CATALOGUE 3

2012|2013



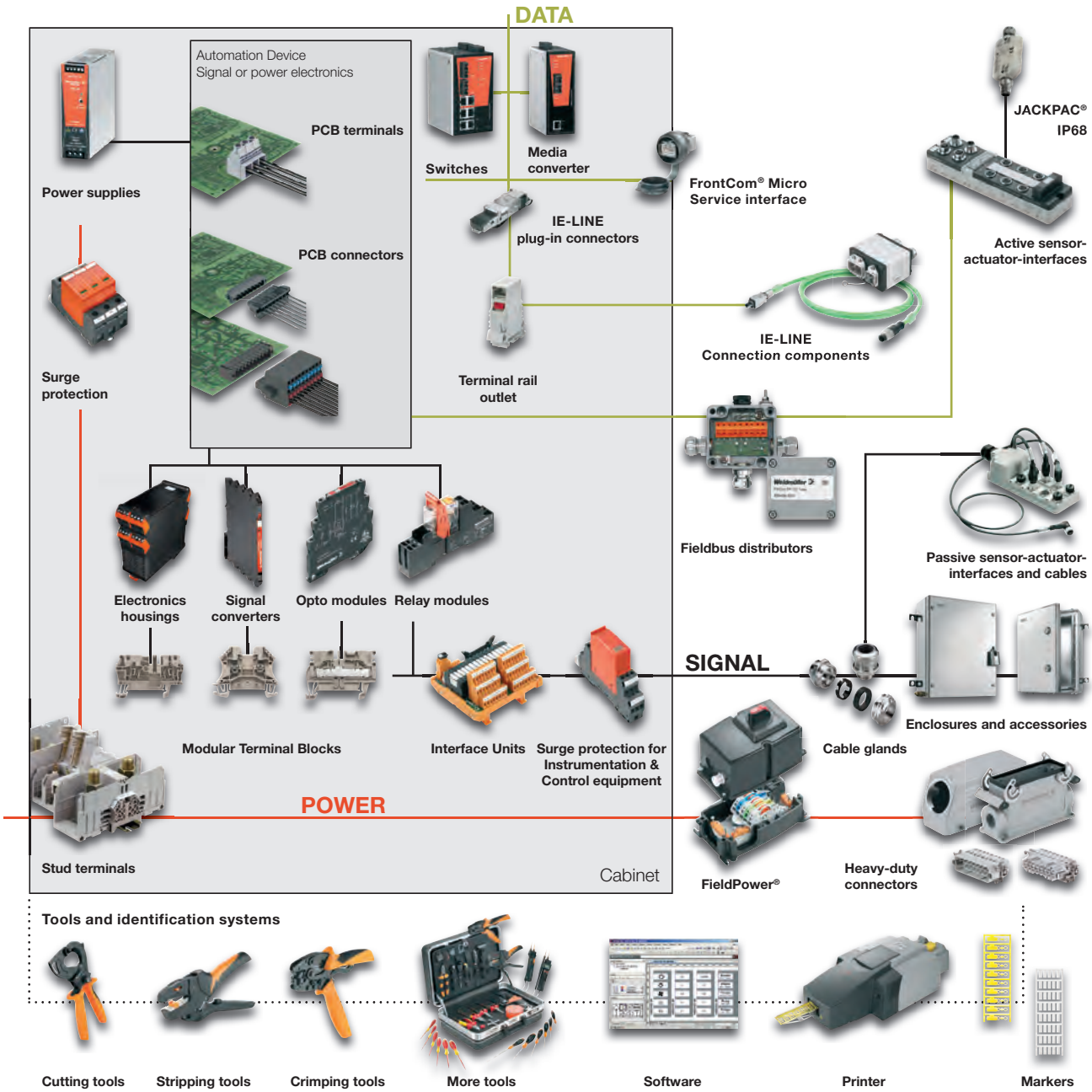

# RockStar® – Heavy Duty Connectors

## Catalogue

Weidmüller

# Product Portfolio

Weidmüller is a leading international provider of solutions for electrical connectivity, transmission and conditioning of power, signal and data in industrial environments. The company with headquarters in Detmold/Germany develops, produces and sells products in the field of electrical connectivity and electronics worldwide.
**www.power-signal-data.com**




## All the catalogues at a glance

| | | Order No. |
|---|---|---|
| Catalog 1 | Modular Terminal Blocks | **5661400000** |
| Catalog 2 | PCB Terminals, PCB Connectors and Housings for Electronics | **1250030000** |
| Catalog 3 | RockStar® – Heavy Duty Connectors | **5664240000** |
| Catalog 4.1 | Electronics – Analogue Signal Conditioning | **1203510000** |
| Catalog 4.2 | Electronics – Relays and Optos | **1282330000** |
| Catalog 4.3 | Electronics – Power Supplies | **1282390000** |
| Catalog 4.4 | Electronics – Surge protection | **1271290000** |

| | | Order No. |
|---|---|---|
| Catalog 4.5 | Electronics – Interface units and PLC solutions | **1252080000** |
| Catalog 5 | Enclosures and Cable Glands | **1274520000** |
| Catalog 6 | Tools | **1161520000** |
| Catalog 7 | Identification systems | **1125590000** |
| Catalog 8 | Sensor Actuator Interface | **1235620000** |
| Catalog 9 | Industrial Ethernet | **1274570000** |
| Product information | FieldPower® – decentralised power distribution | **1229860000** |

CATALOGUE 3

# RockStar® – Heavy Duty Connectors



## RockStar® – Heavy Duty Connectors

Overview HDC

RockStar® inserts

RockStar® HighPower

RockStar® ConCept modular system

RockStar® Housings IP66 / NEMA Type 4X

RockStar® Housings IP68

RockStar® Heat Trace Connector

RockStar® Data Connectors

RockStar® Kits

RockStar® accessories

Tools

Cable entries

Identification systems

## Appendix

Weidmüller Services

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# RockStar® – Heavy Duty Connectors

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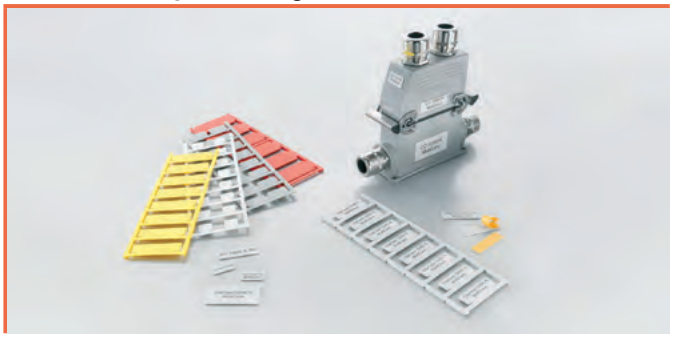
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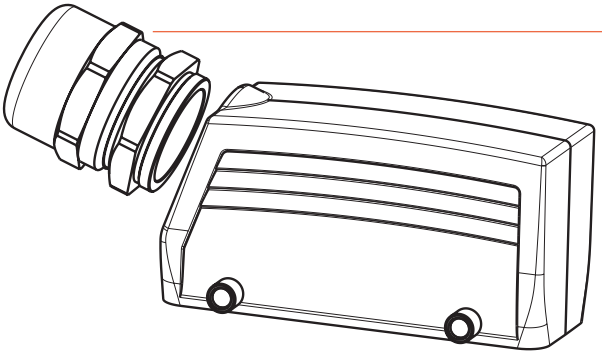


# Overview HDC

## Overview HDC

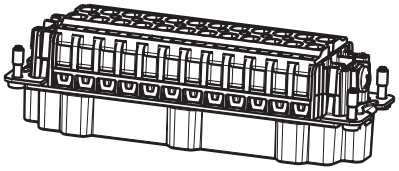

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# Construction of heavy-duty connectors – fixed pole

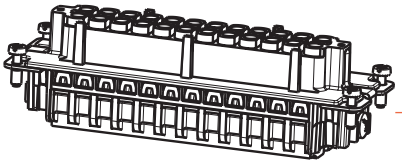


Cable gland

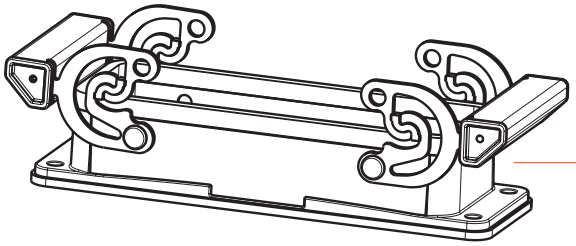
Hood



Male insert

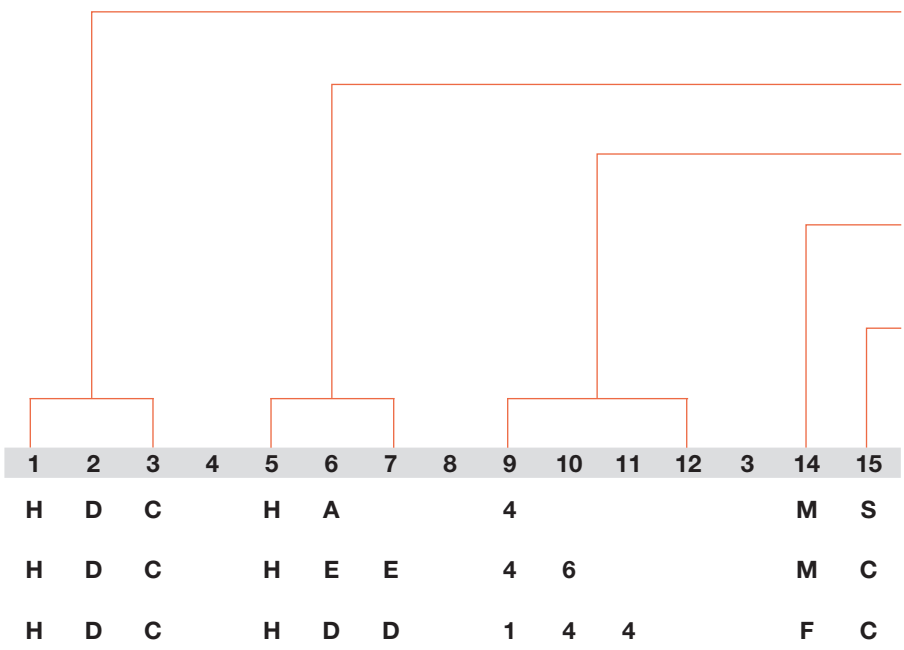


Female insert



Bulkhead housing

# Part codes for inserts




HDC = Name of product line

Type

No. of poles

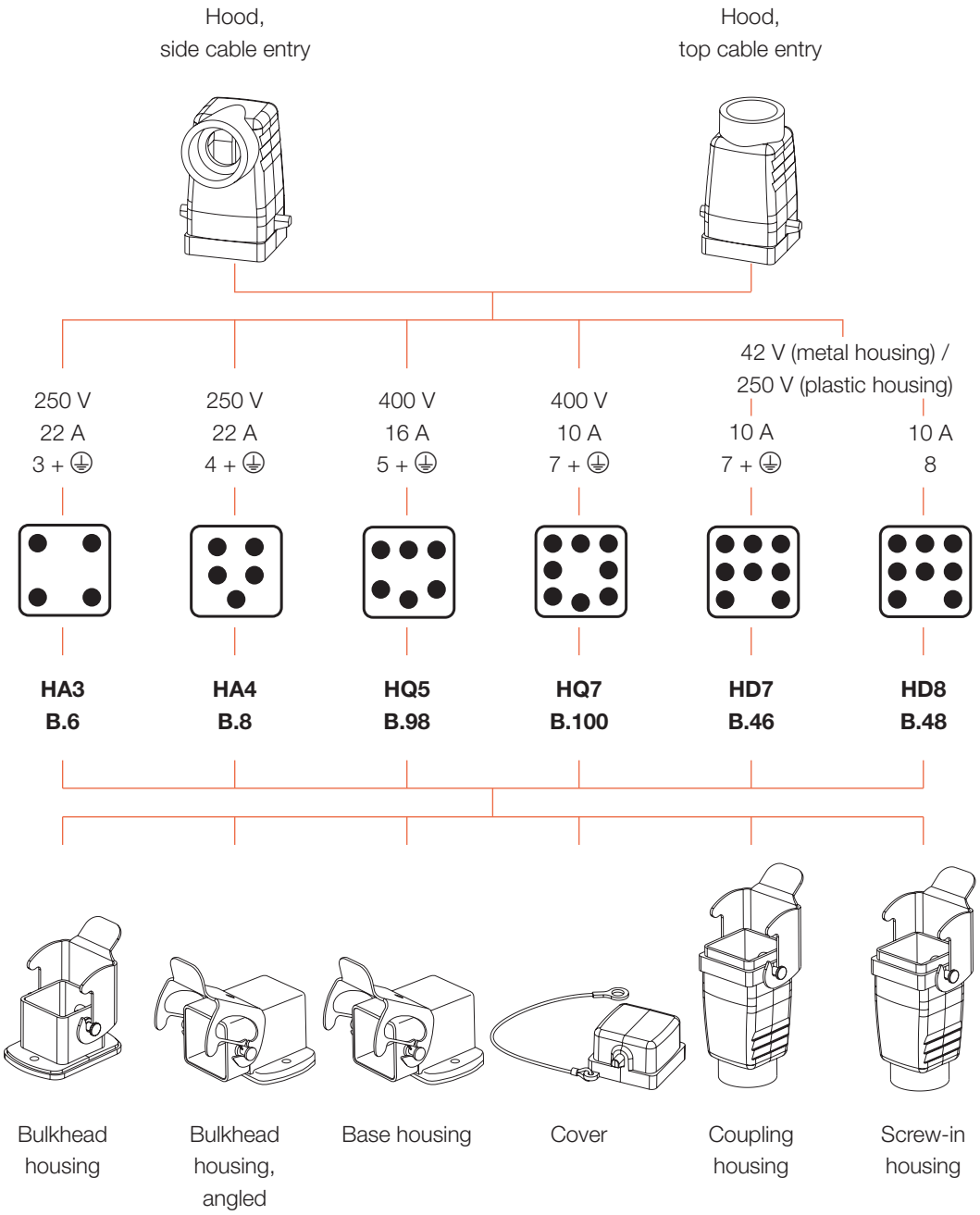
F = Female
M = Male

S = Screw connection
T = Tension clamp connection
P = Push In connection
C = Crimp connection

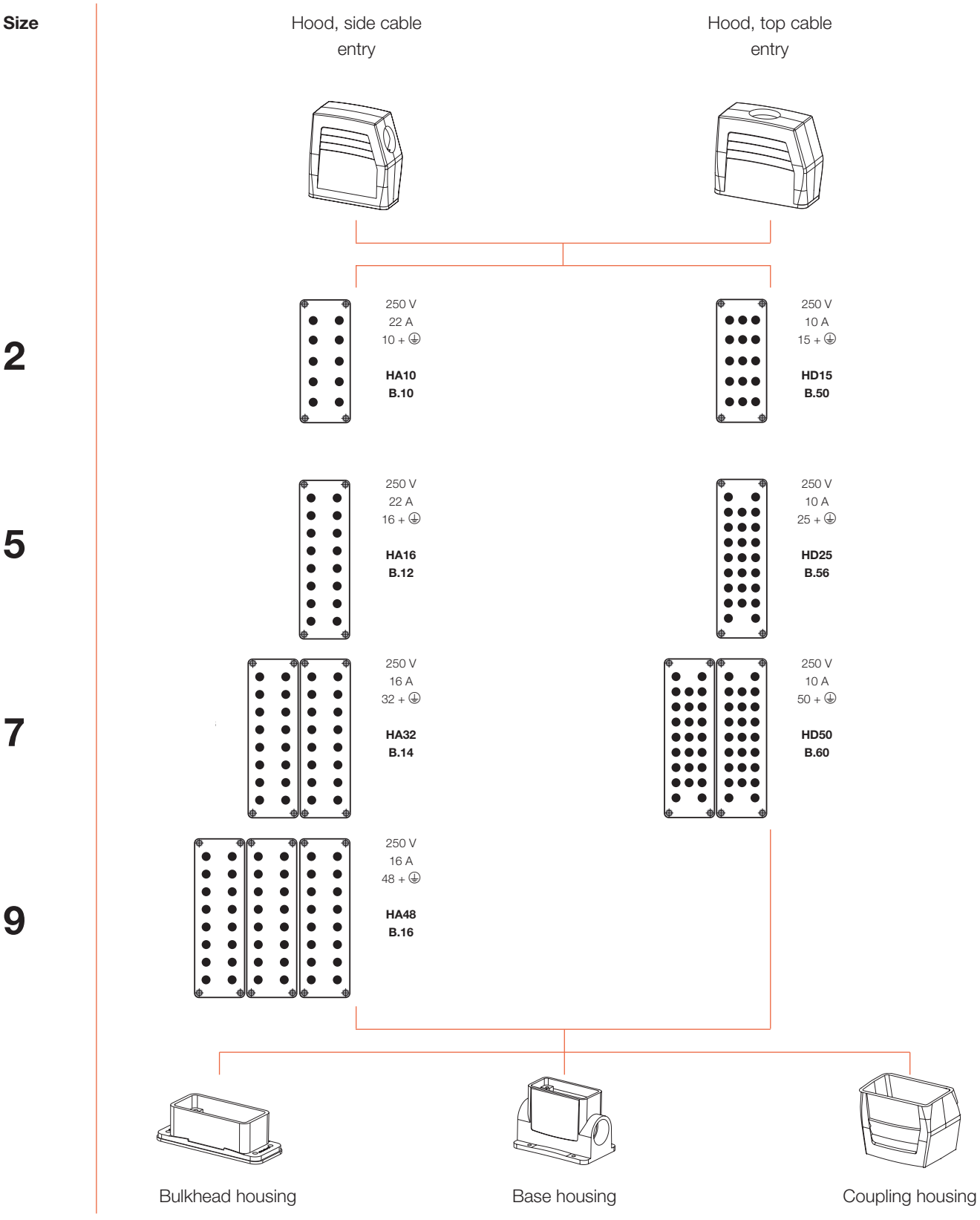
# Overview of size 1 – fixed pole

**Size**

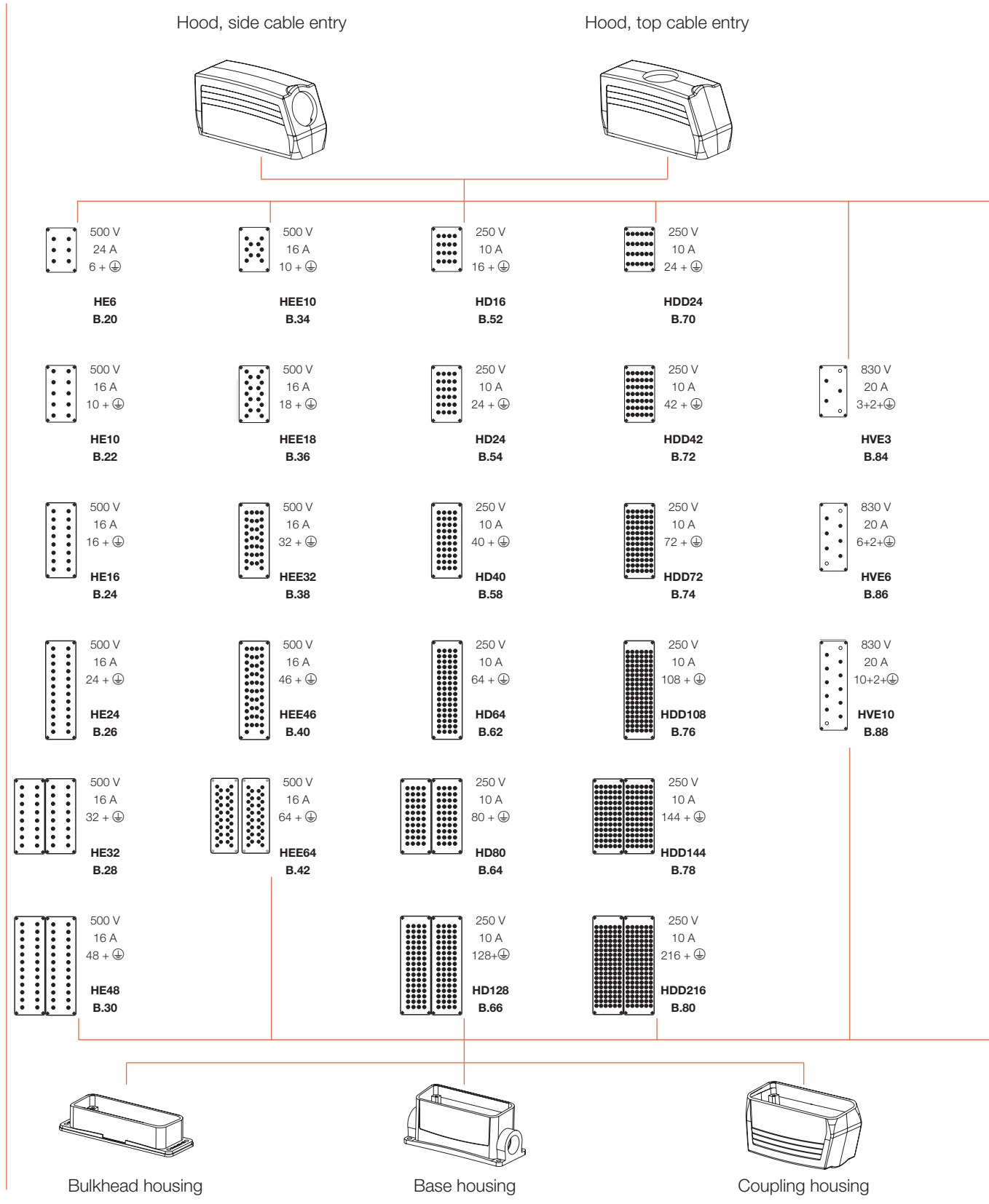
**1**

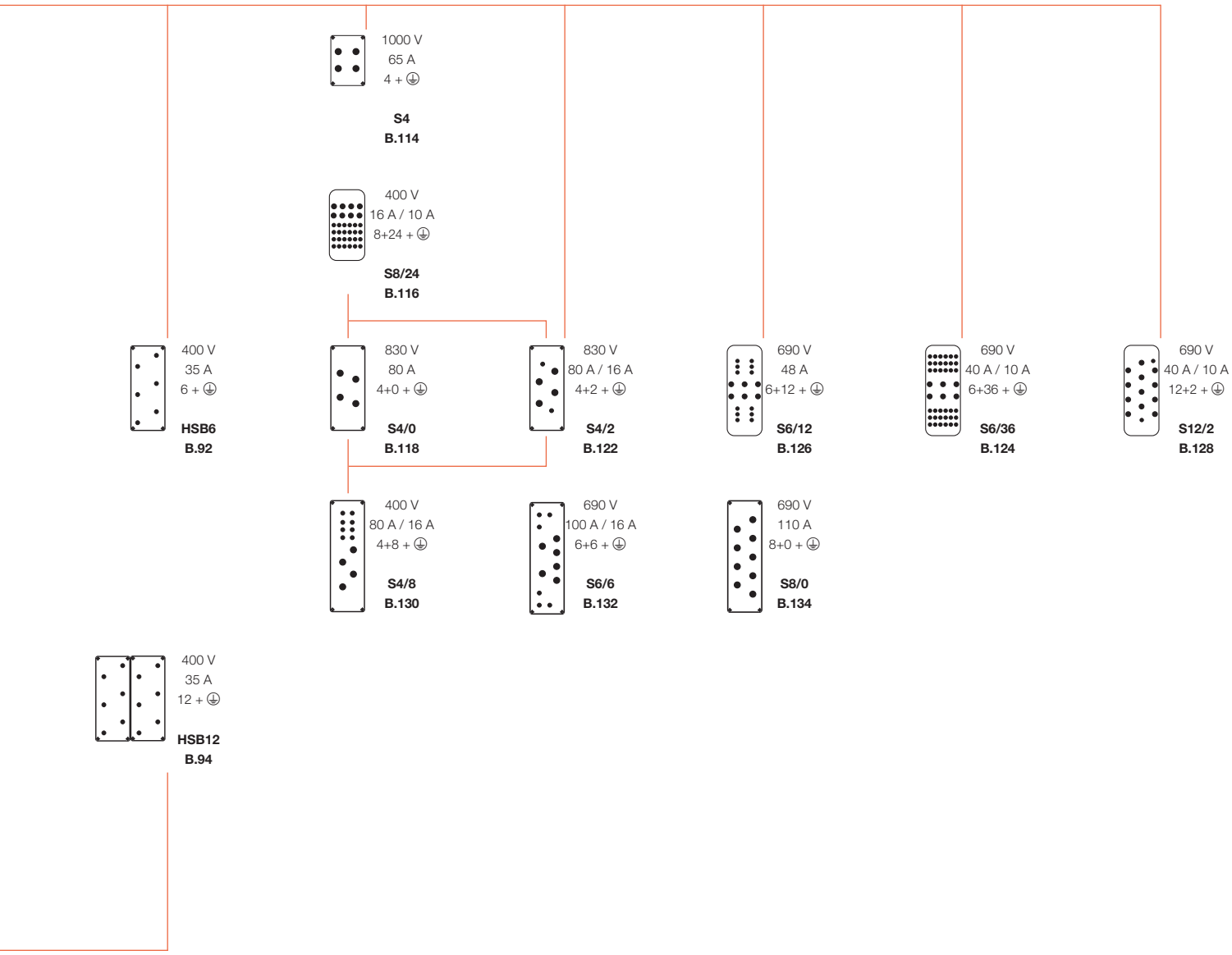


# Overview of sizes 2, 5, 7, 9 – fixed pole



# Overview of sizes 3, 4, 6, 8, 10, 12 – fixed pole

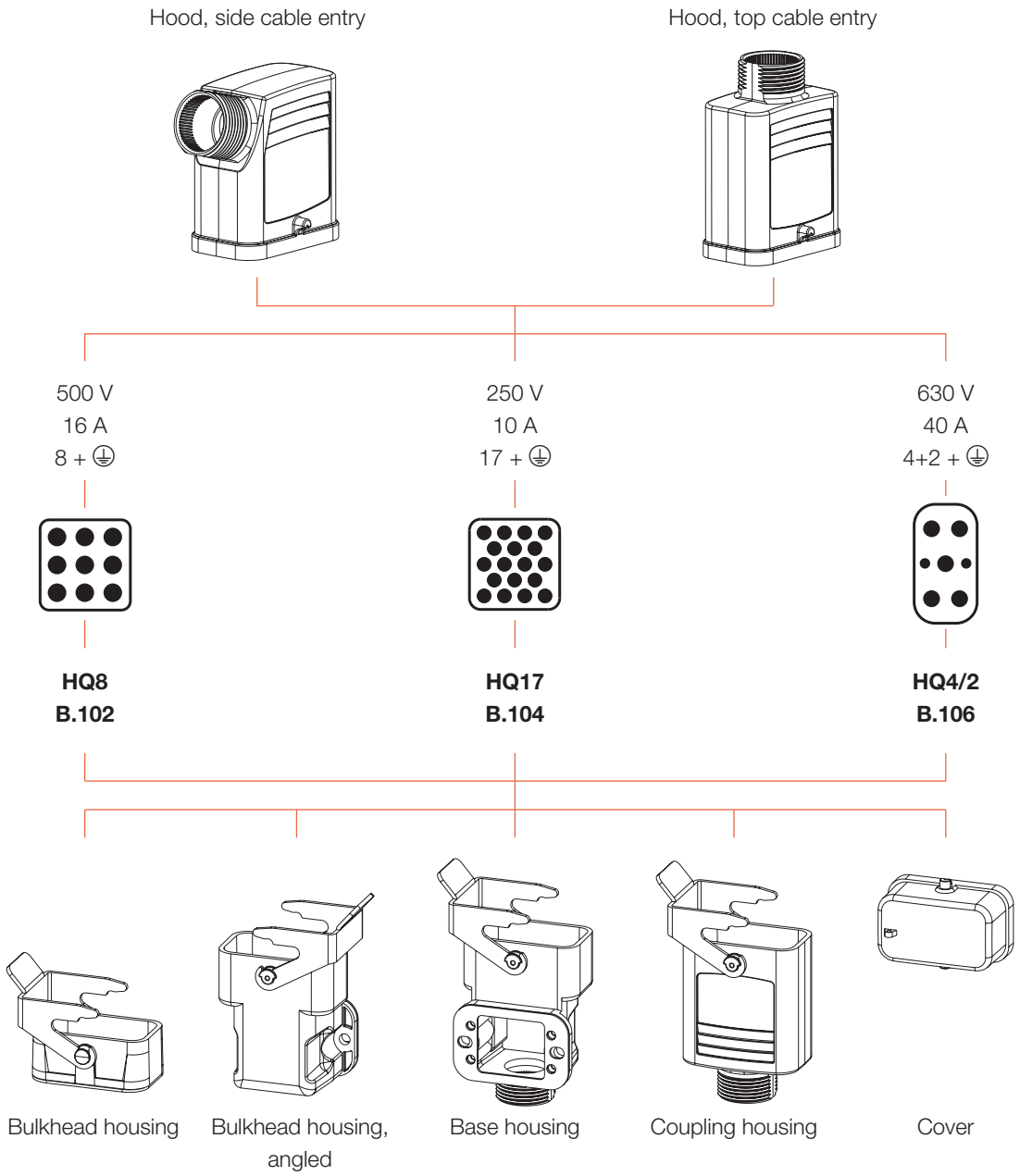



1000 V
65 A
4 + ⏚
S4
B.114
400 V
16 A / 10 A
8+24 + ⏚
S8/24
B.116
400 V
35 A
6 + ⏚
HSB6
B.92
830 V
80 A
4+0 + ⏚
S4/0
B.118
830 V
80 A / 16 A
4+2 + ⏚
S4/2
B.122
690 V
48 A
6+12 + ⏚
S6/12
B.126
690 V
40 A / 10 A
6+36 + ⏚
S6/36
B.124
690 V
40 A / 10 A
12+2 + ⏚
S12/2
B.128
400 V
80 A / 16 A
4+8 + ⏚
S4/8
B.130
690 V
100 A / 16 A
6+6 + ⏚
S6/6
B.132
690 V
110 A
8+0 + ⏚
S8/0
B.134
400 V
35 A
12 + ⏚
HSB12
B.94

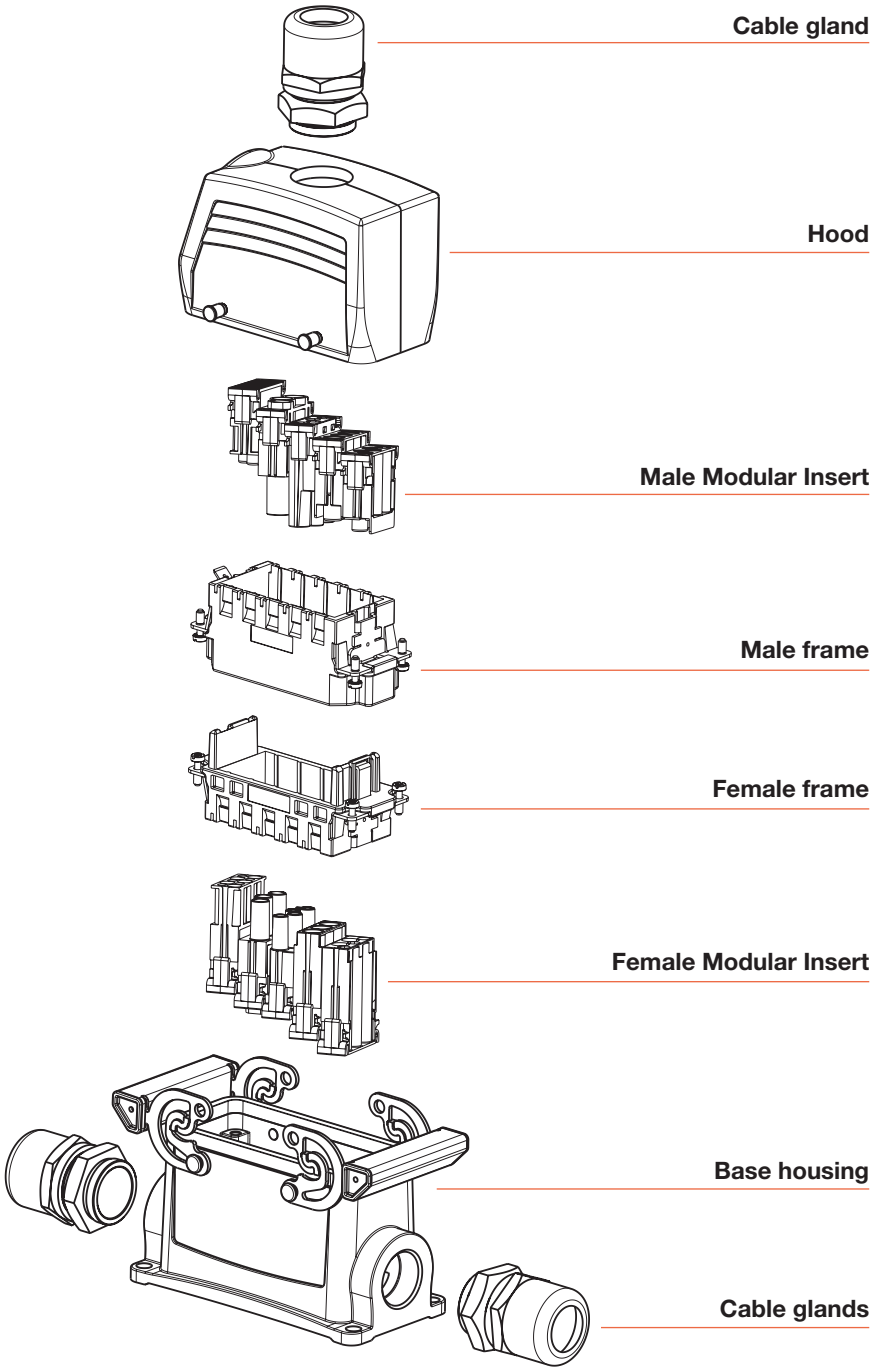
# Overview of size HQ – fixed-pole

**Size**

## HQ

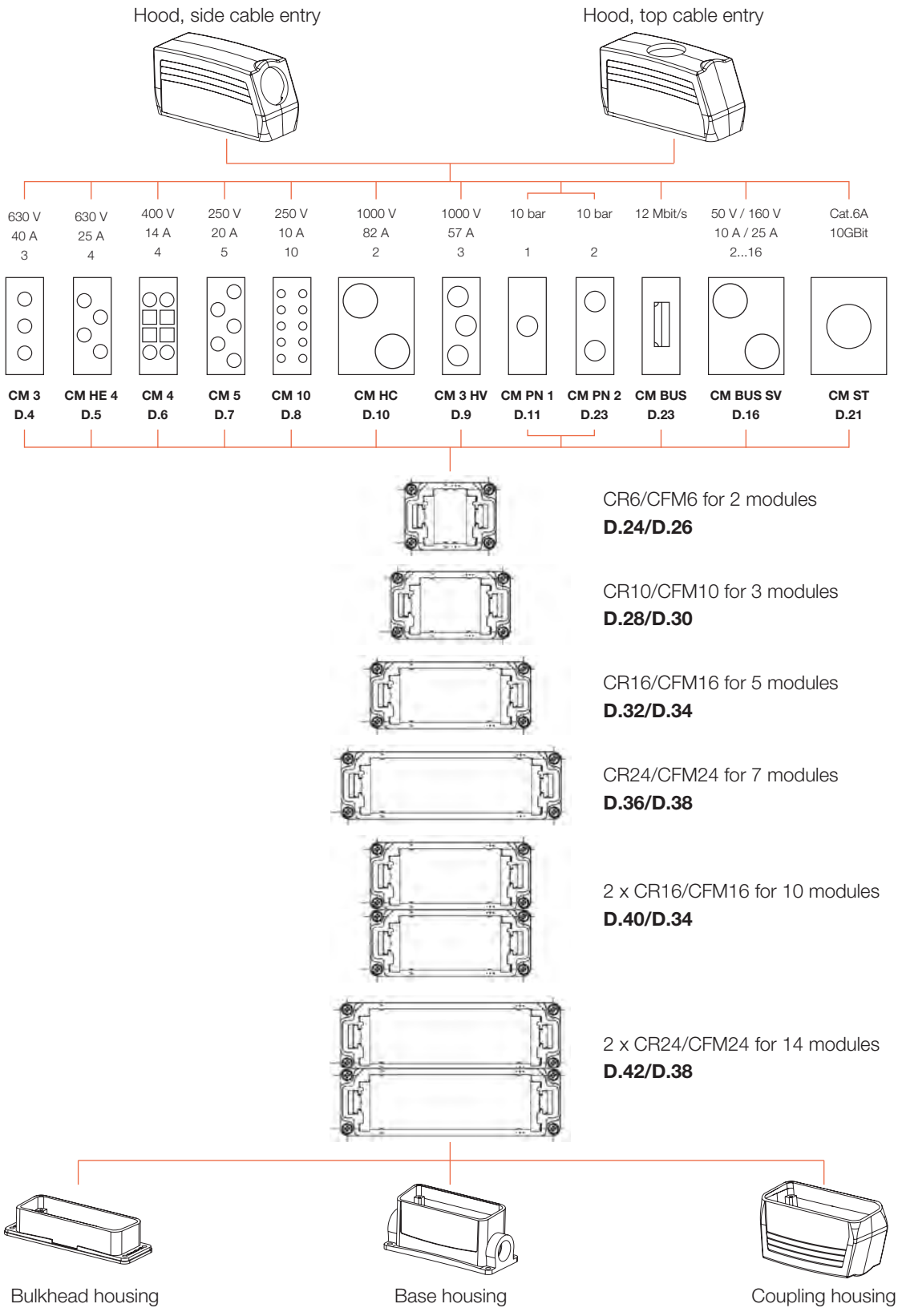


# Construction of heavy-duty connectors – modular



# Overview of sizes 3, 4, 6, 8, 10, 12 – modular

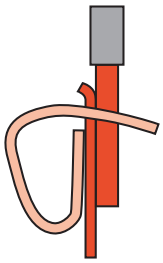
**Size**



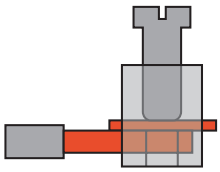
# Connection systems

**Weidmüller offers RockStar® connectors with five different connection systems:**

Tension clamp, screw, crimp, axial screw and PUSH IN wire connections



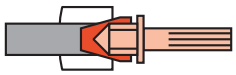
**Tension clamp connection**
The **Weidmüller tension clamp system** functions similarly to the tried-and-tested clamping yoke. Here again, the mechanical and electrical functions are kept separate. The tension spring, made from high-quality rustproof and acid-proof steel, pulls the conductor against the tin-plated copper current bar. Treating the copper in this way ensures low contact resistance and high corrosion resistance. The compensating effect of the tension spring ensures a secure contact for the lifetime of the terminal. The tension-clamp wire connections are resistant to vibrations and have a high wire pull-out force.



**Screw connection**
Screw connection systems are easy to handle and are known worldwide; this is an important point to consider for mounting and maintenance tasks which are spread throughout the world. Screw connections which are based on a clamping-type body offer a gas-tight, vibration-proof connection for connected wires. They also feature excellent contact force. This system is therefore perfectly suited for use in corrosive environments. The passivated silver surfaces ensure even more resistance against corrosion. The Weidmüller clamping-style body is perfectly suited for connecting solid-core and flexible stranded conductors. A wire-protection frame ensures that finely-stranded wires will not splice off.

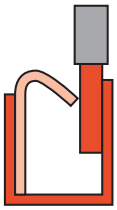


In the **crimping** method, the wires are fed into a metal sleeve, which is then squeezed together with a special tool. This means the connection is now corrosion and vibration proof. The contacts can be crimped on the conductor outside of the connector and then inserted into the connector.



The advantage of the **axial screw connection** is the small space taken up by the contact. The axial screw connection is also extremely easy to use. To make up the connection, the tool and conductor are held in a line. Just three steps are needed for a secure connection: strip the conductor, insert the wire into the contact chamber, screw in the contact – that's all!

PUSH IN



**PUSH IN connection technology**
With the **PUSH IN connection system,** the stripped solid-core conductor is simply inserted into the terminal point until it butts against the end stop. And then it is ready. No tool is required and the result is a reliable, vibration-resistant and gas-tight connection. Even flexible conductors with crimped wire end ferrules or ultrasonic-welded conductors can be connected without any problems. A stainless steel compression spring, which is fitted in a separate housing, guarantees a high contact force between the conductor and the current bar (tin-plated copper). The pull-out force for this system is even higher than that for the tension clamp system. Spring and conductor stops in a steel housing ensure optimum connection conditions and a guide for the screwdriver needed to detach the conductor.

## An overview of the wire connection types for our fixed-pole connector inserts

| Products | Tension clamp connection  | PUSH IN connection  | Axial screw connection  | Screw connection  | Screw connection with wire protection mechanism  | Crimp connection  |
|---|---|---|---|---|---|---|
| HDC HA (3-4 pole) | | | | ✓ | | |
| HDC HA (10-48 pole) | ✓ | | | | ✓ | ✓ |
| HDC HE | ✓ | ✓ | | | ✓ | ✓ |
| HDC HEE | | | | | | ✓ |
| HDC HD | | | | | | ✓ |
| HDC HDD | | | | | | ✓ |
| HDC HVE | ✓ | | | | ✓ | |
| HDC HSB | | | | | ✓ | |
| HDC HQ | | | | | | ✓ |
| HDC S4 | | | ✓ | | | |
| HDC S4/0 | | | ✓ | ✓ | | |
| HDC S4/2 | | | | ✓ | | |
| HDC S6/12 | | | ✓ | | | |
| HDC S4/8 | | | | ✓ | | |
| HDC S3/36 | | | | | | ✓ |
| HDC S8/24 | | | | | | ✓ |
| HDC S12/2 | | | | | | ✓ |
| HDC S6/6 | | | ✓ | | | |
| HDC S8/0 | | | ✓ | | | |
| HDC HighPower 250 A | | | | | | ✓ |
| HDC HighPower 550 A | | | | | | ✓ |

# Crimp contacts

## Crimp contacts

Whereas the contacts for screw, axial screw, tension clamp and PUSH IN connections are already built in, you can choose the appropriate contact for a crimp connection.



The heart of a connector is its contacts. They make up the actual connection between two conductors. Two types of contacts make this possible: pins and sockets (male and female). The pin conducts the electrical current on its outer surface and is introduced into the socket, which conducts the electrical current on its inner surface. Heavy-duty connectors have copper alloy contacts and the contact surfaces are plated with gold or silver: silver improves conductivity, gold is corrosion-proof.

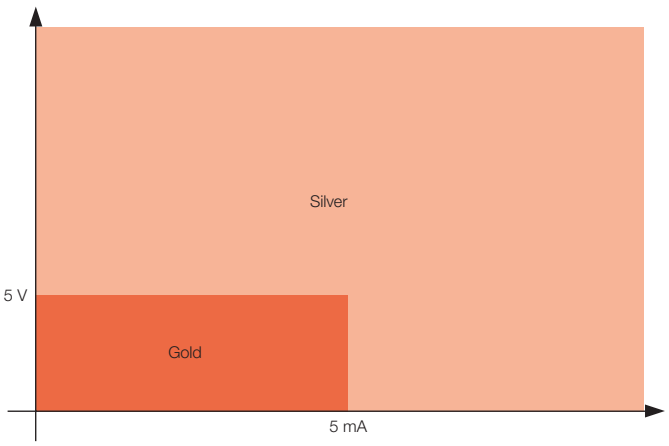
Crimp contacts are available in turned, solid form.

## Selection of silver or gold-plated contacts

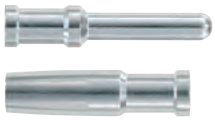
When using plug-in connectors under standard conditions, the resistance between the contacts has little effect. Even heavily corroded silver-coated contact pins and sockets do not exhibit any contact problems.

The situation is different where there are very small currents in extreme applications such as those in electroplating shops, tunnels or in cellulose processing. The silver oxide layer on the surface of the contacts forms an electrical resistance with capacitive, inductive and ohmic components. As a result, the original signal is distorted so much that the recipient is unable to detect it properly and interprets it incorrectly. This results in faults and, indirectly, to damage to machines and processes. Gold-plated contacts should be used in such cases.

The rule of thumb is: use gold-coated contacts for currents < 5 mA and voltages of up to 5 V.



## Overview of crimp contacts

| | Article | Properties | | Usage |
|---|---|---|---|---|
|  | HD-, HDD contacts | Rated current:<br>Cross-section:<br><br>Surface finish: | 10 A<br>0.14-2.50 mm²<br>AWG: 26…14<br>gold-plated<br>silver-plated | HD Series<br>HDD Series<br>CM 10<br>CM BUS SV |
|  | HE-, HEE contacts | Rated current:<br>Cross-section:<br><br>Surface finish: | 16 A<br>0.5-4.00 mm²<br>AWG: 20…12<br>gold-plated<br>silver-plated | HA Series<br>HE Series<br>HEE Series<br>HQ - Series<br>MixMate Series<br>CM HE 4<br>CM BUS SV |
|  | CM-5 contacts | Rated current:<br>Cross-section:<br><br>Surface finish: | 20 A<br>0.75-4.00 mm²<br>AWG: 20…12<br>silver-plated | CM 5 |
|  | HX contacts | Rated current:<br>Cross-section:<br><br>Surface finish: | 40 A<br>1.5-6.00 mm²<br>AWG: 16…10<br>silver-plated | HQ Series<br>MixMate Series |
|  | CM-3 contacts | Rated current:<br>Cross-section:<br><br>Surface finish: | 57 A<br>1.5-10.00 mm²<br>AWG: 16…7<br>silver-plated | CM 3<br>CM 3 HV |
|  | HP contacts | Rated current:<br>Cross-section:<br><br>Surface finish: | 250 A / 550 A<br>25-240 mm²<br><br>silver-plated | HighPower Series |

# Using wire-end ferrules

| Type of connection | Series | HA | HE | HVE | HSB |
|---|---|---|---|---|---|
| **Screw** | Clamping range [mm²] | 0.5 – 2.5 | 0.5 – 2.5 | 0.5 – 2.5 | – |
| | Clamping range [AWG] | 20 – 12 | 20 – 14 (12) [1] | 20 – 14 (12) [1] | – |
| | Ferrules with collars | H0.5/14 – H2.5/14<br>H0.5/16 – H2.5/16 | H0.5/14 – H2.5/14 [2]<br>H0.5/16 – H2.5/16 [2] | H0.5/14 – H2.5/14 [2]<br>H0.5/16 – H2.5/16 [2] | – |
| | Ferrules without collars | H0.5/10 – H2.5/10 | H0.5/10 – H2.5/10 | H0.5/10 – H2.5/10 | – |
| | Twin wire-end ferrules with collars | H0.5/16.5 (ZH)<br>H0.5/18.5 (ZH)<br>H0.75/17 (ZH)<br>H1.0/20 (ZH)<br>H1.5/20 (ZH) | H0.5/18.5 (ZH)<br>H1.0/20 (ZH) [3]<br>H1.5/20 (ZH) [3] | – | H0.5/15 (ZH)<br>H0.5/16.5 (ZH)<br>H0.5/18.5 (ZH)<br>H0.75/15 (ZH)<br>H0.75/17 (ZH)<br>H1.0/15 (ZH)<br>H1.0/20 (ZH)<br>H1.5/16 (ZH)<br>H1.5/20 (ZH)<br>H2.5/18.5 (ZH) |
| | Crimp tool | PZ4 [2], PZ6, PZ6/5 | PZ4 [2], PZ6, PZ6/5<br>PZ6 Hex [2] | PZ4 [2], PZ6, PZ6/5<br>PZ6 Hex [2] | – |
| | Screwdriver | SDK PH0<br>SD 0.5x 3.0 | SDK PH0<br>SD 0.5x 3.0 | SDK PH0<br>SD 0.5x 3.0 | – |
| | Tightening torque | 0.5 Nm | 0.5 Nm | 0.5 Nm | – |
| **Tension clamp** | Clamping range [mm²] | 0.25 – 1.5<br>2.5 solid core | 0.25 – 2.5 | 0.25 – 2.5 | – |
| | Clamping range [AWG] | 24 – 14 [4] | 24 – 14 | 24 – 14 | – |
| | Ferrules with collars | H0.5/14 – H1.5/14 [4]<br>H0.5/16 – H1.5/16 [4] | H0.5/14 – H2.5/14 [2] | H0.5/14 – H2.5/14 [2] | – |
| | Ferrules without collars | H0.5/10 – H1.5/10 [4] | – | – | – |
| | Twin wire-end ferrules with collars | – | H0.5/15 (ZH) [5] [6]<br>H0.75/15 (ZH) [5] [6]<br>H1.0/15 (ZH) [5] [6]<br>H1.5/16 (ZH) [5] [6] | – | – |
| | Crimp tool | PZ4, PZ6, PZ6/5 | PZ4 [7], PZ6, PZ6/5 | PZ4 [7], PZ6, PZ6/5 | – |
| | Screwdriver | SD 0.5x 3.0 | SD 0.6x 3.5 | SD 0.6x 3.5 | – |
| **PUSH IN** | Clamping range [mm²] | – | solid 0.5 – 4 mm²<br>flexible with ferrule<br>0.5 – 2.5 mm² | – | – |
| | Clamping range [mm²] | – | 20 – 12 | – | – |
| | Ferrules with collars | –<br>–<br>– | H0.5/14 – H1.5/14<br>H0.5/16 – H1.5/16<br>H0.75/18 – H2.5/18 [2] | –<br>–<br>– | –<br>–<br>– |
| | Ferrules without collars | –<br>– | H0.5/10 – H2.5/10 [2]<br>H1.5/12 – H2.5/12 [2] | –<br>– | –<br>– |
| | Twin wire-end ferrules with collars | – | H0.5/18.4 ZH 500 V / 6 kV / 3<br>H1/20 ZH 400 V / 6 kV / 3<br>500 V / 6 kV / 3 only with protection degree of at least IP54<br>H1.5/20 ZH 400 V / 6 kV / 3<br>500 V / 6 kV / 3 only with protection degree of at least IP54 | – | – |
| | Ferrules crimped with | – | PZ4. PZ6. PZ6/5.<br>PZ6 Hex | – | – |
| **PE contact** | Clamping range [mm²] | 0.5 – 4.0<br>0.5 – 2.5 flexible | 0.5 – 4 | 0.5 – 4 | – |
| | Clamping range [AWG] | 20 – 12 | 20 – 12 | 20 – 12 | – |
| | Ferrules with collars | H0.5/16 – H2.5/16 | H0.5/16 – H4/16 | H0.5/16 – H4/16 | – |
| | Ferrules without collars | H0.5/10 – H2.5/10 | H0.5/10 – H4/10 | H0.5/10 – H4/10 | – |
| | Ferrules crimped with | PZ4 [2], PZ6, PZ6/5 | PZ4, PZ6, PZ6/5,<br>PZ6 Hex | PZ4, PZ6, PZ6/5,<br>PZ6 Hex | – |
| | Screwdriver | PH 1 | PH 1 | PH 1 | – |
| | Tightening torque | 1.2 Nm | 1.2 Nm | 1.2 Nm | – |

[1] Depending on the diameter of the insulation, the max. AWG wire may need to be pushed in with some force.
[2] The 2.5mm² wire must be inserted with some force.
[3] When the rated voltage is reduced to 400 V / 6 kV / 3 or with a protection degree of at least IP54.
[4] Only by tilting the screwdriver can the clamping point be opened all the way.
[5] Wire-end ferrules may be used when the rated voltage is reduced to 400 V / 6 kV / 3.
[6] When the protection degree is at least IP54, the creepage and clearance distances within the encapsulation may be rated for a lower pollution degree. (DIN EN 61984) For this encapsulation, the use of wire-end ferrules is possible with 500 V / 6 kV / 3.
[7] The PZ4 crimping tool should not be used with the max. wire size.

**The connector inserts can be combined with wire-end ferrules in other ways depending on the available clamping range and the type of cable being used. We would be happy to take a look at the technical feasibility of your specific application.**

# Tightening torques and screwing tools

| Screw size | Connector type | Dia. tightening torque in Nm | Recommended blade inserts and AF size for hexagon socket |
|---|---|---|---|
| **M 2.5** | **Signal contacts** | | |
| | S 6/6 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | S 6/12 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| **M 2.9 x 0.5** | **Fastening screws** | | |
| | HQ 4/2 | 0.8 (plastic) / 1.1 (metal) | SD 0.6 x 3.5 mm or PH0 |
| | HQ 8 | 0.8 (plastic) / 1.1 (metal) | SD 0.6 x 3.5 mm or PH0 |
| | HQ 17 | 0.8 (plastic) / 1.1 (metal) | SD 0.6 x 3.5 mm or PH0 |
| **M 3** | **Contact screws** | | |
| | HA 3 | 0.5 - 0.55 | SD 0.5 x 3.0 mm |
| | HA 4 | 0.5 - 0.55 | SD 0.5 x 3.0 mm |
| | HA 10 bis HA 48 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PH0 |
| | HE | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | HVE | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | **Signal contacts:** | | |
| | S 4/2 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | S 4/8 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | **PE connection via female contact** | | |
| | S 4 | 0.5 - 0.8 | SD 0.6 x 3.5 mm |
| | ConCept modular frame, metal | 0.5 - 0.55 | SD 0.6 x 3.5 mm |
| | **PE terminal** | | |
| | HQ 5 | 0.5 - 0.55 | SD 0.6 x 3.5 or 0.8 x 4 mm |
| | HQ 7 | 0.5 - 0.55 | SD 0.6 x 3.5 or 0.8 x 4 mm |
| | **Fastening screws** | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | **Guide pin** | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | **Guide bush** | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| | **Coding pins** | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZ0 |
| **M 4** | **Contact screws** | | |
| | HSB | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1 |
| | **PE connection via male contact** | | |
| | S 4 | 0.5 - 0.8 | SD 0.6 x 3.5 mm |
| | ConCept modular frame, metal | 1.2 - 1.5 | SD 0.6 x 3.5 mm |
| | **PE terminal** | | |
| | HA | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1 |
| | HE | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1 |
| | HEE | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1 |
| | HVE | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1 |
| | HD | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1 |
| | HDD | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1 |
| | S 6/6 (for signal contacts) | 1.2 - 1.5 | 0.8 x 4 mm or PZ1 |
| | ConCept modular frame, plastic | 1.2 - 1.5 | 0.8 x 4 mm or PZ1 |
| **M 5** | **PE terminal** | | |
| | HSB | 2 - 2.5 | SD 1 x 5.5 mm or PZ2 |
| | S 4/0 (Screw connection) | 2 - 2.5 | SD 1.2 x 6.5 mm or PH2 |
| | S 4/0 (Axial screw connection) | 2 - 2.5 | SD 0.8 x 4 mm or PZ 2 |
| | S 4/2 | 2 - 2.5 | SD 1.2 x 6.5 mm or PH2 |
| | S 4/8 | 2 - 2.5 | SD 1.2 x 6.5 mm or PH2 |
| | S 6/12 | 2 - 2.5 | SD 0.8 x 4 mm or PZ 2 |
| | S 6/36 | 2 - 2.5 | SD 1.2 x 6.5 mm or PH2 |
| | S 8/24 | 2 - 2.5 | SD 1.2 x 6.5 mm or PH2 |
| | S 12/2 | 2 - 2.5 | SD 1.2 x 6.5 mm or PH2 |
| **M 6** | **Power contacts** | | |
| | S 4/0 (Screw connection) | 1.2 (1.5 $mm^2$) / 2 (2.5 $mm^2$) / 3 (4-16 $mm^2$) | SD 0.8 x 4 mm |
| | S 4/2 | 1.2 (1.5 $mm^2$) / 2 (2.5 $mm^2$) / 3 (4-16 $mm^2$) | SD 0.8 x 4 mm |
| | S 4/8 | 1.2 (1.5 $mm^2$) / 2 (2.5 $mm^2$) / 3 (4-16 $mm^2$) | SD 0.8 x 4 mm |
| **M 7 x 0.75** | **Power contacts** | | |
| | S 4 | 1.1 – 1.7 | SW 2 |
| | S 6/6 (+ PE) | 6 – 8 | SW 4 |
| **M 8 x 0.75** | **Power contacts** | | |
| | S 6/12 | 1.1 – 1.7 | SW 2 |
| | S 8/0 (+ PE) | 6 (10-16 $mm^2$) - 7 (25 $mm^2$) | SW 4 |
| **M10 x 1** | **Power contacts** | | |
| | S 4/0 (Axial connection) | 2 – 3 | SW 3 |

Increasing the tightening torque does not improve the contact resistance. The stated torque settings offer optimal mechanical, thermal and electrical conditions. Exceeding the recommended values may even damage the conductor and terminal.

# RockStar® Housing types

## Housing IP66 / NEMA Type 4X





The housing and the interlock mechanism on a connector protect the contacts from exterior mechanical influences (ie. shock, contamination, dust, accidental touching, moisture penetration, water and liquids such as cleaning solvents, coolants and oils). The durable RockStar® housings are produced with the highest quality standards; they provide IP66 protection and are resistant to corrosion and impacts. All housings come standard with a stainless steel interlock. A special die-cast alloy and the multi-level surface finish combine to deliver the ultimate protection against extreme conditions and ensure that the housings keep their visual appeal.

**Applications:**
- General mechanical engineering
- Materials handling and factory construction
- Packaging machines
- Transport and traffic engineering
- Energy technology
- Lighting and stage equipment
- Fairground rides
- Process engineering

**Features:**
- Tightness at least IP66 to IEC 60529
- Tightness NEMA Type 4X
- Scratch-resistant, corrosion-proof, long-lasting

**Design:**
- Cast aluminium alloy
- Multistage surface coating
- Colour: grey, similar to RAL 9006
- 2 versions, standard and high
- 11 sizes

**Interlock system**
- Clamp lock in different versions of rustproof stainless steel

## HQ Series Housings, IP66 / NEMA Type 4X





The HQ connector series has a very compact housing with IP66 protection. It is available in either plastic or metal. The full industrial capability of these products makes them a perfect match for the main usage in materials handling applications. The HQ housing series is particularly important for connecting motor starters and frequency converters. It is also the ideal extension for setting up a decentralised power distribution system based on FieldPower®.

**Applications:**
- General machine construction
- Materials handling and factory construction
- Decentralised automation

**Features:**
- Tightness: at least IP66, acc. to IEC 60529
- Tightness: NEMA Type 4X
- Complies with VDE and ISO 23570 (DESINA)
- Scratch-proof, corrosion resistant and durable

**Design:**
- Plastic housing: polycarbonate, glass-fibre reinforced; Colour: grey, similar to RAL 7032
- Metal housing: die-cast zinc, nickel-plated, multi-level surface coating, EMC properties
- Cable outlet is straight or angled

**Interlock system**
- Clamp interlock made from rust-free stainless steel

**Housing IP68 – the highest degree of sealing**





The IP68 housings have been developed for use under extreme environmental conditions. The high degree of protection (IP68 and IP69K) and the excellent resistance to vibration and shock guarantee fail-safe operation when heavy-duty connectors are used in vehicles and under tough climatic conditions. If you want to protect your delicate interfaces from EMC emissions, these connectors are the right choice for you.

**Applications:**
- Transport and traffic engineering
- Energy technology
- Applications with extreme protection class requirements

**Features:**
- Tightness IP68 / 5 bar to IEC 60529
- IP69K impermeability according to DIN 40050-9
- Scratch-proof, corrosion resistant, impact resistant and durable

**Design:**
- Cast aluminium alloy
- Multistage surface coating
- Optimised construction for high impact resistance and EMC
- Colour: black RAL 9005
- 5 sizes; size 8 also in XXL

**Interlock system**
- Screw cap with internal/external hex drive

# Locking systems

### One longitudinal locking clamp on housing bottom




- Manual operation – no tools required
- 2 locking points – along the longitudinal axis
- Good for lengthwise alignment
- Interlock system made from rust-free stainless steel

### One central locking clamp on housing top




- Manual operation – no tools required
- 2 locking points along the transverse axis
- Easily accessible from above where space is limited
- Made from rust-free stainless steel

### Two transverse locking clamps on housing bottom




- Manual operation – no tools required
- 4 locking points – good sealing effect
- Easily accessible when the cable inlet is in the plugging direction
- Good for aligning side by side
- Made from rust-free stainless steel

### Screw fastening



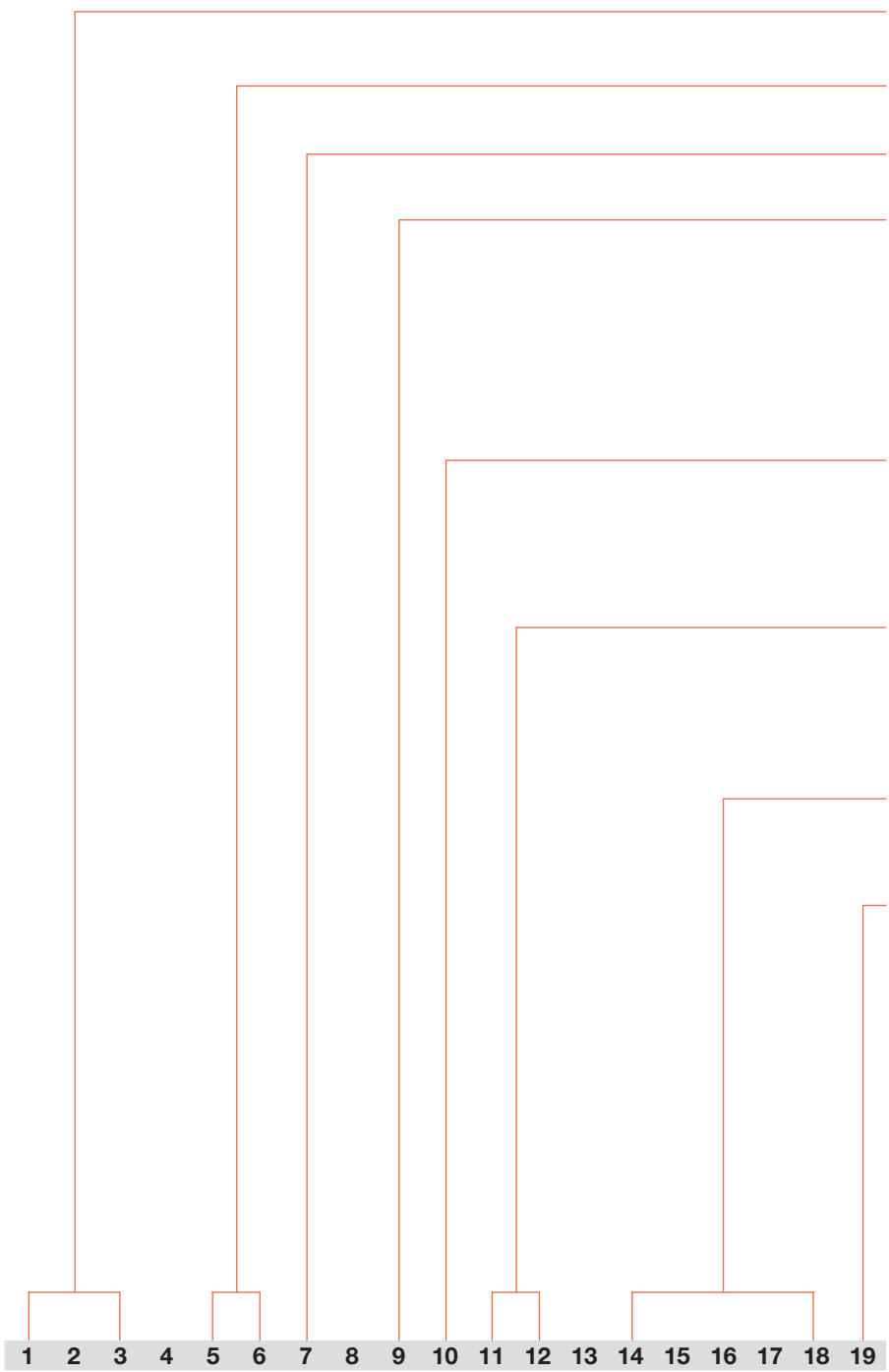

- Uses internal/external hex drive
- Most effective seal
- The two interlock points are arranged diagonally
- Easily accessible when space is tight
- Screws made from rust-free stainless steel

### Two transverse locking clamps on housing top

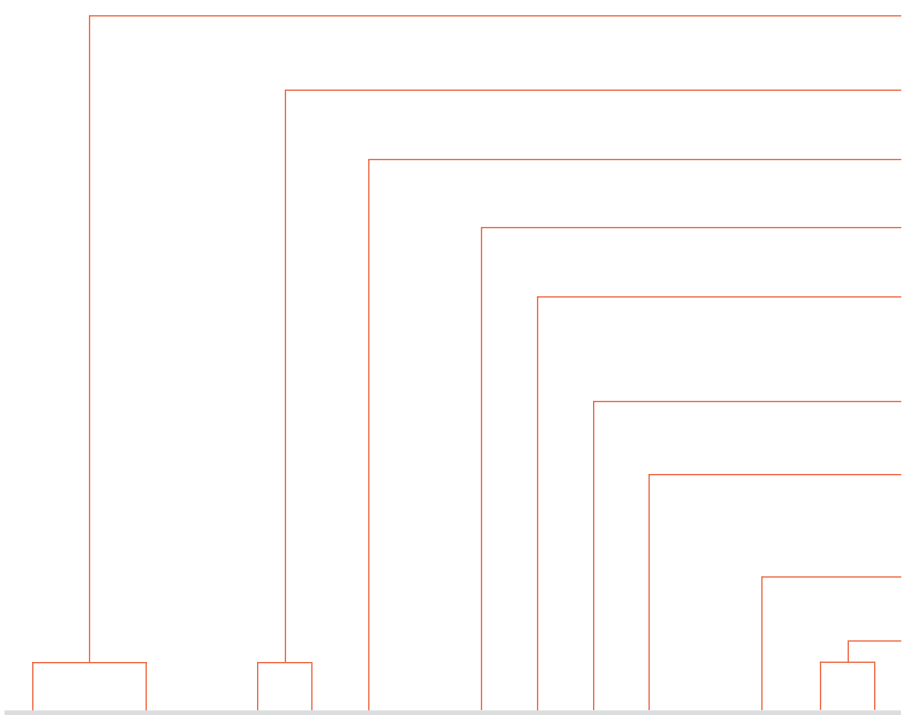



- Manual operation – no tools required
- 4 locking points – good sealing effect
- Easily accessible when the cable inlet is in the plugging direction
- Good for aligning side by side
- Interlock system made from rust-free stainless steel

# Part codes for housings IP66



# Part codes for covers




HDC = Name of product line

Height

B = Design

D = Cover

M = with Gasket
O = without Gasket

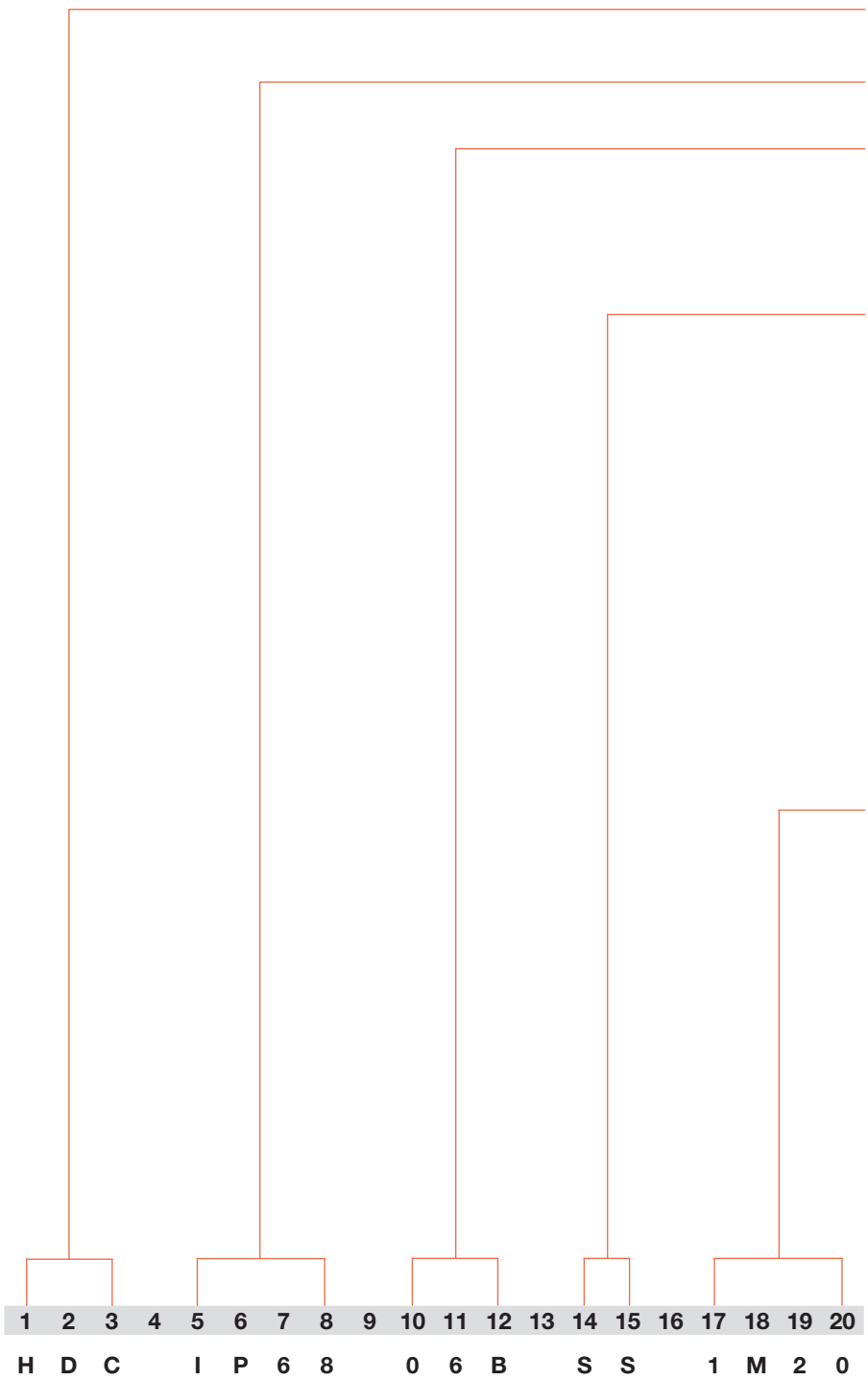
Gasket

L = End locking
Q = Side locking

No.

BO = Bolt
LB = Longitudinal clamp
QB = Transversal clamp

# Part codes for housings IP68




HDC = Name of product line

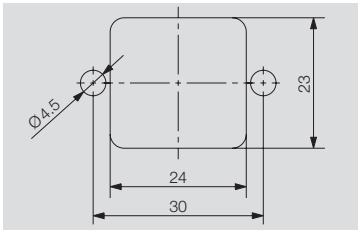
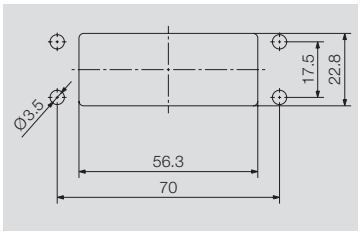
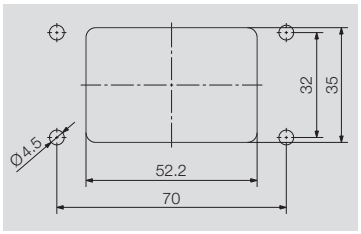
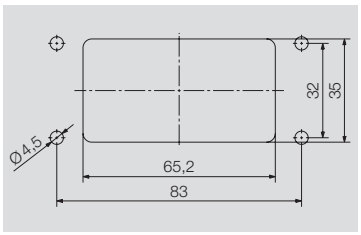
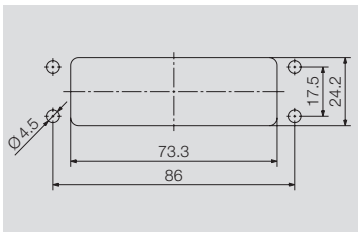
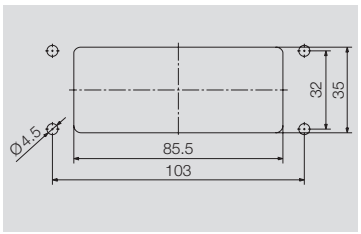
IP68 = Name of product series

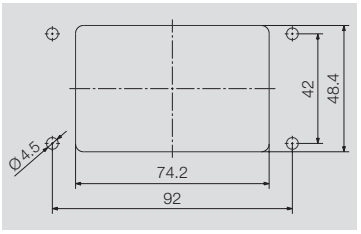
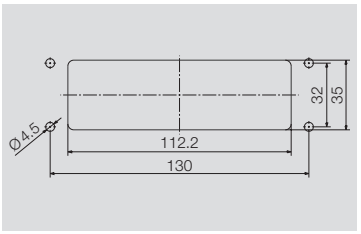
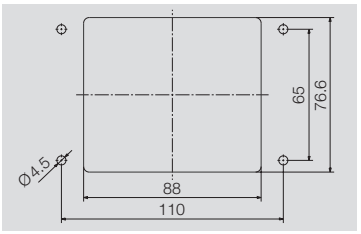
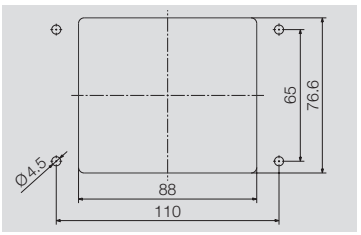
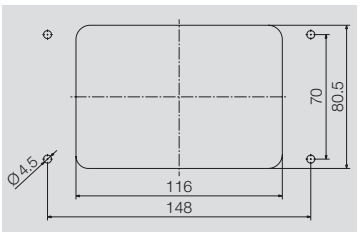
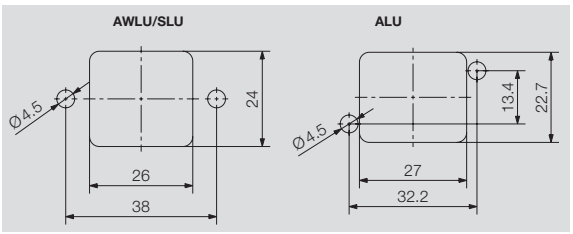
06B = HDC size
10B
16B
24B

Version:
SS = Base housing
AS = Bulkhead housing
AWS = Bulkhead housing, angled
ADS = Adapter to mount bulkhead housing at an angle
TOS = Plug housing, cable outlet at top
TSS = Plug housing, cable outlet sideways
FRAME = Counter-frame
COVER = Cover

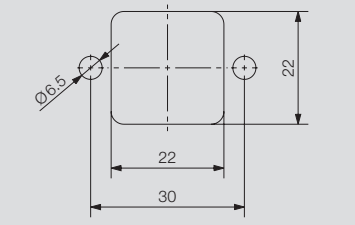
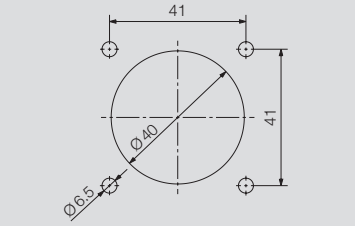
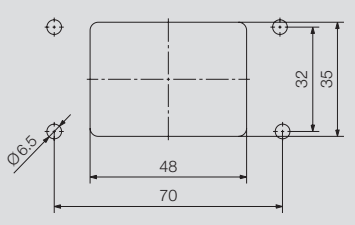
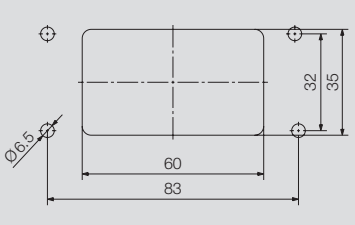
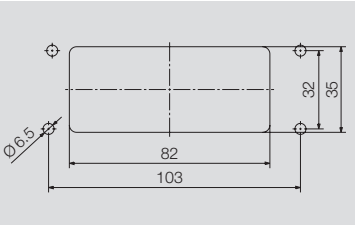
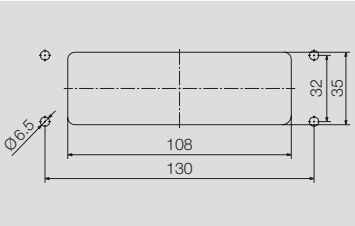
Number and size of the cable entry holes

# Panel cut-out
# Housings IP66

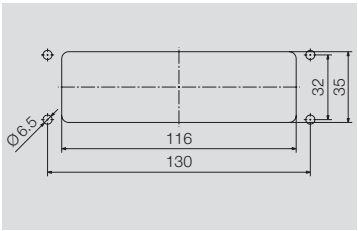
| Size | Designation | |
|---|---|---|
| BG1 | 04A/07A |  |
| BG2 | 10A |  |
| BG3 | 06B |  |
| BG4 | 10B |  |
| BG5 | 16A |  |
| BG6 | 16B |  |

| Size | Designation | |
|---|---|---|
| BG7 | 32A |  |
| BG8 | 24B |  |
| BG9 | 48A |  |
| BG10 | 32B |  |
| BG12 | 48B |  |
| HQ | |  |

# Panel cut-out
# Housings IP68

| Size | Designation | |
|---|---|---|
| BG1 | 04A |  |
| BG1 | 04A AWS |  |
| BG3 | 06B |  |
| BG4 | 10B |  |
| BG6 | 16B |  |
| BG8 | 24B |  |

# Housings IP68 XXL

| Size | Designation | |
|---|---|---|
| BG8 | HB24 |  |

# Electrical data

## Design of clearances and creepage distances in electrical equipment

### General

Since April 2003, the rules of DIN EN 60664-1 / 11.03 in conjunction with DIN 61984 / 09.02 apply to the dimensioning of clearances and creepage distances.

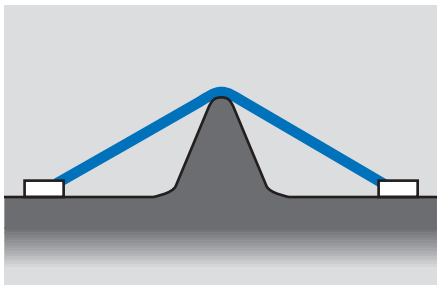
The design data resulting from these provisions is – if applicable – specified in this catalogue for each product.

For the design of clearances and creepage distances, application of the regulations for insulation coordination produces the following interrelationships:

### Clearances

Clearances are rated in accordance with the following factors:

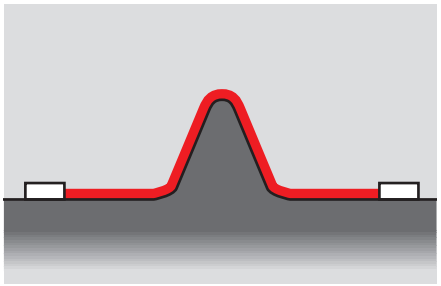
- Anticipated surge
  **rated impulse withstand voltage**
- Used
  **surge protection precaution**
- Measures to prevent pollution
  **pollution severity**

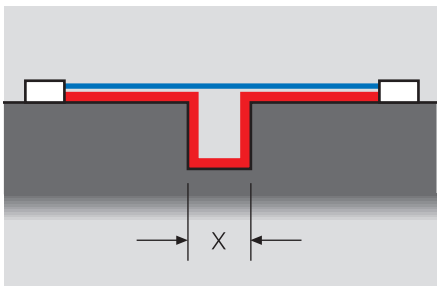


### Creepage distances

Creepage distances are rated in accordance with the following factors:

- Planned
  **rated voltage**
- Insulation materials used
  **insulation group**
- Measures to prevent pollution
  **pollution severity**






**Slots** are taken into account when measuring creepage distances if their minimum width X is dimensioned according to the following table:

| Pollution severity | Minimum width X in mm |
|---|---|
| 1 | 0.25 |
| 2 | 1.0 |
| 3 | 1.5 |
| 4 | 2.5 |

If the associated clearance in air is less than 3 mm, the minimum slot width can be reduced to 1/3 of the clearance.

**Influencing factors:**

**Rated impulse withstand voltage**
The rated impulse withstand voltage is derived from:

- **Phase-to-earth voltage** (the nominal voltage of the network, taking all networks into account)
- **Surge category**

**The surge categories are defined** in accordance with international standard DIN EN 60664-1 (for electrical equipment fed directly from the low voltage network).

**Surge category I**

- Equipment that is intended to be connected to the permanent electrical installation of a building. Measures to limit transient surges to the specific level are taken outside the equipment, either in the permanent installation or between the permanent installation and the equipment.

**Surge category II**

- equipment to be connected to the permanent electrical installation of a building e.g. household appliances, portable tools and similar loads.

**Surge category III**

- equipment that is part of the permanent electrical installation and other equipment where a higher degree of availability is expected e.g. distribution boards, circuit-breakers, wiring systems (IEV 826-06-01, including cables, busbars, junction boxes, switches, power sockets) in the permanent installation, and equipment for industrial use and some other equipment, e.g. stationary motors with permanent connections to the permanent installation.

**Surge category IV**

- Equiment for use at or in the proximity of the incoming supply point of the electrical installations of buildings upstream of the main distribution board e.g. electricity meters, circuit-breakers and ripple control units.

**Pollution severity categories:**

**Pollution severity category 1**

- No pollution, or only dry, non-conductive pollution that has no influence.

**Pollution severity category 2**

- Non-conductive pollution only; occasional condensation may cause temporary conductivity.

**Pollution severity category 3**

- Conductive pollution, or dry, non-conductive pollution that is liable to be rendered conductive through condensation.

**Pollution severity category 4**

- Contamination results in constant conductivity, e.g. caused by conductive dust, rain or snow.

The dimensioning of clearances and creepage distances, and hence the rating data for electromechanical products (terminals, terminal strips, PCB terminals and plug-in connectors) is based on pollution severity 3 and surge category III, taking account of all network types.

**Table 1: Three-phase 4 or 3-conductor a.c. systems**

| Nominal voltage of power supply systems **[V]** | for conductor-cond. insulat. | for conductor-earth insulation | |
|---|---|---|---|
| | all Systems **[V]** | 3-phase 4-conductor systems with earthed neutral cond. **[V]** | 3-phase 4-conductor systems un-earthed or cond. earthed **[V]** |
| 60 | 63 | 32 | 63 |
| 110<br>120<br>127 | 125 | 80 | 125 |
| 150 | 160 | – | 160 |
| 208 | 200 | 125 | 200 |
| 220<br>230<br>240 | 250 | 160 | 250 |
| 300 | 320 | – | 320 |
| 380<br>400<br>415 | 400 | 250 | 400 |
| 440 | 500 | 250 | 500 |
| 480<br>500 | 500 | 320 | 500 |
| 575 | 630 | 400 | 630 |
| 600 | 630 | – | 630 |
| 660<br>690 | 630 | 400 | 630 |
| 720<br>830 | 800 | 500 | 800 |
| 960 | 1000 | 630 | 1000 |
| 1000 | 1000 | – | 1000 |

# Electrical data

## Design of clearances and creepage distances in electrical equipment, influencing factors:

### Rated voltage

The rated voltage is derived from the nominal voltage of the power supply and the corresponding network type.

**Single-phase**
**2- or 3-wire AC or DC systems**

| Rated voltage of the power supply (mains) *) | Voltages for table 4 | |
|---|---|---|
| | For insulation phase-to-phase [1] | For insulation phase-to-earth [1] |
| | All systems | 3-wire systems neutr. point earthing |
| V | V | V |
| 12.5 | 12.5 | – |
| 24 / 25 | 25 | – |
| 30 | 32 | – |
| 42 / 48 / 50**) | 50 | – |
| 60 | 63 | – |
| 30–60 | 63 | 32 |
| 100**) | 100 | – |
| 110 / 120 | 125 | – |
| 150**) | 160 | – |
| 220 | 250 | – |
| 110–220 | 250 | 125 |
| 120–240 | | |
| 300**) | 320 | – |
| 220–440 | 500 | 250 |
| 600**) | 630 | – |
| 480–960 | 1000 | 500 |
| 1000**) | 1000 | – |

**3-phase**
**3- or 4-wire AC systems**

| Rated voltage of the power supply (mains) *) | Voltages for table 4 | | |
|---|---|---|---|
| | For insulation phase-to-phase | For insulation phase-to-earth | |
| | All systems | 3-phase 4-wire systems with earthed-neutral wire[2] | 3-phase 3-wire systems unearthed[1] or phase-earthed |
| V | V | V | V |
| 60 | 63 | 32 | 63 |
| 110/120/127 | 125 | 80 | 125 |
| 150**) | 160 | – | 160 |
| 208 | 200 | 125 | 200 |
| 220/230/240 | 250 | 160 | 250 |
| 300**) | 320 | – | 320 |
| 380/400/415 | 400 | 250 | 400 |
| 440 | 500 | 250 | 500 |
| 480/500 | 500 | 320 | 500 |
| 575 | 630 | 400 | 630 |
| 600**) | 630 | – | 630 |
| 660/690 | 630 | 400 | 630 |
| 720/830 | 800 | 500 | 800 |
| 960 | 1000 | 630 | 1000 |
| 1000**) | 1000 | – | 1000 |

1) Phase-to-earth insulation levels for unearthed or impedance-earthed systems are equal to those of phase-to-phase because the operating voltage to earth of any phase can, in practice, reach full phase-to-phase voltage. This is because the actual voltage to earth is determined by the insulation resistance and capacitive reactance of each phase to earth; thus, a low (but acceptable) insulation resistance of one phase can earth it and raise the other two to full phase-to-phase voltage to earth.

2) For electrical equipment for use in both 3-phase 4-wire and 3-phase 3-wire supplies, earthed and unearthed, use the values for 3-wire systems only.

*) It is assumed that the rated voltage of the electrical equipment is not lower than the nominal voltage of the power supply.

**) Because of the common changes, the meaning of the ** symbol has not been used in table 1; i.e. the / symbol indicates a 4-wire 3-phase distribution system. The lower value is the phase-to-neutral voltage, while the higher value is the phase-to-phase voltage. Where only one value is indicated, it refers to 3-wire 3-phase systems and specifies the value phase-to-phase. The values given in table 1 are still taken into account in tables 3a and 3b by the ** symbol.

### Insulating material

The insulating materials are subdivided into four groups according to their CTI (Comparative Tracking Index):

| Insulating material | |
|---|---|
| I | 600 ≤ CTI |
| II | 400 ≤ CTI < 600 |
| III a | 175 ≤ CTI < 400 |
| III b | 100 ≤ CTI < 175 |

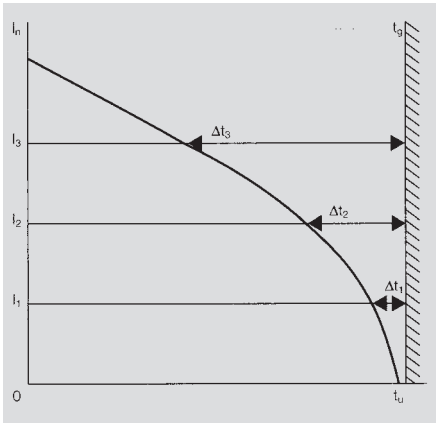
The comparative tracking index must be determined according to DIN IEC 112/ VDE 0303 part 1 on the basis of specially prepared samples with test solution A

The **derating curve** shows which currents may flow continuously and simultaneously via all possible connections when the component is subjected to various ambient temperatures below its upper limit temperature.

The **upper limit temperature** of a component is the rated value determined by the materials used. The total of the ambient temperature plus the temperature rise caused by the current load (power loss at contact resistance) may not exceed the upper limit temperature of the component, otherwise it will be damaged or even completely ruined. The current-carrying capacity is hence not a constant value, but rather decreases as the component ambient temperature increases. Furthermore, the current-carrying capacity is influenced by the geometry of the component, the number of poles and the conductor(s) connected to it.

The current-carrying capacity is determined empirically according to DIN IEC 60512-3. To do this, the resulting component temperatures $t_{b1}$, $t_{b2}$ … and the ambient temperatures $t_{u1}$, $t_{u2}$ are measured for three different currents $I_1$, $I_2$, $I_3$ ….
The values are entered on a graph with a system of linear coordinates to illustrate the relationships between the currents, the ambient temperatures and the temperature rise in the component.

## Base curve

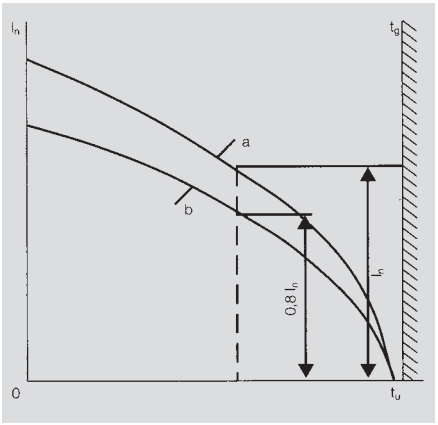



$t_g$ = upper limit temperature of component
$t_u$ = ambient temperature
$I_n$ = current

**The loading currents** are plotted on the y-axis, the **component ambient temperatures** on the x-axis. A line drawn perpendicular to the x-axis at the upper limit temperature $t_g$ of the component completes the system of coordinates. The associated average values of the temperature rise in the component, $\Delta t_1 = t_{b1}-t_{u1}$, $\Delta t_2 = t_{b2}-t_{u2}$,... are plotted for every current $I_1$, $I_2$, … to the left of the perpendicular line. The points generated in this way are joined to form a roughly parabolic curve.

As it is practically impossible to choose components with the maximum permissible contact resistances for the measurements, the base curve must be reduced. Reducing the currents to 80% results in the **"derating curve"** in which

## Derating curve




$t_g$ = upper limit temperature of component
$t_u$ = ambient temperature
$I_n$ = current
a = Base curve
b = Reduced base curve (derating curve)

the maximum permissible contact resistances and the measuring uncertainties in the temperature measurements are taken into account in such a way that they are suitable for practical applications, as experience has shown. If the derating curve exceeds the currents in the low ambient temperature zone, which is given by the current-carrying capacity of the conductor cross-sections to be connected, then the derating curve should be limited to the smaller current in this zone.

# EMC

Many interfaces require the use of a connector that is EMC-compliant.

### What is meant by the phrase EMC-compliant?

Electro-magnetic compatibility (EMC) refers to the ability of electrical equipment to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to anything in that environment. (DIN VDE 0870). An electrical component or electrical equipment is considered to be compatible when their emissions and sensitivity levels are within a tolerable range (i.e., when there is sufficient interference immunity).

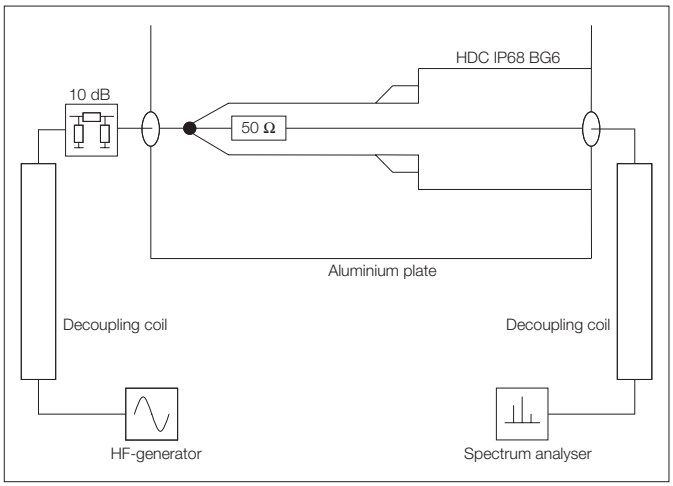
### The basics

There are several types of measurements that can be used to determine the effectiveness of a cable shield. The method used here is the KS 04 B measurement from VG 95 373-41 “Electromagnetic compatibility of devices – methods for measuring shielded cable and shielded protective cable hoses”. This method enables the quality of the shield to be evaluated. It also assesses the influence of the contact points of the shielding braid as well as the male and female plug components.
A standardised test cable with a length of one metre is used. This, and the fact that this measurement is carried out in a 50-ohm system which does not take the actual line impedance into account, leads to characteristic resonance effects. This means that this measurement process only delivers meaningful results up to a frequency of 30 to 100 MHz. It is, however, well suited for evaluating and comparing the effectiveness of various shielding and shield-contacting methods. It does not deliver an absolute value that would enable the limiting of voltages coupled in a cable, using an imposed HF electromagnetic field. The user should always consider the measurement results relative to the laboratory operational situation. Your actual, real-world shield attenuation values will normally be less than the values achieved in the lab because of different cable lengths, impedance behaviour and non-optimal earthing.

### Testing methods

The method applied does not use the normative tri-axial measuring platform, but instead uses an aluminium plate (with dimensions 500 x 380 x 10 mm). This plate serves as the test’s reference earth. HF sockets (N-standard) are mounted on two standing angular panels and are used to connect the measuring device. The flange along with the plug are mounted to one of the angular panels.

The limit value of the shield attenuation Sa is
f < 1 MHz: 60 dB
1 MHz < f < 100 MHz: 60 – 30 dB with15 dB per decreasing decade f = 100 MHz: 30 dB

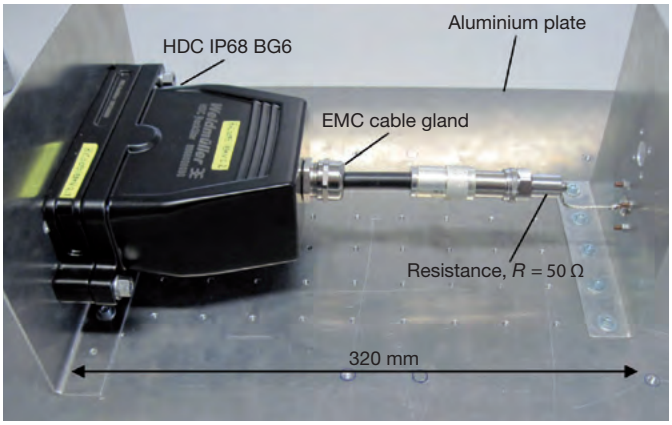



According to VG 95373-41, a frequency range up to 30 MHz is specified for the measurement process. However the range can be extended to about 100 MHz for information purposes.
The insertion loss $a_s$ of the test object is determined by the relationship between the voltage on the interior wire and the supplied voltage. The VG95373-41 also refers to the insertion loss as the shield attenuation factor. The relationship between insertion loss $a_s$ and coupling resistance $Z_k$ is characterised as follows:

Insertion loss: $a_s \approx 20 \lg 50\ \Omega / |Z_k|$ in dB
Coupling resistance: $Z_k \approx 50\ \Omega \times 10$ as / 20 in $\Omega$

According to VG 95373-41, this relationship has sufficient precision when $Z_k < 500\ m\Omega$.

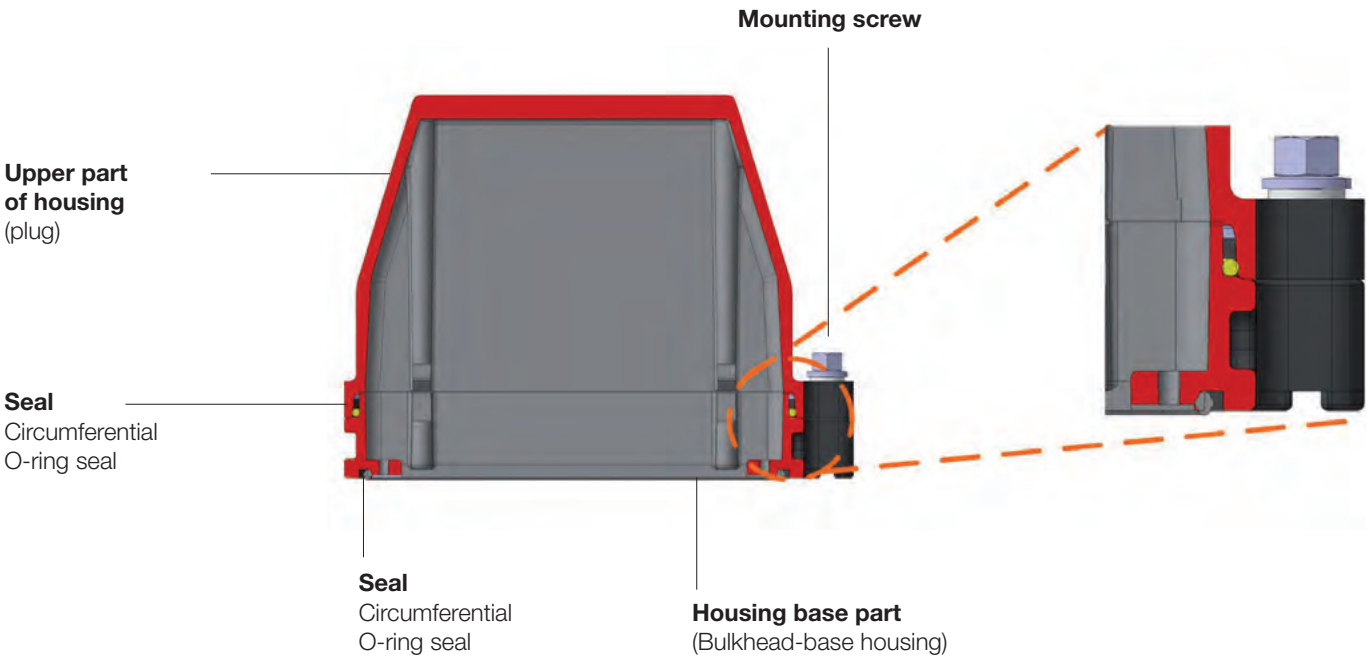
In order to test plug-in connectors, a reference shield cable is used that is separated in the middle. The cable can be connected with a corresponding connector pair and measured as described above. In order to evaluate the shield (the resistance between the cable shield and the reference earth), the connector frame and its reference earth are mounted directly to the cover of the testing equipment.




Housing must have very good EMC characteristics in order to meet these requirements.

Weidmüller has designed the RockStar® IP68 housing with built-in features that ensure outstanding EMC and resistance to interference.

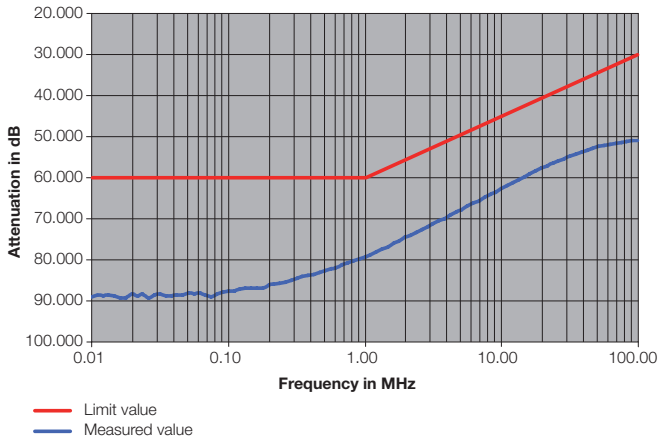
The bulkhead or base housing, combined with the plug housing, produces a labyrinth structure which ensures high EMC shield attenuation. In addition to providing the required EMC protection, this housing series features IP68/IP69K protection and excellent resistance to impacts and vibration. This combination of features permits the RockStar® IP68 housing to be used anywhere.



## Technical data

The requirements for an EMC-compliant interface stipulate that the interference immunity level or shield attenuation potential should be rated high enough so that the electromagnetic fields in the vicinity of the transmitted signals cannot exert influence within the connector. The capacity for active interference must be low enough to ensure that surrounding devices or components are not affected by interference. The following diagrams illustrate the insertion loss and the coupling impedance for the adjacent housing.

### Insertion loss

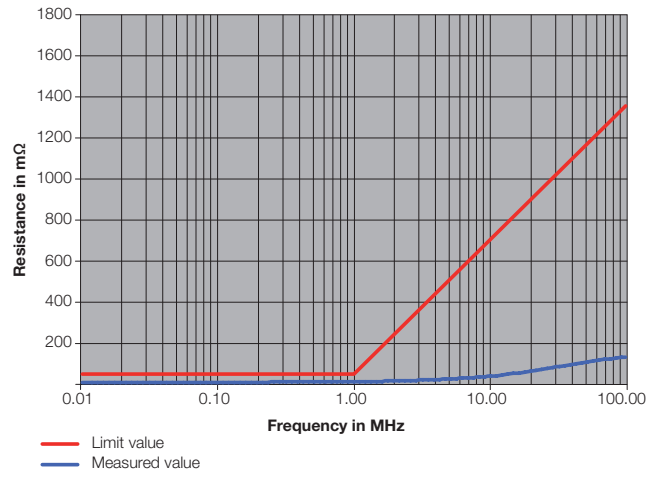






HDC IP68 16B TSS 1M50

### Coupling impedance



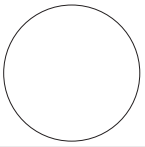
# IP class of protection to IEC 60529

The class of protection is indicated by a code consisting of the two letters IP and two digits representing the class of protection.

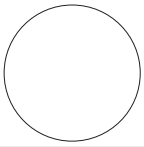
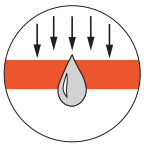
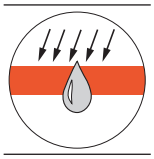
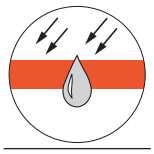
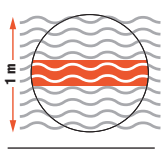
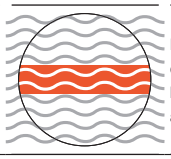
Example: **I P 6 6**

- 2nd digit: protection from liquids
- 1st digit: protection from solid bodies

## Protection against intrusion of external particle matter (1st digit)

| Digit | | |
|---|---|---|
| 0 |  | No protection |
| 1 |  | Protection against ingress of large solid bodies with diameter > 50 mm. (Protection to prevent dangerous parts being touched with the back of the hand.) |
| 2 |  | Protection against ingress of large solid bodies with diameter > 12.5 mm. (Protection to prevent dangerous parts being touched with the fingers.) |
| 3 |  | Protection against ingress of large solid bodies with diameter > 2.5 mm. (Protection to prevent dangerous parts being touched with a tool.) |
| 4 |  | Protection against ingress of large solid bodies with diameter > 1 mm. (Protection to prevent dangerous parts being touched with a piece of wire.) |
| 5 |  | Protection against harmful deposits of dust, which cannot enter in an amount sufficient to interfere with satisfactory operation. |
| 6 |  | Complete protection against ingress of dust. |

## Protection against penetration of liquids (2nd digit)

| Digit | | |
|---|---|---|
| 0 |  | No protection |
| 1 |  | Protection against drops of condensed water falling vertically. |
| 2 |  | Protection against drops of liquid falling at an angle of 15° with respect to the vertical. |
| 3 |  | Protection against drops of liquid falling at an angle of 60° with respect to the vertical. |
| 4 |  | Protection against liquids splashed from any direction. |
| 5 |  | Protection against water jets projected by a nozzle from any direction. |
| 6 |  | Protection against water from heavy sea on ships' decks. |
| 7 |  | Protection against immersion in water under defined conditions of pressure and time. |
| 8 |  | Protection against indefinite immersion in water under defined conditions of pressure (which must be agreed between manufacturer and user and must be more adverse than number 7). |

# Class of protection to NEMA

National Electrical Manufacturers Association NEMA 250-1991

| Digit | |
|---|---|
| **Type 1** | Housing primarily for use in inside rooms. Protects from penetration of solid bodies. |
| **Type 2** | Housing primarily for use in inside rooms. Protects from penetration of solid bodies and water. |
| **Type 3** | Housing primarily for outdoor use. Protection against penetration by rainfall and dust as well as damage due to ice formation. |
| **Type 3R** | Housing primarily for outdoor use. Protection against rain and snow as damage due to ice-formation. |
| **Type 3S** | Housing primarily for outdoor use. Protection against rain, snow and foreign bodies. External mechanisms can be operated despite ice accumulation. |
| **Type 4** | Housing for inside and outside rooms. Protects from rain, foreign bodies, water spray and water jets as well as damage through ice formation on the outside of the housing. |
| **Type 4X** | Housing for inside and outside rooms. Protects from corrosion, rain, foreign bodies, water spray and water jets as well as damage through ice formation on the outside of the housing. |
| **Type 6** | Housing for inside and outside rooms. Protects from water jets as well as penetration of water when submerged; protects from damage through ice formation on the outside of the housing. |

| Digit | |
|---|---|
| **Type 12** | Housing for use in inside rooms. Protects from dust deposits and non-corrosive dripping liquids. |
| **Type 13** | Housing for use in inside rooms. Protects from dust deposits, water spray, oil and non-corrosive coolants. |

# Chemical resistance

| Chemical resistance of inserts (material PC, 20 % GF) | |
|---|---|
| Acetone | + |
| Ammonia, aqueous | – |
| Petrol | + |
| Benzine | + |
| Diesel oil | – |
| Acetic acid, concentrated | + |
| Aqueous potassium hydroxide | – |
| Methanol | – |
| Engine oil | – |
| Alkaline solution, diluted | + |
| Chlorinated hydrocarbons | – |
| Use in open air | – |

| Chemical resistance of standard housing seal (material NBR) | |
|---|---|
| Acetone | – |
| Drilling oil | + |
| Diesel oil | + |
| Ethyl alcohol | + |
| Gear oil | + |
| Hydraulic oil | + |
| Cooling lubricant | + |
| Petrol | + |
| Sweat | + |
| High-octane petrol | – |
| Water | + |
| UV | – |
| Ozone | – |

+ resistant
– partially resistant
o not resistant

# Safety information / standards

**Please note the following safety information:**

- Never plug or unplug connectors under load or during operations.
- We can only guarantee the technical and electro-technical characteristics promised in this catalogue if all the components were supplied by Weidmüller.

The following standards apply in the vicinity of heavy-duty connectors:

- DIN EN 60664-1 or IEC 60664-1: Insulation coordination for equipment within low-voltage systems; principles, requirements and tests (replaces DIN VDE 0110-1)
- DIN EN 61984 or IEC 61984:
  Plug-in connectors – safety requirements and tests
- DIN EN 175301-801:
  Detail Specification: High-density rectangular plug-in connectors, round removable crimp contacts; (replaces DIN 43652)
- DIN EN 60352 or IEC 60352:
  Solderless connections
- DIN EN 60529 or IEC 60529:
  Classes of protection provided by enclosures (IP code)
- DIN VDE 0870:
  Electromagnetic influence
- DIN EN 60999-1:
  Connecting devices, safety requirements for screw terminal connections and screwless terminal connections for electrical copper conductors
- DIN 40050-9:
  Road vehicles; classes of protection (IP-code)

# RockStar® inserts

## RockStar® inserts


**Introduction** B.2

**HA series – the slim connectors** B.4
250 V
22 A
3 – 48 poles

**HE series – the universal connectors** B.18
500 V
24 A
6 – 48 poles

**HEE series – high contact density** B.32
500 V
16 A
10 – 46 poles

**HD series – the flexible connectors** B.44
250 V
10 A
7 – 128 poles

**HDD series – the compact connectors** B.68
250 V
10 A
24 – 216 poles

**HVE series – exciting voltage** B.82
830 V
23 A
3 + 2; 6 + 2; 10 + 2 poles

**HSB series – the heavy-duty connectors** B.90
400 V
35 A
6 – 12 poles

**HQ series – the powerful little connectors** B.96
400 V / 690 V
16 A, 10/40 A
4/2, 5, 7, 8, 17 poles

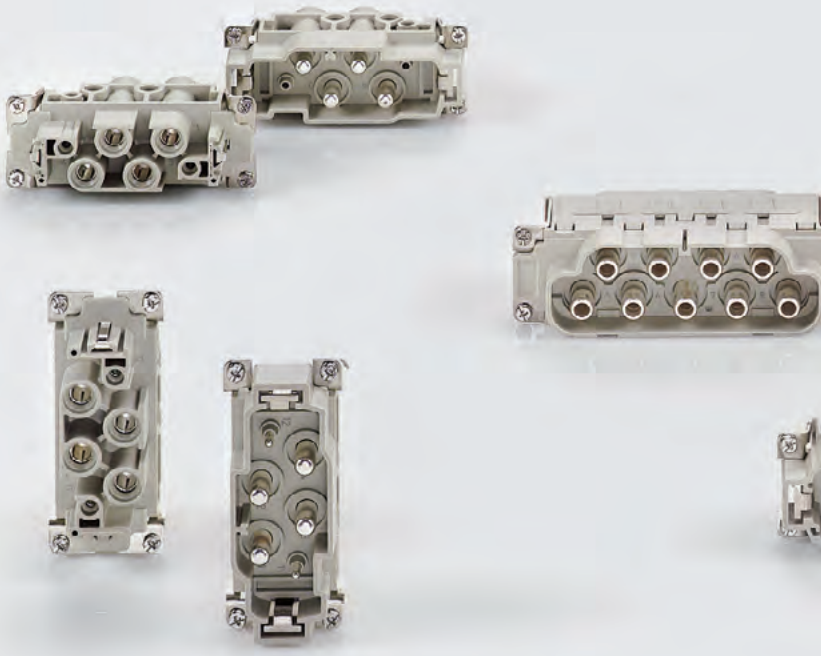
**MixMate series – the high-capacity connectors** B.108
1000 V / 690 V
100 A
4, 4/0, 4/2, 4/8, 6/6, 6/12, 6/36, 8/0, 8/24, 12/2 poles

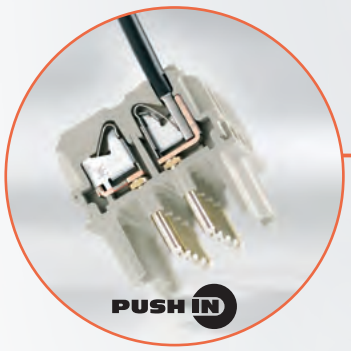
# RockStar® inserts

You can use Weidmüller's RockStar® products for a wide variety of industrial applications. This gives you access to the widest range of products available on the market for your cabling systems. The connector insert, or contact insert, forms the heart of a heavy-duty connector – and Weidmüller offers them in many different variants.

RockStar® inserts are fixed-pole inserts which consist of an insulating body and contact elements. The application-based design of a contact insert is determined by the electrical characteristics, mechanical specifications and the material used to make the insert.

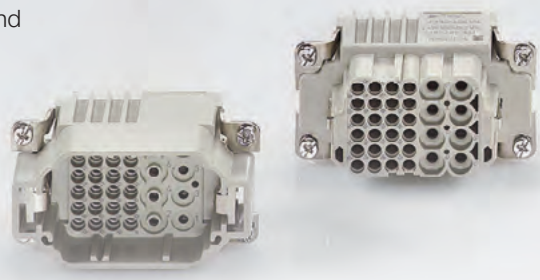
All RockStar® inserts are made from glass-fibre-reinforced polycarbonate. This material is distinguished by its low water absorption and the high levels of dimensional stability made possible by the added glass fibres. So our rugged RockStar® inserts are the ideal choice for solutions of up to 216 poles and a maximum of 110 A / 1000 V.






**Simple**

A quick and safe wire connection using the PUSH IN connection Easy wiring and maintenance - with no tools!





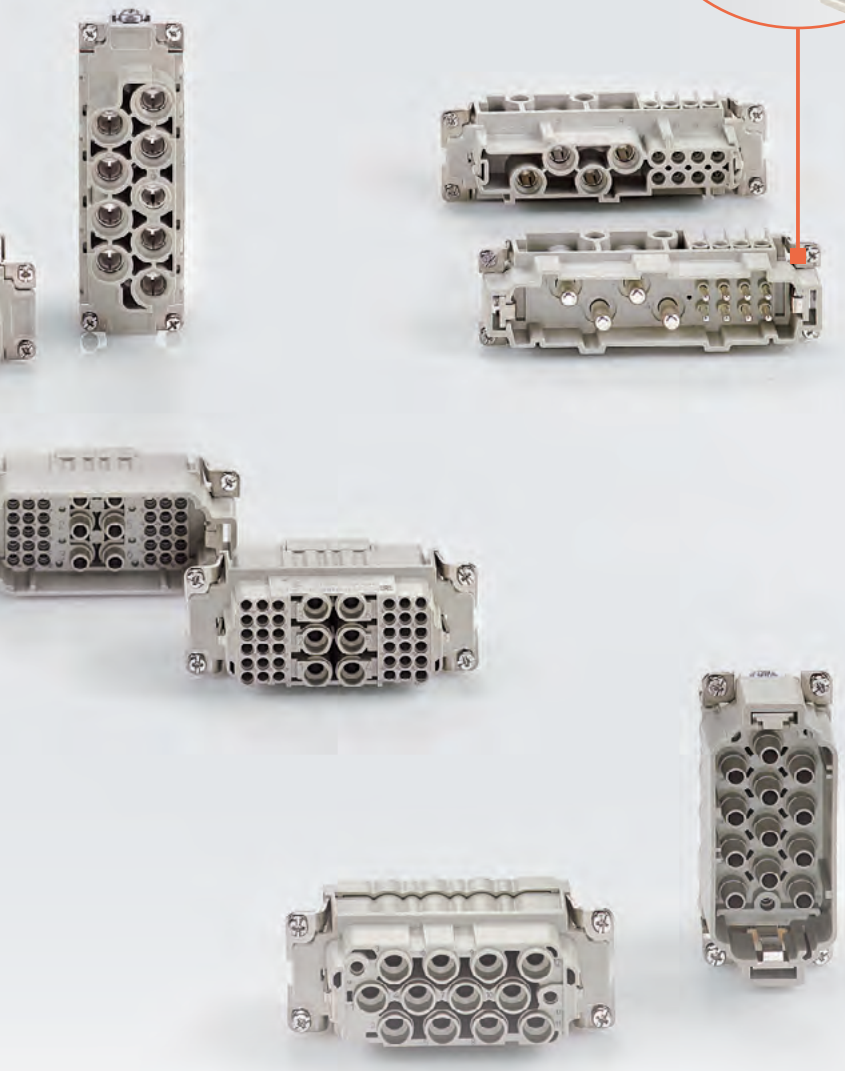

## Consistency

One plastic material – with all approvals. This expands your range of choices. It also helps you to have simple documentation and reliable planning processes.



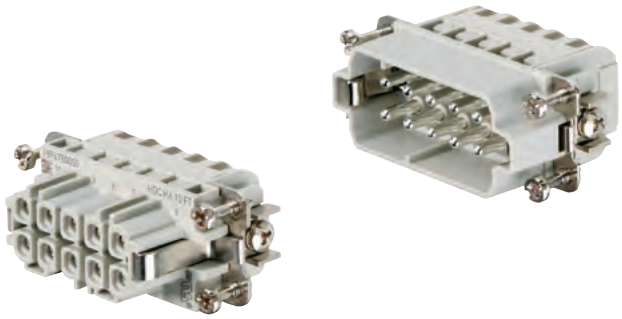
## Suitable

Always according to your needs: including a space-saving combination of power and signals in one connector.



# HA series – the slim connectors

When space is tight, the small and narrow HA series comes into its own.

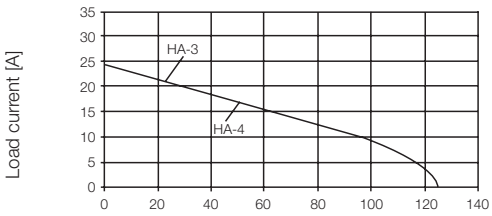


## Technical data

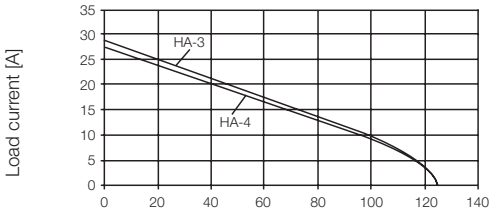
| | |
|---|---|
| **Standards / approvals** | |
| Standards | DIN EN 61984<br>DIN EN 60664-1 |
| Approvals | UL/CSA** |
| **Inserts** | |
| No. of poles | 3, 4, 10, 16, 32, 48 |
| Rated voltage | 250 V |
| Rated voltage to UL/CSA | 600 V |
| Rated current | 22 A (≧ 32 poles 16 A) |
| Rated impulse withstand voltage | 4 kV |
| Pollution severity | 3 (320 V / 4 kV / 2) |
| Insulation resistance | ≥ $10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 |
| Mechanical service life | |
| – Plugging cycles Ag - Surface | ≥ 500 |
| – Plugging cycles Au - Surface | ≥ 500 |
| Contact resistance | |
| Crimp connection | ≤ 2 mΩ |
| Screw connection, Tension clamp connection | ≤ 2 mΩ |
| **Contacts / Material** | |
| Sockets and plug-in contact | Copper alloy |
| Surface | Passivated silver, or gold-plated |
| Clamping unit / Screw connection | Copper alloy / Passivated silver |
| Clamping range / Stripping length | |
| – Crimp connection* | 0.5 - 2.5 mm² (AWG 20 ... 14) 7.5 mm |
| – Screw connection | 0.5 - 2.5 mm² (AWG 20 … 14) / 9 mm*** |
| – Tension clamp connection | 0.25 - 2.5 mm² (AWG 24 … 14) / 8 mm |
| Clamping torque | |
| – Screw connection | 0.5 - 0.55 Nm |
| SD blades | |
| – Screw connection | 0.6 x 3.5 or PZ 0 |
| – Tension clamp connection | 0.5 x 3 or 0.6 x 3.5 |
| PE connection | |
| – Clamping range | 0.5 … 2.5 mm² |
| – solid / stranded | 0.5 … 2.5 mm² / 0.5 … 2.5 mm² |
| – flexible / flexible with wire end ferrule, DIN 46228 pt. 1 | 0.5 … 2.5 mm² / 0.5 … 2.5 mm² |
| – AWG conductor | AWG 20 ... 14 |
| – Stripping length | 10 mm |
| – Clamping torque | 1.2 … 1.5 Nm |
| – Blade dimensions | SD 0.8 x 4 mm or PZ 1 |

**Note:**
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!
* Crimping with flexible conductors.
** For screw and crimp connections.
*** Stripping length of 6 mm for the 3- and 4-pole HA

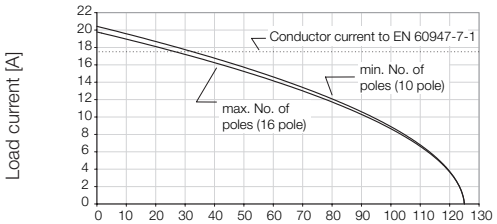
**Derating curves**



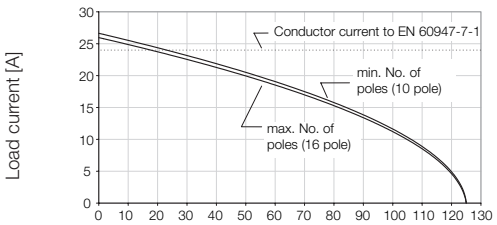

**3 + 4-pole, 1.5 mm²** Ambient temperature [°C]




**3 + 4-pole, 2.5 mm²** Ambient temperature [°C]




**10 ... 48-pole, 1.5 mm²** Ambient temperature [°C]




**10 ... 48-pole, 2.5 mm²** Ambient temperature [°C]

## Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 1 | 250 V | 22 A | 3 + ⏚ | | • | | | | B.6 |
|  |  | 1 | 250 V | 22 A | 4 + ⏚ | | • | | | | B.8 |
|  |  | 2 | 250 V | 22 A | 10 + ⏚ | • | • | • | | | B.10 |
|  |  | 5 | 250 V | 22 A | 16 + ⏚ | • | • | • | | | B.12 |
|  |  | 7 | 250 V | 16 A | 32 + ⏚ | • | • | • | | | B.14 |
|  |  | 9 | 250 V | 16 A | 48 + ⏚ | • | • | • | | | B.16 |

## HA series - the slim connectors

### 250 V, 22 A, Size 1

3 + ⏚

## Inserts

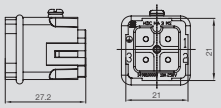
**Screw connection**



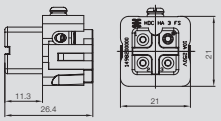
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 3 MS | **1498100000** |
| Female | HDC HA 3 FS | **1498200000** |

**Dimensions**

Male




Female




**Arrangement of contacts**

Male




Female



## Housing selection RockStar® IP66
## Size 1

**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

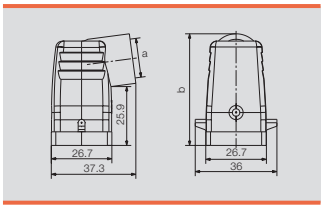
## Hood

### Plug housing, cable entry sideways



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 04A TWLU 1M20G | **1788810000** |

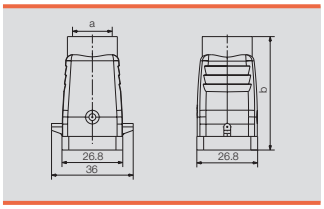



### Plug housing, cable entry at top



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 04A TOLU 1M20G | **1788820000** |



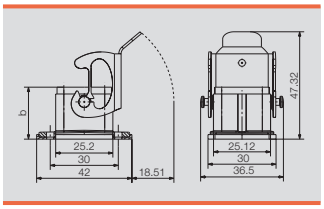

## Base

### Bulkhead housing



**Material:** diecast aluminium

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 04A ALU | **1497600000** |

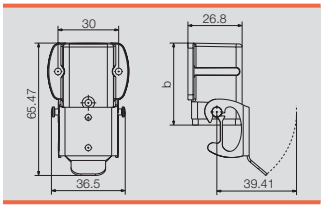



### Base housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 04A SLU 1M20G | **1788830000** |

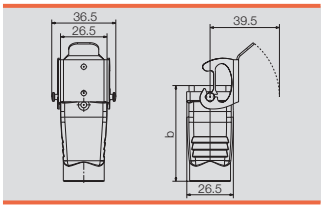



### Coupling housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 04A KOLU 1M20G | **1788840000** |

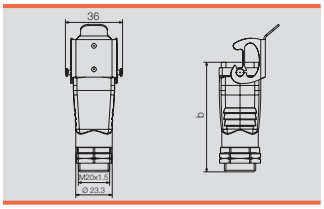



### Screw mounting housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 04A ELU 1M20G | **1900320000** |

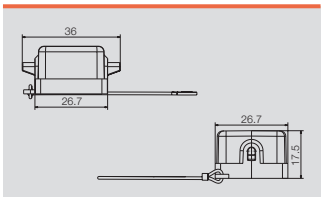



### Cover



**Material:** diecast aluminium

| | Version | | Type | Order No. |
|---|---|---|---|---|
| | for female insert | | HDC 04A DMDL 2BO | **1665750000** |
| | for male insert | | HDC 04A DODL 2BO | **1665740000** |



## 250 V, 22 A, Size 1

4 + ⏚

## Inserts

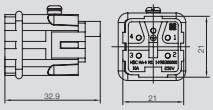
**Screw connection**



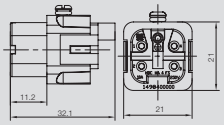
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 4 MS | **1498300000** |
| Female | HDC HA 4 FS | **1498400000** |

**Dimensions**

Male




Female




**Arrangement of contacts**

Male




Female



## Housing selection RockStar® IP66
## Size 1

**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

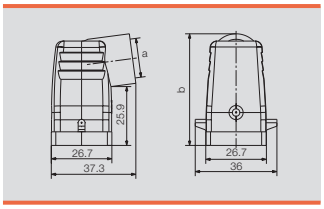
## Hood

### Plug housing, cable entry sideways



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 04A TWLU 1M20G | **1788810000** |

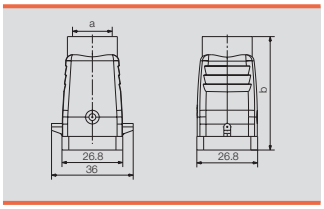



### Plug housing, cable entry at top



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 04A TOLU 1M20G | **1788820000** |



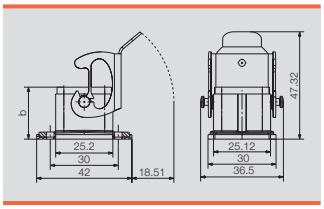

## Base

### Bulkhead housing



**Material:** diecast aluminium

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 04A ALU | **1497600000** |

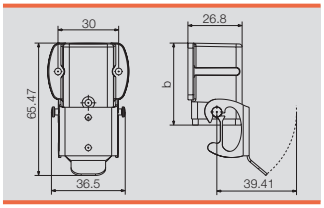



### Base housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 04A SLU 1M20G | **1788830000** |

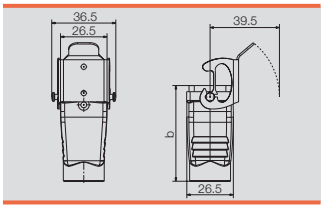



### Coupling housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 04A KOLU 1M20G | **1788840000** |

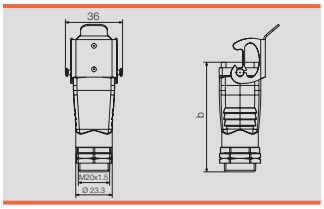



### Screw mounting housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 04A ELU 1M20G | **1900320000** |

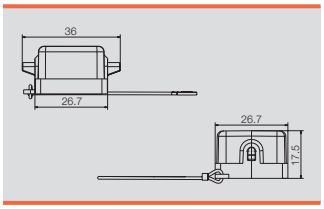



### Cover



**Material:** diecast aluminium

| | Version | | Type | Order No. |
|---|---|---|---|---|
| | for female insert | | HDC 04A DMDL 2BO | **1665750000** |
| | for male insert | | HDC 04A DODL 2BO | **1665740000** |



# HA series - the slim connectors

## 250 V, 22 A, Size 2

10 + ⏚

## Inserts

### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 10 MT | **1896790000** |
| Female | HDC HA 10 FT | **1896780000** |

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 10 MS | **1650610000** |
| Female | HDC HA 10 FS | **1650620000** |

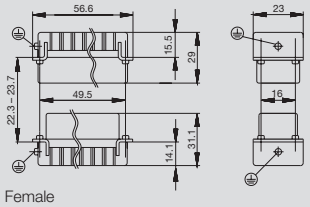
### Crimp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 10 MC | **1873870000** |
| Female | HDC HA 10 FC | **1873860000** |

### Dimensions

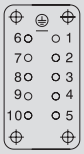
Male



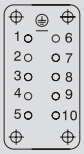

Female

### Arrangement of contacts

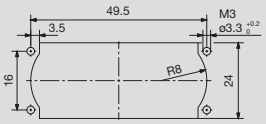
Male




Female




### Mounting cut-out



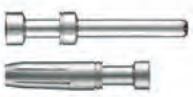

## Accessories

### Crimp contacts

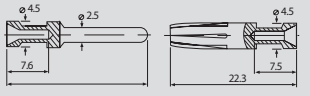
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar® IP66
## Size 2

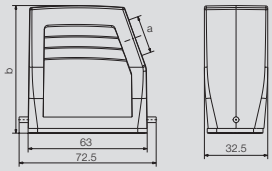
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



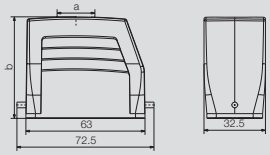
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 68 | HDC 15A TSLU 1M20G | **1788860000** |
| M 25 | w. threading | | 68 | HDC 15A TSLU 1M25G | **1788850000** |




### Plug housing, cable entry at top



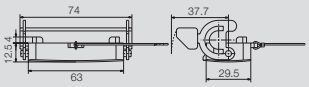
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 10A TOLU 1M20G | **1788620000** |
| M 25 | w. threading | | 54 | HDC 10A TOLU 1M25G | **1788610000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10A DODL 1LB | **1665890000** |

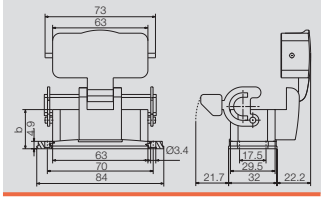



## Base

### Bulkhead housing



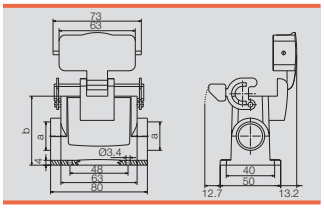
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 25 | HDC 10A ALU | **1664040000** |
| | | with cover | 37.5 | HDC 10A ADLU | **1664060000** |




### Base housing



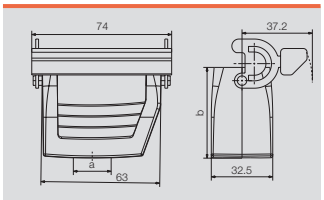
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10A SLU 2M20G | **1788640000** |
| M 20 | w. threading | with cover | 69.5 | HDC 10A SDLU 2M20G | **1788660000** |
| M 25 | w. threading | | 57 | HDC 10A SLU 2M25G | **1788630000** |
| M 25 | w. threading | with cover | 69.5 | HDC 10A SDLU 2M25G | **1788650000** |




### Coupling housing



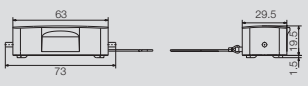
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 48 | HDC 10A KLU 1M25G | **1788670000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10A DMDL 2BO | **1665880000** |



# HA series - the slim connectors

## 250 V, 22 A, Size 5

## 16 + ⏚

## Inserts

### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MT | **1896830000** |
| Female | HDC HA 16 FT | **1896800000** |

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MS | **1650770000** |
| Female | HDC HA 16 FS | **1650780000** |

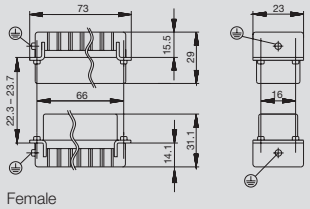
### Crimp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MC | **1873890000** |
| Female | HDC HA 16 FC | **1873880000** |

### Dimensions

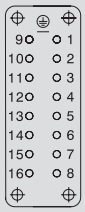
Male



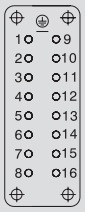

Female

### Arrangement of contacts

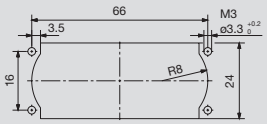
Male




Female




### Mounting cut-out



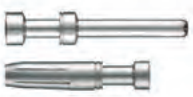

## Accessories

### Crimp contacts

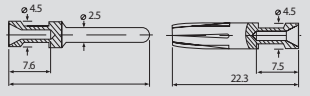
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 5

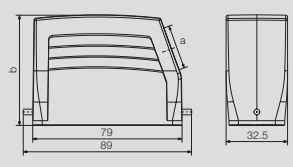
**Further housings are available, see Chapter E for IP66**

## Hood

### Plug housing, cable entry sideways



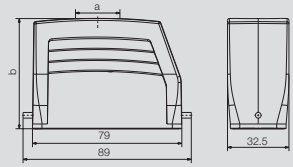
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 72 | HDC 25A TSLU 1M20G | **1788680000** |
| M 25 | w. threading | | 58 | HDC 16A TSLU 1M25G | **1788740000** |
| M 25 | w. threading | | 72 | HDC 25A TSLU 1M25G | **1788690000** |




### Plug housing, cable entry at top



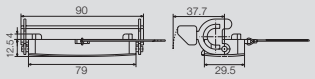
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 72 | HDC 25A TOLU 1M20G | **1788710000** |
| M 25 | w. threading | | 58 | HDC 16A TOLU 1M25G | **1788750000** |
| M 25 | w. threading | | 72 | HDC 25A TOLU 1M25G | **1788700000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16A DODL 1LB | **1665900000** |

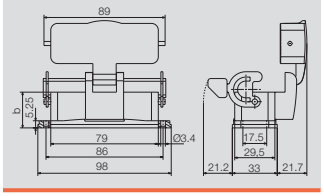



## Base

### Bulkhead housing



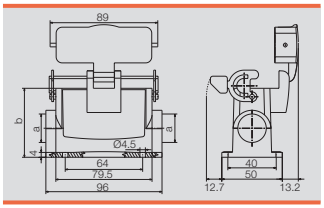
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 25 | HDC 16A ALU | **1664920000** |
| | | with cover | 44.5 | HDC 16A ADLU | **1664940000** |




### Base housing



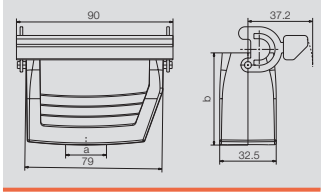
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 16A SLU 2M20G | **1788770000** |
| M 20 | w. threading | with cover | 76.5 | HDC 16A SDLU 2M20G | **1788790000** |
| M 25 | w. threading | | 57 | HDC 16A SLU 2M25G | **1788760000** |
| M 25 | w. threading | with cover | 76.5 | HDC 16A SDLU 2M25G | **1788780000** |




### Coupling housing



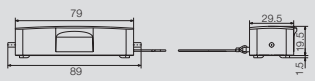
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 53 | HDC 16A KLU 1M25G | **1788800000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16A DMDL 2BO | **1665910000** |



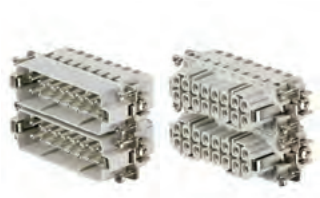
# HA series - the slim connectors

## 250 V, 16 A, Size 7

32 + ⏚

## Inserts

### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MT | **1896830000** |
| Female | HDC HA 16 FT | **1896800000** |
| Male | HDC HA 16 MT 17-32 | **1896840000** |
| Female | HDC HA 16 FT 17-32 | **1896810000** |

**Note** To complete the assembly of the plug-in connector, two inserts are required

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MS | **1650770000** |
| Female | HDC HA 16 FS | **1650780000** |
| Male | HDC HA 16 MS 17-32 | **1650880000** |
| Female | HDC HA 16 FS 17-32 | **1650900000** |

**Note** To complete the assembly of the plug-in connector, two inserts are required

### Crimp connection

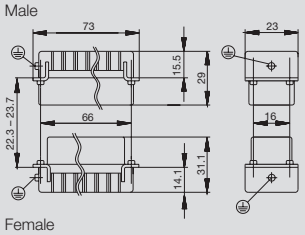


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MC | **1873890000** |
| Female | HDC HA 16 FC | **1873880000** |
| Male | HDC HA 16 MC 17 - 32 | **1875620000** |
| Female | HDC HA 16 FC 17 - 32 | **1876040000** |

**Note** To complete the assembly of the plug-in connector, two inserts are required

### Dimensions

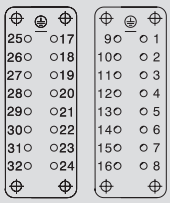
Male



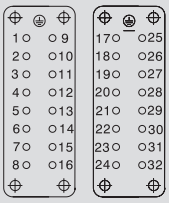

Female

### Arrangement of contacts

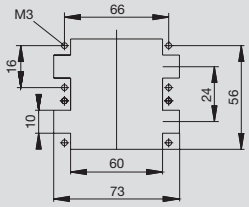
Male




Female




### Mounting cut-out



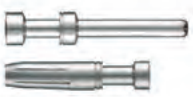

## Accessories

### Crimp contacts

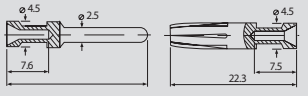
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 7

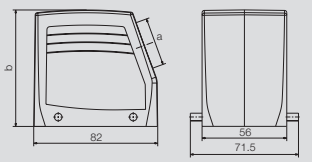
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



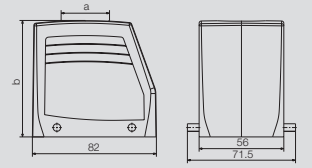
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 75 | HDC 32A TSBU 1M25G | **1787960000** |
| M 32 | w. threading | | 75 | HDC 32A TSBU 1M32G | **1787950000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 75 | HDC 32A TOBU 1M32G | **1787990000** |

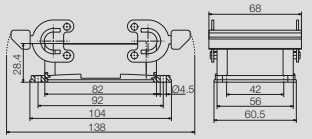



## Base

### Bulkhead housing



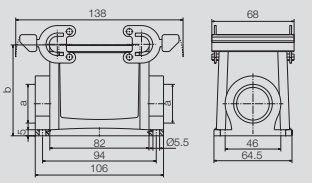
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 28.4 | HDC 32A ABU | **1665860000** |




### Base housing



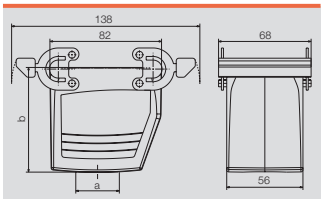
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 75 | HDC 32A SBU 2M25G | **1788040000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 76.5 | HDC 32A KBU 1M25G | **1788080000** |
| M 32 | w. threading | | 76.5 | HDC 32A KBU 1M32G | **1788070000** |



# HA series - the slim connectors

## 250 V, 16 A, Size 9

48 + ⏚

## Inserts

### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MT | 1896830000 |
| Female | HDC HA 16 FT | 1896800000 |
| Male | HDC HA 16 MT 17-32 | 1896840000 |
| Female | HDC HA 16 FT 17-32 | 1896810000 |
| Male | HDC HA 16 MT 33-48 | 1896850000 |
| Female | HDC HA 16 FT 33-48 | 1896820000 |

**Note** To complete the assembly of the plug-in connector, three inserts are required

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MS | 1650770000 |
| Female | HDC HA 16 FS | 1650780000 |
| Male | HDC HA 16 MS 17-32 | 1650880000 |
| Female | HDC HA 16 FS 17-32 | 1650900000 |
| Male | HDC HA 16 MS 33-48 | 1650990000 |
| Female | HDC HA 16 FS 33-48 | 1651020000 |

**Note** To complete the assembly of the plug-in connector, three inserts are required

### Crimp connection

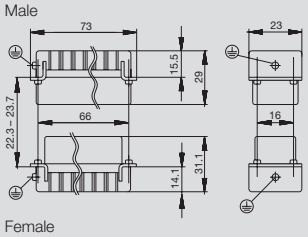


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HA 16 MC | 1873890000 |
| Female | HDC HA 16 FC | 1873880000 |
| Male | HDC HA 16 MC 17 - 32 | 1875620000 |
| Female | HDC HA 16 FC 17 - 32 | 1876040000 |
| Male | HDC HA 16 MC 33 - 48 | 1875630000 |
| Female | HDC HA 16 FC 33 - 48 | 1875540000 |

**Note** To complete the assembly of the plug-in connector, three inserts are required

### Dimensions

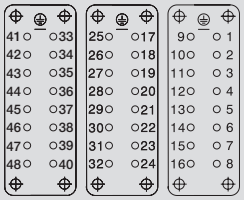
Male



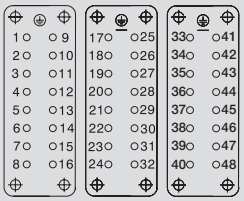

Female

### Arrangement of contacts

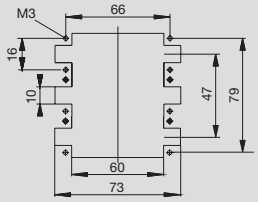
Male




Female




### Mounting cut-out



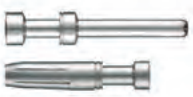

## Accessories

### Crimp contacts

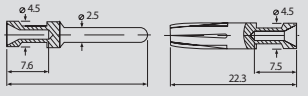
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HE-SM0.5AU | 1651420000 | HDC-C-HE-BM0.5AU | 1651470000 |
| 100 | HDC-C-HE-SM0.75-1.00AU | 1651430000 | HDC-C-HE-BM0.75-1.00AU | 1651480000 |
| 100 | HDC-C-HE-SM1.5AU | 1651440000 | HDC-C-HE-BM1.5AU | 1651490000 |
| 100 | HDC-C-HE-SM2.5AU | 1651450000 | HDC-C-HE-BM2.5AU | 1651500000 |
| 100 | HDC-C-HE-SM4.0AU | 1651460000 | HDC-C-HE-BM4.0AU | 1651510000 |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | 1200500000 | HDC-C-HE-BM0.5AG | 1201100000 |
| 100 | HDC-C-HE-SM0.75-1.00AG | 1200600000 | HDC-C-HE-BM0.75-1.00AG | 1201200000 |
| 100 | HDC-C-HE-SM1.5AG | 1200700000 | HDC-C-HE-BM1.5AG | 1201300000 |
| 100 | HDC-C-HE-SM2.5AG | 1200800000 | HDC-C-HE-BM2.5AG | 1201400000 |
| 100 | HDC-C-HE-SM4.0AG | 1200900000 | HDC-C-HE-BM4.0AG | 1201500000 |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | 9018490000 |
| **Contact Removal Tool** | |
| Removal Tool HE | 1866750000 |

## Housing selection RockStar ® IP66
## Size 9

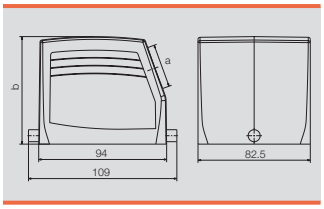
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



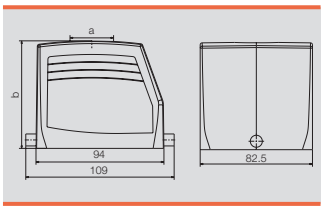
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 48A TSLU 1M32G | **1788550000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 48A TOLU 1M32G | **1788560000** |

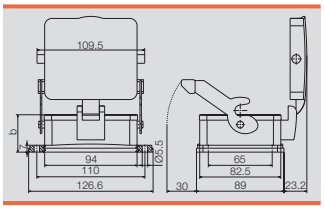



## Base

### Bulkhead housing



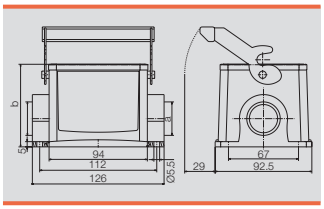
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 48A ALU | **1666740000** |
| | | with cover | 55 | HDC 48A ADLU | **1666750000** |




### Base housing



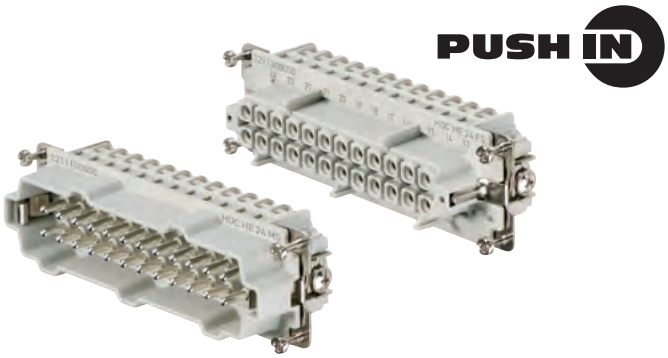
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 48A SLU 2M32G | **1788570000** |



# HE series – the universal connectors

With the HE range, you can choose the wire connection method. In addition to our proven tension-clamp connection, we can also deliver with screw, crimp or PUSH IN wire connection.

You choose the connection method which you need.




## Technical data

| | |
|---|---|
| **Standards / approvals** | |
| Standards | DIN EN 61984<br>DIN EN 60664-1 |
| Approvals | UL/CSA**, ISO 23570 (DESINA)* |
| **Inserts** | |
| No. of poles | 6, 10, 16, 24, 32, 48 |
| Rated voltage | 500 V |
| Rated voltage to UL/CSA | 600 V |
| Rated current | 16 A (6 poles 24 A) |
| Rated impulse withstand voltage | 6 kV |
| Pollution severity | 3 (630 V / 6 kV / 2) |
| Insulation resistance | $\geq 10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 |
| Mechanical service life | |
| – Plugging cycles Ag - Surface | ≥ 500 |
| – Plugging cycles Au - Surface | ≥ 500 |
| Contact resistance | ≤ 2 mΩ |
| **Contacts / Material** | |
| Contacts | Copper alloy |
| Surface | Passivated silver, or gold-plated |
| Clamping range/Stripping length | |
| – Crimp connection | |
| – stranded/flexible | 0.5…4.0 mm²/0.5…4.0 mm² (AWG 20…12) / 7.5 mm |
| – Screw connection | |
| – solid/stranded | 0.5…2.5 mm²/0.5…2.5 mm² (AWG 20…14) / 9 mm |
| – flexible/flexible with wire end ferrule | 0.5…2.5 mm²/0.5…2.5 mm² (AWG 20…14) / 9 mm |
| – Tension clamp connection | |
| – solid/stranded | 0.25…2.5 mm²/ (AWG 24…14 ) / 8 mm |
| – flexible/flexible with wire end ferrule | 0.25…2.5 mm²/ (AWG 24…14 ) / 8 mm |
| – PUSH IN | |
| – solid | 0.5...4 mm² (AWG 20…12 ) / 10 mm |
| – flexible with wire end ferrule | 0.5…2.5 mm² (AWG 20…14 ) / 10 mm |
| Clamping torque | |
| – Screw connection | 0.5 - 0.55 Nm |
| SD blades | |
| – Screw connection | 0.6 x 3.5 or PZ 0 |
| – PUSH IN | 0.4 x 2.5 |
| – Tension clamp connection | 0.5 x 3 or 0.6 x 3.5 |

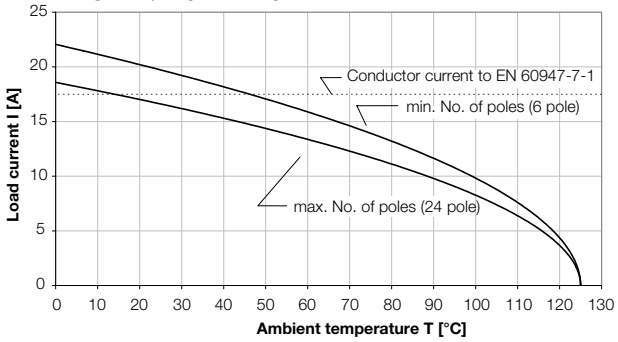
* The HE 10 inserts are included in the ISO 23570 as motor terminal connectors.
** For screw, crimp, and PUSH IN connections

| | |
|---|---|
| **Contacts / Material** | |
| PE connection | |
| – Clamping range | 0.5 … 4 mm² |
| – solid / stranded | 0.5 … 4 mm² / 0.5 … 4 mm² |
| – flexible / flexible with wire end ferrule, DIN 46228 pt. 1 | 0.5 … 4 mm² / 0.5 … 4 mm² |
| – AWG conductor | AWG 20 ... 12 |
| – Stripping length | 10 mm |
| – Clamping torque | 1.2 … 1.5 Nm |
| – Blade dimensions | SD 0.8 x 4 mm or PZ 1 |

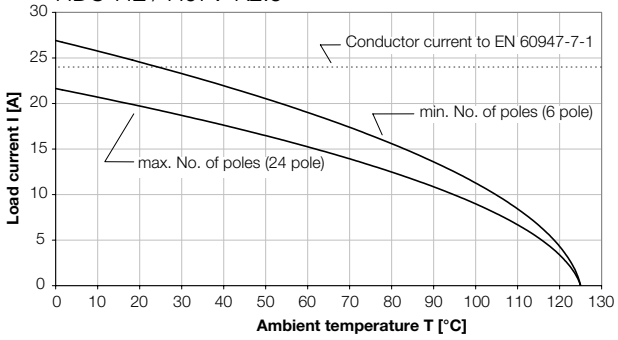
**Note:** When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!
Inserts with PUSH IN connection can be connected to the H07V-U4 conductor.

**Derating curves**

HDC-HE / H07V-K1.5




HDC-HE / H07V-K2.5



## Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 3 | 500 V | 24 A | 6 + ⏚ | • | • | • | • | | B.20 |
|  |  | 4 | 500 V | 16 A | 10 + ⏚ | • | • | • | • | | B.22 |
|  |  | 6 | 500 V | 16 A | 16 + ⏚ | • | • | • | • | | B.24 |
|  |  | 8 | 500 V | 16 A | 24 + ⏚ | • | • | • | • | | B.26 |
|  |  | 10 | 500 V | 16 A | 32 + ⏚ | • | • | • | • | | B.28 |
|  |  | 12 | 500 V | 16 A | 48 + ⏚ | • | • | • | • | | B.30 |

# HE series - the universal connectors

## 500 V, 24 A, Size 3

6 + ⏚

## Inserts

### Tension clamp connection



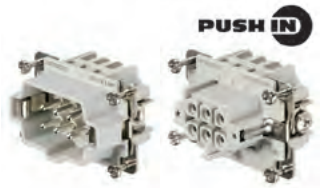
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 6 MT | **1745820000** |
| Female | HDC HE 6 FT | **1745760000** |

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 6 MS | **1200000000** |
| Female | HDC HE 6 FS | **1200200000** |

### PUSH IN connection




| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 6 MP | **1873530000** |
| Female | HDC HE 6 FP | **1873520000** |

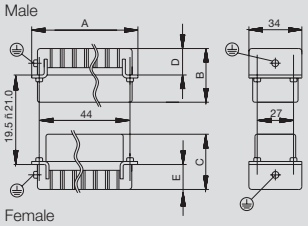
### Crimp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 6 MC | **1200400000** |
| Female | HDC HE 6 FC | **1201000000** |

### Dimensions

Male




Female

| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 51.00 | 33.80 | 33.20 | 19.10 | 16.50 |

### Arrangement of contacts

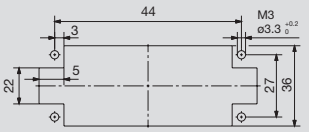
Male




Female




### Mounting cut-out



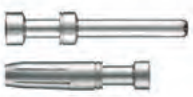

## Accessories

### Crimp contacts

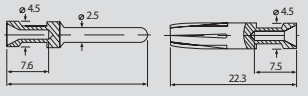
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.50 mm² | AWG 20 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 7.5 mm |
| 1.50 mm² | AWG 16 7.5 mm |
| 2.50 mm² | AWG 14 7.5 mm |
| 4.00 mm² | AWG 12 7.5 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 3

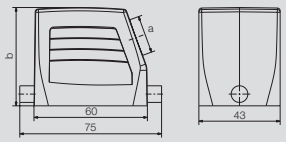
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



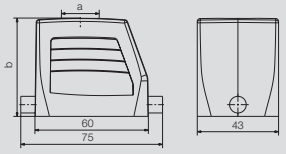
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TSLU 1M20G | **1788100000** |
| M 25 | w. threading | | 52 | HDC 06B TSLU 1M25G | **1788090000** |
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |




### Plug housing, cable entry at top



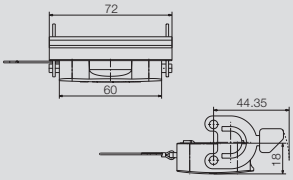
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TOLU 1M20G | **1788120000** |
| M 25 | w. threading | | 52 | HDC 06B TOLU 1M25G | **1788110000** |
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 06B DMDL 1LB | **1665210000** |

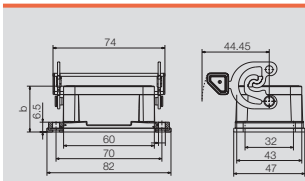



## Base

### Bulkhead housing



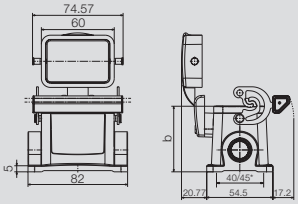
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 06B SLU 2M20G | **1788140000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 2M20G | **1788170000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 2M25G | **1788130000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 2M25G | **1788160000** |

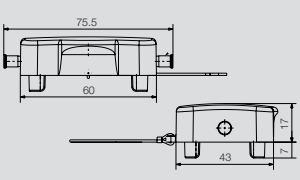



* Mounting dimensions for size-3 base housings, tall shape (16D)

### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 06B DODL 2BO | **1665200000** |



## 500 V, 16 A, Size 4

10 + ⏚

## Inserts

### Tension clamp connection



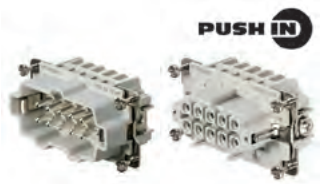
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 10 MT | 1745830000 |
| Female | HDC HE 10 FT | 1745770000 |

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 10 MS | 1203900000 |
| Female | HDC HE 10 FS | 1204100000 |

### PUSH IN connection




| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 10 MP | 1873550000 |
| Female | HDC HE 10 FP | 1873540000 |

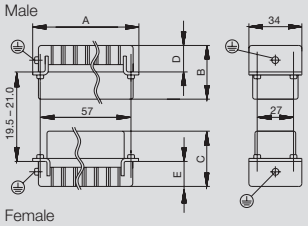
### Crimp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 10 MC | 1204300000 |
| Female | HDC HE 10 FC | 1204400000 |

### Dimensions

Male

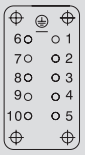



Female

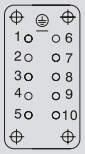
| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 64.00 | 33.80 | 33.20 | 19.10 | 16.50 |

### Arrangement of contacts

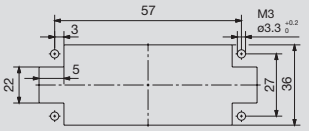
Male




Female




### Mounting cut-out



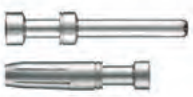

## Accessories

### Crimp contacts

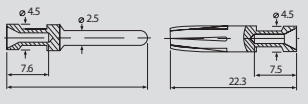
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HE-SM0.5AU | 1651420000 | HDC-C-HE-BM0.5AU | 1651470000 |
| 100 | HDC-C-HE-SM0.75-1.00AU | 1651430000 | HDC-C-HE-BM0.75-1.00AU | 1651480000 |
| 100 | HDC-C-HE-SM1.5AU | 1651440000 | HDC-C-HE-BM1.5AU | 1651490000 |
| 100 | HDC-C-HE-SM2.5AU | 1651450000 | HDC-C-HE-BM2.5AU | 1651500000 |
| 100 | HDC-C-HE-SM4.0AU | 1651460000 | HDC-C-HE-BM4.0AU | 1651510000 |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | 1200500000 | HDC-C-HE-BM0.5AG | 1201100000 |
| 100 | HDC-C-HE-SM0.75-1.00AG | 1200600000 | HDC-C-HE-BM0.75-1.00AG | 1201200000 |
| 100 | HDC-C-HE-SM1.5AG | 1200700000 | HDC-C-HE-BM1.5AG | 1201300000 |
| 100 | HDC-C-HE-SM2.5AG | 1200800000 | HDC-C-HE-BM2.5AG | 1201400000 |
| 100 | HDC-C-HE-SM4.0AG | 1200900000 | HDC-C-HE-BM4.0AG | 1201500000 |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | 9018490000 |
| **Contact Removal Tool** | |
| Removal Tool HE | 1866750000 |

## Housing selection RockStar ® IP66
## Size 4

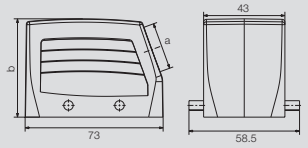
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



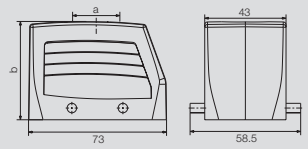
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



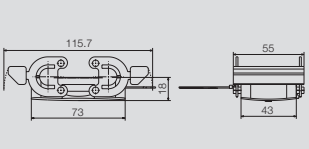
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

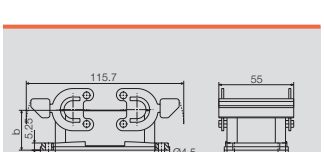



## Base

### Bulkhead housing



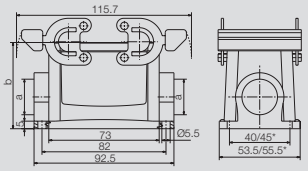
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |

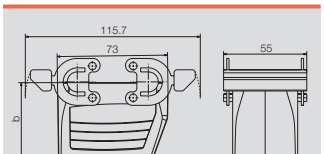



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



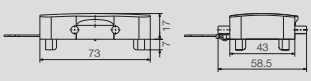
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |



# HE series - the universal connectors

## 500 V, 16 A, Size 6

**16 + ⏚**

## Inserts

### Tension clamp connection



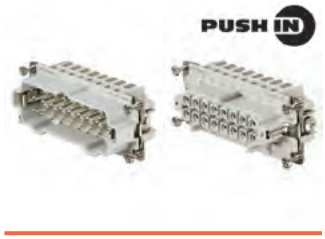
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MT | **1745840000** |
| Female | HDC HE 16 FT | **1745780000** |

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MS | **1207500000** |
| Female | HDC HE 16 FS | **1207700000** |

### PUSH IN connection




| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MP | **1873570000** |
| Female | HDC HE 16 FP | **1873560000** |

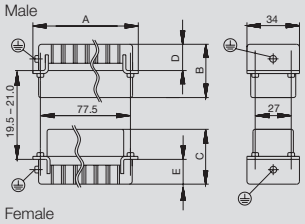
### Crimp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MC | **1207900000** |
| Female | HDC HE 16 FC | **1208000000** |

### Dimensions

Male

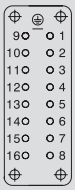



Female

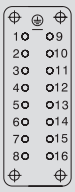
| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 84.50 | 33.80 | 33.20 | 19.10 | 16.50 |

### Arrangement of contacts

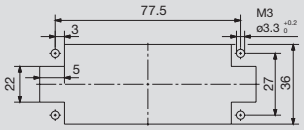
Male




Female




### Mounting cut-out



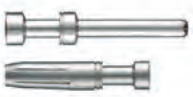

## Accessories

### Crimp contacts

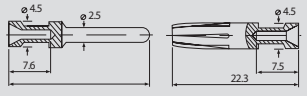
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.50 mm² | AWG 20 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 7.5 mm |
| 1.50 mm² | AWG 16 7.5 mm |
| 2.50 mm² | AWG 14 7.5 mm |
| 4.00 mm² | AWG 12 7.5 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 6

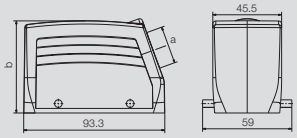
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



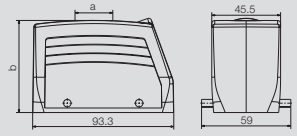
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



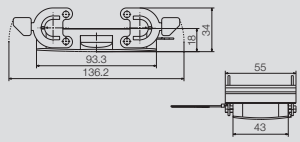
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

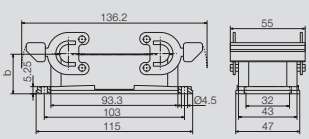



## Base

### Bulkhead housing



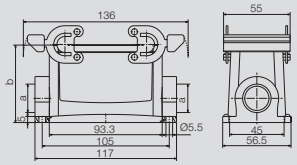
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



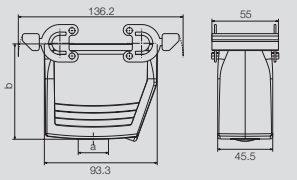
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



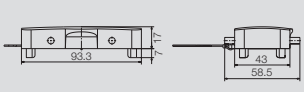
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



# HE series - the universal connectors

## 500 V, 16 A, Size 8

**24 + ⏚**

## Inserts

### Tension clamp connection



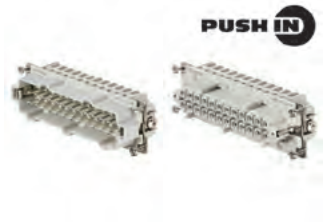
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MT | **1745850000** |
| Female | HDC HE 24 FT | **1745790000** |

### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MS | **1211100000** |
| Female | HDC HE 24 FS | **1211300000** |

### PUSH IN connection




| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MP | **1873590000** |
| Female | HDC HE 24 FP | **1873580000** |

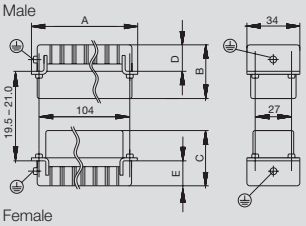
### Crimp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MC | **1211500000** |
| Female | HDC HE 24 FC | **1211600000** |

### Dimensions

Male

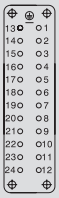



Female

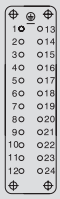
| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 111.00 | 33.80 | 33.20 | 19.10 | 16.50 |

### Arrangement of contacts

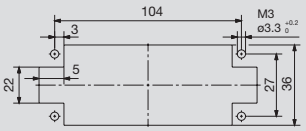
Male




Female




### Mounting cut-out



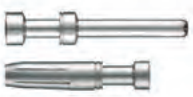

## Accessories

### Crimp contacts

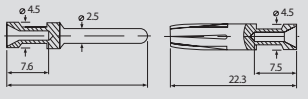
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 8

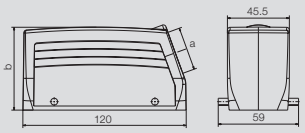
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



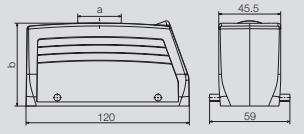
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |



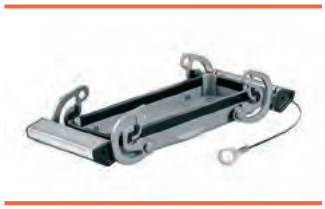

### Plug housing, cable entry at top



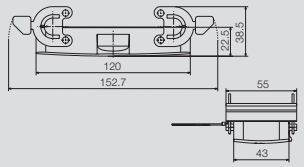
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

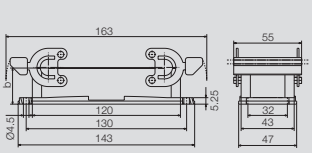



## Base

### Bulkhead housing



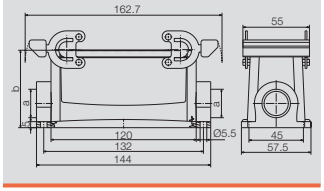
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



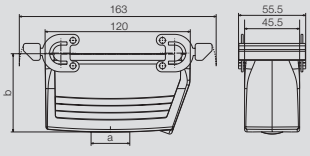
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



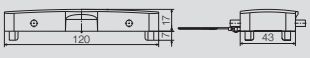
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |



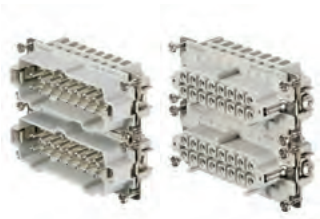
# HE series - the universal connectors

## 500 V, 16 A, Size 10

32 + ⏚

## Inserts

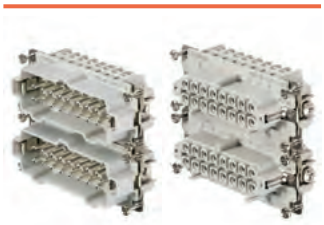
### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MT | 1745840000 |
| Female | HDC HE 16 FT | 1745780000 |
| Male | HDC HE 16 MT 17-32 | 1745860000 |
| Female | HDC HE 16 FT 17-32 | 1745800000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

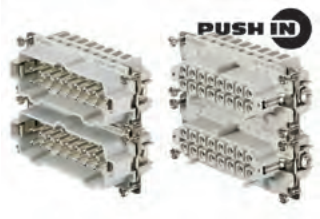
### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MS | 1207500000 |
| Female | HDC HE 16 FS | 1207700000 |
| Male | HDC HE 16 MS 17-32 | 1215700000 |
| Female | HDC HE 16 FS 17-32 | 1216100000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

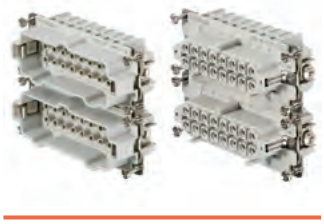
### PUSH IN connection




| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MP | 1873570000 |
| Female | HDC HE 16 FP | 1873560000 |
| Male | HDC HE 16 MP 17-32 | 1875800000 |
| Female | HDC HE 16 FP 17-32 | 1875740000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

### Crimp connection

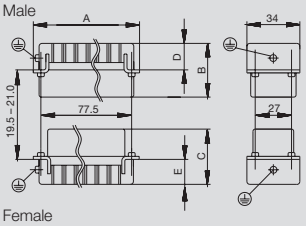


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 16 MC | 1207900000 |
| Female | HDC HE 16 FC | 1208000000 |
| Male | HDC HE 16 MC 17-32 | 1216500000 |
| Female | HDC HE 16 FC 17-32 | 1216700000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

### Dimensions

Male

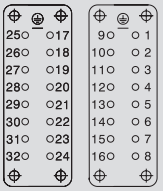



Female

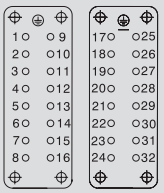
| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 84.50 | 33.80 | 33.20 | 19.10 | 16.50 |

### Arrangement of contacts

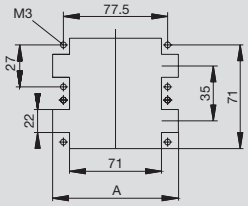
Male




Female




### Mounting cut-out

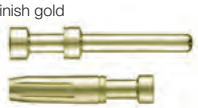



| A (mm) |
|---|
| 84.50 |

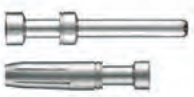
## Accessories

### Crimp contacts

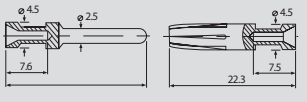
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HE-SM0.5AU | 1651420000 | HDC-C-HE-BM0.5AU | 1651470000 |
| 100 | HDC-C-HE-SM0.75-1.00AU | 1651430000 | HDC-C-HE-BM0.75-1.00AU | 1651480000 |
| 100 | HDC-C-HE-SM1.5AU | 1651440000 | HDC-C-HE-BM1.5AU | 1651490000 |
| 100 | HDC-C-HE-SM2.5AU | 1651450000 | HDC-C-HE-BM2.5AU | 1651500000 |
| 100 | HDC-C-HE-SM4.0AU | 1651460000 | HDC-C-HE-BM4.0AU | 1651510000 |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | 1200500000 | HDC-C-HE-BM0.5AG | 1201100000 |
| 100 | HDC-C-HE-SM0.75-1.00AG | 1200600000 | HDC-C-HE-BM0.75-1.00AG | 1201200000 |
| 100 | HDC-C-HE-SM1.5AG | 1200700000 | HDC-C-HE-BM1.5AG | 1201300000 |
| 100 | HDC-C-HE-SM2.5AG | 1200800000 | HDC-C-HE-BM2.5AG | 1201400000 |
| 100 | HDC-C-HE-SM4.0AG | 1200900000 | HDC-C-HE-BM4.0AG | 1201500000 |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | 9018490000 |
| **Contact Removal Tool** | |
| Removal Tool HE | 1866750000 |

## Housing selection RockStar ® IP66
## Size 10

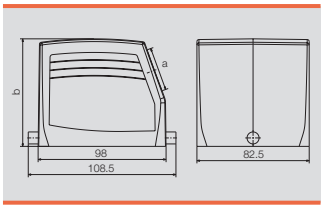
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSLU 1M32G | **1788420000** |

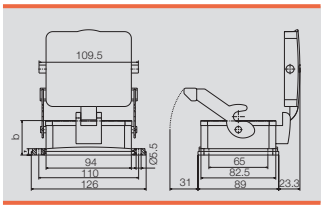



## Base

### Bulkhead housing



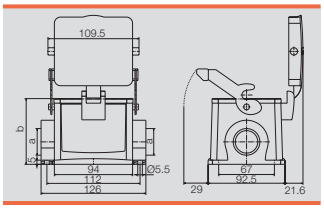
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ALU | **1219500000** |
| | | with cover | 55 | HDC 32B ADLU | **1219800000** |




### Base housing



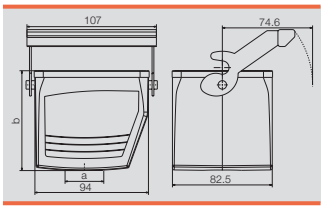
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SLU 2M32G | **1788470000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 2M32G | **1788490000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 83 | HDC 32B KLU 1M32G | **1788500000** |



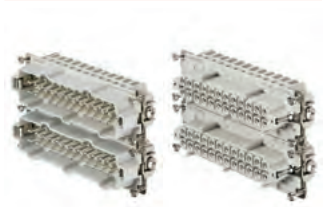
# HE series - the universal connectors

## 500 V, 16 A, Size 12

48 + ⏚

## Inserts

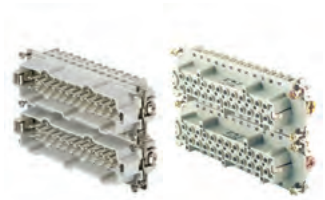
### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MT | 1745850000 |
| Female | HDC HE 24 FT | 1745790000 |
| Male | HDC HE 24 MT 25-48 | 1745870000 |
| Female | HDC HE 24 FT 25-48 | 1745810000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

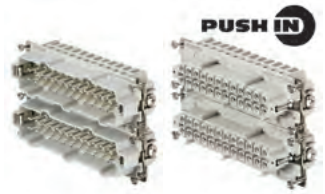
### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MS | 1211100000 |
| Female | HDC HE 24 FS | 1211300000 |
| Male | HDC HE 24 MS 25-48 | 1220800000 |
| Female | HDC HE 24 FS 25-48 | 1221200000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

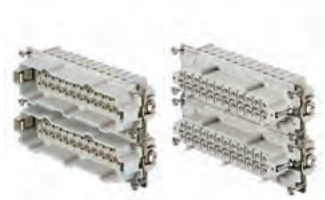
### PUSH IN connection




| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MP | 1873590000 |
| Female | HDC HE 24 FP | 1873580000 |
| Male | HDC HE 24 MP 25-48 | 1875890000 |
| Female | HDC HE 24 FP 25-48 | 1875850000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

### Crimp connection

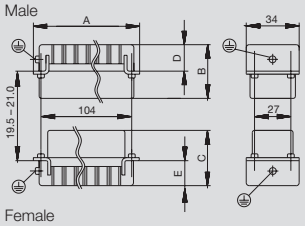


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HE 24 MC | 1211500000 |
| Female | HDC HE 24 FC | 1211600000 |
| Male | HDC HE 24 MC 25-48 | 1226400000 |
| Female | HDC HE 24 FC 25-48 | 1226600000 |

**Note** To complete the assembly of the plug-in connector, two inserts are required

### Dimensions

Male

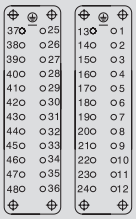



Female

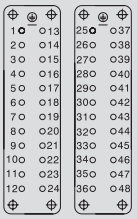
| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 111.00 | 33.80 | 33.20 | 19.10 | 16.50 |

### Arrangement of contacts

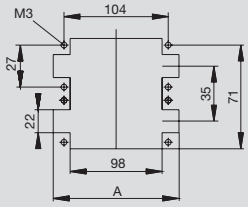
Male




Female




### Mounting cut-out




| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 111.00 | | | | |

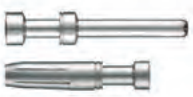
## Accessories

### Crimp contacts

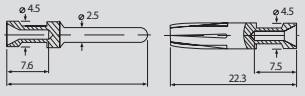
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HE-SM0.5AU | 1651420000 | HDC-C-HE-BM0.5AU | 1651470000 |
| 100 | HDC-C-HE-SM0.75-1.00AU | 1651430000 | HDC-C-HE-BM0.75-1.00AU | 1651480000 |
| 100 | HDC-C-HE-SM1.5AU | 1651440000 | HDC-C-HE-BM1.5AU | 1651490000 |
| 100 | HDC-C-HE-SM2.5AU | 1651450000 | HDC-C-HE-BM2.5AU | 1651500000 |
| 100 | HDC-C-HE-SM4.0AU | 1651460000 | HDC-C-HE-BM4.0AU | 1651510000 |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | 1200500000 | HDC-C-HE-BM0.5AG | 1201100000 |
| 100 | HDC-C-HE-SM0.75-1.00AG | 1200600000 | HDC-C-HE-BM0.75-1.00AG | 1201200000 |
| 100 | HDC-C-HE-SM1.5AG | 1200700000 | HDC-C-HE-BM1.5AG | 1201300000 |
| 100 | HDC-C-HE-SM2.5AG | 1200800000 | HDC-C-HE-BM2.5AG | 1201400000 |
| 100 | HDC-C-HE-SM4.0AG | 1200900000 | HDC-C-HE-BM4.0AG | 1201500000 |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | 9018490000 |
| **Contact Removal Tool** | |
| Removal Tool HE | 1866750000 |

## Housing selection RockStar ® IP66
## Size 12

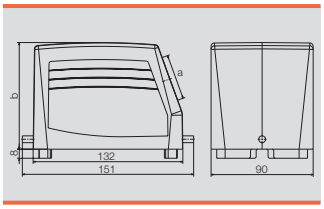
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



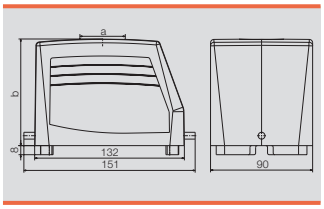
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TSLU 1M32G | **1788320000** |
| M 40 | w. threading | | 94 | HDC 48B TSLU 1M40G | **1788310000** |
| M 50 | w. threading | | 94 | HDC 48B TSLU 1M50G | **1788300000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TOLU 1M32G | **1788350000** |
| M 50 | w. threading | | 94 | HDC 48B TOLU 1M50G | **1788330000** |

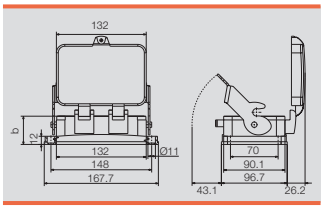



## Base

### Bulkhead housing



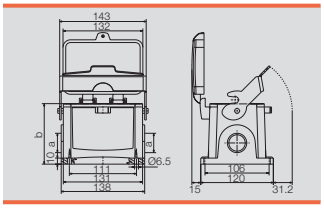
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | with cover | 62 | HDC 48B ADLU | **1222900000** |




### Base housing

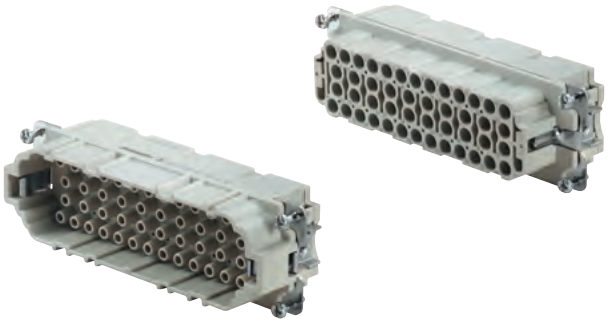


| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 100 | HDC 48B SLU 2M32G | **1788370000** |
| M 32 | w. threading | with cover | 120 | HDC 48B SDLU 2M32G | **1788390000** |
| M 40 | w. threading | | 100 | HDC 48B SLU 2M40G | **1788360000** |



# HEE series – high contact density

The HEE series has a high contact density and its design is based on the proven HE inserts.



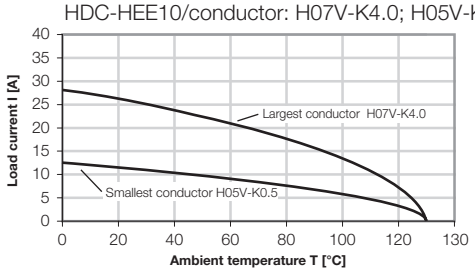
## Technical data

| | |
|---|---|
| **Standards / approvals** | |
| Standards | DIN EN 61984<br>DIN EN 60664-1 |
| Approvals | UL/CSA |
| **Inserts** | |
| No. of poles | 10, 18, 32, 46, 64 (+PE) |
| Rated voltage | 500 V |
| Rated voltage to UL/CSA | 600 V |
| Rated current | 16 A |
| Rated impulse withstand voltage | 6 kV |
| Pollution severity | 3 (630 V / 6 kV / 2) |
| Insulation resistance | ≥ $10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 |
| Mechanical service life | |
| – Plugging cycles Ag - Surface | ≥ 500 |
| – Plugging cycles Au - Surface | ≥ 500 |
| Contact resistance | |
| Crimp connection | ≤ 2 mΩ |
| **Contacts / Material** | |
| Contacts | Copper alloy |
| Surface | Passivated silver, or gold-plated |
| Crimp connection | |
| – Flexible conductor connection | 0.5 - 4 mm² (AWG 20 … 12) |
| – Stripping length | 7.5 mm |
| PE connection | |
| – Clamping range | 0.5 … 4 mm² |
| – solid / stranded | 0.5 … 4 mm² / 0.5 … 4 mm² |
| – flexible / flexible with wire end ferrule, DIN 46228 pt. 1 | 0.5 … 4 mm² / 0.5 … 4 mm² |
| – AWG conductor | AWG 20 ... 12 |
| – Stripping length | 10 mm |
| – Clamping torque | 1.2 … 1.5 Nm |
| – Blade dimensions | SD 0.8 x 4 mm or PZ 1 |

**Note:** When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

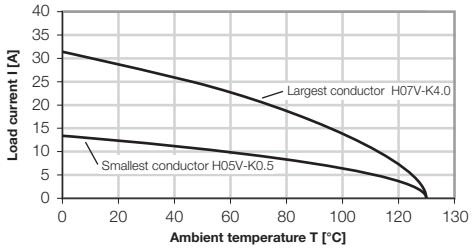
**Derating curves**

HDC-HEE10/conductor: H07V-K4.0; H05V-K0.5



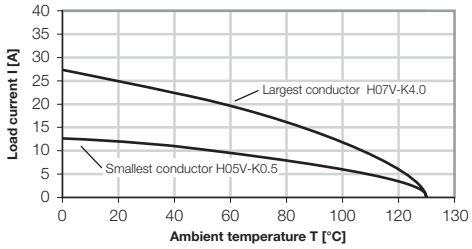

HEE 10-pole

HDC-HEE18/conductor: H07V-K4.0; H05V-K0.5



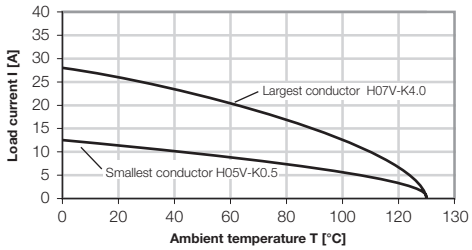

HEE 18-pole

HDC-HEE32/conductor: H07V-K4.0; H05V-K0.5




HEE 32-pole

HDC-HEE46/conductor: H07V-K4.0; H05V-K0.5




HEE 46-pole

## Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 3 | 500 V | 16 A | 10 + ⏚ | | | • | | | B.34 |
|  |  | 4 | 500 V | 16 A | 18 + ⏚ | | | • | | | B.36 |
|  |  | 6 | 500 V | 16 A | 32 + ⏚ | | | • | | | B.38 |
|  |  | 8 | 500 V | 16 A | 46 + ⏚ | | | • | | | B.40 |
|  |  | 10 | 500 V | 16 A | 64 + ⏚ | | | • | | | B.42 |

# HEE series - high contact density

## 500 V, 16 A, Size 3

10 + ⏚

## Inserts

### Crimp connection

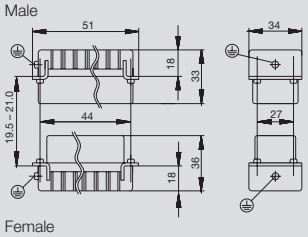


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HEE 10 MC | **1826830000** |
| Female | HDC HEE 10 FC | **1826840000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

### Dimensions

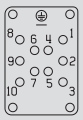
Male




Female

### Arrangement of contacts

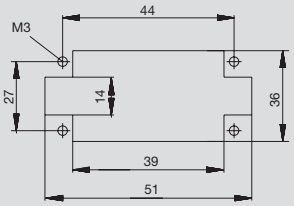
Male




Female




### Mounting cut-out



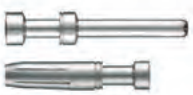

## Accessories

### Crimp contacts

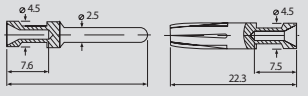
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 3

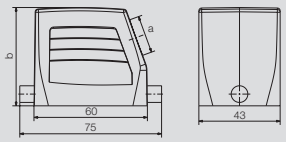
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



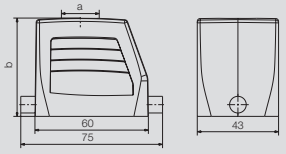
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TSLU 1M20G | **1788100000** |
| M 25 | w. threading | | 52 | HDC 06B TSLU 1M25G | **1788090000** |
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |




### Plug housing, cable entry at top



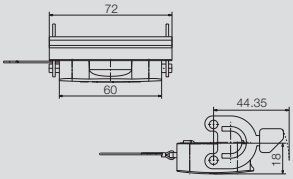
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TOLU 1M20G | **1788120000** |
| M 25 | w. threading | | 52 | HDC 06B TOLU 1M25G | **1788110000** |
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 06B DMDL 1LB | **1665210000** |

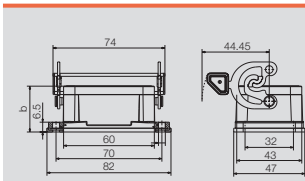



## Base

### Bulkhead housing



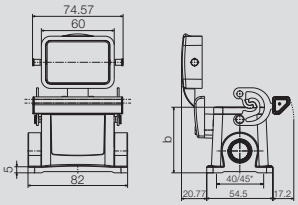
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 06B SLU 2M20G | **1788140000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 2M20G | **1788170000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 2M25G | **1788130000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 2M25G | **1788160000** |

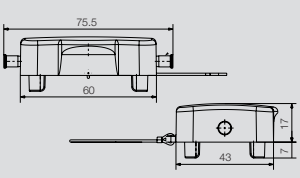



* Mounting dimensions for size-3 base housings, tall shape (16D)

### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 06B DODL 2BO | **1665200000** |



# HEE series - high contact density

## 500 V, 16 A, Size 4

18 + ⏚

## Inserts

### Crimp connection

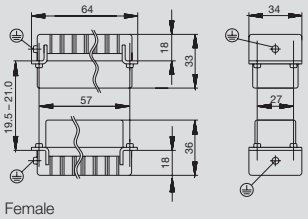


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HEE 18 MC | **1826810000** |
| Female | HDC HEE 18 FC | **1826820000** |

**Note** When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

### Dimensions

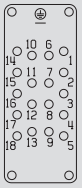
Male



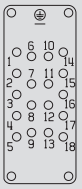

Female

### Arrangement of contacts

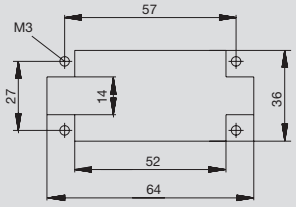
Male




Female



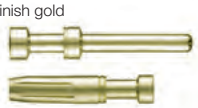

### Mounting cut-out



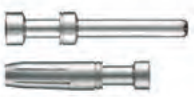

## Accessories

### Crimp contacts

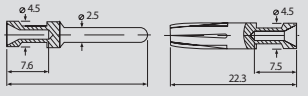
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 4

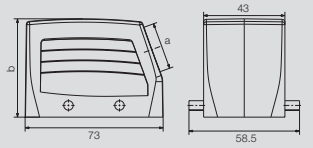
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



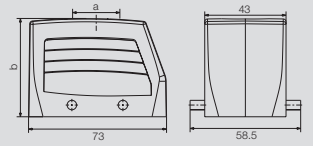
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



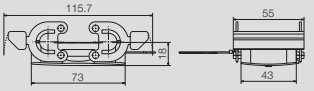
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

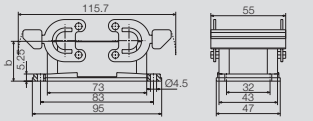



## Base

### Bulkhead housing



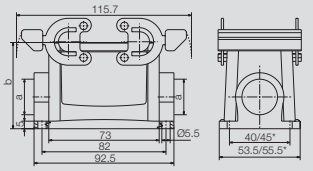
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |

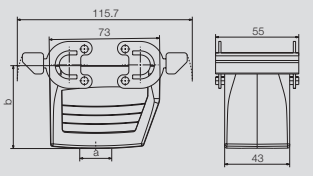



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



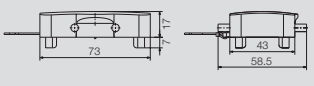
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |



# HEE series - high contact density

## 500 V, 16 A, Size 6

32 + ⏚

## Inserts

### Crimp connection

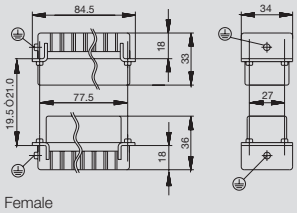


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HEE 32 MC | **1826790000** |
| Female | HDC HEE 32 FC | **1826800000** |

**Note** When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

### Dimensions

Male



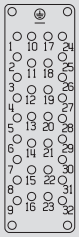

Female

### Arrangement of contacts

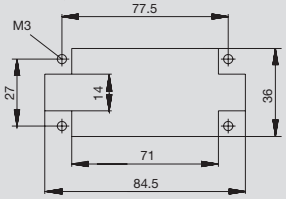
Male




Female




### Mounting cut-out



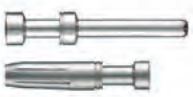

## Accessories

### Crimp contacts

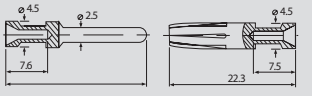
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 6

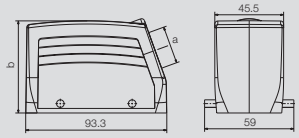
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



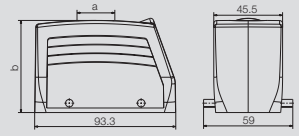
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



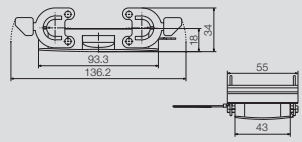
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

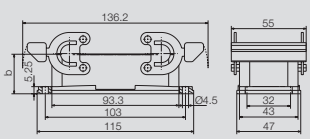



## Base

### Bulkhead housing



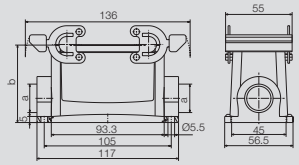
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



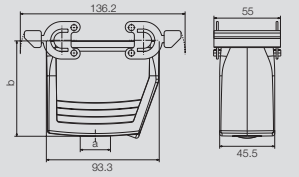
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



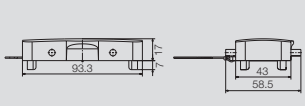
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



# HEE series - high contact density

## 500 V, 16 A, Size 8

**46 + ⏚**

## Inserts

**Crimp connection**

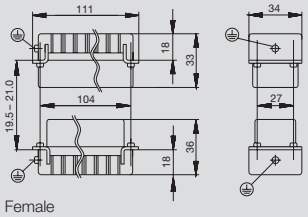


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HEE 46 MC | **1826770000** |
| Female | HDC HEE 46 FC | **1826780000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

**Dimensions**

Male



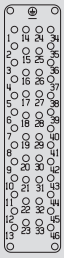

Female

**Arrangement of contacts**

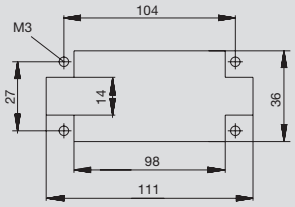
Male



Female



**Mounting cut-out**



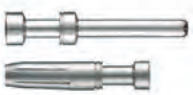

## Accessories

**Crimp contacts**

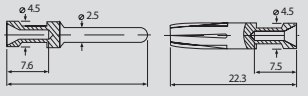
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 8

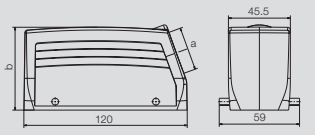
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



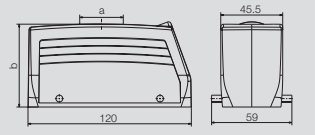
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |




### Plug housing, cable entry at top



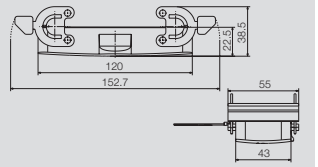
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

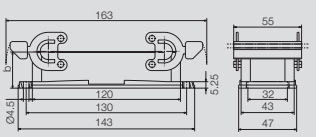



## Base

### Bulkhead housing



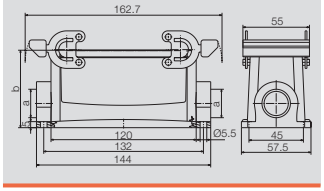
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



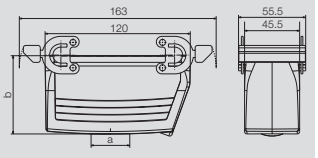
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



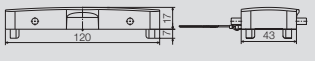
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |



# HEE series - high contact density

## 500 V, 16 A, Size 10

64 + ⏚

## Inserts

### Crimp connection

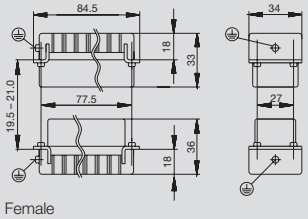


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HEE 32 MC | **1826790000** |
| Female | HDC HEE 32 FC | **1826800000** |
| Male | HDC HEE 32 MC 33-64 | **1018950000** |
| Female | HDC HEE 32 FC 33-64 | **1018960000** |

**Note** To complete the assembly of the plug-in connector, two inserts are required. We recommend the use of guide pins

### Dimensions

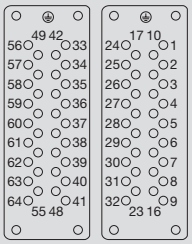
Male



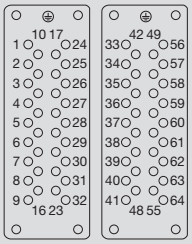

Female

### Arrangement of contacts

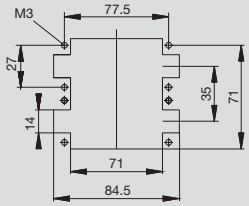
Male




Female




### Mounting cut-out



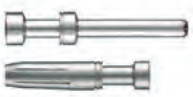

## Accessories

### Crimp contacts

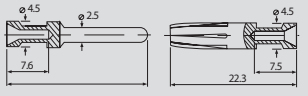
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar ® IP66
## Size 10

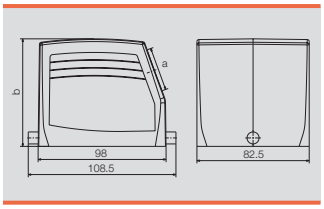
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSLU 1M32G | **1788420000** |

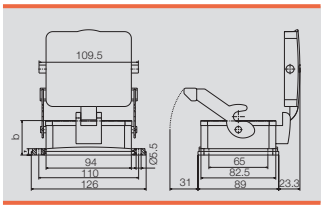



## Base

### Bulkhead housing



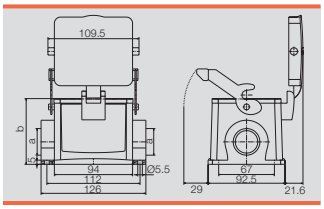
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ALU | **1219500000** |
| | | with cover | 55 | HDC 32B ADLU | **1219800000** |




### Base housing



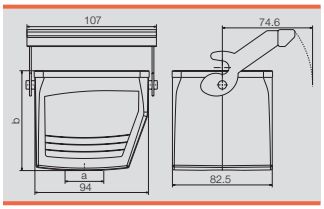
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SLU 2M32G | **1788470000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 2M32G | **1788490000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 83 | HDC 32B KLU 1M32G | **1788500000** |



# HD series – the flexible connectors

The HD series has a high contact density and is therefore particularly suitable for signal processing. The HD insert can be fitted with turned crimp contacts or fibre optic contacts – impressive flexibility.



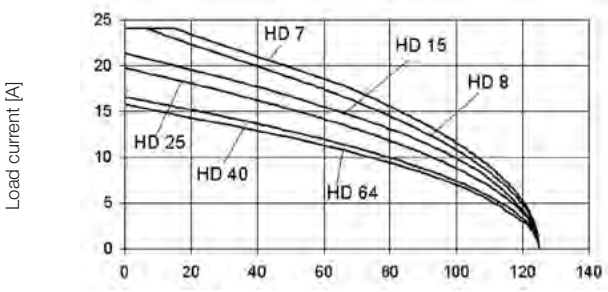
## Technical data

| | |
|---|---|
| **Standards / approvals** | |
| Standards | DIN EN 61984<br>DIN EN 60664-1<br>DIN EN 175301-801 |
| Approvals | UL/CSA |
| **Inserts** | |
| No. of poles | 7, 15, 16, 24, 25, 40, 50, 64, 80, 124 (+PE) 8 |
| Rated voltage | 250 V |
| Rated voltage to UL/CSA | 600 V |
| Rated current | 10 A |
| Rated impulse withstand voltage | 4 kV |
| Pollution severity | 3 |
| Insulation resistance | ≥ $10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 |
| Mechanical service life | |
| – Plugging cycles Ag - Surface | ≥ 500 |
| – Plugging cycles Au - Surface | ≥ 500 |
| Contact resistance | |
| Crimp connection | ≤ 4 mΩ |
| **Contacts / Material** | |
| Sockets and plug-in contact | Copper alloy |
| Surface | Passivated silver, or gold-plated |
| Crimp connection | |
| – Flexible conductor connection | 0.14 - 2.5 mm² (AWG 26 … 14) |
| – Stripping length | 8.0 mm |
| PE connection | |
| – Clamping range | 0.5 … 2.5 mm² |
| – solid / stranded | 0.5 … 2.5 mm² / 0.5 … 2.5 mm² |
| – flexible / flexible with wire end ferrule, DIN 46228 pt. 1 | 0.5 … 2.5 mm² / 0.5 … 2.5 mm² |
| – AWG conductor | AWG 20 ... 14 |
| – Stripping length | 10 mm |
| – Clamping torque | 1.2 … 1.5 Nm |
| – Blade dimensions | SD 0.8 x 4 mm or PZ 1 |

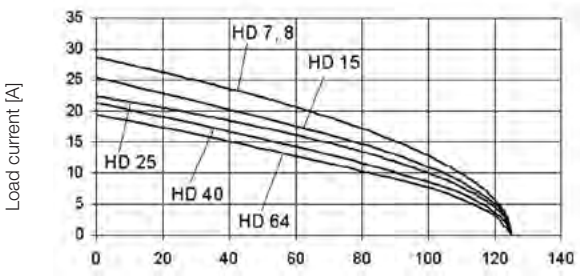
**Note:** for inserts with 15 or more poles, the earthing (ground) is made with a screw connection. When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load! When metal housings are used in conjunction with the HD 7 and HD 8 inserts, the rated voltage must be limited to 42 V. The HD 8 does not feature an earthing connection

When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J.

**Derating curves**




**HD crimp turned 1.5 mm²** Ambient temperature [°C]




**HD crimp turned 1.5 mm²** Ambient temperature [°C]

## Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 1 | 250 V | 10 A | 7 + ⏚ | | | • | | | B.46 |
|  |  | 1 | 42 V | 10 A | 8 | | | • | | | B.48 |
|  |  | 2 | 250 V | 10 A | 15 + ⏚ | | | • | | | B.50 |
|  |  | 3 | 250 V | 10 A | 16 + ⏚ | | | • | | | B.52 |
|  |  | 4 | 250 V | 10 A | 24 + ⏚ | | | • | | | B.54 |
|  |  | 5 | 250 V | 10 A | 25 + ⏚ | | | • | | | B.56 |
|  |  | 6 | 250 V | 10 A | 40 + ⏚ | | | • | | | B.58 |
|  |  | 7 | 250 V | 10 A | 50 + ⏚ | | | • | | | B.60 |
|  |  | 8 | 250 V | 10 A | 64 + ⏚ | | | • | | | B.62 |
|  |  | 10 | 250 V | 10 A | 80 + ⏚ | | | • | | | B.64 |
|  |  | 12 | 250 V | 10 A | 128 + ⏚ | | | • | | | B.66 |

# HD series - the flexible connectors

## 250 V, 10 A, Size 1

**7 + ⏚**

## Inserts

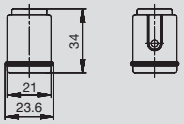
**Crimp connection**



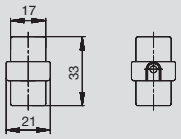
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 7 MC | **1650570000** |
| Female | HDC HD 7 FC | **1650580000** |

**Dimensions**

Male




Female




**Arrangement of contacts**

Male




Female




## Accessories

**Crimp contacts**

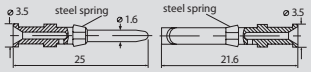
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| | |
|---|---|
| **Crimping tool** | |
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 1

**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

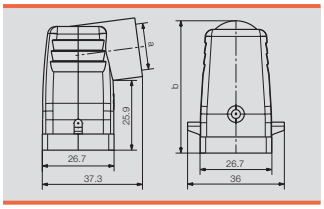
### Hood

**Plug housing, cable entry sideways**



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 07A TWLU 1M20G | **1788510000** |

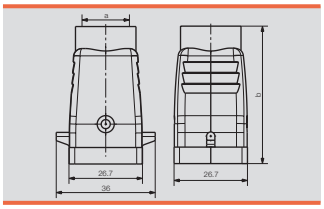



**Plug housing, cable entry at top**



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 07A TOLU 1M20G | **1788520000** |



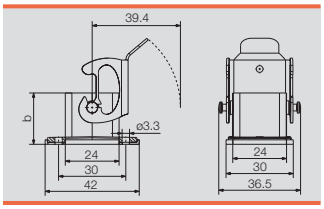

### Base

**Bulkhead housing**



**Material:** Plastic

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 07A ALU | **1652410000** |

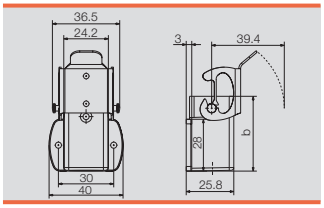



**Base housing**



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 07A SLU 1M20G | **1788530000** |

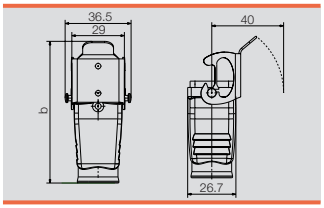



**Coupling housing**



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 07A KOLU 1M20G | **1788540000** |

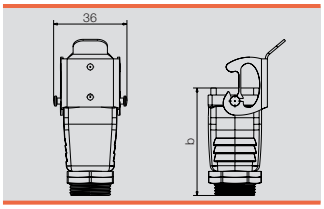



**Screw mounting housing**



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 13.5 | w. threading | | 54 | HDC 07A ELU 1PG13G | **1900990000** |

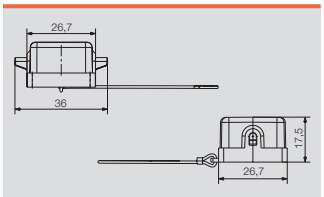



**Cover**



**Material:** Plastic

| | Version | | Type | Order No. |
|---|---|---|---|---|
| | for female insert | | HDC 07A DMDL 2BO | **1665770000** |
| | for male insert | | HDC 07A DODL 2BO | **1665760000** |



# HD series - the flexible connectors

## 42 V, 10 A, Size 1

## 8

## Inserts

**Crimp connection**

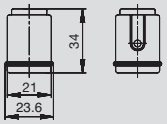


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 8 MC | **1650590000** |
| Female | HDC HD 8 FC | **1650600000** |

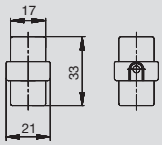
**Note** Reduce the voltage to 42 V when using metal housings

**Dimensions**

Male




Female




**Arrangement of contacts**

Male




Female




## Accessories

**Crimp contacts**

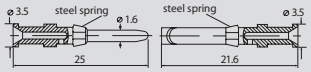
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 1

**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

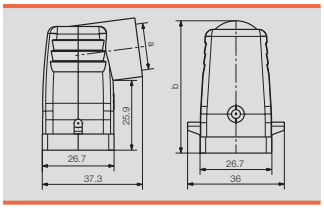
## Hood

### Plug housing, cable entry sideways



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 07A TWLU 1M20G | **1788510000** |

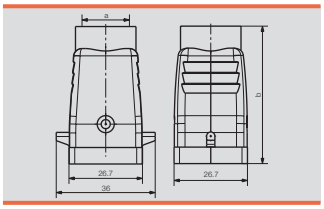



### Plug housing, cable entry at top



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 07A TOLU 1M20G | **1788520000** |



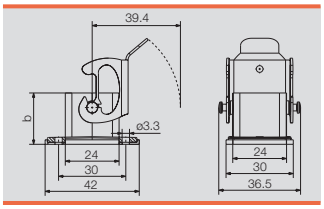

## Base

### Bulkhead housing



**Material:** Plastic

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 07A ALU | **1652410000** |

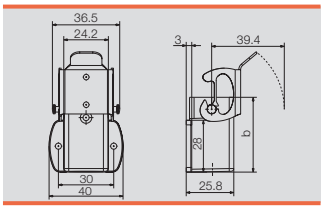



### Base housing



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 07A SLU 1M20G | **1788530000** |

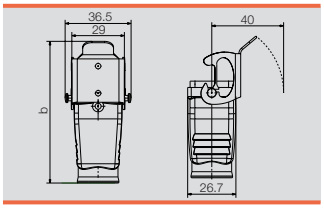



### Coupling housing



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 07A KOLU 1M20G | **1788540000** |

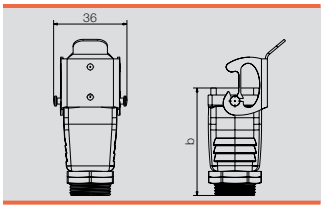



### Screw mounting housing



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 13.5 | w. threading | | 54 | HDC 07A ELU 1PG13G | **1900990000** |

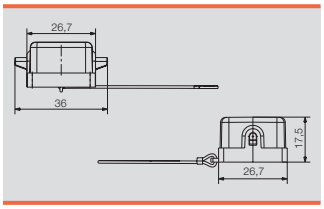



### Cover



**Material:** Plastic

| | Version | Type | Order No. |
|---|---|---|---|
| | for female insert | HDC 07A DMDL 2BO | **1665770000** |
| | for male insert | HDC 07A DODL 2BO | **1665760000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 2

**15 + ⏚**

## Inserts

**Crimp connection**

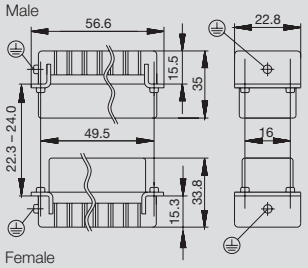


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 15 MC | **1650650000** |
| Female | HDC HD 15 FC | **1650660000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

**Dimensions**

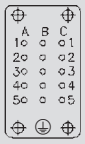
Male



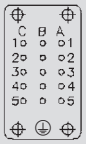

Female

**Arrangement of contacts**

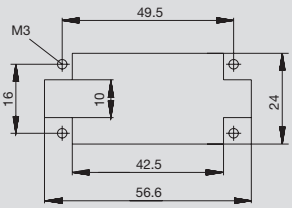
Male




Female




**Mounting cut-out**




## Accessories

**Crimp contacts**

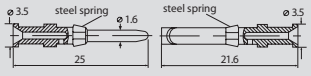
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 2

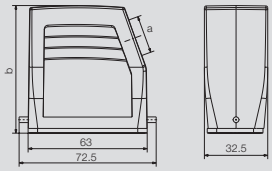
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



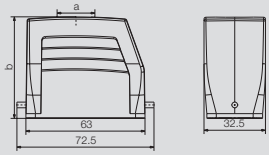
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 68 | HDC 15A TSLU 1M20G | **1788860000** |
| M 25 | w. threading | | 68 | HDC 15A TSLU 1M25G | **1788850000** |




### Plug housing, cable entry at top



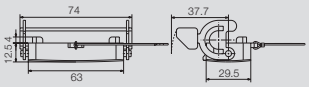
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 10A TOLU 1M20G | **1788620000** |
| M 25 | w. threading | | 54 | HDC 10A TOLU 1M25G | **1788610000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10A DODL 1LB | **1665890000** |

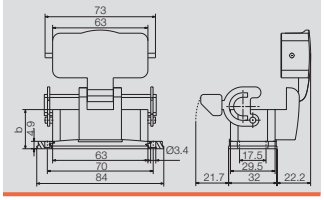



## Base

### Bulkhead housing



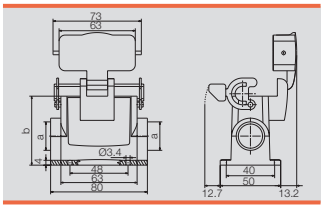
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 25 | HDC 10A ALU | **1664040000** |
| | | with cover | 37.5 | HDC 10A ADLU | **1664060000** |




### Base housing



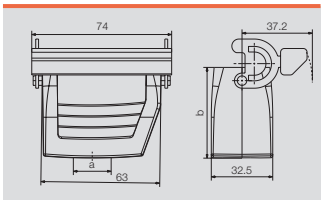
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10A SLU 2M20G | **1788640000** |
| M 20 | w. threading | with cover | 69.5 | HDC 10A SDLU 2M20G | **1788660000** |
| M 25 | w. threading | | 57 | HDC 10A SLU 2M25G | **1788630000** |
| M 25 | w. threading | with cover | 69.5 | HDC 10A SDLU 2M25G | **1788650000** |




### Coupling housing



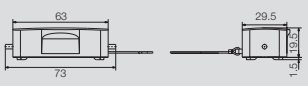
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 48 | HDC 10A KLU 1M25G | **1788670000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10A DMDL 2BO | **1665880000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 3

**16 + ⏚**

## Inserts

**Crimp connection**

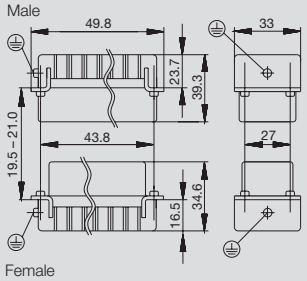


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 16 MC | **1650710000** |
| Female | HDC HD 16 FC | **1650720000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

**Dimensions**

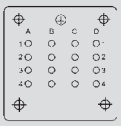
Male



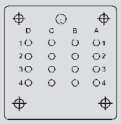

Female

**Arrangement of contacts**

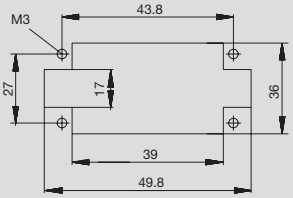
Male



Female



**Mounting cut-out**




## Accessories

**Crimp contacts**

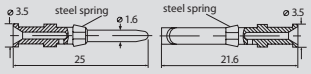
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 3

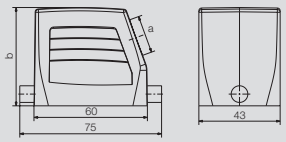
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



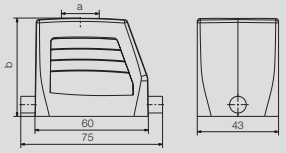
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TSLU 1M20G | **1788100000** |
| M 25 | w. threading | | 52 | HDC 06B TSLU 1M25G | **1788090000** |
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |




### Plug housing, cable entry at top



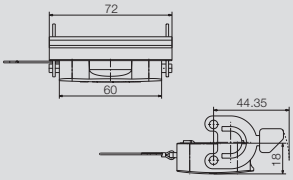
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TOLU 1M20G | **1788120000** |
| M 25 | w. threading | | 52 | HDC 06B TOLU 1M25G | **1788110000** |
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 06B DMDL 1LB | **1665210000** |

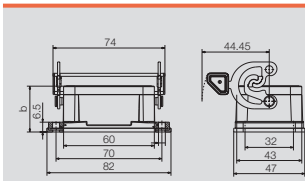



## Base

### Bulkhead housing



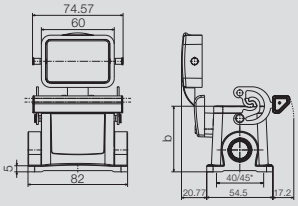
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 06B SLU 2M20G | **1788140000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 2M20G | **1788170000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 2M25G | **1788130000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 2M25G | **1788160000** |

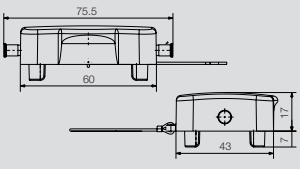



* Mounting dimensions for size-3 base housings, tall shape (16D)

### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 06B DODL 2BO | **1665200000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 4

**24 + ⏚**

## Inserts

**Crimp connection**

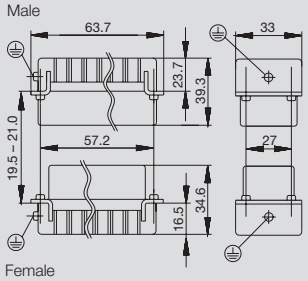


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 24 MC | **1650870000** |
| Female | HDC HD 24 FC | **1650890000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

**Dimensions**

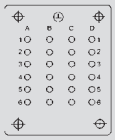
Male



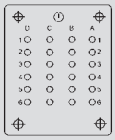

Female

**Arrangement of contacts**

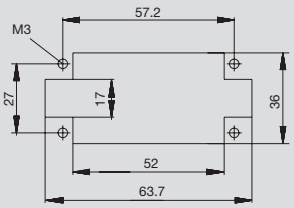
Male



Female



**Mounting cut-out**




## Accessories

**Crimp contacts**

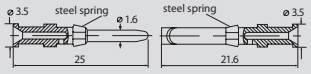
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 4

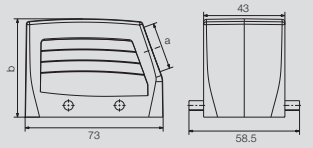
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



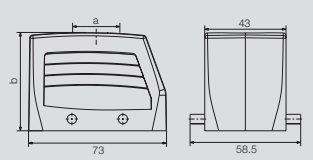
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



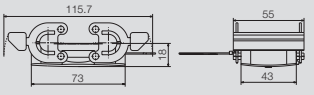
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

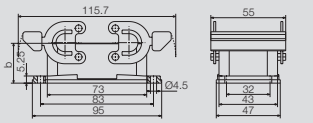



## Base

### Bulkhead housing



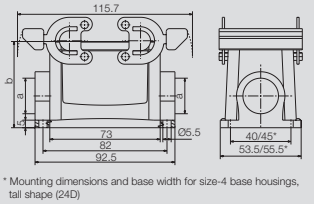
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



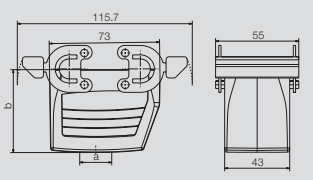
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |




### Coupling housing



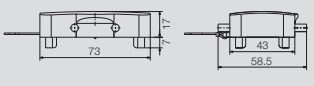
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 5

**25 + ⏚**

## Inserts

**Crimp connection**

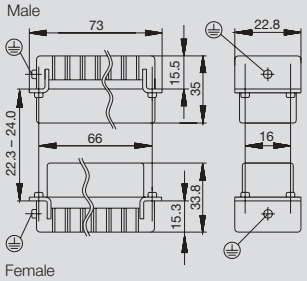


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 25 MC | **1650810000** |
| Female | HDC HD 25 FC | **1650820000** |
| Male | HDC HD 25 MC „Z“ | **1023040000** |
| Female | HDC HD 25 FC „Z“ | **1023050000** |

**Note** We recommend the use of guide pins and sockets.

**Dimensions**

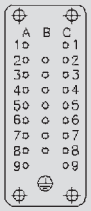
Male



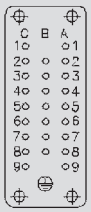

Female

**Arrangement of contacts**

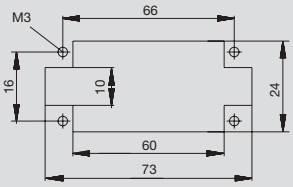
Male




Female




**Mounting cut-out**




## Accessories

**Crimp contacts**

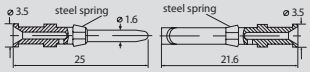
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 5

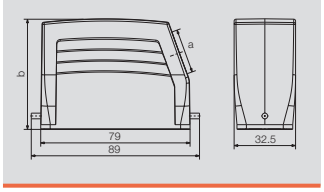
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



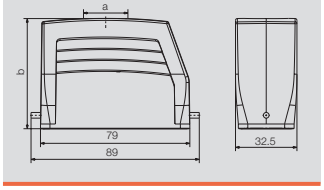
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 72 | HDC 25A TSLU 1M20G | **1788680000** |
| M 25 | w. threading | | 58 | HDC 16A TSLU 1M25G | **1788740000** |
| M 25 | w. threading | | 72 | HDC 25A TSLU 1M25G | **1788690000** |




### Plug housing, cable entry at top



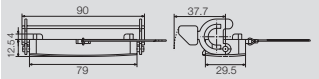
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 72 | HDC 25A TOLU 1M20G | **1788710000** |
| M 25 | w. threading | | 58 | HDC 16A TOLU 1M25G | **1788750000** |
| M 25 | w. threading | | 72 | HDC 25A TOLU 1M25G | **1788700000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16A DODL 1LB | **1665900000** |

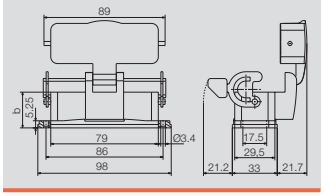



## Base

### Bulkhead housing



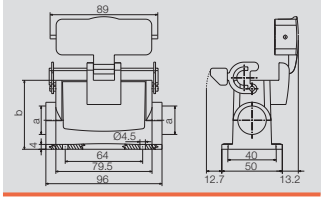
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 25 | HDC 16A ALU | **1664920000** |
| | | with cover | 44.5 | HDC 16A ADLU | **1664940000** |




### Base housing



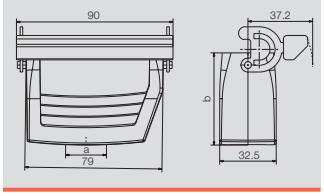
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 16A SLU 2M20G | **1788770000** |
| M 20 | w. threading | with cover | 76.5 | HDC 16A SDLU 2M20G | **1788790000** |
| M 25 | w. threading | | 57 | HDC 16A SLU 2M25G | **1788760000** |
| M 25 | w. threading | with cover | 76.5 | HDC 16A SDLU 2M25G | **1788780000** |




### Coupling housing



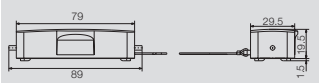
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 53 | HDC 16A KLU 1M25G | **1788800000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16A DMDL 2BO | **1665910000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 6

**40 + ⏚**

## Inserts

**Crimp connection**

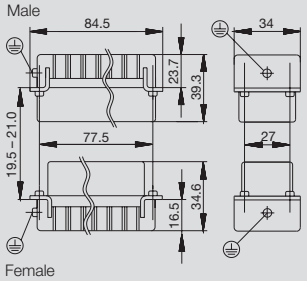


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 40 MC | **1601710000** |
| Female | HDC HD 40 FC | **1601730000** |

| Note | Please use this insert type doubled for size 10 (80-pole). We recommend the use of guide pins and sockets. |
|---|---|

**Dimensions**

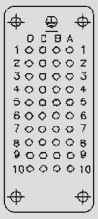
Male



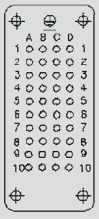

Female

**Arrangement of contacts**

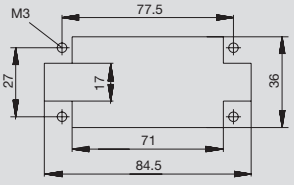
Male




Female




**Mounting cut-out**




## Accessories

**Crimp contacts**

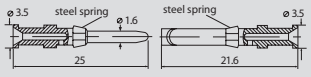
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 6

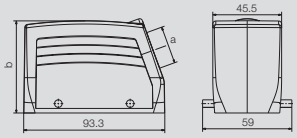
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



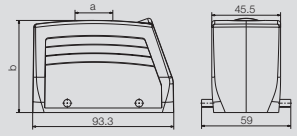
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



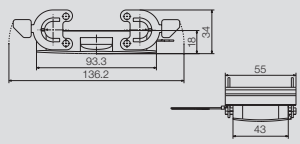
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

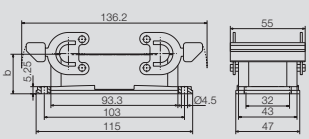



## Base

### Bulkhead housing



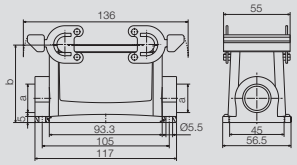
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



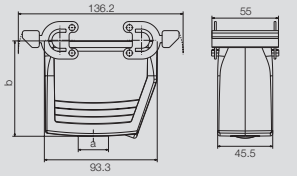
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



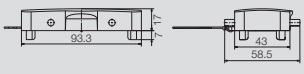
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 7

**50 + ⏚**

## Inserts

**Crimp connection**

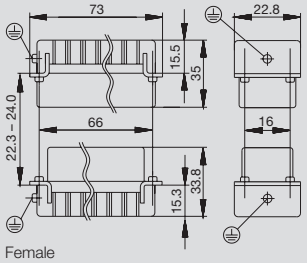


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 25 MC | **1650810000** |
| Female | HDC HD 25 FC | **1650820000** |

| Note | Please use this insert type doubled for size 7 (50-pole). We recommend the use of guide pins and sockets. |
|---|---|

**Dimensions**

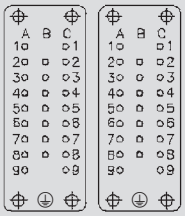
Male



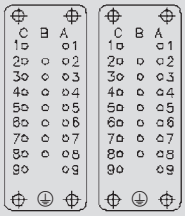

Female

**Arrangement of contacts**

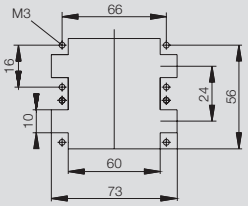
Male



Female



**Mounting cut-out**




## Accessories

**Crimp contacts**

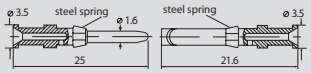
Surface finish gold



Surface finish silver



| | Male | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 7

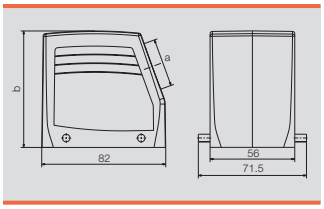
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



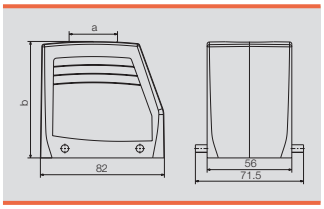
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 75 | HDC 32A TSBU 1M25G | **1787960000** |
| M 32 | w. threading | | 75 | HDC 32A TSBU 1M32G | **1787950000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 75 | HDC 32A TOBU 1M32G | **1787990000** |

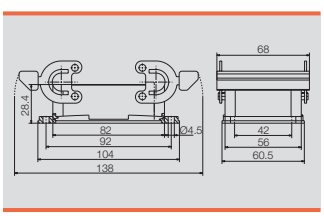



## Base

### Bulkhead housing



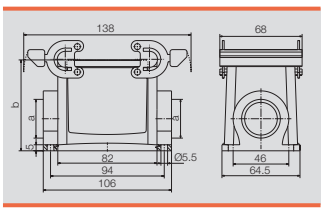
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 28.4 | HDC 32A ABU | **1665860000** |




### Base housing



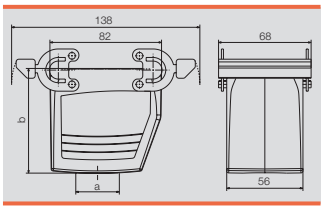
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 75 | HDC 32A SBU 2M25G | **1788040000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 76.5 | HDC 32A KBU 1M25G | **1788080000** |
| M 32 | w. threading | | 76.5 | HDC 32A KBU 1M32G | **1788070000** |



## 250 V, 10 A, Size 8

## 64 + ⏚

## Inserts

### Crimp connection

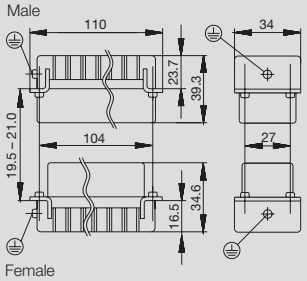


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 64 MC | **1601720000** |
| Female | HDC HD 64 FC | **1601740000** |

| Note | Please use this insert type doubled for size 12 (128-pole). We recommend the use of guide pins and sockets. |
|---|---|

### Dimensions

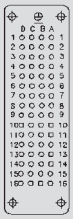
Male



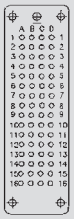

Female

### Arrangement of contacts

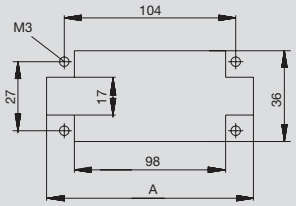
Male



Female



### Mounting cut-out




## Accessories

### Crimp contacts

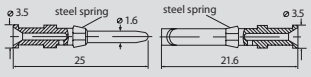
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 8

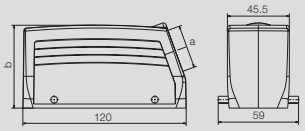
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



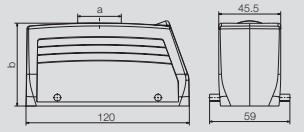
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |




### Plug housing, cable entry at top



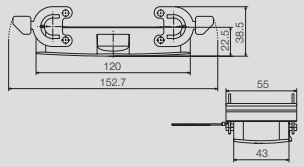
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

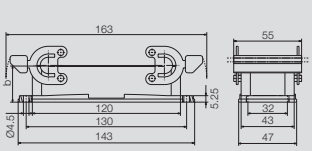



## Base

### Bulkhead housing



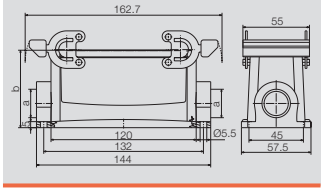
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



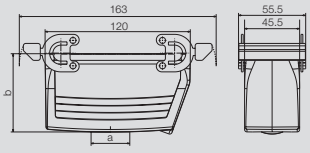
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



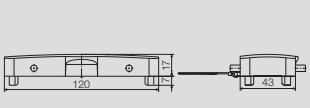
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 10

80 + ⏚

## Inserts

### Crimp connection

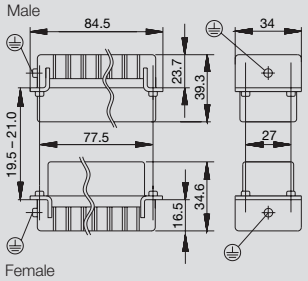


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 40 MC | **1601710000** |
| Female | HDC HD 40 FC | **1601730000** |

| Note | Please use this insert type doubled for size 10 (80-pole). We recommend the use of guide pins and sockets. |
|---|---|

### Dimensions

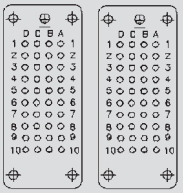
Male



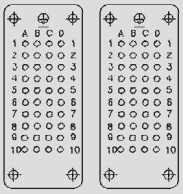

Female

### Arrangement of contacts

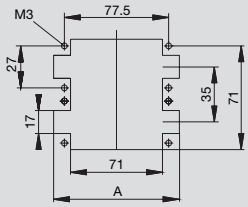
Male



Female



### Mounting cut-out




| A (mm) |
|---|
| 84.50 |

## Accessories

### Crimp contacts

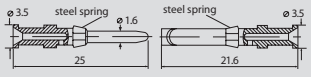
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 10

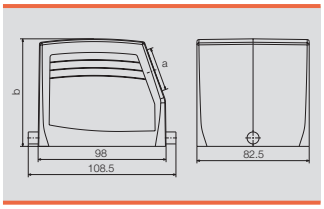
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSLU 1M32G | **1788420000** |

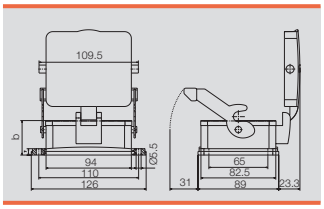



## Base

### Bulkhead housing



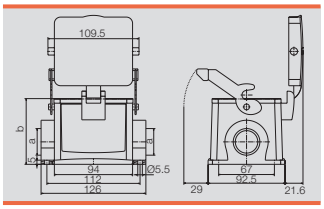
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ALU | **1219500000** |
| | | with cover | 55 | HDC 32B ADLU | **1219800000** |




### Base housing



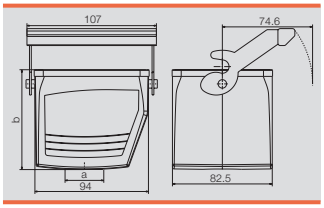
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SLU 2M32G | **1788470000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 2M32G | **1788490000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 83 | HDC 32B KLU 1M32G | **1788500000** |



# HD series - the flexible connectors

## 250 V, 10 A, Size 12

128 + ⏚

## Inserts

### Crimp connection

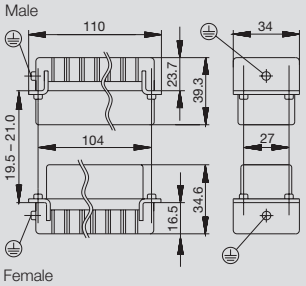


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HD 64 MC | **1601720000** |
| Female | HDC HD 64 FC | **1601740000** |

**Note** Please use this insert type doubled for size 12 (128-pole). We recommend the use of guide pins and sockets.

### Dimensions

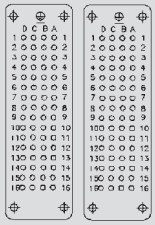
Male



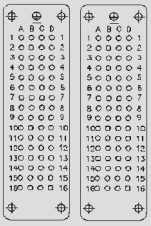

Female

### Arrangement of contacts

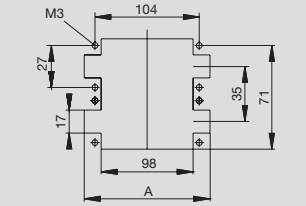
Male



Female



### Mounting cut-out




| A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|---|---|---|---|---|
| 110.00 | | | | |

## Accessories

### Crimp contacts

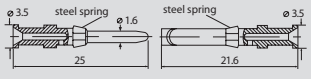
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 12

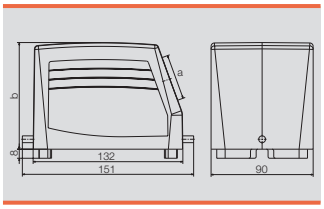
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



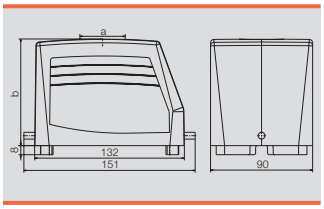
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TSLU 1M32G | **1788320000** |
| M 40 | w. threading | | 94 | HDC 48B TSLU 1M40G | **1788310000** |
| M 50 | w. threading | | 94 | HDC 48B TSLU 1M50G | **1788300000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TOLU 1M32G | **1788350000** |
| M 50 | w. threading | | 94 | HDC 48B TOLU 1M50G | **1788330000** |

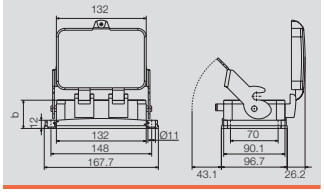



## Base

### Bulkhead housing



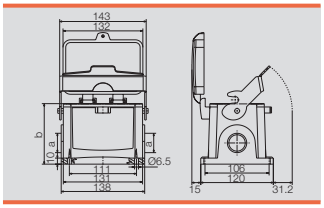
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | with cover | 62 | HDC 48B ADLU | **1222900000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 100 | HDC 48B SLU 2M32G | **1788370000** |
| M 32 | w. threading | with cover | 120 | HDC 48B SDLU 2M32G | **1788390000** |
| M 40 | w. threading | | 100 | HDC 48B SLU 2M40G | **1788360000** |



# HDD series – the compact connectors

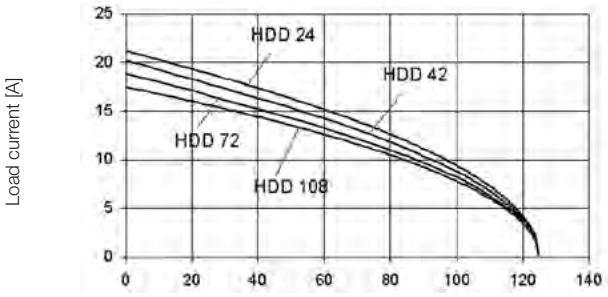
The HDD series with turned contacts is designed for many poles in a small space. The compact housing design saves the user space without compromising the number of poles.



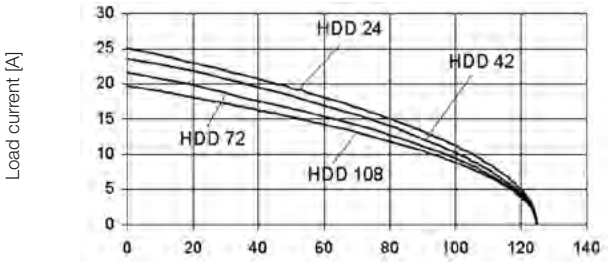
## Technical data

| | |
|---|---|
| **Standards / approvals** | |
| Standards | DIN EN 61984<br>DIN EN 60664-1 |
| Approvals | UL/CSA |
| **Inserts** | |
| No. of poles | 24, 42, 72, 108, 144, 216 +PE |
| Rated voltage | 250 V |
| Rated voltage to UL/CSA | 600 V |
| Rated current | 10 A |
| Rated impulse withstand voltage | 4 kV |
| Pollution severity | 3 |
| Insulation resistance | ≥ $10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 |
| Mechanical service life | |
| – Plugging cycles Ag - Surface | ≥ 500 |
| – Plugging cycles Au - Surface | ≥ 500 |
| Contact resistance | |
| Crimp connection | ≤ 4 mΩ |
| **Contacts / Material** | |
| Sockets and plug-in contact | Copper alloy |
| Surface | Passivated silver, or gold-plated |
| Crimp connection | |
| – Flexible conductor connection | 0.14 - 2.5 mm² (AWG 26 … 14) |
| – Stripping length | 8.0 mm |
| PE connection | |
| – Clamping range | 0.5 … 2.5 mm² |
| – solid / stranded | 0.5 … 2.5 mm² / 0.5 … 2.5 mm² |
| – flexible / flexible with wire end ferrule, DIN 46228 pt. 1 | 0.5 … 2.5 mm² / 0.5 … 2.5 mm² |
| – AWG conductor | AWG 20 ... 14 |
| – Stripping length | 10 mm |
| – Clamping torque | 1.2 … 1.5 Nm |
| – Blade dimensions | SD 0.8 x 4 mm or PZ 1 |

**Derating curves**




**HDD 1.5 mm²** Ambient temperature [°C]




**HDD 2.5 mm²** Ambient temperature [°C]

**Note:** When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

## Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 3 | 250 V | 10 A | 24 + ⏚ | | | • | | | B.70 |
|  |  | 4 | 250 V | 10 A | 42 + ⏚ | | | • | | | B.72 |
|  |  | 6 | 250 V | 10 A | 72 + ⏚ | | | • | | | B.74 |
|  |  | 8 | 250 V | 10 A | 108 + ⏚ | | | • | | | B.76 |
|  |  | 10 | 250 V | 10 A | 144 + ⏚ | | | • | | | B.78 |
|  |  | 12 | 250 V | 10 A | 216 + ⏚ | | | • | | | B.80 |

# HDD series - the compact connectors

## 250 V, 10 A, Size 3

**24 + ⏚**

## Inserts

**Crimp connection**

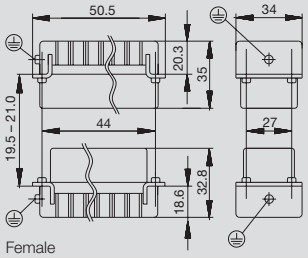


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HDD 24 MC | **1651150000** |
| Female | HDC HDD 24 FC | **1651160000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

**Dimensions**

Male




Female

**Arrangement of contacts**

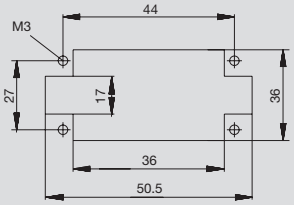
Male




Female




**Mounting cut-out**




## Accessories

**Crimp contacts**

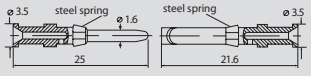
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 3

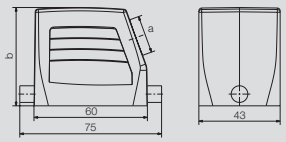
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



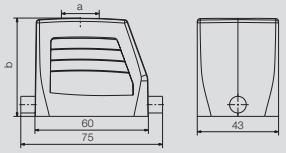
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TSLU 1M20G | **1788100000** |
| M 25 | w. threading | | 52 | HDC 06B TSLU 1M25G | **1788090000** |
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |




### Plug housing, cable entry at top



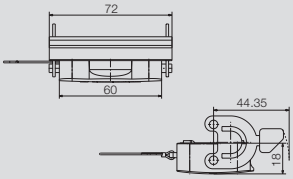
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TOLU 1M20G | **1788120000** |
| M 25 | w. threading | | 52 | HDC 06B TOLU 1M25G | **1788110000** |
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 06B DMDL 1LB | **1665210000** |

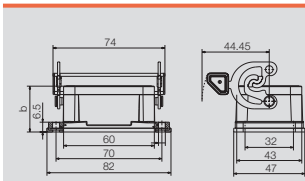



## Base

### Bulkhead housing



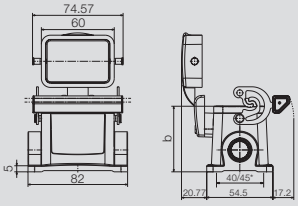
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 06B SLU 2M20G | **1788140000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 2M20G | **1788170000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 2M25G | **1788130000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 2M25G | **1788160000** |

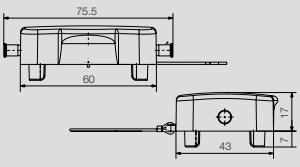



* Mounting dimensions for size-3 base housings, tall shape (16D)

### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 06B DODL 2BO | **1665200000** |



# HDD series - the compact connectors

## 250 V, 10 A, Size 4

**42 + ⏚**

## Inserts

**Crimp connection**

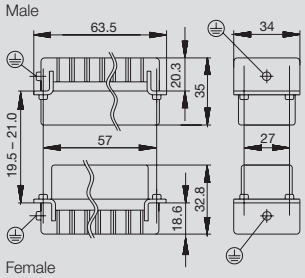


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HDD 42 MC | **1651170000** |
| Female | HDC HDD 42 FC | **1651180000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

**Dimensions**

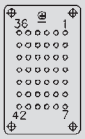
Male



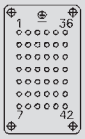

Female

**Arrangement of contacts**

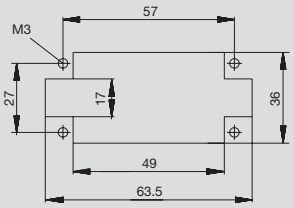
Male




Female




**Mounting cut-out**




## Accessories

**Crimp contacts**

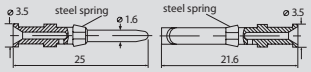
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

**Tools**



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 4

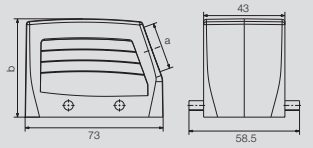
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



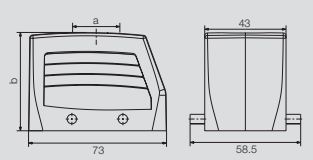
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



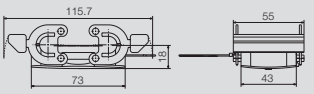
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

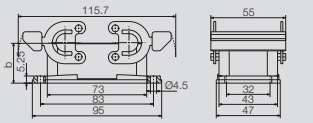



## Base

### Bulkhead housing



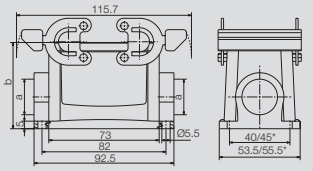
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |

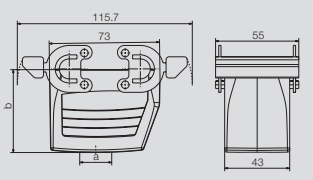



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



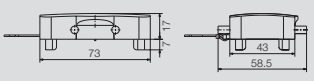
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |



# HDD series - the compact connectors

## 250 V, 10 A, Size 6

72 + ⏚

## Inserts

### Crimp connection

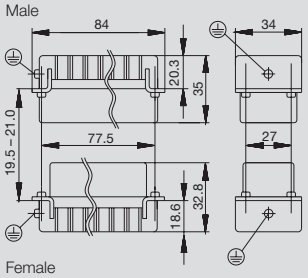


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HDD 72 MC | **1651190000** |
| Female | HDC HDD 72 FC | **1651200000** |

**Note** When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

### Dimensions

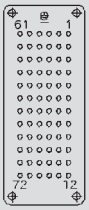
Male



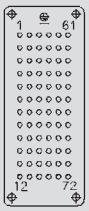

Female

### Arrangement of contacts

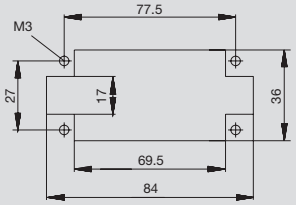
Male




Female




### Mounting cut-out




## Accessories

### Crimp contacts

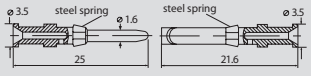
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 6

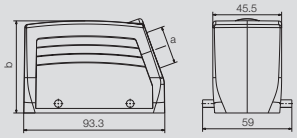
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



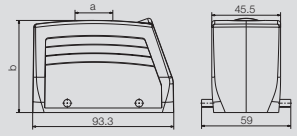
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



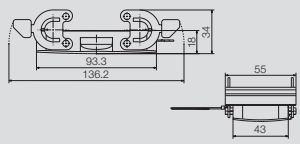
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

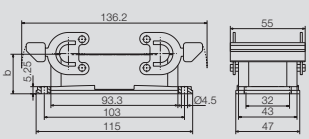



## Base

### Bulkhead housing



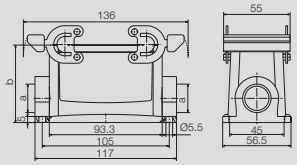
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



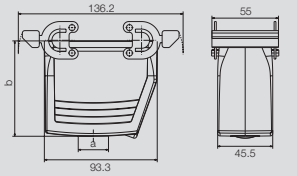
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



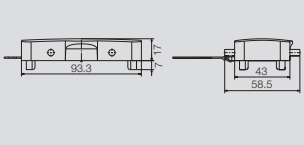
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



# HDD series - the compact connectors

## 250 V, 10 A, Size 8

**108 + ⏚**

## Inserts

**Crimp connection**

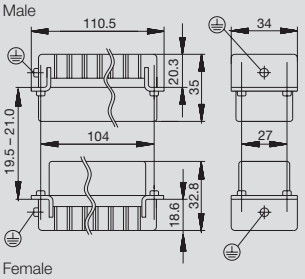


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HDD 108 MC | **1651210000** |
| Female | HDC HDD 108 FC | **1651220000** |

| Note | When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J |
|---|---|

**Dimensions**

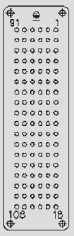
Male



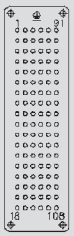

Female

**Arrangement of contacts**

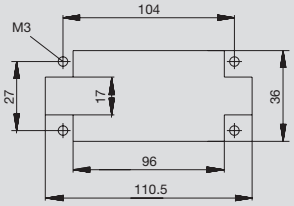
Male



Female



**Mounting cut-out**




## Accessories

**Crimp contacts**

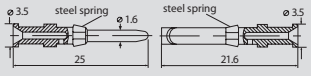
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 8

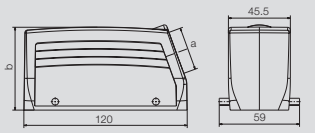
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



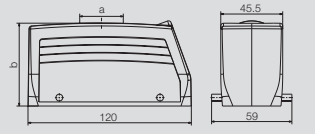
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |




### Plug housing, cable entry at top



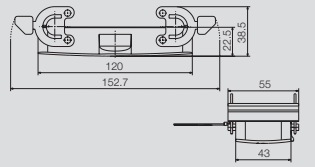
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

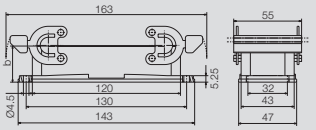



## Base

### Bulkhead housing



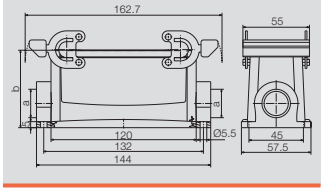
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



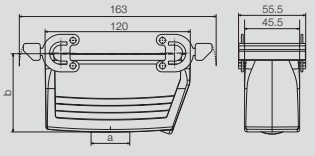
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



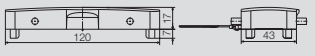
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |



# HDD series - the compact connectors

## 250 V, 10 A, Size 10

144 + ⏚

## Inserts

**Crimp connection**

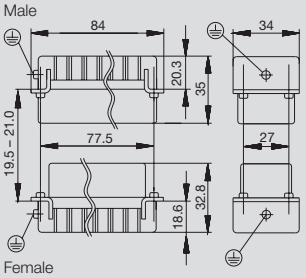


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HDD 72 MC | **1651190000** |
| Female | HDC HDD 72 FC | **1651200000** |
| Male | HDC HDD 72 MC 73-144 | **1651240000** |
| Female | HDC HDD 72 FC 73-144 | **1651260000** |

**Note** To complete the assembly of the plug-in connector, two inserts are required. We recommend the use of guide pins and sockets.

**Dimensions**

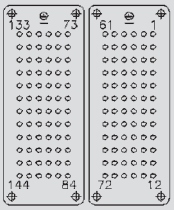
Male



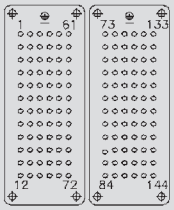

Female

**Arrangement of contacts**

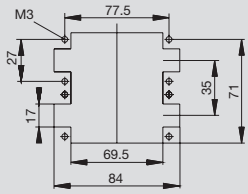
Male




Female




**Mounting cut-out**




## Accessories

**Crimp contacts**

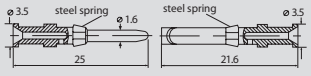
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 10

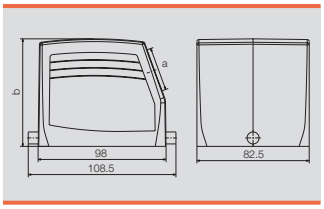
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSLU 1M32G | **1788420000** |

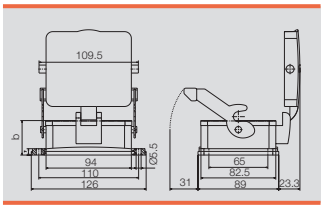



## Base

### Bulkhead housing



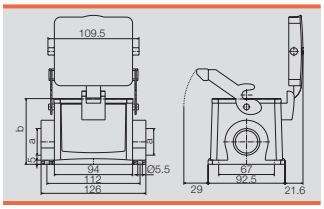
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ALU | **1219500000** |
| | | with cover | 55 | HDC 32B ADLU | **1219800000** |




### Base housing



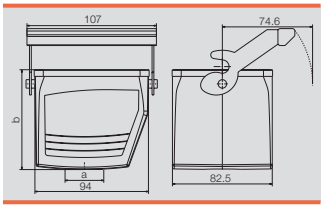
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SLU 2M32G | **1788470000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 2M32G | **1788490000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 83 | HDC 32B KLU 1M32G | **1788500000** |



# HDD series - the compact connectors

## 250 V, 10 A, Size 12

**216 + ⏚**

## Inserts

**Crimp connection**

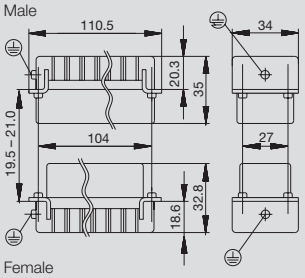


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HDD 108 MC | **1651210000** |
| Female | HDC HDD 108 FC | **1651220000** |
| Male | HDC HDD 108 MC 109-216 | **1651280000** |
| Female | HDC HDD 108 FC 109-216 | **1651300000** |

**Note** To complete the assembly of the plug-in connector, two inserts are required. We recommend the use of guide pins and sockets.

**Dimensions**

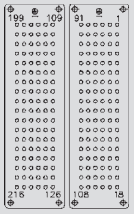
Male



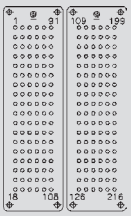

Female

**Arrangement of contacts**

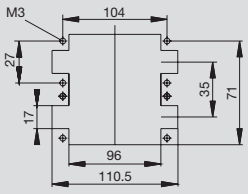
Male




Female




**Mounting cut-out**




## Accessories

**Crimp contacts**

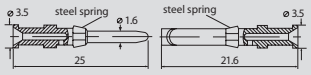
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

**Tools**



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 12

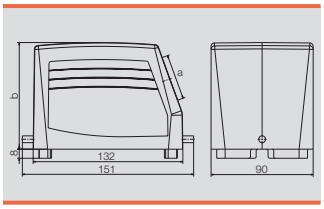
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



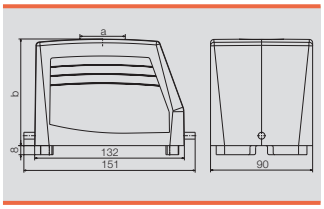
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TSLU 1M32G | **1788320000** |
| M 40 | w. threading | | 94 | HDC 48B TSLU 1M40G | **1788310000** |
| M 50 | w. threading | | 94 | HDC 48B TSLU 1M50G | **1788300000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TOLU 1M32G | **1788350000** |
| M 50 | w. threading | | 94 | HDC 48B TOLU 1M50G | **1788330000** |

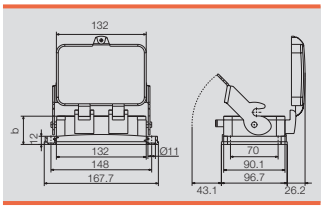



## Base

### Bulkhead housing



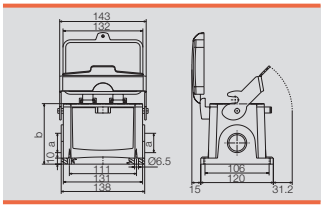
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | with cover | 62 | HDC 48B ADLU | **1222900000** |




### Base housing

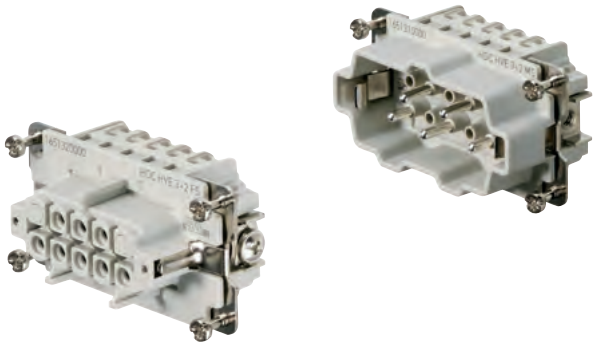


| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 100 | HDC 48B SLU 2M32G | **1788370000** |
| M 32 | w. threading | with cover | 120 | HDC 48B SDLU 2M32G | **1788390000** |
| M 40 | w. threading | | 100 | HDC 48B SLU 2M40G | **1788360000** |



# HVE series – exciting voltage

Weidmüller high-voltage inserts are equipped with lagging contacts. This results in more security during real operations.



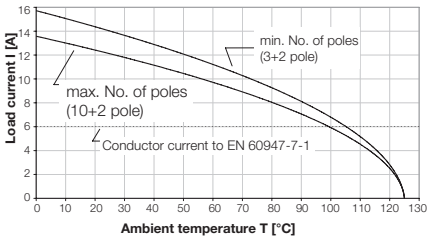
## Technical data

| | |
|---|---|
| **Standards / approvals** | |
| Standards | DIN EN 61984<br>DIN EN 60664-1 |
| Approvals | UL/CSA** |
| **Inserts** | |
| No. of poles | 3 + 2, 6 + 2, 10 + 2 |
| Rated voltage | 830 V |
| Rated voltage to UL/CSA | 600 V |
| Rated current | 20 A |
| Rated impulse withstand voltage | 8 kV |
| Pollution severity | 3 (1000 V / 8 kV / 2) |
| Insulation resistance | ≥ $10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 |
| Mechanical service life | |
| – Plugging cycles Ag - Surface | ≥ 500 |
| Contact resistance | ≤ 2 mΩ |
| **Contacts / Material** | |
| Contacts | Copper alloy |
| Surface | Passivated silver |
| Clamping range / Stripping length | |
| – Screw connection | 0.5 - 2.5 mm² (AWG 20 … 14) / 8 mm |
| – Tension clamp connection | 0.25 - 2.5 mm² (AWG 24 … 14) / 8 mm |
| Clamping torque | |
| – Screw connection | 0.5 - 0.55 Nm |
| SD blades | |
| – Screw connection | 0.6 x 3.5 oder PZ 0 |
| – Tension clamp connection | 0.5 x 3 oder 0.6 x 3.5 |
| PE connection | |
| – Clamping range | 0.5 … 4 mm² |
| – solid / stranded | 0.5 … 4 mm² / 0.5 … 4 mm² |
| – flexible / flexible with wire end ferrule, DIN 46228 pt. 1 | 0.5 … 4 mm² / 0.5 … 4 mm² |
| – AWG conductor | AWG 20 ... 12 |
| – Stripping length | 10 mm |
| – Clamping torque | 1.2 … 1.5 Nm |
| – Blade dimensions | SD 0.8 x 4 mm oder PZ 1 |

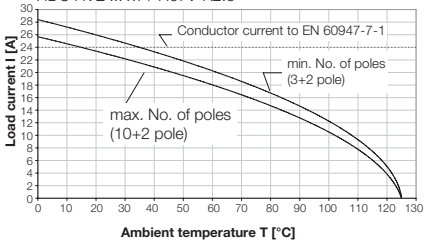
**Note:** When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!
Rated voltage determined on the basis of DIN EN 61984 section 6.19.2.2.
500 V for signal contact.
** For screw connection

**Derating curves**

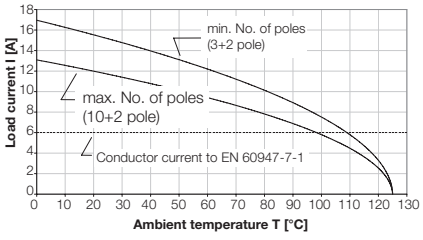
HDC HVE ... xT / H05V-K0.5



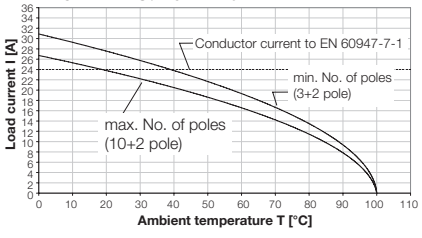

HDC HVE ... xT / H07V-K2.5




HDC HVE ... xS / H05V-K0.5




HDC HVE ... xS / H07V-K2.5



## Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 4 | 830 V | 20 A | 3 + 2 + ⏚ | • | • | | | | B.84 |
|  |  | 6 | 830 V | 20 A | 6 + 2 + ⏚ | • | • | | | | B.86 |
|  |  | 8 | 830 V | 20 A | 10+2+⏚ | • | • | | | | B.88 |

# HVE series - exciting voltage

## 830 V, 20 A, Size 4

**3 + 2 + ⏚**

## Inserts

### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HVE 3+2 MT CtH | **1967230000** |
| Female | HDC HVE 3+2 FT CtH | **1967220000** |

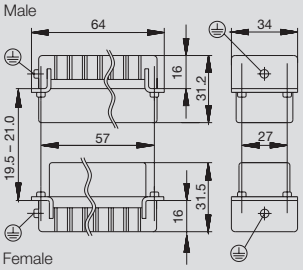
### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HVE 3+2 MS | **1651310000** |
| Female | HDC HVE 3+2 FS | **1651320000** |

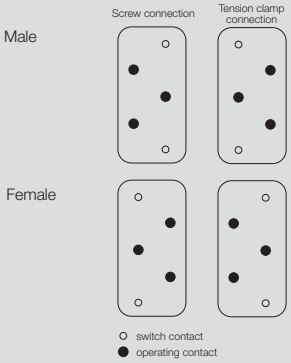
### Dimensions

Male

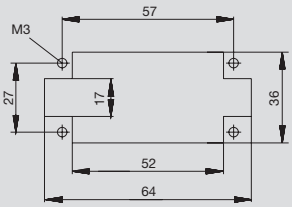



Female

### Arrangement of contacts




### Mounting cut-out



## Housing selection RockStar® IP66
## Size 4

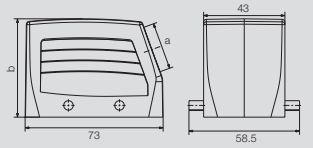
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



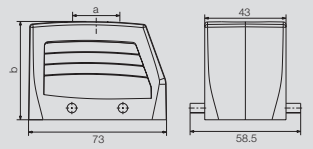
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



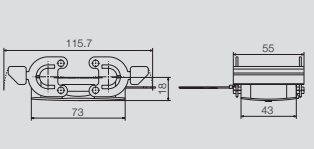
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

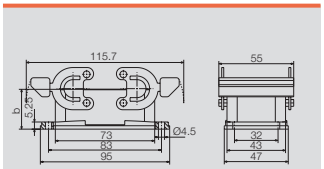



## Base

### Bulkhead housing



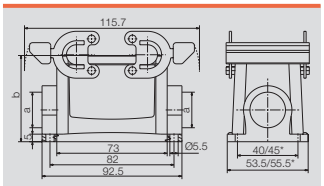
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |

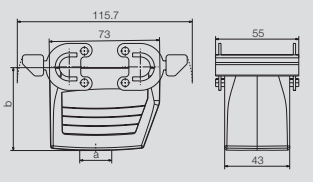



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



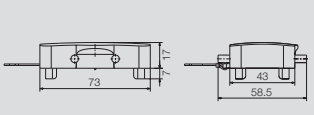
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |



# HVE series - exciting voltage

## 830 V, 20 A, Size 6

**6 + 2 + ⏚**

## Inserts

### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HVE 6+2 MT CtH | **1967250000** |
| Female | HDC HVE 6+2 FT CtH | **1967240000** |

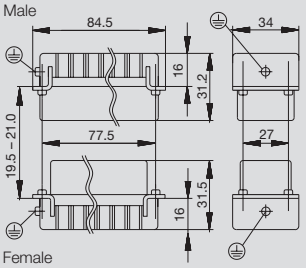
### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HVE 6+2 MS | **1651330000** |
| Female | HDC HVE 6+2 FS | **1651340000** |

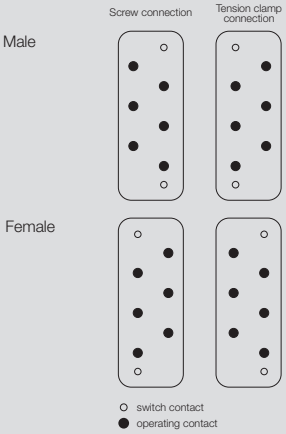
### Dimensions

Male

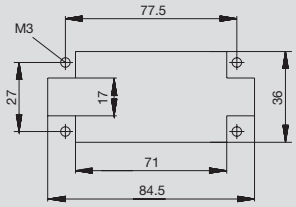



Female

### Arrangement of contacts




### Mounting cut-out



## Housing selection RockStar® IP66
## Size 6

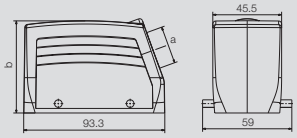
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



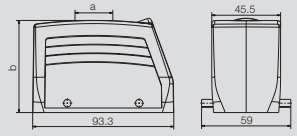
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



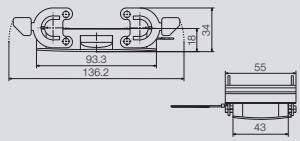
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

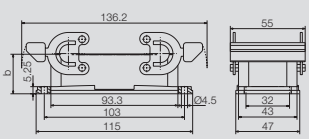



## Base

### Bulkhead housing



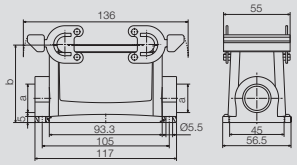
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



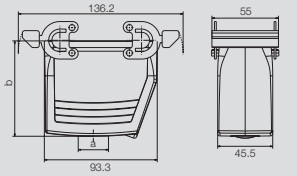
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



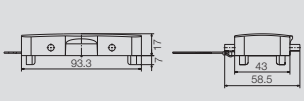
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



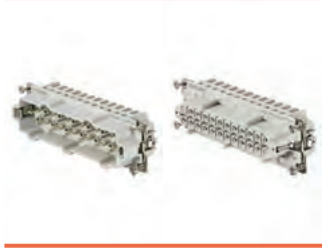
# HVE series - exciting voltage

## 830 V, 20 A, Size 8

## 10 + 2 + ⏚

## Inserts

### Tension clamp connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HVE 10+2 MT CtH | **1967210000** |
| Female | HDC HVE 10+2 FT CtH | **1967260000** |

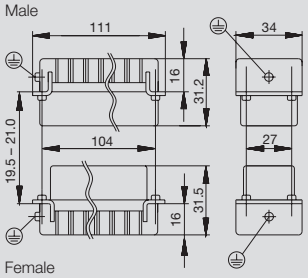
### Screw connection



| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HVE 10+2 MS | **1651350000** |
| Female | HDC HVE 10+2 FS | **1651360000** |

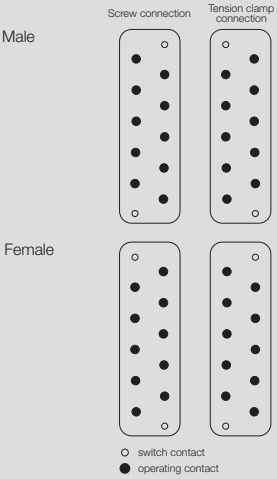
### Dimensions

Male

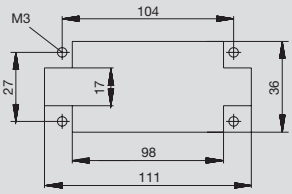



Female

### Arrangement of contacts




### Mounting cut-out



## Housing selection RockStar® IP66
## Size 8

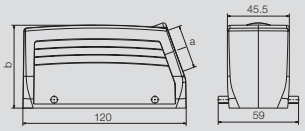
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



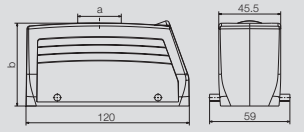
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |




### Plug housing, cable entry at top



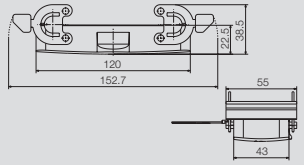
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

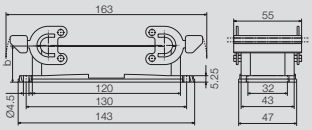



## Base

### Bulkhead housing



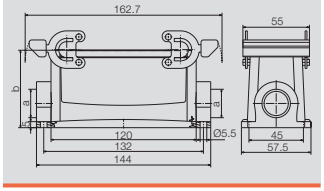
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



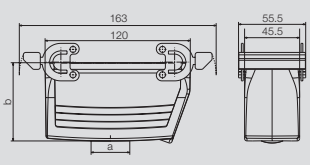
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



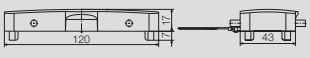
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover

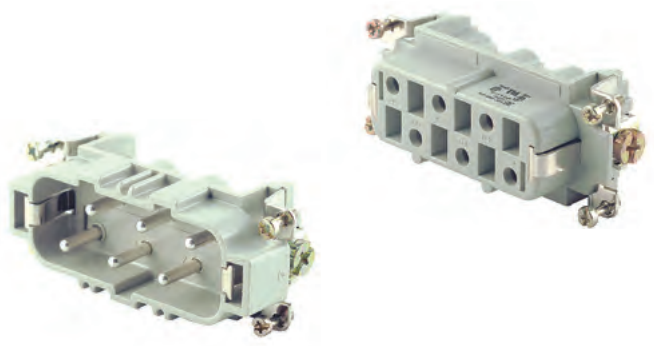


| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |



# HSB series – the heavy-duty connectors

The HSB series provides users with 35 A via each contact with screw connections for a safe and reliable connection.



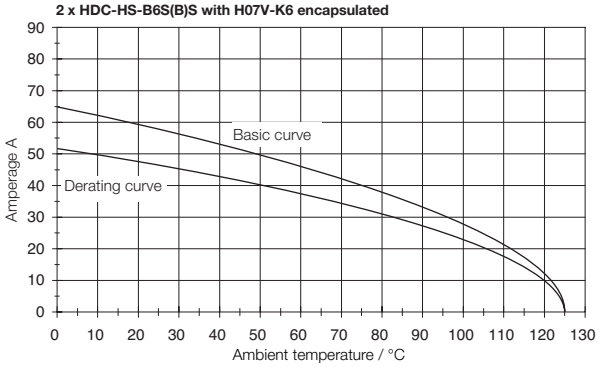
## Technical data

| | |
|---|---|
| **Standards / approvals** | |
| Standards | DIN EN 61984<br>DIN EN 60664-1 |
| Approvals | UL/CSA |
| **Inserts** | |
| No. of poles | 6, 12 |
| Rated voltage | 400 V |
| Rated voltage to UL/CSA | 600 V |
| Rated current | 35 A |
| Rated impulse withstand voltage | 6 kV |
| Pollution severity | 3 |
| Insulation resistance | ≥ $10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 |
| Mechanical service life | |
| – Plugging cycles Ag - Surface | ≥ 500 |
| – Plugging cycles Au - Surface | ≥ 500 |
| Contact resistance | |
| Screw connection | ≤ 2 mΩ |
| **Contacts / Material** | |
| Sockets and plug-in contact | Copper alloy |
| Surface | Passivated silver |
| Screw connection | |
| – Clamping range | 0.5 - 6 mm² (AWG 20 … 10) |
| – Stripping length | 11 mm |
| – flex. with wire end ferrule acc. to DIN 46228 pt. 1 | 4 mm² |
| Clamping torque | |
| – Screw connection | 1.2 … 1.5 Nm |
| SD blades | 0.6 x 3.5 or 0.8 x 4 mm |
| PE – Connection | |
| – Clamping range | 0.5 … 6 mm² |
| – solid / stranded | 0.5 … 6 mm² / 0.5 … 6 mm² |
| – flexible/flexible with wire end ferrule, DIN 46228 pt. 1 | 0.5 … 6 mm² / 0.5 … 6 mm² |
| – AWG conductor | AWG 20 … 10 |
| – Stripping length | 10 mm |
| – Clamping torque | 2 … 2.5 Nm |
| – Blade dimensions | SD 1 x 5.5 mm or PZ 2 |

**Note:** When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load! When connecting flexible conductor with a screw connection, you should use ferrules, according to DIN 46228, section 1.

**Derating curves**

**2 x HDC-HS-B6S(B)S with H07V-K6 encapsulated**




Verified operating range up to max. 35 A (upper limit current)

## Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 6 | 400 V | 35 A | 6 + ⏚ | | • | | | | B.92 |
|  |  | 10 | 400 V | 35 A | 12 + ⏚ | | • | | | | B.94 |

# HSB series - the heavy-duty connectors

## 400 V, 35 A, Size 6

6 + ⏚

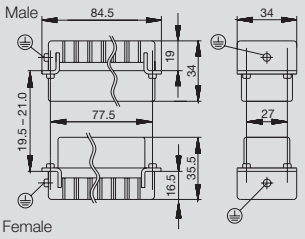
## Inserts

**Screw connection**



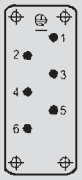
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HSB 6 MS | **1498700000** |
| Female | HDC HSB 6 FS | **1498900000** |

**Dimensions**

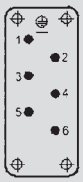



**Arrangement of contacts**

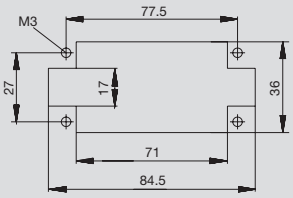
Male




Female




**Mounting cut-out**



## Housing selection RockStar® IP66
## Size 6

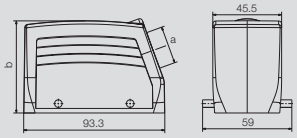
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



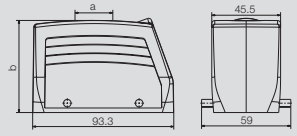
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



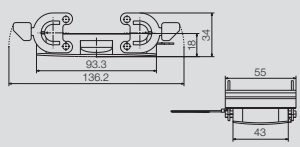
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

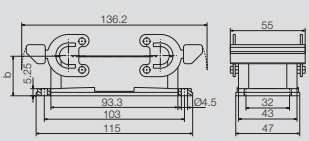



## Base

### Bulkhead housing



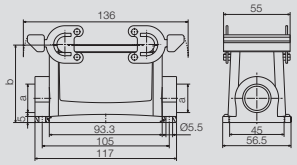
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



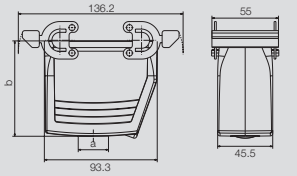
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



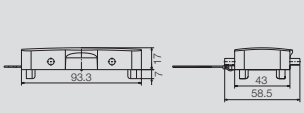
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



## 400 V, 35 A, Size 10

12 + ⏚

## Inserts

**Screw connection**

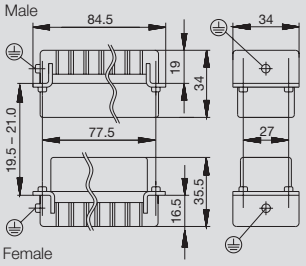


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HSB 6 MS | **1498700000** |
| Female | HDC HSB 6 FS | **1498900000** |
| Male | HDC HSB 6 MS 7 - 12 | **1498800000** |
| Female | HDC HSB 6 FS 7 - 12 | **1499000000** |

**Note** Please use the following inserts for size 10 (12-pole): HSB 6 FS + HSB 6 FS 7-12

**Dimensions**

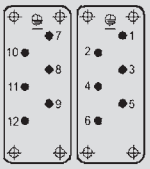
Male



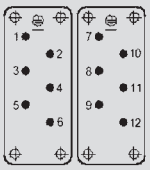

Female

**Arrangement of contacts**

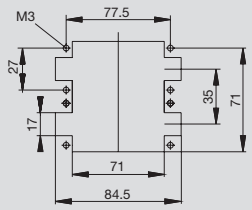
Male




Female




**Mounting cut-out**



## Housing selection RockStar® IP66
## Size 10

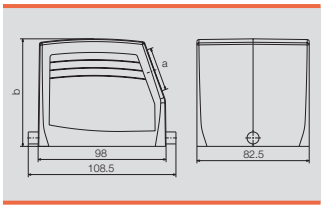
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSLU 1M32G | **1788420000** |

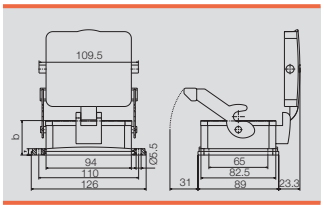



## Base

### Bulkhead housing



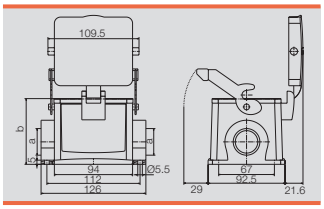
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ALU | **1219500000** |
| | | with cover | 55 | HDC 32B ADLU | **1219800000** |




### Base housing



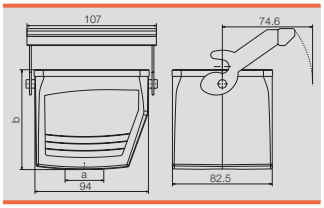
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SLU 2M32G | **1788470000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 2M32G | **1788490000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 83 | HDC 32B KLU 1M32G | **1788500000** |



# HQ series – the powerful little connectors

A small size but quite big. The electrical values speak for themselves. The HQs use the proven HE and HD crimp contacts as well as the high-performance HX contacts.





## Technical data

| | HQ 5 | HQ 7 | HQ 8 | HQ 4 2 | HQ 17 |
|---|---|---|---|---|---|
| **Standards / approvals** | | | | | |
| Standards | DIN EN 61984 | DIN EN 61984 | DIN EN 61984 | DIN EN 61984 | DIN EN 61984 |
| | DIN EN 60664-1 | DIN EN 60664-1 | DIN EN 60664-1 | DIN EN 60664-1 | DIN EN 60664-1 |
| Approvals | UL/CSA | UL/CSA | UL/CSA/ISO 23570 | UL/CSA/ISO 23570 | UL/CSA |
| **Inserts** | | | | | |
| No. of poles | 5 + PE | 7 + PE | 8 + PE | 4 power, 2 signal + PE | 17 + PE |
| Connection system | Crimp, HE-contact | Crimp, HD-contacts | Crimp, HE-contact | Crimp, HX-/HD-contacts | Crimp, HD-contacts |
| Rated voltage | 250 V | 400 V | 500 V | 690 V, 250 V | 250 V |
| Rated voltage to UL/CSA | 600 V | 600 V | 600 V | 600 V | 600 V |
| Rated current | 16 A | 10 A | 16 A | 40/10 A | 10 A |
| Rated impulse withstand voltage | 4 kV | 6 kV | 6 kV | 6 kV/4 kV | 4 kV |
| Pollution severity | 3 | 3 | 3 | 3 | 2 |
| Insulation resistance | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω |
| Material | PC glass-fibre reinforced | PC glass-fibre reinforced | PC glass-fibre reinforced | PC glass-fibre reinforced | PC glass-fibre reinforced |
| Temperature range | –40°…+125° | –40°…+125° | –40°…+125° | –40°…+125° | –40°…+125° |
| Flammability to UL 94 | V - 0 | V - 0 | V - 0 | V - 0 | V - 0 |
| Mechanical service life | | | | | |
| – Plugging cycles Ag - Surface | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 |
| – Plugging cycles Au - Surface | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 |
| Volume (continuity) resistance of crimp connection | ≤ 2 mΩ | ≤ 4 mΩ | ≤ 2 mΩ | ≤ 1 mΩ/≤ 4 mΩ | ≤ 4 mΩ |
| **Contacts / Material** | | | | | |
| Sockets and plug-in contact | Copper alloy | Copper alloy | Copper alloy | Copper alloy | Copper alloy |
| Surface | Passivated silver | Passivated silver/ gold | Passivated silver | Passivated silver/ gold | Passivated silver/ gold |
| Crimp connection | | | | | |
| – Performance power range | 0.5…4 mm² (AWG 20…12) | | 0.5…4 mm² (AWG 20…12) | 1.5…6 mm² (AWG 16…10) | |
| – Signal range | | 0.14…2.5 mm² (AWG 26…14) | | 0.14…2.5 mm² (AWG 26…14) | 0.14…2.5 mm² (AWG 26…14) |
| – Stripping length | 7.5 mm | 8.0 mm | 7.5 mm | 9 mm/8 mm | 8.0 mm |
| PE connection | | | Crimp | Crimp | Crimp |
| – Clamping range | 0.5…2.5 mm² | 0.14…2.5 mm² | 0.5…4 mm² | 1.5…6 mm² | 0.14…2.5 mm² |
| – solid core/stranded | 0.5…2.5 mm²/0.5…2.5 mm² | 0.14…2.5 mm² | 0.5…4 mm² | | |
| – flexible/flexible with ferrule | 0.5…2.5 mm²/0.5…2.5 mm² | 0.14…2.5 mm² | 0.5...4 mm² | | |
| – AWG conductor | AWG 20…14 | AWG 26…14 | AWG 20…12 | AWG 16…10 | AWG 26…14 |
| – Stripping length | 10 mm | 5 mm | 7.5 mm | 9 mm | 8 mm |
| – Clamping torque | 0.5…0.55 Nm | 0.5…0.55 Nm | | | |
| – Blade dimensions | SD 0.8 x 4 mm | SD 0.8 x 4 mm | | | |
| **Accessories and tools** | | | | | |
| Crimping tools used | 9205430000 CTIN CM 1.6/2.5 | 9205430000 CTIN CM 1.6/2.5 | 9205430000 CTIN CM 1.6/2.5 | 9205430000 CTIN CM 1.6/2.5 | 9205430000 CTIN CM 1.6/2.5 |
| | 9018490000 CTX CM 1.6/2.5 | 9018490000 CTX CM 1.6/2.5 | 9018490000 CTX CM 1.6/2.5 | 9205440000 CTIN CM 3.6 | 9018490000 CTX CM 1.6/2.5 |
| | | | | 9018490000 CTX CM 1.6/2.5 | |
| Screwdriver | | | Version Crosshead, shape H | Version Crosshead, shape H | Version Crosshead, shape H |
| | | | Sheet metal screw: | Sheet metal screw: | Sheet metal screw: |
| | | | ISO 7049-ST 2.9x9.5-F-H | ISO 7049-ST 2.9x9.5-F-H | ISO 7049-ST 2.9x9.5-F-H |
| Removal tool for crimps | 1866750000 Removal Tool HE | 1866730000 Removal Tool HD | 1866750000 Removal Tool HE | 1002990000 Removal Tool HX | 1866730000 Removal Tool HD |
| | | | | 1866730000 Removal Tool HD | |

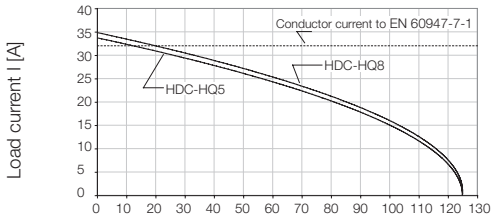
**Note:** When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

## Overview

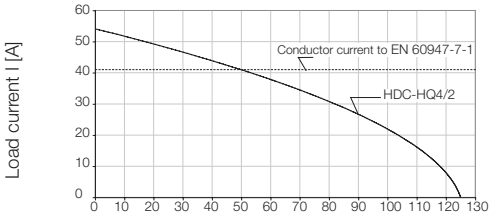
| | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|
|  | 1 | 250 V | 16 A | 5 + ⏚ | | | • | | | B.98 |
|  | 1 | 400 V | 10 A | 7 + ⏚ | | | • | | | B.100 |
|  | HQ | 500 V | 16 A | 8 + ⏚ | | | • | | | B.102 |
|  | HQ | 250 V | 10 A | 17 + ⏚ | | | • | | | B.104 |
|  | HQ | 690/250 V | 40/10 A | 4 + 2 + ⏚ | | | • | | | B.106 |

## Technical data

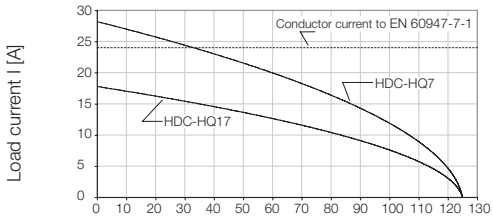
### Derating curves




**HDC-HQ5 und HDC-HQ8 / H07V-K4.0** Ambient temperature T [°C]




**HDC-HQ4/2 / H07V-K6.0** Ambient temperature T [°C]
**(control contacts with 10 A / H07V-K2.5)**




**HDC-HQ7 und HDC-HQ17 / H07V-K2.5** Ambient temperature Tr [°C]

# HQ series - the powerful little connectors

## 250 V, 16 A, Size 1

5 + ⏚

## Inserts

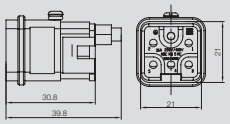
### Crimp connection



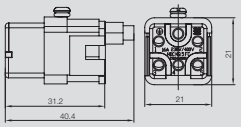
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HQ 5 MC | **1912440000** |
| Female | HDC HQ 5 FC | **1912460000** |

### Dimensions

Male




Female




### Arrangement of contacts

Male



Female



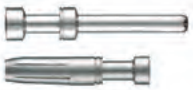
## Accessories

### Crimp contacts

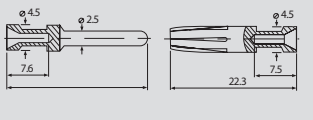
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |

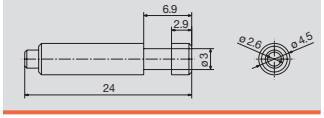



| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Coding pin



| Qty. | Type | Order No. |
|---|---|---|
| 100 | HDC HE CP | **1003240000** |




### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar® IP66
## Size 1

**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

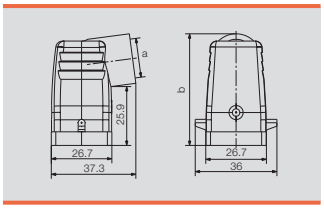
## Hood

### Plug housing, cable entry sideways



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 04A TWLU 1M20G | **1788810000** |

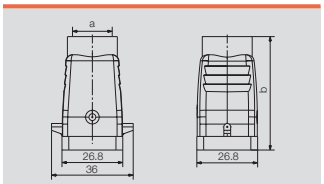



### Plug housing, cable entry at top



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 04A TOLU 1M20G | **1788820000** |



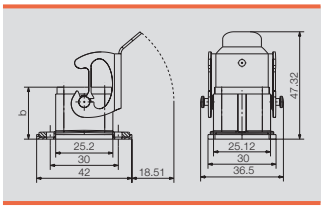

## Base

### Bulkhead housing



**Material:** diecast aluminium

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 04A ALU | **1497600000** |

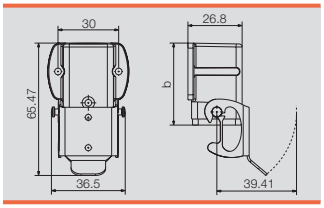



### Base housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 04A SLU 1M20G | **1788830000** |

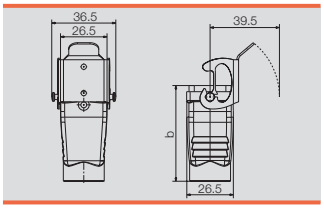



### Coupling housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 04A KOLU 1M20G | **1788840000** |

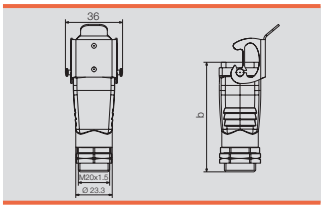



### Screw mounting housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 04A ELU 1M20G | **1900320000** |

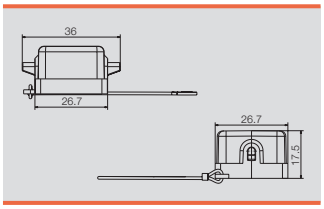



### Cover



**Material:** diecast aluminium

| | Version | Type | Order No. |
|---|---|---|---|
| | for female insert | HDC 04A DMDL 2BO | **1665750000** |
| | for male insert | HDC 04A DODL 2BO | **1665740000** |



# HQ series - the powerful little connectors

## 400 V, 10 A, Size 1

7 + ⏚

## Inserts

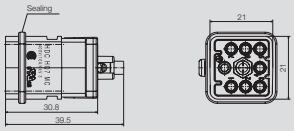
### Crimp connection



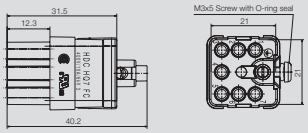
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HQ 7 MC | **1003190000** |
| Female | HDC HQ 7 FC | **1003180000** |

### Dimensions

Male




Female




### Arrangement of contacts

Male



Female



## Accessories

### Crimp contacts

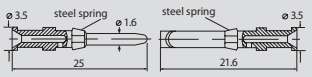
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |



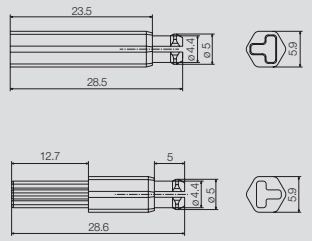

| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

### Coding pin



| Qty. | Type | Order No. |
|---|---|---|
| 50 | HDC HQ 7 CPM | **1003230000** |
| 50 | HDC HQ 7 CPF | **1003220000** |

**Note:** six-way coding is possible with a coding pin.




### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 1

**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

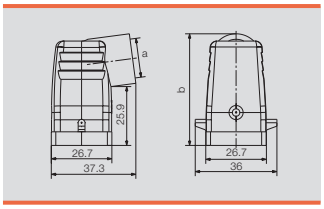
## Hood

### Plug housing, cable entry sideways



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 04A TWLU 1M20G | **1788810000** |

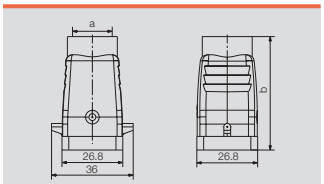



### Plug housing, cable entry at top



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 04A TOLU 1M20G | **1788820000** |



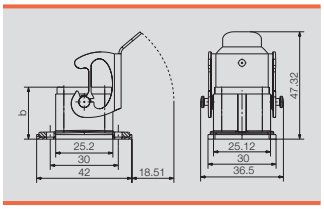

## Base

### Bulkhead housing



**Material:** diecast aluminium

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 04A ALU | **1497600000** |

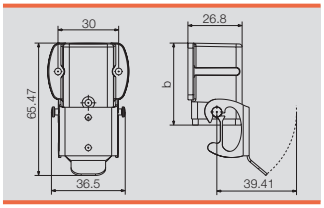



### Base housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 04A SLU 1M20G | **1788830000** |

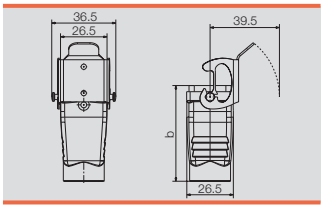



### Coupling housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 04A KOLU 1M20G | **1788840000** |

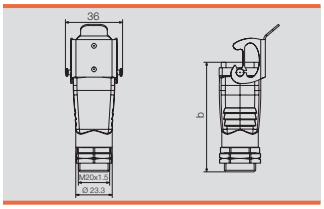



### Screw mounting housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 04A ELU 1M20G | **1900320000** |

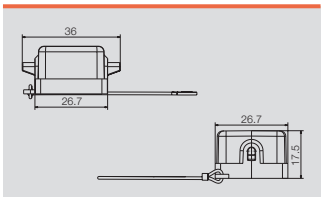



### Cover



**Material:** diecast aluminium

| | Version | | Type | Order No. |
|---|---|---|---|---|
| | for female insert | | HDC 04A DMDL 2BO | **1665750000** |
| | for male insert | | HDC 04A DODL 2BO | **1665740000** |



# HQ series - the powerful little connectors

## 500 V, 16 A, Size HQ

8 + ⏚

## Inserts

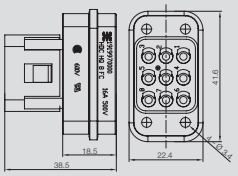
### Crimp connection



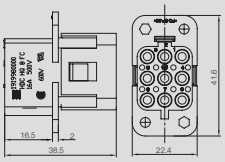
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HQ 8 MC | **1919970000** |
| Female | HDC HQ 8 FC | **1919980000** |

### Dimensions

Male

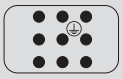


Female

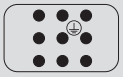


### Arrangement of contacts

Male



Female



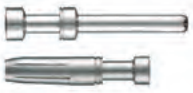
## Accessories

### Crimp contacts

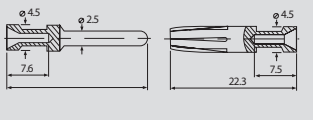
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |

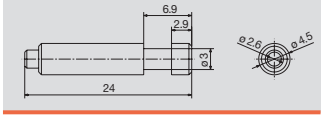


| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Coding pin



| Qty. | Type | Order No. |
|---|---|---|
| 100 | HDC HE CP | **1003240000** |



### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

## Housing selection RockStar® IP66
## Size HQ

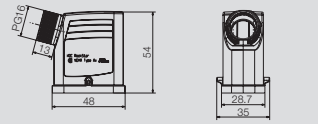
**Further housings are available, see Chapter E for IP66**

## Hood

### Plug housing, cable entry sideways



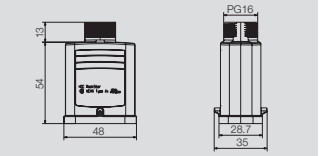
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 54 | HDC HQP TSLU 1PG16 | 1003090000 |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 67 | HDC HQP TOLU 1PG16 | 1003070000 |

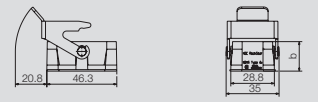



## Base

### Bulkhead housing



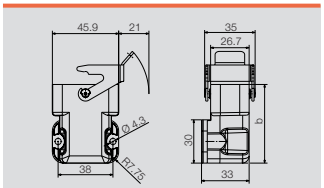
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 19.5 | HDC HQP ALU | 1003040000 |




### Bulkhead housing angled



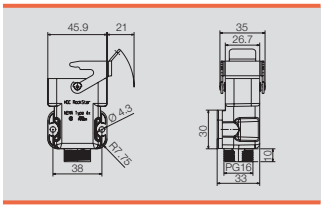
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | angled | | 54.5 | HDC HQP AWLU | 1003060000 |




### Base housing



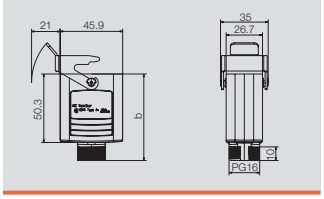
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 54.5 | HDC HQP SLU 1PG16 | 1003110000 |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 63.5 | HDC HQP KOLU 1PG16 | 1003120000 |

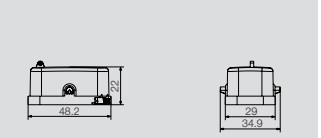



### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | for female insert | HDC HQP DMD 2BO | 1003130000 |
| | for male insert | HDC HQP DOD 2BO | 1003140000 |

| Note | For plastic and metal housings |
|---|---|



# HQ series - the powerful little connectors

## 250 V, 10 A, Size HQ

17 + ⏚

## Inserts

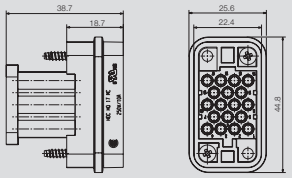
### Crimp connection



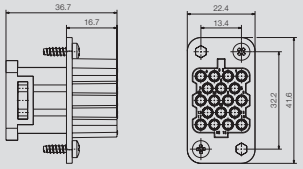
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HQ 17 MC | **1003210000** |
| Female | HDC HQ 17 FC | **1003200000** |

### Dimensions

Male

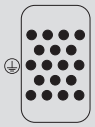



Female

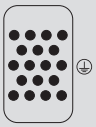



### Arrangement of contacts

Male



Female



## Accessories

### Crimp contacts

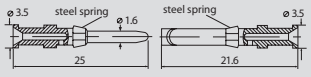
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

### Tools



| | |
|---|---|
| **Crimping tool** | |
| CTX CM 1.6/2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size HQ

**Further housings are available, see Chapter E for IP66**

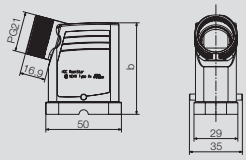
### Hood

**Plug housing, cable entry sideways**



**Material:** Zinc diecast

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 21 | w. threading | | 60.5 | HDC HQM TSLU 1PG21 | **1003100000** |

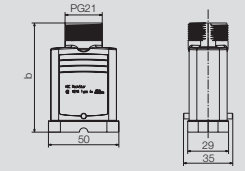



**Plug housing, cable entry at top**



**Material:** Zinc diecast

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 21 | w. threading | | 77.5 | HDC HQM TOLU 1PG21 | **1003080000** |



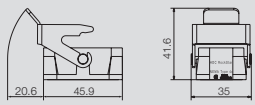

### Base

**Bulkhead housing**



**Material:** Zinc diecast

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 20.5 | HDC HQM ALU | **1003050000** |




**Cover**



**Material:** Plastic

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | for female insert | | 23.5 | HDC HQP DMD 2BO | **1003130000** |
| | for male insert | | 23.5 | HDC HQP DOD 2BO | **1003140000** |

**Note** For plastic and metal housings



# HQ series - the powerful little connectors

## 690/250 V, 40/10 A, Size HQ

**4 + 2 + ⏚**

## Inserts

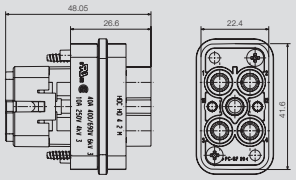
**Crimp connection**



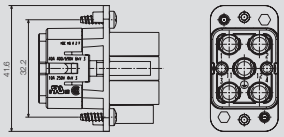
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC HQ 4/2 MC | **1003170000** |
| Female | HDC HQ 4/2 FC | **1003160000** |

**Dimensions**

Male




Female




**Arrangement of contacts**

Male



Female



## Accessories

**Crimp contacts**

Surface finish silver

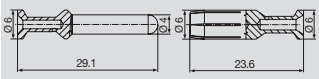


**Male**

| Qty. | Type | Order No. |
|---|---|---|
| 25 | HDC C HX SM1.5AG | **1002910000** |
| 25 | HDC C HX SM2.5AG | **1002920000** |
| 25 | HDC C HX SM4.0AG | **1002930000** |
| 25 | HDC C HX SM6.0AG | **1002940000** |

**Female**

| Type | Order No. |
|---|---|
| HDC C HX BM1.5AG | **1002950000** |
| HDC C HX BM2.5AG | **1002960000** |
| HDC C HX BM4.0AG | **1002970000** |
| HDC C HX BM6.0AG | **1002980000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 8 mm |
| 4.00 mm² | AWG 12 | 8 mm |
| 6.00 mm² | AWG 10 | 8 mm |

**Tools**



| Crimping tool | |
|---|---|
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| Removal Tool HX | **1002990000** |

**Crimp contacts**

Surface finish gold



Surface finish silver

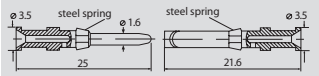


**Male**

| Qty. | Type | Order No. |
|---|---|---|
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** |
| | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** |

**Female**

| Type | Order No. |
|---|---|
| HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| HDC-C-HD-BM0.5AU | **1651680000** |
| HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| HDC-C-HD-BM1.5AU | **1651700000** |
| HDC-C-HD-BM2.5AU | **1651710000** |
| | |
| HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| HDC-C-HD-BM0.5AG | **1651580000** |
| HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| HDC-C-HD-BM1.5AG | **1651600000** |
| HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

**Tools**



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size HQ

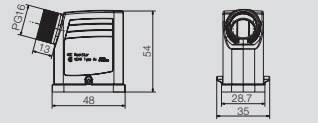
**Further housings are available, see Chapter E for IP66**

## Hood

### Plug housing, cable entry sideways



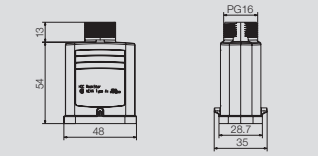
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 54 | HDC HQP TSLU 1PG16 | 1003090000 |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 67 | HDC HQP TOLU 1PG16 | 1003070000 |

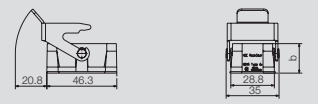



## Base

### Bulkhead housing



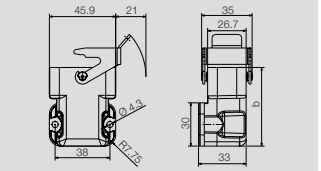
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 19.5 | HDC HQP ALU | 1003040000 |




### Bulkhead housing angled



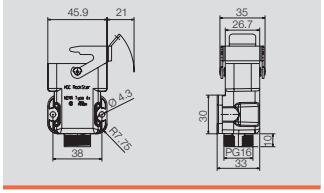
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | angled | | 54.5 | HDC HQP AWLU | 1003060000 |




### Base housing



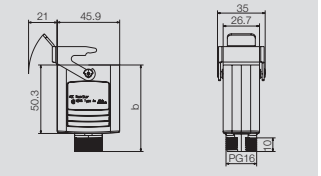
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 54.5 | HDC HQP SLU 1PG16 | 1003110000 |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 63.5 | HDC HQP KOLU 1PG16 | 1003120000 |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | for female insert | HDC HQP DMD 2BO | 1003130000 |
| | for male insert | HDC HQP DOD 2BO | 1003140000 |




| Note | For plastic and metal housings |
|---|---|

# MixMate series – the high-capacity connectors

Using the MixMate series, high rated currents and voltages can be transmitted concurrently with signals in a very confined space. MixMate is available in threaded, axial screw and crimp connection technology.



## Technical data

| | S4 | S8/24 | S4/0 Axial | S4/0 | S4/2 |
|---|---|---|---|---|---|
| **Standards / approvals** | | | | | |
| Standards | DIN EN 61984<br>DIN EN 60664-1 | DIN EN 61984<br>DIN EN 60664-1 | DIN EN 61984<br>DIN EN 60664-1 | DIN EN 61984<br>DIN EN 60664-1 | DIN EN 61984<br>DIN EN 60664-1 |
| Approvals | UL/CSA | UL/CSA/VDE | UL/CSA | UL/CSA/VDE | UL/CSA/VDE |
| **Inserts** | | | | | |
| No. of poles | | | | | |
| – Power contact | 4 (+PE) | 8 (+PE) | 4 (+PE) | 4 (+PE) | 4 (+PE) |
| – Signal contact | | 24 | | | 2 |
| Rated voltage | | | | | |
| – Power contact | 1000 V | 400 V | 690 V | 830 V | 830 V |
| – Signal contact | | 160 V | | | 400 V |
| Rated voltage to UL/CSA | 600 V | 600 V | 600 V | 600 V | 600 V |
| Rated current | | | | | |
| – Power contact | 65 A | 16 A | 80 A | 80 A | 80 A |
| – Signal contact | | 10 A | | | 16 A |
| Rated impulse withstand voltage | | | | | |
| – Power contact | 8 KV | 4 KV | 8 KV | 8 KV | 8 KV |
| – Signal contact | | 2.5 KV | | | 6 KV |
| Pollution severity | 3 | 3 | 3 (1000 V / 8 kV / 2) | 3 | 3 |
| Insulation resistance | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω |
| Material | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Temperature range | –40 °C ... +125 °C | –40 °C ... +125 °C | –40 °C ... +125 °C | –40 °C ... +125 °C | –40 °C ... +125 °C |
| Flammability to UL 94 | V – 0 | V – 0 | V – 0 | V – 0 | V – 0 |
| Mechanical service life | | | | | |
| – Plugging cycles Ag - Surface | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 |
| – Plugging cycles Au - Surface | | ≥ 500 | | | |
| Contact resistance with min. and max. conductors | ≤ 1 mΩ | ≤ 2 mΩ (Power)<br>≤ 4 mΩ (Signals) | ≤ 1 mΩ | ≤ 1 mΩ | ≤ 1 mΩ (Power)<br>≤ 2 mΩ (Signals) |
| **Contacts / Material** | | | | | |
| Sockets and plug-in contact | Copper alloy | Copper alloy | Copper alloy | Copper alloy | Copper alloy |
| Surface | Passivated silver | Passivated silver or gold-plated | Passivated silver | Passivated silver | Passivated silver |
| Flexible conductor connection | | | | | |
| – Power contact | 2.5 - 10 mm² (AWG 14 … 8) | 0.5 - 4 mm² (AWG 20 … 12) | 1.5 - 16 mm² (AWG 16 … 6) | 1.5 - 16 mm² (AWG 16 … 6) | 1.5 - 16 mm² (AWG 16 … 6) |
| – Signal contact | | 0.14 - 2.5 mm² (AWG 26 … 14) | | | 0.5 - 2.5 mm² (AWG 22 … 14) |
| Stripping length | | | | | |
| – Power contact | 8 mm | 7.5 mm | 13 mm | 15 mm | 15 mm |
| – Signal contact | | 8 mm | | | 8 mm |
| Clamping torque | | | | | |
| – Power contact | 1.1 - 1.7 Nm | | 2 … 3 Nm | 1.2 Nm (1.5 mm²) /<br>2 Nm (2.5 mm²) /<br>3 Nm (4 - 16 mm²) | 1.2 Nm (1.5 mm²) /<br>2 Nm (2.5 mm²) /<br>3 Nm (4 - 16 mm²) |
| – Signal contact | | | | | 0.5 - 0.55 Nm |
| Tools | | | | | |
| – Hexagon socket, 2 mm | SW 2 | | SW 3 | | |
| – Screwdriver | 0.6 x 3.5 mm | | | SD 0.8 x 4 mm | SD 0.8 x 4 mm (Power) /<br>SD 0.6 x 3.5 mm or PH1 (Signals) |
| – Crimping tool | | CTIN 1.6/2.5 / CTX CM 1.6/2.5 (for 0.5 - 1.5 mm²) | | | |
| PE connection via plug/socket | | | | | |
| – Clamping range | 1.5/2.5 - 4/10 mm² | 0.5 - 6 mm² (0.5 mm² with ferrule) | 1.5 - 16 mm² with cable lug | 0.5 - 16 mm² (0.5 mm² with ferrule 10 - 16 mm² with ring cable lug) | 0.5 - 16 mm² (0.5 mm² with ferrule 10 - 16 mm² with ring cable lug) |
| – AWG conductor | AWG 16/14 … 12/8 | AWG 20 ... 10 (AWG 10 with ring cable lug) | AWG 16 … 4 | AWG 20 … 6 (AWG 10. 8 and 6 with ring cable lug) | AWG 20 … 6 (AWG 10. 8 and 6 with ring cable lug) |
| – Stripping length | 8 mm | 13 mm | 8 mm (for wire up to 6 mm² only) | 13 mm | 13 mm |
| – Clamping torque | 0.5 - 0.8 Nm | 2 - 2.5 Nm | 2 - 2.5 Nm | 2 - 2.5 Nm | 2 - 2.5 Nm |
| – Blade dimensions | SD 0.8 x 4 mm | SD 1.2 x 6.5 mm or PH 2 | SD 0.8 x 4 mm or PZ 2 | SD 1.2 x 6.5 mm or PH 2 | SD 1.2 x 6.5 mm or PH 2 |

**Note:** When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

* Power contact = Axial screw connection, Signal contact = Screw connection

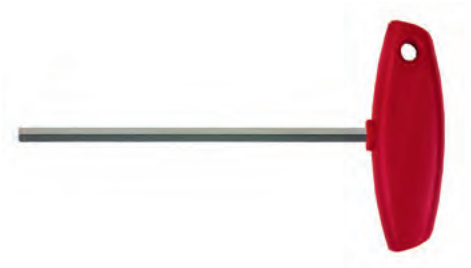
| S6/12* | S6/36 | S12/2 | S4/8 | S6/6* | S8/0 |
|---|---|---|---|---|---|
| | | | | | |
| DIN EN 61984<br>DIN EN 60664-1<br>UL/CSA | DIN EN 61984<br>DIN EN 60664-1<br>UL/CSA/VDE | DIN EN 61984<br>DIN EN 60664-1<br>UL/CSA/VDE | DIN EN 61984<br>DIN EN 60664-1<br>UL/CSA/VDE | DIN EN 61984<br>DIN EN 60664-1<br>UL/CSA | DIN EN 61984<br>DIN EN 60664-1<br>UL/CSA/VDE |
| | | | | | |
| 6 (+PE)<br>12 | 6 (+PE)<br>36 | 12 (+PE)<br>2 | 4 (+PE)<br>8 | 6 (+PE)<br>6 | 8 (+PE x 2) |
| 690 V<br>400 V<br>600 V | 690 V<br>160 V<br>600 V | 690 V<br>250 V<br>600 V | 400 V<br>400 V<br>600 V | 690 V<br>400 V<br>600 V | 690 V<br><br>600 V |
| 48 A<br>16 A | 40 A<br>10 A | 40 A<br>10 A | 80 A<br>16 A | 100 A<br>16 A | 110 A<br> |
| 8 KV<br>6 KV<br>3 | 8 KV<br>2.5 KV<br>3 | 8 KV<br>4 KV<br>3 | 6 KV<br>6 KV<br>3 | 8 KV<br>6 KV<br>3 | 8 KV<br><br>3 |
| ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω | ≥ $10^{10}$ Ω |
| Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| –40 °C ... +125 °C | –40 °C ... +125 °C | –40 °C ... +125 °C | –40 °C ... +125 °C | –40 °C ... +125 °C | –40 °C ... +125 °C |
| V – 0 | V – 0 | V – 0 | V – 0 | V – 0 | V – 0 |
| ≥ 500 | ≥ 500<br>≥ 500 | ≥ 500<br>≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 |
| ≤ 2 mΩ (Power)<br>≤ 2 mΩ (Signals) | ≤ 2 mΩ (Power)<br>≤ 4 mΩ (Signals) | ≤ 2 mΩ (Power)<br>≤ 4 mΩ (Signals) | ≤ 1 mΩ (Power)<br>≤ 2 mΩ (Signals) | ≤ 1 mΩ (Power)<br>≤ 2 mΩ (Signals) | ≤ 1 mΩ |
| | | | | | |
| Copper alloy<br>Passivated silver | Copper alloy<br>Passivated silver or gold-plated | Copper alloy<br>Passivated silver or gold-plated | Copper alloy<br>Passivated silver | Copper alloy<br>Passivated silver | Copper alloy<br>Passivated silver |
| 2.5 - 10 mm² (AWG 14 … 8)<br>0.5 - 2.5 mm² (AWG 24 … 14) | 1.5 - 6 mm² (AWG 16 … 10)<br>0.14 - 2.5 mm² (AWG 26 … 14) | 1.5 - 6 mm² (AWG 16 … 10)<br>0.14 - 2.5 mm² (AWG 26 … 14) | 1.5 - 16 mm² (AWG 16 … 6)<br>0.5 - 2.5 mm² (AWG 22 … 14) | 16 - 35 mm² (AWG 6 … 2)<br>0.5 - 2.5 mm² (AWG 24 … 14) | 10 - 25 mm² (AWG 8 ... 4)**<br> |
| 8 mm<br>12 mm | 9 mm<br>8 mm | 9 mm<br>8 mm | 15 mm<br>8 mm | 13 mm<br>12 mm | 12 mm<br> |
| 1.1 … 1.7 Nm<br>0.45 ... 0.9 Nm | | | 1.2 Nm (1.5 mm²) /<br>2 Nm (2.5 mm²) /<br>3 Nm (4 - 16 mm²)<br>0.5 - 0.55 Nm | 6 … 8 Nm<br>0.45 ... 0.9 Nm | 6 Nm (10 - 16 mm²) /<br>7 Nm (25 mm²)<br> |
| SW 2<br>0.6 x 3.5 mm | | | <br>SD 0.8 x 4 mm (Power) /<br>SD 0.6 x 3.5 mm or PH1 (Signals) | SW 4<br>SD 0.6 x 3.5 or PZ 0 | SW 4<br> |
| | CTIN 1.6/2.5 / CTX CM 1.6/2.5 (for 0.5 - 1.5 mm²) | CTIN 1.6/2.5 / CTX CM 1.6/2.5 (for 0.5 - 1.5 mm²) | | | |
| 2.5 - 10 mm² | 0.5 - 6 mm² (0.5 mm² with ferrule) | 0.5 - 6 mm² (0.5 mm² with ferrule) | 0.5 - 16 mm² (0.5 mm² with ferrule),<br>10 - 16 mm² with ring cable lug) | 16 - 35 mm² | 10 - 25 mm²** |
| AWG 14 … 8 | AWG 20 ... 10 (AWG 10 with ring cable lug) | AWG 20 ... 10 (AWG 10 with ring cable lug) | AWG 20 … 6 (AWG 10. 8 and 6 with ring cable lug) | AWG 6 … 2 | AWG 8 ... 4 |
| 8 mm | 13 mm | 13 mm | 13 mm | 8 mm | 12 mm |
| 2 - 2.5 Nm | 2 - 2.5 Nm | 2 - 2.5 Nm | 2 - 2.5 Nm | 6 - 8 Nm | 6 Nm (10 - 16 mm²)/7 Nm (25 mm²) |
| SD 0.8 x 4 mm or PZ 2 | SD 1.2 x 6.5 mm or PH 2 | SD 1.2 x 6.5 mm or PH 2 | SD 1.2 x 6.5 mm or PH 2 | SD 0.8 x 4 mm or PZ 1 | SD 5.5 x 1.0 or PH2 |

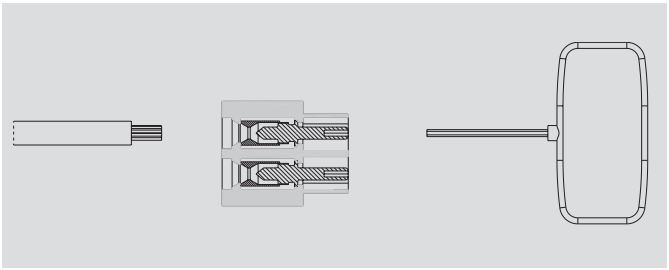
## MixMate series – the high-capacity connectors

### Overview

| | | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 3 | 1000 V | 65 A | 4 + ⏚ | | | | | • | B.114 |
|  |  | 4 | 400 V | 16 A | 8 + 24 + ⏚ | | | • | | | B.116 |
|  |  | 6 | 830 V | 80 A | 4 + 0 + ⏚ | | | | | • | B.118 |
|  |  | 6 | 830 V | 80 A | 4 + 0 + ⏚ | | • | | | | B.120 |
|  |  | 6 | 830 V | 80 A | 4 + 2 + ⏚ | | • | | | | B.122 |
|  |  | 6 | 690 V | 40 A | 6 + 36 + ⏚ | | | • | | | B.124 |
|  |  | 6 | 690 V | 48 A | 6 + 12 + ⏚ | | • | | | • | B.126 |
|  |  | 6 | 690 V | 40 A | 12 + 2 + ⏚ | | | • | | | B.128 |
|  |  | 8 | 400 V | 80 A | 4 + 8 + ⏚ | | • | | | | B.130 |
|  |  | 8 | 690 V | 100 A | 6 + 6 + ⏚ | | • | | | • | B.132 |
|  |  | 8 | 690 V | 110 A | 8 + 0 + ⏚ | | | | | • | B.134 |

## Hex-socket wrench





## Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| IS 2 KG | 2 | **1806630000** |
| IS 3 KG | 2 | **1806650000** |
| IS 4 KG | 2 | **1806660000** |

## Assembly instructions:

1. Strip wire, refer to the technical data for stripping length. Be careful not to twist the litz conductor!
2. Insert the litz conductor into the contact cavity until the insulation lies flush against the contact.
3. Insert the hex wrench into the corresponding contact on the mating face side. Hold the litz conductor in position when tightening the clamping nut.

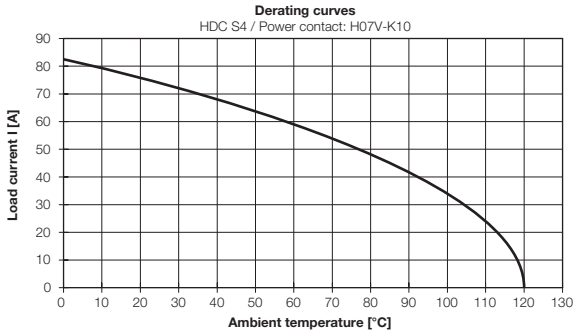
## Technical data

| Power contacts | S 4 | S 4/0 | S 6/12 | S 6/6 |
|---|---|---|---|---|
| Stripping length | 8 mm | 13 mm | 8 mm | 13 mm |
| Tightening torque | 1.1 – 1.7 Nm | 2 - 3 Nm | 1.1 – 1.7 Nm | 6 ... 8 Nm |
| Hex-socket wrench | IS 2 KG | IS 3 KG | IS 2 KG | IS 4 KG |

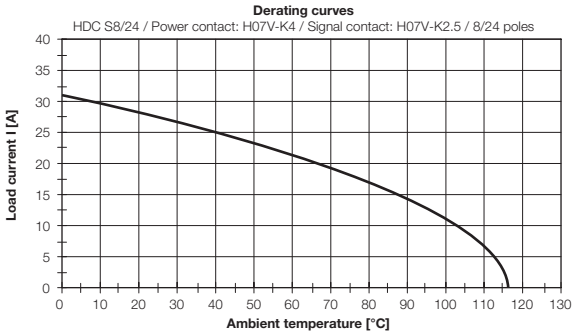
## Technical data

**Derating curves**

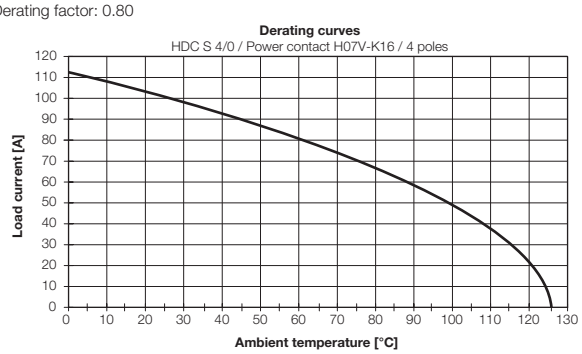
**Size 3**
**HDC S4**
Power contacts: conductor H07V-K14, current varied
Derating factor: 0.80



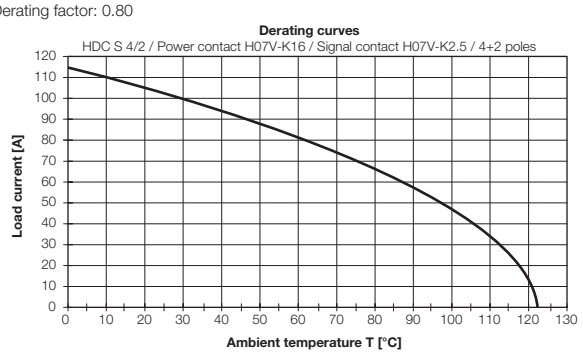

**Size 4**
**HDC S8/24**
Power contacts: conductor: H07V-K14, current varied
Signal contacts: conductor: H07V-K2.5, continuous current of 10 A
Derating factor: 0.80




**Size 6**
**HDC S4/0**
Power contacts H07V-K16, current varied
Signal contacts are not available
Derating factor: 0.80



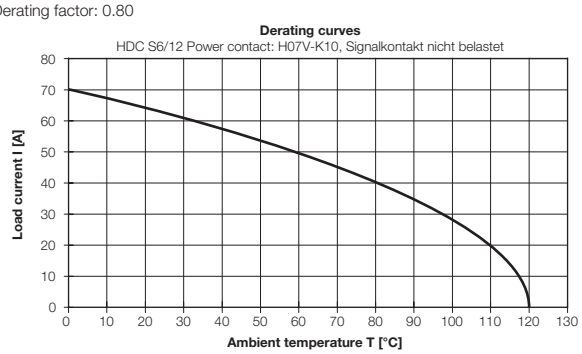

**Size 6**
**HDC S4/2**
Power contacts H07V-K16, current varied
Signal contacts H07V-K2.5, 16 A constant current
Derating factor: 0.80



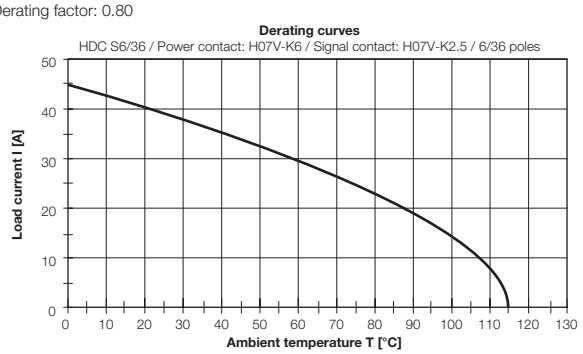
## Technical data

### Derating curves

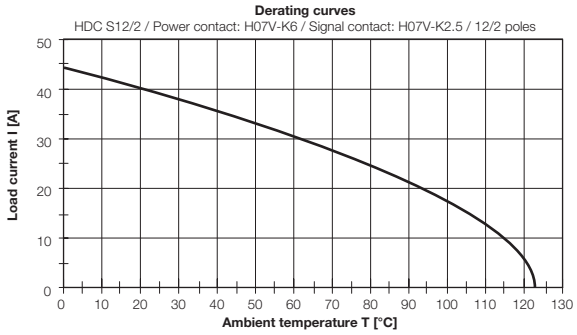
**Size 6**
**HDC S6/12**
Power contacts: conductor H07V-K10, current varied
Signal contacts: conductor under no load
Derating factor: 0.80



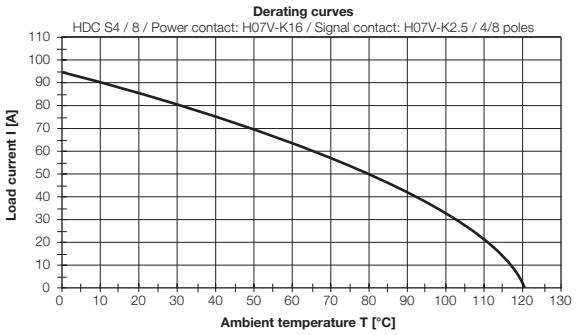

**Size 6**
**HDC S6/36**
Power contacts: conductor: H07V-K6, current varied
Signal contacts: conductor: H07V-K2.5, continuous current of 10 A
Derating factor: 0.80



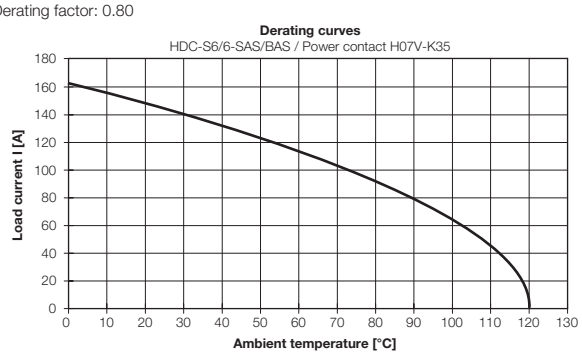

**Size 6**
**HDC S12/2**
Power contacts: conductor H07V-K10, current varied
Signal contacts: conductor: H07V-K2.5, continuous current of 10 A
Derating factor: 0.80



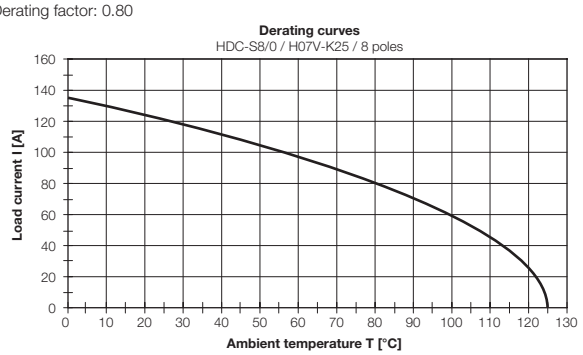

**Size 8**
**HDC S4/8**
Power contacts: conductor: H07V-K16, current varied
Signal contacts: conductor: H07V-K2.5, continuous current of 16 A
Derating factor: 0.80




**Size 8**
**HDC S6/6**
Power contacts: conductor H07V-K35, current varied
Signal contacts: H07V-K2.5, continuous current of 16A
Derating factor: 0.80




**Size 8**
**HDC S8/0**
Power contacts: conductor: H07V-K25, current varied
Signal contacts: not available
Derating factor: 0.80



## 1000 V, 65 A, Size 3

4 + ⏚

## Inserts

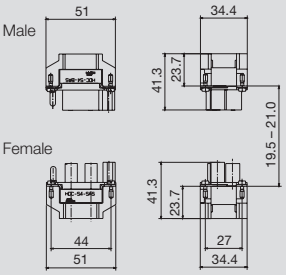
**Axial screw connection**



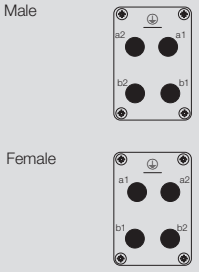
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S4 SAS | **1789990000** |
| Female | HDC S4 BAS | **1789980000** |

**Note** Combine these inserts only with housings with a high design (Size 16D).

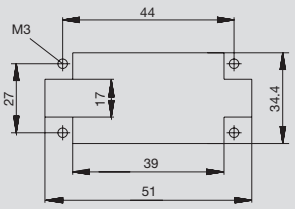
**Dimensions**




**Arrangement of contacts**




**Mounting cut-out**



## Housing selection RockStar® IP66
## Size 3

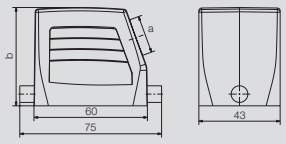
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



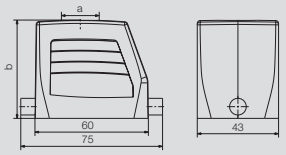
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |
| M 32 | w. threading | | 72 | HDC 16D TSLU 1M32G | **1787470000** |




### Plug housing, cable entry at top



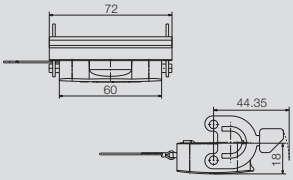
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 06B DMDL 1LB | **1665210000** |

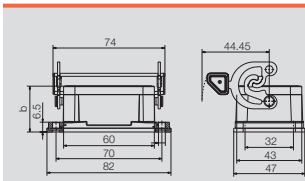



## Base

### Bulkhead housing



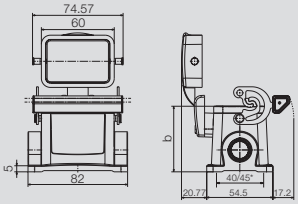
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |




### Base housing



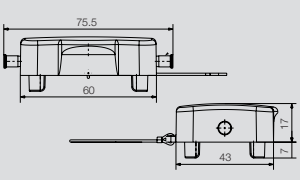
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 74 | HDC 16D SLU 2M25G | **1787520000** |
| M 25 | w. threading | with cover | 92 | HDC 16D SDLU 2M25G | **1787540000** |
| M 32 | w. threading | | 74 | HDC 16D SLU 2M32G | **1787510000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 06B DODL 2BO | **1665200000** |



# MixMate series - the high-capacity connectors

## 400 V, 16 A, Size 4

## 8 + 24 + ⏚

## Inserts

**Crimp connection**

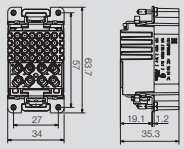


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S8/24 MC | **1023290000** |
| Female | HDC S8/24 FC | **1023270000** |

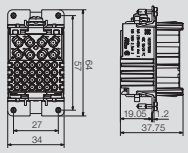
| Note | The signal contacts are designed for a rated voltage of 160 V and a rated current of 10 A. |
|---|---|

**Dimensions**

Male

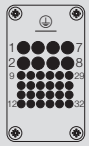



Female

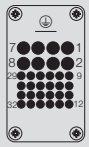



**Arrangement of contacts**

Male




Female




## Accessories

**Crimp contacts**

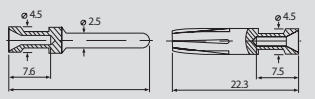
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.50 mm² | AWG 20 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 7.5 mm |
| 1.50 mm² | AWG 16 7.5 mm |
| 2.50 mm² | AWG 14 7.5 mm |
| 4.00 mm² | AWG 12 7.5 mm |

**Crimp contacts**

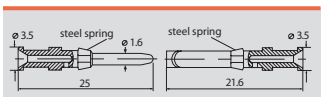
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

**Tools**



| Crimping tool | |
|---|---|
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 4

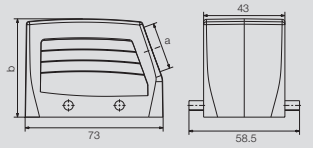
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



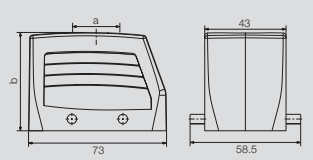
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



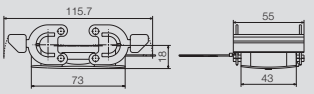
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

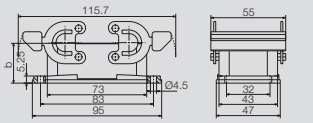



## Base

### Bulkhead housing



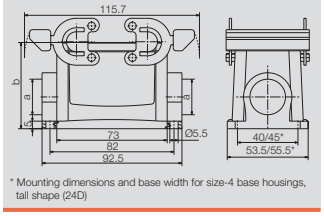
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |

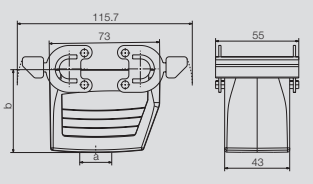



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



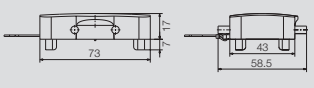
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |



## 830 V, 80 A, Size 6

**4 + 0 + ⏚**

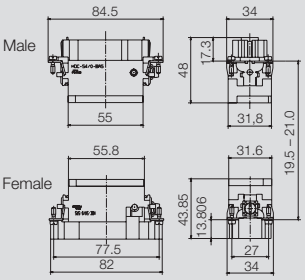
## Inserts

**Axial screw connection**

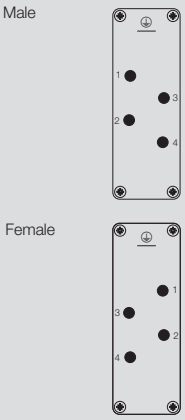


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S4 0 SAS | **1789960000** |
| Female | HDC S4 0 BAS | **1789970000** |

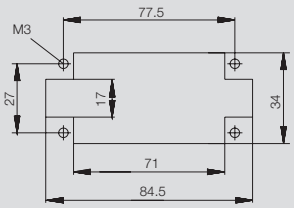
**Dimensions**




**Arrangement of contacts**




**Mounting cut-out**



## Housing selection RockStar® IP66
## Size 6

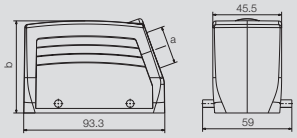
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



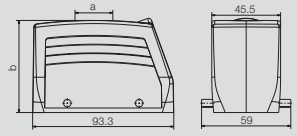
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



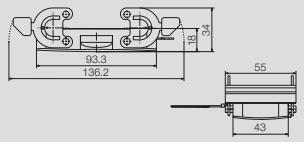
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

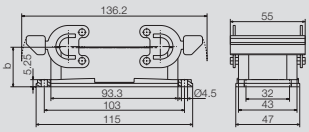



## Base

### Bulkhead housing



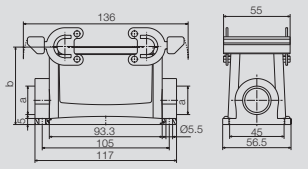
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



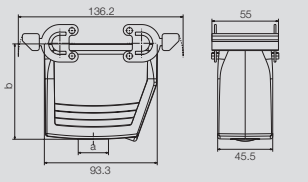
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



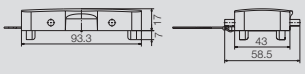
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



## 830 V, 80 A, Size 6

**4 + 0 + ⏚**

## Inserts

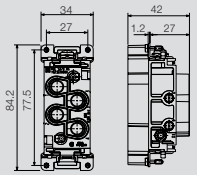
**Screw connection**



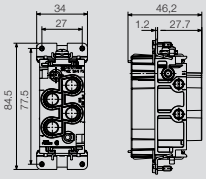
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S4/0 MS | **1023220000** |
| Female | HDC S4/0 FS | **1023210000** |

**Dimensiones**

Male

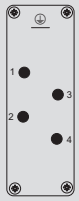



Female

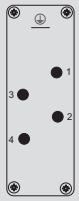



**Arrangement of contacts**

Male




Female



## Housing selection RockStar® IP66
## Size 6

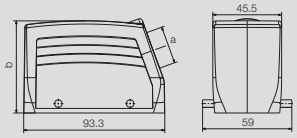
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

## Hood

### Plug housing, cable entry sideways



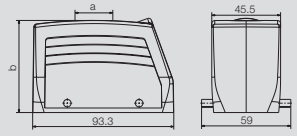
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



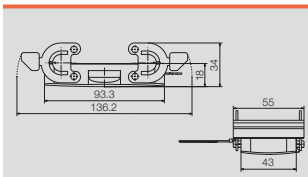
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

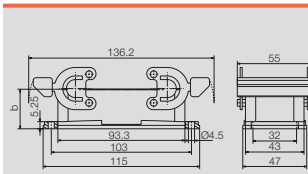



## Base

### Bulkhead housing



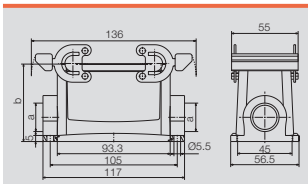
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



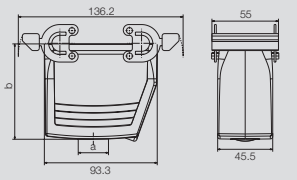
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



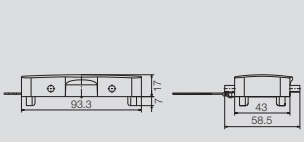
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



## 830 V, 80 A, Size 6

**4 + 2 + ⏚**

## Inserts

**Screw connection**

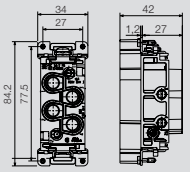


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S4/2 MS | **1023240000** |
| Female | HDC S4/2 FS | **1023230000** |

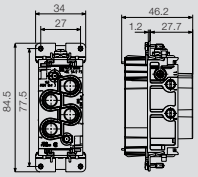
| Note | The signal contacts are designed for a rated voltage of 400V and a rated current of 16A. |
|---|---|

**Dimensions**

Male

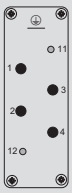



Female

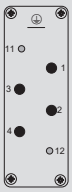



**Arrangement of contacts**

Male




Female



## Housing selection RockStar® IP66
## Size 6

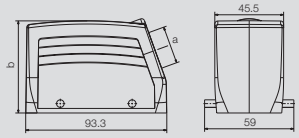
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



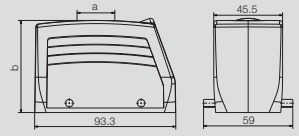
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



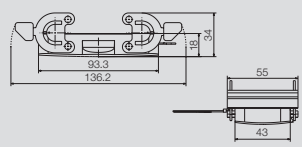
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

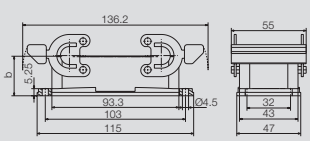



## Base

### Bulkhead housing



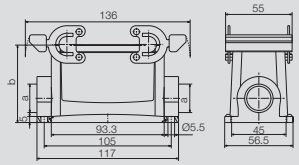
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



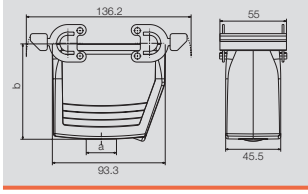
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



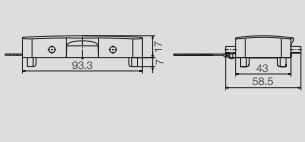
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



# MixMate series - the high-capacity connectors

## 690 V, 40 A, Size 6

## 6 + 36 + ⏚

## Inserts

### Crimp connection

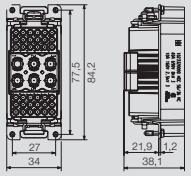


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S6/36 MC | **1023320000** |
| Female | HDC S6/36 FC | **1023310000** |

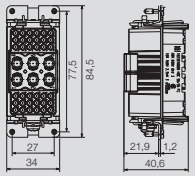
**Note** The signal contacts are designed for a rated voltage of 160 V and a rated current of 10 A.

### Dimensions

Male

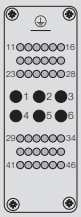



Female

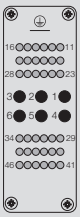



### Arrangement of contacts

Male



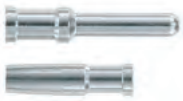
Female



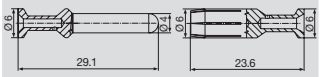
## Accessories

### Crimp contacts for HQ and MixMate inserts

Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| VPE | Type | Order No. | Type | Order No. |
| 25 | HDC C HX SM1.5AG | **1002910000** | HDC C HX BM1.5AG | **1002950000** |
| 25 | HDC C HX SM2.5AG | **1002920000** | HDC C HX BM2.5AG | **1002960000** |
| 25 | HDC C HX SM4.0AG | **1002930000** | HDC C HX BM4.0AG | **1002970000** |
| 25 | HDC C HX SM6.0AG | **1002940000** | HDC C HX BM6.0AG | **1002980000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 8 mm |
| 4.00 mm² | AWG 12 8 mm |
| 6.00 mm² | AWG 10 8 mm |

### Crimp contacts

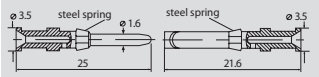
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| Removal Tool HX | **1002990000** |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 6

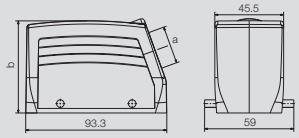
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



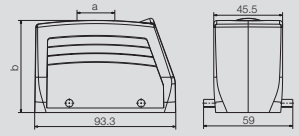
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



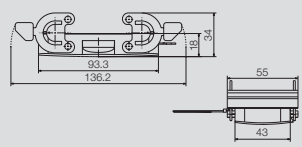
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

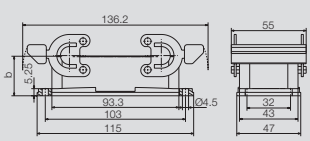



## Base

### Bulkhead housing



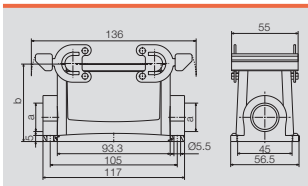
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



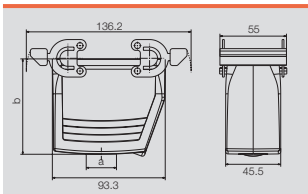
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



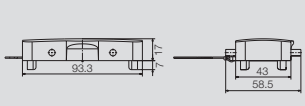
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



## 690 V, 48 A, Size 6

## 6 + 12 + ⏚

## Inserts

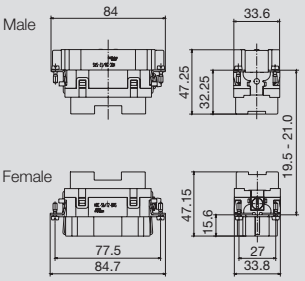
**Axial screw connection**



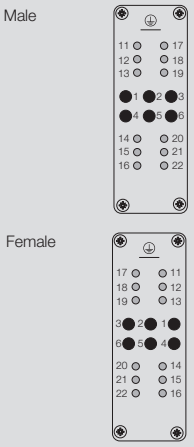
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S6 12 SAS | **1790000000** |
| Female | HDC S6 12 BAS | **1790010000** |

| Note | The signal contacts are designed for a rated voltage of 400V and a rated current of 16A. |
|---|---|

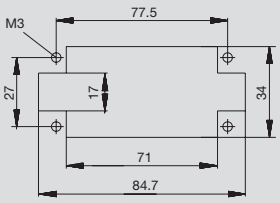
**Dimensions**




**Arrangement of contacts**




**Mounting cut-out**



## Housing selection RockStar® IP66
## Size 6

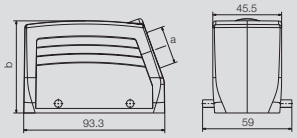
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



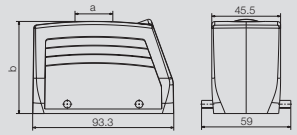
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



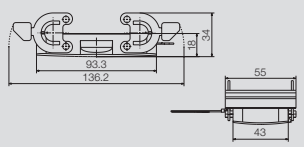
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

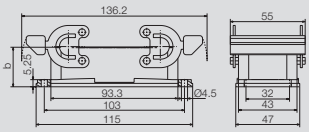



## Base

### Bulkhead housing



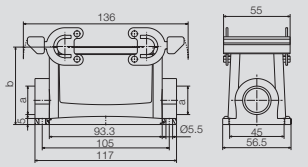
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



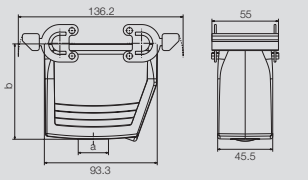
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



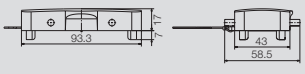
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



# MixMate series - the high-capacity connectors

## 690 V, 40 A, Size 6

## 12 + 2 + ⏚

## Inserts

### Crimp connection

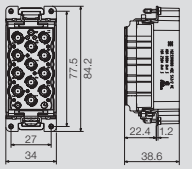


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S12/2 MC | **1023340000** |
| Female | HDC S12/2 FC | **1023330000** |

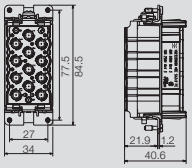
| Note | The signal contacts are designed for a rated voltage of 250 V and a rated current of 10 A. |
|---|---|

### Dimensions

Male

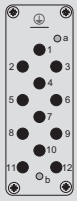



Female

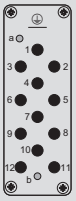



### Arrangement of contacts

Male



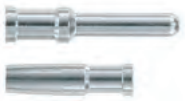

Female



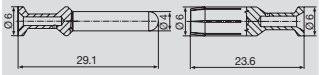

## Accessories

### Crimp contacts for HQ and MixMate inserts

Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| VPE | Type | Order No. | Type | Order No. |
| 25 | HDC C HX SM1.5AG | **1002910000** | HDC C HX BM1.5AG | **1002950000** |
| 25 | HDC C HX SM2.5AG | **1002920000** | HDC C HX BM2.5AG | **1002960000** |
| 25 | HDC C HX SM4.0AG | **1002930000** | HDC C HX BM4.0AG | **1002970000** |
| 25 | HDC C HX SM6.0AG | **1002940000** | HDC C HX BM6.0AG | **1002980000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 8 mm |
| 4.00 mm² | AWG 12 8 mm |
| 6.00 mm² | AWG 10 8 mm |

### Crimp contacts

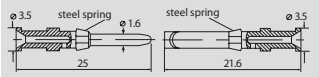
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 6 mm |

### Tools



| Crimping tool | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact Removal Tool** | |
| Removal Tool HX | **1002990000** |
| REMOVAL TOOL HD | **1866730000** |

## Housing selection RockStar® IP66
## Size 6

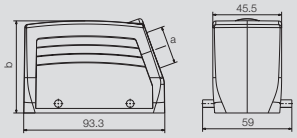
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



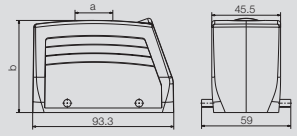
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



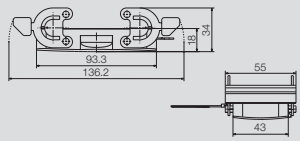
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

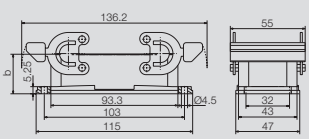



## Base

### Bulkhead housing



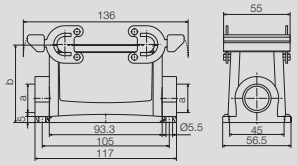
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



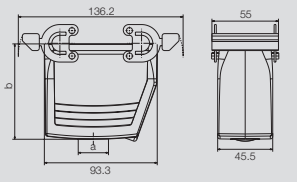
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



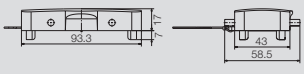
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |



## 400 V, 80 A, Size 8

**4 + 8 + ⏚**

## Inserts

**Screw connection**

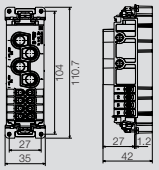


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S4/8 MS | **1023260000** |
| Female | HDC S4/8 FS | **1023250000** |

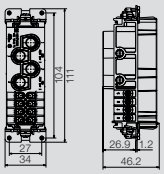
| Note | The signal contacts are designed for a rated voltage of 400V and a rated current of 16A. |
|---|---|

**Dimensions**

Male

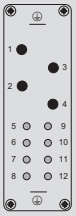



Female

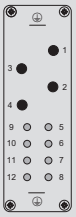



**Arrangement of contacts**

Male




Female



## Housing selection RockStar® IP66
## Size 8

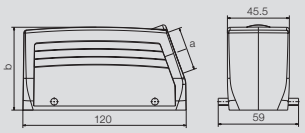
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

## Hood

### Plug housing, cable entry sideways



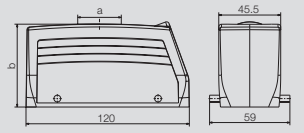
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | 1787760000 |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | 1786780000 |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | 1787750000 |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | 1786770000 |




### Plug housing, cable entry at top



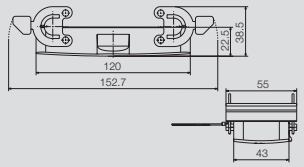
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | 1787820000 |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | 1787810000 |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | 1786830000 |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | 1665640000 |

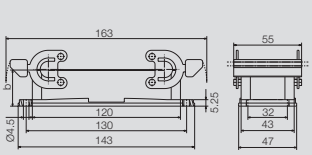



## Base

### Bulkhead housing



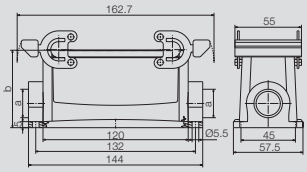
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | 1212400000 |




### Base housing



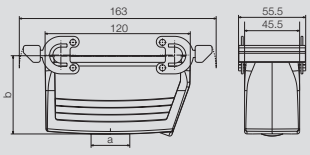
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | 1787870000 |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | 1786890000 |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | 1786880000 |




### Coupling housing



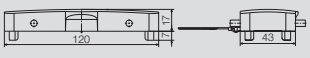
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | 1787920000 |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | 1786960000 |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | 1665630000 |



## 690 V, 100 A, Size 8

## 6 + 6 + ⏚

## Inserts

**Axial screw connection**

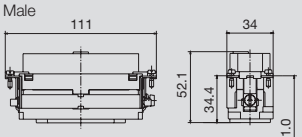


| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S6 6 SAS | **1790030000** |
| Female | HDC S6 6 BAS | **1790020000** |

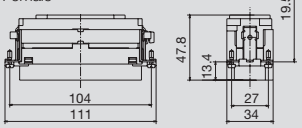
| Note | The signal contacts are designed for a rated voltage of 400V and a rated current of 16A. |
|---|---|

**Dimensions**

Male

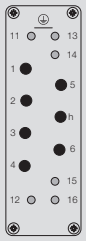



Female

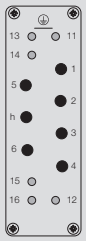



**Arrangement of contacts**

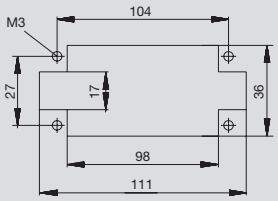
Male




Female




**Mounting cut-out**



## Housing selection RockStar® IP66
## Size 8

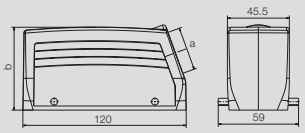
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

## Hood

### Plug housing, cable entry sideways



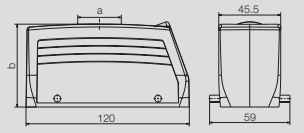
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | 1787760000 |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | 1786780000 |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | 1787750000 |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | 1786770000 |




### Plug housing, cable entry at top



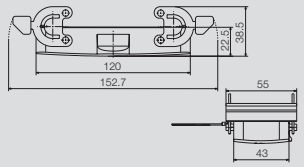
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | 1787820000 |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | 1787810000 |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | 1786830000 |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | 1665640000 |

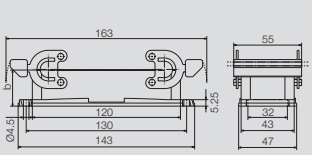



## Base

### Bulkhead housing



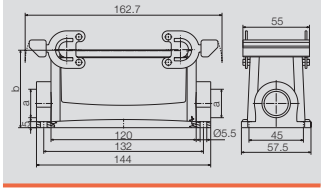
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | 1212400000 |




### Base housing



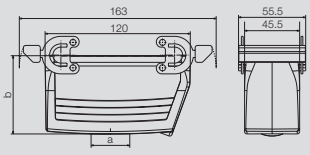
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | 1787870000 |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | 1786890000 |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | 1786880000 |




### Coupling housing



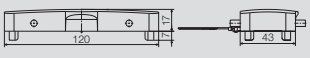
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | 1787920000 |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | 1786960000 |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | 1665630000 |



## 690 V, 100 A, Size 8

**8 + 0 + ⏚**

## Inserts

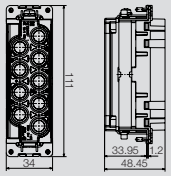
**Axial screw connection**



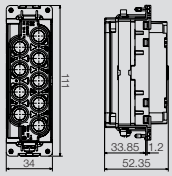
| Insert | Type | Order No. |
|---|---|---|
| Male | HDC S8/0 MAS | **1023360000** |
| Female | HDC S8/0 FAS | **1023350000** |

**Dimensions**

Male

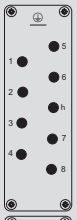



Female

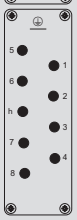



**Arrangement of contacts**

Male




Female



## Housing selection RockStar® IP66
## Size 8

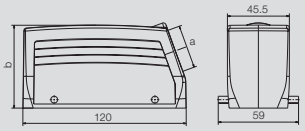
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



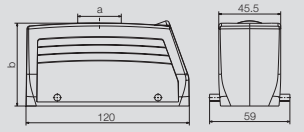
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |




### Plug housing, cable entry at top



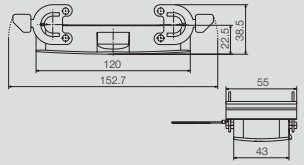
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

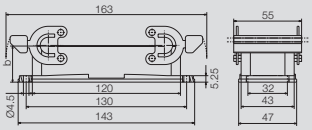



## Base

### Bulkhead housing



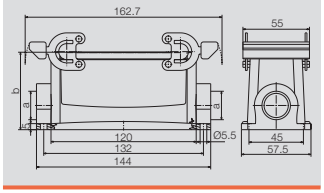
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



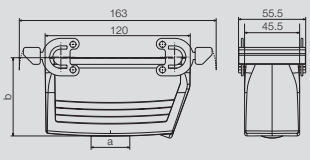
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



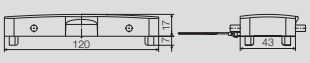
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |



# RockStar® HighPower


**RockStar® HighPower**

**Introduction** C.2

**HighPower 250 A** C.4

4000 V

250 A

1 – 4 poles

**HighPower 550 A** C.10

4000 V

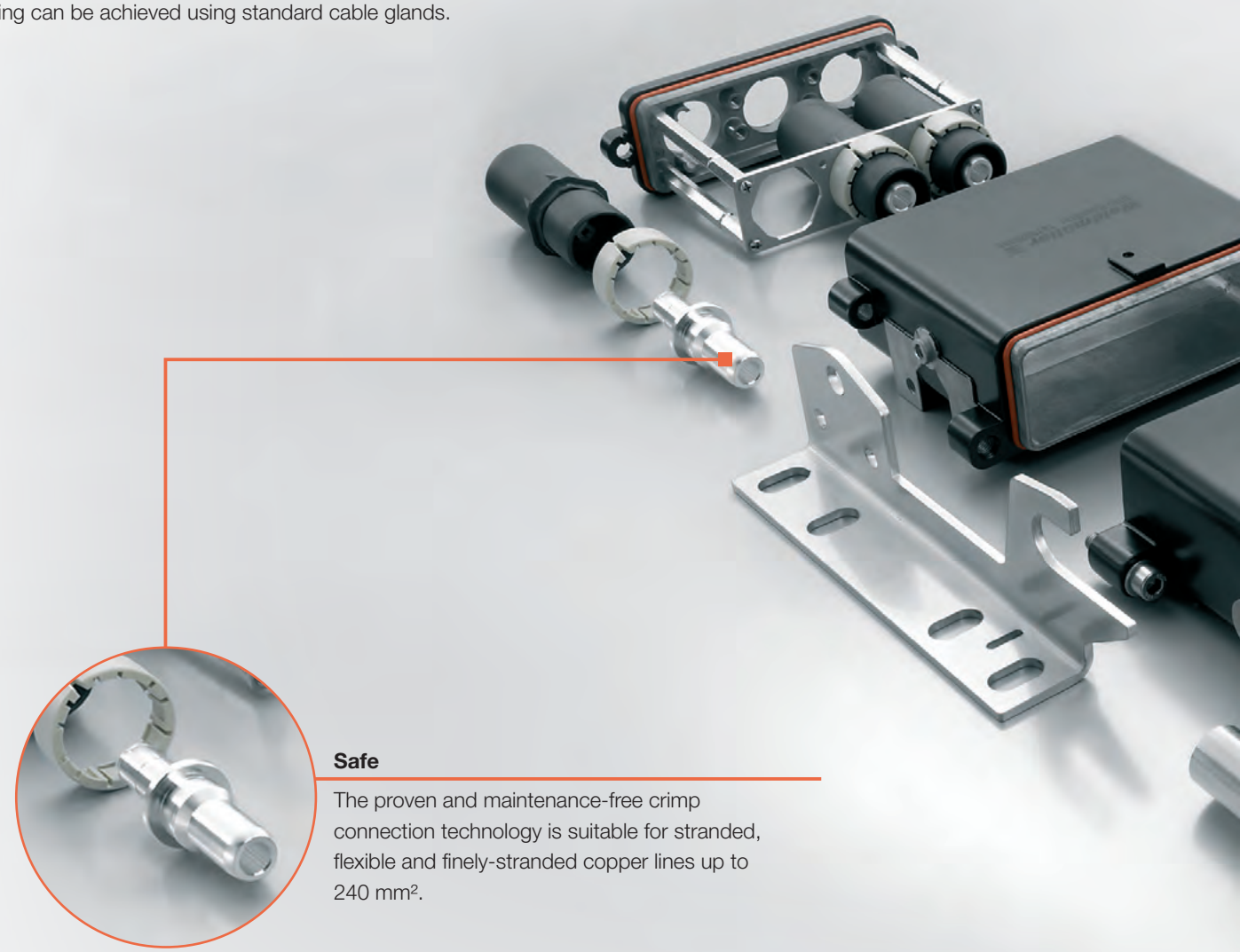
550 A

1 – 3 poles

# RockStar® HighPower

Uncompromising power – in clever and safe packaging. The RockStar® HighPower modular high-current connector system has been custom designed for the high demands of traffic engineering applications. The system also meets the requirements of the wind power industry. It consists of one-piece crimp contacts, insulating sleeves, insert-holder frames and a multi-part die-cast aluminium housing in IP68 and IP69K.

This modular design offers clear advantages for handling: It is possible to wire crimped lines with large cross-sections and to see this process through to the final step. The wiring can be achieved using standard cable glands.





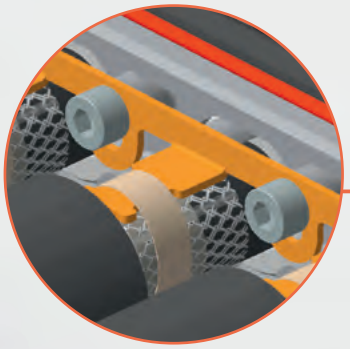
**Safe**

The proven and maintenance-free crimp connection technology is suitable for stranded, flexible and finely-stranded copper lines up to 240 mm².



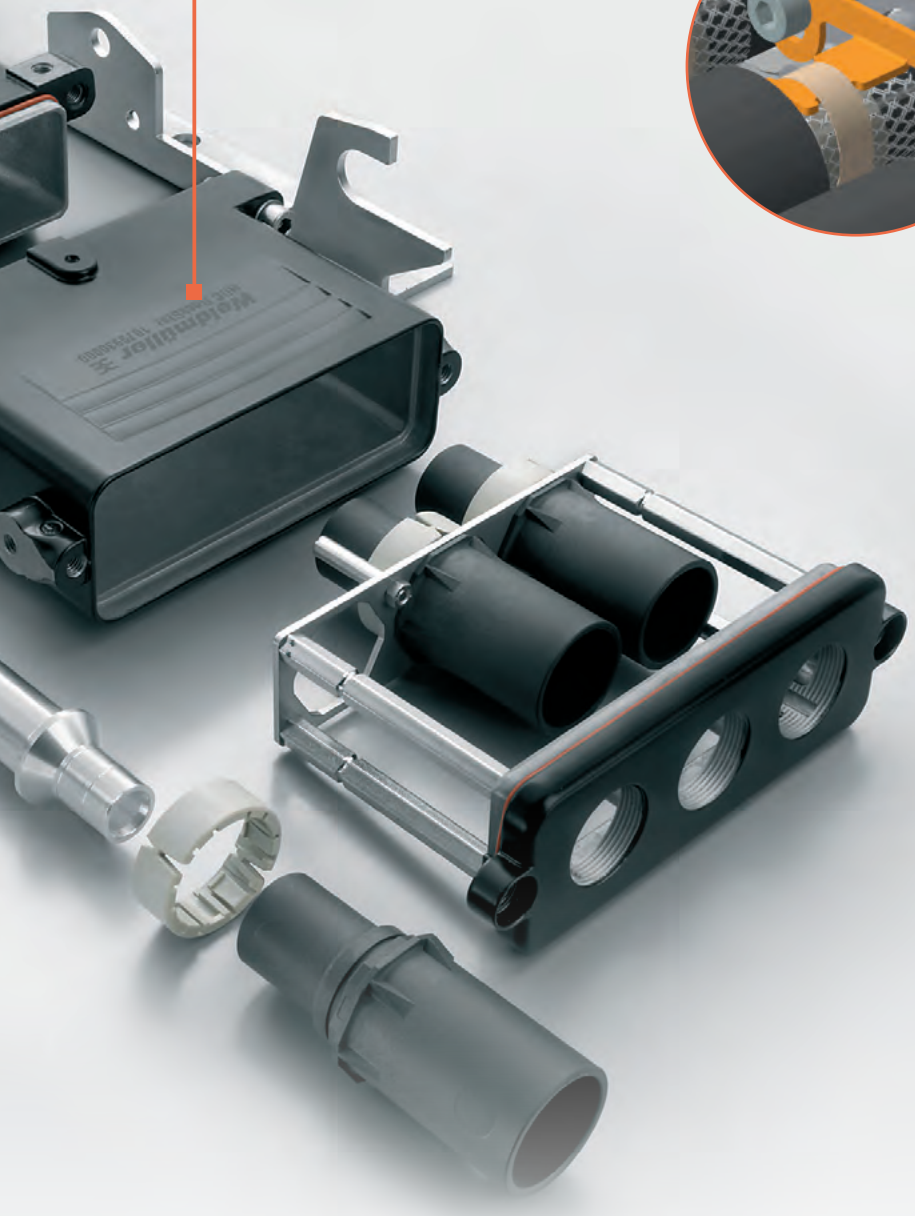
**Practical**

Durable laser marking is applied directly onto the housing – enables quick recognition and simple re-ordering.



**Optimised shielding**

An integrated shield connection in the housing makes the use of standard cable glands possible.



# HighPower 250 A



RockStar® HighPower is designed to meet the strict standards set by DIN EN 61373 Cat. 2 (pivot mounting). The coordinated connector components provide you with a fail-safe and maintenance-free power transmission solution: in this case up to 250 A / 4000 V.

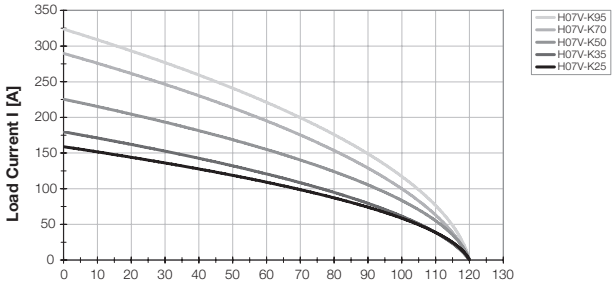
## Technical data

| | |
|---|---|
| **HighPower 250 A series** | |
| Standards | DIN EN 50124-1 |
| | In compliance with DIN EN 61984 |
| | DIN EN 50155 |
| | DIN EN 61373 KAT 2 (Pivot mounting) |
| Number of contacts | 1-, 2-, 3-, 4 poles |
| Wire connection method | Crimp |
| Rated current | 250 A |
| Rated insulation voltage | |
| (Highest permitted operating voltage) | |
| AC wire – wire | 4000 V (4800 V)* |
| AC wire – earthed housing | 2300 V (3000 V)* |
| DC wire – wire | 4000 V (4800 V)* |
| DC wire – earthed housing | 2300 V (3000 V)* |
| Rated impulse voltage | |
| Wire – wire | 25 kV |
| Wire – earthed housing | 15 kV |
| Surge voltage category | OV 3 |
| Pollution severity degree | PD 2 (PD 3)*1 |
| Material | |
| Insulating body | PA 66 glass-fibre reinforced |
| Contact | Copper alloy, silver plated |
| Flammability | |
| According to UL 94 | V-0 |
| According to NFF 16-101 / NFF 16-102 | I3 F2 |
| DIN 5510 Part 2 | V-0 |
| Insulation resistance | $10^{10}$ Ω |
| Temperature range | -50 °C … +120 °C |
| **HDC IP68 HP 24B series** | |
| Protection degree according to DIN EN 60529 | IP68 when interlocked |
| Colour | RAL 9005 (black) |
| Surface finish | Powder coating |
| Locking element | |
| Screw interlock | M8 |
| Material | Stainless steel, rust-proof |
| Torque | 11 Nm |
| Housing seal | Silicone rubber |
| Temperature range | -50 °C … +120 °C |
| Material | |
| Housing | Die-cast aluminium alloy, corrosion resistant |
| Mounting bracket | Stainless steel, rust-proof |
| **Accessories** | |
| Material | |
| Assembly frame | Stainless steel, rust-proof |
| Shield clamp | Sheet steel, galvanized |
| Touch-safe protection | PA66 |
| Colour | |
| Assembly frame | Natural |
| Shield clamp | Natural |
| Touch-safe protection | Red |
| **Cable gland** | |
| Material | |
| Cable gland | Optional as nickel-plated brass or stainless steel |
| Seal insert | TPE |
| Temperature range | -40 °C … +130 °C |
| Class of protection | IP68 |

**Note:** *4800 V, depending on the application

*1 The contacts are protected against contamination and condensation within the HDC housing. The completely assembled connector can be used at pollution degree PD 3.

**Derating curves**




HDC-HP250 in HDC-HP-Plus housing

## Overview

| | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|
|  | 8 | 4000 V | 250 A | 1 – 4 | | | • | | | C.6 |

# RockStar® HighPower

## RockStar® HighPower 250 A

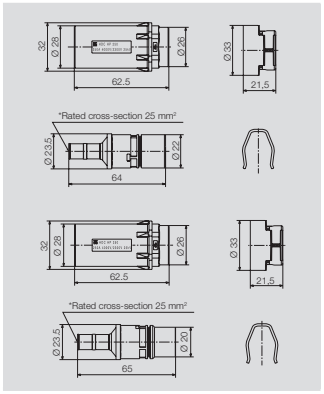
### Crimp contacts

**Crimp contact**



| Wire connection cross-section* | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 25 mm² | HDC HP 250 M 25 | **1079690000** | HDC HP 250 F 25 | **1079720000** |
| 35 mm² | HDC HP 250 M 35 | **1079680000** | HDC HP 250 F 35 | **1079730000** |
| 50 mm² | HDC HP 250 M 50 | **1119080000** | HDC HP 250 F 50 | **1079740000** |
| 70 mm² | HDC HP 250 M 70 | **1119090000** | HDC HP 250 F 70 | **1079750000** |
| 95 mm² | HDC HP 250 M 95 | **1119100000** | HDC HP 250 F 95 | **1079770000** |
| | **Insulated PE contact Male** | **Order No.** | **Insulated PE contact Female** | **Order No.** |
| 50 mm² | HDC HP 250 M 50 PE | **1220850000** | HDC HP 250 F 50 PE | **1220840000** |

**Note:** * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customise the crimp contact to fit your requirements.

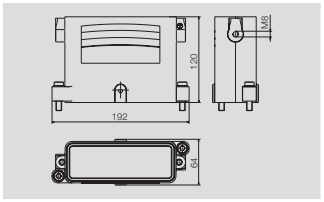



### Housings

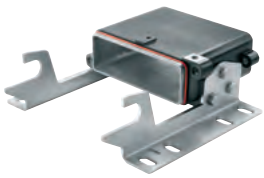
**Plug housing**



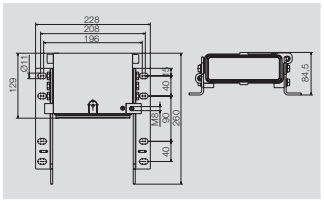
| Designation | Type | Order No. |
|---|---|---|
| Plug housing | HDC IP68 HP 24B TO | **1079930000** |




**Base housing**



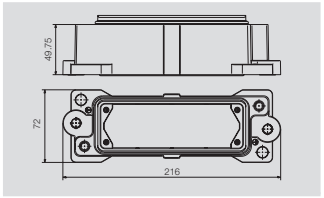
| Designation | Type | Order No. |
|---|---|---|
| Base housing | HDC IP68 HP 24B AS S | **1079920000** |




**Bulkhead housing**



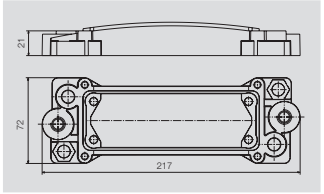
| Designation | Type | Order No. |
|---|---|---|
| Bulkhead housing | HDC IP68 HP 24B A | **1120040000** |




**Counter-frame**



| Designation | Type | Order No. |
|---|---|---|
| Counter-frame | HDC IP68 24B HP FRAME | **1282820000** |



# RockStar® HighPower 250 A

## Housings

### Mounting cover



| Designation | Type | Order No. |
|---|---|---|
| Mounting cover without thread | HDC IP68 HP 24B MD | **1119950000** |
| Mounting cover 3 threads M40 | HDC IP68 HP 24B MD 3M40 | **1119970000** |
| Mounting cover 3 threads M32 | HDC IP68 24B MD 3M32 | **1119980000** |
| Mounting cover 3 threads M25 | HDC IP68 HP 24B MD 3M25 | **1079910000** |
| Mounting cover 4 threads M25 | HDC IP68 24B MD 4M25 T1 | **1160450000** |
| Mounting cover 2 threads M40 | HDC IP68 HP 24B MD 2M40 | **1119990000** |
| Mounting cover 2 threads M32 | HDC IP68 HP 24B MD 2M32 | **1120000000** |
| Mounting cover 2 threads M25 | HDC IP68 HP 24B MD 2M25 | **1120010000** |
| Mounting cover 4 threads M25 | HDC IP68 24B MD 4M25 T2 | **1220860000** |

**Note:** Because of the asymmetric arrangement of the four threaded holes, the T1 version must be used on one side and the T2 version must be used on the other side.

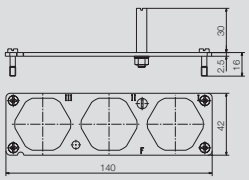
## Accessories

### Mounting frame

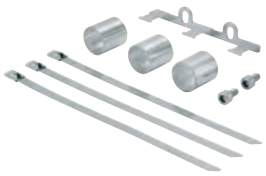


| Designation | Type | Order No. |
|---|---|---|
| BG 3 for 1 HP 250 Female | HDC 06B HP250 MPL1 | **1103680000** |
| BG 8 for 2 HP 250 Female | HDC 24B HP250 MPL2 TYP1 | **1103690000** |
| BG 8 for 2 HP 250 Male | HDC 24B HP250 MPL2 TYP2 | **1103740000** |
| BG 8 for 3 HP 250 Female | HDC 24B HP250 MPL3 TYP1 | **1079640000** |
| BG 8 for 3 HP 250 Male | HDC 24B HP250 MPL3 TYP2 | **1103750000** |
| BG 8 for 3 HP 250 Female + PE | HDC 24B HP250 MPL4PE T1 | **1212890000** |
| BG 8 for 3 HP 250 Male + PE | HDC 24B HP250 MPL4PE T2 | **1212910000** |
| BG 8 for 4 HP 250 Female | HDC 24B HP250 MPL4 TYP1 | **1160430000** |
| BG 8 for 4 HP 250 Male | HDC 24B HP250 MPL4 TYP2 | **1160440000** |

**Note:** Coding pins can be used for additional coding of the mounting frame; refer to Chapter J.




### EMC – Shield lever



| Designation | Type | Order No. |
|---|---|---|
| BG 8 for 2 x 16² - 25² | HDC 24B SL 2X16-25 | **1160410000** |
| BG 8 for 3 x 16² - 25² | HDC 24B SL 3X16-25 | **1160390000** |
| BG 8 for 4 x 16² - 25² | HDC 24B SL 4X16-25 T1 | **1220770000** |
| BG 8 for 4 x 16² - 25² | HDC 24B SL 4X16-25 T2 | **1220820000** |
| BG 8 for 2 x 35² | HDC 24B SL 2X35 | **1232740000** |
| BG 8 for 3 x 35² | HDC 24B SL 3X35 | **1232720000** |
| BG 8 for 4 x 35² | HDC 24B SL 4X35 T1 | **1232770000** |
| BG 8 for 4 x 35² | HDC 24B SL 4X35 T2 | **1232790000** |
| BG 8 for 2 x 50² | HDC 24B SL 2X50 | **1160420000** |
| BG 8 for 3 x 50² | HDC 24B SL 3X50 | **1160400000** |
| BG 8 for 4 x 50² | HDC 24B SL 4X50 T1 | **1220760000** |
| BG 8 for 4 x 50² | HDC 24B SL 4X50 T2 | **1220810000** |
| BG 8 for 2 x 70² | HDC 24B SL 2X70 | **1232750000** |
| BG 8 for 3 x 70² | HDC 24B SL 3X70 | **1232730000** |
| BG 8 for 4 x 70² | HDC 24B SL 4X70T1 | **1232760000** |
| BG 8 for 4 x 70² | HDC 24B SL 4X70T2 | **1232780000** |
| BG 8 for 2 x 95² | HDC 24B SL 2X95 | **1119900000** |
| BG 8 for 3 x 95² | HDC 24B SL 3X95 | **1079650000** |
| BG 8 for 4 x 95² | HDC 24B SL 4X95 T1 | **1220750000** |
| BG 8 for 4 x 95² | HDC 24B SL 4X95 T2 | **1220790000** |

**Note:** In the four-pole version, please select the EMC shield clamp corresponding to the mounting plates.

### Touch-safe protection set



| Designation | Type | Order No. |
|---|---|---|
| Touch-safe protection set HP 250 | HDC HP 250 SHOCKPROTEC | **1120130000** |

# RockStar® HighPower

## RockStar® HighPower 250 A

## Accessories

### Cable glands



| Designation | Type | Order No. |
|---|---|---|
| M25, Stainless steel, clamping range 11-20 | VGM25-SS68 11-20 BG | **1193570000** |
| M32, Stainless steel, clamping range 15-25 | VGM32-SS68 15-25 BG | **1193580000** |
| M40, Stainless steel, clamping range 20-32 | VGM40-SS68 20-32 BG | **1193590000** |
| M40, Stainless steel, clamping range 20-32; Elongated version | VGM40/1-SS68 20-32 BG | **1205920000** |
| M25, Brass, nickel-plated, clamping range 11-20 | VGM25-MS68 11-20 BG | **1193600000** |
| M32, Brass, nickel-plated, clamping range 15-25 | VGM32-MS68 15-25 BG | **1193610000** |
| M40, Brass, nickel-plated, clamping range 20-32 | VGM40-MS68 20-32 BG | **1193620000** |
| M40, Brass, nickel-plated, clamping range 20-32; Elongated version | VGM40/1-MS68 20-32 BG | **1205890000** |

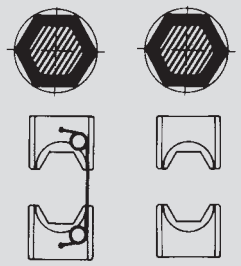
**Note:** When using mounting lids with 3 M40 cable entry threads, the elongated version must be used for the cable gland in the middle.

## Hand crimping tools

### Hand crimping tools



| Designation | Type | Order No. |
|---|---|---|
| Hand crimping tool 10 … 240 mm² | MTR 160 | **9017250000** |
| Crimping inserts 25², Crimping width 7.0 mm | EINSATZ MTR 160 25HEX | **9020920000** |
| Crimping inserts 35², Crimping width 7.0 mm | EINSATZ MTR 160 35HEX | **9020930000** |
| Crimping inserts 50², Crimping width 7.0 mm | EINSATZ MTR 160 50HEX | **9020940000** |
| Crimping inserts 70², Crimping width 7.0 mm | EINSATZ MTR 160 70HEX | **9020950000** |
| Crimping inserts 95², Crimping width 7.0 mm | EINSATZ MTR 160 95HEX | **9020960000** |
| Hand crimping tool 10 … 300 mm² | MTR 300 | **9021390000** |
| Crimping inserts 25², Crimping width 7.0 mm | EINSATZ MTR 300 25HEX | **9021450000** |
| Crimping inserts 35², Crimping width 7.0 mm | EINSATZ MTR 300 35HEX | **9021460000** |
| Crimping inserts 50², Crimping width 7.0 mm | EINSATZ MTR 300 50HEX | **9021470000** |
| Crimping inserts 70², Crimping width 7.0 mm | EINSATZ MTR 300 70HEX | **9021480000** |
| Crimping inserts 95², Crimping width 7.0 mm | EINSATZ MTR 300 95HEX | **9022290000** |



# HighPower 550 A

RockStar® HighPower is designed to meet the strict standards set by DIN EN 61373 Cat. 2 (pivot mounting). The coordinated connector components provide you with a fail-safe and maintenance-free power transmission solution: in this case up to 550 A / 4000 V.



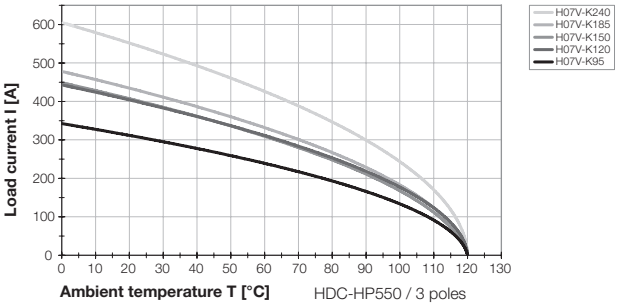
## Technical data

| | |
|---|---|
| **HighPower 550 A sereis** | |
| Standards | DIN EN 50124-1 |
| | In compliance with DIN EN 61984 |
| | DIN EN 50155 |
| | DIN EN 61373 KAT 2 (Pivot mounting) |
| Number of contacts | 1-, 2-, 3 poles |
| Wire connection method | Crimp |
| Rated current | 550 A |
| Rated insulation voltage | |
| (Highest permitted operating voltage) | |
| AC wire – wire | 4000 V (4800 V)* |
| AC wire – earthed housing | 3000 V |
| DC wire – wire | 4000 V (4800 V)* |
| DC wire – earthed housing | 3000 V |
| Rated impulse voltage | |
| Wire – wire | 25 kV |
| Wire – earthed housing | 15 kV |
| Surge voltage category | OV 3 |
| Pollution severity degree | PD 2 (PD 3)*1 |
| Material | |
| Insulating body | PA 66 glass-fibre reinforced |
| Contact | Copper alloy, silver plated |
| Flammability | |
| According to UL 94 | V-0 |
| According to NFF 16-101 / NFF 16-102 | I3 F2 |
| DIN 5510 Part 2 | V-0 |
| Insulation resistance | $10^{10}$ Ω |
| Temperature range | -50 °C … +120 °C |
| **HDC IP68 HP 24B series** | |
| Protection degree according to DIN EN 60529 | IP68 when interlocked |
| Colour | RAL 9005 (black) |
| Surface finish | Powder coating |
| Locking element | |
| Screw interlock | M8 |
| Material | Stainless steel, rust-proof |
| Torque | 11 Nm |
| Housing seal | Silicone rubber |
| Temperature range | -50 °C … +120 °C |
| Material | |
| Housing | Die-cast aluminium alloy, corrosion resistant |
| Mounting bracket | Stainless steel, rust-proof |
| **Accessories** | |
| Material | |
| Assembly frame | Stainless steel, rust-proof |
| Shield clamp | Sheet steel, galvanized |
| Touch-safe protection | PA66 |
| Colour | |
| Assembly frame | Natural |
| Shield clamp | Natural |
| Touch-safe protection | Orange |
| **Cable gland** | |
| Material | |
| Cable gland | Optional as nickel-plated brass or stainless steel |
| Seal insert | TPE |
| Temperature range | -40 °C … +130 °C |
| Class of protection | IP68 |

**Note:** *4800 V, depending on the application

*1 The contacts are protected against contamination and condensation within the HDC housing. The completely assembled connector can be used at pollution degree PD 3.

**Derating curves**




HDC-HP550 / 3 poles

## Overview

| | Size | Rated voltage | Rated current | No. of poles | Tension clamp connection | Screw conn. with wire guard spring | Crimp connection | PUSH IN connection | Axial screw connection | Page |
|---|---|---|---|---|---|---|---|---|---|---|
|  | 8 | 4000 V | 550 A | 1 – 3 | | | • | | | C.12 |

# RockStar® HighPower

## RockStar® HighPower 550 A

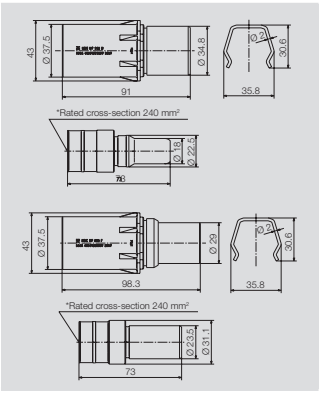
### Crimp contacts

**Crimp contact**



| Wire connection cross-section* | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 50 mm² | HDC HP 550 M 50 | **1157800000** | HDC HP 550 F 50 | **1177100000** |
| 95 mm² | HDC HP 550 M 95 | **1079790000** | HDC HP 550 F 95 | **1079810000** |
| 120 mm² | HDC HP 550 M 120 | **1079780000** | HDC HP 550 F 120 | **1079820000** |
| 150 mm² | HDC HP 550 M 150 | **1119110000** | HDC HP 550 F 150 | **1079830000** |
| 185 mm² | HDC HP 550 M 185 | **1120580000** | HDC HP 550 F 185 | **1079840000** |
| 240 mm² | HDC HP 550 M 240 | **1120590000** | HDC HP 550 F 240 | **1120600000** |

**Note:** * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customise the crimp contact to fit your requirements.

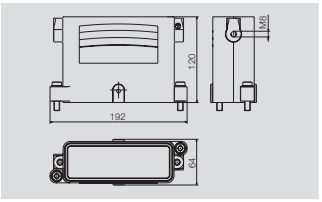



### Housings

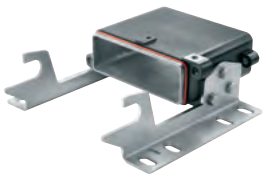
**Plug housing**



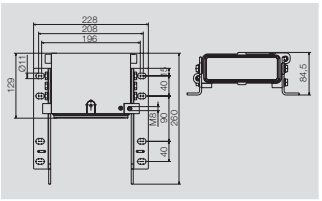
| Designation | Type | Order No. |
|---|---|---|
| Plug housing | HDC IP68 HP 24B TO | **1079930000** |




**Base housing**



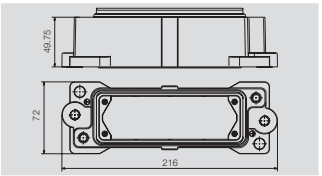
| Designation | Type | Order No. |
|---|---|---|
| Base housing | HDC IP68 HP 24B AS S | **1079920000** |




**Bulkhead housing**



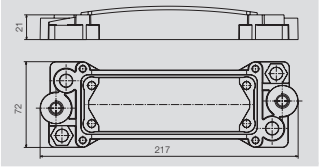
| Designation | Type | Order No. |
|---|---|---|
| Bulkhead housing | HDC IP68 HP 24B A | **1120040000** |




**Counter-frame**



| Designation | Type | Order No. |
|---|---|---|
| Counter-frame | HDC IP68 24B HP FRAME | **1282820000** |




**Mounting cover**



| Designation | Type | Order No. |
|---|---|---|
| Mounting cover without thread | HDC IP68 HP 24B MD | **1119950000** |
| Mounting cover 3 threads M40 | HDC IP68 HP MD 3M40 | **1119970000** |
| Mounting cover 3 threads M32 | HDC IP68 HP MD 3M32 | **1119980000** |
| Mounting cover 3 threads M25 | HDC IP68 HP 24B MD 3M25 | **1079910000** |
| Mounting cover 2 threads M40 | HDC IP68 HP 24B MD 2M40 | **1119990000** |
| Mounting cover 2 threads M32 | HDC IP68 HP 24B MD 2M32 | **1120000000** |
| Mounting cover 2 threads M25 | HDC IP68 HP 24B MD 2M25 | **1120010000** |

## RockStar® HighPower 550 A

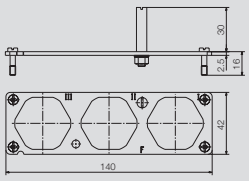
## Accessories

### Mounting frame

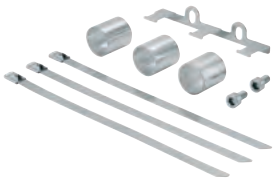


| Designation | Type | Order No. |
|---|---|---|
| BG 8 for 2 HP 550 Female | HDC 24B HP550 MPL2 TYP1 | 1103710000 |
| BG 8 for 2 HP 550 Male | HDC 24B HP550 MPL2 TYP2 | 1103770000 |
| BG 8 for 3 HP 550 Female | HDC 24B HP550 MPL3 TYP1 | 1103720000 |
| BG 8 for 3 HP 550 Male | HDC 24B HP550 MPL3 TYP2 | 1103780000 |

**Note:** Coding pins can be used for additional coding of the mounting frame; refer to Chapter J.




### EMC – Shield lever



| Designation | Type | Order No. |
|---|---|---|
| BG 8 for 2 x 50² | HDC 24B SL 2X50 | 1160420000 |
| BG 8 for 3 x 50² | HDC 24B SL 3X50 | 1160400000 |
| BG 8 for 2 x 70² | HDC 24B SL 2X70 | 1232750000 |
| BG 8 for 3 x 70² | HDC 24B SL 3X70 | 1232730000 |
| BG 8 for 2 x 95² | HDC 24B SL 2X95 | 1119900000 |
| BG 8 for 3 x 95² | HDC 24B SL 3X95 | 1079650000 |
| BG 8 for 2 x 120² | HDC 24B SL 2X120 | 1232700000 |
| BG 8 for 3 x 120² | HDC 24B SL 3X120 | 1232680000 |
| BG 8 for 2 x 150² | HDC 24B SL 2X150 | 1119910000 |
| BG 8 for 3 x 150² | HDC 24B SL 3X150 | 1119880000 |
| BG 8 for 2 x 185² | HDC 24B SL 2X185 | 1232710000 |
| BG 8 for 3 x 185² | HDC 24B SL 3X185 | 1232690000 |
| BG 8 for 2 x 240² | HDC 24B SL 2X240 | 1119920000 |
| BG 8 for 3 x 240² | HDC 24B SL 3X240 | 1119890000 |

### Touch-safe protection set



| Designation | Type | Order No. |
|---|---|---|
| Touch-safe protection set HP 550 | HDC HP 550 SHOCKPROTEC | 1120140000 |

### Cable glands



| Designation | Type | Order No. |
|---|---|---|
| M25, Stainless steel, clamping range 11-20 | VGM25-SS68 11-20 BG | 1193570000 |
| M32, Stainless steel, clamping range 15-25 | VGM32-SS68 15-25 BG | 1193580000 |
| M40, Stainless steel, clamping range 20-32 | VGM40-SS68 20-32 BG | 1193590000 |
| M40, Stainless steel, clamping range 20-32; Elongated version | VGM40/1-SS68 20-32 BG | 1205920000 |
| M25, Brass, nickel-plated, clamping range 11-20 | VGM25-MS68 11-20 BG | 1193600000 |
| M32, Brass, nickel-plated, clamping range 15-25 | VGM32-MS68 15-25 BG | 1193610000 |
| M40, Brass, nickel-plated, clamping range 20-32 | VGM40-MS68 20-32 BG | 1193620000 |
| M40, Brass, nickel-plated, clamping range 20-32; Elongated version | VGM40/1-MS68 20-32 BG | 1205890000 |

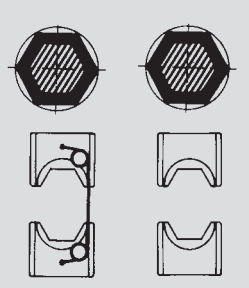
**Note:** When using mounting lids with 3 M40 cable entry threads, the elongated version must be used for the cable gland in the middle.

## Hand crimping tools

### Hand crimping tools



| Designation | Type | Order No. |
|---|---|---|
| Hand crimping tool | MTR 160 | 9017250000 |
| Crimping inserts 50², Crimping width 7.0 mm | EINSATZ MTR 160 50HEX | 9020940000 |
| Crimping inserts 95², Crimping width 7.0 mm | EINSATZ MTR 160 95HEX | 9020960000 |
| Crimping inserts 120², Crimping width 7.0 mm | EINSATZ MTR 160 120HEX | 9020970000 |
| Crimping inserts 150², Crimping width 7.0 mm | EINSATZ MTR 160 150HEX | 9020980000 |
| Crimping inserts 185², Crimping width 7.0 mm | EINSATZ MTR 160 185HEX | 9020990000 |
| Crimping inserts 240², Crimping width 7.0 mm | EINSATZ MTR 160 240HEX | 9021000000 |
| Hand crimping tool | MTR 300 | 9021390000 |
| Crimping inserts 50², Crimping width 7.0 mm | EINSATZ MTR 300 50HEX | 9021470000 |
| Crimping inserts 95², Crimping width 7.0 mm | EINSATZ MTR 300 95HEX | 9022290000 |
| Crimping inserts 120², Crimping width 7.0 mm | EINSATZ MTR 300 120HEX | 9022300000 |
| Crimping inserts 150², Crimping width 7.0 mm | EINSATZ MTR 300 150HEX | 9022310000 |
| Crimping inserts 185², Crimping width 7.0 mm | EINSATZ MTR 300 185HEX | 9022320000 |
| Crimping inserts 240², Crimping width 7.0 mm | EINSATZ MTR 300 240HEX | 9022330000 |



# RockStar® ConCept modular system

**RockStar® ConCept modular system**


**Introduction** D.2

**ConCept modules** D.4

1 - 10 poles

**ConCept bus modules** D.12

2 - 16 poles

**ConCept ST** D.20

2 - 10 poles

**ConCept pneumatic modules** D.23

1 - 2 poles

**ConCept module frame** D.24

Size 3 - 8

**ModuFlex C** D.44

Coupling frame 1 - 5 modules

# RockStar® ConCept modular system

ConCept is a modular system consisting of modules for electrical, optical and pneumatic connections as well as module frames in various sizes. Together, the modules and frames form a full connector insert. The key advantage with ConCept is that you can combine multiple functions together. You can create a connector according to your requirements; this saves space and money compared to the use of multiple fixed-pole inserts.

ConCept is simple to work with and can easily be integrated into an HDC housing in IP66 or IP68. The ConCept modules can also be used individually in ModuFlex-C coupling frames and snapped together to form a block which can then be used in IP20 environments. ConCept can in this way be used on DIN rails, in cable conduits or on flat surfaces.



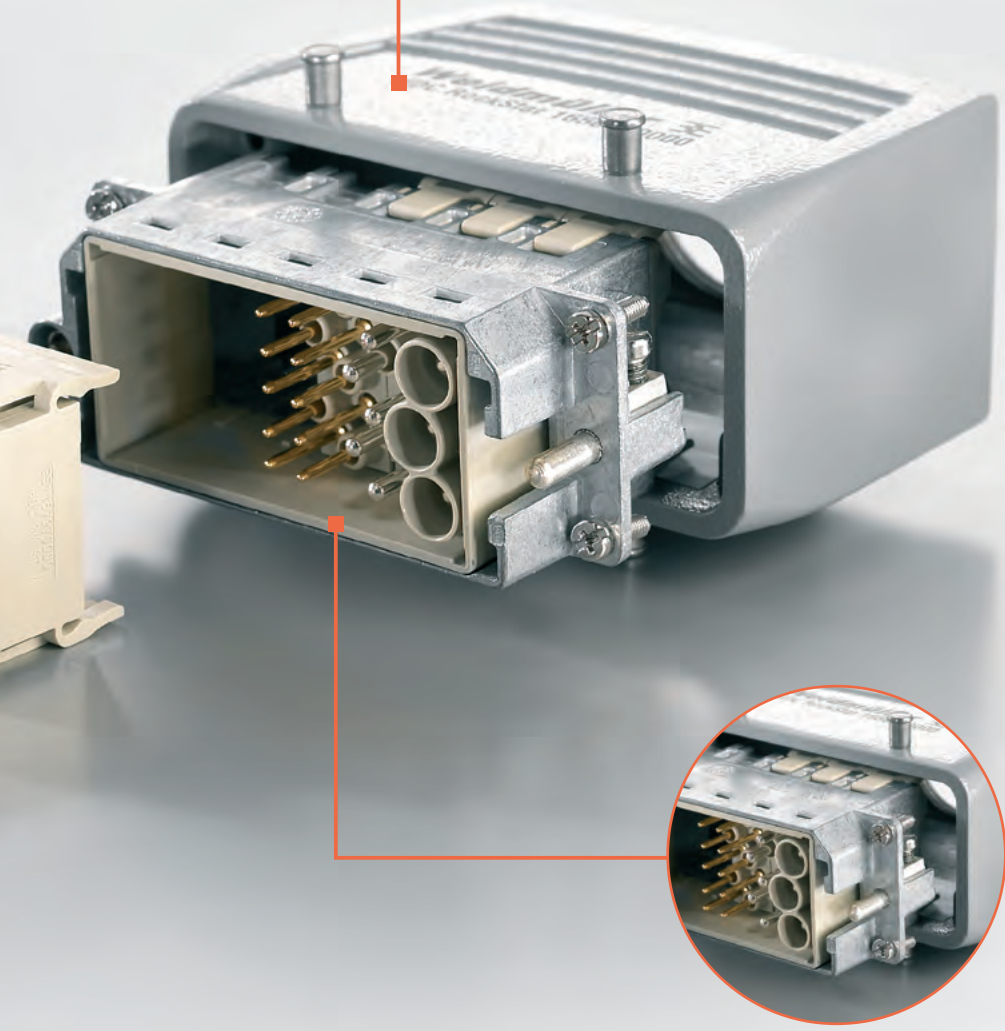
**Power, Signals, Data**

The modules can be combined to produce a single integrated connector that can carry power, signals and data.



**Flexible**

Because of its unique platform design, the ConCept ST module be fitted with up to eight different data inserts.





**Sturdy**

The optimal protection for the modules is provided by the solid module frame which is made of plastic or die-cast zinc.

# ConCept modules

## CM-3 Concept module / turned contacts

### Technical data

**Contact inserts**

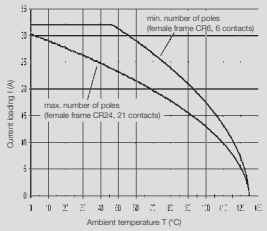
| | |
|---|---|
| Rated current (DIN EN 61984) | 40 A |
| Rated voltage (DIN EN 61984) | 690 V |
| Rated impulse voltage (DIN EN 61984) | 8 kV |
| Pollution severity | 3 |
| Insulation resistance | $10^{12}$ Ω |
| Surge voltage category | III |
| Volume resistance | ≤ 1 mΩ |
| Flammability class UL 94 | V-0 |

**Contacts**

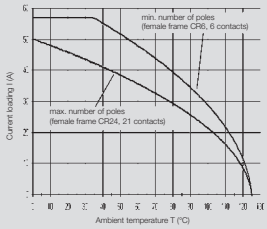
| | |
|---|---|
| Contact diameter, male Ø | 3.6 mm |
| Connection cross-section | 1.5-10 mm² |
| AWG conductor | AWG 16-AWG 7 |
| Material | Polycarbonate, glass fibre reinforced |

**Note**

Rated voltage 1000 V / 8 kV at pollution degree 2. For conductor cross-sections of 6 mm² to 10 mm², you must use ring cable lugs at the connection to the PE conductor. With the 690-V rated voltage, this also covers three-phase 4-wire or 3-wire AC-voltage systems with rated voltages up to 690 V – according to DIN EN 60664-1.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!




ConCept module CM-3
Conductor H07V-K 4.0 mm²




ConCept module CM-3
Conductor H07V-K 10.0 mm²

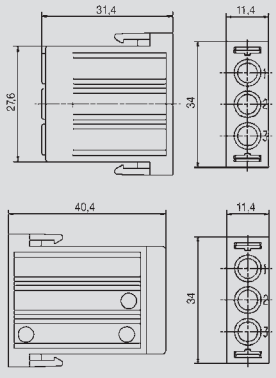
### Modules

**Crimp connection**





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM 3 MC | **1758360000** |
| Female | HDC CM 3 FC | **1758370000** |



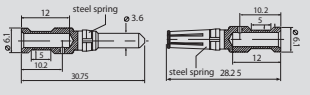

### Accessories

**Crimp contacts**

Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-M3-SM1.5AG | **1698120000** | HDC-C-M3-BM1.5AG | **1698130000** |
| 100 | HDC-C-M3-SM2.5AG | **1698140000** | HDC-C-M3-BM2.5AG | **1698150000** |
| 100 | HDC-C-M3-SM4.0AG | **1682260000** | HDC-C-M3-BM4.0AG | **1682270000** |
| 100 | HDC-C-M3-SM6.0AG | **1682280000** | HDC-C-M3-BM6.0AG | **1682290000** |
| 100 | HDC-C-M3-SM10.0AG | **1682300000** | HDC-C-M3-BM10.0AG | **1682310000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 1.50 mm² | AWG 16 | 10 mm |
| 2.50 mm² | AWG 14 | 10 mm |
| 4.00 mm² | AWG 12 | 10 mm |
| 6.00 mm² | AWG 10 | 10 mm |
| 10.00 mm² | AWG 7 | 10 mm |

**Tools**



| | |
|---|---|
| **Crimping tool** | |
| CTX CM 3.6 | **9018480000** |
| **Contact Removal Tool** | |
| Removal Tool CM 3 | **1866710000** |

## CM-HE Concept module / turned contacts

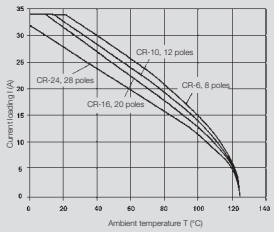
### Technical data

**Contact inserts**

| | |
|---|---|
| Rated current (DIN EN 61984) | 25 A |
| Rated voltage (DIN EN 61984) | 630 V |
| Rated impulse voltage (DIN EN 61984) | 8 kV |
| Pollution severity | 3 |
| Insulation resistance | $10^{12}$ Ω |
| Surge voltage category | III |
| Volume resistance | ≤ 2mΩ |
| Flammability class UL 94 | V-0 |

**Contacts**

| | |
|---|---|
| Contact diameter, male Ø | 2.5 mm |
| Connection cross-section | 0.5-4 mm² |
| AWG conductor | AWG 20-AWG 12 |
| Material | Polycarbonate, glass fibre reinforced |




ConCept module CM-HE
Conductor H07V-K 4.0 mm²

**Note**

Rated voltage 1000 V / 8 kV at pollution degree 2. For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

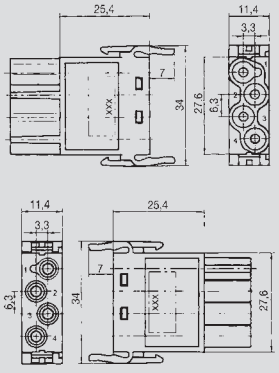
### Modules

**Crimp connection**





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM HE 4 MC | **1861920000** |
| Female | HDC CM HE 4 FC | **1861900000** |



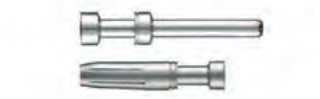

### Accessories

**Crimp contacts**

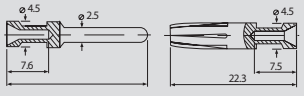
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.50 mm² AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² AWG 18 | 7.5 mm |
| 1.50 mm² AWG 16 | 7.5 mm |
| 2.50 mm² AWG 14 | 7.5 mm |
| 4.00 mm² AWG 12 | 7.5 mm |

**Tools**



| | |
|---|---|
| **Crimping tool** | |
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool HE | **1866750000** |

# ConCept modules

## CM-4 Concept module with tension spring connection

## Technical data

### Contact inserts

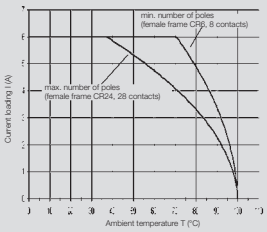
| | |
|---|---|
| Rated current (DIN EN 61984) | 14 A |
| Rated voltage (DIN EN 61984) | 400 V |
| Rated impulse voltage (DIN EN 61984) | 6 kV |
| Pollution severity | 3 |
| Insulation resistance | $10^{12}$ Ω |
| Surge voltage category | III |
| Volume resistance | 1.5 mΩ |
| Flammability class UL 94 | V-0 |

### Contacts

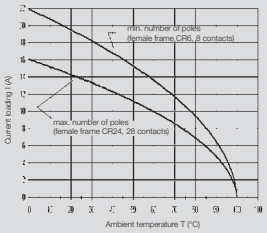
| | |
|---|---|
| Contact diameter, male Ø | 2.5 mm |
| Connection cross-section | 0.5-2.5 mm² |
| AWG conductor | AWG 20-AWG 14 |
| Material | Polycarbonate, glass fibre reinforced |

**Note**

For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!




ConCept module CM-4BZF/4SZF
Conductor H05V-K 0.5 mm²




ConCept module CM-4BZF/4SZF
Conductor H07V-K 2.5 mm²

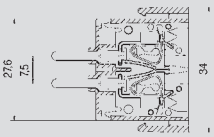
## Modules

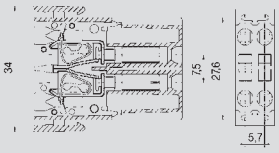
### Tension clamp connection





| Type | Type | Order No. |
|---|---|---|
| Male | HDC-CM-4SZF AG | **1730120000** |
| Female | HDC-CM-4BZF AG | **1730130000** |



## CM-5 Concept module / turned contacts

### Technical data

**Contact inserts**

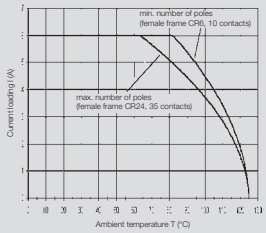
| | |
|---|---|
| Rated current (DIN EN 61984) | 20 A |
| Rated voltage (DIN EN 61984) | 250 V |
| Rated impulse voltage (DIN EN 61984) | 6 kV |
| Pollution severity | 3 |
| Insulation resistance | $10^{12}$ Ω |
| Surge voltage category | III |
| Volume resistance | ≤ 2mΩ |
| Flammability class UL 94 | V-0 |

**Contacts**

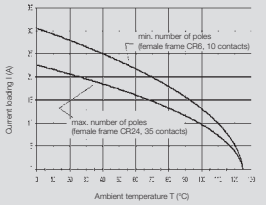
| | |
|---|---|
| Contact diameter, male Ø | 2.5 mm |
| Connection cross-section | 0.5-4 mm² |
| AWG conductor | AWG 20-AWG 12 |
| Material | Polycarbonate, glass fibre reinforced |

**Note**

Rated voltage 500 V / 6 kV at pollution degree 2. For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!




ConCept module CM-5
Conductor H05V-K 0.5 mm²




ConCept module CM-5
Conductor H07V-K 4.0 mm²

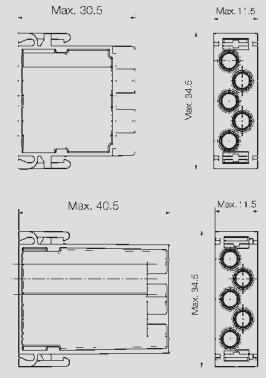
### Modules

**Crimp connection**





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM 5 MC | **1758380000** |
| Female | HDC CM 5 FC | **1758390000** |



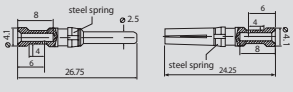

### Accessories

**Crimp contacts**

Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-M5-SM0.5AG | **1682320000** | HDC-C-M5-BM0.5AG | **1682330000** |
| 100 | HDC-C-M5-SM0.75-1.0AG | **1682340000** | HDC-C-M5-BM0.75-1.0AG | **1682350000** |
| 100 | HDC-C-M5-SM1.5AG | **1682360000** | HDC-C-M5-BM1.5AG | **1682370000** |
| 100 | HDC-C-M5-SM2.5AG | **1682380000** | HDC-C-M5-BM2.5AG | **1682390000** |
| 100 | HDC-C-M5-SM4.0AG | **1682400000** | HDC-C-M5-BM4.0AG | **1682410000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.75 - 1.00 mm² | AWG 18 7 mm |
| 1.50 mm² | AWG 16 7 mm |
| 2.50 mm² | AWG 14 7 mm |
| 4.00 mm² | AWG 12 7 mm |

**Tools**



| | |
|---|---|
| **Crimping tool** | |
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| Removal Tool CM 5 | **1866720000** |

# ConCept modules

## CM-10 Concept module / turned contacts

## Technical data

### Contact inserts

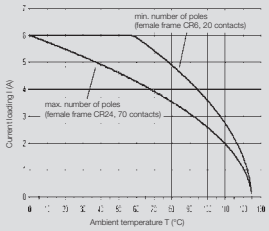
| | |
|---|---|
| Rated current (DIN EN 61984) | 10 A |
| Rated voltage (DIN EN 61984) | 250 V |
| Rated impulse voltage (DIN EN 61984) | 4 kV |
| Pollution severity | 3 |
| Insulation resistance | $10^{11}$ Ω |
| Surge voltage category | III |
| Volume resistance | ≤ 4mΩ |
| Flammability class UL 94 | V-0 |

### Contacts

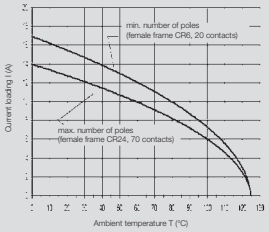
| | |
|---|---|
| Contact diameter, male Ø | 1.6 mm |
| Connection cross-section | 0.14-2.5 mm² |
| AWG conductor | AWG 26-AWG 14 |
| Material | Polycarbonate, glass fibre reinforced |

**Note**

Rated voltage 320 V / 4 kV at pollution degree 2. For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!




ConCept module CM-10
Conductor H05V-K 0.5 mm²




ConCept module CM-10
Conductor H07V-K 2.5 mm²

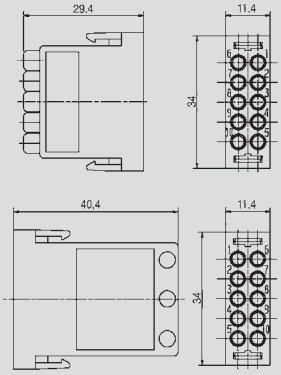
## Modules

### Crimp connection





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM 10 MC | **1758400000** |
| Female | HDC CM 10 FC | **1758410000** |




## Accessories

### Crimp contacts

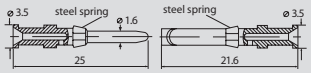
Surface finish gold



Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

### Tools



| **Crimping tool** | |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact Removal Tool** | |
| REMOVAL TOOL HD | **1866730000** |

## CM-3 HV

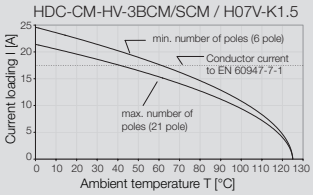
## Technical data

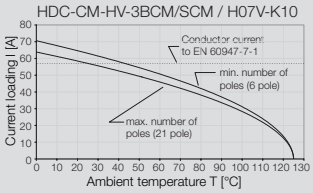
### Contact inserts

| | |
|---|---|
| Rated current (DIN EN 61984) | 57 A |
| Rated voltage (DIN EN 61984) | 1000 V |
| Rated impulse voltage (DIN EN 61984) | 8 kV |
| Pollution severity | 3 |
| Insulation resistance | $10^{12}$ Ω |
| Surge voltage category | III |
| Volume resistance | ≤ 1 mΩ |
| Flammability class UL 94 | V-0 |

### Contacts

| | |
|---|---|
| Contact diameter, male Ø | 3.6 mm |
| Connection cross-section | 1.5-10 mm² |
| AWG conductor | AWG 16-AWG 7 |
| Material | Polycarbonate, glass fibre reinforced |




**Note**

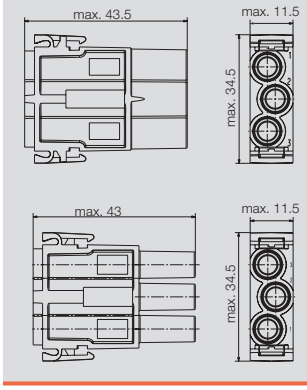
For conductor cross-sections of 6 mm² to 10 mm², you must use ring cable lugs at the connection to the PE conductor.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

## Modules

### Crimp connection



| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM HV 3 MC | **1862080000** |
| Female | HDC CM HV 3 FC | **1862060000** |



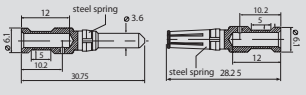

## Accessories

### Crimp contacts

Surface finish silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-M3-SM1.5AG | **1698120000** | HDC-C-M3-BM1.5AG | **1698130000** |
| 100 | HDC-C-M3-SM2.5AG | **1698140000** | HDC-C-M3-BM2.5AG | **1698150000** |
| 100 | HDC-C-M3-SM4.0AG | **1682260000** | HDC-C-M3-BM4.0AG | **1682270000** |
| 100 | HDC-C-M3-SM6.0AG | **1682280000** | HDC-C-M3-BM6.0AG | **1682290000** |
| 100 | HDC-C-M3-SM10.0AG | **1682300000** | HDC-C-M3-BM10.0AG | **1682310000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 1.50 mm² | AWG 16 | 10 mm |
| 2.50 mm² | AWG 14 | 10 mm |
| 4.00 mm² | AWG 12 | 10 mm |
| 6.00 mm² | AWG 10 | 10 mm |
| 10.00 mm² | AWG 7 | 10 mm |

### Tools



| | |
|---|---|
| **Crimping tool** | |
| CTX CM 3.6 | **9018480000** |
| **Contact Removal Tool** | |
| Removal Tool CM 3 | **1866710000** |

## ConCept modules

## CM High current module

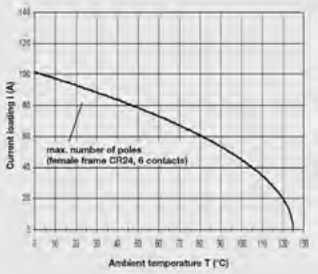
### Technical data

**Contact inserts**

| | |
|---|---|
| Rated current (DIN EN 61984) | 82 A |
| Rated voltage (DIN EN 61984) | 1000 V |
| Rated impulse voltage (DIN EN 61984) | 6 kV |
| Pollution severity | 3 |
| Insulation resistance | $10^{12}$ Ω |
| Surge voltage category | III |
| Volume resistance | ≤ 1 mΩ |
| Flammability class UL 94 | V-0 |

**Contacts**

| | |
|---|---|
| Contact diameter, male Ø | 6 mm |
| Tightening torque | 1.2 |
| Connection cross-section | 10-25 mm² |
| AWG conductor | AWG 8-AWG 4 |
| Material | Polyamide, glass fibre-reinforced |




**Note**

The modules have a double-module design and occupy two places in the ConCept module frame. Only use the modules with wire-end ferrules! When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

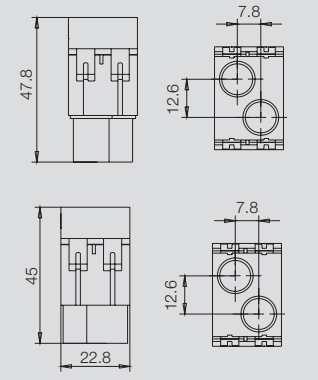
### Modules

**Screw connection**





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM 1 MS + PE | **1828390000** |
| Female | HDC CM 1 FS + PE | **1828410000** |




### Modules

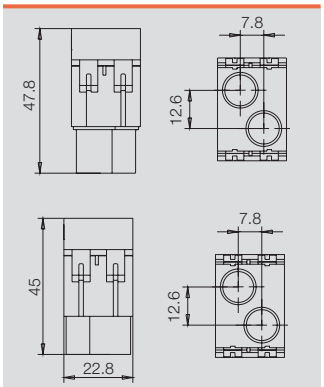
**Screw connection**





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM 2 MS | **1828380000** |
| Female | HDC CM 2 FS | **1828400000** |

**Note**



# ConCept bus module for screened wires

Concept bus is ideal for transmitting highly sensitive signals in heavy-duty connectors.

Modules of the ConCept heavy-duty connector system offer many functions in a very small space with reliable protection from electromagnetic fields, moisture, dust and extreme mechanical loads.

By combining these with other modules, the power supply and other signals for the field device can be connected in a single plug-in connector.

The **Profibus-DP** module with **T-Connector function** enables uninterrupted operation of the fieldbus during servicing or when replacing a field device. The fieldbus system no longer has to be switched off, as was the case in the past, because the field device can simply be connected or disconnected during operation using the heavy-duty connector – “plug and play” is now available for the first time for fieldbus solutions. The same heavy-duty connector also provides a reliable power supply for the connected fieldbus device.

On one side, Weidmüller uses the robust USB plug as connection system for the Profibus DP modules.
This guarantees a high transmission rate of 12 Mbit/s and at least 200 plugging cycles. On the other side, screw terminals are used to connect the screened Profibus cables.

### Advantages

- Simple screw connection
- Simple screen connection



### Versions

- Bus connector
  **HDC CM BUS 4 ...**
  for screened wires
  (for connecting 4 wires and screen)



- Bus connector with integrated T-exit
  **HDC CM BUS 2 ... PDP**
  for screened wires
  (Profibus-DP solution = 2 wires and screen)



## Technical data

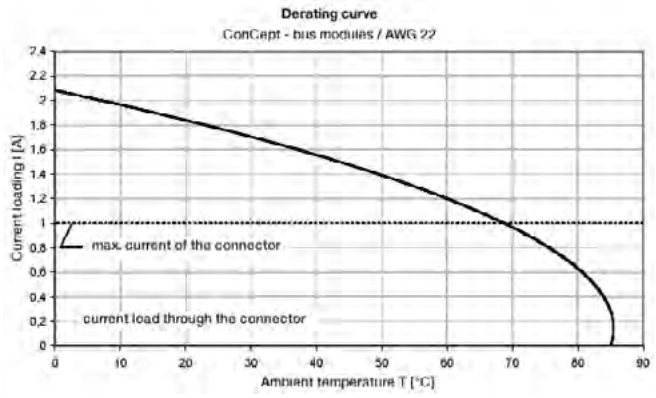
| Material data | HDC CM BUS 4 ... | HDC CM BUS 2 ... PDP |
|---|---|---|
| Insulation | Glass fibre reinforced PC | |
| Colour | Grey (similar to RAL 7032) | |
| Temperature range | –20 °C to +85 °C | |
| **System characteristics** | | |
| Connection technology | Screw connection | |
| No. of poles | 4 + screen | 2 + screen |
| Conductor capacity | 0.08 ... 1.5 mm | As |
| | AWG 28 ... 16 | Profibus DP |
| Stripping length 5 mm | | |
| Clamping capacity | 2.1 ... 7 mm | |
| (outer diameter of cable screen) | | |
| Stripped sheath length 19 mm | | |
| **Rated data to VDE 0627** | | |
| Rated current | 1 A | |
| Rated voltage | 32 V | |
| Rated impulse withstand voltage | 0.8 kV | |
| Degree of pollution | 3 | |
| Transmission rate | max. 12 Mbit/s | |
| **Clamping torques** | | |
| Screen clip | 0.5 – 0.6 Nm | |
| PCB terminal | 0.2 – 0.3 Nm | |

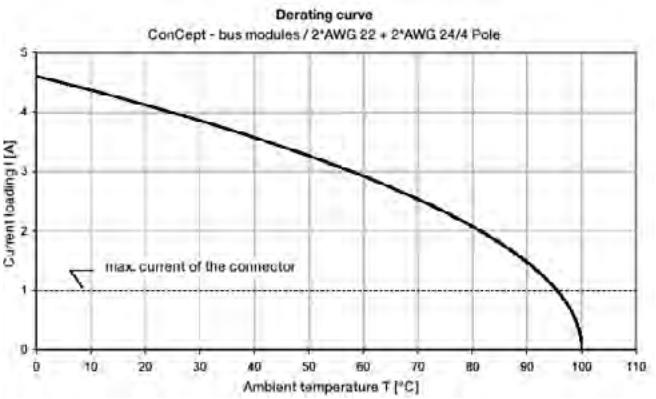
**Assembly instructions**

- Use wire end ferrules
- Clamp screen braid under clip
- Use specified torque settings
- Place module at the far end of the frame with the connection side to the outside
- Only use high housing types

**Note:** Also take note of the assembly instructions enclosed with the product.

**Derating curves**



# ConCept bus modules

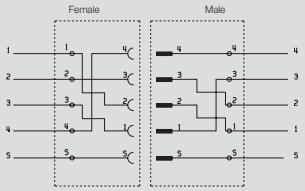
## Bus connectors

## 4 poles

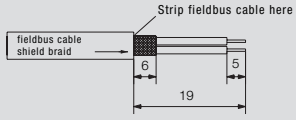
## Technical data

**Contact inserts**

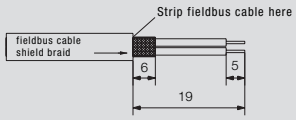
| | |
|---|---|
| Rated current | 1 A |
| Rated voltage | 30 V |
| Qty. | 5 |




**Male module**




**Female module**



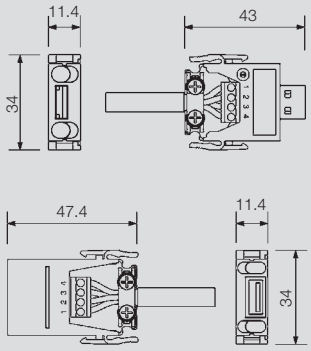

**Note**

## Modules

**Female module**



| Insert | Designation | Order No. |
|---|---|---|
| Male | HDC CM BUS 4SS | **1814310000** |
| Female | HDC CM BUS 4BS | **1814300000** |



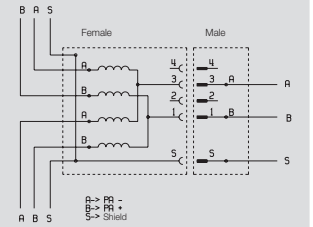
## Bus connector with integrated T-exit

## 2 poles

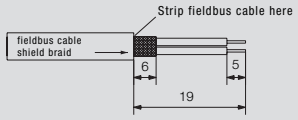
## Technical data

**Contact inserts**

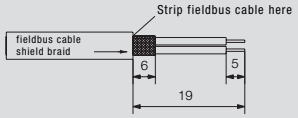
| | |
|---|---|
| Rated current | 1 A |
| Rated voltage | 30 V |
| Qty. | 5 |




**Male module**




**Female module**



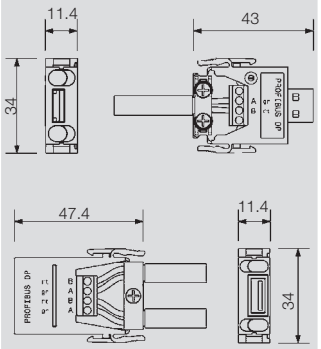

**Note**
The Profibus topology is the line structure. The branches (T-pieces) connect the individual field devices or remote I/Os to the bus cable. The length of the spur depends on the transmission rate and should be as short as possible. IEC 61158 specifies that with a transmission rate of 1.5 Mbit/s per segment, spur lengths of up to 6.6 m are permitted.
Source: Profibus Directive, Order No. 2.111 Version 1.0

## Modules

**Female module**



| Insert | Designation | Order No. |
|---|---|---|
| Male | HDC CM BUS 2SS PDP A | **1806060000** |
| Female | HDC CM BUS 2BS T PDP C | **1806030000** |



# ConCept bus modules

## ConCept system bus

## Shielded module

## Technical data

**Contact inserts**

| | |
|---|---|
| Standards | DIN EN 61984<br>IEC 60664 |
| Approvals | UL/CSA |
| No. contacts | 2…16 poles for signal transmission |
| Conductor connection system | Crimp |
| Rated current | 10 A (HD) / 25 A (HE) |
| Rated voltage/Rated impulse withstand voltage | 50 V/0.8 kV (HD) / 160V/3kV (HE) |
| Degree of pollution | 3 (100 V/1.5 kV/2 (HD) / 250 V/3 kV/2 (HE)) |
| Shield | Shield connected to contact carrier using cable clamp |
| Outside diameter of shielded cable | 3 to 6 mm and/or 6 to 9.5 mm |
| Conductor clamping ranges | 0.14 mm² … 4.62 mm²<br>AWG 26 … AWG 11 |
| Stripping lengths | 8 mm (HD/HE) / 4 mm (SUB-D) |
| Volume resistance | < 4 mΩ (HD) / < 2 mΩ (HE) |
| Contacts (crimp) | HD / HE / SUB-D |
| Contact material | Copper alloy |
| Surface | |
| Crimp contact | Passivated silver or gold-plated |
| Contact carrier | Zinc alloy |
| Temperature range | –40 °C … +70 °C |
| Material – module | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Flammability to UL 94 | V-0 |
| Frame material | Die cast zinc |
| Surface of frame | CuNi |
| Frame earthing (ground) | Leading earthing contact; double-sided PE connection |

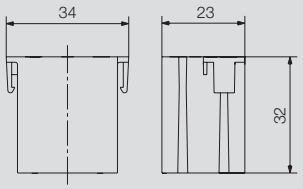
**Note**
The modules have a double-module design and occupy two places in the ConCept module frame.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

## Modules

**Female receptacle module**



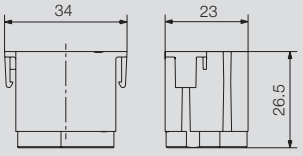
| Designation | Type | Order No. |
|---|---|---|
| HDC CM BUS SV F2 | Female module | **1983720000** |




**Male receptacle module**



| Designation | Type | Order No. |
|---|---|---|
| HDC CM BUS SV M2 | Male module | **1983750000** |

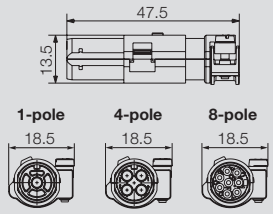


### Female contact carrier



| Designation | | Type | Type of contact | Order No. |
|---|---|---|---|---|
| HDC CM BUS SV F1 CT | 1-pole | Females contact carrier | HD | **1983800000** |
| HDC CM BUS SV F4 CT | 4-pole | Females contact carrier | HD | **1983770000** |
| HDC CM BUS SV F8 CT | 8-pole | Females contact carrier | SUB-D | **1043120000** |
| HDC CM BUS HE F1 CT | 1-pole | Females contact carrier | HE | **1116090000** |

**Note:** Additional crimp contacts on D.18

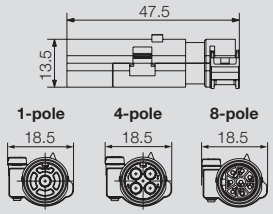



### Male contact carrier



| Designation | | Type | Type of contact | Order No. |
|---|---|---|---|---|
| HDC CM BUS SV M1 CT | 1-pole | Male contact carrier | HD | **1983810000** |
| HDC CM BUS SV M4 CT | 4-pole | Male contact carrier | HD | **1983790000** |
| HDC CM BUS SV M8 CT | 8-pole | Male contact carrier | SUB-D | **1043130000** |
| HDC CM BUS HE M1 CT | 1-pole | Male contact carrier | HE | **1116100000** |

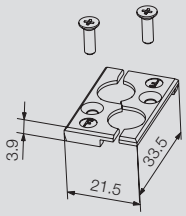
**Note:** Additional crimp contacts on D.18




### Earthing connection adapter plate



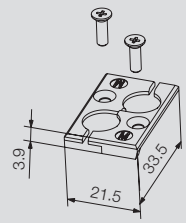
| Designation | Type | Order No. |
|---|---|---|
| HDC CM BUS SV GCA F | Earthing connection adapter plate | **1983820000** |




### Earthing connection adapter plate



| Designation | Type | Order No. |
|---|---|---|
| HDC CM BUS SV GCA M | Earthing connection adapter plate | **1014080000** |




## Accessories

### HD crimp contacts

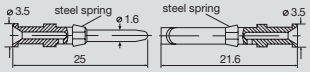
Surface Gold



Surface Silver



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1AU | **1651640000** | HDC-C-HD-BM0.75-1AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.75-1AG | **1601760000** |
| 100 | HDC-C-HD-SM0.75-1AG | **1601750000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

### Tools



| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact release tool** | |
| Removal Tool HD | **1866730000** |

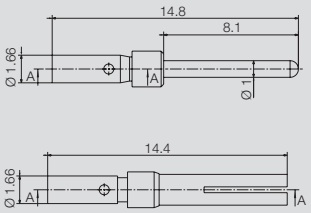
## ConCept bus modules

## Accessories

### SUB-D crimp contacts



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-CM-BUS-S0.33-0.52 | **1027260000** | HDC-C-CM-BUS-B0.33-0.52 | **1027270000** |




### HE crimp contacts

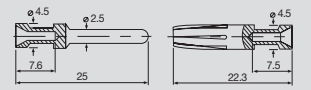
Surface Gold



Surface Silver



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1AU | **1651430000** | HDC-C-HE-BM0.75-1AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| 100 | HDC-C-HE-SM4.65AU | **1116540000** | HDC-C-HE-BM4.65AU | **1116530000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1AG | **1200600000** | HDC-C-HE-BM0.75-1AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 - 1,00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |

### Tools



| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact release tool** | |
| Removal Tool HE | **1866750000** |

## ConCept ST

The new RockStar® ConCept ST data module with ***STEADY****TEC*® technology is a new versatile Gigabit Ethernet module for use with the modular connector system ConCept.

- Gigabit Ethernet (Cat.6A 10GBit System Class EA): fast RJ45 data insert suitable for field assembly.
- Your choice for excellent flexibility: the platform concept allows the use of RJ45, SC/LC and hybrid inserts.
- Optimised handling and easy implementation through integrated module release levers.
- Can be combined with all available ConCept modules and module frames.



## Technical data

| | |
|---|---|
| Standards | IEC 60664<br>DIN EN 61984 |
| Approvals | GL, further approvals are pending |
| Number of poles | 8-pole (RJ45) / 2-pole SC (single-mode/multi-mode/POF)/LC (single-mode/multi-mode) / 10-pole hybrid |
| Rated voltage (RJ45) | 50 V |
| Rated impulse voltage (RJ45) | 1 kV |
| Rated current (RJ45) | 1 A |
| Volume resistance | ≤ 20 mΩ |
| Insulation resistance | ≤ $10^{10}$ mΩ |
| Shielding | 360° shielded data insert housing / optional shield clamp |
| Pollution severity | 3 |
| Category | Cat.6A 10GBit System Class EA (Ethernet TCP/IP, Profinet, Ethernet IP) according to ISO/IEC 11801 |
| Wire connection method | IDC (RJ45) / crimp (RJ45/SC/LC/hybrid) |
| Wire clamping range | RJ45 inserts, no tool required (FH):<br>Flexible: 0.48 - 0.76 mm² (AWG 26/7...AWG 22/7)<br>Solid: 0.40 - 0.64 mm² (AWG 26/1...AWG 22/1) |
| | RJ45 crimp inserts (TH):<br>Flexible: 0.46 - 0.61 mm² (AWG 27/7...AWG 24/7)<br>Solid: 0.36 - 0.51 mm² (AWG 26/1...AWG 24/1) |
| | SC/LC crimp inserts:<br>Inner wire G50 µm/125 µm and G62.5 µm/125 µm |
| | Hybrid crimp inserts:<br>0.2 - 0.5 mm² (AWG 24...20) |
| Temperature range | - 40 °C ... + 70 °C |
| Insertion and pulling forces | ≤ 30 N |
| Plugging cycles | ≥ 500 |
| Materials | |
| Module housing | PC glass-fibre reinforced |
| Flammability according to UL 94 | V-0 |
| Flammability according to NFF 16-101 / NFF 16-102 | I1F2 |
| Colour of module housing | grey (RAL 7032) |
| Data inserts | Die-cast zinc/ brass/PC (RJ45 TH) / PA (SC socket) / PBT (LC socket) / PA/nickel silver (hybrid) |
| Contacts (RJ45/hybrid) | Copper (RJ45 FH) / Phosphor-bronze (RJ45 TH) / Tin-bronze (hybrid) |
| Contact surface (RJ45/hybrid) | Gold-plated nickel (RJ45) / partially gold-plated (hybrid) |

**Note:** These modules are designed as double modules and take up two slots in the ConCept module frames.
The RJ45 data inserts are suitable for PoE (power over Ethernet) in compliance with IEEE 802.3af.
The main catalogue 9 contains additional information on our industrial Ethernet products.

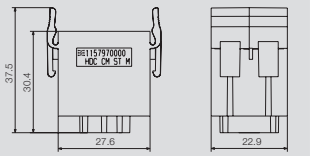
# ConCept ST

## Modules

### Male



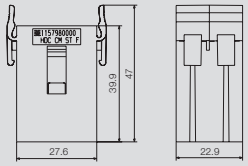
| Designation | Type | Order No. |
|---|---|---|
| Male | HDC CM ST M | 1157970000 |




### Female



| Designation | Type | Order No. |
|---|---|---|
| Female | HDC CM ST F | 1157980000 |

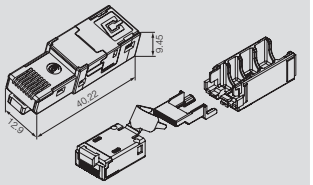



## Data inserts RJ45

### Male



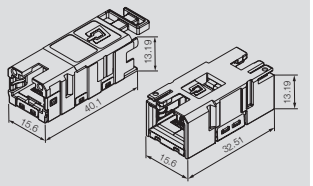
| Designation | Type | Order No. |
|---|---|---|
| Male | IE-PI-RJ45-FH | 1962730000 |
| Male | IE-PI-RJ45-FH-A | 1132010000 |
| Male | IE-PI-RJ45-FH-B | 1132020000 |
| Male | IE-PI-RJ45-FH-P | 1132030000 |
| Male | IE-PI-RJ45-TH | 1962720000 |




### Female

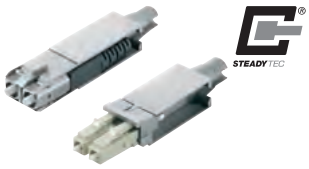


| Designation | Type | Order No. |
|---|---|---|
| Female | IE-BI-RJ45-C | 1962840000 |
| Female | IE-BI-RJ45-FJ-A | 1962850000 |
| Female | IE-BI-RJ45-FJ-B | 1963840000 |
| Female | IE-BI-RJ45-FJ-P | 1963830000 |

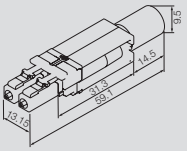



## Data inserts SC/LC

### Male



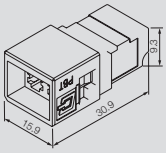
| Designation | Type | Order No. |
|---|---|---|
| Male | IE-PI-2SC-SM | 1962760000 |
| Male | IE-PI-2SC-MM | 1962750000 |
| Male | IE-PI-2SC-POF | 1962770000 |
| Male | IE-PI-2LC-SM | 1962790000 |
| Male | IE-PI-2LC-MM | 1962780000 |




### Female



| Designation | Type | Order No. |
|---|---|---|
| Female | IE-BI-SCRJ2SC-SM-C | 1962870000 |
| Female | IE-BI-SCRJ2SC-MM-C | 1964430000 |
| Female | IE-BI-LCD-SM-C | 1962880000 |
| Female | IE-BI-LCD-MM-C | 1964420000 |



## ConCept ST

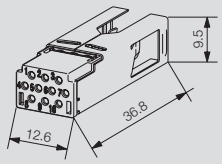
## ConCept ST

### Data inserts hybrid

**Male**



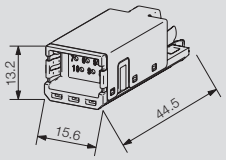
| Designation | Type | Order No. |
|---|---|---|
| Male | IE-PI-HYB-10P | **1068990000** |




**Female**



| Designation | Type | Order No. |
|---|---|---|
| Female | IE-BI-HYB-10P | **1069010000** |




### Crimp contacts hybrid

**Male**

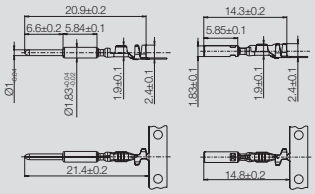


| Designation | Type | Order No. |
|---|---|---|
| Male | IE-BIC-HYB-P-0.5-300 | **1096150000** |

**Female**



| Designation | Type | Order No. |
|---|---|---|
| Female | IE-PIC-HYB-S-0.5-300 | **1096180000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.21 – 0.50 mm² AWG 24-20 | 3.5 mm |

### Accessories

| Designation | Type | Order No. |
|---|---|---|
| Crimping tool RJ45 | TT 8 RS MP 8 | **9202800000** |
| Stripping tool RJ45 | IE-CST | **9204350000** |
| | AM 12 | **9030060000** |
| Crimping tools SC/LC | IE-CT-SC-GOF | **9205320000** |
| | IE-CT-SC-POF | **9205340000** |
| | IE-CT-SC-GOF-P | **9205350000** |
| | IE-CT-LC-GOF | **9205330000** |
| Stripping tool SC (POF) | M-D-STRIPAX LWL | **9003750000** |
| Assembly case SC/LC | IE-CTC-SCST-GOF | **1032030000** |
| | IE-CTC-AS-SC-POF | **1033360000** |
| | IE-CTC-AS-LC-GOF | **1033350000** |
| Crimping tool hybrid | HTF HYB | **1119580000** |
| Cutting tool | KT 8 | **9002650000** |

## CM pneumatic

## Technical data

### Contact inserts

| | |
|---|---|
| Number of valves | 1 |
| Type of connection | Hose connection (pneumatic) |
| Connection diameter, hose (inner) | 2.5 mm |
| Module operating pressure | 10 bar |
| Contact travel | 4 mm |
| Stop valve | Socket side |
| Hose type | Only use PTFE hoses |
| Connection diameter, hose (outer) | 8 mm |
| Connection system | Self-locking |
| Temperature range, installation | -40...80 °C |
| Flammability class UL 94 | V-0 |

### Contacts

| | |
|---|---|
| Contact material | Ms 58 brass |
| Sealing material | NBR |
| Module body material | PA 6.6 |
| Colour | Black |

**Note**

When delivering liquids or gases of any type through pneumatic modules, it is very important to remember that no current-carrying modules should be mounted or be mounted later in the same housing.

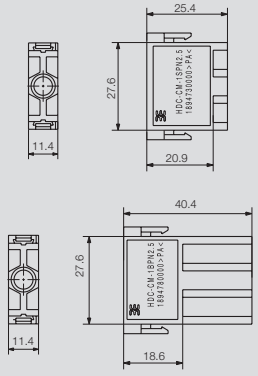
## Modules

### Hose connection (pneumatic)





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM 1 MPN 2.5 | **1894730000** |
| Female | HDC CM 1 FPN 2.5 | **1894780000** |
| Male | HDC CM 1 MPN 4.0 | **1894740000** |
| Female | HDC CM 1 FPN 4.0 | **1894720000** |




## Modules

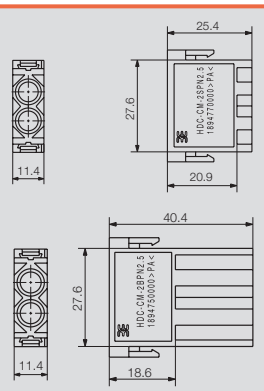
### Hose connection (pneumatic)





| Type | Type | Order No. |
|---|---|---|
| Male | HDC CM 2 MPN 2.5 | **1894770000** |
| Female | HDC CM 2 FPN 2.5 | **1894750000** |
| Male | HDC CM 2 MPN 4.0 | **1894710000** |
| Female | HDC CM 2 FPN 4.0 | **1894760000** |

**Note**

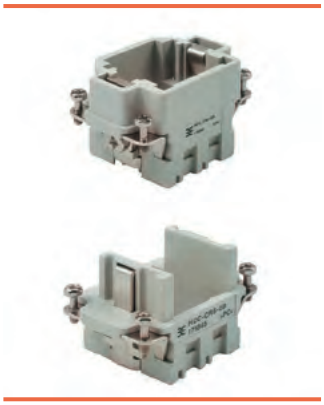


## ConCept module frame

### Size 3

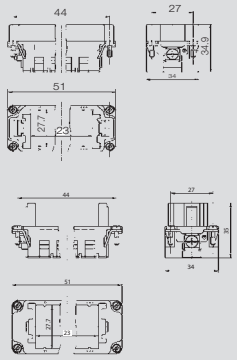
### CR6 ConCept frame, plastic

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC-CR6-2S GR | **1758440000** |
| Female | HDC-CR6-2B GR | **1758450000** |

**Note** For 2 modules



## Selection of Housings RockStar® IP66 Size 3

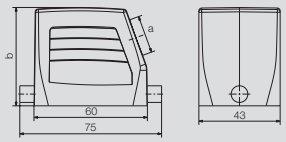
Further housings are available, see Chapter E for IP66 and Chapter F for IP68

## Hood

### Plug housing, cable entry sideways



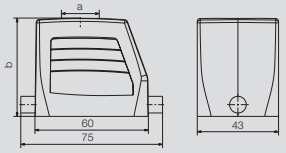
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TSLU 1M20G | **1788100000** |
| M 25 | w. threading | | 52 | HDC 06B TSLU 1M25G | **1788090000** |
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |




### Plug housing, cable entry at top



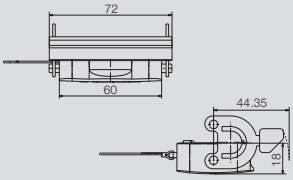
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TOLU 1M20G | **1788120000** |
| M 25 | w. threading | | 52 | HDC 06B TOLU 1M25G | **1788110000** |
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 06B DMDL 1LB | **1665210000** |

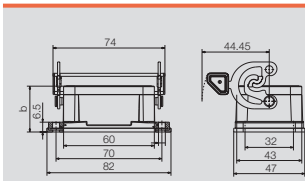



## Base

### Bulkhead housing



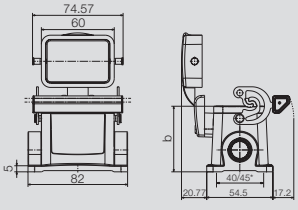
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |




### Base housing



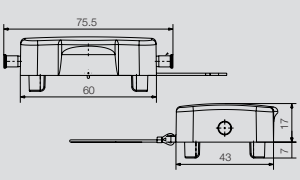
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 06B SLU 2M20G | **1788140000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 2M20G | **1788170000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 2M25G | **1788130000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 2M25G | **1788160000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 06B DODL 2BO | **1665200000** |



## ConCept module frame

### Size 3

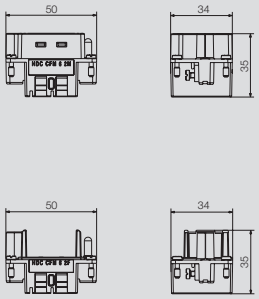
### CR6 ConCept frame, metal

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC CFM 6 2M | **1983830000** |
| Female | HDC CFM 6 2F | **1983840000** |

**Note** For 2 modules



## Selection of Housings RockStar® IP66
## Size 3

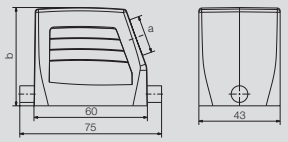
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



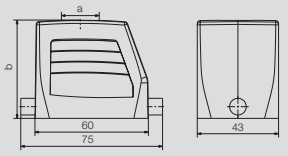
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TSLU 1M20G | **1788100000** |
| M 25 | w. threading | | 52 | HDC 06B TSLU 1M25G | **1788090000** |
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |




### Plug housing, cable entry at top



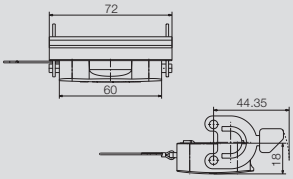
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TOLU 1M20G | **1788120000** |
| M 25 | w. threading | | 52 | HDC 06B TOLU 1M25G | **1788110000** |
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | For hoods | HDC 06B DMDL 1LB | **1665210000** |

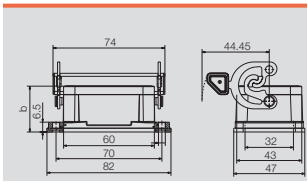



## Base

### Bulkhead housing



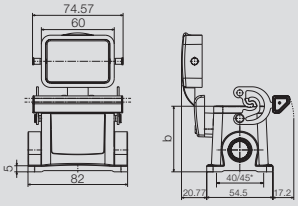
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 06B SLU 2M20G | **1788140000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 2M20G | **1788170000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 2M25G | **1788130000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 2M25G | **1788160000** |




* Mounting dimensions for size-3 base housings, tall shape (16D)

## ConCept module frame

### Size 4

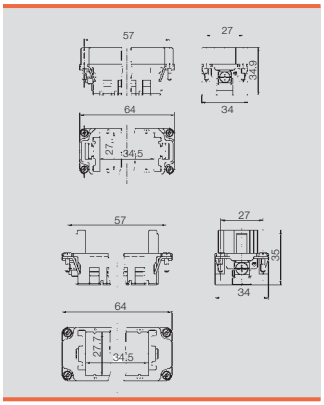
### CR10 ConCept frame, plastic

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC-CR10-3S GR | **1758460000** |
| Female | HDC-CR10-3B GR | **1758470000** |

**Note** For 3 modules



## Selection of Housings RockStar® IP66
## Size 4

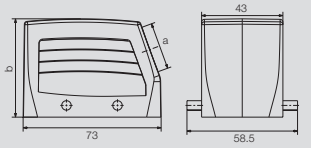
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



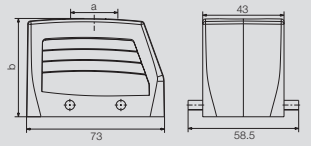
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



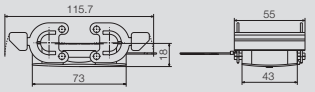
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

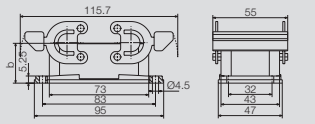



## Base

### Bulkhead housing



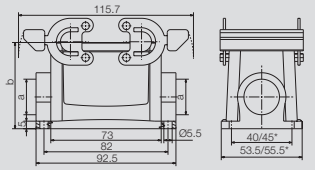
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |

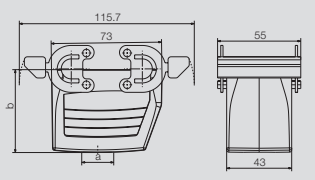



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



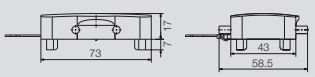
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |



## ConCept module frame

### Size 4

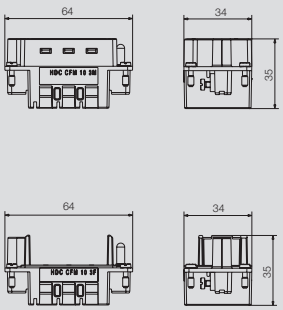
### CR10 ConCept frame, metal

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC CFM 10 3M | **1983850000** |
| Female | HDC CFM 10 3F | **1983860000** |

**Note** For 3 modules



## Selection of Housings RockStar® IP66
## Size 4

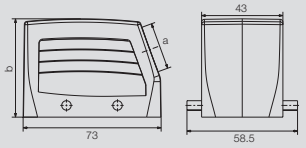
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



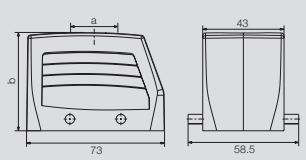
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |




### Plug housing, cable entry at top



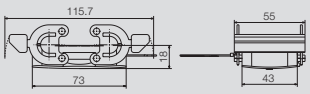
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 2QB | **1665240000** |

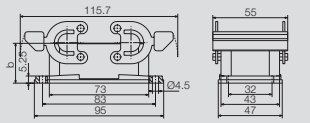



## Base

### Bulkhead housing



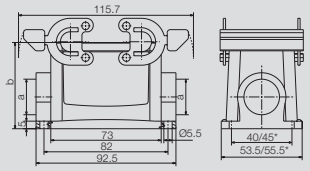
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |

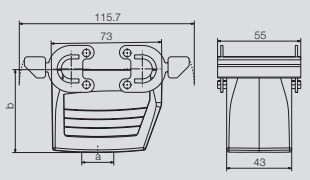



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



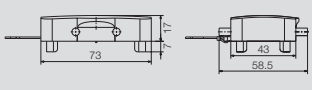
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 4BO | **1665230000** |

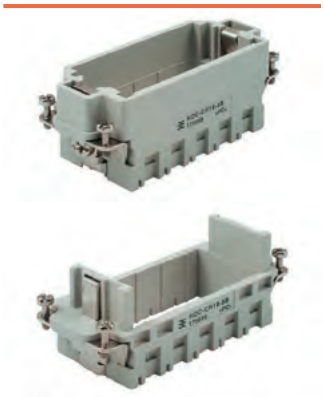


## ConCept module frame

### Size 6

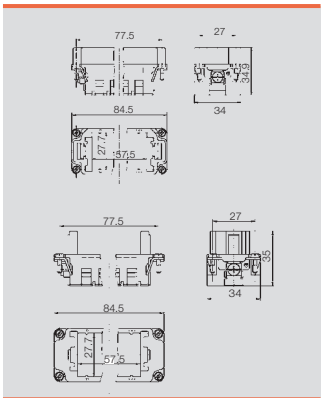
### CR16 ConCept frame, plastic

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC-CR16-5S GR | **1758480000** |
| Female | HDC-CR16-5B GR | **1758490000** |

**Note** For 5 modules



## Selection of Housings RockStar® IP66
## Size 6

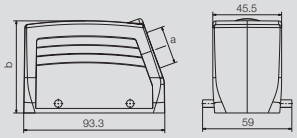
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



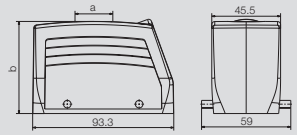
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



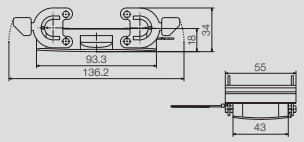
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

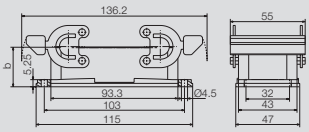



## Base

### Bulkhead housing



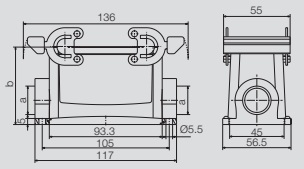
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



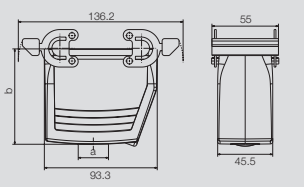
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



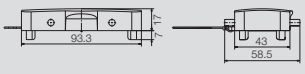
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |

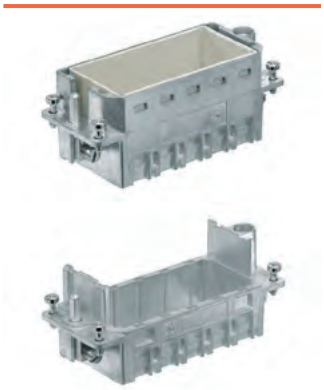


## ConCept module frame

### Size 6

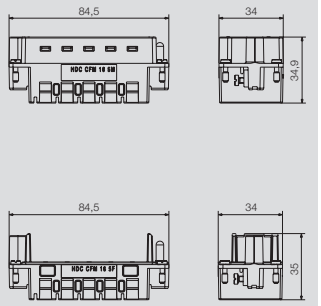
### CR16 ConCept frame, metal

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC CFM 16 5M | **1983870000** |
| Female | HDC CFM 16 5F | **1983880000** |

**Note** For 5 modules



## Selection of Housings RockStar® IP66
## Size 6

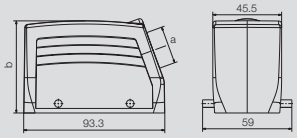
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

## Hood

### Plug housing, cable entry sideways



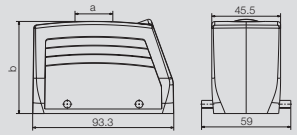
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |




### Plug housing, cable entry at top



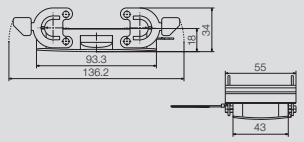
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 16B DMDQ 2QB | **1665270000** |

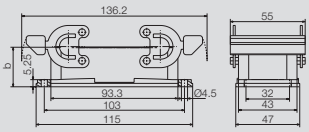



## Base

### Bulkhead housing



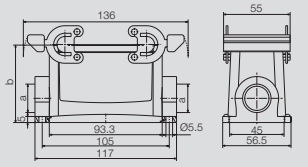
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



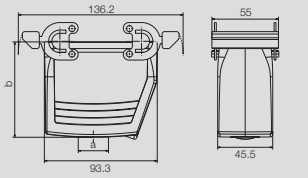
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |




### Coupling housing



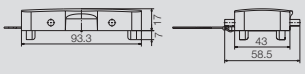
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 16B DODQ 4BO | **1665260000** |

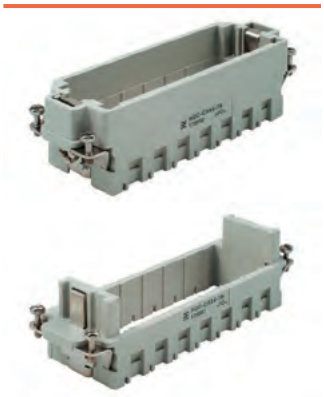


## ConCept module frame

### Size 8

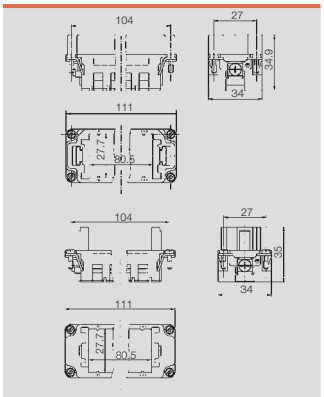
### CR24 ConCept frame, plastic

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC-CR24-7S GR | **1758500000** |
| Female | HDC-CR24-7B GR | **1758510000** |

**Note** For 7 modules



## Selection of Housings RockStar® IP66
## Size 8

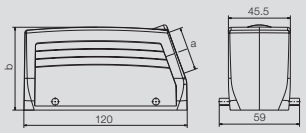
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



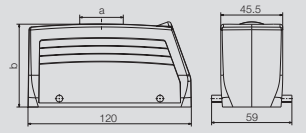
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |




### Plug housing, cable entry at top



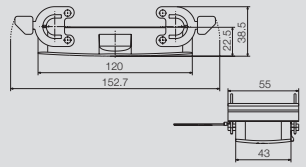
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

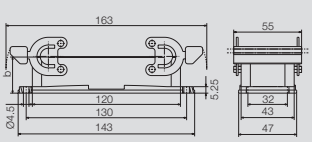



## Base

### Bulkhead housing



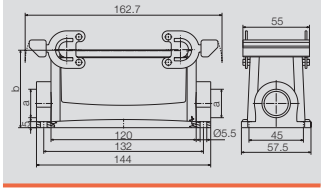
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



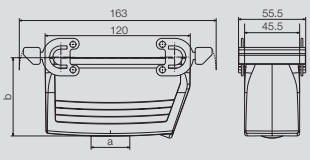
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



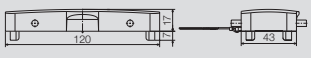
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |

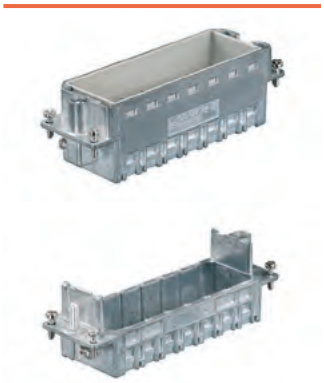


## ConCept module frame

### Size 8

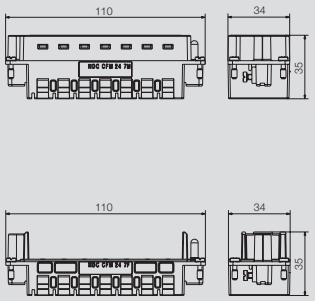
### CR24 ConCept frame, metal

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC CFM 24 7M | **1983890000** |
| Female | HDC CFM 24 7F | **1983900000** |

**Note** For 7 modules



## Selection of Housings RockStar® IP66
## Size 8

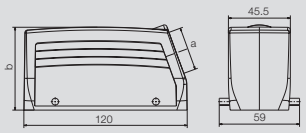
**Further housings are available, see Chapter E for IP66 and Chapter F for IP68**

## Hood

### Plug housing, cable entry sideways



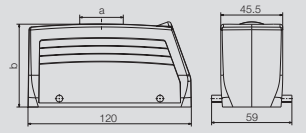
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |




### Plug housing, cable entry at top



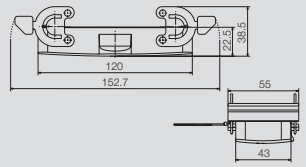
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 2QB | **1665640000** |

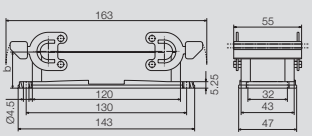



## Base

### Bulkhead housing



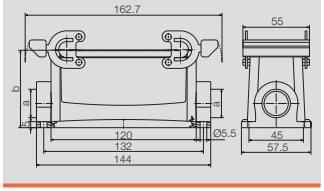
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



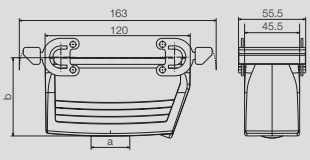
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |




### Coupling housing



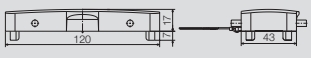
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 4BO | **1665630000** |

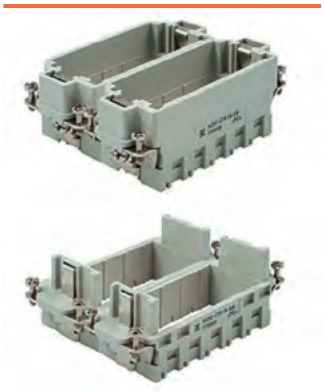


## ConCept module frame

### Size 10

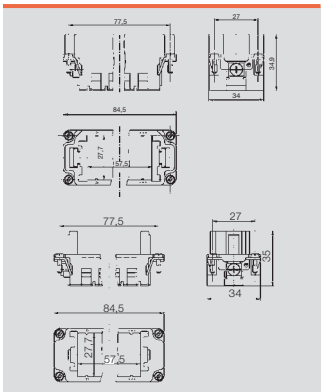
### CR16 ConCept frame, plastic 2x

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC-CR16-5S GR | **1758480000** |
| Male | HDC-CR16-5S-2 GR | **1758520000** |
| Female | HDC-CR16-5B GR | **1758490000** |
| Female | HDC-CR16-5B-2 GR | **1758530000** |

**Note** For 2 x 5 modules



## Selection of Housings RockStar® IP66
## Size 10

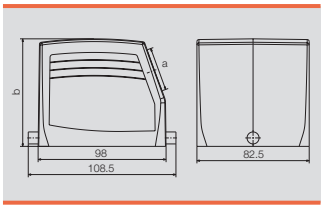
Further housings are available, see Chapter E for IP66

### Hood

**Plug housing, cable entry sideways**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSLU 1M32G | **1788420000** |

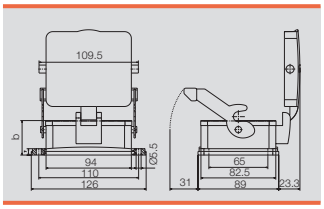



### Base

**Bulkhead housing**



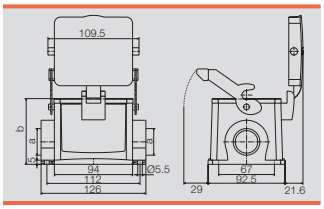
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ALU | **1219500000** |
| | | with cover | 55 | HDC 32B ADLU | **1219800000** |




**Base housing**



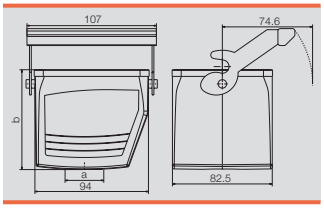
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SLU 2M32G | **1788470000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 2M32G | **1788490000** |




**Coupling housing**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 83 | HDC 32B KLU 1M32G | **1788500000** |

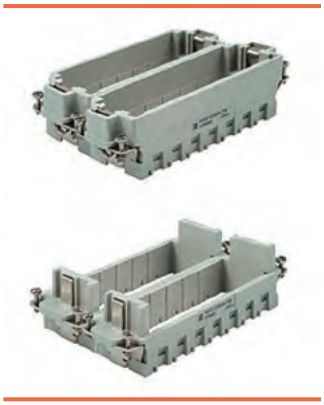


## ConCept module frame

### Size 12

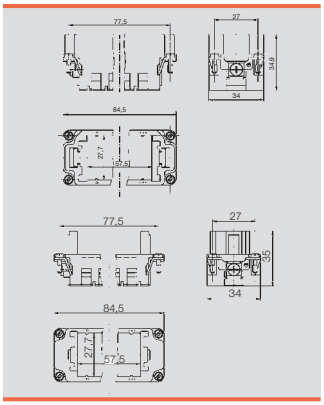
### CR24 ConCept frame, plastic 2x

### Frame



| Type | Type | Order No. |
|---|---|---|
| Male | HDC-CR24-7S GR | **1758500000** |
| Male | HDC-CR24-7S-2 GR | **1758540000** |
| Female | HDC-CR24-7B GR | **1758510000** |
| Female | HDC-CR24-7B-2 GR | **1758550000** |

**Note** For 2 x 7 modules



## Selection of Housings RockStar® IP66
## Size 12

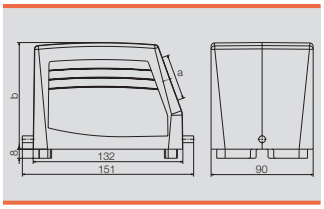
Further housings are available, see Chapter E for IP66

## Hood

### Plug housing, cable entry sideways



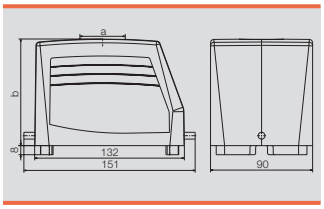
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TSLU 1M32G | **1788320000** |
| M 40 | w. threading | | 94 | HDC 48B TSLU 1M40G | **1788310000** |
| M 50 | w. threading | | 94 | HDC 48B TSLU 1M50G | **1788300000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TOLU 1M32G | **1788350000** |
| M 50 | w. threading | | 94 | HDC 48B TOLU 1M50G | **1788330000** |

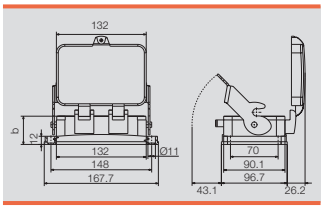



## Base

### Bulkhead housing



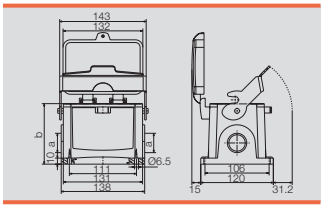
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | with cover | 62 | HDC 48B ADLU | **1222900000** |



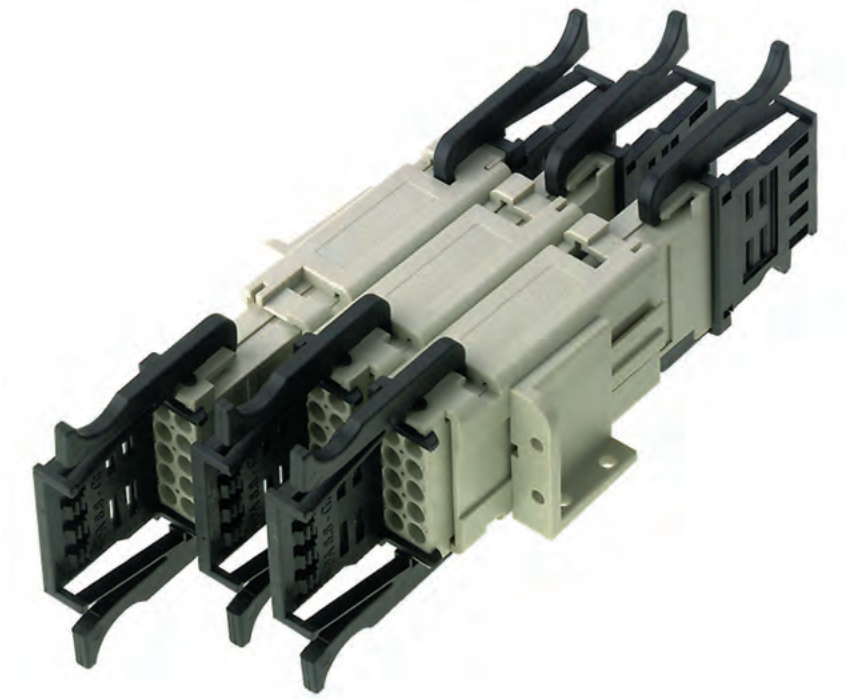

### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 100 | HDC 48B SLU 2M32G | **1788370000** |
| M 32 | w. threading | with cover | 120 | HDC 48B SDLU 2M32G | **1788390000** |
| M 40 | w. threading | | 100 | HDC 48B SLU 2M40G | **1788360000** |



# ModuFlex C



The ModuFlex C coupling system together with modules from the ConCept connector system provides a flexible and low-cost solution for indoor applications (IP20 zone).

ConCept 3–20-pin male and female modules of the same pin number and design can be mounted in the coupling frame. Up to 5 coupling frames can be combined into a block with the help of the tongue-and-groove locking system. The coupling frames can also be locked onto TS32 and TS35 rail by using the mounting feet.

Each individual module can be individually plugged in and released. Thanks to the optional extractor / strain relief tool and the snap-on mounting bracket, ModuFlex C-coupling frames and the male and female modules of the ConCept system allow a wide range of combinations for all possible connector configurations.

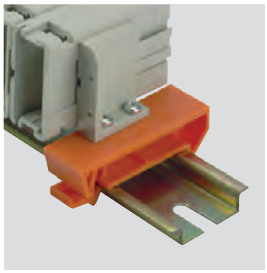
## Coupling frame



- Max. 5 coupling frames in a row
- Protection from incorrect connection
- Force required to withdraw a single module from the coupling frame >170 N

## Mounting bracket / mounting foot





**Mounting bracket**
- For fixing the coupling frames to a flat surface and to MOFU mounting foot
- Hole diameter 3 mm

**Mounting foot**
- For fixing coupling frames to TS35x7.5 and TS35x15 mounting rails using mounting brackets

## Technical data C-CR

| | Coupling frame |
|---|---|
| Insulation | PC |
| Colour | grey (RAL 7032) |
| Temperature range | –40 ... +120 °C |
| Flammability class to UL 94 | V-0 |

## Technical data C-MW MOFU

| | Mounting bracket | Mounting foot |
|---|---|---|
| Insulation | PC | PA |
| Colour | grey (RAL 7032) | orange |
| Temperature range | –40 ... +120 °C | –40 ... +120 °C |
| Flammability class to UL 94 | V-0 | V-2 |

## Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| ModuFlex C-CR grey | 10 | **1746060000** |

## Ordering data

| Type | | Qty. | Order No. |
|---|---|---|---|
| ModuFlex C-MW | Mounting bracket | 10 | **1746070000** |
| MOFU | Mounting foot | 20 | **0495660000** |

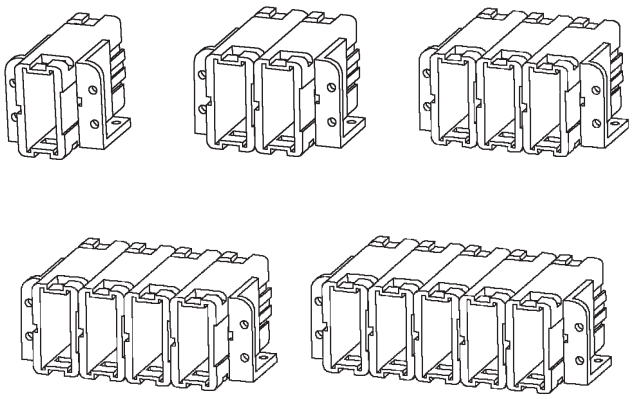
## Accessories

| Type | Qty. | Order No. |
|---|---|---|
| **Crosshead screw**<br>for fastening the coupling to the mounting foot, to front and back panel and to a flat surface | | |
| PTSC KB 30 x 6 | 100 | **1766120000** |
| **Spacer pin**<br>M3 x 27 and clamping screws M3 x 8 in set. For mounting the coupling to flat panels. 1 pack contains 80 screws and 40 spacer pins, separately packaged. | | |
| ABST.BOLZM3X27+KLSC-KIT | 1 | **1766130000** |

## Module extractor and strain relief tool



## Coupling frame – sets



Set consists of:
- 1 – 5 coupling frames
- 1 right and 1 left mounting bracket

## Technical data C-MH/ZE

| | Module extractor and strain relief tool |
|---|---|
| Insulation | PA |
| Colour | black |
| Temperature range | –40 ... +120 °C |
| Flammability class to UL 94 | V-2 |

## Technical data

| | Mounting bracket | Mounting foot |
|---|---|---|
| Insulation | PC | PA |
| Colour | grey (RAL 7032) | orange |
| Temperature range | –40 ... +120 °C | –40 ... +120 °C |
| Flammability class to UL 94 | V-0 | V-2 |

## Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| ModuFlex C-MH/ZE black | 10 | **1752970000** |

## Ordering data

| Type | No. of coupling frames | Qty. | Order No. |
|---|---|---|---|
| ModuFlex C-KlTo.M.MW-1F | 1 | 1 | **1765570000** |
| ModuFlex C-KlTo.M.MW-2F | 2 | 1 | **1765580000** |
| ModuFlex C-KlTo.M.MW-3F | 3 | 1 | **1765590000** |
| ModuFlex C-KlTo.M.MW-4F | 4 | 1 | **1765600000** |
| ModuFlex C-KlTo.M.MW-5F | 5 | 1 | **1765610000** |

## Accessories

| Type | Qty. | Order No. |
|---|---|---|
| **Crosshead screw**<br>for fastening the coupling to the mounting foot, to front and back panel and to a flat surface | | |
| PTSC KB 30 x 6 | 100 | **1766120000** |
| **Spacer pin**<br>M3 x 27 and clamping screws M3 x 8 in set. For mounting the coupling to flat panels. 1 pack contains 80 screws and 40 spacer pins, separately packaged. | | |
| ABST.BOLZM3X27+KLSC-KIT | 1 | **1766130000** |

# RockStar® Housings IP66 / NEMA Type 4X

**RockStar® Housings IP66 / NEMA Type 4X**

**Introduction** E.2

**RockStar® Housings IP66 / NEMA Type 4X** E.4

Size 1 - 12

# RockStar® Housings IP66 / NEMA Type 4X

Where something extra comes as standard. The high quality workmanship of RockStar® IP66 housings begins with the material from which all interlock mechanisms are made: stainless steel. It guarantees a long lifespan with high resistance to corrosion and impact. For the die-cast aluminium variants, a high-quality, multi-stage surface sealing provides years of safety and reliability – even under the most extreme conditions. With just one housing series, Weidmüller delivers the proper protective solution for your heavy-duty connector – so your choice is simple.

Other standard extras:
- A patented spring system provides a secure interlock and easier handling.
- Integrated threads: your choice of cable glands
- Integrated insulation strips: for worry-free transmission of higher voltages

RockStar® IP66 housings are available in 12 sizes and can be combined with all fixed-pole and modular inserts.

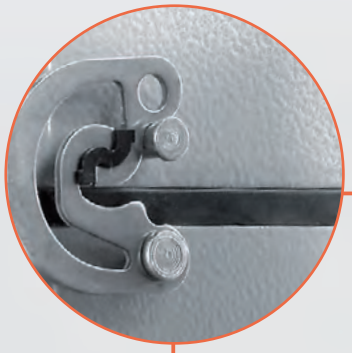






**Sturdy**

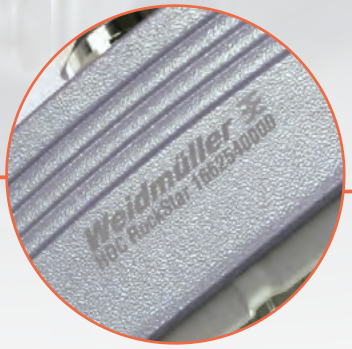
Stainless steel interlock systems and multi-stage surface sealing results in high durability.



**Reliable**

Guaranteed protection against jets of water, corrosion, ice and rain, according to IEC 60529 and UL.





**Practical**

Laser labelling for permanent identification and faster allocation.

## Plastic housing

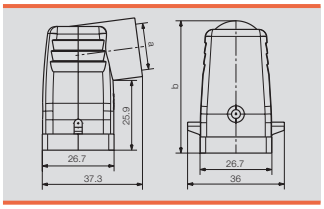
## Size 1

## Hood

### Plug housing, cable entry sideways



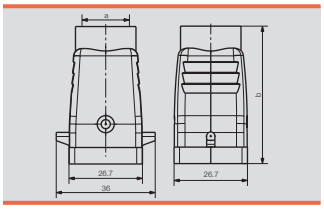
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 07A TWLU 1M20G | **1788510000** |
| PG 11 | w. threading | | 49.2 | HDC 07A TWLU 1PG11G | **1652400000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 07A TOLU 1M20G | **1788520000** |
| PG 11 | w. threading | | 50 | HDC 07A TOLU 1PG11G | **1652380000** |



## Plastic housing

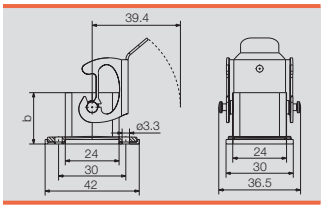
### Size 1

### Base

**Bulkhead housing**



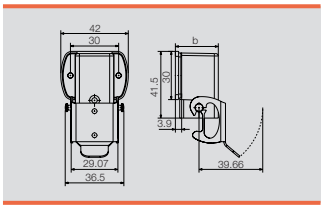
| Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 23 | HDC 07A ALU | **1652410000** |




**Bulkhead housing, angled**



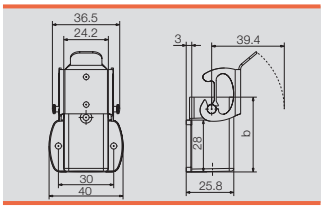
| Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|
| angled | | 26.7 | HDC 07A AWLU | **1652420000** |




**Base housing**



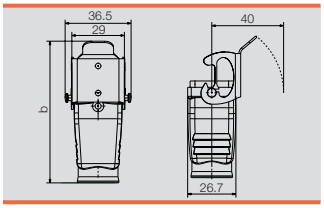
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 07A SLU 1M20G | **1788530000** |
| PG 11 | w. adapter | | 41.5 | HDC 07A SLU 1PG11S | **1652440000** |




**Coupling housing**



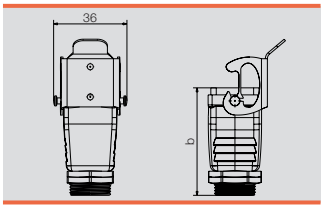
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 07A KOLU 1M20G | **1788540000** |
| PG 11 | w. threading | | 53.5 | HDC 07A KOLU 1PG11G | **1652460000** |




**Screw mounting housing**



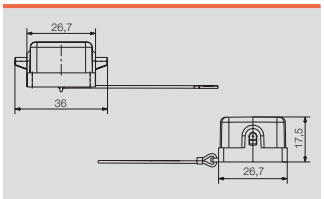
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 13.5 | w. threading | | 54 | HDC 07A ELU 1PG13G | **1900990000** |




**Cover**



| Version | Type | Order No. |
|---|---|---|
| for female insert | HDC 07A DMDL 2BO | **1665770000** |
| for male insert | HDC 07A DODL 2BO | **1665760000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Metal housing

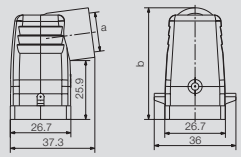
## Size 1

## Hood

### Plug housing, cable entry sideways



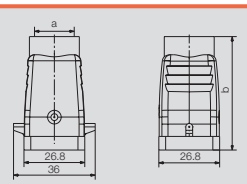
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 04A TWLU 1M20G | **1788810000** |
| PG 11 | w. threading | | 49.2 | HDC 04A TWLU 1PG11G | **1652480000** |
| PG 11 | w. threading | | 49.2 | HDC 04A TWLU 1PG11S BL | **1900310000** |




### Plug housing, cable entry at top



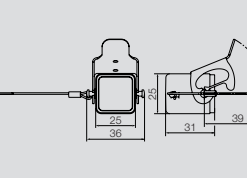
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 16 | w. threading | | 50 | HDC 04A TOLU 1M16G | **1206090000** |
| M 20 | w. threading | | 50 | HDC 04A TOLU 1M20G | **1788820000** |
| PG 11 | w. threading | | 50 | HDC 04A TOLU 1PG11G | **1652470000** |
| PG 11 | w. threading | | 50 | HDC 04A TOLU 1PG11S BL | **1900280000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | for male insert | HDC 04A DODL 1LB | **1963690000** |



## Metal housing

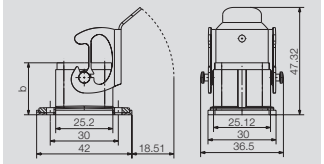
### Size 1

### Base

#### Bulkhead housing



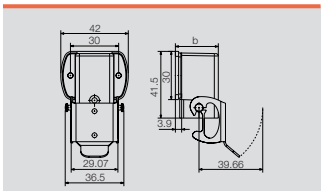
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 04A ALU | **1497600000** |




#### Bulkhead housing, angled



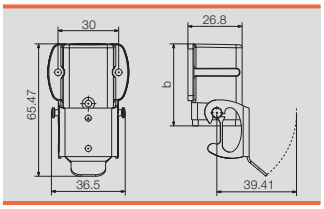
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | angled | | 26.7 | HDC 04A AWLU | **1497700000** |
| | angled | | 26.7 | HDC 04A AWLU BL | **1899890000** |




#### Base housing



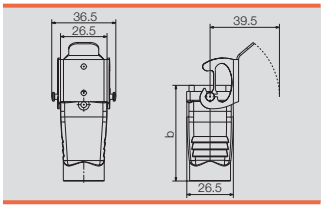
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 04A SLU 1M20G | **1788830000** |
| PG 11 | w. threading | | 41.5 | HDC 04A SLU 1PG11G | **1652490000** |
| PG 11 | w. threading | | 41.5 | HDC 04A SLU 1PG11G BL | **1899800000** |




#### Coupling housing



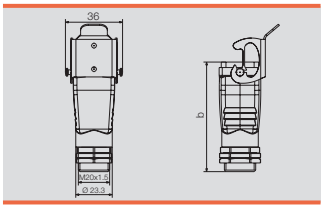
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 04A KOLU 1M20G | **1788840000** |
| PG 11 | w. threading | | 53.5 | HDC 04A KOLU 1PG11G | **1652500000** |
| PG 11 | w. threading | | 53.5 | HDC 04A KOLU 1PG11S BL | **1899920000** |




#### Screw mounting housing



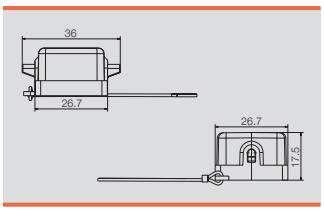
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 04A ELU 1M20G | **1900320000** |
| PG 13 | w. threading | | 54 | HDC 04A ELU 1PG13S | **1900330000** |
| PG 13 | w. threading | | 54 | HDC 04A ELU 1PG13S bl | **1900350000** |




#### Cover



| | Version | Cover | | Type | Order No. |
|---|---|---|---|---|---|
| | for female insert | | | HDC 04A DMDL 2BO | **1665750000** |
| | for male insert | | | HDC 04A DODL 2BO | **1665740000** |



## Plastic housing

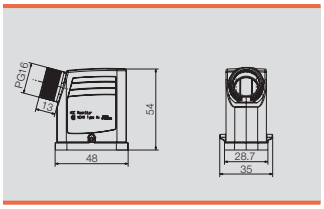
## Size HQ

### Hood

**Plug housing, cable entry sideways**



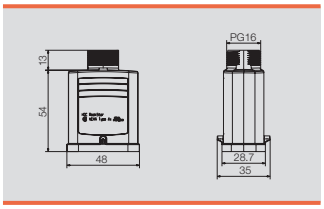
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 54 | HDC HQP TSLU 1PG16 | **1003090000** |




**Plug housing, cable entry at top**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 67 | HDC HQP TOLU 1PG16 | **1003070000** |



## Plastic housing

## Size HQ

### Base

**Bulkhead housing**



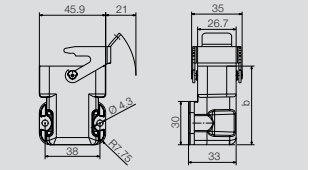
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 19.5 | HDC HQP ALU | **1003040000** |




**Bulkhead housing, angled**



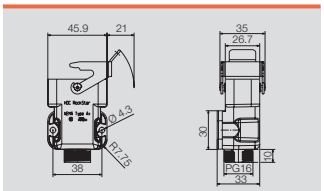
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | angled | | 54.5 | HDC HQP AWLU | **1003060000** |




**Base housing**



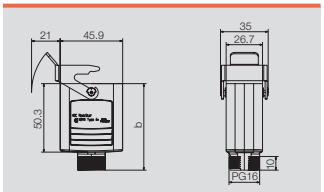
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 54.5 | HDC HQP SLU 1PG16 | **1003110000** |




**Coupling housing**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 16 | w. threading | | 63.5 | HDC HQP KOLU 1PG16 | **1003120000** |

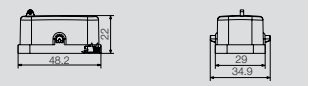



**Cover**



| | Version | | Type | Order No. |
|---|---|---|---|---|
| | for female insert | | HDC HQP DMD 2BO | **1003130000** |
| | for male insert | | HDC HQP DOD 2BO | **1003140000** |

| Note | For plastic and metal housings |
|---|---|



# RockStar® Housings IP66 / NEMA Type 4X

## Die cast zinc housing (EMC)

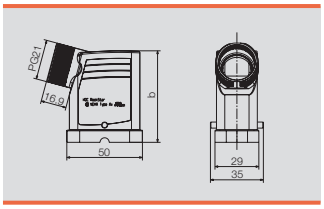
## Size HQ

### Hood

**Plug housing, cable entry sideways**



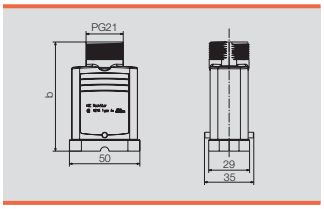
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 21 | w. threading | | 60.5 | HDC HQM TSLU 1PG21 | **1003100000** |




**Plug housing, cable entry at top**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 21 | w. threading | | 77.5 | HDC HQM TOLU 1PG21 | **1003080000** |



## Die cast zinc housing (EMC)

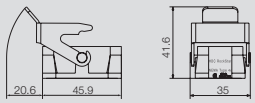
## Size HQ

### Base

**Bulkhead housing**



| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 20.5 | HDC HQM ALU | **1003050000** |




**Cover**



**Material:** Plastic

| | Version | Type | Order No. |
|---|---|---|---|
| | for female insert | HDC HQP DMD 2BO | **1003130000** |
| | for male insert | HDC HQP DOD 2BO | **1003140000** |

| Note | For plastic and metal housings |
|---|---|



# RockStar® Housings IP66 / NEMA Type 4X

## End locking, lower side

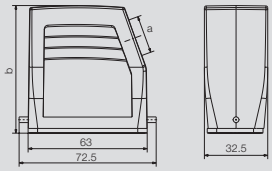
## Size 2

## Hood

### Plug housing, cable entry sideways



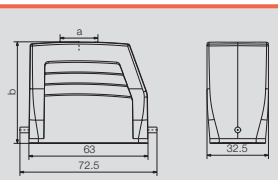
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 10A TSLU 1M20G | **1967660000** |
| M 20 | w. threading | | 68 | HDC 15A TSLU 1M20G | **1788860000** |
| M 25 | w. threading | | 68 | HDC 15A TSLU 1M25G | **1788850000** |
| PG 16 | w. threading | | 54 | HDC 10A TSLU 1PG16G | **1663810000** |
| PG 16 | w. threading | | 68 | HDC 15A TSLU 1PG16G | **1663850000** |
| PG 21 | w. threading | | 68 | HDC 15A TSLU 1PG21G | **1663870000** |




### Plug housing, cable entry at top



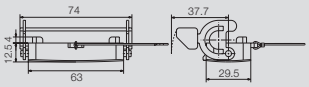
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 10A TOLU 1M20G | **1788620000** |
| M 25 | w. threading | | 54 | HDC 10A TOLU 1M25G | **1788610000** |
| PG 11 | w. threading | | 54 | HDC 10A TOLU 2PG11G | **1746170000** |
| PG 16 | w. threading | | 54 | HDC 10A TOLU 1PG16G | **1663930000** |
| PG 21 | w. threading | | 68 | HDC 15A TOLU 1PG21G | **1663990000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | For hoods | HDC 10A DODL 1LB | **1665890000** |



## End locking, lower side

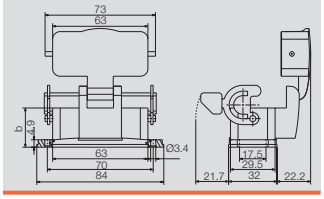
## Size 2

## Base

### Bulkhead housing



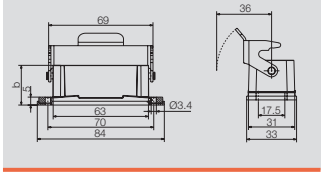
| Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 25 | HDC 10A ALU | **1664040000** |
| | with cover | 37.5 | HDC 10A ADLU | **1664060000** |




### Bulkhead housing



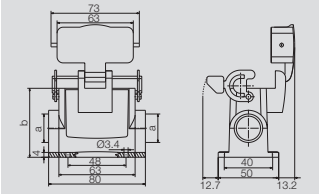
| Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 26 | HDC 10A ALU SL | **1021450000** |




### Base housing



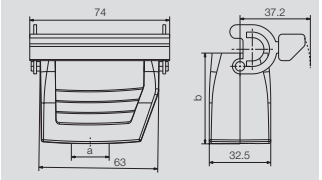
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10A SLU 1M20G | **1901100000** |
| M 20 | w. threading | with cover | 69.5 | HDC 10A SDLU 1M20G | **1901010000** |
| M 20 | w. threading | | 57 | HDC 10A SLU 2M20G | **1788640000** |
| M 20 | w. threading | with cover | 69.5 | HDC 10A SDLU 2M20G | **1788660000** |
| M 25 | w. threading | | 57 | HDC 10A SLU 1M25G | **1901160000** |
| M 25 | w. threading | with cover | 69.5 | HDC 10A SDLU 1M25G | **1901040000** |
| M 25 | w. threading | | 57 | HDC 10A SLU 2M25G | **1788630000** |
| M 25 | w. threading | with cover | 69.5 | HDC 10A SDLU 2M25G | **1788650000** |
| PG 16 | w. threading | | 57 | HDC 10A SLU 1PG16G | **1664170000** |
| PG 16 | w. threading | with cover | 69.5 | HDC 10A SDLU 1PG16G | **1664410000** |
| PG 16 | w. threading | | 57 | HDC 10A SLU 2PG16G | **1664190000** |
| PG 16 | w. threading | with cover | 69.5 | HDC 10A SDLU 2PG16G | **1664420000** |
| PG 21 | w. threading | | 57 | HDC 10A SLU 1PG21G | **1664210000** |




### Coupling housing



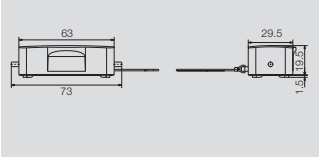
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 48 | HDC 10A KLU 1M25G | **1788670000** |
| PG 9 | w. threading | | 48 | HDC 10A KLU 2PG09G | **1783250000** |
| PG 16 | w. threading | | 48 | HDC 10A KLU 1PG16G | **1664560000** |
| PG 21 | w. threading | | 62 | HDC 15A KLU 1PG21G | **1664630000** |




### Cover



| Version | Type | Order No. |
|---|---|---|
| For bases | HDC 10A DMDL 2BO | **1665880000** |



# RockStar® Housings IP66 / NEMA Type 4X

## End locking, lower side

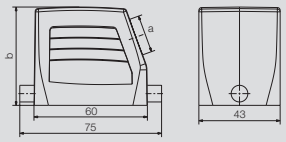
## Size 3

## Hood

### Plug housing, cable entry sideways



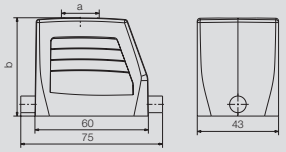
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TSLU 1M20G | **1788100000** |
| M 25 | w. threading | | 52 | HDC 06B TSLU 1M25G | **1788090000** |
| M 25 | w. threading | | 72 | HDC 16D TSLU 1M25G | **1787480000** |
| M 32 | w. threading | | 72 | HDC 16D TSLU 1M32G | **1787470000** |
| PG 13.5 | w. threading | | 52 | HDC 06B TSLU 1PG13G | **1670530000** |
| PG 16 | w. threading | | 52 | HDC 06B TSLU 1PG16G | **1652520000** |
| PG 21 | w. threading | | 72 | HDC 16D TSLU 1PG21G | **1652560000** |
| PG 29 | w. threading | | 72 | HDC 16D TSLU 1PG29G | **1652580000** |




### Plug housing, cable entry at top



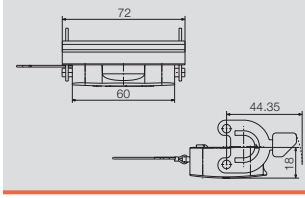
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 06B TOLU 1M20G | **1788120000** |
| M 25 | w. threading | | 52 | HDC 06B TOLU 1M25G | **1788110000** |
| M 25 | w. threading | | 72 | HDC 16D TOLU 1M25G | **1787500000** |
| M 32 | w. threading | | 72 | HDC 16D TOLU 1M32G | **1787490000** |
| PG 13.5 | w. threading | | 52 | HDC 06B TOLU 1PG13G | **1670500000** |
| PG 16 | w. threading | | 52 | HDC 06B TOLU 1PG16G | **1652640000** |
| PG 21 | w. threading | | 72 | HDC 16D TOLU 1PG21G | **1652680000** |
| PG 29 | w. threading | | 72 | HDC 16D TOLU 1PG29G | **1652700000** |




### Cover



| | Version | | Type | Order No. |
|---|---|---|---|---|
| | For hoods | | HDC 06B DMDL 1LB | **1665210000** |



## End locking, lower side

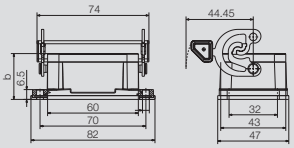
## Size 3

## Base

### Bulkhead housing



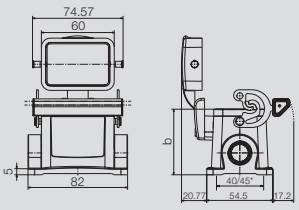
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 06B ALU | **1202100000** |
| | | with cover | 47 | HDC 06B ADLU | **1202500000** |
| | | | 27.8 | HDC 06B ALU O-RING | **1019870000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 06B SLU 1M20G | **1900460000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 1M20G | **1900360000** |
| M 20 | w. threading | | 54 | HDC 06B SLU 2M20G | **1788140000** |
| M 20 | w. threading | with cover | 72 | HDC 06B SDLU 2M20G | **1788170000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 1M25G | **1900480000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 1M25G | **1900380000** |
| M 25 | w. threading | | 74 | HDC 16D SLU 1M25G | **1900880000** |
| M 25 | w. threading | with cover | 92 | HDC 16D SDLU 1M25G | **1900820000** |
| M 25 | w. threading | | 54 | HDC 06B SLU 2M25G | **1788130000** |
| M 25 | w. threading | | 74 | HDC 16D SLU 2M25G | **1787520000** |
| M 25 | w. threading | with cover | 92 | HDC 16D SDLU 2M25G | **1787540000** |
| M 25 | w. threading | with cover | 72 | HDC 06B SDLU 2M25G | **1788160000** |
| M 32 | w. threading | | 74 | HDC 16D SLU 1M32G | **1900900000** |
| M 32 | w. threading | | 74 | HDC 16D SLU 2M32G | **1787510000** |
| PG 16 | w. threading | | 54 | HDC 06B SLU 1PG16G | **1652750000** |
| PG 16 | w. threading | with cover | 72 | HDC 06B SDLU 1PG16G | **1652980000** |
| PG 16 | w. threading | | 54 | HDC 06B SLU 2PG16G | **1652760000** |
| PG 16 | w. threading | with cover | 72 | HDC 06B SDLU 2PG16G | **1652990000** |
| PG 21 | w. threading | | 74 | HDC 16D SLU 2PG21G | **1652840000** |

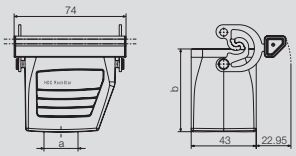



* Mounting dimensions for size-3 base housings, tall shape (16D)

### Coupling housing



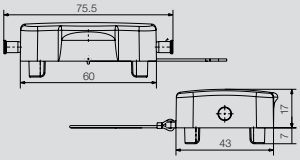
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 55 | HDC 06B KLU 1M25G | **1021330000** |
| PG 21 | w. threading | | 75 | HDC 16D KLU 1PG21G | **1653230000** |
| PG 16 | w. threading | | 55 | HDC 06B KLU 1PG16G | **1653200000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | For bases | HDC 06B DODL 2BO | **1665200000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, lower side

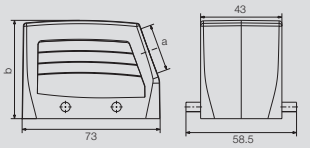
## Size 4

## Hood

### Plug housing, cable entry sideways



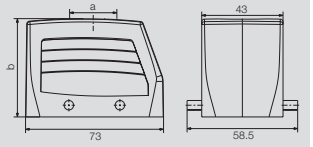
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TSBU 1M20G | **1787560000** |
| M 25 | w. threading | | 52 | HDC 10B TSBU 1M25G | **1787550000** |
| M 25 | w. threading | | 72 | HDC 24D TSBU 1M25G | **1787240000** |
| M 32 | w. threading | | 72 | HDC 24D TSBU 1M32G | **1787230000** |
| PG 16 | w. threading | | 52 | HDC 10B TSBU 1PG16G | **1654070000** |
| PG 21 | w. threading | | 52 | HDC 10B TSBU 1PG21G | **1654090000** |
| PG 21 | w. threading | | 72 | HDC 24D TSBU 1PG21G | **1654150000** |
| PG 29 | w. threading | | 72 | HDC 24D TSBU 1PG29G | **1654170000** |




### Plug housing, cable entry at top



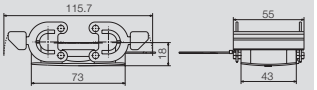
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 52 | HDC 10B TOBU 1M20G | **1787600000** |
| M 25 | w. threading | | 52 | HDC 10B TOBU 1M25G | **1787590000** |
| M 25 | w. threading | | 72 | HDC 24D TOBU 1M25G | **1787300000** |
| M 32 | w. threading | | 72 | HDC 24D TOBU 1M32G | **1787290000** |
| PG 16 | w. threading | | 52 | HDC 10B TOBU 1PG16G | **1654220000** |
| PG 21 | w. threading | | 52 | HDC 10B TOBU 1PG21G | **1654240000** |
| PG 29 | w. threading | | 72 | HDC 24D TOBU 1PG29G | **1654320000** |




### Cover



| | Version | | Type | Order No. |
|---|---|---|---|---|
| | For hoods | | HDC 10B DMDQ 2QB | **1665240000** |



## Side locking, lower side

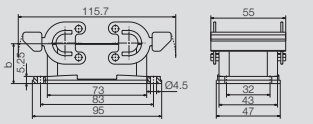
## Size 4

## Base

### Bulkhead housing



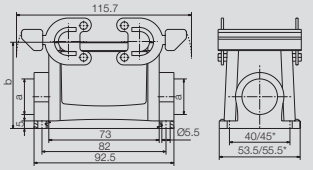
| Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 29.3 | HDC 10B ABU | **1205000000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SBU 1M20G | **1901360000** |
| M 20 | w. threading | | 57 | HDC 10B SBU 2M20G | **1787640000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 1M25G | **1901370000** |
| M 25 | w. threading | | 57 | HDC 10B SBU 2M25G | **1787630000** |
| M 25 | w. threading | | 74 | HDC 24D SBU 1M25G | **1903210000** |
| M 25 | w. threading | | 74 | HDC 24D SBU 2M25G | **1787350000** |
| M 32 | w. threading | | 74 | HDC 24D SBU 1M32G | **1903220000** |
| M 32 | w. threading | | 74 | HDC 24D SBU 2M32G | **1787360000** |
| PG 16 | w. threading | | 57 | HDC 10B SBU 1PG16G | **1654370000** |
| PG 16 | w. threading | | 57 | HDC 10B SBU 2PG16G | **1654380000** |
| PG 21 | w. threading | | 74 | HDC 24D SBU 2PG21G | **1654450000** |
| PG 29 | w. threading | | 74 | HDC 24D SBU 1PG29G | **1654470000** |

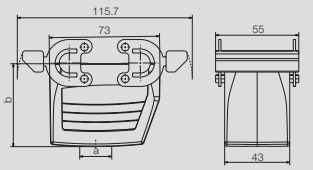



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



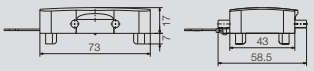
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KBU 1M20G | **1787720000** |
| M 25 | w. threading | | 55 | HDC 10B KBU 1M25G | **1021250000** |
| PG 16 | w. threading | | 55 | HDC 10B KBU 1PG16G | **1654580000** |




### Cover



| Version | Type | Order No. |
|---|---|---|
| For bases | HDC 10B DODQ 4BO | **1665230000** |



# RockStar® Housings IP66 / NEMA Type 4X

## End locking, lower side

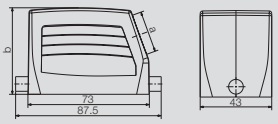
## Size 4

## Hood

### Plug housing, cable entry sideways



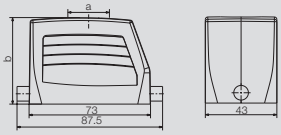
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 52 | HDC 10B TSLU 1M25G | **1787580000** |
| M 25 | w. threading | | 72 | HDC 24D TSLU 1M25G | **1787280000** |
| M 32 | w. threading | | 72 | HDC 24D TSLU 1M32G | **1787270000** |
| PG 16 | w. threading | | 52 | HDC 10B TSLU 1PG16G | **1655210000** |
| PG 21 | w. threading | | 72 | HDC 24D TSLU 1PG21G | **1655250000** |
| PG 29 | w. threading | | 72 | HDC 24D TSLU 1PG29G | **1655270000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 52 | HDC 10B TOLU 1M25G | **1787620000** |
| M 25 | w. threading | | 72 | HDC 24D TOLU 1M25G | **1787340000** |
| M 32 | w. threading | | 72 | HDC 24D TOLU 1M32G | **1787330000** |
| PG 16 | w. threading | | 52 | HDC 10B TOLU 1PG16G | **1655320000** |
| PG 21 | w. threading | | 72 | HDC 24D TOLU 1PG21G | **1655360000** |
| PG 29 | w. threading | | 72 | HDC 24D TOLU 1PG29G | **1655380000** |



## End locking, lower side

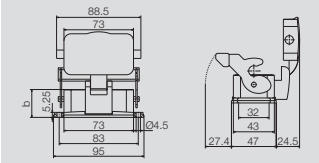
## Size 4

## Base

### Bulkhead housing



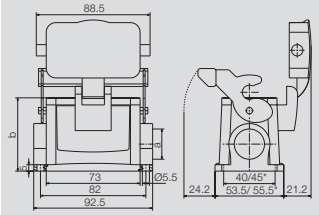
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B ALU | **1206100000** |
| | | with cover | 47 | HDC 10B ADLU | **1206500000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 10B SLU 1M20G | **1901620000** |
| M 20 | w. threading | with cover | 79.5 | HDC 10B SDLU 1M20G | **1901570000** |
| M 20 | w. threading | | 57 | HDC 10B SLU 2M20G | **1787660000** |
| M 20 | w. threading | with cover | 79.5 | HDC 10B SDLU 2M20G | **1787700000** |
| M 25 | w. threading | | 57 | HDC 10B SLU 1M25G | **1901640000** |
| M 25 | w. threading | with cover | 96.5 | HDC 24D SDLU 1M25G | **1903410000** |
| M 25 | w. threading | | 57 | HDC 10B SLU 2M25G | **1787650000** |
| M 25 | w. threading | with cover | 96.5 | HDC 24D SDLU 2M25G | **1787420000** |
| M 32 | w. threading | | 74 | HDC 24D SLU 1M32G | **1903560000** |
| M 32 | w. threading | with cover | 96.5 | HDC 24D SDLU 1M32G | **1903510000** |
| M 32 | w. threading | | 74 | HDC 24D SLU 2M32G | **1787370000** |
| M 32 | w. threading | with cover | 96.5 | HDC 24D SDLU 2M32G | **1787410000** |
| PG 16 | w. threading | | 57 | HDC 10B SLU 2PG16G | **1655470000** |
| PG 16 | w. threading | with cover | 79.5 | HDC 10B SDLU 2PG16G | **1655680000** |

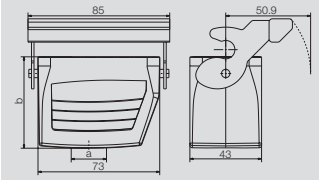



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 55 | HDC 10B KLU 1M20G | **1787740000** |
| M 25 | w. threading | | 55 | HDC 10B KLU 1M25G | **1787730000** |
| M 25 | w. threading | | 75 | HDC 24D KLU 1M25G | **1787460000** |
| M 32 | w. threading | | 75 | HDC 24D KLU 1M32G | **1787450000** |
| PG 16 | w. threading | | 55 | HDC 10B KLU 1PG16G | **1655890000** |



## Side locking, upper side

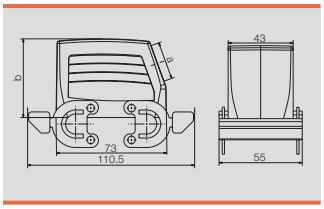
## Size 4

## Hood

### Plug housing, cable entry sideways



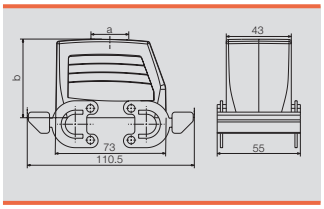
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 52 | HDC 10B TSBO 1M25G | **1787570000** |
| M 25 | w. threading | | 72 | HDC 24D TSBO 1M25G | **1787260000** |
| M 32 | w. threading | | 72 | HDC 24D TSBO 1M32G | **1787250000** |
| PG 16 | w. threading | | 52 | HDC 10B TSBO 1PG16G | **1654750000** |
| PG 16 | w. threading | | 72 | HDC 24D TSBO 1PG16G | **1654810000** |
| PG 21 | w. threading | | 72 | HDC 24D TSBO 1PG21G | **1654790000** |




### Plug housing, cable entry at top



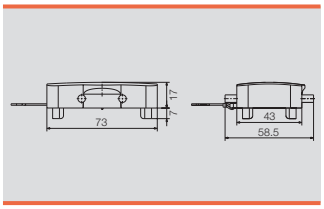
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 52 | HDC 10B TOBO 1M25G | **1787610000** |
| PG 16 | w. threading | | 52 | HDC 10B TOBO 1PG16G | **1654860000** |
| PG 29 | w. threading | | 72 | HDC 24D TOBO 1PG29G | **1654920000** |




### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 10B DMDQ 4BO | **1665250000** |

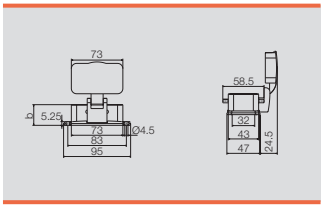



## Base

### Bulkhead housing



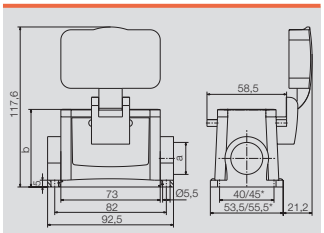
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | | HDC 10B ABO | **1052430000** |
| | | with cover | 51.6 | HDC 10B ADBO | **1205600000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | with cover | 79.5 | HDC 10B SDBO 1M20G | **1901490000** |
| M 20 | w. threading | with cover | 79.5 | HDC 10B SDBO 2M20G | **1787680000** |
| M 25 | w. threading | with cover | 79.5 | HDC 10B SDBO 1M25G | **1901510000** |
| M 25 | w. threading | with cover | 96.5 | HDC 24D SDBO 1M25G | **1903370000** |
| M 25 | w. threading | with cover | 79.5 | HDC 10B SDBO 2M25G | **1787670000** |
| M 25 | w. threading | with cover | 96.5 | HDC 24D SDBO 2M25G | **1787400000** |
| PG 16 | w. threading | with cover | 79.5 | HDC 10B SDBO 2PG16G | **1655000000** |

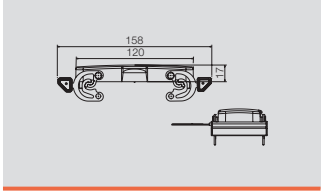



* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

### Cover



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 10B DODQ 2QB | **1009080000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Central-locking clamp

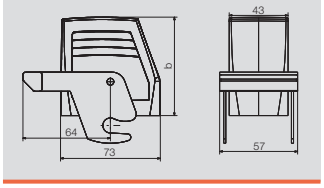
## Size 4

### Hood

**Plug housing, cable entry sideways**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 72 | HDC 24D TSZO 1M25G | **1903610000** |
| PG 21 | w. threading | | 72 | HDC 24D TSZO 1PG21G | **1968360000** |

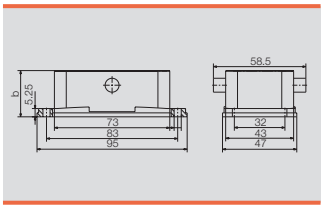



### Base

**Bulkhead housing**



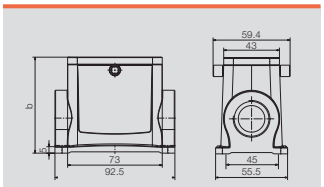
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 10B AZO | **1901700000** |




**Base housing**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 21 | w. threading | | 74 | HDC 24D SZO 2PG21G | **1968350000** |



# RockStar® Housings IP66 / NEMA Type 4X

## End locking, lower side

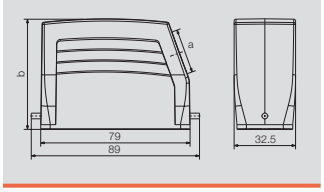
## Size 5

## Hood

### Plug housing, cable entry sideways



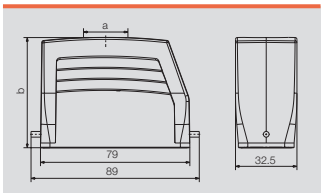
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 58 | HDC 16A TSLU 1M20G | **1041760000** |
| M 20 | w. threading | | 72 | HDC 25A TSLU 1M20G | **1788680000** |
| M 25 | w. threading | | 58 | HDC 16A TSLU 1M25G | **1788740000** |
| M 25 | w. threading | | 72 | HDC 25A TSLU 1M25G | **1788690000** |
| PG 16 | w. threading | | 58 | HDC 16A TSLU 1PG16G | **1664690000** |
| PG 16 | w. threading | | 72 | HDC 25A TSLU 1PG16G | **1664730000** |
| PG 21 | w. threading | | 72 | HDC 25A TSLU 1PG21G | **1664750000** |




### Plug housing, cable entry at top



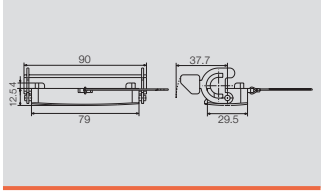
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 72 | HDC 25A TOLU 1M20G | **1788710000** |
| M 25 | w. threading | | 58 | HDC 16A TOLU 1M25G | **1788750000** |
| M 25 | w. threading | | 72 | HDC 25A TOLU 1M25G | **1788700000** |
| PG 16 | w. threading | | 58 | HDC 16A TOLU 1PG16G | **1664810000** |
| PG 21 | w. threading | | 72 | HDC 25A TOLU 1PG21G | **1664870000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | For hoods | HDC 16A DODL 1LB | **1665900000** |



## End locking, lower side

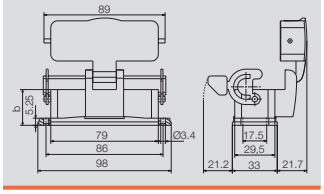
## Size 5

### Base

**Bulkhead housing**



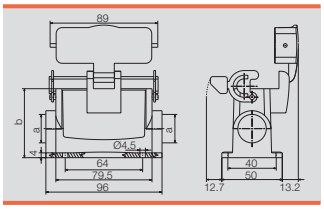
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 25 | HDC 16A ALU | **1664920000** |
| | | with cover | 44.5 | HDC 16A ADLU | **1664940000** |




**Base housing**



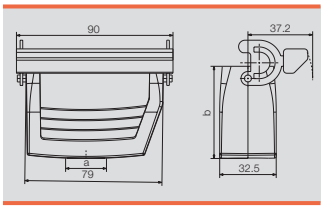
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 57 | HDC 16A SLU 2M20G | **1788770000** |
| M 20 | w. threading | with cover | 76.5 | HDC 16A SDLU 2M20G | **1788790000** |
| M 25 | w. threading | | 57 | HDC 16A SLU 2M25G | **1788760000** |
| M 25 | w. threading | with cover | 76.5 | HDC 16A SDLU 2M25G | **1788780000** |
| PG 16 | w. threading | | 57 | HDC 16A SLU 2PG16G | **1665070000** |
| PG 16 | w. threading | with cover | 76.5 | HDC 16A SDLU 2PG16G | **1665300000** |
| PG 21 | w. threading | | 57 | HDC 16A SLU 1PG21G | **1665090000** |




**Coupling housing**



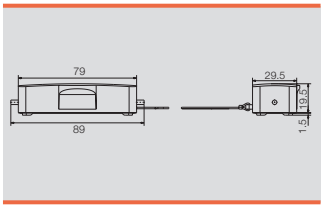
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 53 | HDC 16A KLU 1M25G | **1788800000** |
| PG 16 | w. threading | | 53 | HDC 16A KLU 1PG16G | **1665450000** |




**Cover**



| | Version | | Type | Order No. |
|---|---|---|---|---|
| | For bases | | HDC 16A DMDL 2BO | **1665910000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, lower side

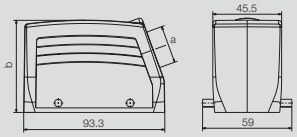
## Size 6

## Hood

### Plug housing, cable entry sideways



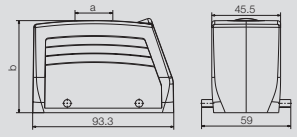
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBU 1M25G | **1788180000** |
| M 25 | w. threading | | 76 | HDC 40D TSBU 1M25G | **1787010000** |
| M 32 | w. threading | | 76 | HDC 40D TSBU 1M32G | **1787000000** |
| M 40 | w. threading | | 61 | HDC 16B TSBU 1M40G | **1809620000** |
| M 40 | w. threading | | 76 | HDC 40D TSBU 1M40G | **1904800000** |
| PG 21 | w. threading | | 61 | HDC 16B TSBU 1PG21G | **1656480000** |
| PG 21 | w. threading | | 76 | HDC 40D TSBU 1PG21G | **1656520000** |
| PG 29 | w. threading | | 76 | HDC 40D TSBU 1PG29G | **1656540000** |




### Plug housing, cable entry at top



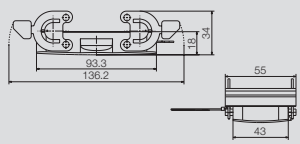
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBU 1M25G | **1788210000** |
| M 25 | w. threading | | 76 | HDC 40D TOBU 1M25G | **1787070000** |
| M 32 | w. threading | | 76 | HDC 40D TOBU 1M32G | **1787060000** |
| PG 21 | w. threading | | 61 | HDC 16B TOBU 1PG21G | **1656590000** |
| PG 21 | w. threading | | 76 | HDC 40D TOBU 1PG21G | **1656630000** |
| PG 29 | w. threading | | 76 | HDC 40D TOBU 1PG29G | **1656650000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | For hoods | HDC 16B DMDQ 2QB | **1665270000** |



## Side locking, lower side

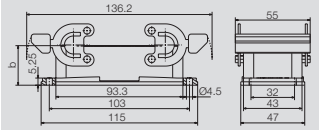
## Size 6

## Base

### Bulkhead housing



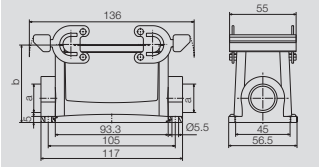
| Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 29 | HDC 16B ABU | **1208600000** |




### Base housing



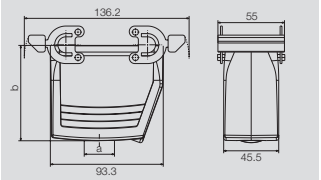
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SBU 1M25G | **1899980000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 1M25G | **1902970000** |
| M 25 | w. threading | | 64 | HDC 16B SBU 2M25G | **1788240000** |
| M 25 | w. threading | | 84 | HDC 40D SBU 2M25G | **1787120000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 1M32G | **1902990000** |
| M 32 | w. threading | | 84 | HDC 40D SBU 2M32G | **1787110000** |
| PG 21 | w. threading | | 64 | HDC 16B SBU 1PG21G | **1656720000** |
| PG 21 | w. threading | | 64 | HDC 16B SBU 2PG21G | **1656730000** |
| PG 21 | w. threading | | 84 | HDC 40D SBU 2PG21G | **1656810000** |
| PG 29 | w. threading | | 84 | HDC 40D SBU 1PG29G | **1656830000** |
| PG 29 | w. threading | | 84 | HDC 40D SBU 2PG29G | **1656840000** |




### Coupling housing



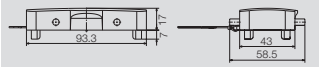
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 79 | HDC 40D KBU 1M25G | **1787200000** |
| M 32 | w. threading | | 79 | HDC 40D KBU 1M32G | **1787190000** |
| PG 21 | w. threading | | 64 | HDC 16B KBU 1PG21G | **1657270000** |
| PG 21 | w. threading | | 79 | HDC 40D KBU 1PG21G | **1657310000** |
| PG 29 | w. threading | | 79 | HDC 40D KBU 1PG29G | **1967670000** |




### Cover



| Version | Type | Order No. |
|---|---|---|
| For bases | HDC 16B DODQ 4BO | **1665260000** |



# RockStar® Housings IP66 / NEMA Type 4X

## End locking, lower side

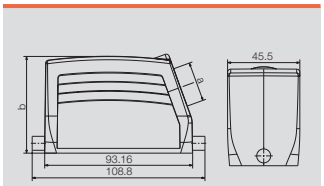
## Size 6

## Hood

### Plug housing, cable entry sideways



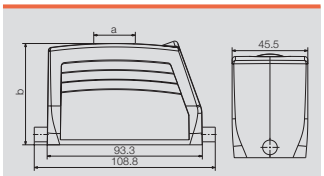
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSLU 1M25G | **1788200000** |
| M 25 | w. threading | | 76 | HDC 40D TSLU 1M25G | **1787050000** |
| M 32 | w. threading | | 61 | HDC 16B TSLU 1M32G | **1804640000** |
| M 32 | w. threading | | 76 | HDC 40D TSLU 1M32G | **1787040000** |
| M 40 | w. threading | | 76 | HDC 40D TSLU 1M40G | **1804650000** |
| PG 21 | w. threading | | 61 | HDC 16B TSLU 1PG21G | **1657850000** |
| PG 21 | w. threading | | 76 | HDC 40D TSLU 1PG21G | **1657890000** |
| PG 29 | w. threading | | 76 | HDC 40D TSLU 1PG29G | **1657910000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOLU 1M25G | **1788230000** |
| M 32 | w. threading | | 61 | HDC 16B TOLU 1M32G | **1804630000** |
| M 32 | w. threading | | 76 | HDC 40D TOLU 1M32G | **1787100000** |
| PG 21 | w. threading | | 61 | HDC 16B TOLU 1PG21G | **1657960000** |
| PG 29 | w. threading | | 76 | HDC 40D TOLU 1PG29G | **1658020000** |



## End locking, lower side

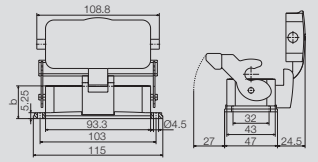
## Size 6

## Base

### Bulkhead housing



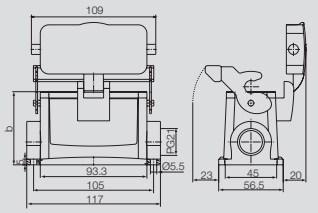
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29 | HDC 16B ALU | **1209700000** |
| | | with cover | 47 | HDC 16B ADLU | **1210100000** |




### Base housing



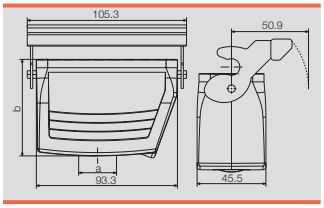
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B SLU 1M25G | **1900170000** |
| M 25 | w. threading | with cover | 102 | HDC 40D SDLU 1M25G | **1903070000** |
| M 25 | w. threading | | 64 | HDC 16B SLU 2M25G | **1788250000** |
| M 25 | w. threading | with cover | 82 | HDC 16B SDLU 2M25G | **1788270000** |
| M 25 | w. threading | with cover | 102 | HDC 40D SDLU 2M25G | **1787180000** |
| M 32 | w. threading | | 84 | HDC 40D SLU 1M32G | **1903110000** |
| M 32 | w. threading | with cover | 102 | HDC 40D SDLU 1M32G | **1903080000** |
| M 32 | w. threading | | 84 | HDC 40D SLU 2M32G | **1804660000** |
| M 32 | w. threading | with cover | 102 | HDC 40D SDLU 2M32G | **1787170000** |
| PG 21 | w. threading | | 64 | HDC 16B SLU 1PG21G | **1658110000** |
| PG 21 | w. threading | with cover | 82 | HDC 16B SDLU 1PG21G | **1658320000** |
| PG 21 | w. threading | | 64 | HDC 16B SLU 2PG21G | **1658120000** |
| PG 21 | w. threading | with cover | 82 | HDC 16B SDLU 2PG21G | **1658330000** |
| PG 29 | w. threading | with cover | 102 | HDC 40D SDLU 1PG29G | **1658410000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 16B KLU 1M25G | **1788290000** |
| M 25 | w. threading | | 79 | HDC 40D KLU 1M25G | **1787220000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, upper side

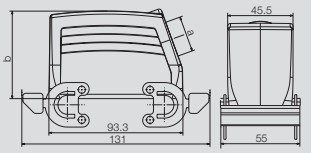
## Size 6

## Hood

### Plug housing, cable entry sideways



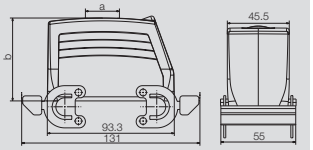
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TSBO 1M25G | **1788190000** |
| M 25 | w. threading | | 76 | HDC 40D TSBO 1M25G | **1787030000** |
| M 32 | w. threading | | 76 | HDC 40D TSBO 1M32G | **1787020000** |
| PG 21 | w. threading | | 61 | HDC 16B TSBO 1PG21G | **1657380000** |
| PG 21 | w. threading | | 76 | HDC 40D TSBO 1PG21G | **1657420000** |




### Plug housing, cable entry at top



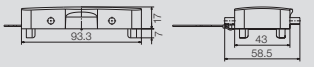
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 16B TOBO 1M25G | **1788220000** |
| PG 21 | w. threading | | 61 | HDC 16B TOBO 1PG21G | **1657490000** |
| PG 29 | w. threading | | 76 | HDC 40D TOBO 1PG29G | **1657550000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | For hoods | HDC 16B DMDQ 4BO | **1665620000** |



## Side locking, upper side

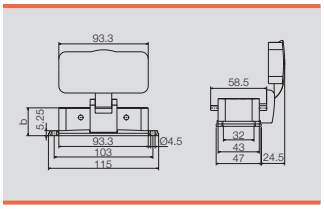
## Size 6

## Base

### Bulkhead housing



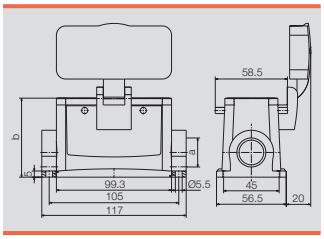
| Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | with cover | 47 | HDC 16B ADBO | **1209200000** |




### Base housing



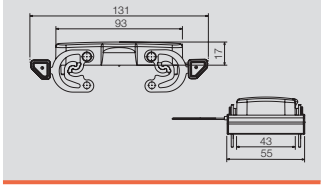
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | with cover | 82 | HDC 16B SDBO 1M25G | **1900080000** |
| M 25 | w. threading | with cover | 82 | HDC 16B SDBO 2M25G | **1788260000** |
| PG 21 | w. threading | with cover | 82 | HDC 16B SDBO 2PG21G | **1657640000** |




### Cover



| Version | Type | Order No. |
|---|---|---|
| For bases | HDC 16B DODQ 2QB | **1009090000** |



## Side locking, lower side

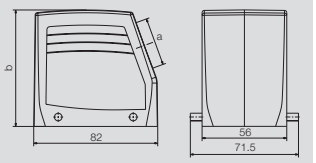
## Size 7

## Hood

### Plug housing, cable entry sideways



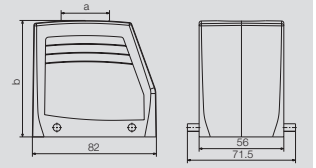
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 75 | HDC 32A TSBU 1M25G | **1787960000** |
| M 32 | w. threading | | 75 | HDC 32A TSBU 1M32G | **1787950000** |
| PG 21 | w. threading | | 75 | HDC 32A TSBU 1PG21G | **1665670000** |
| PG 29 | w. threading | | 75 | HDC 32A TSBU 1PG29G | **1665690000** |




### Plug housing, cable entry at top



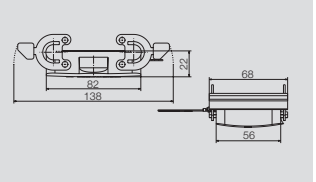
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 75 | HDC 32A TOBU 1M32G | **1787990000** |
| PG 21 | w. threading | | 75 | HDC 32A TOBU 1PG21G | **1665790000** |
| PG 29 | w. threading | | 75 | HDC 32A TOBU 1PG29G | **1665810000** |




### Cover



| | Version | Type | Order No. |
|---|---|---|---|
| | For hoods | HDC 32A DMDQ 2QB | **1665930000** |



## Side locking, lower side

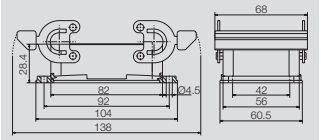
## Size 7

## Base

### Bulkhead housing



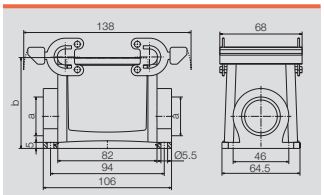
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 28.4 | HDC 32A ABU | **1665860000** |




### Base housing



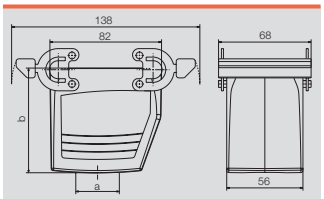
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 75 | HDC 32A SBU 1M25G | **1903870000** |
| M 25 | w. threading | | 75 | HDC 32A SBU 2M25G | **1788040000** |
| PG 21 | w. threading | | 75 | HDC 32A SBU 2PG21G | **1665980000** |
| PG 29 | w. threading | | 75 | HDC 32A SBU 1PG29G | **1666010000** |




### Coupling housing



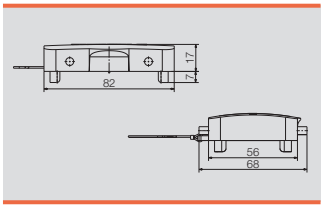
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 76.5 | HDC 32A KBU 1M25G | **1788080000** |
| M 32 | w. threading | | 76.5 | HDC 32A KBU 1M32G | **1788070000** |




### Cover



| | Version | | Type | Order No. |
|---|---|---|---|---|
| | For bases | | HDC 32A DODQ 4BO | **1665920000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, upper side

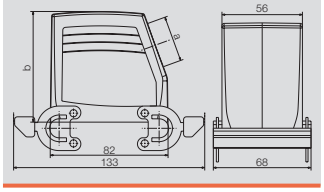
## Size 7

### Hood

**Plug housing, cable entry sideways**



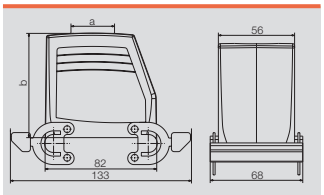
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 75 | HDC 32A TSBO 1M25G | **1787980000** |
| M 32 | w. threading | | 75 | HDC 32A TSBO 1M32G | **1787970000** |
| PG 29 | w. threading | | 75 | HDC 32A TSBO 1PG29G | **1666270000** |




**Plug housing, cable entry at top**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 77 | HDC 32A TOBO 1M32G | **1788010000** |

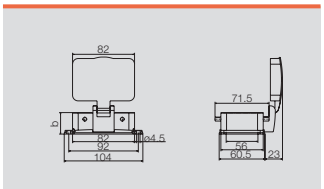



### Base

**Bulkhead housing**



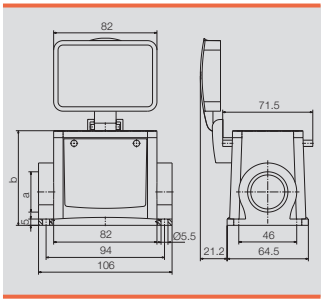
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | with cover | 46.4 | HDC 32A ADBO | **1666440000** |




**Base housing**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | with cover | 97 | HDC 32A SDBO 1M25G | **1903900000** |
| M 25 | w. threading | with cover | 97 | HDC 32A SDBO 2M25G | **1788060000** |
| M 32 | w. threading | with cover | 97 | HDC 32A SDBO 1M32G | **1903910000** |
| M 32 | w. threading | with cover | 97 | HDC 32A SDBO 2M32G | **1788050000** |
| PG 21 | w. threading | with cover | 97 | HDC 32A SDBO 1PG21G | **1666550000** |
| PG 29 | w. threading | with cover | 97 | HDC 32A SDBO 1PG29G | **1666590000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, lower side

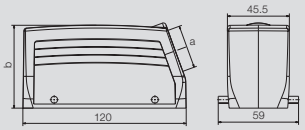
## Size 8

### Hood

**Plug housing, cable entry sideways**



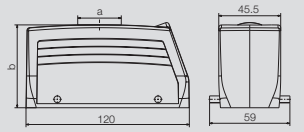
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBU 1M25G | **1787760000** |
| M 25 | w. threading | | 76 | HDC 64D TSBU 1M25G | **1786780000** |
| M 32 | w. threading | | 61 | HDC 24B TSBU 1M32G | **1787750000** |
| M 32 | w. threading | | 76 | HDC 64D TSBU 1M32G | **1786770000** |
| M 40 | w. threading | | 61 | HDC 24B TSBU 1M40G | **1902480000** |
| M 40 | w. threading | | 76 | HDC 64D TSBU 1M40G | **1809630000** |
| PG 21 | w. threading | | 61 | HDC 24B TSBU 1PG21G | **1661230000** |
| PG 21 | w. threading | | 76 | HDC 64D TSBU 1PG21G | **1661300000** |
| PG 29 | w. threading | | 61 | HDC 24B TSBU 1PG29G | **1661240000** |
| PG 29 | w. threading | | 76 | HDC 64D TSBU 1PG29G | **1661320000** |




**Plug housing, cable entry at top**



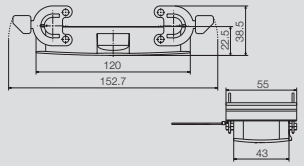
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOBU 1M25G | **1787820000** |
| M 32 | w. threading | | 61 | HDC 24B TOBU 1M32G | **1787810000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 1M32G | **1786830000** |
| M 32 | w. threading | | 76 | HDC 64D TOBU 2M32G | **1009710000** |
| M 40 | w. threading | | 61 | HDC 24B TOBU 1M40G | **1902980000** |
| M 40 | w. threading | | 61 | HDC 64D TOBU 1M40G | **1045560000** |
| PG 21 | w. threading | | 61 | HDC 24B TOBU 1PG21G | **1661370000** |
| PG 21 | w. threading | | 76 | HDC 64D TOBU 1PG21G | **1661440000** |
| PG 29 | w. threading | | 61 | HDC 24B TOBU 1PG29G | **1661380000** |
| PG 29 | w. threading | | 76 | HDC 64D TOBU 1PG29G | **1661460000** |




**Cover**



| | Version | Type | Order No. |
|---|---|---|---|
| | For hoods | HDC 24B DMDQ 2QB | **1665640000** |




## Side-locking clamp on the bottom section

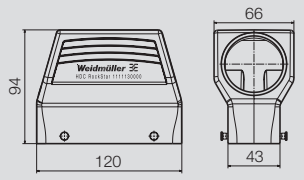
## Size 8

### upper section

**XXL connector housing, cable exit on side**



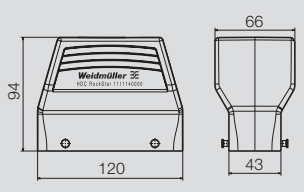
| a | Version | Cover | B (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M50 | with threading | | 94 | HDC 64D TSBU 1M50G | **1111130000** |




**XXL connector housing, cable exit on top**



| a | Version | Cover | B (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M50 | with threading | | 94 | HDC 64D TOBU 1M50G | **1111140000** |



## Side locking, lower side

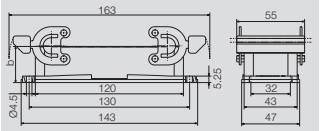
## Size 8

## Base

### Bulkhead housing



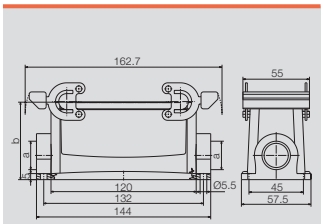
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ABU | **1212400000** |




### Base housing



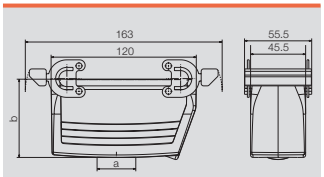
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SBU 1M25G | **1901150000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 1M25G | **1904340000** |
| M 25 | w. threading | | 64 | HDC 24B SBU 2M25G | **1787870000** |
| M 25 | w. threading | | 84 | HDC 64D SBU 2M25G | **1786890000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 1M32G | **1904350000** |
| M 32 | w. threading | | 84 | HDC 64D SBU 2M32G | **1786880000** |
| PG 21 | w. threading | | 64 | HDC 24B SBU 1PG21G | **1661510000** |
| PG 21 | w. threading | | 64 | HDC 24B SBU 2PG21G | **1661520000** |
| PG 21 | w. threading | | 84 | HDC 64D SBU 2PG21G | **1661590000** |
| PG 29 | w. threading | | 84 | HDC 64D SBU 2PG29G | **1661630000** |




### Coupling housing



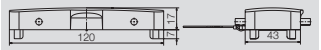
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 65 | HDC 24B KBU 1M25G | **1787920000** |
| M 32 | w. threading | | 79 | HDC 64D KBU 1M32G | **1786960000** |
| PG 21 | w. threading | | 65 | HDC 24B KBU 1PG21G | **1661720000** |
| PG 29 | w. threading | | 65 | HDC 24B KBU 1PG29G | **1661730000** |
| PG 29 | w. threading | | 79 | HDC 64D KBU 1PG29G | **1661810000** |




### Cover



| | Version | | Type | Order No. |
|---|---|---|---|---|
| | For bases | | HDC 24B DODQ 4BO | **1665630000** |



# RockStar® Housings IP66 / NEMA Type 4X

## End locking, lower side

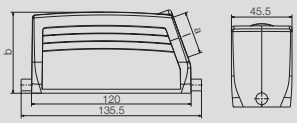
## Size 8

## Hood

### Plug housing, cable entry sideways



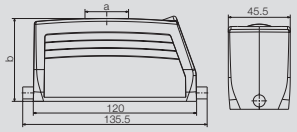
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSLU 1M25G | **1787800000** |
| M 32 | w. threading | | 61 | HDC 24B TSLU 1M32G | **1787790000** |
| M 32 | w. threading | | 76 | HDC 64D TSLU 1M32G | **1786810000** |
| M 40 | w. threading | | 76 | HDC 64D TSLU 1M40G | **1804610000** |
| PG 21 | w. threading | | 76 | HDC 64D TSLU 1PG21G | **1662470000** |
| PG 21 | w. threading | | 61 | HDC 24B TSLU 1PG21G | **1662390000** |
| PG 29 | w. threading | | 61 | HDC 24B TSLU 1PG29G | **1662410000** |
| PG 29 | w. threading | | 76 | HDC 64D TSLU 1PG29G | **1662490000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TOLU 1M25G | **1787860000** |
| M 25 | w. threading | | 92 | HDC 64D TOLU 1M25G | **1786870000** |
| M 32 | w. threading | | 61 | HDC 24B TOLU 1M32G | **1787850000** |
| M 32 | w. threading | | 92 | HDC 64D TOLU 1M32G | **1786860000** |
| M 40 | w. threading | | 92 | HDC 64D TOLU 1M40G | **1983470000** |
| PG 21 | w. threading | | 61 | HDC 24B TOLU 1PG21G | **1662540000** |
| PG 21 | w. threading | | 92 | HDC 64D TOLU 1PG21G | **1662610000** |
| PG 29 | w. threading | | 61 | HDC 24B TOLU 1PG29G | **1662550000** |
| PG 29 | w. threading | | 92 | HDC 64D TOLU 1PG29G | **1662630000** |




## End-locking clamp on the bottom section

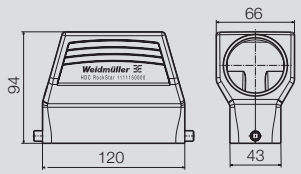
## Size 8

## upper section

### XXL connector housing, cable exit on side



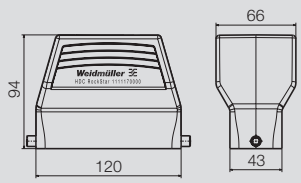
| a | Version | Cover | B (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M50 | with threading | | 94 | HDC 64D TSLU 1M50G | **1111150000** |




### XXL connector housing, cable exit on top



| a | Version | Cover | B (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M50 | with threading | | 94 | HDC 64D TOLU 1M50G | **1111170000** |



## End locking, lower side

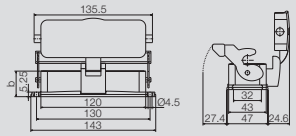
## Size 8

## Base

### Bulkhead housing



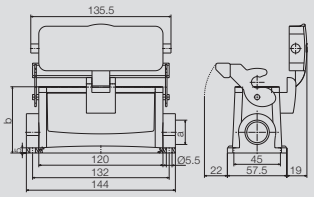
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B ALU | **1213900000** |
| | | with cover | 47 | HDC 24B ADLU | **1214300000** |




### Base housing



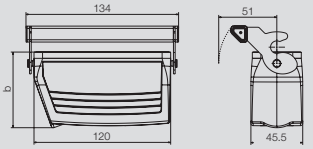
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 64 | HDC 24B SLU 1M25G | **1901560000** |
| M 25 | w. threading | with cover | 86 | HDC 24B SDLU 1M25G | **1901480000** |
| M 25 | w. threading | | 84 | HDC 64D SLU 1M25G | **1904480000** |
| M 25 | w. threading | with cover | 106 | HDC 64D SDLU 1M25G | **1904430000** |
| M 25 | w. threading | | 64 | HDC 24B SLU 2M25G | **1787880000** |
| M 25 | w. threading | with cover | 86 | HDC 24B SDLU 2M25G | **1787900000** |
| M 25 | w. threading | | 84 | HDC 64D SLU 2M25G | **1786910000** |
| M 25 | w. threading | with cover | 106 | HDC 64D SDLU 2M25G | **1786950000** |
| M 32 | w. threading | | 84 | HDC 64D SLU 1M32G | **1904490000** |
| M 32 | w. threading | with cover | 106 | HDC 64D SDLU 1M32G | **1904440000** |
| M 32 | w. threading | | 84 | HDC 64D SLU 2M32G | **1786900000** |
| M 32 | w. threading | with cover | 106 | HDC 64D SDLU 2M32G | **1786940000** |
| PG 21 | w. threading | | 64 | HDC 24B SLU 2PG21G | **1662720000** |
| PG 21 | w. threading | with cover | 86 | HDC 24B SDLU 2PG21G | **1214500000** |
| PG 29 | w. threading | with cover | 106 | HDC 64D SDLU 2PG29G | **1663040000** |




### Coupling housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 63.8 | HDC 24B KLU 1M25G | **1968340000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, upper side

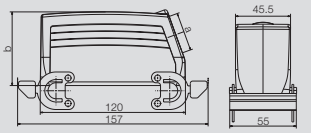
## Size 8

### Hood

**Plug housing, cable entry sideways**



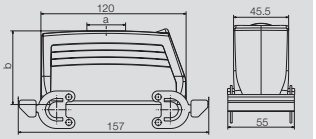
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 25 | w. threading | | 61 | HDC 24B TSBO 1M25G | **1787780000** |
| M 25 | w. threading | | 76 | HDC 64D TSBO 1M25G | **1786800000** |
| M 32 | w. threading | | 61 | HDC 24B TSBO 1M32G | **1787770000** |
| M 32 | w. threading | | 76 | HDC 64D TSBO 1M32G | **1786790000** |
| PG 21 | w. threading | | 61 | HDC 24B TSBO 1PG21G | **1661860000** |
| PG 21 | w. threading | | 76 | HDC 64D TSBO 1PG21G | **1661940000** |
| PG 29 | w. threading | | 61 | HDC 24B TSBO 1PG29G | **1661880000** |
| PG 29 | w. threading | | 76 | HDC 64D TSBO 1PG29G | **1661960000** |




**Plug housing, cable entry at top**



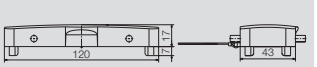
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 61 | HDC 24B TOBO 1M32G | **1787830000** |
| PG 21 | w. threading | | 76 | HDC 64D TOBO 1PG21G | **1662080000** |
| PG 29 | w. threading | | 61 | HDC 24B TOBO 1PG29G | **1662020000** |
| PG 29 | w. threading | | 76 | HDC 64D TOBO 1PG29G | **1662100000** |




**Cover**



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For hoods | | | HDC 24B DMDQ 4BO | **1665650000** |

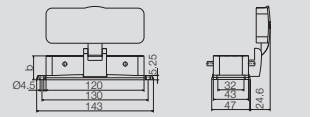



### Base

**Bulkhead housing**



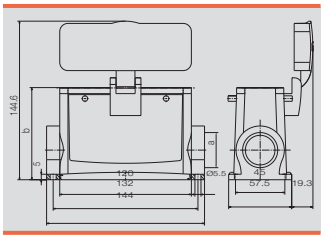
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 28.8 | HDC 24B ABO | **1967910000** |
| | | with cover | 51.3 | HDC 24B ADBO | **1213300000** |




**Base housing**



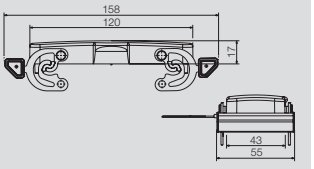
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | with cover | 106 | HDC 64D SDBO 1M32G | **1904400000** |
| M 32 | w. threading | with cover | 106 | HDC 64D SDBO 2M32G | **1786920000** |
| PG 21 | w. threading | with cover | 86 | HDC 24B SDBO 2PG21G | **1662180000** |
| PG 29 | w. threading | with cover | 106 | HDC 64D SDBO 1PG29G | **1662280000** |




**Cover**



| | Version | | | Type | Order No. |
|---|---|---|---|---|---|
| | For bases | | | HDC 24B DODQ 2QB | **1009100000** |



## Central-locking clamp

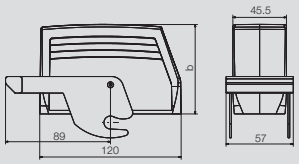
## Size 8

## Hood

**Plug housing, cable entry sideways**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 40 | w. threading | | 76 | HDC 64D TSZO 1M40G | **1904690000** |
| PG 21 | w. threading | | 76 | HDC 64D TSZO 1PG21G | **1663370000** |
| PG 29 | w. threading | | 76 | HDC 64D TSZO 1PG29G | **1663390000** |

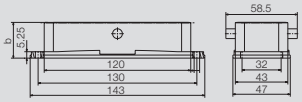



## Base

**Bulkhead housing**



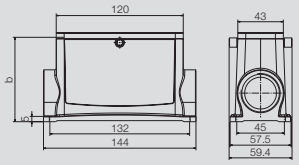
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 29.3 | HDC 24B AZO | **1611350000** |




**Base housing**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| PG 29 | w. threading | | 84 | HDC 64D SZO 2PG29G | **1968370000** |



# RockStar® Housings IP66 / NEMA Type 4X

## End locking, lower side

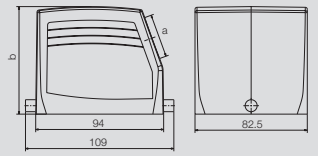
## Size 9

## Hood

### Plug housing, cable entry sideways



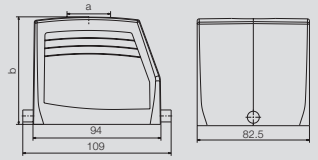
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 48A TSLU 1M32G | **1788550000** |
| PG 29 | w. threading | | 79 | HDC 48A TSLU 1PG29G | **1666710000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 48A TOLU 1M32G | **1788560000** |
| PG 29 | w. threading | | 79 | HDC 48A TOLU 1PG29G | **1666730000** |



## End locking, lower side

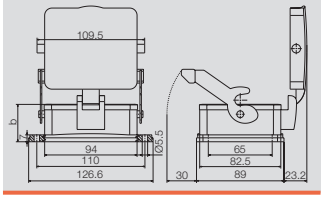
## Size 9

### Base

**Bulkhead housing**



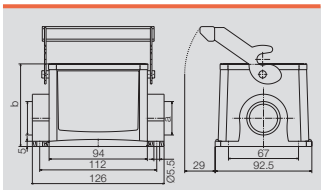
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 48A ALU | **1666740000** |
| | | with cover | 55 | HDC 48A ADLU | **1666750000** |




**Base housing**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 48A SLU 2M32G | **1788570000** |
| PG 29 | w. threading | | 79 | HDC 48A SLU 1PG29G | **1666770000** |
| PG 29 | w. threading | with cover | 96 | HDC 48A SDLU 1PG29G | **1666810000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, lower side

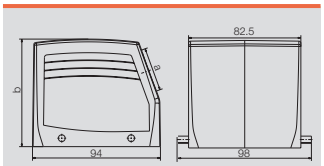
## Size 10

## Hood

### Plug housing, cable entry sideways



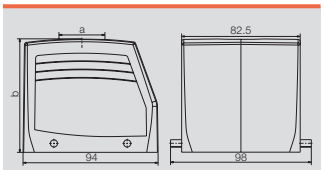
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSBU 1M32G | **1788400000** |
| PG 29 | w. threading | | 79 | HDC 32B TSBU 1PG29G | **1666840000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TOBU 1M32G | **1788430000** |
| PG 29 | w. threading | | 79 | HDC 32B TOBU 1PG29G | **1666870000** |



## Side locking, lower side

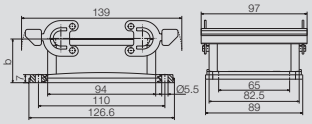
## Size 10

### Base

**Bulkhead housing**



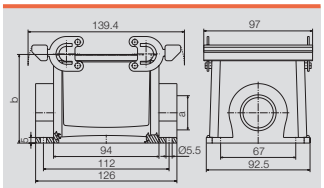
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ABU | **1217800000** |




**Base housing**



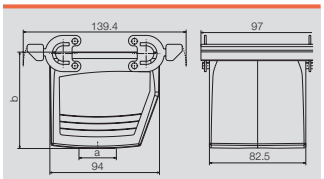
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SBU 1M32G | **1902600000** |
| M 32 | w. threading | | 79 | HDC 32B SBU 2M32G | **1788460000** |
| PG 29 | w. threading | | 79 | HDC 32B SBU 2PG29G | **1666920000** |
| PG 36 | w. threading | | 79 | HDC 32B SBU 1PG36G | **1902610000** |
| PG 36 | w. threading | | 79 | HDC 32B SBU 2PG36G | **1902640000** |




**Coupling housing**



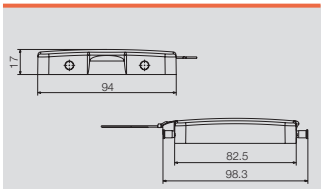
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 40 | w. threading | | 83 | HDC 32B KBU 1M40G | **1902730000** |
| PG 29 | w. threading | | 83 | HDC 32B KBU 1PG29G | **1902740000** |
| PG 36 | w. threading | | 83 | HDC 32B KBU 1PG36G | **1902750000** |




**Cover**



| | Version | | Type | Order No. |
|---|---|---|---|---|
| | | | HDC 32B DODQ 4BO | **1165790000** |



## End locking, lower side

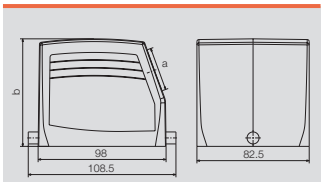
## Size 10

### Hood

**Plug housing, cable entry sideways**



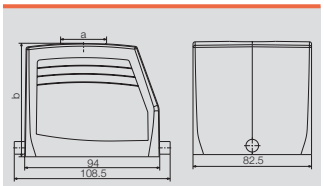
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSLU 1M32G | **1788420000** |
| PG 29 | w. threading | | 79 | HDC 32B TSLU 1PG29G | **1667120000** |




**Plug housing, cable entry at top**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TOLU 1M32G | **1788450000** |
| PG 29 | w. threading | | 79 | HDC 32B TOLU 1PG29G | **1219300000** |



## End locking, lower side

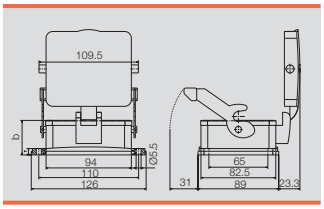
## Size 10

### Base

**Bulkhead housing**



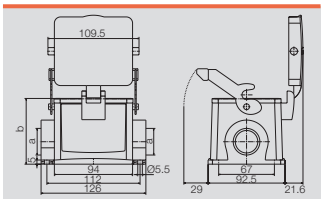
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 38 | HDC 32B ALU | **1219500000** |
| | | with cover | 55 | HDC 32B ADLU | **1219800000** |




**Base housing**



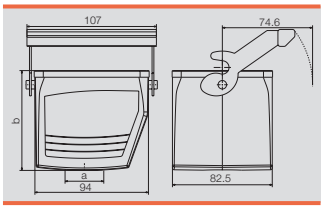
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B SLU 1M32G | **1902670000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 1M32G | **1902650000** |
| M 32 | w. threading | | 79 | HDC 32B SLU 2M32G | **1788470000** |
| M 32 | w. threading | with cover | 96 | HDC 32B SDLU 2M32G | **1788490000** |




**Coupling housing**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 83 | HDC 32B KLU 1M32G | **1788500000** |



# RockStar® Housings IP66 / NEMA Type 4X

## Side locking, upper side

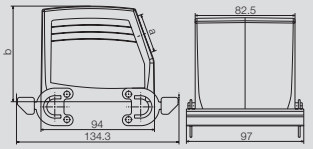
## Size 10

### Hood

**Plug housing, cable entry at top**



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 79 | HDC 32B TSBO 1M32G | **1788410000** |

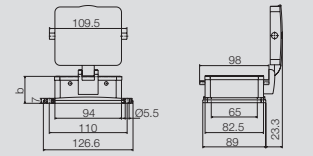



### Base

**Bulkhead housing**



| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | with cover | 55 | HDC 32B ADBO | **1218800000** |



## End locking, lower side

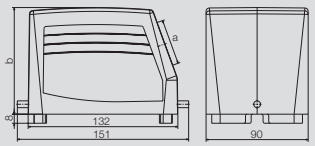
## Size 12

## Hood

### Plug housing, cable entry sideways



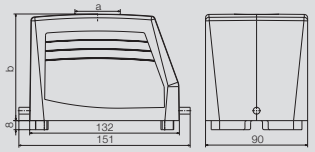
| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TSLU 1M32G | **1788320000** |
| M 40 | w. threading | | 94 | HDC 48B TSLU 1M40G | **1788310000** |
| M 50 | w. threading | | 94 | HDC 48B TSLU 1M50G | **1788300000** |
| PG 29 | w. threading | | 94 | HDC 48B TSLU 1PG29G | **1650850000** |
| PG 36 | w. threading | | 94 | HDC 48B TSLU 1PG36G | **1650860000** |
| PG 42 | w. threading | | 94 | HDC 48B TSLU 1PG42G | **1670470000** |




### Plug housing, cable entry at top



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 94 | HDC 48B TOLU 1M32G | **1788350000** |
| M 40 | w. threading | | 94 | HDC 48B TOLU 1M40G | **1788340000** |
| M 50 | w. threading | | 94 | HDC 48B TOLU 1M50G | **1788330000** |
| PG 29 | w. threading | | 94 | HDC 48B TOLU 1PG29G | **1650980000** |
| PG 36 | w. threading | | 94 | HDC 48B TOLU 1PG36G | **1651000000** |

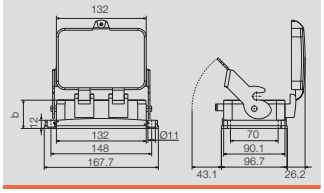



## Base

### Bulkhead housing



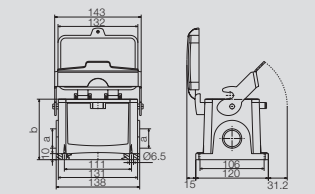
| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | with cover | 62 | HDC 48B ADLU | **1222900000** |




### Base housing



| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 32 | w. threading | | 100 | HDC 48B SLU 1M32G | **1904190000** |
| M 32 | w. threading | with cover | 120 | HDC 48B SDLU 1M32G | **1904150000** |
| M 32 | w. threading | | 100 | HDC 48B SLU 2M32G | **1788370000** |
| M 32 | w. threading | with cover | 120 | HDC 48B SDLU 2M32G | **1788390000** |
| M 40 | w. threading | | 100 | HDC 48B SLU 2M40G | **1788360000** |
| M 40 | w. threading | with cover | 120 | HDC 48B SDLU 2M40G | **1983500000** |
| M 50 | w. threading | with cover | 120 | HDC 48B SDLU 2M50G | **1983510000** |
| PG 29 | w. threading | | 100 | HDC 48B SLU 1PG29G | **1651100000** |
| PG 29 | w. threading | with cover | 120 | HDC 48B SDLU 1PG29G | **1799810000** |
| PG 29 | w. threading | with cover | 120 | HDC 48B SDLU 2PG29G | **1667560000** |



# RockStar® Housings IP68

**RockStar® Housings IP68**

**Introduction** F.2

**RockStar® Housings IP68** F.4

Size 1 - 8

# RockStar® Housings IP68

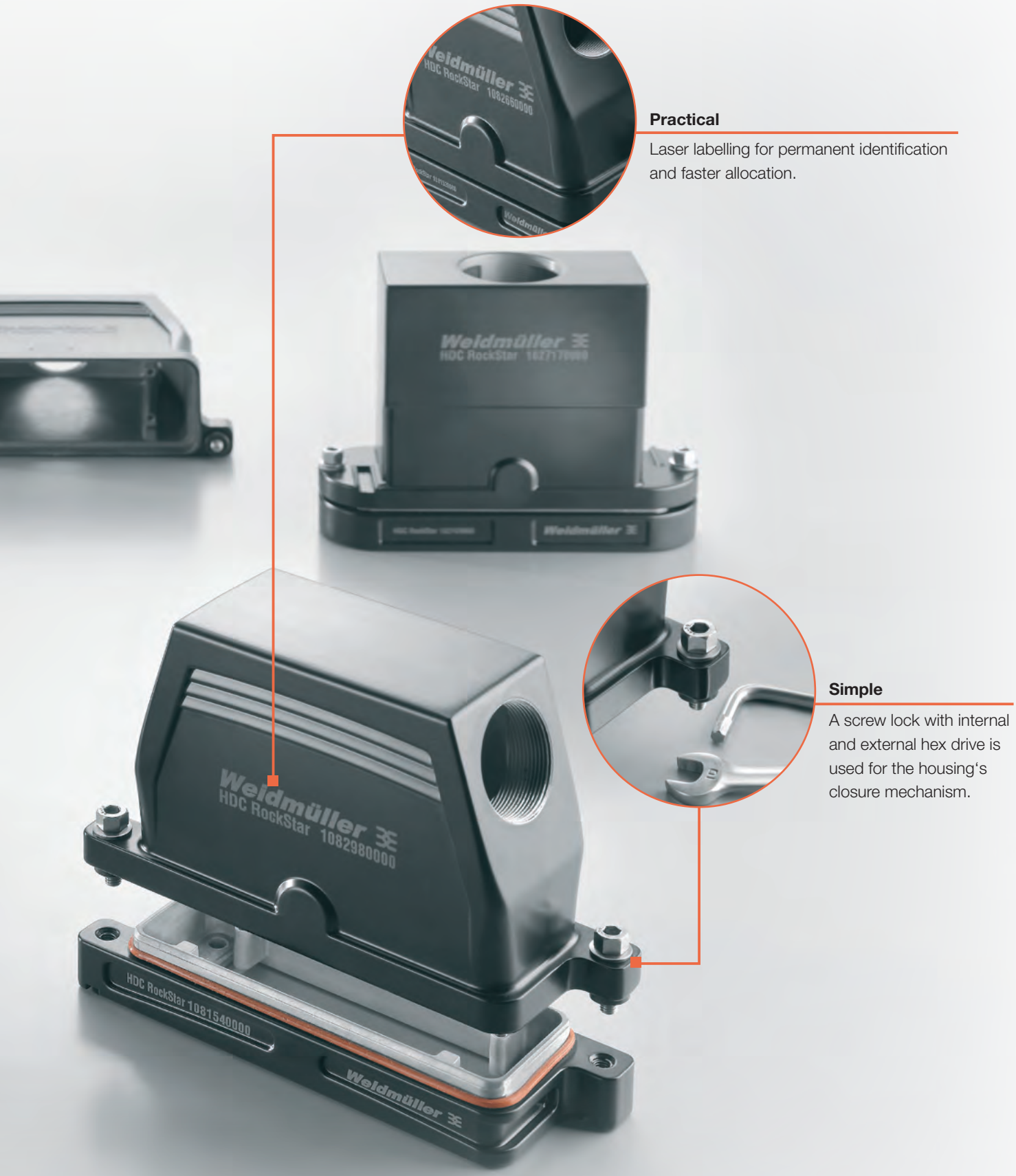
The new RockStar® IP68 and IP69K housings are resistant to sea water and high impacts. They are designed for use under extreme environmental conditions and comply with the high vibration requirements of DIN EN 61373 Cat 2 (pivot mounting). These housings deliver a fail-safe and maintenance-free solution when using heavy-duty connectors in transportation, traffic engineering and energy technology. They are also suitable for applications subject to extreme climatic conditions.
Weidmüller has designed the RockStar® IP68 housings with additional built-in features that ensure outstanding EMC. The bulkhead or base housing, combined with the plug housing, produces a labyrinth structure which ensures high shield attenuation.
RockStar® IP68 housings are available in sizes 1, 3, 4, 6, 8 and 8 XXL; they can be combined with all fixed-pole modular inserts.





**Impact resistant**

The optimised construction provides high impact resistance and therefore, a long product lifespan.




**Practical**

Laser labelling for permanent identification and faster allocation.

**Simple**

A screw lock with internal and external hex drive is used for the housing‘s closure mechanism.

# RockStar® Housings IP68

## Screw connection

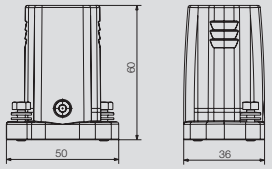
## Size 1

## Hood

**Plug housing, cable entry at top**



| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 60 | HDC IP68 04A TOS 1M20 | **1082390000** |
| PG 13.5 | w. threading | 60 | HDC IP68 04A TOS 1PG13 | **1082410000** |



## Screw connection

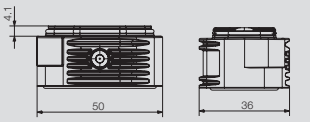
## Size 1

## Base

### Bulkhead housing



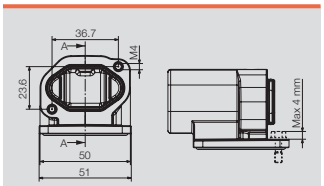
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 24.4 | HDC IP68 04A AS | **1081470000** |




### Angled bulkhead housing



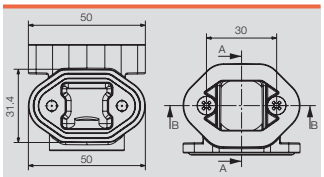
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 43.7 | HDC IP68 04A AWS 1M20 | **1081480000** |
| | | 43.7 | HDC IP68 04A AWS | **1081490000** |




### Adapter



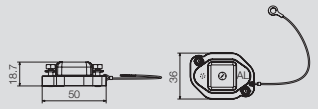
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 38.6 | HDC IP68 04A ADS | **1083130000** |
| PG 13.5 | w. threading | 38.6 | HDC IP68 04A ADS 1PG13 | **1083120000** |




### Cover



| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 18.7 | HDC IP68 04A COVER | **1083110000** |



# RockStar® Housings IP68

## Screw connection

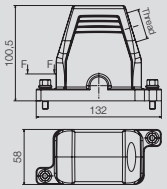
## Size 3

## Hood

### Plug housing, cable entry sideways



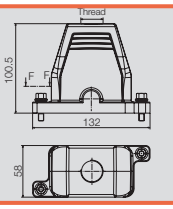
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 100.5 | HDC IP68 06B TSS 1M20 | **1082510000** |
| M 25 | w. threading | 100.5 | HDC IP68 06B TSS 1M25 | **1082530000** |
| M 32 | w. threading | 100.5 | HDC IP68 06B TSS 1M32 | **1082550000** |
| PG 16 | w. threading | 100.5 | HDC IP68 06B TSS 1PG16 | **1082560000** |
| PG 21 | w. threading | 100.5 | HDC IP68 06B TSS 1PG21 | **1082570000** |




### Plug housing, cable entry at top



| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 100.5 | HDC IP68 06B TOS 1M20 | **1082420000** |
| M 25 | w. threading | 100.5 | HDC IP68 06B TOS 1M25 | **1082430000** |
| M 32 | w. threading | 100.5 | HDC IP68 06B TOS 1M32 | **1082440000** |
| M 40 | w. threading | 100.5 | HDC IP68 06B TOS 1M40 | **1082450000** |
| PG 16 | w. threading | 100.5 | HDC IP68 06B TOS 1PG16 | **1082460000** |
| PG 21 | w. threading | 100.5 | HDC IP68 06B TOS 1PG21 | **1082470000** |
| PG 29 | w. threading | 100.5 | HDC IP68 06B TOS 1PG29 | **1082480000** |



## Screw connection

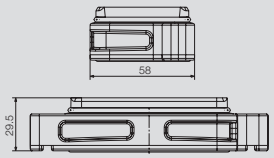
## Size 3

## Base

### Bulkhead housing



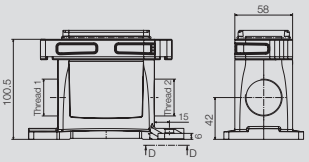
| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 29.5 | HDC IP68 06B AS | **1081510000** |




### Base housing



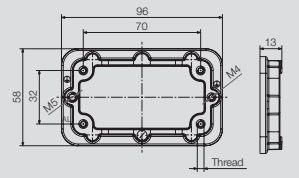
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 100.5 | HDC IP68 06B SS 1M20 | **1081180000** |
| M 20 | w. threading | 100.5 | HDC IP68 06B SS 2M20 | **1081250000** |
| M 25 | w. threading | 100.5 | HDC IP68 06B SS 1M25 | **1081190000** |
| M 25 | w. threading | 100.5 | HDC IP68 06B SS 2M25 | **1081240000** |
| M 32 | w. threading | 100.5 | HDC IP68 06B SS 1M32 | **1081210000** |
| M 32 | w. threading | 100.5 | HDC IP68 06B SS 2M32 | **1081220000** |
| PG 29 | w. threading | 100.5 | HDC IP68 06B SS 1PG29 | **1081230000** |
| PG 29 | w. threading | 100.5 | HDC IP68 06B SS 2PG29 | **1081260000** |




### Counter-frame



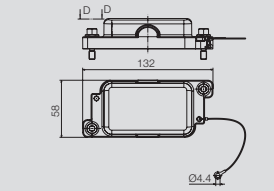
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 13 | HDC IP65 06B FRAME M4 | **1081550000** |
| | | 13 | HDC IP68 06B FRAME M6 | **1110890000** |




### Cover



| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 31 | HDC IP68 06B COVER | **1083060000** |



# RockStar® Housings IP68

## Screw connection

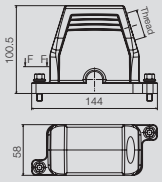
## Size 4

## Hood

### Plug housing, cable entry sideways



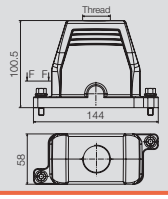
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 100.5 | HDC IP68 10B TSS 1M20 | **1082690000** |
| M 25 | w. threading | 100.5 | HDC IP68 10B TSS 1M25 | **1082650000** |
| M 32 | w. threading | 100.5 | HDC IP68 10B TSS 1M32 | **1082660000** |
| PG 21 | w. threading | 100.5 | HDC IP68 10B TSS 1PG21 | **1082670000** |
| PG 29 | w. threading | 100.5 | HDC IP68 10B TSS 1PG29 | **1082680000** |




### Plug housing, cable entry at top



| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 100.5 | HDC IP68 10B TOS 1M20 | **1082580000** |
| M 25 | w. threading | 100.5 | HDC IP68 10B TOS 1M25 | **1082590000** |
| M 32 | w. threading | 100.5 | HDC IP68 10B TOS 1M32 | **1082610000** |
| PG 16 | w. threading | 100.5 | HDC IP68 10B TOS 1PG16 | **1082620000** |
| PG 21 | w. threading | 100.5 | HDC IP68 10B TOS 1PG21 | **1082630000** |
| PG 29 | w. threading | 100.5 | HDC IP68 10B TOS 1PG29 | **1082640000** |



## Screw connection

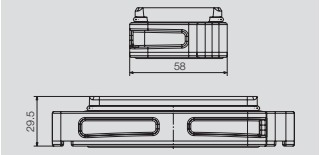
## Size 4

## Base

### Bulkhead housing



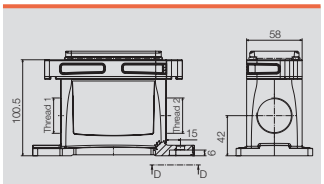
| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 29.5 | HDC IP68 10B AS | **1081520000** |



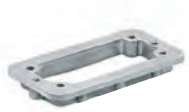

### Base housing



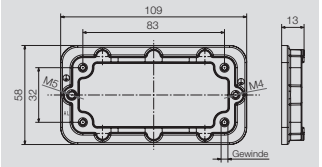
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 100.5 | HDC IP68 10B SS 1M20 | **1081270000** |
| M 20 | w. threading | 100.5 | HDC IP68 10B SS 2M20 | **1081310000** |
| M 32 | w. threading | 100.5 | HDC IP68 10B SS 1M32 | **1081280000** |
| M 32 | w. threading | 100.5 | HDC IP68 10B SS 2M32 | **1081320000** |
| PG 29 | w. threading | 100.5 | HDC IP68 10B SS 1PG29 | **1081290000** |
| PG 29 | w. threading | 100.5 | HDC IP68 10B SS 2PG29 | **1081330000** |




### Counter-frame



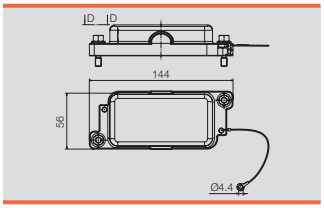
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 13 | HDC IP65 10B FRAME M4 | **1081560000** |
| | | 13 | HDC IP68 10B FRAME M6 | **1110900000** |




### Cover



| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 31 | HDC IP68 10B COVER | **1083070000** |



# RockStar® Housings IP68

## Screw connection

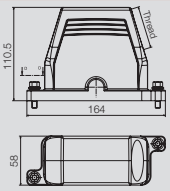
## Size 6

## Hood

### Plug housing, cable entry sideways



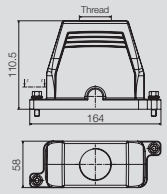
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 32 | w. threading | 164 | HDC IP68 16B TSS 1M32 | **1082800000** |
| M 40 | w. threading | 164 | HDC IP68 16B TSS 1M40 | **1082810000** |
| M 50 | w. threading | 164 | HDC IP68 16B TSS 1M50 | **1082820000** |
| PG 21 | w. threading | 164 | HDC IP68 16B TSS 1PG21 | **1082830000** |
| PG 29 | w. threading | 164 | HDC IP68 16B TSS 1PG29 | **1082840000** |
| PG 36 | w. threading | 164 | HDC IP68 16B TSS 1PG36 | **1082850000** |




### Plug housing, cable entry at top



| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 25 | w. threading | 164 | HDC IP68 16B TOS 1M25 | **1082700000** |
| M 25 | w. threading | 164 | HDC IP68 16B TOS 2M25 | **1082780000** |
| M 32 | w. threading | 164 | HDC IP68 16B TOS 1M32 | **1082710000** |
| M 40 | w. threading | 164 | HDC IP68 16B TOS 1M40 | **1082720000** |
| M 50 | w. threading | 164 | HDC IP68 16B TOS 1M50 | **1082730000** |
| PG 21 | w. threading | 164 | HDC IP68 16B TOS 1PG21 | **1082750000** |
| PG 21 | w. threading | 164 | HDC IP68 16B TOS 2PG21 | **1082740000** |
| PG 29 | w. threading | 164 | HDC IP68 16B TOS 1PG29 | **1082760000** |
| PG 36 | w. threading | 164 | HDC IP68 16B TOS 1PG36 | **1082770000** |



## Screw connection

## Size 6

## Base

### Bulkhead housing



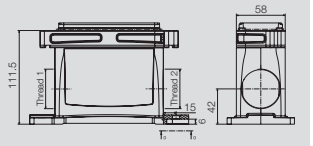
| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 21 | HDC IP68 16B AS | **1081530000** |




### Base housing



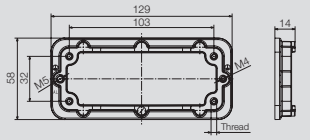
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 111.5 | HDC IP68 16B SS | **1081340000** |
| M 32 | w. threading | 111.5 | HDC IP68 16B SS 1M32 | **1081350000** |
| M 32 | w. threading | 111.5 | HDC IP68 16B SS 2M32 | **1081390000** |
| M 40 | w. threading | 111.5 | HDC IP68 16B SS 1M40 | **1081360000** |
| M 40 | w. threading | 111.5 | HDC IP68 16B SS 2M40 | **1081370000** |
| PG 36 | w. threading | 111.5 | HDC IP68 16B SS 1PG36 | **1081380000** |




### Counter-frame



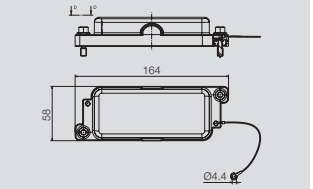
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 14 | HDC IP65 16B FRAME M4 | **1081570000** |
| | | 14 | HDC IP68 16B FRAME M6 | **1110910000** |




### Cover



| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 31 | HDC IP68 16B COVER | **1083080000** |



# RockStar® Housings IP68

## Screw connection

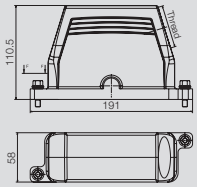
## Size 8

## Hood

### Plug housing, cable entry sideways



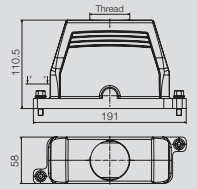
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 32 | w. threading | 110.5 | HDC IP68 24B TSS 1M32 | **1082970000** |
| M 40 | w. threading | 110.5 | HDC IP68 24B TSS 1M40 | **1082980000** |
| M 50 | w. threading | 110.5 | HDC IP68 24B TSS 1M50 | **1082990000** |
| PG 29 | w. threading | 110.5 | HDC IP68 24B TSS 1PG29 | **1083000000** |
| PG 36 | w. threading | 110.5 | HDC IP68 24B TSS 1PG36 | **1083010000** |




### Plug housing, cable entry at top



| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 25 | w. threading | 110.5 | HDC IP68 24B TOS 3M25 | **1082960000** |
| M 32 | w. threading | 110.5 | HDC IP68 24B TOS 1M32 | **1082860000** |
| M 32 | w. threading | 110.5 | HDC IP68 24B TOS 2M32 | **1082940000** |
| M 40 | w. threading | 110.5 | HDC IP68 24B TOS 1M40 | **1082870000** |
| M 40 | w. threading | 110.5 | HDC IP68 24B TOS 2M40 | **1082950000** |
| M 50 | w. threading | 110.5 | HDC IP68 24B TOS 1M50 | **1082880000** |
| PG 21 | w. threading | 110.5 | HDC IP68 24B TOS 1PG21 | **1082900000** |
| PG 29 | w. threading | 110.5 | HDC IP68 24B TOS 1PG29 | **1082920000** |
| PG 29 | w. threading | 110.5 | HDC IP68 24B TOS 2PG29 | **1082910000** |
| PG 36 | w. threading | 110.5 | HDC IP68 24B TOS 1PG36 | **1082930000** |



## Screw connection

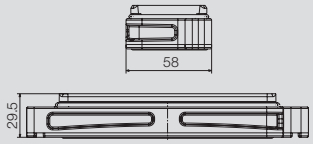
## Size 8

## Base

### Bulkhead housing



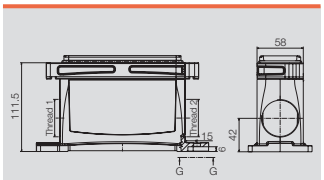
| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 29.5 | HDC IP68 24B AS | **1081540000** |




### Base housing



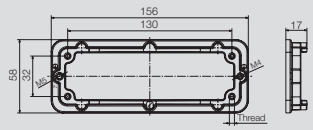
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 111.5 | HDC IP68 24B SS | **1081450000** |
| M 40 | w. threading | 111.5 | HDC IP68 24B SS 1M40 | **1081410000** |
| M 40 | w. threading | 111.5 | HDC IP68 24B SS 2M40 | **1081420000** |
| PG 36 | w. threading | 111.5 | HDC IP68 24B SS 1PG36 | **1081430000** |
| PG 36 | w. threading | 111.5 | HDC IP68 24B SS 2PG36 | **1081440000** |




### Counter-frame



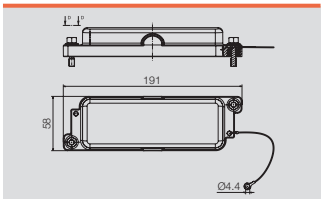
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 17 | HDC IP65 24B FRAME M4 | **1081580000** |
| | | 17 | HDC IP68 24B FRAME M6 | **1110920000** |




### Cover



| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 31 | HDC IP68 24B COVER | **1083090000** |



# RockStar® Housings IP68

## Screw connection

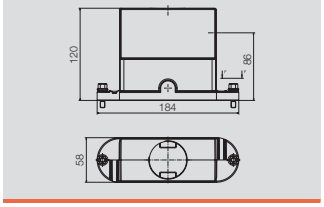
## Size 8, XXL

### Hood

**Plug housing, cable entry sideways**



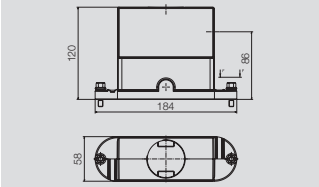
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 40 | w. threading | 120 | HDC HB 24 TEK TSS1xM40G | **1000920001** |
| M 50 | w. threading | 120 | HDC HB 24 TEK TSS1xM50G | **1827160000** |




**Plug housing, cable entry at top**



| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 40 | w. threading | 120 | HDC HB 24 TEK TOS2XM40G | **1020520000** |
| M 50 | w. threading | 120 | HDC HB 24 TEK TOS1xM50G | **1827170000** |



## Screw connection

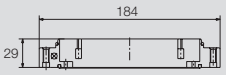
## Size 8, XXL

### Base

**Bulkhead housing**



| Version | b (mm) | Type | Order No. |
|---|---|---|---|
| | 29 | HDC HB 24 TEK AS M4 | **1827470000** |



# RockStar® Heat Trace Connector


**RockStar® Heat Trace Connector**

**Introduction** G.2

**RockStar® Heat Trace Connector** G.4

600 V

35 A

2 poles

# RockStar® Heat Trace Connector

The temperature in an oil pipeline system must not fall below a specific limit, even when operating in harsh Arctic conditions, in order to ensure the smooth flow of oil. Pipelines are therefore equipped with heaters which must be connected to each other in a simple, safe and durable manner. Weidmüller has designed a connector with a CSA-approved temperature range from -50 °C to +60 °C. The coaxial design makes it easy to connect the connector elements in any position (360°). The inserts can be wired using the reliable screw connection. A snap closure secures the connection. It can also be easily released using a screwdriver. This provides long-term protection against an accidental opening.

**The benefits for you:**

- Two-piece construction helps save you time and money during installation
- Coaxial design for maximum 360° pluggability: can be plugged in without a complex alignment process or rotation
- Caps provide IP67 protection even when unplugged






**High quality**

Housing made from high-grade tin-plated aluminium.



**Sturdy**

Sturdy spiral spring contacts ensure a long-term, reliable electrical connection.



**Colour coded**

Simplified assignment using colour-coded inserts and caps.

# Heat Trace Connector – Male and female

## Heat Trace Connector

## Male and female

## Technical data

**Contact inserts**

| | |
|---|---|
| **Rated electrical data** | |
| Contacts | 2-pole (L1, L2) + PE (earth/ground) |
| Rating data | 35 amps, 600 V AC, 50 Hz / 60 Hz |
| Conductor | |
| Harmonised | 2.5 mm² – 10 mm² |
| AWG | 8 – 14 AWG |
| **Materials, components** | |
| Body | tin-plated aluminium |
| Contacts | silver-plated brass |
| Inserts | Polyamide (UL94-V0) |
| Cover | Polyamide (UL94-V0) |
| Sealing | FVMQ |
| Thread shape, cable gland | 3/4" NPT-F (internal thread) |
| **Environmental conditions** | |
| Housing classification | Type 6, IP67 |
| **Approvals** | |
| CSA | **Class I, Division 2**, Groups A, B, C, D, T6, Tamb –50 °C to +60 °C, Type 6 |
| | **Class 1, Zone 2**; Ex nA, IIC, T6, Tamb –50 °C to +60 °C, IP67 |
| GOSTEx | |

G

## Heat Trace Connector

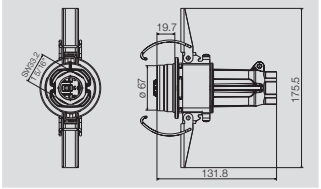
**Female**



| Designation | Type | Order No. |
|---|---|---|
| HDC HTC F | 3/4" NPT female | **1023880000** |

**Caution:** special closing mechanism contingent on approval. (screwdriver required)

**Note:** included with delivery:
socket housing, socket insert and protective cap with safety cord

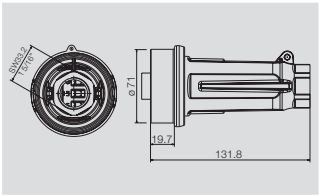



**Male**



| Designation | Type | Order No. |
|---|---|---|
| HDC HTC M | 3/4" NPT male | **1023890000** |

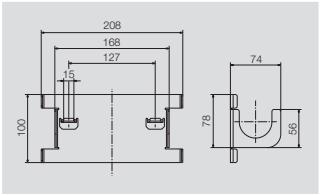
**Note:** included with delivery:
socket housing, socket insert and protective cap with safety cord




**Mounting frame**



| Designation | Type | Order No. |
|---|---|---|
| HDC HTC MOUNTING | Mounting frame | **1049370000** |

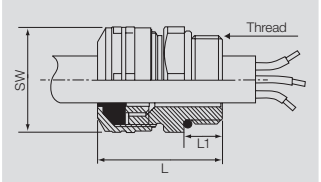



**Cable gland**



| Designation | Type | Order No. |
|---|---|---|
| VG NPT 3/4" Eex-e MS | Ex cable gland | **1778150000** |

**Note:** Additional Ex fittings and Ex adapters for the Heat Trace connector can be found in Section L




## Accessories

| Designation | Type | Order No. |
|---|---|---|
| SD 0.8x4.0x100 | Slotted screwdriver | **9008340000** |

# RockStar® Data Connectors

## RockStar® Data Connectors

**Introduction** H.2

**RockStar® CSB Size 1** H.4

Coax

2 - 16 poles

**IE-LINE Variant 5** H.10

RJ45/USB

4 - 8 poles

# RockStar® Data Connectors

Weidmüller's expertise and experience with the proven modular-based ConCept System bus has been applied to the design of the RockStar® CSB size 1 – the smallest HDC housing size available. This new connector can be combined with all contact carriers from the ConCept System bus module – optionally assembled with HD, HE or Sub-D contacts. RockStar® CSB size 1 can be easily built into an HDC IP66/IP68 housing and can be used to connect coaxial cables in railway applications.

In size 1, Weidmüller also offers IP67 Ethernet connectors that comply with requirements for up to 10 GBit Ethernet. They are also standardised for IEC 61076-3-106 and IEC 61076-3-117 (variant 5 for Ethernet IP). Variant 5 in the IE LINE can be assembled very quickly on-site. The RJ45 data inserts data, featuring STEADYTEC® technology*, are extremely reliable and easy to use. A USB coupling is also available for the female side which can be used with the IE LINE connector as a service interface.

***STEADYTEC® is a brand of technology from Weidmüller, BTR NETCOM and Telegärtner.**





**Compact**

For use in compact HDC housings with IP66 or HDC-IP68/69K.



**Secure**

Signal and data transmission with resistance against shock and vibration



**Fast**



RJ45 data inserts for assembling in the field, according to Cat.$6_A$ 10 GBit system Class EA.

# RockStar® CSB Size 1

## ConCept system bus

## Shielded module

## Technical data

**Contact inserts**

| | |
|---|---|
| Standards | DIN EN 61984<br>IEC 60664 |
| Number of contacts | 2…16 poles for signal transmission |
| Conductor connection system | Crimp |
| Rated current | 10 A (HD) / 25 A (HE) |
| Rated voltage/Rated impulse withstand voltage | 50 V/0.8 kV (HD) / 160V/3kV (HE) |
| Degree of pollution | 3 (100 V/1.5 kV/2 (HD) / 250 V/3 kV/2 (HE)) |
| Shield | Shield connected to contact carrier using cable clamp |
| Outside diameter of shielded cable | 3 to 6 mm and/or 6 to 9.5 mm |
| Conductor clamping ranges | 0.14 mm² … 1.5 mm²<br>AWG 26 … AWG 16 |
| Stripping lengths | 8 mm (HD/HE) / 4 mm (SUB-D) |
| Volume resistance | < 4 mΩ (HD) / < 2 mΩ (HE) |
| Contacts (crimp) | HD / HE / SUB-D |
| Contact material | Copper alloy |
| Surface | |
| Crimp contact | Passivated silver or gold-plated |
| Contact carrier | Zinc alloy |
| Temperature range | –40 °C … +70 °C |
| Material – module | Glass-fibre reinforced PC (in UL list and approved for railway applications) |
| Flammability to UL 94 | V-0 |

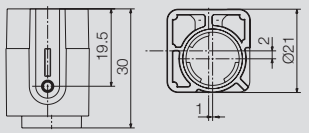
**Note**

## Inserts

**Male insert**



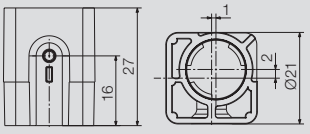
| Designation | Type | Order No. |
|---|---|---|
| HDC 04A CSB MALE | Male insert | **1137720000** |




**Female insert**



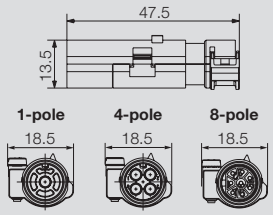
| Designation | Type | Order No. |
|---|---|---|
| HDC 04A CSB FEMALE | Female insert | **1137760000** |



### Male contact carrier



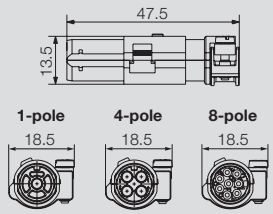
| Designation | | Type | | Order No. |
|---|---|---|---|---|
| HDC CM BUS SV M1 CT | 1-pole | Male contact carrier | HD | **1983810000** |
| HDC CM BUS SV M4 CT | 4-pole | Male contact carrier | HD | **1983790000** |
| HDC CM BUS SV M8 CT | 8-pole | Male contact carrier | SUB-D | **1043130000** |
| HDC CM BUS HE M1 CT | 1-pole | Male contact carrier | HE | **1116100000** |




### Female contact carrier



| Designation | | Type | | Order No. |
|---|---|---|---|---|
| HDC CM BUS SV F1 CT | 1-pole | Females contact carrier | HD | **1983800000** |
| HDC CM BUS SV F4 CT | 4-pole | Females contact carrier | HD | **1983770000** |
| HDC CM BUS SV F8 CT | 8-pole | Females contact carrier | SUB-D | **1043120000** |
| HDC CM BUS HE F1 CT | 1-pole | Females contact carrier | HE | **1116090000** |




## Accessories

### HD crimp contacts

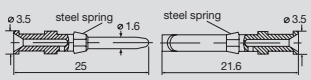
Surface Gold



Surface Silver



| Male | | | Female | |
|---|---|---|---|---|
| Qty. | Type | Order No. | Type | Order No. |
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1AU | **1651640000** | HDC-C-HD-BM0.75-1AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.75-1AG | **1601760000** |
| 100 | HDC-C-HD-SM0.75-1AG | **1601750000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 6 mm |

### Tools



| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact release tool** | |
| Removal Tool HD | **1866730000** |

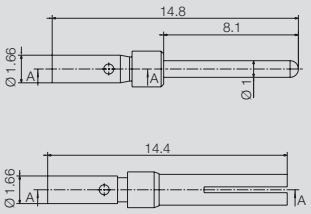
# RockStar® CSB Size 1

## Accessories

### SUB-D crimp contacts



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-CM-BUS-S0.33-0.52 | **1027260000** | HDC-C-CM-BUS-B0.33-0.52 | **1027270000** |

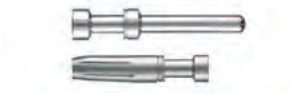



### HE crimp contacts

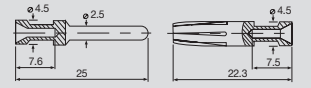
Surface Gold



Surface Silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1AU | **1651430000** | HDC-C-HE-BM0.75-1AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| 100 | HDC-C-HE-SM4.65AU | **1116540000** | HDC-C-HE-BM4.65AU | **1116530000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1AG | **1200600000** | HDC-C-HE-BM0.75-1AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | | Insulation stripping length |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 - 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |
| 4.62 mm² | AWG 11 | 7.5 mm |

### Tools



| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6/2.5 | **9018490000** |
| **Contact release tool** | |
| Removal Tool HE | **1866750000** |

# Housing selection RockStar® IP66
# Size 1

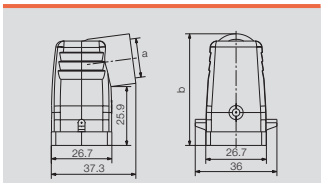
## Hood

### Plug housing, cable entry sideways



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 49.2 | HDC 04A TWLU 1M20G | **1788810000** |

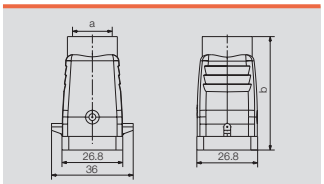



### Plug housing, cable entry at top



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 50 | HDC 04A TOLU 1M20G | **1788820000** |



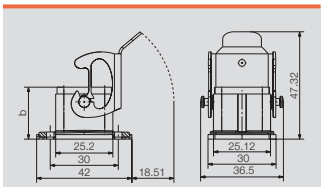

## Base

### Bulkhead housing



**Material:** diecast aluminium

| | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| | | | 23 | HDC 04A ALU | **1497600000** |

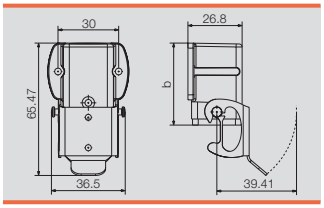



### Base housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 41.5 | HDC 04A SLU 1M20G | **1788830000** |

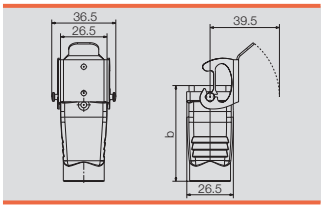



### Coupling housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 53.5 | HDC 04A KOLU 1M20G | **1788840000** |

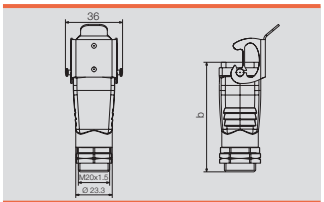



### Screw mounting housing



**Material:** diecast aluminium

| a | Version | Cover | b (mm) | Type | Order No. |
|---|---|---|---|---|---|
| M 20 | w. threading | | 54 | HDC 04A ELU 1M20G | **1900320000** |

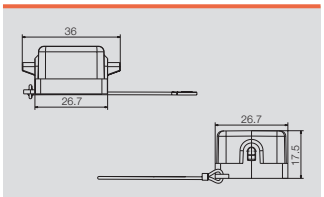



### Cover



**Material:** diecast aluminium

| | Version | | Type | Order No. |
|---|---|---|---|---|
| | for female insert | | HDC 04A DMDL 2BO | **1665750000** |
| | for male insert | | HDC 04A DODL 2BO | **1665740000** |



## Screw connection

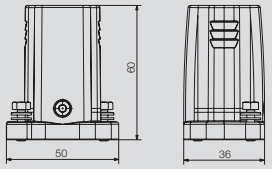
## Size 1

## Hood

**Plug housing, cable entry at top**



| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 60 | HDC IP68 04A TOS 1M20 | **1082390000** |
| PG 13.5 | w. threading | 60 | HDC IP68 04A TOS 1PG13 | **1082410000** |



## Screw connection

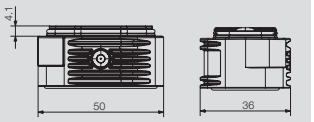
## Size 1

## Base

### Bulkhead housing



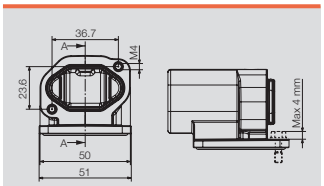
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 24.4 | HDC IP68 04A AS | **1081470000** |




### Angled bulkhead housing



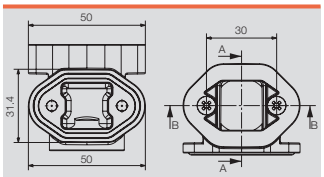
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| M 20 | w. threading | 43.7 | HDC IP68 04A AWS 1M20 | **1081480000** |
| | | 43.7 | HDC IP68 04A AWS | **1081490000** |




### Adapter



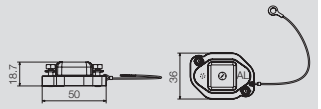
| a | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 38.6 | HDC IP68 04A ADS | **1083130000** |
| PG 13.5 | w. threading | 38.6 | HDC IP68 04A ADS 1PG13 | **1083120000** |




### Cover



| | Version | b (mm) | Type | Order No. |
|---|---|---|---|---|
| | | 18.7 | HDC IP68 04A COVER | **1083110000** |

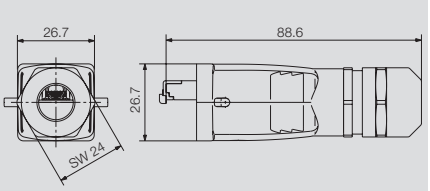



H

## Plug RockStar® V5 - RJ45

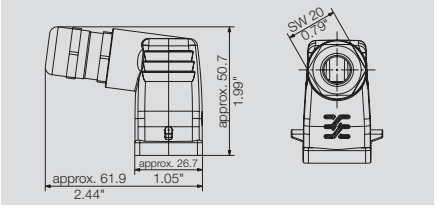
### V5 - RJ45 plug, straight






### V5-RJ45 plug, angled






## Technical data

| | V5 - RJ45 plug, straight | V5-RJ45 plug, angled |
|---|---|---|
| Degree of protection | IP 67 | IP 67 |
| Housing main material | diecast aluminium | diecast aluminium |
| Sheath diameter, min. / max. | 5 mm / 12 mm | 5 mm / 10 mm |
| Plugging cycles | 750 | 750 |
| Ambient temperature (operational), min. / max. | -40 °C...+70 °C | -40 °C...+70 °C |
| Connector standard | IEC 61076-3-106 Var. 5, IEC 60603-7-51 | IEC 61076-3-106 Var. 5, IEC 60603-7-51 |

**Note**

## Ordering data - Sets

| | Type | Qty. | Order No. |
|---|---|---|---|
| RJ45 tool-free, AWG 26-22, TIA-A/-B/-PROFINET | IE-PS-V05M-RJ45-FH | 10 | **1963200000** |
| RJ45 tool-free, AWG 26-22 , TIA-B | IE-PS-V05M-RJ45-FH-B | 10 | **1271250000** |
| RJ45 Crimp, AWG 27-24 | IE-PS-V05M-RJ45-TH | 10 | **1963110000** |

| Type | Qty. | Order No. |
|---|---|---|
| IE-PS-V05M-A-RJ45-FH | 10 | **1077300000** |

**Note**

## Ordering data - Empty housings

| Type | Qty. | Order No. |
|---|---|---|
| IE-PH-V05M | 10 | **1962540000** |

| Type | Qty. | Order No. |
|---|---|---|

**Note**

## Accessories

| Dust protection cap | Type | Qty. | Order No. |
|---|---|---|---|
| Plug housing protective cap | IE-PP-V05M | 10 | **1968920000** |

| Type | Qty. | Order No. |
|---|---|---|
| IE-PP-V05M | 10 | **1968920000** |

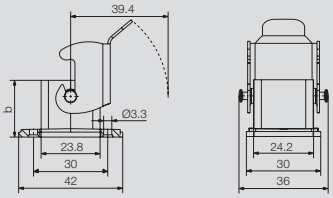
Plug inserts can also be ordered separately. Refer to Inserts.

Plug inserts can also be ordered separately. Refer to Inserts.

## Flange RockStar® V5 - RJ45

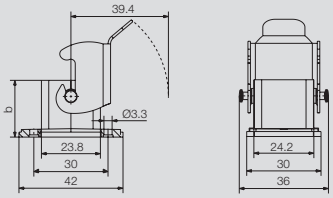
### Module






### Coupling






## Technical data

| | Module | Coupling |
|---|---|---|
| Degree of protection | IP 67 | IP 67 |
| Housing main material | diecast aluminium | diecast aluminium |
| Plugging cycles | 750 | 750 |
| Ambient temperature (operational), min. / max. | -40 °C...+70 °C | -40 °C...+70 °C |
| Connector standard | IEC 61076-3-106 Var. 5, IEC 60603-7-51 | IEC 61076-3-106 Var. 5, IEC 60603-7-51 |
| Wire cross-section, flexible, min. / max. | AWG 26 / AWG 22 | |
| Wire cross-section, flexible, min. / max. | 0.48 mm / 0.76 mm | |
| Wire cross-section, solid, min. / max. | AWG 24 / AWG 22 | |
| Wire cross-section, solid, min. / max. | 0.4 mm / 0.64 mm | |
| **Note** | | |

## Ordering data - Sets

| | Module Type | Qty. | Order No. | Coupling Type | Qty. | Order No. |
|---|---|---|---|---|---|---|
| PROFINET module | IE-BS-V05M-RJ45-FJ-P | 10 | **1963700000** | | | |
| TIA-A modul | IE-BS-V05M-RJ45-FJ-A | 10 | **1963460000** | | | |
| Coupling | | | | IE-BS-V05M-RJ45-C | 10 | **1963510000** |

**Note**

## Ordering data - Empty housings

| Module Type | Qty. | Order No. | Coupling Type | Qty. | Order No. |
|---|---|---|---|---|---|
| IE-BH-V05M | 10 | **1963530000** | IE-BH-V05M | 10 | **1963530000** |

**Note**

## Accessories

| **Dust protection cap** | Module Type | Qty. | Order No. | Coupling Type | Qty. | Order No. |
|---|---|---|---|---|---|---|
| Flange-mounted housing, protective cap | IE-BP-V05M | 10 | **1968930000** | IE-BP-V05M | 10 | **1968930000** |

Plug inserts can also be ordered separately. Refer to Inserts.

Plug inserts can also be ordered separately. Refer to Inserts.

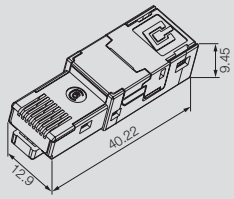
H

## Plug inserts RJ45

- Cat.$6_A$
- IP 20
- For Variant 1, 4, 5 and 14 housings

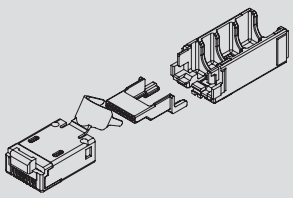
## Tool-free






## Crimp





## Technical data

| | Tool-free | Crimp |
|---|---|---|
| Category | Cat.$6_A$ / Class $E_A$ (ISO/IEC 11801 2010) | Cat.$6_A$ / Class $E_A$ (ISO/IEC 11801 2010) |
| Degree of protection | IP 67 with housing | IP 67 with housing |
| Plugging cycles | 750 | 750 |
| Shielding | 360° all-round enclosure | 360° all-round enclosure |
| Housing main material | Zinc diecast | Brass, PC UL 94 V0 |
| Contact material / Contact surface | | Phosphor bronze / AU ≥ 0.8 µm, Ni 2.54 µm |
| Wire cross-section, flexible, min. / max. | AWG 26 / AWG 22 | AWG 27 / AWG 24 |
| Wire cross-section, flexible, min. / max. | 0.48 mm / 0.76 mm | 0.46 mm / 0.61 mm |
| Wire cross-section, solid, min. / max. | AWG 24 / AWG 24 | AWG 24 / AWG 24 |
| Wire cross-section, solid, min. / max. | 0.4 mm / 0.64 mm | 0.4 mm / 0.51 mm |
| Insulation cross-section, max. | 1.6 mm | 1.05 mm |
| Humidity | | 0...93 % rel. humidity |
| Ambient temperature (operational), min. / max. | -40 °C...+70 °C | -40 °C...+70 °C |
| Insulation resistance | 500 MΩ | 500 MΩ |
| Dielectric strength, contact / contact | ≥ 1000 V DC | ≥ 1000 V DC |
| Dielectric strength, contact / shield | ≥ 1500 V DC | ≥ 1500 V DC |
| Current-carrying capacity at 50 °C | 1 A | 1 A |
| PoE+ | | conforming to IEEE 802.3af |
| Speed | 10 GBit | 10 GBit |
| Connector standard | IEC 60603-7-51 | IEC 60603-7-51 |
| **Note** | | |

## Ordering data

| tool-free | Type | Qty. | Order No. |
|---|---|---|---|
| TIA-A/B/PROFINET | IE-PI-RJ45-FH | 10 | **1962730000** |
| TIA-A | IE-PI-RJ45-FH-A | 10 | **1132010000** |
| TIA-B | IE-PI-RJ45-FH-B | 10 | **1132020000** |
| PROFINET | IE-PI-RJ45-FH-P | 10 | **1132030000** |
| **Crimp** | | | |
| | | | |
| **Note** | | | |

| Type | Qty. | Order No. |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| IE-PI-RJ45-TH | 10 | **1962720000** |
| | | |

## Accessories

| Tools | Type | Qty. | Order No. |
|---|---|---|---|
| Crimping tool | | | |
| Optional pressing tool | PWZ RJ45 | 1 | **1118040000** |

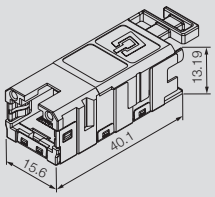
| Type | Qty. | Order No. |
|---|---|---|
| TT 8 RS MP 8 | 1 | **9202800000** |
| | | |

## Flange inserts RJ45

- Cat.$6_A$
- IP 20
- For Variant 1, 4, 5 and 14 housings

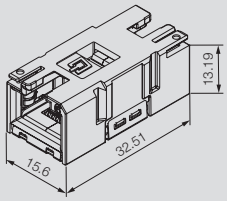
## Module






## Coupling






## Technical data

| | | |
|---|---|---|
| Category | Cat.$6_A$ / Class $E_A$ (ISO/IEC 11801 2010) | Cat.$6_A$ / Class $E_A$ (ISO/IEC 11801 2010) |
| Degree of protection | IP 67 with housing | IP 67 with housing |
| Plugging cycles | 750 | 750 |
| Shielding | 360° all-round enclosure | 360° all-round enclosure |
| Housing main material | Zinc diecast | Zinc diecast |
| Wire cross-section, flexible, min. / max. | AWG 26 / AWG 22 | |
| Wire cross-section, solid, min. / max. | AWG 24 / AWG 24 | |
| Insulation cross-section, max. | 1.6 mm | |
| Connector standard | IEC 60603-7-51 | IEC 60603-7-51 |
| Ambient temperature (operational), min. / max. | -40 °C...+70 °C | -40 °C...+70 °C |
| **Note** | | |

## Ordering data

| **No tools needed** | **Type** | **Qty.** | **Order No.** | **Type** | **Qty.** | **Order No.** |
|---|---|---|---|---|---|---|
| TIA-A | IE-BI-RJ45-FJ-A | 10 | **1962850000** | | | |
| TIA-B | IE-BI-RJ45-FJ-B | 10 | **1963840000** | | | |
| PROFINET | IE-BI-RJ45-FJ-P | 10 | **1963830000** | | | |
| Coupling | | | | IE-BI-RJ45-C | 10 | **1962840000** |
| **Note** | | | | | | |

## Accessories

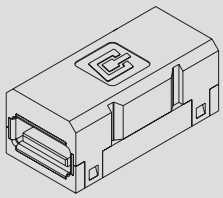
| **Tools** | **Type** | **Qty.** | **Order No.** | **Type** | **Qty.** | **Order No.** |
|---|---|---|---|---|---|---|
| Optional pressing tool | PWZ RJ45 | 1 | **1118040000** | | | |

## Flange inserts USB

- IP 20
- For Variant 1, 4, 5 and 14 housings

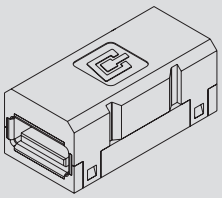
## Coupling USB A/A





## Coupling USB A/B





## Technical data

| | Coupling USB A/A | Coupling USB A/B |
|---|---|---|
| Degree of protection | IP 67 with housing | IP 67 with housing |
| Shielding | 360° all-round enclosure | 360° all-round enclosure |
| Ambient temperature (operational), min. / max. | -40 °C...+70 °C | -40 °C...+70 °C |
| Connection 1 / 2 | USB A / USB A | USB A / USB B |
| Connector standard | IEC 61076-3-107 | IEC 61076-3-107 |
| **Note** | | |

## Ordering data

| | Type | Qty. | Order No. |
|---|---|---|---|
| USB coupling | IE-BI-USB-A | 10 | **1019570000** |
| **Note** | | | |

| | Type | Qty. | Order No. |
|---|---|---|---|
| USB coupling | IE-BI-USB-AB | 10 | **1131380000** |
| **Note** | | | |

## Accessories

# RockStar® Kits



**RockStar® Kits**


**Introduction** I.2

**RockStar® Kits with HA inserts** I.4
250 V
22 A
3 - 4 poles

**RockStar® Kits with HE inserts** I.8
500 V
16 A
6 - 48 poles

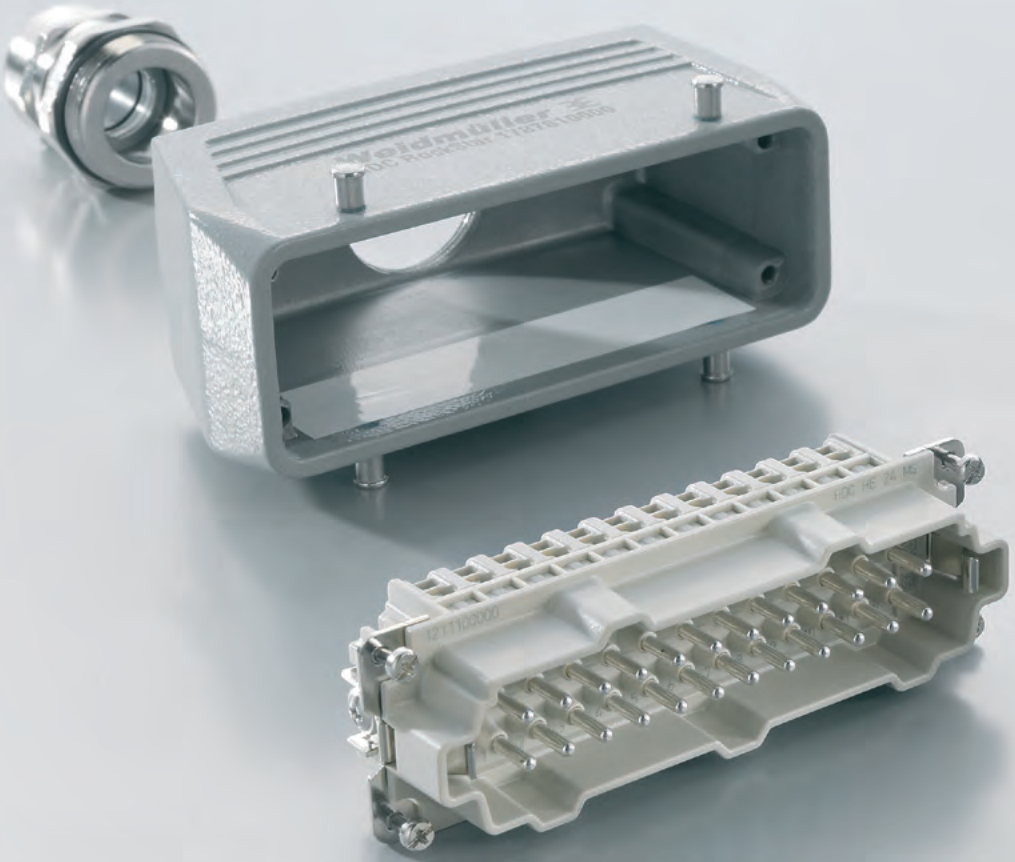
**RockStar® Kits with HSB inserts** I.28
400 V
35 A
6 poles

# RockStar® Kits

RockStar® kits are sets consisting of all components necessary for assembling a heavy-duty connector. The kit includes the male and female inserts, the plug housing, the bulkhead housing and the cable gland.

**The benefits for you:**

- Easy to purchase – only one ordered part for all items
- Easy to use – just one package with no individual parts
- Wide variety – we'll put together a customised kit for whichever components you need.





**Easy to choose**

All components at a single glance – each matched to the required number of poles, size and wire connection method



### Easy to stock

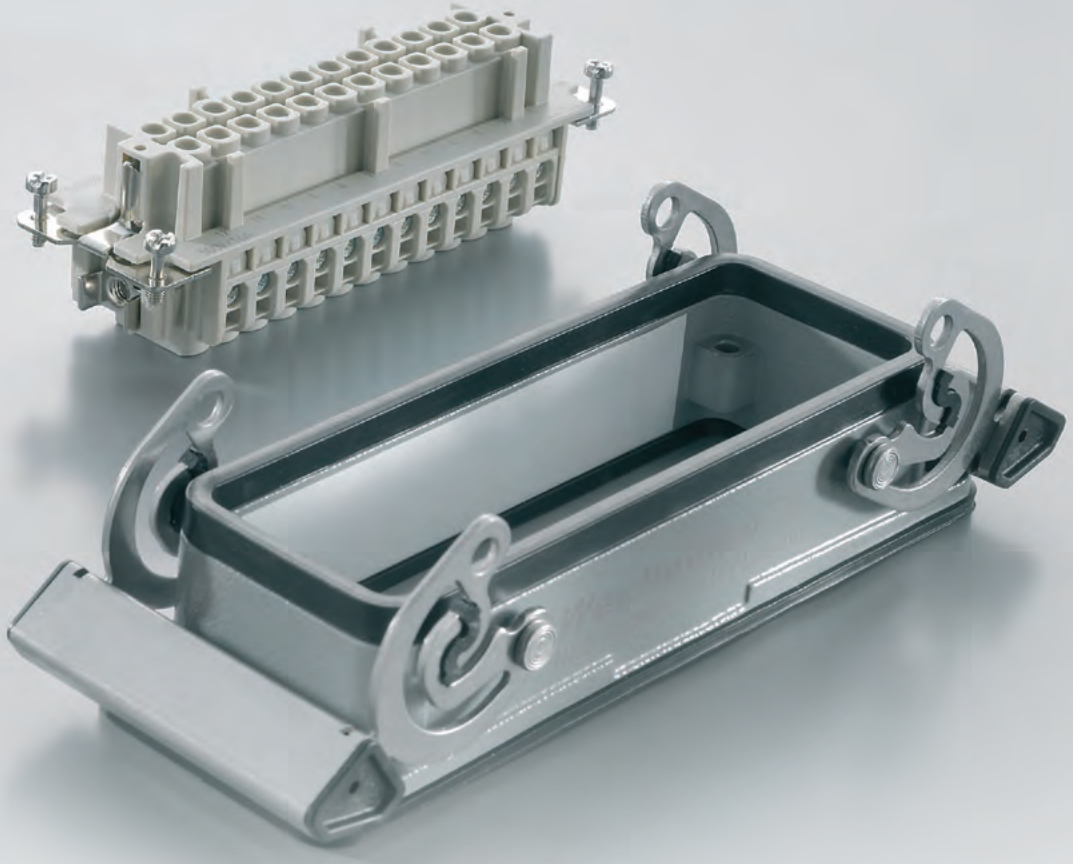
Only one package is needed for the complete connector. The RockStar® kits simplify your logistics.



### Easy to install

You only need a screwdriver to install the connector in the field.





## Kits with HA inserts, 3 pole

### 250 V, 22 A, Size 1

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 03.300 M | 1802470000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 3 FS | 1498200000 |
| Male | HDC HA 3 MS | 1498100000 |
| Bulkhead (feed-through) | HDC 04A ALU | 1497600000 |
| Plug | HDC 04A TOLU 1M20G | 1788820000 |
| Cable glands | VG M20 - MS 68 | 1772220000 |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 03.301 M | 1802460000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 3 FS | 1498200000 |
| Male | HDC HA 3 MS | 1498100000 |
| Bulkhead (feed-through) | HDC 07A ALU | 1652410000 |
| Plug | HDC 07A TOLU 1M20G | 1788520000 |
| Cable glands | VG M20-1/K68 | 1772300000 |

Plastic housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 03.302 M | 1802450000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 3 FS | 1498200000 |
| Male | HDC HA 3 MS | 1498100000 |
| Bulkhead (feed-through) | HDC 04A AWLU | 1497700000 |
| Plug | HDC 04A TOLU 1M20G | 1788820000 |
| Cable glands | VG M20 - MS 68 | 1772220000 |

Metal housing

## 250 V, 22 A, Size 1

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 03.300 | 1712560000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 3 FS | 1498200000 |
| Male | HDC HA 3 MS | 1498100000 |
| Bulkhead (feed-through) | HDC 04A ALU | 1497600000 |
| Plug | HDC 04A TOLU 1PG11G | 1652470000 |
| Cable glands | VG 11-MS68 | 1569080000 |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 03.301 | 1712570000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 3 FS | 1498200000 |
| Male | HDC HA 3 MS | 1498100000 |
| Bulkhead (feed-through) | HDC 07A ALU | 1652410000 |
| Plug | HDC 07A TOLU 1PG11G | 1652380000 |
| Cable glands | VG 11-K68 | 1568990000 |

Plastic housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 03.302 | 1712580000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 3 FS | 1498200000 |
| Male | HDC HA 3 MS | 1498100000 |
| Bulkhead (feed-through) | HDC 04A AWLU | 1497700000 |
| Plug | HDC 04A TOLU 1PG11G | 1652470000 |
| Cable glands | VG 11-MS68 | 1569080000 |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 03.404 | 1712630000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 3 FS | 1498200000 |
| Male | HDC HA 3 MS | 1498100000 |
| Bulkhead (feed-through) | HDC 07A AWLU | 1652420000 |
| Plug | HDC 07A TOLU 1PG11G | 1652380000 |
| Cable glands | VG 11-K68 | 1568990000 |

Plastic housing

## Kits with HA inserts, 4 pole

### 250 V, 22 A, Size 1

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 04.400 M | 1802440000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 04A ALU | 1497600000 |
| Plug | HDC 04A TOLU 1M20G | 1788820000 |
| Cable glands | VG M20 - MS 68 | 1772220000 |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 04.401 M | 1802430000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 07A ALU | 1652410000 |
| Plug | HDC 07A TOLU 1M20G | 1788520000 |
| Cable glands | VG M20-1/K68 | 1772300000 |

Plastic housing



| | Type | Order No. |
|---|---|---|
| | HDC KIT HA 04.402 M | 1802700000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 04A AWLU | 1497700000 |
| Plug | HDC 04A TOLU 1M20G | 1788820000 |
| Cable glands | VG M20 - MS 68 | 1772220000 |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC KIT HA 04.406 M | 1802720000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 07A AWLU | 1652420000 |
| Plug | HDC 07A TOLU 1M20G | 1788520000 |
| Cable glands | VG M20-1/K68 | 1772300000 |

Plastic housing

## 250 V, 22 A, Size 1

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 04.400 | 1712590000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 04A ALU | 1497600000 |
| Plug | HDC 04A TOLU 1PG11G | 1652470000 |
| Cable glands | VG 11-MS68 | 1569080000 |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 04.401 | 1712600000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 07A ALU | 1652410000 |
| Plug | HDC 07A TOLU 1PG11G | 1652380000 |
| Cable glands | VG 11-K68 | 1568990000 |

Plastic housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 04.402 | 1712610000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 04A AWLU | 1497700000 |
| Plug | HDC 04A TOLU 1PG11G | 1652470000 |
| Cable glands | VG 11-MS68 | 1569080000 |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HA 04.406 | 1712650000 |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HA 4 FS | 1498400000 |
| Male | HDC HA 4 MS | 1498300000 |
| Bulkhead (feed-through) | HDC 07A AWLU | 1652420000 |
| Plug | HDC 07A TOLU 1PG11G | 1652380000 |
| Cable glands | VG 11-K68 | 1568990000 |

Plastic housing

## Kits with HE inserts, 6 pole

### 500 V, 24 A, Size 3

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC KIT HE 06.100 M | **1802730000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FS | **1200200000** |
| Male | HDC HE 6 MS | **1200000000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TSLU 1M20G | **1788100000** |
| Cable glands | VG M20 - MS 68 | **1772220000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC KIT HE 06.101 M | **1802740000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FS | **1200200000** |
| Male | HDC HE 6 MS | **1200000000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TOLU 1M20G | **1788120000** |
| Cable glands | VG M20 - MS 68 | **1772220000** |

Metal housing

## 500 V, 24 A (16 A), Size 3

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 06.100 | **1712460000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FS | **1200200000** |
| Male | HDC HE 6 MS | **1200000000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TSLU 1PG16G | **1652520000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 06.101 | **1712660000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FS | **1200200000** |
| Male | HDC HE 6 MS | **1200000000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TOLU 1PG16G | **1652640000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housing

# Kits with HE inserts, 6-pole, PUSH IN

## 500 V, 24 A, Size 3

### Metric versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 06.10 M | **1027650000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FP | **1873520000** |
| Male | HDC HE 6 MP | **1873530000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TSLU 1M20G | **1788100000** |
| Cable glands | VG M20 - MS 68 | **1772220000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 06.11 M | **1061720000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FP | **1873520000** |
| Male | HDC HE 6 MP | **1873530000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TOLU 1M20G | **1788120000** |
| Cable glands | VG M20 - MS 68 | **1772220000** |

Metal housings

## 500 V, 24 A, Size 3

### PG versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 06.10 | **1027660000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FP | **1873520000** |
| Male | HDC HE 6 MP | **1873530000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TSLU 1PG16G | **1652520000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 06.11 | **1061710000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 6 FP | **1873520000** |
| Male | HDC HE 6 MP | **1873530000** |
| Bulkhead (feed-through) | HDC 06B ALU | **1202100000** |
| Plug | HDC 06B TOLU 1PG16G | **1652640000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housings

## Kits with HE inserts, 10 pole

### 500 V, 16 A, Size 4

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 10.110 M | **1802420000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FS | **1204100000** |
| Male | HDC HE 10 MS | **1203900000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TSBU 1M25G | **1787550000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 10.111 M | **1802410000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FS | **1204100000** |
| Male | HDC HE 10 MS | **1203900000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TOBU 1M25G | **1787590000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housing

## 500 V, 16 A, Size 4

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 10.110 | **1712510000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FS | **1204100000** |
| Male | HDC HE 10 MS | **1203900000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TSBU 1PG16G | **1654070000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 10.111 | **1712670000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FS | **1204100000** |
| Male | HDC HE 10 MS | **1203900000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TOBU 1PG16G | **1654220000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housing

## Kits with HE inserts, 10-pole, PUSH IN

### 500 V, 16 A, Size 4

### Metric versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 10.110 M | **1027670000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FP | **1873540000** |
| Male | HDC HE 10 MP | **1873550000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TSBU 1M25G | **1787550000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 10.111 M | **1061740000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FP | **1873540000** |
| Male | HDC HE 10 MP | **1873550000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TOBU 1M25G | **1787590000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housings

## 500 V, 16 A, Size 4

### PG versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 10.110 | **1027680000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FP | **1873540000** |
| Male | HDC HE 10 MP | **1873550000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TSBU 1PG16G | **1654070000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 10.111 | **1061730000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 10 FP | **1873540000** |
| Male | HDC HE 10 MP | **1873550000** |
| Bulkhead (feed-through) | HDC 10B ABU | **1205000000** |
| Plug | HDC 10B TOBU 1PG16G | **1654220000** |
| Cable glands | VG 16-MS68 | **1569100000** |

Metal housings

## Kits with HE inserts, 16 pole

### 500 V, 16 A, Size 6

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 16.120 M | **1802400000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FS | **1207700000** |
| Male | HDC HE 16 MS | **1207500000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TSBU 1M25G | **1788180000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 16.121 M | **1802390000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FS | **1207700000** |
| Male | HDC HE 16 MS | **1207500000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TOBU 1M25G | **1788210000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housing

## 500 V, 16 A, Size 6

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 16.120 | **1712520000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FS | **1207700000** |
| Male | HDC HE 16 MS | **1207500000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TSBU 1PG21G | **1656480000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 16.121 | **1712680000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FS | **1207700000** |
| Male | HDC HE 16 MS | **1207500000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TOBU 1PG21G | **1656590000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housing

## Kits with HE inserts, 16-pole, PUSH IN

### 500 V, 16 A, Size 6

### Metric versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 16.120 M | **1027690000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FP | **1873560000** |
| Male | HDC HE 16 MP | **1873570000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TSBU 1M25G | **1788180000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 16.121 M | **1061770000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FP | **1873560000** |
| Male | HDC HE 16 MP | **1873570000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TOBU 1M25G | **1788210000** |
| Cable glands | VG M25 - MS 68 | **1772230000** |

Metal housings

## 500 V, 16 A, Size 6

### PG versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 16.120 | **1027640000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FP | **1873560000** |
| Male | HDC HE 16 MP | **1873570000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TSBU 1PG21G | **1656480000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 16.121 | **1061750000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FP | **1873560000** |
| Male | HDC HE 16 MP | **1873570000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TOBU 1PG21G | **1656590000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housings

## Kits with HE inserts, 24 pole

### 500 V, 16 A, Size 8

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 24.130 M | **1802380000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FS | **1211300000** |
| Male | HDC HE 24 MS | **1211100000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TSBU 1M32G | **1787750000** |
| Cable glands | VG M32 - MS 68 | **1772240000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 24.131 M | **1802480000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FS | **1211300000** |
| Male | HDC HE 24 MS | **1211100000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TOBU 1M32G | **1787810000** |
| Cable glands | VG M32 - MS 68 | **1772240000** |

Metal housing

## 500 V, 16 A, Size 8

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 24.130 | **1712530000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FS | **1211300000** |
| Male | HDC HE 24 MS | **1211100000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TSBU 1PG21G | **1661230000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housing



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 24.131 | **1712690000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FS | **1211300000** |
| Male | HDC HE 24 MS | **1211100000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TOBU 1PG21G | **1661370000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housing

# Kits with HE inserts, 24-pole, PUSH IN

## 500 V, 16 A, Size 8

### Metric versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 24.130 M | **1061790000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FP | **1873580000** |
| Male | HDC HE 24 MP | **1873590000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TSBU 1M32G | **1787750000** |
| Cable glands | VG M32 - MS 68 | **1772240000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 24.131 M | **1061700000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FP | **1873580000** |
| Male | HDC HE 24 MP | **1873590000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TOBU 1M32G | **1787810000** |
| Cable glands | VG M32 - MS 68 | **1772240000** |

Metal housings

## 500 V, 16 A, Size 8

### PG versions




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 24.130 | **1061780000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FP | **1873580000** |
| Male | HDC HE 24 MP | **1873590000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TSBU 1PG21G | **1661230000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housings




| | Type | Order No. |
|---|---|---|
| | HDC KIT HE-P 24.131 | **1061800000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FP | **1873580000** |
| Male | HDC HE 24 MP | **1873590000** |
| Bulkhead (feed-through) | HDC 24B ABU | **1212400000** |
| Plug | HDC 24B TOBU 1PG21G | **1661370000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housings

## Kits with HE inserts, 32 pole

### 500 V, 16 A, Size 10

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 32.140 M | **1802370000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FS | **1207700000** |
| Female | HDC HE 16 FS 17-32 | **1216100000** |
| Male | HDC HE 16 MS | **1207500000** |
| Male | HDC HE 16 MS 17-32 | **1215700000** |
| Bulkhead (feed-through) | HDC 32B ABU | **1217800000** |
| Plug | HDC 32B TSBU 1M32G | **1788400000** |
| Cable glands | VG M32 - MS 68 | **1772240000** |

Metal housing

## 500 V, 16 A, Size 10

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 32.140 | **1712540000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 16 FS | **1207700000** |
| Female | HDC HE 16 FS 17-32 | **1216100000** |
| Male | HDC HE 16 MS | **1207500000** |
| Male | HDC HE 16 MS 17-32 | **1215700000** |
| Bulkhead (feed-through) | HDC 32B ABU | **1217800000** |
| Plug | HDC 32B TSBU 1PG29G | **1666840000** |
| Cable glands | VG 29-MS68 | **1569120000** |

Metal housing

## Kits with HE inserts, 48 pole

### 500 V, 16 A, Size 12

### Metric versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 48.150 M | **1802360000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FS | **1211300000** |
| Female | HDC HE 24 FS 25-48 | **1221200000** |
| Male | HDC HE 24 MS | **1211100000** |
| Male | HDC HE 24 MS 25-48 | **1220800000** |
| Bulkhead (feed-through) | HDC 48B ADLU | **1222900000** |
| Plug | HDC 48B TSLU 1M40G | **1788310000** |
| Cable glands | VG M40 - MS 68 | **1772250000** |

Metal housing

## 500 V, 16 A, Size 12

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HE 48.150 | **1712550000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HE 24 FS | **1211300000** |
| Female | HDC HE 24 FS 25-48 | **1221200000** |
| Male | HDC HE 24 MS | **1211100000** |
| Male | HDC HE 24 MS 25-48 | **1220800000** |
| Bulkhead (feed-through) | HDC 48B ADLU | **1222900000** |
| Plug | HDC 48B TSLU 1PG29G | **1650850000** |
| Cable glands | VG 29-MS68 | **1569120000** |

Metal housing

## Kits with HSB inserts, 6 pole

### 400 V, 35 A, Size 6

### PG versions



| | Type | Order No. |
|---|---|---|
| | HDC-KIT-HSB 06.500 | **1724000000** |

| Part | Type | Order No. |
|---|---|---|
| Female | HDC HSB 6 FS | **1498900000** |
| Male | HDC HSB 6 MS | **1498700000** |
| Bulkhead (feed-through) | HDC 16B ABU | **1208600000** |
| Plug | HDC 16B TSBU 1PG21G | **1656480000** |
| Cable glands | VG 21-MS68 | **1569110000** |

Metal housing

# RockStar® accessories

**RockStar® accessories**


| | |
|---|---|
| Introduction | J.2 |
| Crimp contacts | J.4 |
| Coding | J.12 |
| Shield lever | J.16 |
| Other accessories | J.20 |

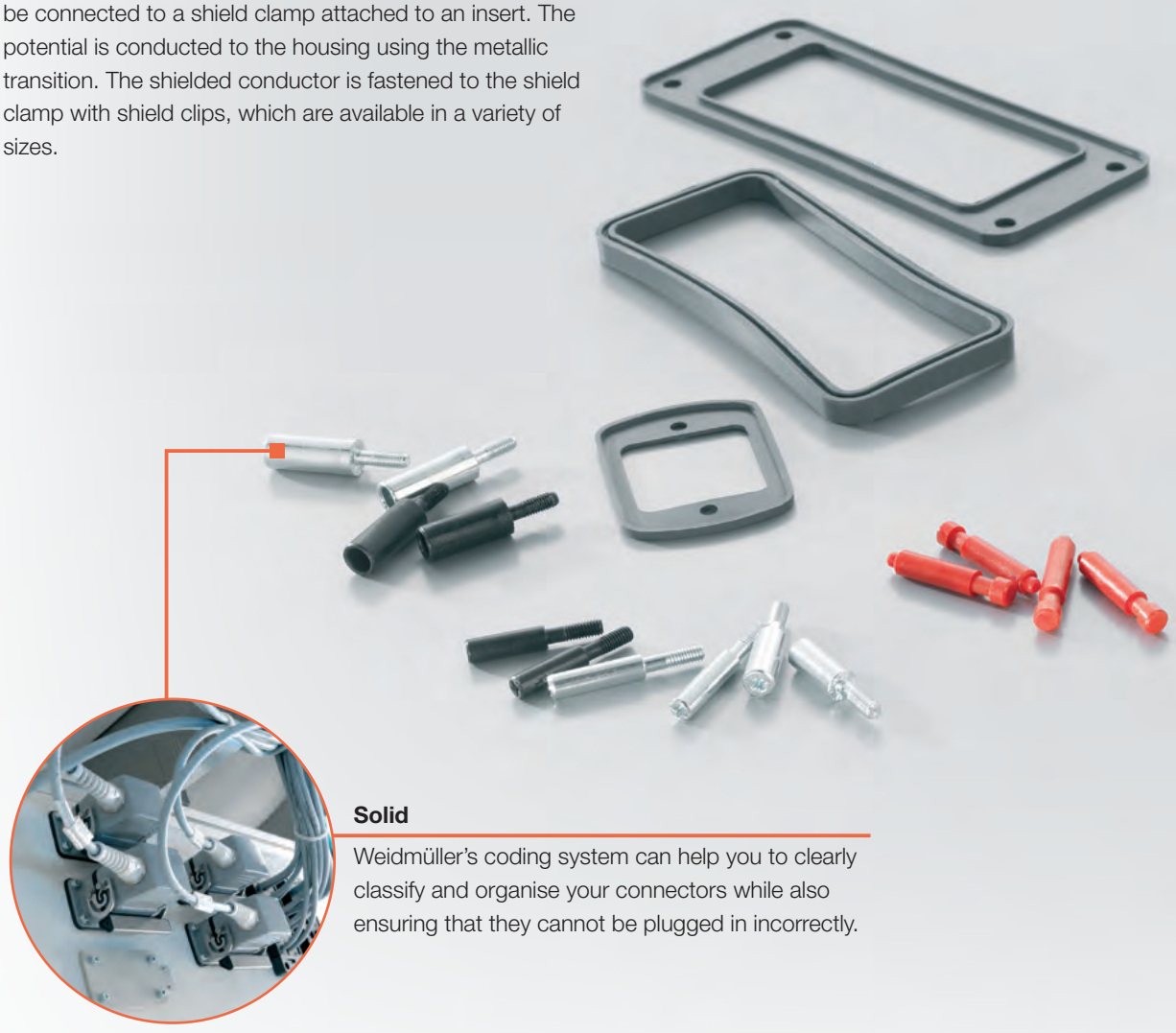
# RockStar® accessories

In addition to heavy-duty connectors, RockStar® also includes functional and safety accessories – including crimp contacts, coding systems and shield clamps – to help you with your facility cabling.

A technically proper crimp connection should be gas-tight and corrosion-resistant. Machined crimp contacts are available with different performance requirements and with either silver or gold plating.

When aligning multiple connectors with similar mating profiles within one facility, you must safeguard against accidental plugging mistakes. The RockStar® product line also includes the corresponding locking pins, coding systems and pole coding for this purpose.

If multiple shielded cables are being fed into the connector housing using a flexible hose or a multi-cable feed, then the shielding should normally be connected to a shield clamp attached to an insert. The potential is conducted to the housing using the metallic transition. The shielded conductor is fastened to the shield clamp with shield clips, which are available in a variety of sizes.



**Solid**

Weidmüller's coding system can help you to clearly classify and organise your connectors while also ensuring that they cannot be plugged in incorrectly.



### Secure

Solid, machined crimped contacts ensure a gas-tight and corrosion-resistant crimp.





### Optimised shielding

Shield clamps and shield clips allow the shield to be directly attached to the connector housing.

# Crimp contacts

## Crimp contacts for fixed-pole inserts

### Technical data

| | for HD and HDD inserts | for HE and HEE inserts |
|---|---|---|
| Material | Copper alloy | Copper alloy |
| Surface hard gold-plated | 0.8 µm | 0.8 µm |
| Surface hard silver-plated | 3 µm | 3 µm |
| Contact resistance | ≤ 4 mΩ | ≤ 2 mΩ |
| Clamping range | 0.14 ... 2.5 mm² | 0.5 ... 4.0 mm² |
| | 26 ... 14 AWG | 20 ... 12 AWG |
| Stripping length | 8 mm | 7.5 mm |

### For HD and HDD inserts

**Crimp contacts**

Surface Gold

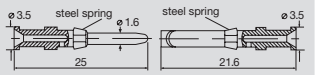


Surface Silver



**Male** / **Female**

| Qty. | Type | Order No. | Type | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 | 8 mm |
| 0.50 mm² | AWG 20 | 8 mm |
| 0.75 – 1.00 mm² | AWG 18 | 8 mm |
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 8 mm |

**Tools**

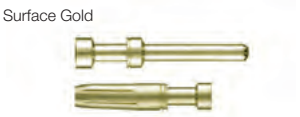


| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6 / 2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact release tool** | |
| Removal Tool HD | **1866730000** |

### For HE and HEE inserts

**Crimp contacts**

Surface Gold

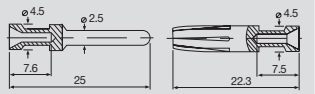


Surface Silver



**Male** / **Female**

| Qty. | Type | Order No. | Type | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| 100 | HDC-C-HE-SM4.65AU | **1116540000** | HDC-C-HE-BM4.65AU | **1116530000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.50 mm² | AWG 20 | 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 | 7.5 mm |
| 1.50 mm² | AWG 16 | 7.5 mm |
| 2.50 mm² | AWG 14 | 7.5 mm |
| 4.00 mm² | AWG 12 | 7.5 mm |
| 4.65 mm² | AWG 11 | 7.5 mm |

**Tools**



| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6 / 2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact release tool** | |
| Removal Tool HE | **1866750000** |

## Crimp contacts for fixed-pole inserts

### Technical data

| | For HQ and MixMate inserts |
|---|---|
| Material | Copper alloy |
| Surface hard silver-plated | 3 µm |
| Contact resistance | ≤ 1 mΩ |
| Clamping range | 1.5 ... 6 mm² |
| | 16 ... 10 AWG |
| Stripping length | 8 mm |

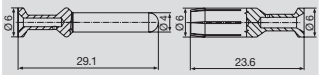
### For HQ and MixMate inserts

**Crimp contacts**

Surface Silver



| Male | | | Female | |
|---|---|---|---|---|
| **Qty.** | **Type** | **Order No.** | **Type** | **Order No.** |
| 25 | HDC C HX SM1.5AG | **1002910000** | HDC C HX BM1.5AG | **1002950000** |
| 25 | HDC C HX SM2.5AG | **1002920000** | HDC C HX BM2.5AG | **1002960000** |
| 25 | HDC C HX SM4.0AG | **1002930000** | HDC C HX BM4.0AG | **1002970000** |
| 25 | HDC C HX SM6.0AG | **1002940000** | HDC C HX BM6.0AG | **1002980000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 1.50 mm² | AWG 16 | 8 mm |
| 2.50 mm² | AWG 14 | 8 mm |
| 4.00 mm² | AWG 12 | 8 mm |
| 6.00 mm² | AWG 10 | 8 mm |

**Tools**



| **Crimping tool** | **Order No.** |
|---|---|
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact release tool** | |
| Removal Tool HX | **1002990000** |

# Crimp contacts

## Crimp contacts for HighPower

### Technical data

| | for HighPower 250 A |
|---|---|
| Material | Copper alloy |
| Surface hard silver-plated | 3-5 µm |
| Contact resistance | ≤ 0.1 mΩ |
| Clamping range | 25 ... 95 mm²<br>AWG 4 ... AWG 000 |
| Stripping length | 30 mm* |

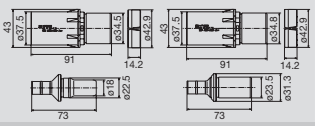
### For HighPower 250 A

**Crimp contacts**



| Wire connection cross-section* | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 25 mm² | HDC HP 250 M 25 | **1079690000** | HDC HP 250 F 25 | **1079720000** |
| 35 mm² | HDC HP 250 M 35 | **1079680000** | HDC HP 250 F 35 | **1079730000** |
| 50 mm² | HDC HP 250 M 50 | **1119080000** | HDC HP 250 F 50 | **1079740000** |
| 70 mm² | HDC HP 250 M 70 | **1119090000** | HDC HP 250 F 70 | **1079750000** |
| 95 mm² | HDC HP 250 M 95 | **1119100000** | HDC HP 250 F 95 | **1079770000** |

**Note:** * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customize the crimp contact to fit your requirements.



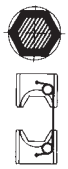

| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 25 mm² | AWG 4 | 23 mm |
| 35 mm² | AWG 2 | 23 mm |
| 50 mm² | AWG 1 | 23 mm |
| 70 mm² | AWG 00 | 23 mm |
| 95 mm² | AWG 000 | 23 mm |

**Hand crimping tools**



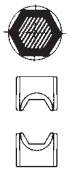
| Designation | Type | Order No. |
|---|---|---|
| Hand crimping tool | MTR 160 | **9017250000** |
| Hand crimping tool | MTR 300 | **9021390000** |

**Crimping inserts MTR 160**



| Cross-section (mm²) | Code to DIN 48083 | Crimping width (mm) | Order No. |
|---|---|---|---|
| 25 | 10 | 7.0 | **9020920000** |
| 35 | 12 | 7.0 | **9020930000** |
| 50 | 14 | 7.0 | **9020940000** |
| 70 | 16 | 7.0 | **9020950000** |
| 95 | 18 | 7.0 | **9020960000** |

**Crimping inserts MTR 300**



| Cross-section (mm²) | Code to DIN 48083 | Crimping width (mm) | Order No. |
|---|---|---|---|
| 25 | 10 | 7.0 | **9021450000** |
| 35 | 12 | 7.0 | **9021460000** |
| 50 | 14 | 7.0 | **9021470000** |
| 70 | 16 | 7.0 | **9021480000** |
| 95 | 18 | 7.0 | **9022290000** |

## Crimp contacts for HighPower

### Technical data

| | for HighPower 550 A |
|---|---|
| Material | Copper alloy |
| Surface hard silver-plated | 3-5 µm |
| Contact resistance | ≤ 0.1 mΩ |
| Clamping range | 50 … 240 mm²<br>AWG 1/0 … kcmil 500 |
| Stripping length | 30 mm* |

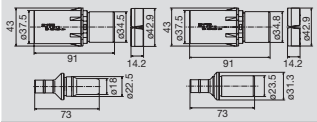
### For HighPower 550 A

#### Crimp contacts



| Wire connection cross-section* | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 50 mm² | HDC HP 550 M 50 | **1157800000** | HDC HP 550 F 50 | **1177100000** |
| 95 mm² | HDC HP 550 M 95 | **1079790000** | HDC HP 550 F 95 | **1079810000** |
| 120 mm² | HDC HP 550 M 120 | **1079780000** | HDC HP 550 F 120 | **1079820000** |
| 150 mm² | HDC HP 550 M 150 | **1119110000** | HDC HP 550 F 150 | **1079830000** |
| 185 mm² | HDC HP 550 M 185 | **1120580000** | HDC HP 550 F 185 | **1079840000** |
| 240 mm² | HDC HP 550 M 240 | **1120590000** | HDC HP 550 F 240 | **1120600000** |

**Note:** * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customise the crimp contact to fit your requirements.



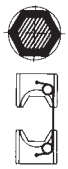

| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 50 mm² | AWG 1 | 30 mm |
| 95 mm² | AWG 000 | 30 mm |
| 120 mm² | AWG 0000 | 30 mm |
| 150 mm² | AWG 00000 | 30 mm |
| 185 mm² | AWG 000000 | 30 mm |
| 240 mm² | kciml 500 | 30 mm |

#### Hand crimping tools



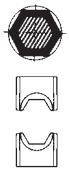
| Designation | Type | Order No. |
|---|---|---|
| Hand crimping tool | MTR 160 | **9017250000** |
| Hand crimping tool | MTR 300 | **9021390000** |

#### Crimping inserts MTR 160



| Cross-section (mm²) | Code to DIN 48083 | Crimping width (mm) | Order No. |
|---|---|---|---|
| 50 | 14 | 7.0 | **9020940000** |
| 95 | 18 | 7.0 | **9020960000** |
| 120 | 20 | 7.0 | **9020970000** |
| 150 | 22 | 7.0 | **9020980000** |
| 185 | 25 | 7.0 | **9020990000** |
| 240 | 28 | 7.0 | **9021000000** |

#### Crimping inserts MTR 300



| Cross-section (mm²) | Code to DIN 48083 | Crimping width (mm) | Order No. |
|---|---|---|---|
| 50 | 14 | 7.0 | **9021470000** |
| 95 | 18 | 7.0 | **9022290000** |
| 120 | 20 | 7.0 | **9022300000** |
| 150 | 22 | 7.0 | **9022310000** |
| 185 | 25 | 7.0 | **9022320000** |
| 240 | 28 | 7.0 | **9022330000** |

# Crimp contacts

## Crimp contacts for the modular ConCept system

### Technical data

| | CM-3 | CM-5 | CM-10 | CM-HE | CM ST Hybrid |
|---|---|---|---|---|---|
| Material | Copper alloy | Copper alloy | v | Copper alloy | Tin-bronze |
| Surface hard gold-plated | | | 0.8 µm | 0.8 µm | |
| Surface hard silver-plated | 3 µm | 3 µm | 3 µm | 3 µm | |
| Contact resistance | ≤ 1 mΩ | ≤ 2 mΩ | ≤ 4 mΩ | ≤ 2 mΩ | ≤ 5 mΩ |
| Clamping range | 1.5 ... 10 mm² | 0.5 ... 4.0 mm² | 0.14 ... 2.5 mm² | 0.5 ... 4.0 mm² | 0.25 … 0.5 mm² |
| | 16 ... 7 AWG | 20 ... 12 AWG | 26 ... 14 AWG | 20 ... 12 AWG | AWG 24 … 20 |
| Stripping length | 10 mm | 7 mm | 8 mm | 7.5 mm | 3 mm |

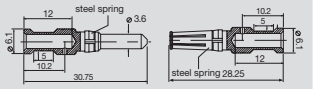
## For CM-3 modules

### Crimp contacts

Surface Silver



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-M3-SM1.5AG | **1698120000** | HDC-C-M3-BM1.5AG | **1698130000** |
| 100 | HDC-C-M3-SM2.5AG | **1698140000** | HDC-C-M3-BM2.5AG | **1698150000** |
| 100 | HDC-C-M3-SM4.0AG | **1682260000** | HDC-C-M3-BM4.0AG | **1682270000** |
| 100 | HDC-C-M3-SM6.0AG | **1682280000** | HDC-C-M3-BM6.0AG | **1682290000** |
| 100 | HDC-C-M3-SM10.0AG | **1682300000** | HDC-C-M3-BM10.0AG | **1682310000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 1.50 mm² | AWG 16 | 10 mm |
| 2.50 mm² | AWG 14 | 10 mm |
| 4.00 mm² | AWG 12 | 10 mm |
| 6.00 mm² | AWG 10 | 10 mm |
| 10.00 mm² | AWG 7 | 10 mm |

### Tools



| Crimping tool 1.5 ... 2.5 mm² | Order No. |
|---|---|
| CTX CM 1.6 / 2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Crimping tool 4 ... 10 mm²** | |
| CTX CM 3.6 | **9018480000** |
| **Crimping tool 1.5 ... 10 mm²** | |
| CTIN CM 3.6 | **9205440000** |
| **Contact release tool** | |
| Removal Tool CM3 | **1866710000** |

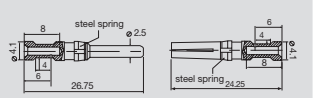
## For CM-5 modules

### Crimp contacts

Surface Silver



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-M5-SM0.5AG | **1682320000** | HDC-C-M5-BM0.5AG | **1682330000** |
| 100 | HDC-C-M5-SM0.75-1.00AG | **1682340000** | HDC-C-M5-BM0.75-1.00AG | **1682350000** |
| 100 | HDC-C-M5-SM1.5AG | **1682360000** | HDC-C-M5-BM1.5AG | **1682370000** |
| 100 | HDC-C-M5-SM2.5AG | **1682380000** | HDC-C-M5-BM2.5AG | **1682390000** |
| 100 | HDC-C-M5-SM4.0AG | **1682400000** | HDC-C-M5-BM4.0AG | **1682410000** |




| Conductor cross-section | Insulation stripping length | |
|---|---|---|
| 0.5 mm² | AWG 20 | 7 mm |
| 0.75 - 1.00 mm² | AWG 18 | 7 mm |
| 1.50 mm² | AWG 16 | 7 mm |
| 2.50 mm² | AWG 14 | 7 mm |
| 4.00 mm² | AWG 12 | 7 mm |

### Tools



| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6 / 2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact release tool** | |
| Removal Tool CM5 | **1866720000** |

## For CM-10 modules and ConCept system bus, 1 and 4 poles

### Crimp contacts

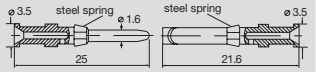
Surface Gold



Surface Silver



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-HD-SM0.14-0.37AU | **1651620000** | HDC-C-HD-BM0.14-0.37AU | **1651670000** |
| 100 | HDC-C-HD-SM0.5AU | **1651630000** | HDC-C-HD-BM0.5AU | **1651680000** |
| 100 | HDC-C-HD-SM0.75-1.00AU | **1651640000** | HDC-C-HD-BM0.75-1.00AU | **1651690000** |
| 100 | HDC-C-HD-SM1.5AU | **1651650000** | HDC-C-HD-BM1.5AU | **1651700000** |
| 100 | HDC-C-HD-SM2.5AU | **1651660000** | HDC-C-HD-BM2.5AU | **1651710000** |
| | | | | |
| 100 | HDC-C-HD-SM0.14-0.37AG | **1651520000** | HDC-C-HD-BM0.14-0.37AG | **1651570000** |
| 100 | HDC-C-HD-SM0.5AG | **1651530000** | HDC-C-HD-BM0.5AG | **1651580000** |
| 100 | HDC-C-HD-SM0.75-1.00AG | **1601750000** | HDC-C-HD-BM0.75-1.00AG | **1601760000** |
| 100 | HDC-C-HD-SM1.5AG | **1651550000** | HDC-C-HD-BM1.5AG | **1651600000** |
| 100 | HDC-C-HD-SM2.5AG | **1651560000** | HDC-C-HD-BM2.5AG | **1651610000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.14 – 0.37 mm² | AWG 26-22 8 mm |
| 0.50 mm² | AWG 20 8 mm |
| 0.75 – 1.00 mm² | AWG 18 8 mm |
| 1.50 mm² | AWG 16 8 mm |
| 2.50 mm² | AWG 14 8 mm |

### Tools



| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6 / 2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact release tool** | |
| Removal Tool HD | **1866730000** |

## For CM-HE modules and ConCept system bus, 1-pole HE

### Crimp contacts

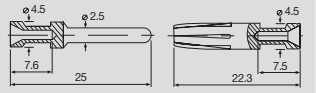
Surface Gold



Surface Silver



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 100 | HDC-C-HE-SM0.5AU | **1651420000** | HDC-C-HE-BM0.5AU | **1651470000** |
| 100 | HDC-C-HE-SM0.75-1.00AU | **1651430000** | HDC-C-HE-BM0.75-1.00AU | **1651480000** |
| 100 | HDC-C-HE-SM1.5AU | **1651440000** | HDC-C-HE-BM1.5AU | **1651490000** |
| 100 | HDC-C-HE-SM2.5AU | **1651450000** | HDC-C-HE-BM2.5AU | **1651500000** |
| 100 | HDC-C-HE-SM4.0AU | **1651460000** | HDC-C-HE-BM4.0AU | **1651510000** |
| 100 | HDC-C-HE-SM4.65AU | **1116540000** | HDC-C-HE-BM4.65AU | **1116530000** |
| | | | | |
| 100 | HDC-C-HE-SM0.5AG | **1200500000** | HDC-C-HE-BM0.5AG | **1201100000** |
| 100 | HDC-C-HE-SM0.75-1.00AG | **1200600000** | HDC-C-HE-BM0.75-1.00AG | **1201200000** |
| 100 | HDC-C-HE-SM1.5AG | **1200700000** | HDC-C-HE-BM1.5AG | **1201300000** |
| 100 | HDC-C-HE-SM2.5AG | **1200800000** | HDC-C-HE-BM2.5AG | **1201400000** |
| 100 | HDC-C-HE-SM4.0AG | **1200900000** | HDC-C-HE-BM4.0AG | **1201500000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.50 mm² | AWG 20 7.5 mm |
| 0.75 – 1.00 mm² | AWG 18 7.5 mm |
| 1.50 mm² | AWG 16 7.5 mm |
| 2.50 mm² | AWG 14 7.5 mm |
| 4.00 mm² | AWG 12 7.5 mm |
| 4.65 mm² | AWG 11 7.5 mm |

### Tools



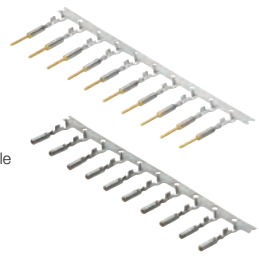
| Crimping tool | Order No. |
|---|---|
| CTX CM 1.6 / 2.5 | **9018490000** |
| CTIN CM 1.6/2.5 | **9205430000** |
| **Contact release tool** | |
| Removal Tool HD | **1866750000** |

## For ConCept ST modules with hybrid insert

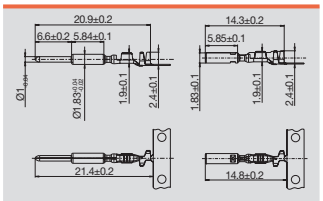
### Crimp contacts hybrid

Male

Female



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 300 | IE-BIC-HYB-P-0.5-300 | **1096150000** | IE-PIC-HYB-S-0.5-300 | **1096180000** |




| Conductor cross-section | Insulation stripping length |
|---|---|
| 0.21 – 0.50 mm² | AWG 24-20 3.5 mm |

### Accessories



| Crimping tool hybrid | Order No. |
|---|---|
| HTF HYB | **1119580000** |

## Crimp contacts

### Fibre optic contacts



Fibre-optic cables guarantee interference-free transmission without any feedback.

The new fibre-optic contacts can now also be used in heavy-duty connectors. Their shape corresponds to that of our proven HD contacts for connecting conventional copper wires. Accordingly, they can be assembled in existing connectors of the HD series, as well as being suitable for use with the ConCept modular system. It is even possible to connect fibre-optic wires and copper wires in a single connector.

The advantages at a glance:

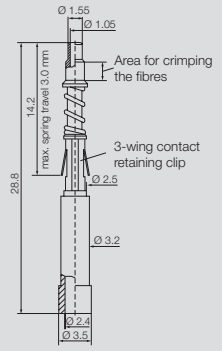
- Immune to electromagnetic interference
- Absolute contact separation
- Weight reduction by dispensing with copper wires
- High transmission capacity and large bandwidth
- All advantages now also available for robust industrial environments

J

### HDC-C-HD ... LWL 1.0 POF

#### Technical data

| | |
|---|---|
| **Connection for POF cable** | |
| Maximum outer diameter | 2.2 mm |
| Polymer fibre diameter | 1.0 mm |
| **Attenuation** | |
| – Requirement to DIN IEC Part 7 Section 2/05.94: | < 3 dB |
| – the HDC-C-HD LWL contacts in plugged-in state: | < 2 dB |
| **Material** | |
| Temperature range | –40 °C to +85 °C |
| Contact material | Nickel-silver |
| Over-spring | Copper alloy |

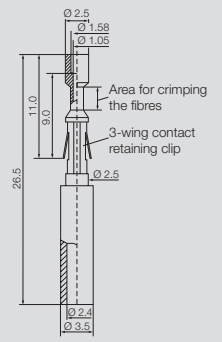



#### Ordering data



| Qty. | Male | Order No. | Female | Order No. |
|---|---|---|---|---|
| 5 | HDC-C-HD-S-LWL 1.0 POF | **1773630000** | HDC-C-HD-B-LWL 1.0 POF | **1773640000** |

HD inserts must be ordered separately



## Instructions for assembling fibre optic contacts

1. Cut POF cable (polymer optical fibre) to the required length with cutting tool (we recommend the KT 8).

2. The end face of the fibre of 2.2 mm POF cables must be polished before crimping onto the fibre optic contact. Insert end of POF cable into polishing disc and polish with polishing sheet placed on a smooth surface (e.g. glass plate). Wipe away any residues after polishing. The best optical attenuation values are obtained with wet polishing.

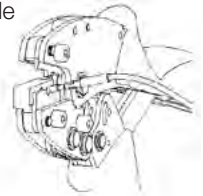
3. Strip sheath of 2.2 mm POF cable to at least 14 mm for female contacts (HDC-C-HD-B-LWL) and at least 19 mm for male contacts (HDC-C-HD-S-LWL).

4. Crimping:
   A. Insert POF cable into male contact, then both together into the crimping die.
   B. The female contact has to be inserted angled slightly downwards into the die.
   Make sure the end face of the contact and the plastic fibre press against the locator.
   C. Squeeze the hand levers until the tool unlocks.
   D. Release option in case of incorrect operation.

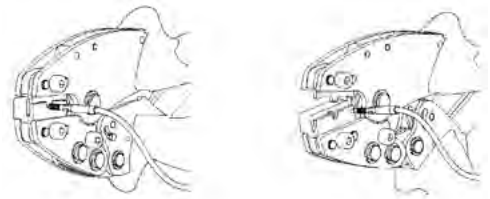
A. Male



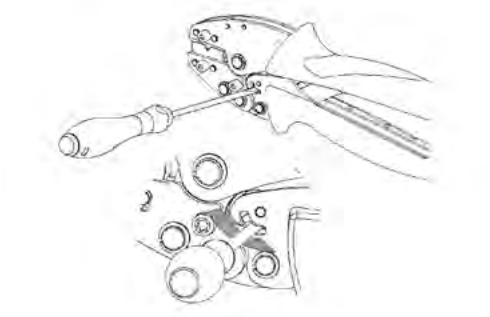
B. Female



C.



D.



### Cutting tool

including positioning sleeve



| Type | Qty. | Order No. |
|---|---|---|
| KT 8 | 1 | 9002650000 |

### Polishing disc for fibre-optic cable

Polishing sheet, 1000 grit size




| Type | Qty. | Order No. |
|---|---|---|
| PS LWL/POF | 1 | 9020390000 |
| PB LWL/POF | 1 | 9020400000 |

### Stripping tool

**for fibre-optic cable**



| Type | Qty. | Order No. |
|---|---|---|
| AM LWL/POF | 1 | 9020360000 |

### Crimping tool

**for fibre-optic set**



| Type | Qty. | Order No. |
|---|---|---|
| HTX-HDC/POF | 1 | 9010950000 |

### Contact release tool

for removing machined HD and fibre-optic contacts



| Type | Qty. | Order No. |
|---|---|---|
| Removal Tool HD | 1 | 1866730000 |

## Coding

### Coding pins

Where several connectors of similar type are arranged on a machine, it is essential to avoid the risk of connectors being inserted in the wrong place.
If you have up to 6 connectors to code, Weidmüller coding pins are the simplest solution. They allow 6 secure coding variations.

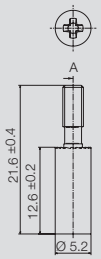
In this case, you substitute 2 M3 fastening screws on the female insert by coding pins. On the male insert, you leave the opposing fastening screws where they are and substitute the others by coding pins. You then have a pair of inserts that fit together. The coding diagram illustrates the system.

### Ordering data

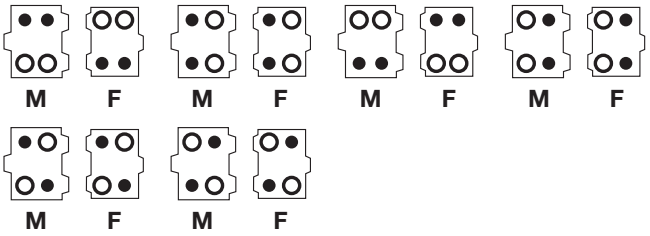


| Type | Qty. | Order No. |
|---|---|---|
| SPB-M 3 | 10 | **1203600000** |

Allow 4 coding pins for each connector.




### Coding arrangement for coding pins




J

## Coding system with guiding function

If you have more than 6 connectors of similar type to code, you need coding pins and coding sockets.
Replace all M3 fastening screws of an insert by 2 coding pins and 2 coding sockets. You then fit 2 coding pins and 2 coding sockets to the mating insert, in a complementary arrangement. Fit coding pins to the other connectors in the same way, but with a different arrangement. The coding diagram illustrates the system.

### Ordering data DSTV

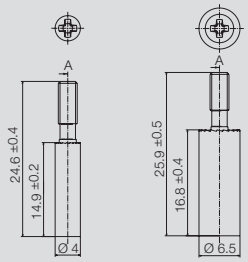
**For fixed-pole inserts and ConCept plastic frames**



**Cod. socket 5 mm dia** ○
**Cod. pin 4 mm dia** ●

| Type | Qty. | Order No. |
|---|---|---|
| DSTV COST4 | 100 | **1471300000** |
| DSTV COBU5 | 100 | **1471500000** |

Plan to have four coding pins and four coding sockets for each connector.




### Ordering data HDC CM

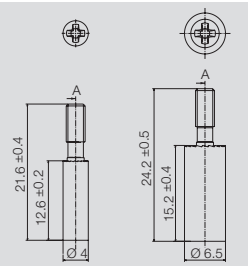
**For ConCept metal frames**



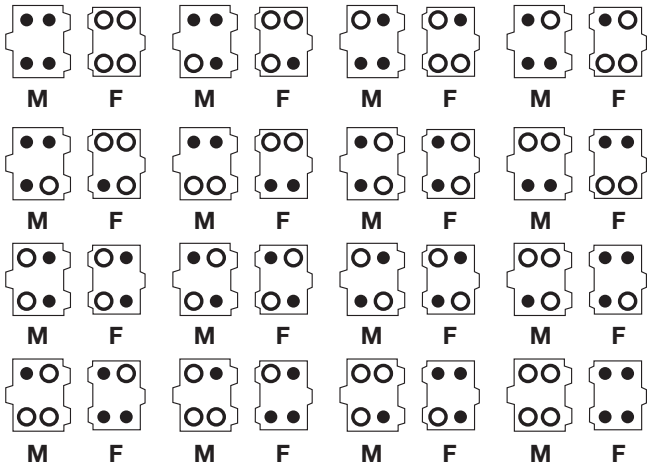
**Cod. socket 5 mm dia** ○
**Cod. pin 4 mm dia** ●

| Type | Qty. | Order No. |
|---|---|---|
| HDC CM GUIDING PIN | 100 | **1202660000** |
| HDC CM GUIDING SOCKET | 100 | **1202670000** |

Plan to have four coding pins and four coding sockets for each connector.




### Coding arrangement for coding pins




J

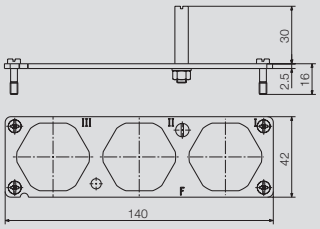
## Coding

### Assembly instructions for the coding system for the RockStar® HDC HighPower connectors

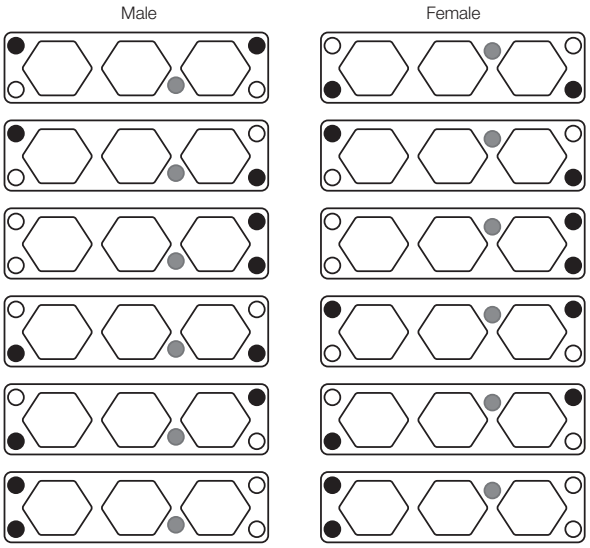
The coding elements (available under Accessories) can be used to code up to five connectors.

### Ordering data

| Mounting frame | Type | Order No. |
|---|---|---|
|  | HDC 06B HP250 MPL1 | **1103680000** |
| | HDC 24B HP250 MPL2 TYP1 | **1103690000** |
| | HDC 24B HP250 MPL2 TYP2 | **1103740000** |
| | HDC 24B HP250 MPL3 TYP1 | **1079640000** |
| | HDC 24B HP250 MPL3 TYP2 | **1103750000** |
| | HDC 24B HP250 MPL4PE T1 | **1212890000** |
| | HDC 24B HP250 MPL4PE T2 | **1212910000** |
| | HDC 24B HP250 MPL4 TYP1 | **1160430000** |
| | HDC 24B HP250 MPL4 TYP2 | **1160440000** |




### Coding arrangement Male/Female



## HE coding pin

Use the HE coding pin for a quick and simple solution to avoid mixing up your plug-in connections. The coding pin can be inserted into a single contact chamber (instead of a crimp contact) on both the male and female side of the connector. The opposite mated contact then remains free. The HE coding pin can be used to code all inserts and modules using HE-series crimp contacts.

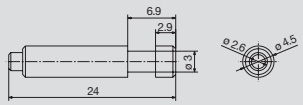
These include the following:

- HA crimp inserts
- HE crimp inserts
- HEE inserts
- HQ 5 insert
- HQ 8 insert
- S8/24 insert (power contacts)
- CM-HE module

### Ordering data



| Type | Qty. | Order No. |
|---|---|---|
| HDC HE CP | 100 | **1003240000** |




## HQ 7 coding system

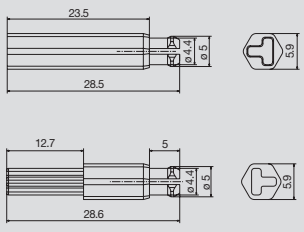
You can protect 7-pole HQ connectors against false insertions by using the HQ 7 coding system. Both a coding pin and socket are used for protection. Six different variants are permitted by the shape of the optional coding which is aligned centrally in the connector. Refer to the coding diagram for the layout.

### Ordering data

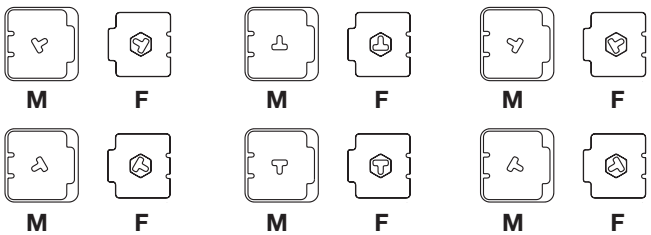


| Type | Qty. | Order No. |
|---|---|---|
| HDC HQ 7 CPM | 50 | **1003230000** |
| HDC HQ 7 CPF | 50 | **1003220000** |

**Note:** six-way coding is possible with a coding pin.




### Coding arrangement Male/Female



# Shield lever

## Shield lever for sizes 3, 4, 6 and 8 for fitting of shield clamps or KLBÜ 3–8 SC

### Technical data

| | |
|---|---|
| Use | Clamping of the shield |
| Fastening of shield lever | To PE terminal, both sides, 2nd screw for fixing |
| Cable connection system | Shield clamp or KLBÜ clamping yoke |
| No. shield clamps or KLBÜ clamping yokes | |
| Size 3 | 1* |
| Size 4 | 2* |
| Size 6 | 3* |
| Size 8 | 5* |
| Clamping range shield clamp | see page J.20 |
| Material | Steel |
| Surface | Galvanised |
| Temperature range | –40 °C ... +125 °C |

**Note:** *Fastening points of shield clamp, 16 mm spacing

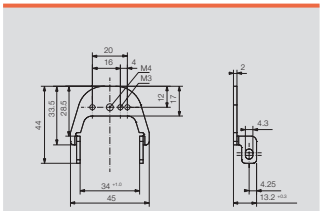
## Shield lever

for standard inserts and the ConCept modular system (plastic frame)

**HDC SHIELD LEVER 3 SC**



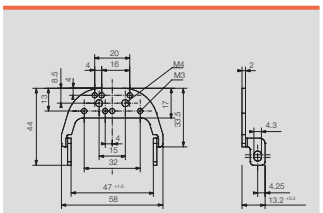
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| HDC SHIELD LEVER 3 SC | 3 | 1 | **1867390000** |



**HDC SHIELD LEVER 4 SC**



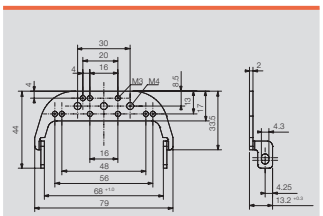
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| HDC SHIELD LEVER 4 SC | 4 | 1 | **1867370000** |



**HDC SHIELD LEVER 6 SC**



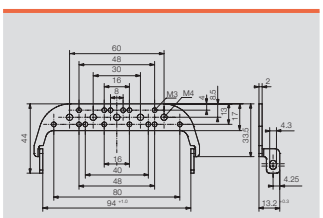
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| HDC SHIELD LEVER 6 SC | 6 | 1 | **1867380000** |



**HDC SHIELD LEVER 8 SC**



| Type | Size | Qty. | Order No. |
|---|---|---|---|
| HDC SHIELD LEVER 8 SC | 8 | 1 | **1867360000** |



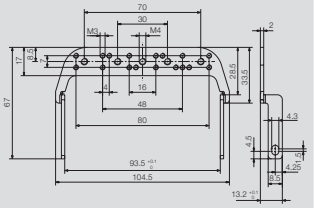
## Shield lever

for standard inserts and the ConCept modular system (plastic frame) – special versions

**SHIELD LEVER 8 MOD 35 mm**



| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 8 MOD 35mm | 8 | 1 | **1000950001** |



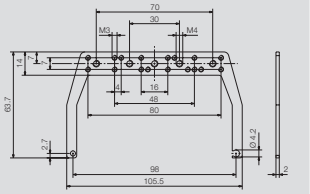

## Shield lever

Special versions

**SHIELD LEVER 8 MOD HIGH**



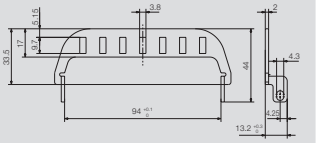
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 8 MOD HIGH | 8 | 1 | **1009310000** |




**HDC SHIELD LEVER 8 LL**



| Type | Size | Qty. | Order No. |
|---|---|---|---|
| HDC SHIELD LEVER 8 LL | 8 | 1 | **1011380000** |



## Shield lever

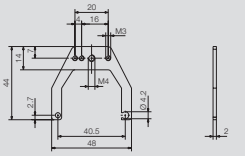
## Shield lever

for the ConCept modular system (metal frame) – straight version

### SHIELD LEVER 3 MOD



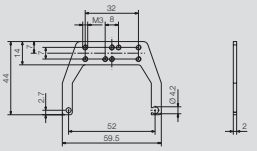
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 3 MOD | 3 | 1 | **1983910000** |




### SHIELD LEVER 4 MOD



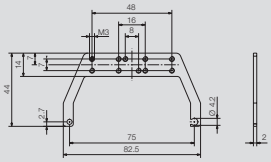
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 4 MOD | 4 | 1 | **1983920000** |




### SHIELD LEVER 6 MOD



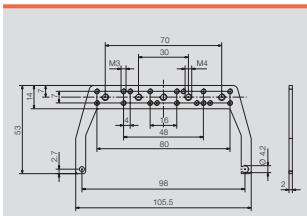
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 6 MOD | 6 | 1 | **1983930000** |




### SHIELD LEVER 8 MOD



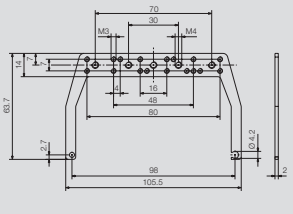
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 8 MOD | 8 | 1 | **1983940000** |




### SHIELD LEVER 8 MOD HIGH



| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 8 MOD HIGH | 8 | 1 | **1009310000** |



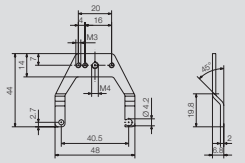
## Shield lever

for the ConCept modular system (metal frame) – 45° angled version

### SHIELD LEVER 3 CSB 45°



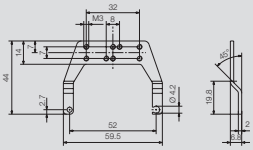
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 3 CSB 45° | 3 | 1 | 1017040000 |




### SHIELD LEVER 4 CSB 45°



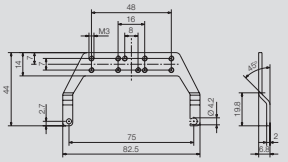
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 4 CSB 45° | 4 | 1 | 1017050000 |




### SHIELD LEVER 6 CSB 45°



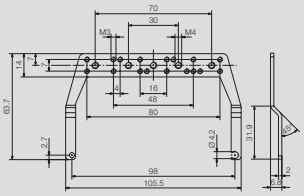
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 6 CSB 45° | 6 | 1 | 1017060000 |




### SHIELD LEVER 8 CSB 45°



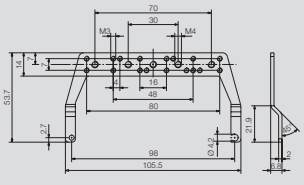
| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 8 CSB 45° | 8 | 1 | 1017070000 |




### SHIELD LEVER 8 CSB 45°L



| Type | Size | Qty. | Order No. |
|---|---|---|---|
| SHIELD LEVER 8 CSB 45°L | 8 | 1 | 1018760000 |



## Other accessories

# Shield clamps for shield levers of size 3 (06B), 4 (10B), 6 (16B) and 8 (24B)

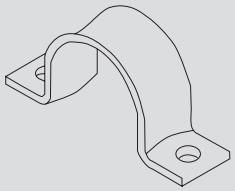
## Technical data

| | | |
|---|---|---|
| Use | Clamps shield on the shield lever | |
| Fastening of shield lever | With supplied fastening accessories | |
| Clamping range shield clamp | Cable diameter mm | Gauge of fastening holes mm |
| Shield clamp 10 mm | 10 | 20 |
| Shield clamp 9 mm | 9 | 20 |
| Shield clamp 8 mm | 8 | 20 |
| Shield clamp 7 mm | 7 | 20 |
| Shield clamp 6 mm | 6 | 16 |
| Shield clamp 5 mm | 5 | 16 |
| Shield clamp 4.5 mm | 4.5 | 16 |
| Material | Steel | |
| Surface | Galvanised | |
| Temperature range | –40 °C ... +125 °C | |

## Shield clamps



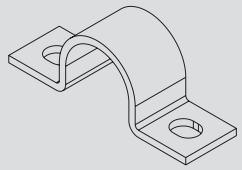
| Type | Qty. | Order No. |
|---|---|---|
| SHIELD CLAMP 4.5 WO S | 100 | **1018120000** |
| SHIELD CLAMP 5 WO S | 100 | **1018130000** |
| SHIELD CLAMP 6 WO S | 100 | **1018150000** |
| SHIELD CLAMP 7 WO S | 100 | **1018160000** |
| SHIELD CLAMP 8 WO S | 100 | **1018170000** |
| SHIELD CLAMP 9 WO S | 100 | **1018180000** |
| SHIELD CLAMP 10 WO S | 100 | **1018110000** |
| SHIELD CLAMP 14 WO S | 100 | **1041490000** |



## Shield contact clips with fitting materials



| Type | Qty. | Order No. |
|---|---|---|
| HDC SHIELD CLAMP 4.5 | 100 | **1912190000** |
| HDC SHIELD CLAMP 5.0 | 100 | **1912200000** |
| HDC SHIELD CLAMP 6.0 | 100 | **1912210000** |
| HDC SHIELD CLAMP 7.0 | 100 | **1912220000** |
| HDC SHIELD CLAMP 8.0 | 100 | **1912230000** |
| HDC SHIELD CLAMP 9.0 | 100 | **1912240000** |
| HDC SHIELD CLAMP 10.0 | 100 | **1912250000** |
| HDC SHIELD CLAMP 14.0 | 1 | **1002820000** |



## HDC GRIP PANEL 8 SC

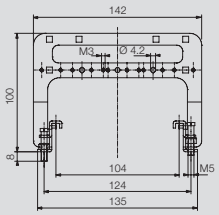
### Technical data

| | |
|---|---|
| Use | To establish direct contact to bulkhead |
| | Fastened with integrated M5 screws |
| Advantages | Broad contact surface gives large-area contact |
| | Low contact resistance; high torsional rigidity |
| | Shield can be connected to grip panel |
| **Material data Grip Panel 8 SC** | |
| Material | Steel |
| Surface | Galvanised |
| Temperature range | –40 °C to 125 °C |
| **System data** | |
| Size | 24B or 8 |
| | KLBÜ and shield clamps can be used |
| | Cable ties can be used for fixing cable |

### Grip panel



| Type | Qty. | Order No. |
|---|---|---|
| HDC GRIP PANEL 8 SC | 5 | **1934770000** |



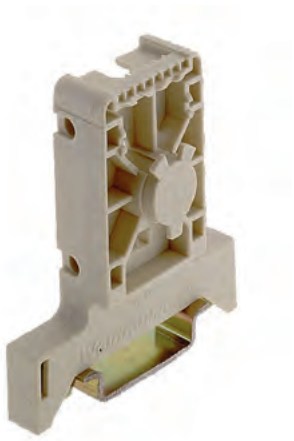

### PE and mounting screws



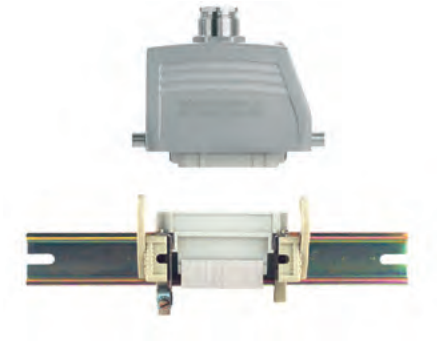
| Type | Qty. | Order No. |
|---|---|---|
| HDC PE HA SCREW M4x5.5 | 50 | **1025660000** |
| HDC PE HE SCREW M4x7.8 | 50 | **1025670000** |
| HDC PE HD/ HDD/CF SCREW M4x6 | 50 | **1029440000** |
| HDC PE HSB/S SCREW M5x8 | 50 | **1029470000** |
| HDC PE S6/6 SCREW M4x8 | 50 | **1029520000** |
| | | |
| HDC FIXING SC SIZE1 M3x6 | 50 | **1168850000** |
| HDC FIXING SCREW M3x10 | 50 | **1029510000** |

## Other accessories

### Locking foot for TS 35 mounting rail



### Locking hook



Example: DSTV-TS



### Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| DSTV-TS 6-24 | 10 | **1595220000** |

**Note:**
For all inserts apart from HA and all inserts of size 1

### Ordering data

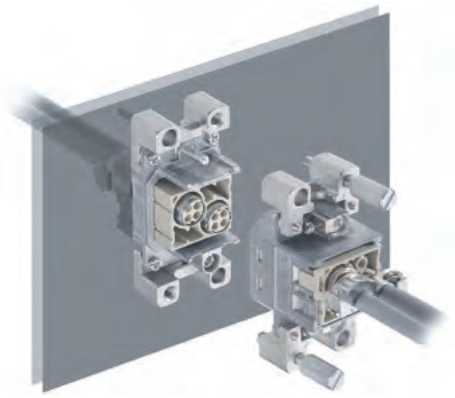
| Type | Qty. | Order No. |
|---|---|---|
| DSTV-TS 6 VH | 10 | **1595230000** |
| DSTV-TS 10-24 VH | 10 | **1595240000** |

**Note:**
For all inserts apart from HA and all inserts of size 1

## HDC screw adapter

The screw adapter is an IP20 installation solution with a full metal construction. The inserts are screwed into the screw adapters. The fastening screws for the inserts should be tightened with 0.5 Nm torque.

After the contact insert has been properly connected with the screw adapter, it can be mounted to the bulkhead or used as a mating connector, depending on the particular version. Three different screw adapters are possible based on the screw-in angle. The required mounting hardware is included.

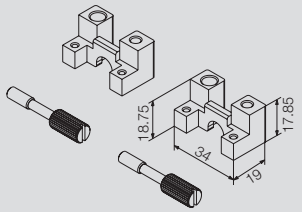


### HDC ADAPTER W. SCREW



| Type | Qty. | Order No. |
|---|---|---|
| HDC ADAPTER W. SCREW | 1 | **1017010000** |

**Note:** Knurled screw interlock for the connector.

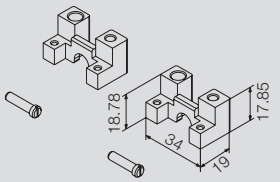



### HDC SCREW ADAPTER



| Type | Qty. | Order No. |
|---|---|---|
| HDC SCHRAUBADAPTER | 1 | **1002790000** |

**Note:** Rectangular cut-out and M4 screws for mounting to wall panel; M3 screws for mounting the insert in the adapter.

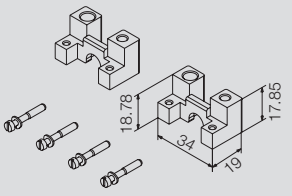


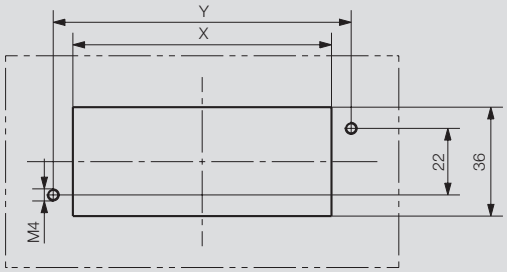

### HDC SCREW ADAPTER W/O T



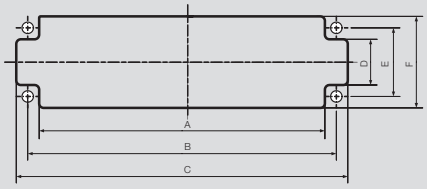
| Type | Qty. | Order No. |
|---|---|---|
| HDC SCREW ADAPTER W/O T | 1 | **1028030000** |

**Note:** Direct mounting on wall panel with rectangular cut-out and M3 screws



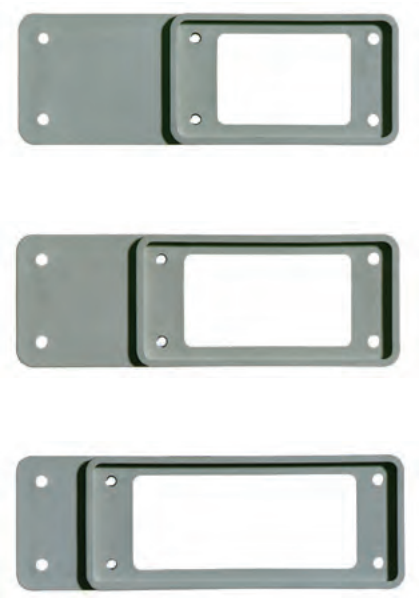

| Size | Dimension „X“ | Dimension „Y“ |
|---|---|---|
| 3 | 52.0 mm | 65.0 mm |
| 4 | 65.0 mm | 78.0 mm |
| 6 | 85.5 mm | 98.5 mm |
| 8 | 112.0 mm | 125.0 mm |




| Size | Type | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| Size 3 | HE 06 | **38** $^{+0.2}_{+0.5}$ | **44** | **48** $^{+0.2}_{+0.5}$ | **36** $^{+0.2}_{+0.5}$ | **27** | **14** $^{+0.2}_{+0.5}$ |
| Size 4 | HE 10 | **51** $^{+0.2}_{+0.5}$ | **57** | **61** $^{+0.2}_{+0.5}$ | **36** $^{+0.2}_{+0.5}$ | **27** | **14** $^{+0.2}_{+0.5}$ |
| Size 6 | HE 16 | **71.5** $^{+0.2}_{+0.5}$ | **77.5** | **81.5** $^{+0.2}_{+0.5}$ | **36** $^{+0.2}_{+0.5}$ | **27** | **14** $^{+0.2}_{+0.5}$ |
| Size 8 | HE 24 | **98** $^{+0.2}_{+0.5}$ | **104** | **108** $^{+0.2}_{+0.5}$ | **36** $^{+0.2}_{+0.5}$ | **27** | **14** $^{+0.2}_{+0.5}$ |

# Other accessories

## Adapter plates, plastic



## Cover plates



## Adapter plates, SUB-D



## Technical data

| Adapter plates, plastic | |
|---|---|
| Material | PA6 |
| Sealing material | TPE-S |
| Colour | orange/grey |
| Temperature range | –30 °C to +110 °C |
| Class of protection | IP 65 |

## Technical data

| Cover plates | |
|---|---|
| Material | PA6 / FE |
| Sealing material | TPE-S |
| Colour | orange/grey |
| Temperature range | –30 °C to +110 °C |
| Class of protection | IP 65 |

## Technical data

| Adapter plates, SUB-D | |
|---|---|
| Material | PA6 |
| Sealing material | |
| Colour | grey |
| Temperature range | –30 °C to +110 °C |
| Class of protection | |

## Ordering data

| Type | Size | Qty. | Order No. |
|---|---|---|---|
| **orange** | | | |
| ADP-8/3-OR | 3 | 10 | **1664980000** |
| ADP-8/4-OR | 4 | 10 | **1665000000** |
| ADP-8/6-OR | 6 | 10 | **1665020000** |
| **grey** | | | |
| ADP-8/3-GR | 3 | 10 | **1664990000** |
| ADP-8/4-GR | 4 | 10 | **1665010000** |
| ADP-8/6-GR | 6 | 10 | **1665030000** |

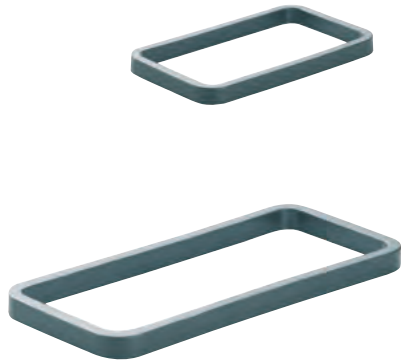
## Ordering data

| Type | Size | Qty. | Order No. |
|---|---|---|---|
| **Sheet steel** | | | |
| ABD-1 sheet steel | 1 | 10 | **9457300000** |
| **Plastic, grey** | | | |
| ABD-2-GR | 2 | 10 | **1664330000** |
| ABD-3-GR | 3 | 10 | **1664350000** |
| ABD-4-GR | 4 | 10 | **1664360000** |
| ABD-5-GR | 5 | 10 | **1664370000** |
| ABD-6-GR | 6 | 10 | **1664390000** |
| ABD-8-GR | 8 | 10 | **1664970000** |
| **Plastic, orange** | | | |
| ABD-8-OR | 8 | 10 | **1664960000** |

## Ordering data

| Type | Aperture | Qty. | Order No. |
|---|---|---|---|
| **Size 3 / Plastic** | | | |
| ADS/6-1/9 | 1 x SUB-D 9 | 10 | **1665940000** |
| ADS/6-2/9 | 2 x SUB-D 9 | 10 | **1665950000** |
| ADS/6-1/15 | 1 x SUB-D 15 | 10 | **1666200000** |
| ADS/6-2/15 | 2 x SUB-D 15 | 10 | **1666210000** |
| **Size 4 / Plastic** | | | |
| ADS/10-1/25 | 1 x SUB-D 25 | 10 | **1666220000** |
| ADS/10-2/25 | 2 x SUB-D 25 | 10 | **1666230000** |
| **Size 6 / Plastic** | | | |
| ADS/16-1/25 | 1 x SUB-D 25 | 10 | **1666320000** |
| ADS/16-2/25 | 2 x SUB-D 25 | 10 | **1666330000** |
| ADS/16-1/37 | 1 x SUB-D 37 | 10 | **1666340000** |
| ADS/16-2/37 | 2 x SUB-D 37 | 10 | **1666350000** |
| ADS/16-1/50 | 1 x SUB-D 50 | 10 | **1666460000** |

## Profile seals



## Gaskets



## Ordering data

| Type | Size | Qty. | Order No. |
|---|---|---|---|
| HDC DG 07A | 1 | 5 | **1044580000** |
| HDC DG 10A | 2 | 5 | **1044590000** |
| HDC DG 06B | 3 | 5 | **1044610000** |
| HDC DG 10B | 4 | 5 | **1044620000** |
| HDC DG 16A | 5 | 5 | **1044600000** |
| HDC DG 16B | 6 | 5 | **1044630000** |
| HDC DG 32A | 7 | 5 | **1044640000** |
| HDC DG 24B | 8 | 5 | **1044650000** |
| HDC DG 48A 32B | 9/10 | 5 | **1044660000** |
| HDC DG 48B | 12 | 5 | **1044670000** |

**Note:**
for bulkhead and coupling housings

## Ordering data

| Type | Size | Qty. | Order No. |
|---|---|---|---|
| HDC FLDG 04A | 1 | 5 | **1044480000** |
| HDC FLDG 10A | 2 | 5 | **1044490000** |
| HDC FLDG 06B | 3 | 5 | **1044500000** |
| HDC FLDG 10B | 4 | 5 | **1044510000** |
| HDC FLDG 16A | 5 | 5 | **1044520000** |
| HDC FLDG 16B | 6 | 5 | **1044530000** |
| HDC FLDG 32A | 7 | 5 | **1044540000** |
| HDC FLDG 24B | 8 | 5 | **1044550000** |
| HDC FLDG 32B | 10 | 5 | **1044560000** |
| HDC FLDG 48B | 12 | 5 | **1044570000** |
| HDC-HB10 AWWL FD | HB-10 AWWL | 500 | **1855680000** |

**Note:**
for bulkhead housings

## Other accessories

### Protective transportation cap for IP66 housings

The protective transportation caps are available for sizes 3, 4, 6 and 8. They can be used with the IP65/IP66 standard housings. The transportation caps are easy to attach and provide IP20 protection. They can be used with all bottom housing sections, bulkhead housings or base housings. A lanyard (not included) can be threaded through the built-in eyelet.

### Technical data

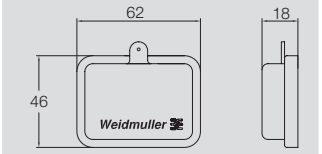
| | |
|---|---|
| Material | Polypropylene |
| UL94 | HB |
| Colour | white/transparent |
| Temperature range | –55 °C ... +110 °C |
| Class of protection | IP20 |

### Protective transportation cap for IP66 housings

**HDC 06B DC**



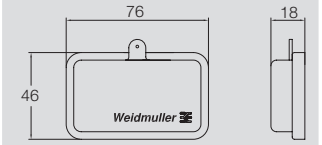
| Type | Qty. | Order No. |
|---|---|---|
| HDC 06B DC | 10 | **1215900000** |




**HDC 10B DC**



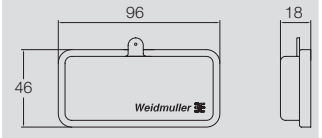
| Type | Qty. | Order No. |
|---|---|---|
| HDC 10B DC | 10 | **1215910000** |




**HDC 16B DC**



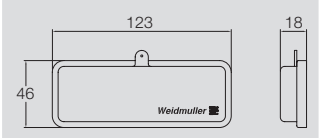
| Type | Qty. | Order No. |
|---|---|---|
| HDC 16B DC | 10 | **1215920000** |




**HDC 24B DC**



| Type | Qty. | Order No. |
|---|---|---|
| HDC 24B DC | 10 | **1215930000** |



# Tools



**Tools**


| | |
|---|---|
| Introduction | K.2 |
| Cutting | K.4 |
| Stripping | K.7 |
| Crimping | K.12 |
| Screwdrivers | K.20 |
| Miscellaneous | K.25 |

# Tools

Weidmüller's professional tools are the result of an intensive development process that has been specifically focussed on the requirements of their use in practice.
The ideal tool can only be designed by a company that understands work processes and is constantly engaged on perfecting these processes. In addition to optimising the workflow, we are also concentrating on ensuring a long lifespan and improving application-based functionality for our products. Weidmüller establishes this by designing tools and products that are perfectly matched to each other.
At Weidmüller, everything fits together.
We offer many tools that help you work safely and precisely for an optimised installation of heavy-duty connectors. The new stripax®, for example, with its 70 self-adjusting blades, ensures that insulation is cut precisely, without damaging the conductor. This increases your accuracy and improves the efficiency of your manufacturing process.





## Cutting



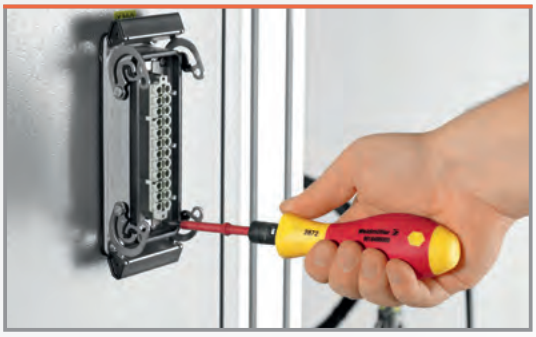
Practical tools for cutting cables up to 400 mm² comfortably and easily – with just one hand.

## Crimping



Long lifespan; optimised grip delivers crimping results with high repeat accuracy.

## Screwdrivers



Torque screwdrivers ensure that the housing is properly mounted without loss of the IP protection rating.

## Cutting tools

- Cutting formation for different cable sizes increases the quality of the cuts for smaller cross-sections
- Not suitable for steel wires, steel-armoured cables, aluminium alloys and hard-drawn copper conductors!
- Cutting without deformation of the conductor

| KT 8 | KT 12 |
|---|---|





| KT 8 | KT 12 |
|---|---|
| max. 8 mm | max. 12 mm |
| max. 16 mm² | max. 16 mm² |
| max. 16 mm² | max. 25 mm² |
| max. 16 mm² | max. 35 mm² |

## Technical data

| | | KT8 | KT12 |
|---|---|---|---|
| **Max. cutting performance, copper cable** | | | |
| Solid (max. conductor cross-section) | mm²/AWG | 16 / 6 | 16 / 6 |
| Stranded (max. conductor cross-section) | mm²/AWG | 16 / 6 | 25 / 3 |
| Flexible (max. conductor cross-section) | mm²/AWG | 16 / 6 | 35 / 2 |
| Flexible, stranded (max. conductor diameter) | mm | 8 | 12 |
| **Max. cutting performance, aluminium cable** | | | |
| Stranded (max. conductor cross-section) | mm²/- | 16 / 6 | 25 / 6 |
| Stranded (max. conductor diameter) | mm | 8 | 8 |
| solid | mm² | 16 | 25 |
| **Data / telephone / control cable** | | | |
| Max. outer diameter | mm | 8 | 12 |
| **Tool data** | | | |
| Length / Width / Height | mm | 165 / 65 / 25 | 215 / 66 / 28 |
| Weight | g | 180 | 300 |
| **Note** | | Tool closed | |

## Ordering data

| Version | Type | Qty | Order No. |
|---|---|---|---|
| | KT 8 | 1 | 9002650000 |
| | KT 12 | 1 | 9002660000 |
| **Note** | | | |

## Cable cutter

- One-hand operation
- Easy handling
- Minimal hand force required
- Release option in every cutting position
- Not suitable for steel wires, steel-armoured cables, aluminium alloys and hard-drawn copper conductors!

## KT 45 R





Cu + Al: max. 45 mm

Cu: max. 300 mm²
Al: max. 400 mm²

Cu: max. 400 mm²



## Technical data

| | | KT 45 R |
|---|---|---|
| **Max. cutting performance, copper cable** | | |
| Stranded (max. conductor cross-section) | mm²/kcmil | 300 / 600 |
| Flexible (max. conductor cross-section) | mm²/kcmil | 400 / 800 |
| Flexible, stranded (max. conductor diameter) | mm | 45 |
| Copper sector cable | | 3 x 70 SM |
| **Max. cutting performance, aluminium cable** | | |
| Stranded (max. conductor cross-section) | mm²/kcmil | 400 / 800 |
| Stranded (max. conductor diameter) | mm | 45 |
| Aluminium sector cable | | 4 x 70 SE |
| **Data / telephone / control cable** | | |
| Max. outer diameter | mm | 45 |
| **Tool data** | | |
| Length / Width / Height | mm | 290 / 85 / 40 |
| Weight | g | 740 |
| **Note** | | |

## Ordering data

| Version | Type | Qty | Order No. |
|---|---|---|---|
| | KT 45 R | 1 | **9202040000** |
| | Pivoting blade KT 45 R | 1 | **9204270000** |

| Note | |
|---|---|
| | The dimensions of the cable cutter refer to the delivery condition, i.e. the point of the hinged blade parallel to the fixed blade. |

## Hydraulic hole puncher

The IP protection classes for housings, cable glands, heavy-duty connectors and Industrial Ethernet connectors can only be maintained under two conditions: the sheet metal must not be bent during the punching process and the size of the punched-out holes must correspond precisely with the specifications. The IE-KO-HAT hydraulic sheet metal hole puncher, together with its accessories, guarantees you the highest quality workmanship available. It ensures that the connector fits precisely with the punched-out holes so that you can fulfill the proper IP protection class requirements.



**Automatic centre punching at the drill points when punching out holes for heavy-duty connectors.**

## IE-KO-HAT



- Pressure-relief valve protects against overload
- Cylinder head angled 90°
- Angled head, 360° turnable
- Ergonomic handle springs back by itself
- Waste pieces no longer become jammed thanks to the three-way splitting
- Hydraulic punch made from high-strength aluminium (approx. 40 % weight savings)

### Technical data

| Maximum steel-sheet punching performance | IE-KO-HAT |
|---|---|
| Square holes up to 68 x 68 mm | 2.0 mm F = 370 N/mm² |
| Rectangular holes up to 36 x 112 mm | 3.0 mm F = 370 N/mm² |
| | 2.0 mm F = 370 N/mm² |
| | 2.0 mm F = 370 N/mm² |
| **Tool data** | |
| Length / width / height mm | 290/120/70 |
| Weight kg | 1.9 |
| Punching force kN | 75 |
| Max. operating pressure bar | 650 |
| Including accessories (contents) | 1 hydraulic screw Ø 19 mm<br>1 hydraulic screw Ø 19 x 9.5 mm<br>1 HSS pre-drill Ø 10 mm<br>1 spacer nut set (3-part)<br>1 bridge |

### Ordering data

| Version | Type | Qty. | Order No. |
|---|---|---|---|
| | IE-KO-HAT | 1 | **1966810000** |

**Note**

### Accessories



| Type | Qty. | Order No. |
|---|---|---|
| Tension screw KOBBS 9,5 x 50 | 1 | **9205030000** |
| Tension screw KOBBS 19 x 55 | 1 | **9205040000** |
| Tension screw KOBBS 19 x 75 | 1 | **9204780000** |

**Note**

## KOK



Rectangular splitting stamp for heavy-duty connectors

### Ordering data

| Type | Description | Qty. | Order No. |
|---|---|---|---|
| KOK 52 x 36 | 6-pole | 1 | **9204820000** |
| KOK 65 x 36 | 10-pole | 1 | **9204830000** |
| KOK 86 x 36 | 16-pole | 1 | **9204850000** |
| KOK 112 x 36 | 24-pole | 1 | **9204870000** |

**Note:** the fastening points are centre-punched.

## Stripping and cutting tools

- for flexible and solid conductors with PVC insulation
- Cable with double insulation in two processing steps without special adjustment
- Automatic opening of clamping jaws after stripping
- No play in self-adjusting cutting unit
- Long-lasting
- No splicing of single conductors
- Optimised ergonomic design
- Stripping length adjustable via stop
- Adjustable for different insulation thicknesses
- switchable partial stripping function
- Removable handle shells
- Fold-out cutting protection
- Custom marking with ESG device markers

### stripax®

**0.08 - 10 mm²**



- Stripping: PVC insulated flexible conductor, size 0.08...10 mm² (~AWG 28...7)
- Cutting: PVC insulated flexible conductor, size 0.08...6 mm² (~AWG 28...10)
- Conductors undamaged due to special self adjusting stripping blades.
- Processing of multi-conductors, with thin flat ribbon cables and even multiple conductors in one operation

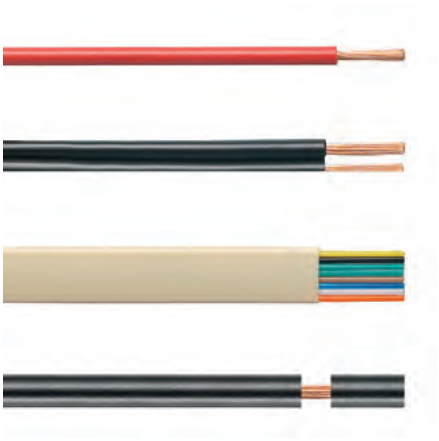
### stripax® 16

**6 - 16 mm²**



- Stripping: PVC insulated flexible and solid conductors (~AWG 10...6)
- Cutting: PVC insulated flexible and solid conductors, up to 6 mm² (AWG 10)
- Conductors undamaged due to special self adjusting stripping blades.









## Technical data

| Max. stripping performance | | stripax® | stripax® 16 |
|---|---|---|---|
| Cable type | | Flexible and solid conductors with PVC insulation | Flexible and solid conductors with PVC insulation |
| Conductor cross-section | mm² | 0.08...10 | 6...16 |
| Stripping length, max. | mm | 25 | 25 |
| **Cutting performance** | | | |
| Max. cutting performance | mm² | 6 | 6 |
| **Tool data** | | | |
| Length | mm | 190 | 190 |
| Weight | g | 175 | 175 |
| **Note** | | | |

## Ordering data

| Version | Type | Qty. | Order No. | Type | Qty. | Order No. |
|---|---|---|---|---|---|---|
| | stripax® | 1 | **9005000000** | stripax® 16 | 1 | **9005610000** |
| **Note** | | | | | | |

## Accessories

| | Type | Qty. | Order No. | Type | Qty. | Order No. |
|---|---|---|---|---|---|---|
| | Spare stripping blades | 1 | **1119030000** | Spare stripping blades | 1 | **1119040000** |
| **Note** | | | | | | |

## Stripping and cutting tools multi-stripax®

- Specially shaped stripping blades enable stripping of special types of insulation and conductor configurations
- High-quality stripping for industrial applications
- Stripping results reproduced accurately time and time again
- A long-lasting, reliable tool thanks to its robust design
- Optimised ergonomic design
- No damage to the conductor or insulation
- Highly flexible thanks to interchangeable stripping units
- Adjustable stop for setting stripping lengths from 2.3 to 30 mm
- The stripping length can be increased by repeating the stripping process.
- Integral cutting function for max. 2.5 mm² solid or 6 mm² flexible cables

## multi-stripax®

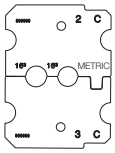
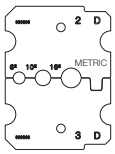
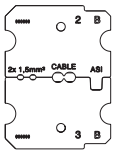
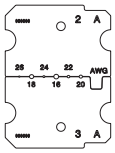
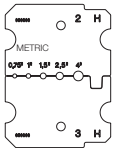
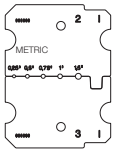
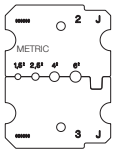
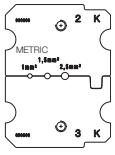
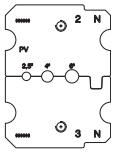
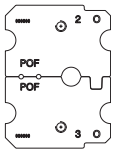



## Technical data

| | |
|---|---|
| Cable type | PVC, Teflon, PTE, PUR, silicone, halogen-free |
| Conductor cross-section, min. | 2 mm |
| Conductor cross-section, max. | no limit (in several steps) |
| max. cutting capacity, fine-strand | 6 mm² |
| max. cutting capacity, solid | 2.5 mm² |
| max. cutting capacity, ribbon | 10.2 x 4 mm |
| Length/Width/Height | 250 / 85 / 40 mm |
| Weight | 250 g |
| **Information** | |



## Ordering data

| Type | Conductor | Insulation | Shaped blade | Code | Qty. | Order No. |
|---|---|---|---|---|---|---|
| multi-stripax 16 SL<br>stripping unit multi-stripax 16 SL | 16 mm²<br>Standard<br>stranded | PVC |  | C | 1<br>1 | **9202220000**<br>**9202270000** |
| multi-stripax 6-16<br>stripping unit multi-stripax 6-16 | 6 mm²<br>10 mm²<br>16 mm²<br>solid<br>stranded<br>flexible | PVC |  | D | 1<br>1 | **9202210000**<br>**9202260000** |
| multi-stripax ASI<br>stripping unit multi-stripax ASI | ASI cable<br>1.5 mm² | PTE<br>PUR<br>EPDM |  | B | 1<br>1 | **9202250000**<br>**9202300000** |
| multi-stripax AWG<br>stripping unit multi-stripax AWG | AWG 26<br>AWG 24<br>AWG 22<br>AWG 20<br>AWG 18<br>AWG 16 | PTFE<br>PVC |  | A | 1<br>1 | **9202230000**<br>**9202280000** |
| multi-stripax 0.75-4²SL<br>stripping unit multi-spx 0.75-4²SL | 0.75 mm²<br>1 mm²<br>1.5 mm²<br>2.5 mm²<br>4 mm² | PVC<br>halogen-free |  | H | 1<br>1 | **9203610000**<br>**9203730000** |
| multi-stripax 0.25-1.5S<br>stripping unit M-SPX 0.25-1.5 S | 0.25 mm²<br>0.5 mm²<br>0.75 mm²<br>1 mm²<br>1.5 mm² | PVC<br>halogen-free |  | I | 1<br>1 | **9204540000**<br>**9204550000** |
| multi-stripax 1.5-6.0S<br>stripping unit M-SPX 1.5-6.0 S | 1.5 mm²<br>2.5 mm²<br>4 mm²<br>6 mm² | PVC<br>halogen-free |  | J | 1<br>1 | **9204560000**<br>**9204570000** |
| multi-stripax® GKW LW<br>stripping unit M-SPX GKW LW | 1.0 mm²<br>1.5 mm²<br>2.5 mm² | Railway Radox cable<br>GKW LW |  | K | 1<br>1 | **9205760000**<br>**9205770000** |
| multi-stripax® PV<br>stripping unit M-SPX PV | 2.5 mm²<br>4 mm²<br>6 mm² | Photovoltaic cable and<br>earth- and short-circuit-<br>proof cables |  | N | 1<br>1 | **1190490000**<br>**1204280000** |
| multi-stripax® POF<br>stripping unit M-SPX POF | 1000 µm<br>980 µm POF | Duplex stripping tool for<br>POF fibre and cable |  | O | 1<br>1 | **1208880000**<br>**1212770000** |
| **Information** | | | | | | |

## Accessories

| Type | Description | Qty. | Order No. |
|---|---|---|---|
| ERME MULTI-STRIPAX | cutting blade | 1 | **9203070000** |
| ERAN MULTI-STRIPAX | wire stop-set | 1 | **9203100000** |
| **Information** | | | |

## Sheathing strippers

- Sheathing stripper for round PVC cables




- Sheathing stripper for PVC cables
- Insulation can be stripped from any point along the cable
- Opening of slit insulation by means of integrated cutter

product design award 2008



## AM 25 / AM 35

**AM 25: Ø 6...25 mm; AM 35: Ø 25...36 mm**



- Pivoting blade for circular, longitudinal and spiral cuts
- Retaining clip with integrated blade to break open an incision in the insulation
- Integrated spare blade

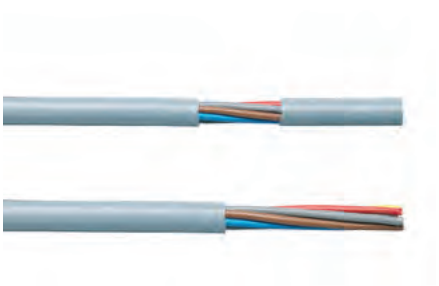


## AM 16

**For round cable, Ø 6...17 mm**




- Especially suitable for stripping cables in the cable duct, too





## Technical data

| Max. stripping performance | | AM 25 | AM 35 | AM 16 |
|---|---|---|---|---|
| Cable type | | PVC round cable | PVC round cable | PVC round cable |
| Conductor cross-section | - | | | |
| Conductor diameter | mm | 6...25 | 25...36 | 6...17 |
| Depth of cut | | adjustable up to 4.5 mm | adjustable up to 4.5 mm | 0.8 - 2.5 mm |
| **Cutting performance** | | | | |
| UTP und STP data cables, max. diameter | - | | | |
| Flexible (max. conductor cross-section) | - | | | |
| **Tool data** | | | | |
| Length | mm | 135 | 140 | 53 |
| Weight | g | 135 | 135 | 60 |
| **Note** | | | | |

## Ordering data

| Version | Type | Qty. | Order No. | Type | Qty. | Order No. |
|---|---|---|---|---|---|---|
| | AM 25 | 1 | **9001540000** | AM 16 | 1 | **9204190000** |
| | AM 35 | 1 | **9001080000** | | | |
| **Note** | | | | | | |

## Accessories

| | Type | Qty. | Order No. | Type | Qty. | Order No. |
|---|---|---|---|---|---|---|
| | Spare blades | 2 | **9001530000** | Spare blades | 1 | **9204260000** |
| **Note** | Sheathing stripper | | | Sheathing stripper | | |

## Sheathing stripper for coaxial cable

- For coaxial cable and round (shielded) data cables from 2.5 to 8mm diameter
- 1-, 2- and 3-level stripping in one step
- Fast changeover to other cable types thanks to adjustable interchangeable screw holder
- Colour-coded replaceable cassettes with preset stripping lengths for standard coax cable. Refer to the table.
- Setting block (included) permits quick presetting of cutting depths
- Blade cassettes can be used on both sides

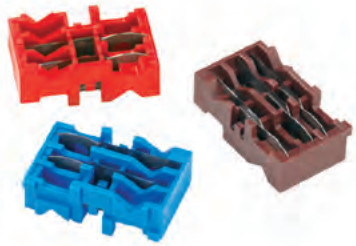
## CST / IE-CST

**ø 2.5...8 mm**

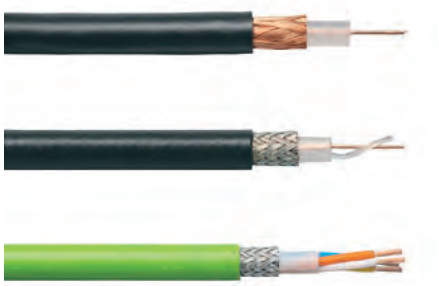


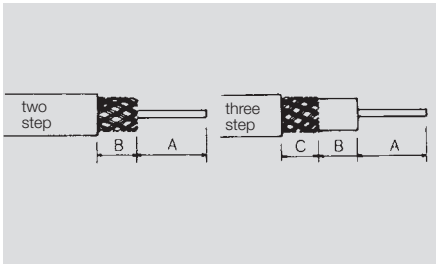

- RG 58 and RG 71
- RG 59 and RG 62
- Antenna cable
- Profibus cable
- Ethernet cable

**Cutter cassettes for CST**










## Technical data

| Max. stripping performance | | |
|---|---|---|
| Cable type | | |
| Conductor diameter | mm | |
| Stripping length, max. | - | |
| **Tool data** | | |
| Length | mm | |
| Weight | g | |
| **Note** | | |

| CST | IE-CST |
|---|---|
| Coaxial & round data cables | Coaxial & round data cables |
| 2.5...8 | 2.5...8 |
| | |
| 100 | 100 |
| 65 | 85 |

| Colour cutter cassettes | B [mm] | C [mm] |
|---|---|---|
| grey | 3.9 | |
| red | 6.0 | |
| yellow | 12.0 | |
| blue | 6.5 | |
| white | 8.6 | |
| green | 7.1 | 5.1 |
| brown | 7.5 | 3.5 |
| orange | 8.0 | 3.7 |
| light green | 6.0 | 6.0 |
| black | 8.6 | 2.3 |

Dim. A as stated by manufacturer (not defined by tool)

## Ordering data

| Version |
|---|
| |
| **Note** |

| Type | Qty | Order No. |
|---|---|---|
| CST | 1 | **9030500000** |
| IE-CST | 1 | **9204350000** |

IE-CST including blade cartridge, adjusted to Weidmüller Ethernet cable
CST not including blade cartridge

| Colour cutter cassettes | Qty. | Order No. |
|---|---|---|
| grey | 1 | **9032050000** |
| red | 1 | **9032040000** |
| yellow | 1 | **9032030000** |
| blue | 1 | **9032020000** |
| white | 1 | **9204340000** |
| green | 1 | **9032000000** |
| brown | 1 | **9032010000** |
| orange | 1 | **9032200000** |
| light green | 1 | **9032210000** |
| black | 1 | **9032220000** |

## Accessories

| |
|---|
| |
| **Note** |

| Type | Qty | Order No. |
|---|---|---|
| Screw holder | 1 | **9032060000** |
| Screwdriver | 1 | **9005720000** |
| Setting block | 1 | **9005800000** |

Dimension A: as specified by connector manufacturer (not defined by tool)

## Crimping tool for wire end ferrules

**Three functions:**
- Cutting
- Stripping
- Crimping

- Wire-end ferrules with plastic collars, in compliance with DIN 46228-4
- Ratchet for precise crimping.
- Efficient operation: Change of tools not necessary, resulting in a significant time savings
- Automatic conveyance of wire-end ferrules
- Quick adjustment for differing cross-sections
- Easy handling of ferrule strips

**Only Weidmüller fifty-piece linked ferrule strips can be processed. The use of wire-end ferrules on reels can lead to damage.**

## stripax® plus 2.5

**0,5...2,5 mm²**

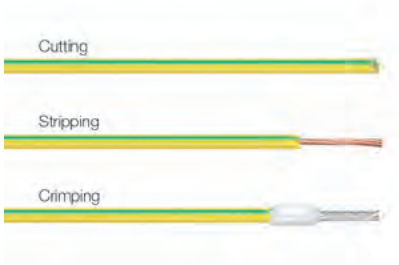


- For processing linked wire-end ferrules from Weidmüller 0.5...2.5 mm² (~AWG 20...14)














## Technical data

| Description of contact | | STRIPAX PLUS 2.5 |
|---|---|---|
| Type of contact | | Strips of linked wire-end ferrules |
| Crimping range | mm² | 0.5...2.5 |
| Crimping range 1 (with multiple crimping positions) | mm² | 0.5...0.75 |
| Crimping range 2 (with multiple crimping positions) | mm² | 1...1.5 |
| Crimping range 3 (with multiple crimping positions) | mm² | 2.5 |
| Crimping range 4 (with multiple crimping positions) | - | |
| Crimping range 5 (with multiple crimping positions) | - | |
| **Tool data** | | |
| Length | mm | 210 |
| Weight | g | 260 |
| **Note** | | Only strip-type products from Weidmüller can be processed. The use of wire-end ferrules on reels can lead to damage. |

## Ordering data

| Version | Type | Qty | Order No. |
|---|---|---|---|
| | STRIPAX PLUS 2.5 | 1 | 9020000000 |
| | Spare cutting blade | 1 | 9050340000 |
| **Note** | Additional accessories can be found in Chapter J. | | |

## Crimping tool for wire end ferrules

- For wire-end ferrules with and without plastic collars, according to DIN 46228 T.1 and T.4 (~ AWG 24...16)
- Ratchet for precise crimping.
- Release option in the event of incorrect operation

## PZ 6 roto

**0.14...6 mm²**



- Only one die for the whole cross-section range
- Rotating die enables wire-end ferrule insertion from the front or side





## Technical data

| Description of contact | | PZ 6 Roto |
|---|---|---|
| Type of contact | | Wire-end ferrules with/without plastic collars |
| Crimping range | mm² | 0.14...6 |
| Crimping range 1 (with multiple crimping positions) | mm² | |
| Crimping range 2 (with multiple crimping positions) | mm² | |
| Crimping range 3 (with multiple crimping positions) | mm² | |
| Crimping range 4 (with multiple crimping positions) | mm² | |
| Crimping range 5 (with multiple crimping positions) | mm² | |
| **Tool data** | | |
| Length | mm | 200 |
| Weight | g | 428 |
| **Note** | | |

## Ordering data

| Version | Type | Qty | Order No. |
|---|---|---|---|
| | PZ 6 Roto | 1 | **9014350000** |

| Note | Additional accessories can be found in Chapter J. |
|---|---|

## Crimping tools for turned contacts

- Ratchet for precise crimping.
- Release option in the event of incorrect operation
- With stop for exact positioning of the contacts.

### CTX CM 1.6/2.5 / CTX CM 3.6

**0.14...10 mm²**



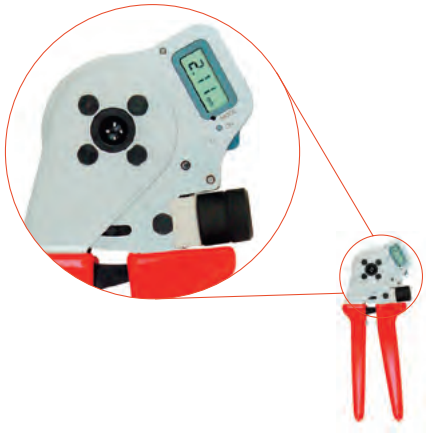
**CTX CM 1.6/2.5**
- Turned HD contacts
- Turned HE contacts
- ConCept M10 and M5 contacts
- 0.14...4.0 mm²

**CTX CM 3.6**
- Turned HD contacts
- ConCept M 3 contacts
- 4.0...10 mm²



### CTIN CM 1.6/2.5 / CTIN 3.6

**0.14...10 mm²**



**CTIN CM 1.6/2.5**
- Turned HD and HE contacts
- Turned HX contacts
- ConCept M10, M5 and M3 contacts
- 4-indent crimp
- 0.14...6.0 mm²

**CTIN CM 3.6**
- Turned HX contacts
- ConCept M 3 contacts
- 4-indent crimp
- 1.5...10.0 mm²



## Technical data

| Description of contact | | CTX CM 1.6/2.5 | CTX CM 3.6 | CTIN CM 1.6/2.5 | CTIN CM 3.6 |
|---|---|---|---|---|---|
| Type of contact | | Turned contacts | Turned contacts | Turned HD,HE HX +Concept M10.M5,M3 | HX turned and Concept M3 contacts |
| Crimping range | mm² | 0.14...4 | 4...10 | 0.14...6 | 1.5...10 |
| Crimping range 1 (with multiple crimping positions) | mm² | 0.14...0.5 | 4 | 0.14...6 | 1.5...10 |
| Crimping range 2 (with multiple crimping positions) | mm² | 0.75...1 | 6 | | |
| Crimping range 3 (with multiple crimping positions) | mm² | 1.5 | 10 | | |
| Crimping range 4 (with multiple crimping positions) | mm² | 2.5 | | | |
| Crimping range 5 (with multiple crimping positions) | mm² | 4 | | | |
| **Tool data** | | | | | |
| Length | mm | 250 | 250 | 230 | 230 |
| Weight | g | 730 | 730 | 1220 | 1220 |
| **Note** | | | | | |

## Ordering data

| Version | Type | Qty | Order No. | Type | Qty | Order No. |
|---|---|---|---|---|---|---|
| | CTX CM 1.6/2.5 | 1 | **9018490000** | CTIN CM 1.6/2.5 | 1 | **9205430000** |
| | CTX CM 3.6 | 1 | **9018480000** | CTIN CM 3.6 | 1 | **9205440000** |
| **Note** | | | | | | |

## Stripping and crimping machines

### CA 4/8 Indent

**0.14...4 mm²**



The CA 4/8 Indent is an electro-pneumatic-driven automatic stripper and crimper for processing loose-packed, turned male and female contacts. The contacts are fed automatically via an oscillating conveyor set-up.

Conductors and contacts in the 0.14 - 4.0 mm range (AWG 26-14) can be crimped normally with a 4/8 indent crimp shape, in compliance with MIL C-22520/1-01. The settings for stripping and crimp depth are motor- driven. The values can be saved in 50 different programs. The keyboard is used for configuration and program-ming. Important data, functions and errors are shown on the LCD display. With the help of the appropriate tools, the automatic crimper may be converted to various contacts and/or conductors.

It was developed for preparing conductors in medium-batch series for stationary use.

The automatic machine can be operated quickly and easily.

- Stripping and crimping in one operation
- Electro-pneumatic drive
- Strips and crimps 0.14...4.0 mm²
- Processes loose twisted pin and socket contacts
- Rapid and simple change-over
- Vibration-feeder takes 500 loose machined contacts
- 4/8-Indent crimp conforms with MIL C-22520/1-01
- Program memory for 50 contact variations
- Stripping and crimping dimensions adjusted by means of electric motor
- The CA 4/8 Indent S features an oscillating conveyor with selective feed. It uses sensors and actuators to ensure that the contacts are correctly positioned for processing.

### Technical data

| | CA 4/8 Indent | CA 4/8 Indent S |
|---|---|---|
| Stripping range | 0.14 ... 2,5 mm² | 0.25 ... 4 mm² |
| Connection | 220 V / 50 Hz / 115 VA | 220 V / 50 Hz /115 VA |
| Drive | pneumatic | pneumatic |
| Compressed air connection | 5 bar | 5 bar |
| Processing time | approx. 2.5 s | approx. 2.5 s |
| Size W x D x H | 450 x 490 x 420 | 530 x 500 x 600 |
| Weight | 40 kg | 54 kg |
| Options | special blade fixture (profile blade, V-radius blade), special fixing device for stranded wires, shortened insertion length, monitoring of entry, feed equipped with selection unit, control of crimping force, interface | |

### Note on ordering

The machine is set up using sample contacts to suit the user's requirements. For this we need the name of the manufacturer, the type designation and the cross-sections of the contacts.

## Crimping tools for connectors

- For insulated and uninsulated cable lugs and connectors
- Mechanical function ensures safe and manageable operations under different environmental conditions
- Precision engineering means high pressing force with little physical effort
- Fast feed helps pre-centering and extraction of the connecting parts
- Ratchet for proper trouble-free crimping
- Release option in the event of incorrect operation

## MTR 160 / MTR 300

**10...300 mm²**



- Tubular cable lugs ranging from 10...300 mm²
- Rolled CU connectors ranging from 10...150 mm²
- Retractable head for easy withdrawal of crimped connection (only MTR 300)

**MTR 300**
Turntable presses: 25...240 ms; 35...240 sec

## Crimping inserts

### MTR 160

| | Cross-section [mm²] | Code to DIN 48083 | Crimping width [mm] | Order No. |
|---|---|---|---|---|
| Die sets for **copper tube** cable lugs and connectors **DIN 46235** | | | | |
|  | 10 | 6 | 7.0 | **9020900000** |
| | 16 | 8 | 7.0 | **9020910000** |
|  | 25 | 10 | 7.0 | **9020920000** |
| | 35 | 12 | 7.0 | **9020930000** |
|  | 50 | 14 | 7.0 | **9020940000** |
| | 70 | 16 | 7.0 | **9020950000** |
| | 95 | 18 | 7.0 | **9020960000** |
| | 120 | 20 | 7.0 | **9020970000** |
| | 150 | 22 | 7.0 | **9020980000** |
| | 185 | 25 | 7.0 | **9020990000** |
| | 240 | 28 | 7.0 | **9021000000** |

### MTR 300

| | Cross-section [mm²] | Code to DIN 48083 | Crimping width [mm] | Order No. |
|---|---|---|---|---|
| Die sets for **copper tube** cable lugs and connectors **DIN 46235** | | | | |
|  | 10 | 6 | 7.0 | **9021430000** |
| | 16 | 8 | 7.0 | **9021440000** |
|  | 25 | 10 | 7.0 | **9021450000** |
| | 35 | 12 | 7.0 | **9021460000** |
|  | 50 | 14 | 7.0 | **9021470000** |
| | 70 | 16 | 7.0 | **9021480000** |
| | 95 | 18 | 7.0 | **9022290000** |
| | 120 | 20 | 7.0 | **9022300000** |
| | 150 | 22 | 7.0 | **9022310000** |
| | 185 | 25 | 7.0 | **9022320000** |
| | 240 | 28 | 7.0 | **9022330000** |

## Technical data

| Description of contact | | MTR 160 | MTR 300 |
|---|---|---|---|
| Pressing force / Deviation | kN/mm | 100 / 16 | 100 / 16 |
| Crimping range for copper connector (rolled) | mm² | 10...150 | 10...150 |
| Crimping range for copper tube connector | mm² | 10...240 | 10...300 |
| Crimping range for insulated connectors | mm² | | 10...120 |
| Crimping range of wire end ferrule | mm² | | |
| **Tool data** | | | |
| Length / Weight | mm/kg | 540 / 4 | 540 / 4 |
| **Note** | | sm: sector conductor stranded; se: sector single conductor | |

## Ordering data

| Version | Type | Qty. | Order No. |
|---|---|---|---|
| | MTR 160 | 1 | **9017250000** |
| | MTR 300 | 1 | **9021390000** |
| **Note** | | | |

## Accessories

| Carry cases | Type | Qty. | Order No. |
|---|---|---|---|
| | MTR 300 | 1 | **9021420000** |
| | MTR 160 | 1 | **9017270000** |
| **Note** | Crimping inserts see on the following pages | | |

## Pressing tool

- Pressing tool for modular plug connectors of the WE system (Western Electric and DEC)
- Ratchet for precise crimping.
- Release option in the event of incorrect operation

**Three functions:**
- Pressing of plug connectors
- Pressing of enclosure shielding
- Crimping of cable shielding

## TT 8 RS MP 8



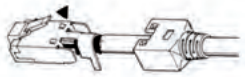
For 8-pole shielded RJ45 plug

**AWG 27...24**

Pressing of IDC contacts



Pressing of shielded enclosures



Crimping of shielded cable



STEADY TEC



## Technical data

| Description of contact | | TT 8 RS MP 8 |
|---|---|---|
| No. of poles | | 8 |
| **Tool data** | | |
| Length | mm | 255 |
| Weight | g | 1251 |
| **Note** | | |

## Ordering data

| Version | Type | Qty | Order No. |
|---|---|---|---|
| | TT 8 RS MP 8 | 1 | 9202800000 |

| Note | A large selection of RJ 45 plugs can be found in our current Industrial Ethernet Catalogue. |
|---|---|

## Crimping tools for SC/LC contacts

- Ratchet for precise crimping.
- Release option in the event of incorrect operation

### IE-CT-SC-GOF / IE-CT-LC-GOF

**Crimping tools for IP 20 + 67 plugs**



- For fibre-optic SC/ST, IP 20 and IP 67 connectors
- For fibre-optic LC and IP 67 connectors



### IE-CT-SC-POF / IE-CT-SC-GOF-P

**Crimping tools for IP 20 + 67 plugs**



- For polymer fibre-optic SC/ST, IP 20 and IP 67 connectors
- For fibre-optic, ProfiNet, Mobil cable SC/ST and IP 67 connectors





## Technical data

| Tool data | IE-CT-SC-GOF | IE-CT-LC-GOF | IE-CT-SC-POF | IE-CT-SC-GOF-P |
|---|---|---|---|---|
| Length | 250 | 250 | 250 | 250 |
| Weight | 730 | 730 | 730 | 730 |
| Note | | | | |

## Ordering data

| Version | Type | Qty | Order No. | Type | Qty | Order No. |
|---|---|---|---|---|---|---|
| | IE-CT-SC-GOF | 1 | **9205320000** | IE-CT-SC-POF | 1 | **9205340000** |
| | IE-CT-LC-GOF | 1 | **9205330000** | IE-CT-SC-GOF-P | 1 | **9205350000** |
| Note | | | | | | |

## Accessories

| | Type | Qty | Order No. | Type | Qty | Order No. |
|---|---|---|---|---|---|---|
| | IE-CTI-SC-GOF | 1 | **9205280000** | IE-CTI-SC-POF | 1 | **9205300000** |
| | IE-CTI-LC-GOF | 1 | **9205290000** | IE-CTI-SC-GOF-P | 1 | **9205310000** |
| Note | A large selection of plugs and connectors can be found in our current Industrial Ethernet Catalogue. | | | A large selection of plugs and connectors can be found in our current Industrial Ethernet Catalogue. | | |

## Tools for polymer optical fibre

### HTX-HDC/POF

**POF crimping**

Crimping of fibre optic contacts “polymer optical fibre” (POF).

- For plug and socket
- Ratchet for precise crimping.
- Unlocks in case of incorrect operation
- Locator for precise contact positioning

**Contacts:**
- Fibre-optic HD-contact socket for ø 1.0mm POF
- Fibre-optic HD-contact pin for ø 1.0mm POF

#### Ordering data

| Type | Qty | Order No. |
|---|---|---|
| HTX-HDC/POF | 1 | **9010950000** |

#### Technical data

| | |
|---|---|
| Length | 200 mm |
| Weight | 438 g |



### PB LWL/POF / PS LWL/POF

**POF polishing**

For processing the cut surface of fibre-optic cables with polymer optical fibre (POF).

- Buffing disc (PS LWL/POF)
- Buffing sheet (PB LWL/POF)

#### Ordering data

| Type | Qty | Order No. |
|---|---|---|
| PS LWL/POF | 1 | **9020390000** |
| PB LWL/POF | 1 | **9020400000** |



### AM LWL/POF

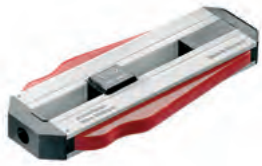
**POF stripping**

Stripping fibre-optic cables. Fibre-optic cables with polymer optical fibre (POF).

- Longitudinal stop with scale is built into the tool
- Stripping direction is lengthwise to the fibre
- No damage to the optical fibre

#### Ordering data

| Type | Qty | Order No. |
|---|---|---|
| AM LWL/POF | 1 | **9020360000** |



### LWL-stripax

Stripping and cutting tool for plastic fibre-optic cables with 1-mm diameter inner conductor

- Stripping length adjustable via end stop
- Automatic opening of the clamping jaws after stripping

#### Ordering data

| Type | Qty | Order No. |
|---|---|---|
| M-D-STRIPAX LWL | 1 | **9003750000** |

#### Accessories

| Type | Qty | Order No. |
|---|---|---|
| Spare stripping blades LWL-Stripax | 1 | **9003760000** |

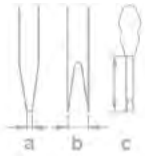
#### Technical data

| **Max. stripping performance** | **M-D-STRIPAX LWL** |
|---|---|
| Cable type | POF conductor with an inner conductor of 1 mm Ø |
| Conductor diameter - | ...1 |
| Stripping length, max. - | 7.5 |
| **Tool data** | |
| Length mm | 135 |
| Weight g | 110 |
| **Note** | POF: polymer optical fibre |



# Screwdrivers

## Uninsulated torque screwdriver




### DMS manual

**Torque screwdriver**
**EN ISO 6798, BS EN 26789, ASME B107.14M**



| Type | Size / AF | a | b | c | Order No. |
|---|---|---|---|---|---|
| DMS MANUAL 0.5-1.7 | 0.5 - 1.7 Nm | | | | **9918370000** |
| DMS MANUAL 2.0-8.0 | 2.0 - 8.0 Nm | | | | **9918380000** |

### WK K S

**Interchangeable bits for torque screwdriver**
**output acc. to DIN 5264, ISO 2380/1**



| | | | | | |
|---|---|---|---|---|---|
| WK S 0.4x2.5 | Max. 0.4 Nm | 0.4 | 2.5 | 175 | **9918520000** |
| WK S 0.5x3.0 | Max. 0.6 Nm | 0.5 | 3.0 | 175 | **9918530000** |
| WK S 0.6x3.5 | Max. 1.1 Nm | 0.6 | 3.5 | 175 | **9918540000** |
| WK S 0.8x4.0 | Max. 2.5 Nm | 0.8 | 4.0 | 175 | **9918550000** |
| WK S 1.0x5.5 | Max. 3.8 Nm | 1.0 | 5.5 | 175 | **9918560000** |

### WK K PZ

**Interchangeable bits for torque screwdriver**
**output acc. to DIN 5260-PZ, ISO 8764/1-PZ**



| | | | | | |
|---|---|---|---|---|---|
| WK K PZ0 | Max. 0.9 Nm | | | 175 | **9918600000** |
| WK K PZ1 | Max. 3.8 Nm | | | 175 | **9918610000** |
| WK K PZ2 | Max. 5.5 Nm | | | 175 | **9918620000** |



### WK K PH

**Interchangeable bits for torque screwdriver**
**output acc. to DIN 5260-PH, ISO 8764/1-PH**



| | | | | | |
|---|---|---|---|---|---|
| WK K PH0 | Max. 0.9 Nm | | | 175 | **9918570000** |
| WK K PH1 | Max. 3.8 Nm | | | 175 | **9918580000** |
| WK K PH2 | Max. 5.5 Nm | | | 175 | **9918590000** |

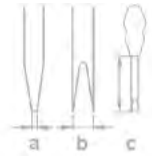
### WGK 1/4 C6.3 E6.3

**Interchangeable bit with bit holder for torque screwdrivers**
**Drive: 1/4“ C6.3 and 1/4“ E6.3**




| | | | | | |
|---|---|---|---|---|---|
| WK 1/4“ C6.3 E6.3 | | | | | **9202510000** |

## VDE-insulated torque screwdriver




### DMSI manual

**VDE-insulated torque screwdriver**
**EN ISO 6798, BS EN 26789, ASME B107.14M**



| Type | Size / AF | a | b | c | Order No. |
|---|---|---|---|---|---|
| DMSI MANUAL 0.5-1.7 | 0.5 - 1.7 Nm | | | | **9918390000** |
| DMSI MANUAL 2.0-8.0 | 2.0 - 8.0 Nm | | | | **9918400000** |

### WK SI

**VDE-insulated interchangeable bits for VDE-insulated torque screwdriver; output acc. to DIN 5264, ISO 2380/1**




| | | | | | |
|---|---|---|---|---|---|
| WK SI 0.4x2.5 | Max. 0.4 Nm | 0.4 | 2.5 | 220 | **9918410000** |
| WK SI 0.5x3.0 | Max. 0.6 Nm | 0.5 | 3.0 | 220 | **9918420000** |
| WK SI 0.6x3.5 | Max. 1.1 Nm | 0.6 | 3.5 | 220 | **9918430000** |
| WK SI 0.8x4.0 | Max. 2.5 Nm | 0.8 | 4.0 | 220 | **9918440000** |
| WK SI 1.0x5.5 | Max. 3.8 Nm | 1.0 | 5.5 | 220 | **9918450000** |

### WK IK PH

**VDE-insulated interchangeable bits for VDE-insulated torque screwdriver; output acc. to DIN 5260-PH, ISO 8764/1-PH**




| | | | | | |
|---|---|---|---|---|---|
| WK IK PH0 | Max. 0.9 Nm | | | 220 | **9918460000** |
| WK IK PH1 | Max. 3.8 Nm | | | 220 | **9918470000** |
| WK IK PH2 | Max. 5.5 Nm | | | 220 | **9918480000** |

### WK IK PZ

**VDE-insulated interchangeable bits for VDE-insulated torque screwdriver; output acc. to DIN 5260-PZ, ISO 8764/1-PZ**

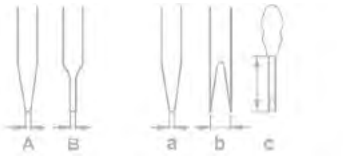



| | | | | | |
|---|---|---|---|---|---|
| WK IK PZ0 | Max. 0.9 Nm | | | 220 | **9918490000** |
| WK IK PZ1 | Max. 3.8 Nm | | | 220 | **9918500000** |
| WK IK PZ2 | Max. 5.5 Nm | | | 220 | **9918510000** |

# Screwdrivers

## Uninsulated screwdriver

**The Weidmuller SoftFinish screwdriver, for general use, has a blade made from fully-hardened high-alloy chromium-vanadium-molybdenum steel with a matt chrome finish.**




### SD S

**Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip**



| Type | Blade type | Size / AF | a | b | c | Order No. |
|---|---|---|---|---|---|---|
| SD 0.4x2.0x60 | B | | 0.4 | 2.0 | 60 | **9037160000** |
| SD 0.4x2.5x75 | A | | 0.4 | 2.5 | 75 | **9009030000** |
| SD 0.5x3.0x80 | A | | 0.5 | 3.0 | 80 | **9008320000** |
| SD 0.6x3.5x100 | A | | 0.6 | 3.5 | 100 | **9008330000** |
| SD 0.6x3.5x200 | A | | 0.6 | 3.5 | 200 | **9010110000** |
| SD 0.8x4.0x100 | A | | 0.8 | 4.0 | 100 | **9008340000** |
| SD 0.8x4.5x125 | A | | 0.8 | 4.5 | 125 | **9009020000** |
| SD 1.0x5.5x150 | A | | 1.0 | 5.5 | 150 | **9008350000** |
| SD 1.2x6.5x150 | A | | 1.2 | 6.5 | 150 | **9009010000** |

### SDK PH

**Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, ouput to ISO 8764-PH, ChromTop tip, SoftFinish grip**



| | | | | | | |
|---|---|---|---|---|---|---|
| SDK PH0 | | 0 | | | 60 | **9008470000** |
| SDK PH1 | | 1 | | | 80 | **9008480000** |
| SDK PH2 | | 2 | | | 100 | **9008490000** |
| SDK PH3 | | 3 | | | 150 | **9008500000** |

### SDK PZ

**Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, ouput to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip**



| | | | | | | |
|---|---|---|---|---|---|---|
| SDK PZ0 | | 0 | | | 60 | **9008520000** |
| SDK PZ1 | | 1 | | | 80 | **9008530000** |
| SDK PZ2 | | 2 | | | 100 | **9008540000** |
| SDK PZ3 | | 3 | | | 150 | **9008550000** |



### SD TH

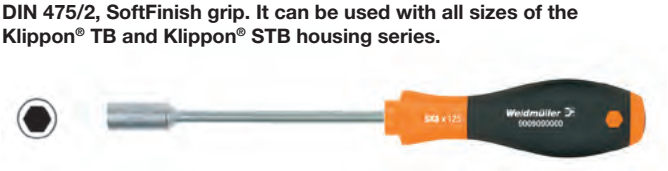
**Torx® TH screwdriver with hole in tip of blade (tamper-resistant), SD TH for screwing Torx® and Torx®-TH security screws (pin in centre of Torx recess), chrome top tip, SoftFinish grip. The SD TH20 can be used with the Klippon® K housing series.**



| | | | | | | |
|---|---|---|---|---|---|---|
| SD TH20 | 20 | | | | 100 | **9009160000** |
| SD TH15 | 15 | | | | 80 | **9009170000** |
| SD TH10 | 10 | | | | 80 | **9009180000** |
| SD TH8 | 8 | | | | 60 | **9009190000** |

### SK

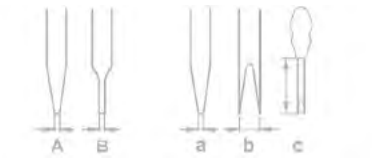
**The SK 10.0x125 Allen key, SK DIN 3125, drive output acc. to DIN 475/2, SoftFinish grip. It can be used with all sizes of the Klippon® TB and Klippon® STB housing series.**



| | | | | | | |
|---|---|---|---|---|---|---|
| SK 10.0x125 | 10 | | | | 125 | **9009070000** |

## Uninsulated screwdriver

**The Weidmuller SoftFinish screwdriver, for general use, has a blade made from fully-hardened high-alloy chromium-vanadium-molybdenum steel with a matt chrome finish.**




### Set S 2.5/3.0/4.0/5.5/PH 1/2

**6-part set: slotted and crosshead PH screwdriver set with circular blades**



| Type | Blade type | Size / AF | a | b | c | Order No. |
|---|---|---|---|---|---|---|
| SD 0.4x2.5x75 | A | | 0.4 | 2.5 | 75 | |
| SD 0.5x3.0x80 | A | | 0.5 | 3.0 | 80 | |
| SD 0.8x4.0x100 | A | | 0.8 | 4.0 | 100 | |
| SD 1.0x5.5x150 | A | | 1.0 | 5.5 | 150 | |
| SD PH 1 | | 1 | | | 80 | |
| SD PH 2 | | 2 | | | 100 | |
| SDS 2.5-5.5/PH1/2 | | | | | | **9009740000** |

### Set S 2.0/2.5/3.0/3.5/4.0/5.5

**Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip**



| | | | | | | |
|---|---|---|---|---|---|---|
| SD 0.4x2.0x60 | B | | 0.4 | 2.0 | 60 | |
| SD 0.4x2.5x75 | A | | 0.4 | 2.5 | 75 | |
| SD 0.5x3.0x80 | A | | 0.5 | 3.0 | 80 | |
| SD 0.6x3.5x100 | A | | 0.6 | 3.5 | 100 | |
| SD 0.8x4.0x100 | A | | 0.8 | 4.0 | 100 | |
| SD 1.0x5.5x150 | A | | 1.0 | 5.5 | 150 | |
| SDS 2.0-5.5 | | | | | | **9205560000** |

### System 11+1 S-PH-PZ-SK

**12-part set of interchangeable blades for slotted head, crosshead PH/PZ and hexagon screws, SoftFinish grip**





| | | | | | |
|---|---|---|---|---|---|
| SD | | 0.5 | 3.0 | 140 | |
| SD | | 0.8 | 4.0 | 140 | |
| SD | | 1.0 | 5.0 | 140 | |
| SD | | 1.2 | 6.0 | 140 | |
| PH 1 | 1 | | | 140 | |
| PH 2 | 2 | | | 140 | |
| PZ 1 | 1 | | | 140 | |
| PZ 2 | 2 | | | 140 | |
| SK | 3 | | | 140 | |
| SK | 4 | | | 140 | |
| SK | 5 | | | 140 | |
| SYSTEM 11+1 | | | | 140 | **9009750000** |

## Screwdrivers

### Weidmüller wrench set

**Allen keys made from fully hardened, high-alloy chromium-vanadium steel, produced acc. to DIN ISO 2936 L (DIN 911), high-quality refined surface.**

## SK S

**7-piece Allen key set**






| Type | Blade type | Size / AF | a | b | c | Order No. |
|---|---|---|---|---|---|---|
| | 2 | | | | | |
| | 2.5 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 8 | | | | | |
| SKS 2.0-8.0 | | | | | | **9008860000** |

## IS 2 KG / IS 3 KG / IS 4 KG

**Socket wrench**

Hexagon screwdriver with cross-grip made from high-quality plastics

- Surface nickel-plated
- Made from hardened chromium-vanadium s
- According to DIN 6911
- Designed for screws acc. to DIN 6912




### Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| IS 2 KG | 1 | **1806630000** |
| IS 3 KG | 1 | **1806650000** |
| IS 4 KG | 1 | **1806660000** |

### Technical data

| | |
|---|---|
| Blade length (C) | 100 mm |
| Weight | 32 g |

## Crimp removal tools

### Crimp removal tools



### Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| Removal Tool HD | 1 | **1866730000** |
| Removal Tool HE | 1 | **1866750000** |
| Removal Tool HX | 1 | **1002990000** |
| Removal Tool CM 3 | 1 | **1866710000** |
| Removal Tool CM 5 | 1 | **1866720000** |

### Replacement sleeves, crimp removal tools



### Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| HÜLSE REMOVAL TOOL HD | 5 | **1044100000** |
| HÜLSE REMOVAL TOOL CM 3 | 5 | **1044080000** |
| HÜLSE REMOVAL TOOL CM 5 | 5 | **1044090000** |

### Module removal tool

Tool for removing ConCept modules from the frame



### Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| HDC-DW-MOD | 1 | **1688200000** |

# Cable entries


**Cable entries**

| | |
|---|---|
| Introduction | L.2 |
| Standard cable glands - Plastic | L.5 |
| Standard cable glands - Brass | L.7 |
| EMC cable glands | L.14 |
| Standard cable glands - Stainless steel | L.16 |
| Cable glands for Ex applications - Brass | L.17 |
| Adaptors | L.18 |
| Accessories - Flat IP washers | L.19 |
| Sealing plugs | L.21 |

# Cable entries

In this section of the catalogue, we offer a selected range of cable glands for heavy-duty connectors.

Our complete product range is listed in our Enclosure and Cable Entry Catalogue.

Depending on the connector series and the application area, the cable glands, sealing plugs, adaptors, pressure compensation elements and accessories are certified and manufactured in line with the following standards:

- EN 60423 (metric thread)
- EN 40430 (PG and NPT thread)
- EN 60079-0 (General ATEX regulations)
- EN 50262 (strain relief)
- EN 60529 (IP protection degree)

The range of cable glands is available in metric (M) and high-strength (PG) threads. When choosing glands and sealing plugs, the table with the sealing characteristics of the O-rings, IP washers and sealing rings must be considered. The O-ring or IP washer is provided to seal the connecting thread of an enclosure, the sealing ring is for the gland and actually seals and clamps the connection cable.



You should always observe the maximum drill-hole diameter when installing a cable gland. These must not exceed the following specified maximum values / tolerances so that the protection degree of the whole enclosure can be guaranteed.

## Through-hole information

| M thread | Through-hole, in mm |
|---|---|
| M 16 | 16.2 |
| M 20 | 20.2 |
| M 25 | 25.2 |
| M 32 | 32.2 |
| M 40 | 40.2 |
| M 50 | 50.2 |
| M 63 | 63.2 |
| **PG thread** | **Through-hole, in mm** |
| PG 9 | 15.1 |
| PG 11 | 18.5 |
| PG 13.5 | 20.4 |
| PG 16 | 22.5 |
| PG 21 | 28.3 |
| PG 29 | 37.4 |
| PG 36 | 47.2 |
| PG 42 | 54.2 |
| PG 48 | 59.5 |

## Overview of sealing materials for O-rings, flat gaskets as well as seal inserts

| Abbreviation | Material | Trade name | Temperature range | Chemical resistance | Fire resistant | Shore | Free from halogens | UV resistance |
|---|---|---|---|---|---|---|---|---|
| **TPE** | Thermo-plastic elastomer | Santroprene | -40 °C…+130 °C | Hydrocarbons, oils, acids | UL94, HB | 64 | Yes | very good |
| **CR** | Chloroprene rubber | Neoprene | -40 °C…+130 °C | Mineral oils, greases, fuels | very good | 40 - 90 | No | very good |
| **NBR** | Nitrile rubber | Perbunan, Nitrile | -40 °C…+130 °C | Hydrocarbons, oils, acids, aliphatic solvents, greases, fuels | weak | 40 - 90 | No | good |
| **EPDM** | Ethylene-propylene-diene rubber | Keltan | -50 °C…+130 °C | Weather-, grease-, mineral oil-, chlorine-,and ozone resistant, hydrocarbons | weak | 20 - 90 | | very good |
| **FPM** | Fluoro-rubber | Viton | -25 °C…+200 °C | ozone, oxygen, mineral oils, synthetic hydraulic fluids, fuels, aromatics, many organic solvents and chemicals | weak | 65 - 95 | | good |

## Abbreviations - technical data

| | |
|---|---|
| A, L | Length |
| L1 | Length of thread |
| D | Diameter |
| S | Thickness |
| S1,S2 | Depth |
| SW | Distance across flats (AF) |
| KB | Clamping range |
| Thread | External thread |
| SUHB | Shroud |
| TRQ BO | Body torque |
| MODR | Mounting torque |
| TRQ CN | Cap nut torque |
| Qty. | Packing unit |

## Product designation

| | |
|---|---|
| VG | Cable gland |
| VP | Sealing plugs |
| ZE | Strain relief |
| EMV | Electromagnetic compatibility |
| SKS | Spiral kink protection |
| GWDR | Flat IP washer |
| SKMU | Hexagon nut |

# Glands and accessories

The tables below provide an overview of the Weidmüller cable glands and the recommended accessories.

## Standard glands

| Material/Type | Approvals: IP class of protection without seal | Approvals: IP class of protection with seal | Ex | EMC | Armouring | Thread sealing rings: CSM GWDR PO | Thread sealing rings: CR GWDR...NR | Thread sealing rings: O-Ring | Locknuts: grey SKMU...K GR | Locknuts: black SKMU...K SW | Locknuts: brass SKMU...MS | Locknuts: MS EMC SKMU EMV... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Plastic** | | | | | | | | | | | | |
|  VG ... K67 | IP67 | | | | | | | | ● | | | |
|  VG ... K68 | IP68 / 5 bar | | | | | | | | ● | | | |
|  VG ... K68 SKS | IP68 / 5 bar | | | | | | | | ● | | | |
| **Nickel-plated brass** | | | | | | | | | | | | |
|  VG ... MS54 | IP54 | IP65 | | | | optional | | | | | ● | |
|  VG ... MS54-ZE | IP54 | | | | | | | | | | ● | |
|  VG...MS54 ZE BS | IP54 | | | | | | | | | | ● | |
|  VG...MS54 ZR | IP54 | | | | | | | | | | ● | |
|  VG ... MS68 | | IP68 / 5 bar, IP69k | | | | | | included | | | ● | |
|  VG ... EMV | | IP68 / 10 bar | | ● | | | | included | | | | ● |
|  VG ... 1/EMV | | IP68 / 5 bar, IP69k | | ● | | | | included | | | | ● |
| **Stainless steel** | | | | | | | | | | | | |
|  VG...SS68 | | IP68 / 5 bar, IP69k | | | | | | included | | | ● | |

## Cable glands HQ

| Material/Type | Approvals: IP class of protection without seal | Approvals: IP class of protection with seal | Ex | EMC | Armouring | Thread sealing rings: CSM GWDR PO | Thread sealing rings: CR GWDR...NR | Thread sealing rings: O-Ring | Locknuts: grey SKMU...K GR | Locknuts: black SKMU...K SW | Locknuts: brass SKMU...MS | Locknuts: MS EMC SKMU EMV... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Plastic** | | | | | | | | | | | | |
|  VG ... K68 ... | IP65 | | | | | | | | | | | |
| **Nickel-plated brass** | | | | | | | | | | | | |
|  VG ... MS68 ... | IP65 | | | | | | | | | | | |
|  VG ... EMV68 ... | IP65 | | | ● | | | | | | | | |

## Cable glands Ex

| Material/Type | Approvals: IP class of protection without seal | Approvals: IP class of protection with seal | Ex | EMC | Armouring | Thread sealing rings: CSM GWDR PO | Thread sealing rings: CR GWDR...NR | Thread sealing rings: O-Ring | Locknuts: grey SKMU...K GR | Locknuts: black SKMU...K SW | Locknuts: brass SKMU...MS | Locknuts: MS EMC SKMU EMV... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Nickel-plated brass** | | | | | | | | | | | | |
|  VG ... Exe MS | | IP68 / 20 bar | Exe | | | | | included | | | ● | ● |
| Stainless steel glands on request | | | | | | | | | | | | |

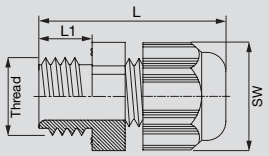
## Stopping plugs

| Material/Type | Approvals: IP class of protection without seal | Approvals: IP class of protection with seal | Ex | Thread sealing rings: CSM GWDR PO | Thread sealing rings: CR GWDR...NR | Thread sealing rings: O-Ring | Locknuts: grey SKMU...K GR | Locknuts: black SKMU...K SW | Locknuts: brass SKMU...MS | Locknuts: MS EMC SKMU EMV... |
|---|---|---|---|---|---|---|---|---|---|---|
| **Plastic** | | | | | | | | | | |
|  VP ... K54 | IP54 | IP66 | | | | | ● | | | |
| **Nickel-plated brass** | | | | | | | | | | |
|  VP ... MS65 | | IP68 | | | | included | | | ● | |

## Cable glands - Plastic - IP68



Plastic cable glands with integrated strain relief mechanism suitable for industrial applications that require IP68 protection.




## Technical data

| | |
|---|---|
| Material / Colour | Polyamide 6 / RAL 7035 |
| Seal insert | CR |
| Temperature range | -30 °C...80 °C |
| Degree of protection | IP68 - 5 bar (30 min) |
| Flammability rating | V-2 |

| | |
|---|---|
| **Note** | Version with moulded sealing lip<br>Length L varies depending on the cable diameter used |

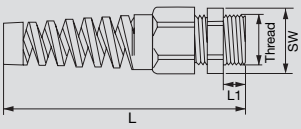
## Ordering data

| Type | Thread | KB | L/L1 | SW | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VG M16-1/K68 | M 16 x 1.5 | 5.00-10.00 | 39.7 / 10.00 | 22 | 2.00 | 3.00 | 3.00 | 5.00 | 50 | **1772290000** |
| VG M16-1/K68 | M 16 x 1.5 | 4.00-8.00 | 35.7 / 8.00 | 19 | 2.50 | 2.50 | 3.80 | 3.80 | 50 | **1909860000** |
| VG M20-1/K68 | M 20 x 1.5 | 6.00-12.00 | 41.2 / 10.00 | 24 | 2.50 | 2.50 | 3.80 | 3.80 | 50 | **1772300000** |
| VG M25-1/K68 | M 25 x 1.5 | 13.00-18.00 | 48.2 / 10.00 | 33 | 7.00 | 9.00 | 10.00 | 13.00 | 25 | **1772310000** |
| VG M25-1/K68 | M 25 x 1.5 | 11.00-17.00 | 43.2 / 8.00 | 29 | 5.00 | 5.00 | 7.50 | 7.50 | 25 | **1909870000** |
| VG M32-1/K68 | M 32 x 1.5 | 18.00-25.00 | 50.8 / 15.00 | 42 | 8.00 | 10.00 | 12.00 | 15.00 | 20 | **1772320000** |
| VG M32-1/K68 | M 32 x 1.5 | 15.00-21.00 | 50.7 / 10.00 | 36 | 5.00 | 5.00 | 7.50 | 7.50 | 20 | **1909880000** |
| VG M40-1/K68 | M 40 x 1.5 | 22.00-32.00 | 69.9 / 15.00 | 53 | 15.00 | 20.00 | 22.00 | 30.00 | 10 | **1772330000** |
| VG M40-1/K68 | M 40 x 1.5 | 19.00-28.00 | 55.2 / 10.00 | 46 | 11.00 | 11.00 | 7.50 | 7.50 | 10 | **1909890000** |
| VG M50-1/K68 | M 50 x 1.5 | 30.00-38.00 | 71.7 / 18.00 | 60 | 20.00 | 25.00 | 30.00 | 35.00 | 10 | **1772340000** |
| VG M50-1/K68 | M 50 x 1.5 | 30.00-38.00 | 70.3 / 18.00 | 60 | 12.00 | 12.00 | 7.50 | 7.50 | 10 | **1909900000** |
| VG M63-1/K68 | M 63 x 1.5 | 34.00-44.00 | 72.9 / 18.00 | 65 | 12.00 | 12.00 | 7.50 | 7.50 | 10 | **1772350000** |
| **PG** | | | | | | | | | | |
| VG 9-K68 | PG 9 | 4.00-8.00 | 34 / 8.00 | 19 | 2.50 | 2.50 | 3.75 | 3.75 | 50 | **1568980000** |
| VG 11-K68 | PG 11 | 5.00-10.00 | 37 / 8.00 | 22 | 2.50 | 2.50 | 3.75 | 3.75 | 50 | **1568990000** |
| VG 13.5-K68 | PG 13.5 | 6.00-12.00 | 39 / 9.00 | 24 | 2.50 | 2.50 | 3.75 | 3.75 | 50 | **1569000000** |
| VG 16-K68 | PG 16 | 10.00-14.00 | 42.5 / 10.00 | 27 | 3.30 | 3.30 | 5.00 | 5.00 | 50 | **1569010000** |
| VG 21-K68 | PG 21 | 13.00-18.00 | 48 / 11.00 | 33 | 5.00 | 5.00 | 7.50 | 7.50 | 25 | **1569020000** |
| VG 29-K68 | PG 29 | 18.00-25.00 | 53 / 11.00 | 42 | 5.00 | 5.00 | 7.50 | 7.50 | 20 | **1569030000** |
| VG 36-K68 | PG 36 | 22.00-32.00 | 65 / 13.00 | 53 | 5.00 | 5.00 | 7.50 | 7.50 | 10 | **1569040000** |
| VG 42-K68 | PG 42 | 30.00-38.00 | 68 / 13.00 | 60 | 5.00 | 5.00 | 7.50 | 7.50 | 10 | **1569050000** |
| VG 48-K68 | PG 48 | 34.00-44.00 | 69 / 14.00 | 65 | 5.00 | 5.00 | 7.50 | 7.50 | 10 | **1718770000** |
| **Note** | | halogen free, without sealing ring | | | | | | | | |

## Cable glands - Plastic - SKS



Plastic cable glands with spiral bending protection specially suited for flexible connections.




## Technical data

| | |
|---|---|
| Material / Colour | Polyamide 6 / RAL 7035 |
| Seal insert | CR |
| Temperature range | -30 °C...80 °C |
| Degree of protection | IP68 - 5 bar (30 min) |
| Flammability rating | V-2 |

**Note**
Version with moulded sealing lip
Length L varies depending on the cable diameter used

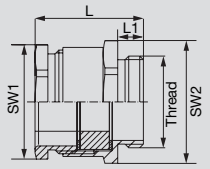
## Ordering data

| Type | Thread | KB | L/L1 | SW | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VG M16-K68 SKS | M 16 x 1.5 | 5.00-10.00 | 80 / 15.00 | 22 | 2.50 | 2.50 | 3.80 | 3.80 | 50 | **1776710000** |
| VG M20-K68 SKS | M 20 x 1.5 | 6.00-12.00 | 106 / 11.00 | 24 | 2.50 | 2.50 | 3.80 | 3.80 | 50 | **1778860000** |
| VG M20-K68 SKS | M 20 x 1.5 | 10.00-14.00 | 106 / 15.00 | 27 | 3.30 | 3.30 | 5.00 | 5.00 | 50 | **1776720000** |
| VG M25-K68 SKS | M 25 x 1.5 | 13.00-18.00 | 129 / 15.00 | 33 | 5.00 | 5.00 | 7.50 | 7.50 | 25 | **1776730000** |
| **PG** | | | | | | | | | | |
| VG 9-K68 SKS | PG 9 | 4.00-8.00 | 78 / 8.00 | 19 | 2.50 | 2.50 | 3.75 | 3.75 | 50 | **1720480000** |
| VG 11-K68 SKS | PG 11 | 5.00-10.00 | 84 / 8.00 | 22 | 2.50 | 2.50 | 3.75 | 3.75 | 100 | **1720490000** |
| VG 13.5-K68 SKS | PG 13.5 | 6.00-12.00 | 105 / 9.00 | 24 | 2.50 | 2.50 | 3.75 | 3.75 | 50 | **1720500000** |
| VG 16-K68 SKS | PG 16 | 10.00-14.00 | 117 / 10.00 | 27 | 3.30 | 3.30 | 5.00 | 5.00 | 25 | **1720510000** |
| VG 21-K68 SKS | PG 21 | 13.00-18.00 | 130 / 11.00 | 33 | 5.00 | 5.00 | 7.50 | 7.50 | 20 | **1720520000** |
| **Note** | | halogen free, without sealing ring | | | | | | | | |

## Cable glands - Brass - IP54



Brass cable glands for industrial applications that require IP54 protection.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| Seal insert | NBR |
| Temperature range | -20 °C...60 °C |
| Degree of protection | IP 54 |
| Degree of protection with thread gasket | IP 65 |

| | |
|---|---|
| **Note** | Optional sealing ring<br>Length „L“ varies depending on the cable diameter used. |

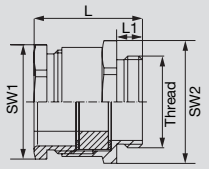
## Ordering data

| Type | Thread | KB | L/L1 | SW1/SW2 | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VG M16-MS54 | M 16 x 1.5 | 8.00-10.00 | 26 / 6.00 | 18 / 20 | 3.05 | 3.05 | 6.25 | 6.25 | 100 | **1778390000** |
| VG M20-MS54 | M 20 x 1.5 | 8.00-10.00 | 26.5 / 6.50 | 18 / 22 | 3.05 | 3.05 | 6.25 | 6.25 | 50 | **1778380000** |
| VG M20-MS54 | M 20 x 1.5 | 10.00-12.00 | 26.5 / 6.50 | 20 / 22 | 3.05 | 3.05 | 6.25 | 6.25 | 50 | **1778370000** |
| VG M25-MS54 | M 25 x 1.5 | 12.00-14.00 | 27.5 / 7.00 | 22 / 27 | 3.66 | 3.66 | 7.50 | 7.50 | 50 | **1778360000** |
| VG M25-MS54 | M 25 x 1.5 | 15.00-17.00 | 29.5 / 7.00 | 28 / 30 | 4.88 | 4.88 | 10.00 | 10.00 | 50 | **1778350000** |
| VG M32-MS54 | M 32 x 1.5 | 24.00-26.00 | 33 / 8.00 | 38 / 40 | 4.88 | 4.88 | 10.00 | 10.00 | 25 | **1778340000** |
| VG M40-MS54 | M 40 x 1.5 | 28.00-30.00 | 33 / 8.00 | 37 / 43 | 4.88 | 4.88 | 10.00 | 10.00 | 25 | **1778330000** |
| VG M50-MS54 | M 50 x 1.5 | 31.00-33.00 | 39 / 9.00 | 47 / 55 | 4.88 | 4.88 | 10.00 | 10.00 | 10 | **1778320000** |
| VG M50-MS54 | M 50 x 1.5 | 39.00-41.00 | 43 / 9.00 | 54 / 57 | 4.88 | 4.88 | 10.00 | 10.00 | 5 | **1778310000** |
| VG M63-MS54 | M 63 x 1.5 | 45.00-47.00 | 45 / 10.00 | 60 / 68 | 4.88 | 4.88 | 10.00 | 10.00 | 5 | **1778300000** |
| **PG** | | | | | | | | | | |
| VG 9-MS54 | PG 9 | 6.00-8.00 | 22 / 6.00 | 15 / 17 | 10.13 | 10.13 | 15.20 | 15.20 | 100 | **0261500000** |
| VG 11-MS54 | PG 11 | 8.00-10.00 | 26 / 6.00 | 18 / 20 | 12.40 | 12.40 | 18.60 | 18.60 | 50 | **0260700000** |
| VG 13.5-MS54 | PG 13.5 | 10.00-12.00 | 26 / 6.50 | 20 / 22 | 13.60 | 13.60 | 20.40 | 20.40 | 50 | **0260800000** |
| VG 16-MS54 | PG 16 | 12.00-14.00 | 27 / 6.50 | 22 / 24 | 15.00 | 15.00 | 22.50 | 22.50 | 50 | **0261400000** |
| VG 21-MS54 | PG 21 | 15.00-17.00 | 29.5 / 7.00 | 28 / 30 | 18.87 | 18.87 | 28.30 | 28.30 | 50 | **0260900000** |
| VG 29-MS54 | PG 29 | 24.00-26.00 | 33 / 8.00 | 37 / 40 | 24.67 | 24.67 | 37.00 | 37.00 | 25 | **0261000000** |
| VG 36-MS54 | PG 36 | 33.00-35.00 | 39 / 9.00 | 47 / 50 | 31.33 | 31.33 | 47.00 | 47.00 | 20 | **0497600000** |
| VG 42-MS54 | PG 42 | 41.00-43.00 | 44 / 10.00 | 54 / 57 | 36.00 | 36.00 | 54.00 | 54.00 | 10 | **0497700000** |
| VG 48-MS54 | PG 48 | 45.00-47.00 | 45 / 10.00 | 60 / 64 | 39.50 | 39.50 | 59.30 | 59.30 | 5 | **1718780000** |
| **Note** | | Further versions on request | | | | | | | | |

## Cable glands - Brass - ZR



Brass cable gland with concentric O-rings for standard industrial applications. The sealed insert used here contains several removable or dividable inlets. This allows to connect cables of a wide diameter range (from 4 mm to 41 mm) with only one sealed insert.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| Seal insert | NBR |
| Temperature range | -20 °C...80 °C |
| Degree of protection | IP 54 |

**Note**

## Ordering data

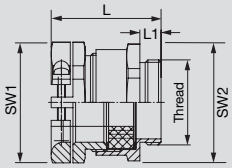
| Type | Thread | KB | L/L1 | SW1/SW2 | TRQ CN, min. | TRQ BO, min. | D1 | D2 | D3 | D4 | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | | | |
| VG M20-MS54 | M 20 x 1.5 | 4.00-13.00 | 26.5 / 6.50 | 22 / 24 | 3.05 | 6.25 | 4 | 7 | 10 | 13 | 50 | **1009560000** |
| VG M25-MS54 | M 25 x 1.5 | 8.50-18.00 | 27.5 / 7.00 | 28 / 30 | 3.66 | 7.50 | 8.5 | 11.5 | 14.5 | 18 | 25 | **1009570000** |
| VG M32-MS54 | M 32 x 1.5 | 16.00-26.00 | 33 / 8.00 | 37 / 40 | 4.88 | 10.00 | 16 | 19 | 22 | 25 | 25 | **1009580000** |
| VG M40-MS54 | M 40 x 1.5 | 23.00-30.00 | 33 / 33.00 | 47 / 50 | 4.88 | 10.00 | 23 | 26 | 29 | 32 | 10 | **1009590000** |
| VG M50-MS54 | M 50 x 1.5 | 32.00-40.00 | 39 / 39.00 | 54 / 57 | 4.88 | 10.00 | 32 | 35 | 38 | 41 | 5 | **1009600000** |
| **PG** | | | | | | | | | | | | |
| VGPG13.5-MS54 | PG 13.5 | 7.50-12.50 | 22 / 6.50 | 20 / 22 | 13.60 | 20.40 | 7.5 | 10 | 12.5 | 0 | 50 | **1009610000** |
| VG PG16-MS54 | PG 16 | 7.50-15.00 | 27 / 6.50 | 22 / 24 | 15.00 | 22.50 | 7.5 | 10 | 12.5 | 15 | 50 | **1009620000** |
| VG PG21-MS54 | PG 21 | 10.00-19.00 | 29.5 / 7.00 | 28 / 30 | 18.87 | 28.30 | 10 | 13 | 16 | 19 | 25 | **1009630000** |
| VG PG29-MS54 | PG 29 | 18.00-27.00 | 33 / 8.00 | 37 / 40 | 24.67 | 37.00 | 18 | 21 | 24 | 27 | 25 | **1009640000** |
| VG PG36-MS54 | PG 36 | 24.00-33.00 | 39 / 9.00 | 47 / 50 | 31.33 | 47.00 | 24 | 27 | 30 | 33 | 10 | **1009650000** |
| VG PG42-MS54 | PG 42 | 30.00-39.00 | 44 / 10.00 | 54 / 57 | 36.00 | 54.00 | 30 | 33 | 36 | 39 | 5 | **1009670000** |

**Note** It is possible to connect cables with diameters ranging from D1 to D4.

## Cable glands - Brass - ZE



Brass cable glands with external, centrally positioned strain relief provided by the clamping jaws.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| Seal insert | NBR |
| Temperature range | -20 °C...80 °C |
| Degree of protection | IP 54 |

| | |
|---|---|
| **Note** | Optional sealing ring<br>Length „L“ varies depending on the cable diameter used. |

## Ordering data

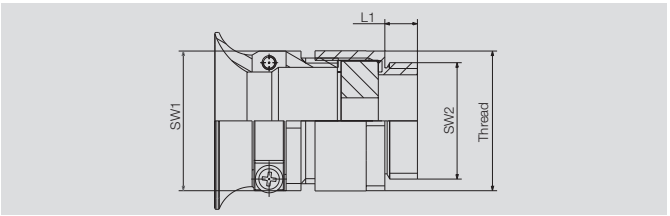
| Type | Thread | KB | L/L1 | SW1/SW2 | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VG M16-MS54 ZE | M 16 x 1.5 | 4.00-10.00 | 26 / 6.00 | 18 / 19 | 6.67 | 6.67 | 10.00 | 10.00 | 100 | **1778440000** |
| VG M20-MS54 ZE | M 20 x 1.5 | 6.50-12.50 | 26.5 / 6.50 | 20 / 22 | 8.00 | 8.00 | 12.00 | 12.00 | 50 | **1778450000** |
| VG M20-MS54 ZE | M 20 x 1.5 | 6.50-12.50 | 26.5 / 6.50 | 22 / 22 | 8.00 | 8.00 | 12.00 | 12.00 | 50 | **1778460000** |
| VG M25-MS54 ZE | M 25 x 1.5 | 9.00-19.00 | 29.5 / 7.00 | 30 / 34 | 8.00 | 8.00 | 12.00 | 12.00 | 50 | **1778480000** |
| VG M32-MS54 ZE | M 32 x 1.5 | 17.00-27.00 | 33 / 8.00 | 40 / 42 | 12.00 | 12.00 | 18.00 | 18.00 | 25 | **1778490000** |
| VG M40-MS54 ZE | M 40 x 1.5 | 23.00-33.00 | 33 / 8.00 | 50 / 52 | 12.00 | 12.00 | 18.00 | 18.00 | 25 | **1778500000** |
| VG M50-MS54 ZE | M 50 x 1.5 | 29.00-39.00 | 43 / 9.00 | 57 / 59 | 13.33 | 13.33 | 20.00 | 20.00 | 5 | **1778520000** |
| VG M63-MS54 ZE | M 63 x 1.5 | 35.00-45.00 | 45 / 10.00 | 66 / 64 | 13.33 | 13.33 | 20.00 | 20.00 | 5 | **1778530000** |
| **PG** | | | | | | | | | | |
| VG 9-MS54-ZE | PG 9 | 4.00-10.00 | 30.5 / 6.00 | 17 / 19 | 10.13 | 10.13 | 15.20 | 15.20 | 50 | **1718810000** |
| VG 11-MS54-ZE | PG 11 | 6.50-12.50 | 31.5 / 6.00 | 20 / 22 | 12.40 | 12.40 | 18.60 | 18.60 | 50 | **1718820000** |
| VG 13.5-MS54-ZE | PG 13.5 | 6.50-12.50 | 32 / 6.50 | 22 / 24 | 13.60 | 13.60 | 20.40 | 20.40 | 50 | **1718830000** |
| VG 16-MS54-ZE | PG 16 | 6.50-15.00 | 33 / 6.50 | 24 / 27 | 15.00 | 15.00 | 22.50 | 22.50 | 50 | **1718840000** |
| VG 21-MS54-ZE | PG 21 | 9.00-19.00 | 38 / 7.00 | 30 / 34 | 18.87 | 18.87 | 28.30 | 28.30 | 50 | **1718850000** |
| VG 29-MS54-ZE | PG 29 | 17.00-27.00 | 43 / 8.00 | 40 / 42 | 24.67 | 24.67 | 37.00 | 37.00 | 25 | **1718860000** |
| VG 36-MS54-ZE | PG 36 | 23.00-33.00 | 49.5 / 9.00 | 50 / 52 | 31.33 | 31.33 | 47.00 | 47.00 | 10 | **1718870000** |
| VG 42-MS54-ZE | PG 42 | 29.00-39.00 | 53.5 / 10.00 | 57 / 62 | 36.00 | 36.00 | 54.00 | 54.00 | 5 | **1718880000** |
| VG 48-MS54-ZE | PG 48 | 35.00-45.00 | 55 / 10.00 | 64 / 68 | 39.53 | 39.53 | 59.30 | 59.30 | 5 | **1718890000** |
| **Note** | | Further versions on request | | | | | | | | |

# Standard cable glands - Brass

## Cable glands with strain-relief and bending protection



Industrial brass cable glands with strain-relief and bending protection for connecting non-stationary cables and lines.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| Seal insert | NBR |
| Temperature range | -20 °C...80 °C |
| Degree of protection | IP 54 |

**Note**

## Ordering data

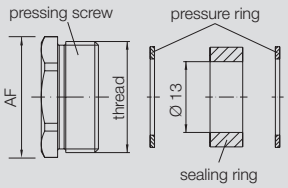
| Type | Thread | KB | L/L1 | SW1/SW2 | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VGM16-MS54ZE | M 16 x 1.5 | 4.00-10.00 | 5 / 5.00 | 17 / 18 | 2.50 | 2.50 | 4.00 | 4.00 | 50 | **1005190000** |
| VGM16-MS54ZE | M 16 x 1.5 | 6.50-12.50 | 34 / 5.00 | 17 / 18 | 2.50 | 2.50 | 4.00 | 4.00 | 50 | **1005200000** |
| VGM20-MS54ZE | M 20 x 1.5 | 6.50-12.50 | 37.8 / 6.00 | 22 / 22 | 8.00 | 8.00 | 12.00 | 12.00 | 50 | **1005210000** |
| VGM20-MS54ZE | M 20 x 1.5 | 6.50-15.00 | 37.8 / 6.00 | 22 / 22 | 8.00 | 8.00 | 12.00 | 12.00 | 50 | **1005220000** |
| VGM25-MS54ZE | M 25 x 1.5 | 9.00-19.00 | 44 / 7.00 | 30 / 30 | 8.00 | 8.00 | 12.00 | 12.00 | 25 | **1005230000** |
| VGM32-MS54ZE | M 32 x 1.5 | 17.00-27.00 | 50.8 / 8.00 | 41 / 40 | 12.00 | 12.00 | 18.00 | 18.00 | 25 | **1005240000** |

**Note**

## Brass clamping screws - IP54



These special cable glands are designed for use in HDC RockStar® bases and hoods.




## Technical data

| | |
|---|---|
| Clamping screw material | Nickel-plated brass |
| Sealing ring material | SBR/NBR |
| Pressure ring material | Polyamide |
| Temperature range | -20 °C...60 °C |

**Note**

## Ordering data

| Type | Thread | Inserts in mm | SW | Qty. | Order No. |
|---|---|---|---|---|---|
| **metric** | | | | | |
| VG H M20 MS | M 20 x 1.5 | 4 / 7 / 10 / 13 | 20 | 50 | **1921720000** |
| VG H M25 MS | M 25 x 1.5 | 8.5 / 11.5 / 14.5 / 18 | 25 | 25 | **1921740000** |
| VG H M32 MS | M 32 x 1.5 | 16 / 19 / 22 / 25 | 32 | 20 | **1921760000** |
| VG H M40 MS | M 40 x 1.5 | 23 / 26 / 29 / 32 | 40 | 10 | **1921770000** |
| **PG** | | | | | |
| KV 11-M | PG 11 | 7.5 / 10 / 12.5 | 10 | 10 | **1656390000** |
| KV 13-M | PG 13 | 7.5 / 10 / 12.5 | 10 | 10 | **1656400000** |
| KV 16-M | PG 16 | 7.5 / 10 / 12.5 / 15 | 10 | 10 | **1656410000** |
| KV 21-M | PG 21 | 10 / 13 / 16 / 19 | 10 | 10 | **1656420000** |
| KV 29-M | PG 29 | 18 / 21 / 24 / 27 | 10 | 10 | **1656430000** |

**Note**

# Standard cable glands - Brass

## Cable glands HQ



Cable glands specifically for the HQ series, in plastic. Available as brass and brass-EMC versions.

## Technical data

| | |
|---|---|
| Material | PA 6 / Brass, nickel-plated |
| Seal insert | TPE-V |
| Temperature range | -40 °C...100 °C |
| Degree of protection | IP 68 |

**Note**

## Ordering data

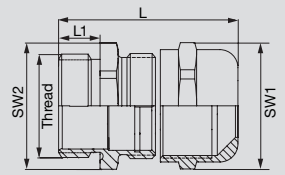
| Type | Thread | KB | SW | Qty. | Order No. |
|---|---|---|---|---|---|
| **Plastic** | | | | | |
| VG 16 HQ K68 9-13 | PG 16 | 9.00-13.00 | 27 | 1 | **1016070000** |
| VG 16 HQ K68 11.5-15.5 | PG 16 | 11.50-15.50 | 27 | 1 | **1016080000** |
| **Brass** | | | | | |
| VG 21 HQ MS68 9-13 | PG 21 | 9.00-13.00 | 30 | 1 | **1016090000** |
| VG 21 HQ MS68 11.5-15.5 | PG 21 | 11.50-15.50 | 30 | 1 | **1016100000** |
| VG 21 HQ MS68 14-18 | PG 21 | 14.00-18.00 | 30 | 1 | **1016110000** |
| **EMC** | | | | | |
| VG 21 HQ EMV68 11-15.5 | PG 21 | 11.00-15.50 | 30 | 1 | **1016120000** |
| VG 21 HQ EMV68 14-18 | PG 21 | 14.00-18.00 | 30 | 1 | **1016130000** |
| **Only for angled HQ base housing (order number 1003110000)** | | | | | |
| VG16 HQ K68 9-12SH | PG 16 | 9.00-12.00 | 30 | 50 | **1045530000** |
| VG16 HQ K68 11.5-15.5SH | PG 16 | 11.50-15.50 | 30 | 50 | **1045540000** |

**Note**

## Cable glands - Brass - IP68



Standard brass cable glands for industrial applications that require IP68 protection.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| O-ring / Seal insert | NBR / CR |
| Temperature range | -40 °C...100 °C |
| Clamp insert | Polyamide |
| Degree of protection with thread gasket | IP 68 - 5 bar |

**Note** Length „L" varies according to cable diameter used

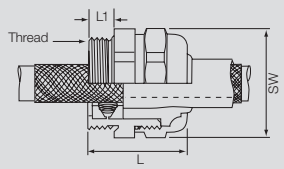
## Ordering data

| Type | Thread | L/L1 | SW | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | |
| VG M16-1/MS68 | M 16 x 1.5 | 28 / 5.50 | 17 | 2.50 | 2.50 | 3.80 | 3.80 | 50 | **1772210000** |
| VG M16-1/MS68 | M 16 x 1.5 | 37.3 / 7.00 | 20 | 12.00 | 12.00 | 10.00 | 10.00 | 50 | **1909910000** |
| VG M20-1/MS68 | M 20 x 1.5 | 32 / 8.00 | 22 | 2.50 | 2.50 | 3.80 | 3.80 | 50 | **1772220000** |
| VG M25-1/MS68 | M 25 x 1.5 | 35 / 7.00 | 30 | 12.00 | 12.00 | 7.50 | 7.50 | 25 | **1772230000** |
| VG M25-1/MS68 | M 25 x 1.5 | 42 / 8.00 | 27 | 20.00 | 20.00 | 14.00 | 14.00 | 25 | **1909920000** |
| VG M32-1/MS68 | M 32 x 1.5 | 39 / 8.00 | 34 | 12.00 | 12.00 | 7.50 | 7.50 | 25 | **1772240000** |
| VG M32-1/MS68 | M 32 x 1.5 | 45 / 8.00 | 34 | 20.00 | 20.00 | 20.00 | 20.00 | 20 | **1909930000** |
| VG M40-1/MS68 | M 40 x 1.5 | 53 / 8.00 | 44 | 12.00 | 12.00 | 7.50 | 7.50 | 20 | **1772250000** |
| VG M40-1/MS68 | M 40 x 1.5 | 55.1 / 9.00 | 43 | 20.00 | 20.00 | 20.00 | 20.00 | 20 | **1909940000** |
| VG M50-1/MS68 | M 50 x 1.5 | 62.2 / 9.00 | 58 | 20.00 | 20.00 | 20.00 | 20.00 | 12 | **1909950000** |
| VG M63-1/MS68 | M 63 x 1.5 | 63.6 / 14.00 | 64 | 20.00 | 20.00 | 20.00 | 20.00 | 12 | **1772270000** |
| **PG (IP 69K)** | | | | | | | | | |
| VG 9-MS68 | PG 9 | 27 / 6.00 | 17 | 12.00 | 12.00 | 10.00 | 10.00 | 50 | **1569070000** |
| VG 11-MS68 | PG 11 | 28.5 / 6.00 | 20 | 12.00 | 12.00 | 10.00 | 10.00 | 50 | **1569080000** |
| VG 13.5-MS68 | PG 13.5 | 29.5 / 6.50 | 22 | 14.00 | 14.00 | 12.00 | 12.00 | 50 | **1569090000** |
| VG 16-MS68 | PG 16 | 29.5 / 6.50 | 24 | 14.00 | 14.00 | 14.00 | 14.00 | 25 | **1569100000** |
| VG 21-MS68 | PG 21 | 33.5 / 7.00 | 30 | 18.00 | 18.00 | 16.00 | 16.00 | 25 | **1569110000** |
| **PG (IP 68)** | | | | | | | | | |
| VG 29-MS68 | PG 29 | 37.5 / 8.00 | 40 | 20.00 | 20.00 | 20.00 | 20.00 | 20 | **1569120000** |
| VG 36-MS68 | PG 36 | 45 / 10.00 | 50 | 20.00 | 20.00 | 20.00 | 20.00 | 15 | **1569130000** |
| VG 42-MS68 | PG 42 | 47.5 / 12.00 | 58 | 20.00 | 20.00 | 20.00 | 20.00 | 12 | **1569140000** |
| VG 48-MS68 | PG 48 | 50.5 / 14.00 | 64 | 20.00 | 20.00 | 20.00 | 20.00 | 12 | **1718790000** |
| **Note** | | Further versions on request | | | | | | | |

## Cable glands - Brass - EMC



Brass cable glands for shielding against interference frequencies with a screening attenuation of up to 100 dB. Contact with cable shield by means of spring washer.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| O-Ring | NBR |
| Temperature range | -40 °C...135 °C |
| Degree of protection | IP 68 - 5 bar |
| Degree of protection with thread gasket | IP 68 - 10 bar |
| Clamp insert | TPE |

**Note** Length „L" varies according to cable diameter used

## Ordering data

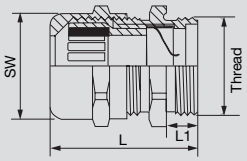
| Type | Thread | KB | Shield Ø | L/L1 | SW | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | | |
| VG EMV M20X1.5 | M 20 x 1.5 | 8.00-11.00 | 4.00-8.50 | 41 / 10.00 | 24 | 9.00 | 10.00 | 9.00 | 9.00 | 50 | **1706940000** |
| VG EMV M25X1.5 | M 25 x 1.5 | 14.00-18.00 | 8.00-13.50 | 43 / 11.00 | 30 | 10.00 | 10.00 | 10.00 | 10.00 | 25 | **1706950000** |
| **PG** | | | | | | | | | | | |
| VG EMV PG 9/11 | PG 9 | 6.50-9.50 | 2.50-6.00 | 34 / 6.00 | 20 | 6.00 | 8.00 | 6.00 | 6.00 | 50 | **1706860000** |
| VG EMV PG 11 | PG 11 | 6.50-9.00 | 3.50-7.50 | 41 / 10.00 | 24 | 10.00 | 10.00 | 10.00 | 10.00 | 50 | **1706870000** |
| VG EMV PG 13.5 | PG 13.5 | 8.00-11.00 | 4.00-8.50 | 41 / 10.00 | 24 | 10.00 | 10.00 | 10.00 | 10.00 | 50 | **1706880000** |
| VG EMV PG 16 K14 | PG 16 | 10.00-14.00 | 8.00-13.00 | 43 / 11.00 | 30 | 10.00 | 10.00 | 10.00 | 10.00 | 25 | **1706890000** |
| VG EMV PG 16 K18 | PG 16 | 14.00-18.00 | 8.00-13.00 | 43 / 11.00 | 30 | 10.00 | 10.00 | 10.00 | 10.00 | 25 | **1713880000** |
| VG EMV PG 21 K18 | PG 21 | 17.00-18.00 | 12.50-17.50 | 45 / 11.00 | 35 | 10.00 | 15.00 | 10.00 | 10.00 | 10 | **1706900000** |
| VG EMV PG K28 | PG 21 | 17.00-20.00 | 12.50-17.50 | 45 / 11.00 | 35 | 8.00 | 15.00 | 8.00 | 8.00 | 10 | **1713890000** |
| VG EMV PG 29 K26 | PG 29 | 22.00-26.00 | 15.00-21.00 | 52 / 13.00 | 40 | 15.00 | 20.00 | 15.00 | 15.00 | 10 | **1706910000** |
| VG EMV PG 29 K29 | PG 29 | 25.00-29.00 | 22.00-25.00 | 58 / 13.00 | 50 | 20.00 | 20.00 | 20.00 | 20.00 | 5 | **1713900000** |
| VG EMV PG36 K32-27 | PG 36 | 27.00-32.00 | 24.00-30.50 | 54 / 9.00 | 50 | 15.00 | 30.00 | 15.00 | 15.00 | 10 | **1770410000** |

**Note** Further versions on request

## Cable glands - Brass - 1/EMC



Brass cable glands for shielding against interference frequencies with a screening attenuation of up to 90 dB. Conical metal cage ensures multiple contacts with the cable shielding.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| O-ring / Seal insert | NBR / CR |
| Temperature range | -40 °C...100 °C |
| Degree of protection | IP 68 - 5 bar |
| Clamp insert | Polyamide |

**Note** Length „L" varies according to cable diameter used

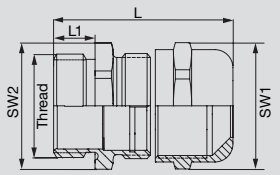
## Ordering data

| Type | Thread | KB | L/L1 | SW | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VG M16-MS 1/EMV | M 16 x 1.5 | 4.50-10.00 | 37.3 / 7.00 | 20 | 5.00 | 7.00 | 8.00 | 10.00 | 50 | **1909500000** |
| VG M20-MS 1/EMV | M 20 x 1.5 | 6.00-12.00 | 38.8 / 8.00 | 22 | 8.00 | 10.00 | 12.00 | 15.00 | 50 | **1909510000** |
| VG M25-MS 1/EMV | M 25 x 1.5 | 11.00-17.00 | 42 / 8.00 | 27 | 6.00 | 8.00 | 9.00 | 12.00 | 25 | **1909520000** |
| VG M32-MS 1/EMV | M 32 x 1.5 | 15.00-21.00 | 45 / 8.00 | 34 | 6.00 | 10.00 | 9.00 | 15.00 | 20 | **1909530000** |
| VG M40-MS 1/EMV | M 40 x 1.5 | 19.00-28.00 | 55.1 / 9.00 | 43 | 7.00 | 10.00 | 10.00 | 15.00 | 10 | **1909540000** |
| VG M50-MS 1/EMV | M 50 x 1.5 | 27.00-38.00 | 62.2 / 9.00 | 58 | 20.00 | 30.00 | 30.00 | 45.00 | 10 | **1909550000** |
| VG M63-MS 1/EMV | M 63 x 1.5 | 34.00-44.00 | 71.5 / 14.00 | 64 | 23.00 | 28.00 | 30.00 | 40.00 | 5 | **1909560000** |
| **Note** | | Further versions on request | | | | | | | | |

## Cable glands - Stainless steel - IP68



Stainless steel cable glands for standard industrial applications that require a high (IP68) degree of protection. These cable glands – with their resistance to impact and sea water – are also suitable for use in applications under extreme environmental conditions.




## Technical data

| | |
|---|---|
| Material | Stainless steel |
| O-Ring / Seal insert | NBR / CR |
| Temperature range | -40 °C...100 °C |
| Degree of protection | IP68 - 5 bar (30 min) |

**Note**

## Ordering data

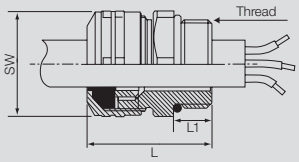
| Type | Thread | KB | L/L1 | SW | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VGM16-SS 68 KB 4-8 | M 16 x 1.5 | 4.00-8.00 | 7.00 | 18 | 8.00 | 10.00 | 15.00 | 12.00 | 50 | **1009850000** |
| VGM20-SS 68 KB 6-12 | M 20 x 1.5 | 6.00-12.00 | 8.00 | 22 | 12.00 | 15.00 | 22.00 | 16.00 | 50 | **1009860000** |
| VGM25-SS 68 KB 10-14 | M 25 x 1.5 | 10.00-14.00 | 8.00 | 27 | 15.00 | 20.00 | 30.00 | 22.00 | 25 | **1009870000** |
| VGM32-SS 68 KB 13-18 | M 32 x 1.5 | 13.00-18.00 | 9.00 | 34 | 28.00 | 35.00 | 50.00 | 40.00 | 20 | **1009880000** |
| VGM40-SS 68 KB 18-25 | M 40 x 1.5 | 18.00-25.00 | 9.00 | 43 | 30.00 | 40.00 | 60.00 | 45.00 | 20 | **1009890000** |
| VGM50-SS 68 KB 22-32 | M 50 x 1.5 | 22.00-32.00 | 9.00 | 55 | 35.00 | 45.00 | 60.00 | 50.00 | 12 | **1009900000** |
| VGM63-SS 68 KB 34-44 | M 63 x 1.5 | 34.00-44.00 | 14.00 | 68 | 45.00 | 55.00 | 70.00 | 60.00 | 10 | **1009910000** |
| **PG** | | | | | | | | | | |
| VG 9-SS 68 KB 4-8 | PG 9 | 4.00-8.00 | 6.00 | 17 | 8.00 | 10.00 | 15.00 | 12.00 | 50 | **1009750000** |
| VG 11-SS 68 KB 5-10 | PG 11 | 5.00-10.00 | 6.00 | 22 | 10.00 | 13.00 | 20.00 | 15.00 | 50 | **1009760000** |
| VG 13.5-SS 68 KB 6-12 | PG 13.5 | 6.00-12.00 | 6.50 | 22 | 12.00 | 15.00 | 22.00 | 16.00 | 50 | **1009770000** |
| VG 16-SS 68 KB 10-14 | PG 16 | 10.00-14.00 | 6.50 | 24 | 15.00 | 20.00 | 30.00 | 22.00 | 25 | **1009780000** |
| VG 21-SS 68 KB 13-18 | PG 21 | 13.00-18.00 | 7.50 | 30 | 28.00 | 35.00 | 50.00 | 40.00 | 25 | **1009790000** |
| VG 29-SS 68 KB 18-25 | PG 29 | 18.00-25.00 | 8.00 | 40 | 30.00 | 40.00 | 60.00 | 45.00 | 20 | **1009800000** |
| VG 36-SS 68 KB 22-32 | PG 36 | 22.00-32.00 | 9.00 | 50 | 35.00 | 45.00 | 60.00 | 50.00 | 15 | **1009810000** |
| VG 42-SS 68 KB 30-38 | PG 42 | 30.00-38.00 | 12.00 | 58 | 40.00 | 50.00 | 70.00 | 55.00 | 12 | **1009820000** |
| VG 48-SS 68 KB 34-44 | PG 48 | 34.00-44.00 | 14.00 | 64 | 45.00 | 55.00 | 70.00 | 60.00 | 10 | **1009830000** |

**Note**

## Cable glands - Brass - Ex e, IP 68



Brass nickel-plated cable glands for use in Ex zones Ex-e and Ex-i.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| O-ring / Seal insert | NBR / CR |
| Temperature range | -40 °C...100 °C |
| Degree of protection | IP 68 - 5 bar (30 min.) |
| Approval | Ex e II, II 2 GD |

**Note** Length „L" varies according to cable diameter used

## Ordering data

| Type | Thread | KB | L/L1 | SW | TRQ CN, min. | TRQ CN, max. | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | | | |
| VG M20-EXE MS | M 20 x 1.5 | 8.50-13.00 | 28 / 8.00 | 24 | 27.50 | 27.50 | 6.00 | 6.00 | 50 | **1737220000** |
| VG M25-EXE MS | M 25 x 1.5 | 13.50-18.00 | 33 / 9.00 | 30 | 45.00 | 45.00 | 10.00 | 10.00 | 20 | **1737230000** |
| VG M32-EXE MS | M 32 x 1.5 | 17.50-25.00 | 38 / 10.00 | 41 | 85.00 | 85.00 | 17.50 | 17.50 | 20 | **1737240000** |
| **NPT** | | | | | | | | | | |
| VG NPT 3/4" Eex-e MS | NPT 3/4" | 13.50-18.00 | 24 / 16.00 | 30 | | | | | 1 | **1778150000** |

**Note**
Further versions available on request
Suitable for the Heat Trace connector, Chapter G

## Adaptors with NPT male threads



Adaptors can be used to connect threaded holes and cable glands of different thread sizes and types.

## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| Temperature range | -40 °C...100 °C |
| Degree of protection | IP 54 |
| Degree of protection with thread gasket | IP 68 |
| Approval | II 2 GD, Ex d IIC, Ex e II, Ex tD |

## Ordering data

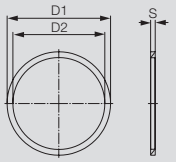
| External thread | 3/4“ NPT |
|---|---|
| **Inner thread** | **Order No.** |
| M20 | **1737640000** |
| M25 | **1737800000** |
| M32 | **1737950000** |
| 1/2" NPT | **1738400000** |
| 3/4" NPT | **1738560000** |

**Note** We recommend using sealing compound or tape
Suitable for the Heat Trace connector, Chapter G

## Flat IP washers - Standard - Polyethylene



Flat IP washers for increasing the degree of protection for cable glands and sealing plugs. The IP washer is also suitable as a replacement for O-rings.




## Technical data

| | |
|---|---|
| Material / Colour | Polyethylene / transparent |
| Temperature range | -30 °C...90 °C |

**Note**

## Ordering data

| Type | Thread | D1 | D2 | S | Qty. | Order No. |
|---|---|---|---|---|---|---|
| **metric** | | | | | | |
| GWDR M12-PO | M 12 x 1.5 | 16.00 | 12.00 | 1.50 | 50 | **1777920000** |
| GWDR M16-PO | M 16 x 1.5 | 20.00 | 16.00 | 1.50 | 50 | **1777930000** |
| GWDR M20-PO | M 20 x 1.5 | 25.00 | 20.40 | 2.00 | 100 | **1777940000** |
| GWDR M25-PO | M 25 x 1.5 | 30.00 | 25.00 | 2.00 | 50 | **1777950000** |
| GWDR M32-PO | M 32 x 1.5 | 38.00 | 32.00 | 2.00 | 50 | **1777960000** |
| GWDR M40-PO | M 40 x 1.5 | 45.00 | 40.00 | 2.00 | 50 | **1777970000** |
| GWDR M50-PO | M 50 x 1.5 | 56.00 | 50.00 | 2.00 | 50 | **1777980000** |
| GWDR M63-PO | M 63 x 1.5 | 70.00 | 63.00 | 2.00 | 50 | **1777990000** |
| **PG** | | | | | | |
| GWDR PG7-PO | PG 7 | 16.50 | 12.50 | 1.60 | 100 | **1719440000** |
| GWDR PG9-PO | PG 9 | 19.00 | 15.20 | 1.60 | 100 | **1719450000** |
| GWDR PG11-PO | PG 11 | 22.50 | 18.60 | 1.80 | 100 | **1719460000** |
| GWDR PG13.5-PO | PG 13.5 | 25.00 | 20.40 | 1.80 | 100 | **1719470000** |
| GWDR PG16-PO | PG 16 | 27.00 | 22.50 | 1.80 | 100 | **1719480000** |
| GWDR PG21-PO | PG 21 | 33.50 | 28.30 | 2.20 | 100 | **1719490000** |
| GWDR PG29-PO | PG 29 | 43.50 | 37.00 | 2.20 | 50 | **1719500000** |
| GWDR PG36-PO | PG 36 | 55.00 | 47.00 | 2.70 | 50 | **1719510000** |
| GWDR PG42-PO | PG 42 | 63.00 | 54.00 | 3.20 | 10 | **1719520000** |
| GWDR PG48-PO | PG 48 | 69.00 | 59.30 | 3.20 | 5 | **1719530000** |

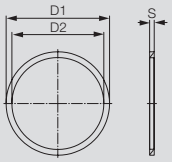
**Note** Further versions on request

# Accessories - Flat IP washers

## Flat IP washers - Standard - Neoprene



Flat IP washers for increasing the degree of protection for cable glands and sealing plugs – recommended for use in Ex applications. The IP washers are also suitable as a replacement for O-rings.




## Technical data

| | |
|---|---|
| Material / Colour | Neoprene / RAL 9005 |
| Temperature range | -40 °C...100 °C |

**Note**

## Ordering data

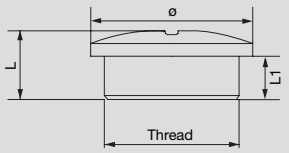
| Type | Thread | D1 | D2 | S | Qty. | Order No. |
|---|---|---|---|---|---|---|
| **metric** | | | | | | |
| GWDR M12-NP | M 12 x 1.5 | 16.00 | 12.00 | 1.20 | 50 | **1913320000** |
| GWDR M16-NP | M 16 x 1.5 | 22.00 | 16.00 | 1.20 | 50 | **1736230000** |
| GWDR M20-NP | M 20 x 1.5 | 24.00 | 20.00 | 1.20 | 50 | **1736240000** |
| GWDR M25-NP | M 25 x 1.5 | 30.00 | 25.00 | 1.50 | 50 | **1736250000** |
| GWDR M32-NP | M 32 x 1.5 | 42.00 | 32.00 | 1.50 | 50 | **1736260000** |
| GWDR M40-NP | M 40 x 1.5 | 52.00 | 40.00 | 1.50 | 20 | **1736270000** |
| GWDR M50-NP | M 50 x 1.5 | 63.00 | 50.00 | 1.50 | 20 | **1736280000** |
| GWDR M63-NP | M 63 x 1.5 | 77.00 | 63.00 | 2.00 | 10 | **1736290000** |
| **PG** | | | | | | |
| GWDR PG7-NP | PG 7 | 17.00 | 11.60 | 1.20 | 100 | **1719540000** |
| GWDR PG9-NP | PG 9 | 21.00 | 14.00 | 1.20 | 100 | **1719550000** |
| GWDR PG11-NP | PG 11 | 24.00 | 17.00 | 1.20 | 100 | **1719560000** |
| GWDR PG13.5-NP | PG 13.5 | 27.00 | 19.50 | 1.20 | 100 | **1719570000** |
| GWDR PG16-NP | PG 16 | 30.00 | 22.50 | 1.20 | 100 | **1719580000** |
| GWDR PG21-NP | PG 21 | 35.00 | 28.30 | 1.50 | 100 | **1719590000** |
| GWDR PG29-NP | PG 29 | 45.00 | 37.00 | 1.50 | 50 | **1719600000** |
| GWDR PG36-NP | PG 36 | 60.00 | 47.00 | 1.50 | 20 | **1719610000** |
| GWDR PG42-NP | PG 42 | 65.00 | 54.00 | 1.50 | 10 | **1719620000** |
| GWDR PG48-NP | PG 48 | 71.00 | 59.30 | 1.50 | 5 | **1719630000** |

**Note** Further versions on request

## Sealing plugs - Plastic



Plastic sealing plugs with cross-heads are used to seal surplus threaded holes and to maintain the IP protection degree.




## Technical data

| | |
|---|---|
| Material / Colour | Polyamid 6 (PA6 - GF30) / RAL 7035 |
| Temperature range | -40 °C...100 °C |
| Degree of protection | IP 54 |
| Degree of protection with thread gasket | IP 65 |
| Flammability rating | V-2 |

| | |
|---|---|
| **Note** | Optional sealing ring |

## Ordering data

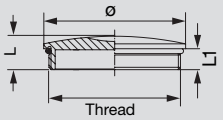
| Type | Thread | L | L1 | Head Ø | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | |
| VP M12 K54 | M 12 x 1.5 | 10 | 6.00 | 15.00 | 0.50 | 0.50 | 100 | **1776930000** |
| VP M16 K54 | M 16 x 1.5 | 11.5 | 7.00 | 19.00 | 0.50 | 0.50 | 100 | **1776920000** |
| VP M20 K54 | M 20 x 1.5 | 12.5 | 7.50 | 22.00 | 1.00 | 1.00 | 100 | **1776910000** |
| VP M25 K54 | M 25 x 1.5 | 15 | 11.00 | 27.00 | 1.00 | 1.00 | 100 | **1776900000** |
| VP M32 K54 | M 32 x 1.5 | 16 | 11.00 | 34.00 | 1.00 | 1.00 | 100 | **1776940000** |
| VP M40 K54 | M 40 x 1.5 | 18 | 12.00 | 42.00 | 2.00 | 2.00 | 50 | **1776950000** |
| VP M50 K54 | M 50 x 1.5 | 20 | 13.00 | 52.00 | 2.00 | 2.00 | 25 | **1776960000** |
| VP M63 K54 | M 63 x 1.5 | 20 | 14.00 | 65.00 | 2.50 | 2.50 | 50 | **1776970000** |
| **PG** | | | | | | | | |
| VP 7-K54 | PG 7 | 8 | 6.00 | 15.00 | 0.50 | 0.50 | 50 | **1719250000** |
| VP 9-K54 | PG 9 | 9 | 6.00 | 19.00 | 0.50 | 0.50 | 100 | **0294760000** |
| VP 11-K54 | PG 11 | 10.5 | 6.50 | 22.00 | 0.50 | 0.50 | 100 | **0294860000** |
| VP 13.5-K54 | PG 13.5 | 9.5 | 6.00 | 25.00 | 1.00 | 1.00 | 100 | **0294960000** |
| VP 16-K54 | PG 16 | 9.5 | 6.00 | 27.00 | 1.00 | 1.00 | 100 | **0295060000** |
| VP 21-K54 | PG 21 | 11 | 8.00 | 33.00 | 1.00 | 1.00 | 100 | **0295160000** |
| VP 29-K54 | PG 29 | 12 | 8.00 | 44.00 | 1.00 | 1.00 | 50 | **0501160000** |
| VP 36-K54 | PG 36 | 15 | 10.00 | 55.00 | 2.00 | 2.00 | 25 | **0501260000** |
| VP 42-K54 | PG 42 | 16 | 10.00 | 62.00 | 2.00 | 2.00 | 10 | **0501360000** |
| VP 48-K54 | PG 48 | 16 | 12.00 | 69.00 | 2.50 | 2.50 | 5 | **1719260000** |
| **Note** | Further versions on request | | | | | | | |

# Sealing plugs

## Sealing plugs - Brass - Nickel-plated



Brass sealing plugs with cross-heads are used to seal surplus threaded holes and to maintain the IP protection degree.




## Technical data

| | |
|---|---|
| Material | Brass, nickel-plated |
| O-Ring | NBR |
| Temperature range | -30 °C...100 °C |
| Degree of protection with thread gasket | IP 68 |

**Note**

## Ordering data

| Type | Thread | L | L1 | Head Ø | TRQ BO, min. | TRQ BO, max. | Qty. | Order No. |
|---|---|---|---|---|---|---|---|---|
| **metric** | | | | | | | | |
| VP M12-MS65 | M 12 x 1.5 | 7.4 | 5.00 | 14.00 | 8.00 | 8.00 | 100 | **1777720000** |
| VP M16-MS65 | M 16 x 1.5 | 8 | 5.00 | 18.00 | 10.00 | 10.00 | 100 | **1777730000** |
| VP M20-MS65 | M 20 x 1.5 | 9.4 | 6.50 | 22.00 | 12.00 | 12.00 | 100 | **1777740000** |
| VP M25-MS65 | M 25 x 1.5 | 10.8 | 7.00 | 28.00 | 12.00 | 12.00 | 100 | **1777750000** |
| VP M32-MS65 | M 32 x 1.5 | 11.6 | 8.00 | 35.00 | 18.00 | 18.00 | 50 | **1777760000** |
| VP M40-MS65 | M 40 x 1.5 | 12.3 | 8.00 | 44.00 | 18.00 | 18.00 | 50 | **1777770000** |
| VP M50-MS65 | M 50 x 1.5 | 15 | 9.00 | 54.00 | 20.00 | 20.00 | 25 | **1777780000** |
| VP M63-MS65 | M 63 x 1.5 | 18 | 10.00 | 67.00 | 20.00 | 20.00 | 10 | **1777790000** |
| **PG** | | | | | | | | |
| VP 7-MS65 | PG 7 | 8 | 5.00 | 15.00 | 12.50 | 12.50 | 100 | **0521600000** |
| VP 9-MS65 | PG 9 | 8 | 5.00 | 18.00 | 15.20 | 15.20 | 100 | **0294700000** |
| VP 11-MS65 | PG 11 | 8 | 5.00 | 20.00 | 18.60 | 18.60 | 100 | **0294800000** |
| VP 13.5-MS65 | PG 13.5 | 9.5 | 5.50 | 22.00 | 20.40 | 20.40 | 100 | **0294900000** |
| VP 16-MS65 | PG 16 | 9 | 5.50 | 24.00 | 22.50 | 22.50 | 100 | **0295000000** |
| VP 21-MS65 | PG 21 | 11 | 6.00 | 30.00 | 28.30 | 28.30 | 100 | **0295100000** |
| VP 29-MS65 | PG 29 | 12 | 8.00 | 40.00 | 37.00 | 37.00 | 50 | **0501100000** |
| VP 36-MS65 | PG 36 | 15 | 9.00 | 50.00 | 47.00 | 47.00 | 25 | **0501200000** |
| VP 42-MS65 | PG 42 | 16 | 10.00 | 57.00 | 54.00 | 54.00 | 10 | **0501300000** |
| VP 48-MS65 | PG 48 | 16 | 10.00 | 64.00 | 59.30 | 59.30 | 5 | **1719270000** |

**Note** Further versions on request

# Identification systems

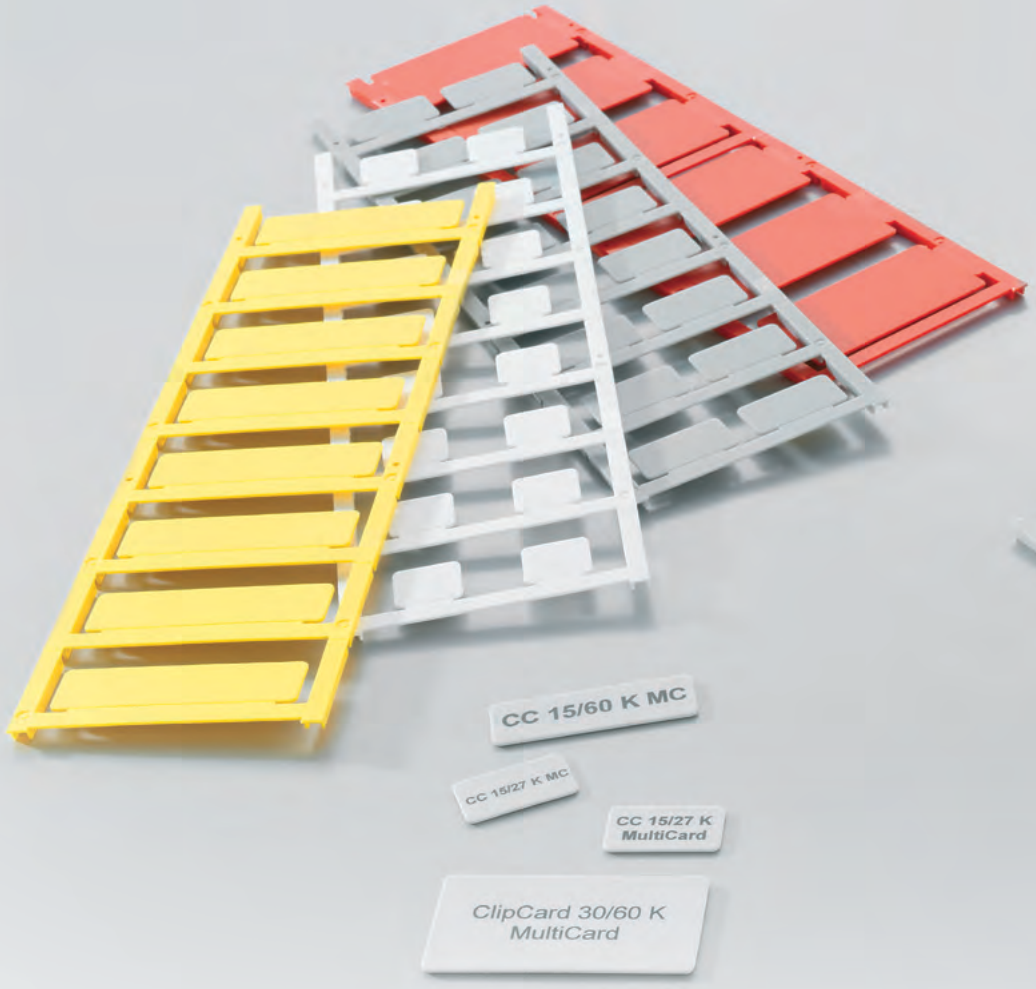

**Identification systems**

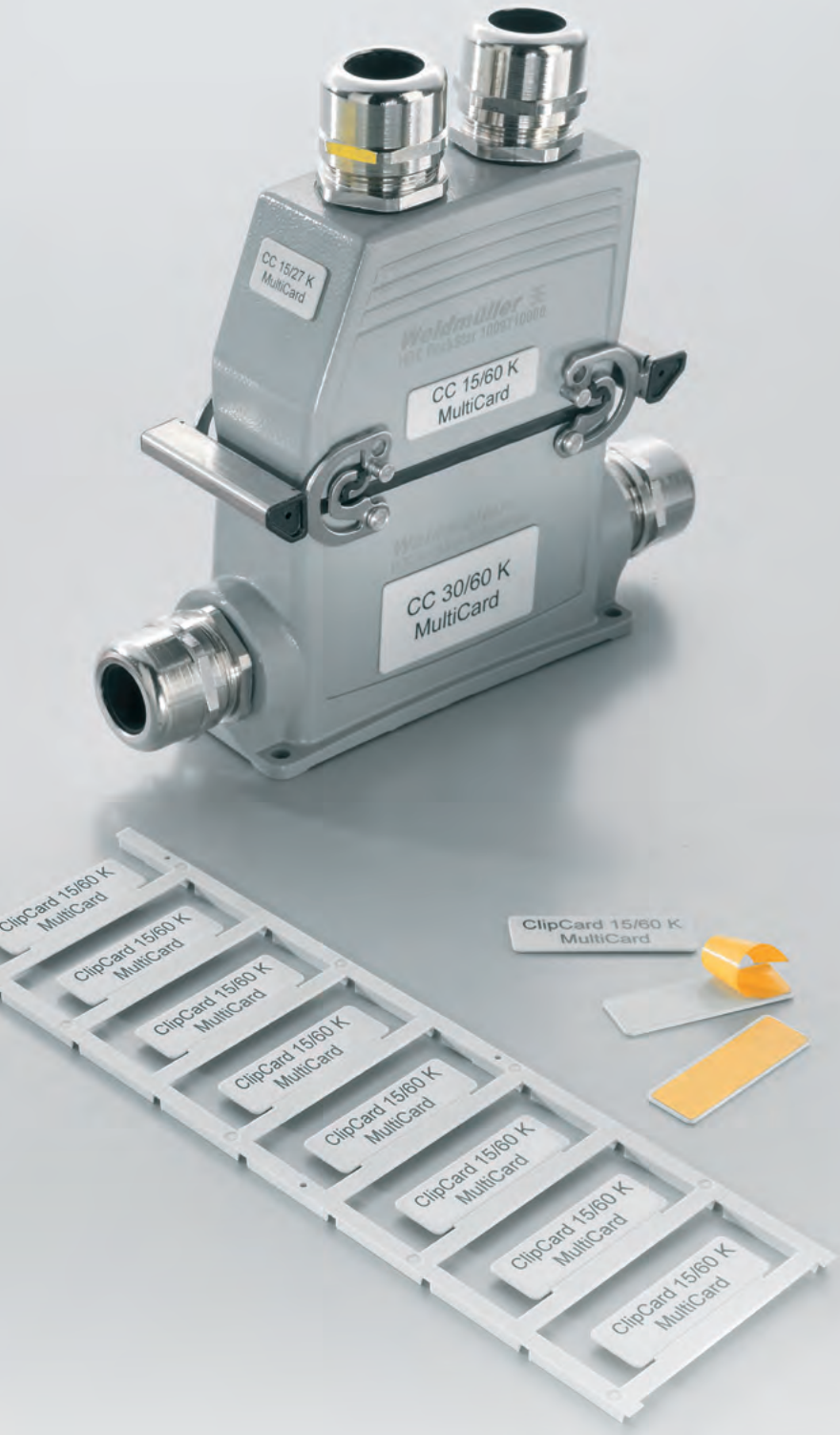
| | |
|---|---|
| Introduction | M.2 |
| Markers | M.4 |
| Printers | M.10 |
| Software | M.15 |

# Identification systems

For over 25 years, the Weidmüller brand has been a symbol of innovative marking and printing systems – which have included software and services that are perfectly adapted to work in harmony with one another. As technical and market leaders, we are committed to technology advancement and continuous improvement. Our products establish standards and help to bring efficiency and safety to the increasingly complex production process.

The new PrintJet PRO printer is part of a unique concept which involves the optimal integration of hardware, software and service. Everything comes from a single source and is optimally tuned to work together. With all products working in harmony, you will achieve a new perspective on the marking and labelling of connectors, wires, cables and devices.  Whether a small business or large corporation – the system provides the proper modules for any need, including the labelling of heavy-duty connectors and cable assemblies.






## Markers



No needs or requirements remain unfulfilled: with over 200 variants and consistent expansion of the MultiCard line. And when necessary we will develop a customised solution with you together.

## Printer



The PrintJet PRO leads the way, defining a new level of high performance and innovation – easy to operate and low maintenance.

## Software



Import, edit and manage data. Our M-Print® PRO software includes performance modules for the entire range of applications – from the CAE workstation to actual implementation.

# Markers

## ESG



The ESG is our proven marker in MultiCard-format. The result is an all-purpose, superior-quality adhesive marker with a high-contrast appearance that is perfect for connector housings.

### ESG - blank

**Technical specification**

| | |
|---|---|
| UL 94 flammability rating | V2 |
| Min. temperature, continuous | -40 °C |
| Max. temperature, continuous | 100 °C |
| Material | Polyamide 66 |

### Ordering data

| Type | Application | Width/Length | Qty. | Order No. |
|---|---|---|---|---|
| ESG 6/15 K MC white | self-adhesive | 15 mm/6 mm | 200 | **1880100000** |
| ESG 6/15 K MC yellow | self-adhesive | 15 mm/6 mm | 200 | **1880130000** |
| ESG 6/17 K MC white | self-adhesive | 17 mm/6 mm | 200 | **1880120000** |
| ESG 6/17 K MC yellow | self-adhesive | 17 mm/6 mm | 200 | **1880110000** |
| ESG 9/11 K MC white | self-adhesive | 11 mm/9 mm | 200 | **1857440000** |
| ESG 9/17 K MC white | self-adhesive | 17 mm/9 mm | 200 | **1674760000** |
| ESG 9/17 K MC yellow | self-adhesive | 17 mm/9 mm | 200 | **1753500000** |

### ESG - Custom printing

### Ordering data

| Type | Application | Width/Length | Qty. | Order No. |
|---|---|---|---|---|
| ESG 6/15 K MC | self-adhesive | 15 mm/6 mm | 40 | **1880090000** |
| ESG 6/17 K MC | self-adhesive | 17 mm/6 mm | 40 | **1880080000** |
| ESG 9/11 K MC | self-adhesive | 11 mm/9 mm | 40 | **1857450000** |
| ESG 9/17 K MC | self-adhesive | 17 mm/9 mm | 40 | **1674770000** |

## SM



The SwitchMark marker has been designed for labelling command and signalling devices. The tags are mounted using the attached adhesive film. Customised tags can be created with the PrintJet or MCP Plus plotter printing systems.

- Users can quickly produce markers to suit their needs.
- No need to stock expensive standard tags.
- Hardwearing printing quality with the PrintJet which can be used as a substitute for engraving.
- We recommend the ETO SM protective film for extreme applications.

### SM - blank

**Technical specification**

| | |
|---|---|
| Material | Polyamide 66, halogen-free |
| UL 94 flammability rating | V2 |
| Min. temperature, continuous | -40 °C |
| Max. temperature, continuous | 100 °C |




### Ordering data

| Type | Length (mm) | Qty. | Order No. white | silver | grey | red | yellow |
|---|---|---|---|---|---|---|---|
| SM 22/22 K MC | 22 | 80 | **1877570000** | **1877590000** | **1014650000** | | **1131830000** |
| SM 27/8 K MC | 8 | 80 | **1812630000** | **1771930000** | **1079480000** | | **1131820000** |
| SM 27/12.5 K MC | 12.5 | 80 | **1699880000** | **1713720000** | **1027830000** | | **1131810000** |
| SM 27/18 K MC | 18 | 80 | **1707270000** | **1713760000** | **1073340000** | **1906120000** | **1915340000** |
| SM 27/27 K MC | 27 | 60 | **1783000000** | **1782990000** | **1079520000** | | **1131800000** |
| SM 18/9.5 K MC | n 9.5 | 200 | **1248580000** | | **1248610000** | | **1248590000** |
| SM 19/42 K MC | n 19 | 40 | **1248620000** | | **1248640000** | | **1248630000** |

### SM - Custom printing



### Ordering data

| Type | Length (mm) | Qty. | Order No. Colour and print details |
|---|---|---|---|
| SM 27/8 K | 8 | 80 | **1713690000** |
| SM 27/12.5 K | 12.5 | 80 | **1699890000** |
| SM 27/18 K | 18 | 80 | **1707280000** |
| SM 22/22 K | 22 | 80 | **1877580000** |
| SM 27/27 K | 27 | 60 | **1783010000** |
| SM 18/9.5 K MC | n 9.5 | 40 | **1248550000** |
| SM 19/42 K MC | n 19 | 8 | **1248560000** |

### SM - protective film

**Technical specification**

| | |
|---|---|
| Material | Polyester film |
| UL 94 flammability rating | HB |
| Min. temperature, continuous | -20 °C |
| Max. temperature, continuous | 80 °C |
| Colour | transparent |

### Ordering data

| Type | Length (mm) | Width (mm) | Labels per sheet | Qty. | Order No. |
|---|---|---|---|---|---|
| ETO SM 27/8 | 8 | 27 | 165 | 1 | **1720570000** |
| ETO SM 27/12.5 | 12.5 | 27 | 100 | 1 | **1720580000** |
| ETO SM 27/18 | 18 | 27 | 112 | 1 | **1720590002** |
| ETO SM 22/22 | 22 | 22 | 117 | 1 | **1880720000** |
| ETO SM 27/27 | 27 | 27 | 70 | 1 | **1805840000** |

# Markers

## ClipCard



ClipCard device markers in MultiCard format are an alternative to engraving. This product line is used to mark electrical installations and switching facilities. The tried-and-tested MultiCard format means that printing can be carried out using the PrintJet or Plotter MCP.

- Hardwearing printing quality with the PrintJet as a substitute for engraving.
- Self-adhesive tags

### Technical data

| | |
|---|---|
| Material | Polyamide 66, halogen-free |
| UL 94 flammability rating | V2 |
| Temperature range °C | –40 … 60 |

## ClipCard - blank




### Ordering data

| Type | Width x Length (mm) | Qty. | Order No. white | silver | grey | red | yellow |
|---|---|---|---|---|---|---|---|
| CC 15/17 K MC | 15 x 17 | 80 | **1876590000** | **1876580000** | **1079540000** | **1288320000** | **1131920000** |
| CC 15/27 K MC | 15 x 27 | 80 | **1876640000** | **1876780000** | **1079560000** | **1288330000** | **1131910000** |
| CC 15/49 K MC | 15 x 49 | 40 | **1877220000** | **1877270000** | **1079580000** | **1288380000** | **1131970000** |
| CC 15/60 K MC | 15 x 60 | 40 | **1877310000** | **1877360000** | **1072650000** | **1288340000** | **1131890000** |
| CC 30/60 K MC | 30 x 60 | 30 | **1934390000** | **1934330000** | **1072680000** | **1085430000** | **1078320000** |
| CC 85/54 K MC | 54 x 85 | 10 | **1138430000** | | **1138450000** | **1288390000** | **1138440000** |

## ClipCard - Custom printing




### Ordering data

| Type | Width x Length (mm) | Qty. | Order No. Colour and print details |
|---|---|---|---|
| CC 15/17 K MC | 15 x 17 | 16 | **1876600000** |
| CC 15/27 K MC | 15 x 27 | 16 | **1876750000** |
| CC 15/49 K MC | 15 x 49 | 8 | **1877230000** |
| CC 15/60 K MC | 15 x 60 | 8 | **1877320000** |
| CC 30/60 K MC | 30 x 60 | 6 | **1934370000** |
| CC 85/54 K MC | 54 x 85 | 2 | **1138470000** |

## ClipCard - protective film



### Ordering data

| Type | Labels per sheet | Qty. | Order No. transparent |
|---|---|---|---|
| ETO CC 15/17 | 228 | 1 | **1880850000** |
| ETO CC 15/27 | 133 | 1 | **1880810000** |
| ETO CC 15/49 | 76 | 1 | **1880830000** |
| ETO CC 15/60 | 57 | 1 | **1880840000** |
| ETO CC 30/60 | 27 | 10 | **1934440000** |

## LM MT 300 – self-adhesive polyester labels



- Suitable for A4 laser printer
- Abrasion-resistant
- High heat resistance
- For marking all kinds of switchgear and equipment
- Can also be written on with a ballpoint pen of the STI marking pen

### LM MT 300

**Technical specification**

| | |
|---|---|
| Material | Polyester, PVC-free |
| UL 94 flammability rating | HB |
| Min. temperature, continuous | -45 °C |
| Max. temperature, continuous | 150 °C |

### Ordering data

| Type | Length (mm) | No. per pcs | Qty. | Order No. white | yellow | silver |
|---|---|---|---|---|---|---|
| LM 12/6 | 12 | 322 | 10 | | 1882910000 | |
| LM 15/4.63 | 15 | 627 | 10 | 1724141044 | 1724141687 | 1724140001 |
| LM 15/6 | 15.2 | 484 | 10 | 1686361044 | 1686361687 | 1686360001 |
| LM 15/9 | 15 | 186 | 10 | | 1882890000 | |
| LM 17x6 | 17 | 10 | 10 | | 1835820000 | |
| LM 17/9 | 17.8 | 341 | 10 | 1724151044 | 1724151687 | 1724150001 |
| LM 18/6.5 | 18 | 290 | 10 | 1749321044 | 1749321687 | 1749320001 |
| LM 19.05x6.3 | 19.05 | 10 | 10 | | 1835830000 | |
| LM 20/8 | 20.3 | 264 | 10 | 1686381044 | 1686381687 | 1686380001 |
| LM PA 20/8 | 20.3 | 264 | 10 | | 1874860000 | |
| LM 25.4/12.7 | 25.4 | 147 | 10 | 1686391044 | 1686391687 | 1686390001 |
| LM 26/10 | 26 | 156 | 10 | 1686401044 | 1686401687 | 1686400001 |
| LM 26.5/17.5 | 26.5 | 10 | 10 | | | 1784340000 |
| LM 27/8 | 27 | 198 | 10 | | 1861510000 | |
| LM 27/18 | 27 | 90 | 10 | | | 1873810000 |
| LM 30/20 | 30 | 78 | 10 | 1724161044 | 1724161687 | 1724160001 |
| LM 40/6 | 40 | 90 | 10 | 1760461044 | | |
| LM 56/22 | 56 | 36 | 10 | 1686421044 | 1686421687 | 1686420001 |
| LM 60/36 | 60 | 21 | 10 | 1686431044 | 1686431687 | 1686430001 |
| LM 89/34 | 89 | 16 | 10 | 1003400000 | | |
| LM 105/105 | 105 | 4 | 10 | | | 1975160000 |
| LM 105/148 | 105 | 4 | 10 | 1724171044 | 1724171687 | 1724170001 |
| LM 202/12 | 202 | 22 | 10 | | 1915320000 | |
| LM 210/148 | 210 | 2 | 10 | 1724181044 | 1724181687 | 1724180001 |
| LM 210/297 | 210 | 1 | 10 | 1686441044 | 1686441687 | 1686440001 |

## THM – ThermoMark labels



ThermoMark labels offer brilliant printing quality thanks to thermal transfer technology. Different materials and the user-friendly printing system of THM Basic 300 plus M-Print Pro optimises every marking requirement.

- High-quality polyester labels in various colours available,
- Automatic positioning of the labels in the printer for perfect centring of the printing on every label.
- The THM Basic 300 printer ensures hardwearing printing output.

### THM MT 30x - Polyester labels

**Technical specification**

| | |
|---|---|
| Material | Polyester film |
| UL 94 flammability rating | HB |
| Min. temperature, continuous | -40 °C |
| Max. temperature, continuous | 150 °C |
| Form of supply | Rolls, perforated |

### Ordering data

| Type | Length x Width (mm) | No. per reel | Qty. | Order No. white | yellow | silver |
|---|---|---|---|---|---|---|
| THM 8/8 | 8x8 | 10000 | 1 | **1954070000** | | |
| THM 15/4 | 15x4 | 10000 | 1 | | **1072690000** | |
| THM 15/5.08 | 15x5.08 | 10000 | 1 | | **1964130000** | |
| THM 15/6 | 15x6 | 10000 | 1 | **1753231044** | **1753231687** | **1753230001** |
| THM 16/7 | 16x7 | 10000 | 1 | | **1852520000** | |
| THM 17x8 | 17x8 | 10000 | 1 | | **1027620000** | |
| THM 17/9 | 17x9 | 10000 | 1 | **1968130000** | **1856650000** | |
| THM 18/6 | 18x6 | 10000 | 1 | **1753271044** | **1753271687** | **1753270001** |
| THM 18/9 | 18x9 | 10000 | 1 | **1753251044** | **1753251687** | **1753250001** |
| THM 20/8 | 20x8 | 10000 | 1 | **1753241044** | **1753241687** | **1753240001** |
| THM 25.9/7.1 | 25.9x7.1 | 5000 | 1 | **1891770000** | | |
| THM 25/12 | 25x12 | 10000 | 1 | **1751751044** | **1751751687** | **1751750001** |
| THM 26/10 | 26x10 | 10000 | 1 | **1751761044** | **1751761687** | **1751760001** |
| THM 26.5/17.5 | 26.5x17.5 | 10000 | 1 | | | **1770090000** |
| THM 30/20 | 30x20 | 6000 | 1 | **1753261044** | **1753261687** | **1753260001** |
| THM 30/52 | 30x52 | 2000 | 1 | | | **1014680000** |
| THM 32/9 | 32x9 | 6000 | 1 | **1751771044** | | **1751770001** |
| THM 38/17 | 38x17 | 4000 | 1 | **1011610000** | | |
| THM 38/19 | 38x19 | 2000 | 1 | **1751801044** | **1751801687** | **1751800001** |
| THM 38/32 | 38x32 | 1000 | 1 | | | **1862350000** |
| THM 45/23 | 45x23 | 2000 | 1 | **1751811044** | **1751811687** | **1751810001** |
| THM 57/27 | 57x27 | 2000 | 1 | | | **1852540000** |
| THM 65/35 | 65x35 | 1000 | 1 | **1751831044** | **1751831687** | **1751830001** |
| THM 89/60 | 89x60 | 1000 | 1 | | | **1003410000** |
| THM 101/48 | 101x48 | 500 | 1 | **1751821044** | **1751821687** | **1751820001** |
| THM 101/74 | 101x74 | 500 | 1 | | **1061810000** | **1762960001** |
| THM 101/150 | 101x150 | 250 | 1 | | | **1778170000** |








These textile labels, are made of very flexible cotton fabric which come on sheet rolls specifically for use on THM Basic 300 printer. This means a thicker adhesive layer is possible - just like labels on A4 sheets. Both the flexible material and the thicker adhesive layer offer stronger adhesion and allows the use for angled or round objects such as cables or fuses.

### THM GEW - Textile labels

**Reels**

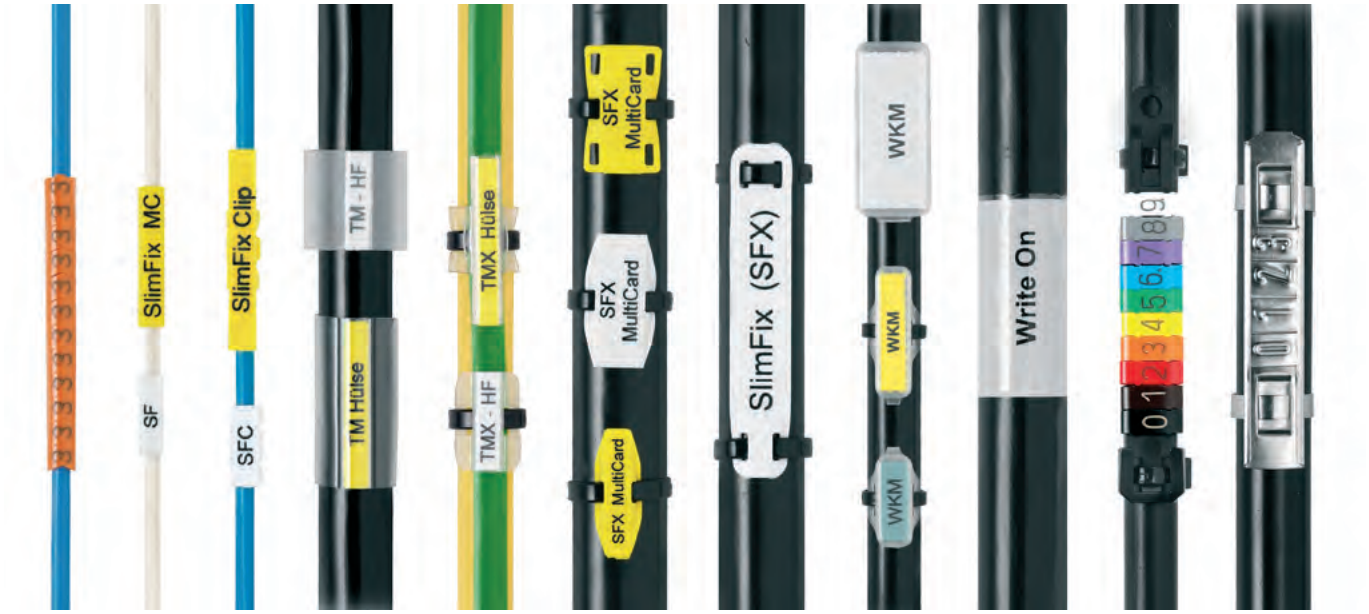
**Technical specification**

| | |
|---|---|
| Material | Vinyl coated cotton fabric |
| Min. temperature, continuous | -29 °C |
| Max. temperature, continuous | 80 °C |
| Form of supply | Rolls, perforated |

### Ordering data

| Type | Length x Width (mm) | No. per reel | Qty. | Order No. white | yellow | silver |
|---|---|---|---|---|---|---|
| THM GEW 15/6 | 15x6 | 10000 | 1 | **1059780000** | **1059790000** | |
| THM GEW 17/9 | 17x9 | 10000 | 1 | **1059800000** | **1059810000** | |
| THM GEW 18/6 | 18x6 | 10000 | 1 | **1059820000** | **1059830000** | |
| THM GEW 18/9 | 18x9 | 10000 | 1 | **1059840000** | **1059850000** | |
| THM GEW 20/8 | 20x8 | 10000 | 1 | **1059870000** | **1059880000** | |
| TMH GEW 30/8 | 30x8 | 10000 | 1 | | **1114450000** | |

# Wire and cable markers




Weidmüller's range of wire and cable markers provides users with solutions for a wide variety of applications. The applications range from thin wires through to cables with large external diameters. Amongst others, the assortment includes combination systems with individual tags, transparent sleeves and markers that are fastened using cable ties.

Open and closed, printed or blank markers for individual printing are available.

Halogen-free and practically free of pollutants, Weidmüller's wire and cable markers comply with both European and in-house standards of well-known system manufacturers.

Systems are available for:

- Clip-on ready-to-use printed markers according to individual marking requirements
- Marking by digits from a standard set of characters
- Combination of individual pre-printed digits to form a character code
- Customer prints utilising one of the following options: SMark-Laser printer, PrintJet printer, laser printer, plotter, thermal transfer, Matrix printer or pen.

A sample selection is available in Weidmüller's sample bag of wire and cable markers: order no. **1640420000**.



Owing to the sheer number of possible applications and environmental influences such as moisture, radiation, gases or heat/cold to which the products can be exposed, Weidmüller accepts no liability for the suitability of products in all customer applications. Suitability tests for specific applications must therefore be carried out by the customer. However, Weidmüller will be happy to provide help and advice upon request..

Due to the different identification systems available on the market, we wish to point out that Weidmüller does not guarantee industrial identification products if the Weidmüller components (markers – transparent sleeves – ink/toner/colour ink ribbons – printing systems) are combined with third-party products, unless Weidmüller has explicitly agreed the purpose of an individual application.

## PrintJet PRO

The **PrintJet PRO** inkjet printer prints markers for electrical connectivity. These markers can be used for clear equipment identification on devices, cables and connectors. The labelling makes servicing, maintenance and troubleshooting much easier. Water-based ink is used for black or spot colour printing. The print is crystal clear and resistant to environmental influences.
The **PrintJet PRO** prints plastic markers in **MultiCard** format. In combination with the userfriendly **M-Print® PRO** software and the attached loader, the printer becomes an essential part of production.The inkjet process being used, the subsequent fusing, as well as the printer cartridge and ink have all been specially adapted by Weidmüller for industrial use. The printer has excellent long-term use capabilities, thanks to its integrated loader.

- Top-quality, resistant printing
- Spot colour print
- Perfect for constant use
- Integrated loader for 20 MultiCards
- Ideal for large quantities
- The display shows all relevant information
- Flexible connection options, from LAN ports to USB ports



### Technical data

| PrintJet PRO | |
|---|---|
| Type | PrintJet PRO |
| Application | Prints MultiCard markers |
| Technology | Inkjet process |
| Print quality | 600 / 1,200 dpi |
| Printer drivers | Windows® 2000/XP/VISTA/7 |
| Print software | M-Print® PRO |
| System requirements | Windows® 2000/XP/VISTA/7 |
| Feed | Integrated loader |
| Fusing | Thermal fusing |
| Interface | USB, LAN |
| Power supply | AC 230 V or AC 115 V |
| Location | Office conditions |
| Ambient temperature | 20 °C to 35 °C |
| Dimensions (L x W x H) | 1060 x 500 x 310 mm |
| Weight | 33 kg |
| Cartridge system | Ink cartridge, CMYK (up to 1.000.000 characters, Arial font size 6) |
| Scope of supply | PrintJet PRO, power cable, printer drivers, manuals (CD), Ink tank starter set colour, USB cable, M-Print® PRO software |

### Ordering data

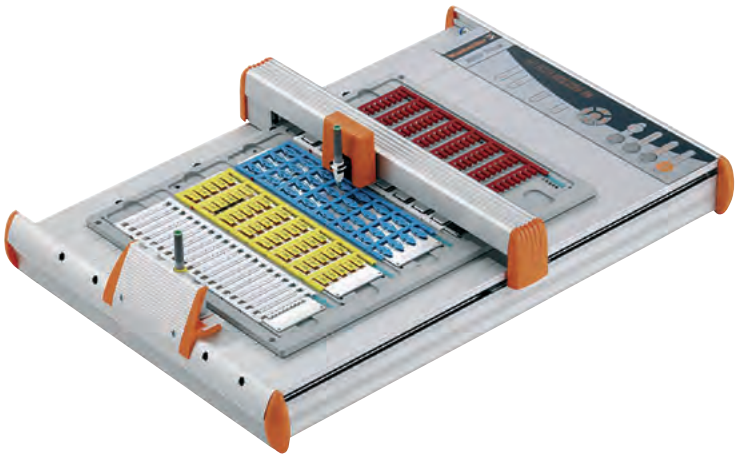
**PrintJet PRO**

| Type | | Order No. |
|---|---|---|
| PrintJet PRO 115V | | **1024050000** |
| PrintJet PRO 230V | | **1001180001** |
| **Accessories** | | |
| PJ PRO TNTK INK SET COL | Ink tank starter set, colour | **1027110000** |
| PJ PRO TNTK INK K | ● Ink tank Black | **1027040000** |
| PJ PRO TNTK INK C | ● Ink tank Cyan | **1027050000** |
| PJ PRO TNTK INK M | ● Ink tank Magenta | **1027060000** |
| PJ PRO TNTK INK Y | ● Ink tank Yellow | **1027070000** |
| PJ PRO TNAW | waste pad | **1024140000** |

## MCP Plus

The plotter **MCP Plus** complements the Weimüller MultiCard concept. It is suitable for smaller quantities of markers and when only part of a MultiCard is to be printed on. The special positioning frame for five MultiCards increases productivity by 20 % over comparable systems. With the positioning frame for SlimFix markers sizes 4 to 6, printing on more than 160 MultiCard types for terminals, cables, wires and equipment is possible. Labels are printed with the MCP-Label positioning frame. Suitable for use with the Weidmüller **M-Print® PRO** software.

- 2 positioning frames for more than 160 MultiCard types
- MultiCards easily fitted into the frame
- Easy to use with partly used MultiCards
- Automatic pen activation function
- Safe storage of the plotter pens



## Technical data

| | |
|---|---|
| Type | MCP Plus |
| Application | printing of MultiCard markers and labels |
| Technology | plotting technique |
| Print software | M-Print® PRO |
| System requirements | Windows® 2000/XP/Vista/7 |
| Interface | Parallel Centronics / USB |
| Power supply | AC 230/AC 115 V |
| Feed | manual |
| Location | office conditions |
| Ambient temperature | 10 °C - 35 °C |
| Dimensions (L x W x H) | 660 x 440 x 125 mm |
| Weight | approx. 8 kg |
| Scope of supply | MCP Plus with Centronics cable, USB cable, power pack (100-240 V AC/50-60 Hz), Euro and US plugs, MultiCard positioning frame, 0.25 P-Ink plotter pen, printer driver, M-Print® PRO software and manual |

## Ordering data

MCP Plus

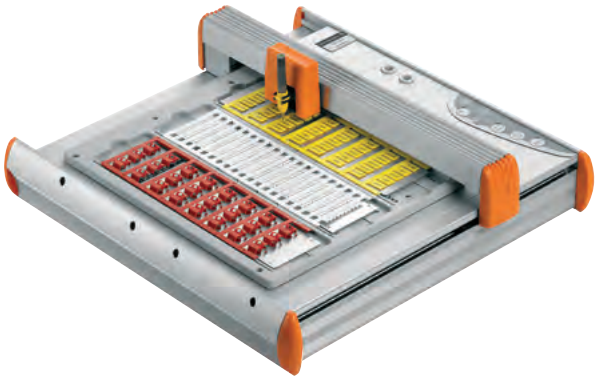
| Type | Order No. |
|---|---|
| MCP Plus plotter set | 1925000000 |

## MCP Basic plotter

The **MCP Basic** plotter is a flexible and portable solution that allows you to print your labels on-site quickly and easily.

The **MCP Basic** is suited for printing small-scale labelling jobs, partial labels, or remaining quantities

- Small space-saving flat-bed plotter
- Positioning frame for 3 MultiCards
- Easily filled with MultiCard sheets
- Positioning frame for SlimFix, sizes 4 to 6 and a label positioning frame optionally available
- Works together with Weidmüller's **M-Print® PRO** software



## Technical data

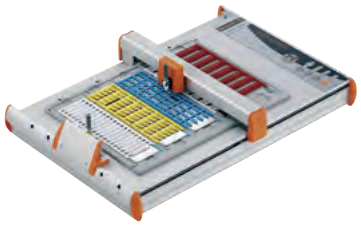
| | |
|---|---|
| Type | MCP Basic |
| Application | Printing MultiCard markers and labels |
| Technology | plotting technique |
| Plotting speed | max. 40 mm/s |
| System requirements | Windows® 2000/XP/VISTA/7 |
| Software | M-Print® PRO |
| Interfaces | USB |
| Voltage supply | 100~240 V AC, 50-60 Hz |
| Voltage supply | Via external power supply unit with interchangeable adapters |
| Feed | manual |
| Location | office conditions |
| Ambient temperature | 10°C – 35°C |
| Dimensions (L x W x H) | 440 x 440 x 125 mm |
| Weight | 6 kg |
| Scope of supply | MCP Basic plotter, printer driver, power cord, USB cable, M-Print® PRO software, 0.25 P-Ink plotter pen, MultiCard positioning frame, power supply unit (100-240 V AC / 50-60 Hz), Euro and US plugs, user manual on CD, hand trolley-case |

## Ordering data

MCP Basic

| Type | Order No. |
|---|---|
| MCP Basic | 1139400000 |

## MCP



## MCP positioning frames

### Ordering data

| Type | for | Qty. | Order No. |
|---|---|---|---|
| MCP AP PLUS | MultiCards | 1 | **1924360000** |
| MCP AP BASIC | MultiCards | 1 | **1139880000** |
| MCP AP SF 4-6 | SlimFix sizes 4 to 6 | 1 | **1924310000** |
| MCP AP Labels | Labels | 1 | **1924370000** |

## MCP plotter pens

| Type | for | | Qty. | Order No. |
|---|---|---|---|---|
| Plotter Pen 0.18 | Reusable pen | | 1 | **1768570000** |
| Plotter Pen 0.25 | Reusable pen | | 1 | **1768540000** |
| Plotter Pen 0.25 P-Ink | Disposable pen 8 ml | Not for CLI T sleeves | 1 | **1920640000** |
| Plotter Pen 0.35 | Reusable pen | | 1 | **1768550000** |
| Plotter Pen 0.35 P-Ink | Disposable pen 8 ml | Not for CLI T sleeves | 1 | **1920650000** |
| Plotter Pen 0.50 | Reusable pen | | 1 | **1768560000** |
| Plotter Pen 0.50 P-Ink | Disposable pen 8 ml | Not for CLI T sleeves | 1 | **1005710000** |
| Plotter Pen 0.70 | Reusable pen | | 1 | **1011440000** |
| Plotter Pen 0.70 P-Ink | Disposable pen 8 ml | Not for CLI T sleeves | 1 | **1011450000** |

## MCP ink

| Type | Contents | | Qty. | Order No. |
|---|---|---|---|---|
| P- Ink | 30 ml | Not for CLI T sleeves | 1 | **1924340000** |
| Ink 2000 | 25 ml | | 1 | **1772120000** |

## MCP miscellaneous

| Type | Contents | Qty. | Order No. |
|---|---|---|---|
| P cleaner | 30 ml | 1 | **1924330000** |
| Cleaner Clean 2000 | 25 ml | 1 | **1772130000** |
| Inlay for MCP | | 1 | **1935130000** |
| Inlay SFC 3 | | 1 | **1058090000** |
| MCP adhesive strips | | 5 | **1924320000** |
| MCP Plus cover | | 1 | **1924350000** |
| MCP TP-KOF Basic | Trolley MCP Basic | 1 | **1139890000** |




The STI-S felt tip pen is suitable for labelling blank Weidmüller marking products. It can be used for handwritten labels or, in conjunction with the STI-S adapter, for a plotter printout. A black, waterproof ink is used.

## Accessories - STI pen

### Ordering data

| Type | | Qty. | Order No. |
|---|---|---|---|
| Adapter aluminium STI pen | | 1 | **1762440000** |
| STI pen SW | Not for CLI T sleeves | 10 | **0508401694** |

## THM Basic printer

The **THM Basic 300** printer uses thermal transfer technology for industrial printing of labels. Its space-saving design makes it perfect for office use. The printer is well suited for labelling a variety of materials and delivers a brilliant, quality print. The user-friendly system is operated together with the **M-Print® PRO** software.

- Small space-saving thermal-transfer printer
- Suitable for printing a variety of roll-packaged labels
- A variety of interfaces are available
- Works together with Weidmüller's **M-Print® PRO** software




## Technical data

| | |
|---|---|
| Type | THM Basic 300 |
| Application | Printing of labels |
| Technology | Thermal transfer |
| Printing speed | 75 mm/s |
| Printing quality | 300 dpi |
| Printer drivers | Windows® 2000/XP/VISTA/7 |
| Software | M-Print® PRO |
| Interface | Parallel Centronics / USB / Seriell RS 232 C / Ethernet 10/100 Base |
| Power supply | 100~240 V |
| Location | office conditions |
| Ambient temperature | 10 °C – 40 °C |
| Dimensions (H x L x W) | 200 x 329 x 256 mm |
| Weight | 3,5 kg |
| Scope of supply | ribbon (HiRes), printer drivers, power cable, USB cable, M-Print® PRO software, manual (CD) |

## Ordering data

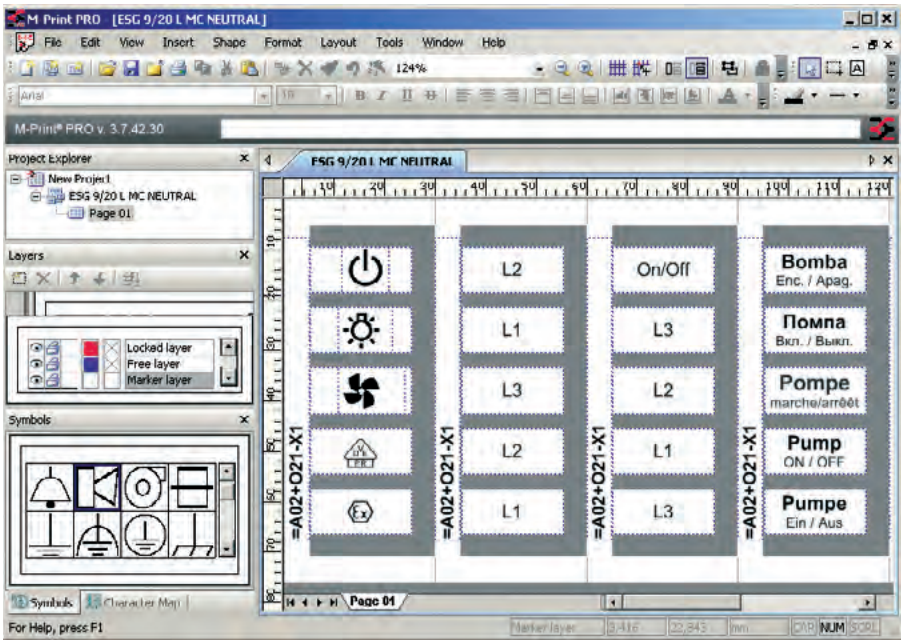
THM Basic

| Type | | | Order No. |
|---|---|---|---|
| THM Basic 300 | | | **1276230000** |
| **Printing foil** | **Material** | **Width (mm)** | |
| HiRes ribbon, 280 m | Resin | 110 | **1790650000** |

## M-Print® PRO Label Designer

**Print** and **ordering software** for markers and labels

**M-Print® PRO** is a professional software for printing and ordering Weidmüller markers and labels under Windows®. This software helps you to optimise your processes for marking electrical equipment. You can design, print and order your marking materials effortlessly, professionally and quickly: includes texts, frames, lines, graphics, barcodes, serial numbers and photos.




## Technical data

| Here is an overview of the main functions |
|---|
| Integrated product catalogue for all labels and markers, including images and links to the relevant web pages and product data sheets |
| Custom formatting of individual text characters (RTF) |
| Perform copy-and-paste functions with texts and their formats |
| Supports UNICODE for foreign-language texts, such as Russian, Chinese, Polish, etc. |
| Enter data on labels or worksheet, or directly in Microsoft® Excel |
| Numeric and alphanumeric counts and sequences |
| Extensive range of image formats (*.bmp, *.wmf, *.png, *.ico, *.jpeg, *.tif, *.gif) |
| Image library including all the important symbols used in electrical engineering |
| Permanent print preview: see how the printout will look during the design phase |
| Supported output devices: PrintJet Pro, PrintJet II, SMark laser, MCP plotter, THM and standard printers with Windows® drivers |
| Assign product to specific printer; for example, ESG 9/20 to PrintJet, LaserMark to laser printer, etc. |
| Optimum and rapid adjustment of the output devices |
| Imports data from CAE systems |
| Import assistant to create your own import filter for numerous file formats (*.txt, *.csv, *.xml etc.) |
| Markers and labels can be designed in as many levels as required |
| Interface to RailDesigner® |

| Operating systems supported |
|---|
| WINDOWS® 2000/XP/VISTA/7 |

| System requirements | |
|---|---|
| RAM | > 256 MB |
| Processor | > Pentium PIII or comparable model |
| Graphics | > 800 x 600 pixels with 256 colours<br>optimum: 1024 x 768 with 16-bit High Colour |
| Hard drive | > 90 MB free storage |
| Miscellaneous | mouse, keyboard, CD-ROM drive (to install the software) |

M-Print® PRO is available in two editions:

- M-Print® PRO Standard Edition for professional printing results with all of Weidmüller's marking materials
- M-Print® PRO Advanced Edition for professional printing results with all of Weidmüller's marking materials plus labels to your own specification

## Ordering data

M-Print® PRO

| Type | Order No. |
|---|---|
| M-Print® PRO | 1905490000 |
| M-Print® PRO advanced | 1905500000 |

# Weidmüller Services


**Weidmüller Services**

| | |
|---|---|
| RockStar® individual services | V.2 |
| Bespoke services: best advice, best solutions | V.6 |
| Digital support: RailDesigner®, Product Assistant for Distributor Housing, Online product catalogue, M-Print® PRO label designer | V.12 |

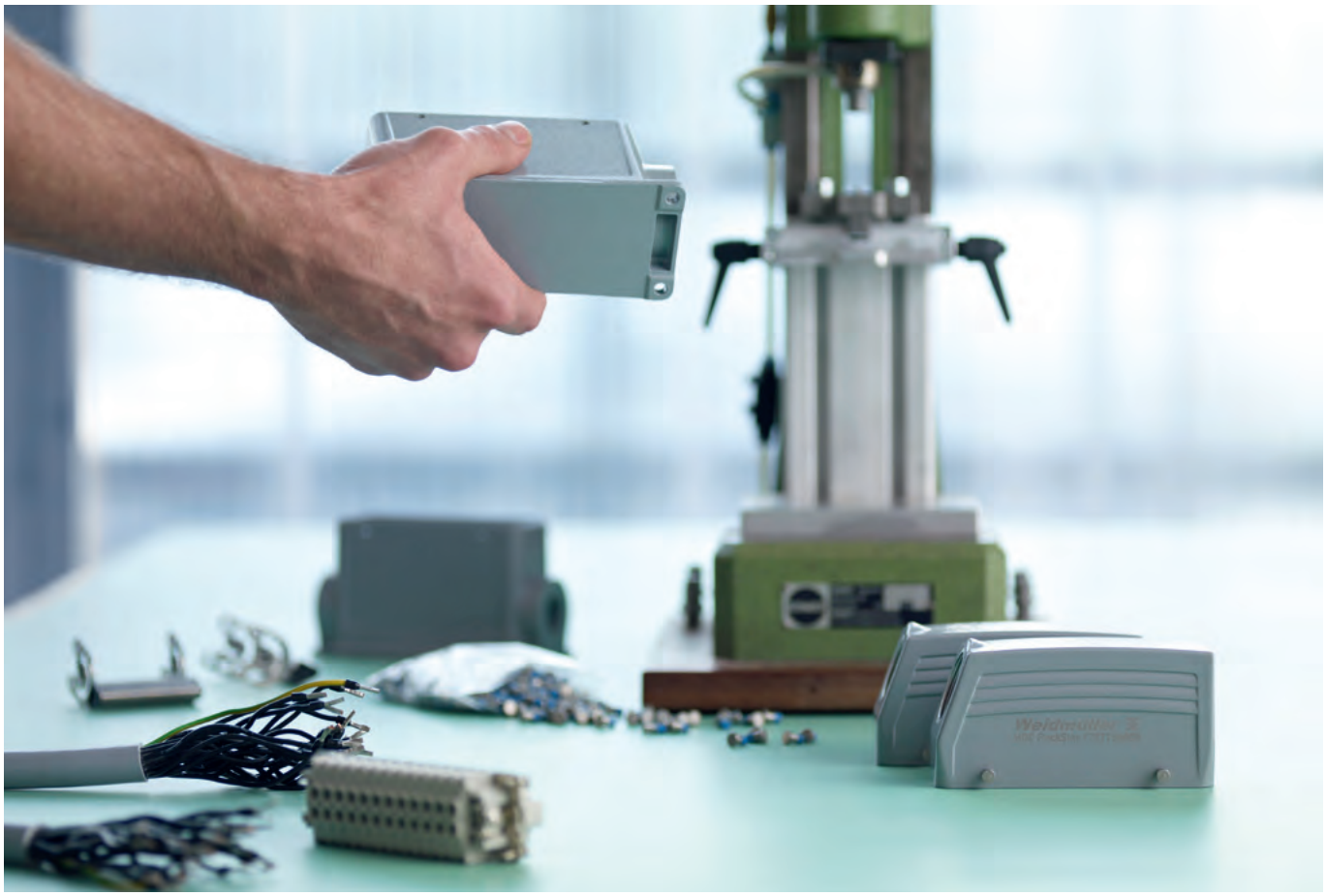
# RockStar® individual services – Heavy duty connectors to match your specification

**A wide array of options with RockStar®**

RockStar® is a highly effective industrial, heavy duty connector range which has made “excellence” its minimum design standard. Now, all you have to do is decide how you wish to use this portfolio to your best advantage.

With our customer specific assembly service we can meet any of your requirements not covered by the standard RockStar® range. Do you need extra threads, special laser markings or a different RAL colour? No problem!

We will put everything you need together,  exactly as specified by you - so that you end up with a custom solution that is guaranteed fit for purpose - completely pre-assembled, ready to use and with the power, dynamics and innovation you expect from all of our products.



# Overview of services



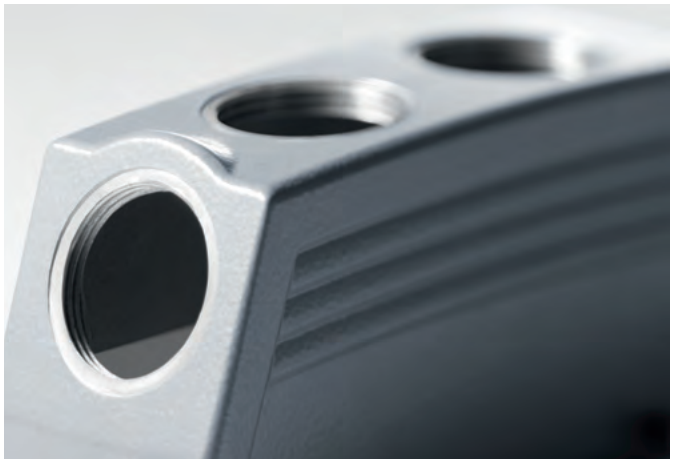
**Kitting**
We can configure all individual connector components to meet your specific needs and provide you with a complete kit.

- One order number
- Demand-oriented delivery
- Minimal logistics costs



**Housing colours**
For large order quantities we are able to powder coat our RockStar® housings in the colour of your choice.

- Choice of numerous RAL colours
- Special colours on request
- Can be combined with customised laser marking



**Housing adaptation**
All of our housings can be designed to meet your specification needs.

- Inserting of holes and threads
- Enhanced wiring space
- You decide on the size, position and quantity of cable entries

**Pre-assembled connectors**
Looking for something extra? We are able to deliver ready-to-use connectors to meet your demands.

- You choose the type, length and number of cables
- Preparing, marking and connection of conductors
- Demand-based configuration from one single source



**Laser marking of inserts**
Laser marking is a unique service provided by Weidmüller.

- Connector inserts marked with your corporate logo, reference or individual article number
- Individual pole identification
- Wipe proof and UV resistant for durable markings




**Laser marking of housings**
Individualised housing markings offer you endless opportunities.

- Connector housings marked with your corporate logo, reference or individual article number
- Choose the type, size and position of the markings
- Wipe proof and UV resistant for durable markings



# Application specific solutions – Your requirements are our motivation

Each industry has its own requirements calling for more and more individual solutions aside from standard products. Your new product might have to contend with severe conditions. Many applications are subjected to high mechanical strains – through vibration or directly applied forces. Extreme temperature conditions or the application in hazardous areas are further factors your product must be able to comply with. We offer you our competent and target-oriented support for the selection of ideal products for any application. Feel free to contact us!

Individual product development, customer-specific assembly or application-specific products that are ready for use – with an individual and perfect solution we want to help you to optimise working processes and to ensure your company's sustained efficiency today as well as for the future.

**Individual product development**
In co-operation with you we will develop individual and future-oriented products at the highest technological level – tailored to your application.

**Customer-specific assembly**
According to your specifications we use our great production expertise and our broad product portfolio to set up the solution to meet and exceed your requirements.

**Application-specific products**
Our cross-industrial solutions set standards: Set up for your application, instantly ready for use and available from stock.







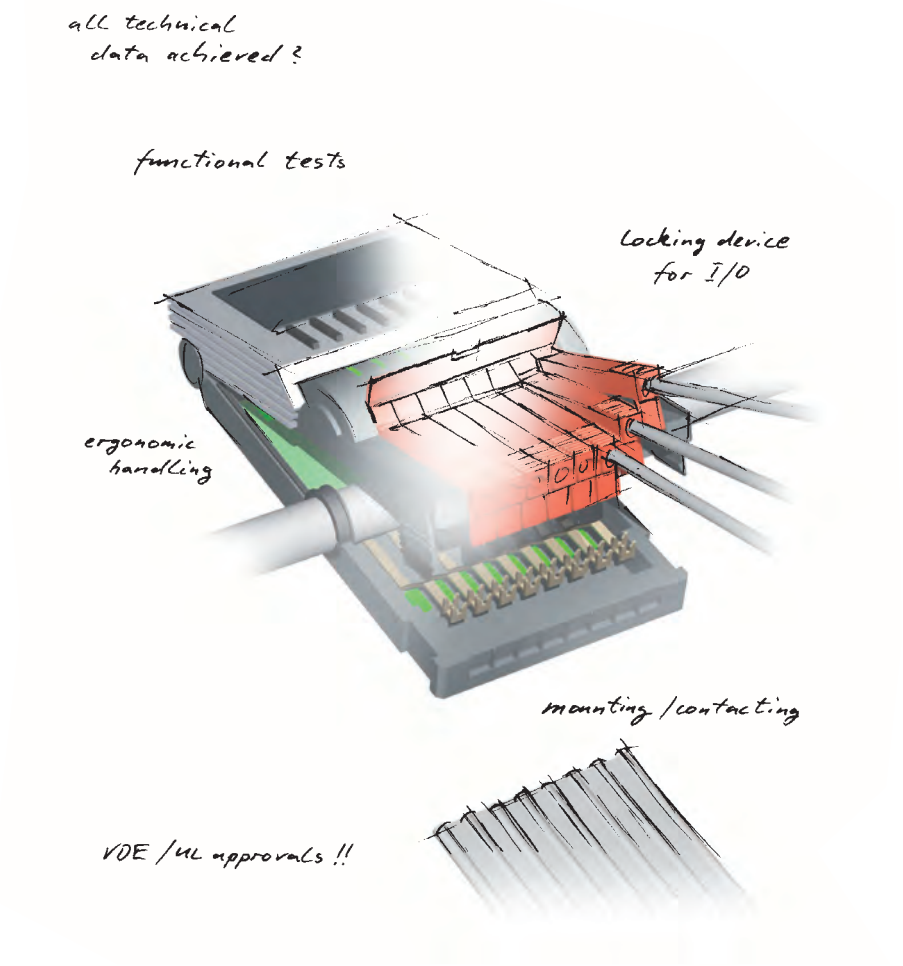

# Individual product development for your success

**We have a passion for simple, innovative solutions**
Together we will develop innovative and future-oriented products tailored to your application. Our philosophy is simple “one customer-one product”. It is not the product that is the starting point, but you, your technical specifications and your requirements.

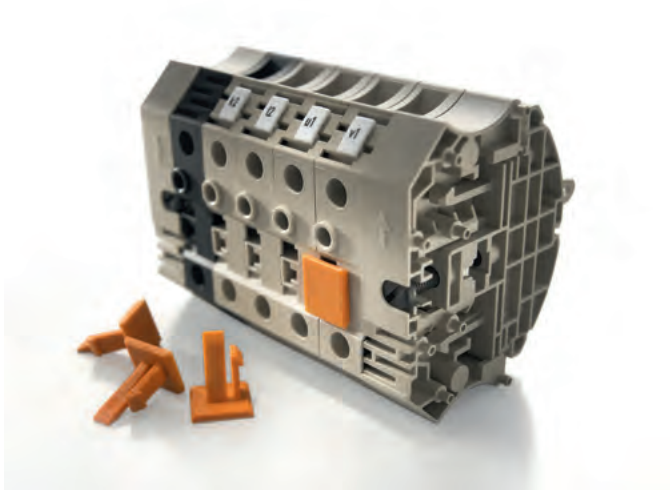
**Lets Connect!**
For the development of individual products, we will both need to contribute our experience and competencies. Our professional project managers will work closely with you - from the idea and design phase, via the development phase, to the implementation and production. We place our complete knowledge in the field of electrical connectivity, enclosure and sealing technology as well as signal conditioning at your disposal.

**Benefit from a reliable partner:**

- **Increasing the efficiency of your development and production processes**
  The particular outsourcing of development and production of your components will shorten the time-to-market phase. It will minimise your efforts thus allowing you to concentrate on your core competences.
- **Taking benefit from our application and production know-how**
  Take profit from the expertise of our application engineers and our specialists in the fields of connection technology, enclosure and surface technology as well as metal and plastic processing.
- **Increasing safety through professional project management**
  Through innovation workshops, feasability studies and profitability analyses we define a requirement profile forming the basis for the further development process. This makes sure that you will decide for the best possible product.



# Application specific products – solutions for industries and markets







Industries and applications often have similar or even identical requirements for products or product assemblies. Application specific products that are based on earlier realised solutions are now directly available from stock.

**Your advantage:** You get a suitable and cost efficient solution within a minimum of time!

**Cross industrial solutions as standard**

It is our aim to develop real solutions for you that offer the additional advantage of a truly flexible design. This means that an application specific product might have a supplementary input or a terminal you don't need. The small adaptations needs will be much cheaper than the complete unrolling of an individual job. Thus you cannot only save time but also money!

**Take multiple profit:**

- **High availability**
  Application specific products are available from stock without delay. So you can rely on the delivery of your products in due time.
- **Advice from application engineers**
  Take advantage of our application engineers' expertise. They develop real solutions with added value for your applications.
- **Supportive software**
  Project planning and evaluation made easy, with our software solutions such as NetCalc, RailDesigner® or Softclinic.
- **Worldwide application centres**
  We stay in constant dialogue with our application centres thus enhancing our application know how and being at your disposal anywhere you need us.

# Customer specific assembly, tailored configuration

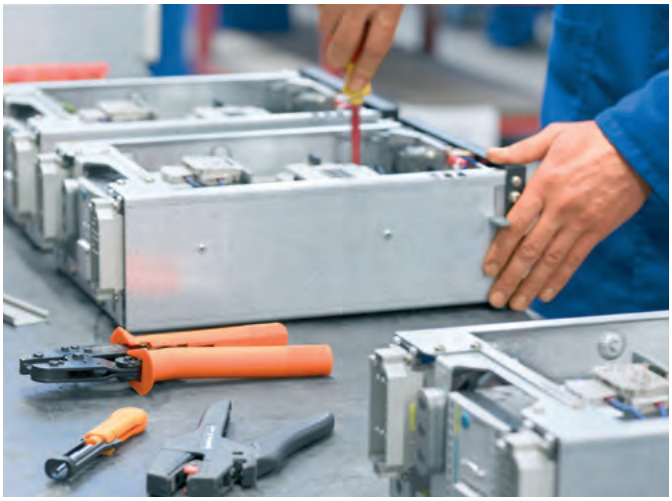
You want to bring costs down and increase your efficiency. You would like to fully concentrate on your core competences. You are looking for a partner who will set up intelligent solutions for you, suiting your special requirements. We will share our applications knowledge and capability to set up tailored solutions for you that are fast, flexible and economically sound.

We offer co-operative support and advice for all of your questions and together with you we will define the job assignment. As we continue the process, we will select the ideal components from our wide-ranging portfolio and bring them together to deliver you your tailored solution.

**Highest level of professional production**
Take advantage of our professional project managers and our extensive knowledge of production, for instance, in the ATEX area. We offer you a comprehensive portfolio of customer specific assemblies, from simple assembly to the modification of existing electronics products.

Our services include:
- Adaptation and assembly of enclosures for all IP protection classes
- ATEX solutions for hazardous areas
- Assembly of heavy duty connectors
- Assembly of terminal strips
- Customer specific electronics solutions
- Cable assembly

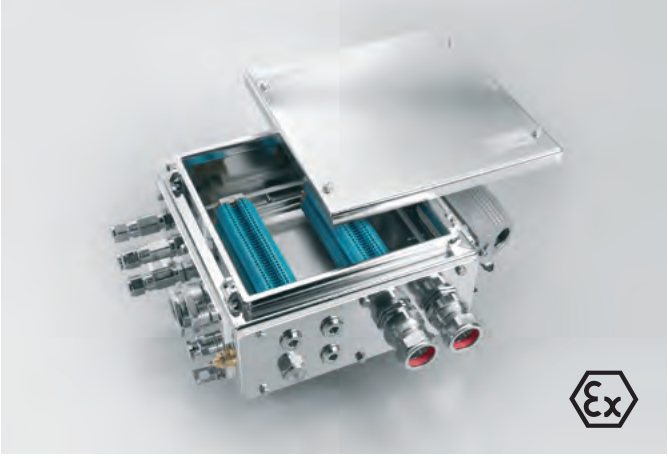


**Take multiple profit:**
- **Simplification of ordering and stockholding**
  One solution – one item number! It will no longer be necessary to order single components. Article variety and stockholding will be reduced.
- **Professional assembly**
  All individual components will be pre-assembled thus reducing your assembly time. This will save your time and money.
- **Less costs for documentation**
  Our RailDesigner® software will facilitate the generation of parts lists or drawings.
- **Modern processing of enclosures**
  Our CNC processing centres adapt the enclosures to suit your tailored solution.

# Customer specific assembly – consultation, product, development and production all come from one source

Our application and manufacturing expertise has a significant influence and results in all areas of modern connection technology. Their participation is therefore integral to every solution.



**Enclosures**

Deliver protection and safety

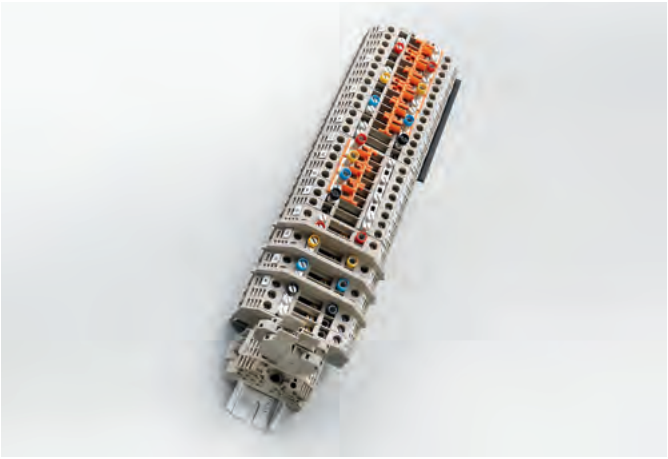
- Enclosures for all IP protection classes
- ATEX enclosures for hazardous areas
- Placement of inspection glasses, drill holes and threads
- Elaborate machining operations like the milling of contours
- Class C5 welding, according to DIN 6700, for stainless steel and sheet steel enclosures
- Surface coating as and when required
- Individual device and system markers



**Heavy duty connectors**

Superior connection system

- Placement of drill holes and cable glands
- Equipped with plug-and-play components
- Wiring of subassemblies
- Cable assembly
- All housings are available with individual laser marking



**Terminal strips**

Configurations made to measure

- Machining of mounting rails
- Snapping components onto terminal rails
- Placement of cross connections
- Mounting of standard conductors
- Marking of terminals, devices, conductors and cables



**Electronics**

Individual solutions right from the start

- Modular terminal blocks, component plugs, snap on bases, enclosures for electronics: integration of relevant electronic components
- Snap-on base: Component carrier design or simple wiring of the modules
- Interface units
- Modification of existing electronic products: Modification of the circuitry or specific calibration
- Combination of components: Relays or optocouplers in combination with other components

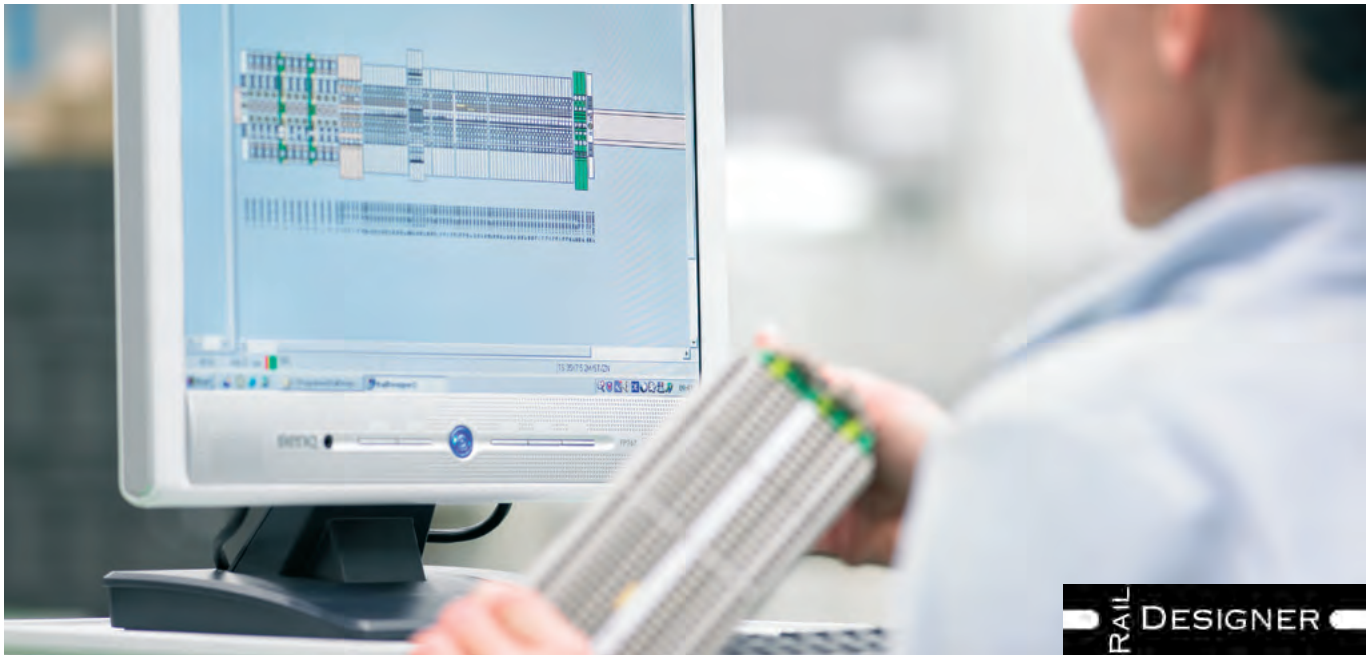


**Cable assembly**

Our special service

- Pre cutting of cables and conductors
- Installation of
  - Heavy duty connectors
  - PCB connectors or DIN connectors
- Conditioning of wire ends
- Mounting of wire end ferrules and cable lugs
- Connection of conductors to terminal rails

# RailDesigner®
# A faster way to configure and order terminal strips




These days, time and cost efficiency are of the essence when it comes to working in planning and production. RailDesigner®, our free configuration and purchasing software, uses its virtual assembly of mounting rails (assembled or unassembled) to help you with the design of your own completely personal solution.

**RailDesigner® brings you substantial benefits:**

**Less time required**
It speeds up the process of acquiring quotations and placing orders because, for example, all processes can be initiated directly from the software. You configure your projects and the rest virtually takes care of itself!

**User friendly operation**
Any potential errors are prevented by automatic installation tips and clear project processing and management. So that you can plan your project realistically, RailDesigner® offers both 2D and 3D displays.

**Wide selection from the current product portfolio**
"You can easily download software updates for RailDesigner® from the internet. This means that you will always have access to the latest version of our product database."

**Project planning that is compatible with your software**
Plan and design your projects easily using your usual CAE software. With the integrated interface, transferring data from your CAE system has never been so simple. You can export component lists and terminal strip designs in various formats. Marking data is automatically transferred to the M-Print® Pro labelling software.

**Simple purchasing of terminal strips**
Once you have completed the planning stages of your projects in RailDesigner®, you can choose to send all of your data to us by email. We then take over the assembly and deliver the required configuration to you, along with anything else that you still require for your project.

Download the software for free and discover the advantages to using RailDesigner® at
**www.raildesigner.de**

# Product assistant for distribution boxes and assemblies – The ideal solution, in the shortest time




You can easily and quickly select, combine and purchase the required components, all with the help of the Weidmüller product assistant for distribution boxes and assemblies. This means that you can quickly obtain your individual enclosure solution. Your solution may include the following components:

**Empty enclosures without holes**
Empty enclosures in various sizes of the Klippon® K and Klippon® POK series (aluminium and plastic) with matching mounting rails.

**Empty enclosures with pre-threaded holes**
Empty enclosures in different sizes from the Klippon® K and Klippon® POK series (aluminium and plastic), that are already equipped with metric threaded holes.

**Mounting rails**
Exactly tailored mounting rails for the enclosure sizes on offer.

**Terminal strips**
Mounting rails, which also perfectly match the offered enclosure sizes and are pre-fitted with terminals, optionally with screw or tension clamp connection.

**Distribution boxes with Ex-protection**
Enclosures that are already assembled with a terminal strip and already equipped with metric threaded holes.

**Numerous possible combinations**
Enclosures with Ex-protection are supplied exclusively with terminal strips that are already fitted. The product assistant offers you various approaches for industry variants so that you can create the right enclosure variant.

You can start off with any of the listed components and then add further components to the combination. This means that, for example, you can select the required terminal strip and the product assistant will then offer the matching enclosure variants. Or, you can start with the enclosure, and matching terminal strips or mounting rails will then be chosen. The selected products can then be directly included in the query list.

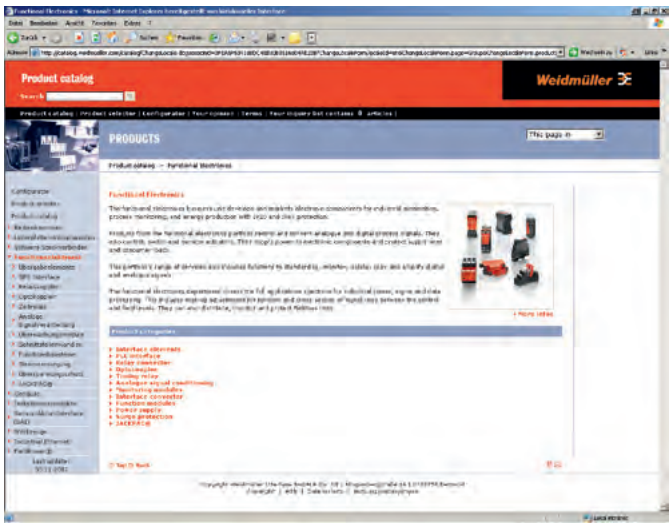
**Provision of all relevant data**
During the selection, you can choose filters for the terminal strips, such as length, connection technology or dimensional cross-section and, for the enclosure, you can choose material, size, holes etc. If a product is then selected and combined, the user can view all of the relevant data, including drawings and pictures. This means that you can extensively plan how the enclosure will be integrated into the customer‘s application.

The product assistant is available at
**http://galaxy.weidmueller.com**

# Online product catalogue

If you have questions about the specifications and details of our products, perhaps even outside normal business hours, then our online catalogue at **http://catalog.weidmueller.com** is open 24 hours a day, 365 days a year and is the ideal source for information. Besides product features and part numbers, it contains extensive details on all product groups.

For further information, offers and your personal contact, simply consult the Weidmüller website at **www.weidmueller.com**

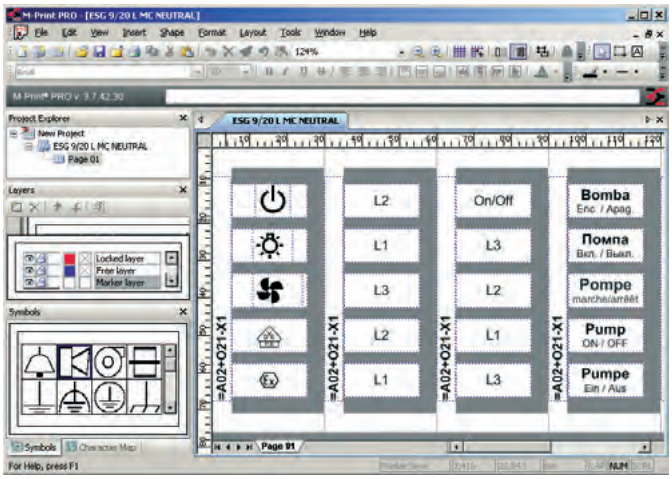



**Just one click away for the product data sheet of your choice.**

# M-Print® PRO label designer

The comprehensive range of Weidmüller services includes the M-Print® PRO software.
This is a professional standard, Windows®-based program for printing and ordering labels and markers that is coordinated with our current printing systems and marking materials.

M-Print® PRO enables you to design your labelling materials professionally and quickly. Texts, borders, lines, graphics, barcodes, serial numbers and photographs are all possible. The interface to RailDesigner® or your CAE system enables the transfer of all your configured data.



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| HDC 40D TOBU 1M25G | 1787070000 | B.121 |
| HDC 40D TOBU 1M25G | 1787070000 | B.119 |
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| HDC 40D TOBU 1M25G | 1787070000 | B.87 |
| HDC 40D TOBU 1M25G | 1787070000 | B.75 |

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| HDC 40D TOBU 1M32G | 1787060000 | D.33 |
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| HDC 40D TOBU 1M32G | 1787060000 | B.127 |
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| HDC 40D TOBU 1PG21G | 1656630000 | E.26 |
| HDC 40D TOBU 1PG29G | 1656650000 | E.26 |
| HDC 40D TOLU 1M32G | 1787100000 | E.28 |
| HDC 40D TOLU 1PG29G | 1658020000 | E.28 |
| HDC 40D TSBO 1M25G | 1787030000 | E.30 |
| HDC 40D TSBO 1M32G | 1787020000 | E.30 |
| HDC 40D TSBO 1PG21G | 1657420000 | E.30 |
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| HDC 48A SLU 1PG29G | 1666770000 | E.43 |
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| HDC 48A TOLU 1PG29G | 1666730000 | E.42 |
| HDC 48A TSLU 1M32G | 1788550000 | E.42 |
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| HDC 48B SLU 1PG29G | 1651100000 | E.49 |
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| HDC HA 16 MS | 1650770000 | B.14 |
| HDC HA 16 MS | 1650770000 | B.12 |
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| HDC HA 16 MS 17-32 | 1650880000 | B.14 |
| HDC HA 16 MS 33-48 | 1650990000 | B.16 |
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| HDC IP68 24B MD 4M25 T2 | 1220860000 | C.7 |
| HDC IP68 24B SS | 1081450000 | F.13 |
| HDC IP68 24B SS 1M40 | 1081410000 | F.13 |
| HDC IP68 24B SS 1PG36 | 1081430000 | F.13 |
| HDC IP68 24B SS 2M40 | 1081420000 | F.13 |
| HDC IP68 24B SS 2PG36 | 1081440000 | F.13 |
| HDC IP68 24B TOS 1M32 | 1082860000 | F.12 |
| HDC IP68 24B TOS 1M40 | 1082870000 | F.12 |
| HDC IP68 24B TOS 1M50 | 1082880000 | F.12 |
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| HDC IP68 24B TOS 1PG29 | 1082920000 | F.12 |
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| HDC IP68 24B TOS 2M32 | 1082940000 | F.12 |
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| HDC IP68 24B TOS 2PG29 | 1082910000 | F.12 |
| HDC IP68 24B TOS 3M25 | 1082960000 | F.12 |
| HDC IP68 24B TSS 1M32 | 1082970000 | F.12 |
| HDC IP68 24B TSS 1M40 | 1082980000 | F.12 |
| HDC IP68 24B TSS 1M50 | 1082990000 | F.12 |
| HDC IP68 24B TSS 1PG29 | 1083000000 | F.12 |
| HDC IP68 24B TSS 1PG36 | 1083010000 | F.12 |
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| HDC IP68 HP24 A | 1120040000 | C.6 |
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| HDC KIT HA 04.406 M | 1802720000 | I.6 |
| HDC KIT HE 06.100 M | 1802730000 | I.8 |
| HDC KIT HE 06.101 M | 1802740000 | I.8 |
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| HDC KIT HE-P 06.10 M | 1027650000 | I.10 |
| HDC KIT HE-P 06.11 | 1061710000 | I.11 |
| HDC KIT HE-P 06.11 M | 1061720000 | I.10 |
| HDC KIT HE-P 10.110 | 1027680000 | I.15 |
| HDC KIT HE-P 10.110 M | 1027670000 | I.14 |
| HDC KIT HE-P 10.111 | 1061730000 | I.15 |
| HDC KIT HE-P 10.111 M | 1061740000 | I.14 |
| HDC KIT HE-P 16.120 | 1027640000 | I.19 |
| HDC KIT HE-P 16.120 M | 1027690000 | I.18 |
| HDC KIT HE-P 16.121 | 1061750000 | I.19 |
| HDC KIT HE-P 16.121 M | 1061770000 | I.18 |
| HDC KIT HE-P 24.130 | 1061780000 | I.23 |
| HDC KIT HE-P 24.130 M | 1061790000 | I.22 |
| HDC KIT HE-P 24.131 | 1061800000 | I.23 |
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| HDC S12/2 MC | 1023340000 | B.128 |
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| HDC S4 BAS | 1789980000 | B.114 |
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| HDC SHIELD CLAMP 4.5 | 1912190000 | J.20 |
| HDC SHIELD CLAMP 5.0 | 1912200000 | J.20 |
| HDC SHIELD CLAMP 6.0 | 1912210000 | J.20 |
| HDC SHIELD CLAMP 7.0 | 1912220000 | J.20 |
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| HDC SHIELD CLAMP 14.0 | 1002820000 | J.20 |
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| HDC-C-CM-BUS-S0.33-0.52 | 1027260000 | H.6 |
| HDC-C-CM-BUS-S0.33-0.52 | 1027260000 | D.18 |
| HDC-C-HD-B-LWL1.0POF | 1773640000 | J.10 |
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| HDC-C-HD-BM0.14-0.37AG | 1651570000 | J.4 |
| HDC-C-HD-BM0.14-0.37AG | 1651570000 | H.5 |
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| HDC-C-HD-BM0.14-0.37AU | 1651670000 | J.4 |
| HDC-C-HD-BM0.14-0.37AU | 1651670000 | H.5 |
| HDC-C-HD-BM0.5AG | 1651580000 | J.9 |
| HDC-C-HD-BM0.5AG | 1651580000 | J.4 |
| HDC-C-HD-BM0.5AG | 1651580000 | H.5 |
| HDC-C-HD-BM0.5AU | 1651680000 | J.9 |
| HDC-C-HD-BM0.5AU | 1651680000 | J.4 |
| HDC-C-HD-BM0.5AU | 1651680000 | H.5 |
| HDC-C-HD-BM0.75-1.00AG | 1601760000 | J.9 |
| HDC-C-HD-BM0.75-1.00AG | 1601760000 | J.4 |
| HDC-C-HD-BM0.75-1.00AG | 1601760000 | H.5 |
| HDC-C-HD-BM0.75-1.00AU | 1651690000 | J.9 |
| HDC-C-HD-BM0.75-1.00AU | 1651690000 | J.4 |
| HDC-C-HD-BM0.75-1.00AU | 1651690000 | H.5 |
| HDC-C-HD-BM1.5AG | 1651600000 | J.9 |
| HDC-C-HD-BM1.5AG | 1651600000 | J.4 |
| HDC-C-HD-BM1.5AG | 1651600000 | H.5 |
| HDC-C-HD-BM1.5AU | 1651700000 | J.9 |
| HDC-C-HD-BM1.5AU | 1651700000 | J.4 |
| HDC-C-HD-BM1.5AU | 1651700000 | H.5 |
| HDC-C-HD-BM2.5AG | 1651610000 | J.9 |
| HDC-C-HD-BM2.5AG | 1651610000 | J.4 |
| HDC-C-HD-BM2.5AG | 1651610000 | H.5 |
| HDC-C-HD-BM2.5AU | 1651710000 | J.9 |
| HDC-C-HD-BM2.5AU | 1651710000 | J.4 |
| HDC-C-HD-BM2.5AU | 1651710000 | H.5 |
| HDC-C-HD-S-LWL1.0POF | 1773630000 | J.10 |
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| HDC-C-HD-SM0.14-0.37AG | 1651520000 | J.4 |
| HDC-C-HD-SM0.14-0.37AG | 1651520000 | H.5 |
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| HDC-C-HD-SM0.14-0.37AU | 1651620000 | J.4 |
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| HDC-C-HD-SM0.5AU | 1651630000 | J.9 |
| HDC-C-HD-SM0.5AU | 1651630000 | J.4 |
| HDC-C-HD-SM0.5AU | 1651630000 | H.5 |
| HDC-C-HD-SM0.75-1.00AG | 1601750000 | J.9 |
| HDC-C-HD-SM0.75-1.00AG | 1601750000 | J.4 |
| HDC-C-HD-SM0.75-1.00AG | 1601750000 | H.5 |
| HDC-C-HD-SM0.75-1.00AU | 1651640000 | J.9 |
| HDC-C-HD-SM0.75-1.00AU | 1651640000 | J.4 |
| HDC-C-HD-SM0.75-1.00AU | 1651640000 | H.5 |
| HDC-C-HD-SM1.5AG | 1651550000 | J.9 |
| HDC-C-HD-SM1.5AG | 1651550000 | J.4 |
| HDC-C-HD-SM1.5AG | 1651550000 | H.5 |
| HDC-C-HD-SM1.5AU | 1651650000 | J.9 |
| HDC-C-HD-SM1.5AU | 1651650000 | J.4 |
| HDC-C-HD-SM1.5AU | 1651650000 | H.5 |
| HDC-C-HD-SM2.5AG | 1651560000 | J.9 |
| HDC-C-HD-SM2.5AG | 1651560000 | J.4 |
| HDC-C-HD-SM2.5AG | 1651560000 | H.5 |
| HDC-C-HD-SM2.5AU | 1651660000 | J.9 |
| HDC-C-HD-SM2.5AU | 1651660000 | J.4 |
| HDC-C-HD-SM2.5AU | 1651660000 | H.5 |
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| HDC-C-HE-BM0.5AG | 1201100000 | J.4 |
| HDC-C-HE-BM0.5AG | 1201100000 | H.6 |
| HDC-C-HE-BM0.5AU | 1651470000 | J.9 |
| HDC-C-HE-BM0.5AU | 1651470000 | J.4 |
| HDC-C-HE-BM0.5AU | 1651470000 | H.6 |
| HDC-C-HE-BM0.75-1.00AG | 1201200000 | J.9 |
| HDC-C-HE-BM0.75-1.00AG | 1201200000 | J.4 |
| HDC-C-HE-BM0.75-1.00AG | 1201200000 | H.6 |
| HDC-C-HE-BM0.75-1.00AU | 1651480000 | J.9 |
| HDC-C-HE-BM0.75-1.00AU | 1651480000 | J.4 |
| HDC-C-HE-BM0.75-1.00AU | 1651480000 | H.6 |
| HDC-C-HE-BM1.5AG | 1201300000 | J.9 |
| HDC-C-HE-BM1.5AG | 1201300000 | J.4 |
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| HDC-C-HE-BM2.5AG | 1201400000 | J.9 |
| HDC-C-HE-BM2.5AG | 1201400000 | J.4 |
| HDC-C-HE-BM2.5AG | 1201400000 | H.6 |
| HDC-C-HE-BM2.5AU | 1651500000 | J.9 |
| HDC-C-HE-BM2.5AU | 1651500000 | J.4 |
| HDC-C-HE-BM2.5AU | 1651500000 | H.6 |
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| HDC-C-HE-BM4.0AG | 1201500000 | J.4 |
| HDC-C-HE-BM4.0AG | 1201500000 | H.6 |
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| HDC-C-HE-BM4.0AU | 1651510000 | J.4 |
| HDC-C-HE-BM4.0AU | 1651510000 | H.6 |
| HDC-C-HE-BM4.65AU | 1116530000 | J.9 |
| HDC-C-HE-BM4.65AU | 1116530000 | J.4 |
| HDC-C-HE-BM4.65AU | 1116530000 | H.6 |
| HDC-C-HE-BM4.65AU | 1116530000 | D.18 |
| HDC-C-HE-SM0.5AG | 1200500000 | J.9 |
| HDC-C-HE-SM0.5AG | 1200500000 | J.4 |
| HDC-C-HE-SM0.5AG | 1200500000 | H.6 |
| HDC-C-HE-SM0.5AU | 1651420000 | J.9 |
| HDC-C-HE-SM0.5AU | 1651420000 | J.4 |
| HDC-C-HE-SM0.5AU | 1651420000 | H.6 |
| HDC-C-HE-SM0.75-1.00AG | 1200600000 | J.9 |
| HDC-C-HE-SM0.75-1.00AG | 1200600000 | J.4 |
| HDC-C-HE-SM0.75-1.00AG | 1200600000 | H.6 |
| HDC-C-HE-SM0.75-1.00AU | 1651430000 | J.9 |
| HDC-C-HE-SM0.75-1.00AU | 1651430000 | J.4 |
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| HDC-C-HE-SM1.5AG | 1200700000 | J.9 |
| HDC-C-HE-SM1.5AG | 1200700000 | J.4 |
| HDC-C-HE-SM1.5AG | 1200700000 | H.6 |
| HDC-C-HE-SM1.5AU | 1651440000 | J.9 |
| HDC-C-HE-SM1.5AU | 1651440000 | J.4 |
| HDC-C-HE-SM1.5AU | 1651440000 | H.6 |
| HDC-C-HE-SM2.5AG | 1200800000 | J.9 |
| HDC-C-HE-SM2.5AG | 1200800000 | J.4 |
| HDC-C-HE-SM2.5AG | 1200800000 | H.6 |
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| HDC-C-HE-SM4.0AU | 1651460000 | J.9 |
| HDC-C-HE-SM4.0AU | 1651460000 | J.4 |
| HDC-C-HE-SM4.0AU | 1651460000 | H.6 |
| HDC-C-HE-SM4.65AU | 1116540000 | J.9 |
| HDC-C-HE-SM4.65AU | 1116540000 | J.4 |
| HDC-C-HE-SM4.65AU | 1116540000 | H.6 |
| HDC-C-HE-SM4.65AU | 1116540000 | D.18 |
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| HDC-CM-1BPN4.0 | 1894720000 | D.23 |
| HDC-CM-1SPN2.5 | 1894730000 | D.23 |
| HDC-CM-1SPN4.0 | 1894740000 | D.23 |
| HDC-CM-2BPN2.5 | 1894750000 | D.23 |
| HDC-CM-2BPN4.0 | 1894760000 | D.23 |
| HDC-CM-2SPN2.5 | 1894770000 | D.23 |
| HDC-CM-2SPN4.0 | 1894710000 | D.23 |
| HDC-C-M3-BM1.5AG | 1698130000 | J.8 |
| HDC-C-M3-BM1.5AG | 1698130000 | D.9 |
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| HDC-C-M3-BM10.0AG | 1682310000 | D.9 |
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| HDC-C-M3-BM2.5AG | 1698150000 | J.8 |
| HDC-C-M3-BM2.5AG | 1698150000 | D.9 |
| HDC-C-M3-BM2.5AG | 1698150000 | D.4 |
| HDC-C-M3-BM4.0AG | 1682270000 | J.8 |
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| HDC-C-M3-BM4.0AG | 1682270000 | D.4 |
| HDC-C-M3-BM6.0AG | 1682290000 | J.8 |
| HDC-C-M3-BM6.0AG | 1682290000 | D.9 |
| HDC-C-M3-BM6.0AG | 1682290000 | D.4 |
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| HDC-C-M3-SM2.5AG | 1698140000 | J.8 |
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| HDC-C-M3-SM2.5AG | 1698140000 | D.4 |
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| HDC-C-M3-SM6.0AG | 1682280000 | J.8 |
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| HDC-C-M5-SM2.5AG | 1682380000 | J.8 |
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| HDC-CR16-5B GR | 1758490000 | D.40 |
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| HDC-CR16-5S GR | 1758480000 | D.40 |
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| HDC-KIT-HA 03.300 | 1712560000 | I.5 |
| HDC-KIT-HA 03.300 M | 1802470000 | I.4 |
| HDC-KIT-HA 03.301 | 1712570000 | I.5 |
| HDC-KIT-HA 03.301 M | 1802460000 | I.4 |
| HDC-KIT-HA 03.302 | 1712580000 | I.5 |
| HDC-KIT-HA 03.302 M | 1802450000 | I.4 |
| HDC-KIT-HA 03.404 | 1712630000 | I.5 |
| HDC-KIT-HA 04.400 | 1712590000 | I.7 |
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| HDC-KIT-HA 04.401 | 1712600000 | I.7 |
| HDC-KIT-HA 04.401 M | 1802430000 | I.6 |
| HDC-KIT-HA 04.402 | 1712610000 | I.7 |
| HDC-KIT-HA 04.406 | 1712650000 | I.7 |
| HDC-KIT-HE 06.100 | 1712460000 | I.9 |
| HDC-KIT-HE 06.101 | 1712660000 | I.9 |
| HDC-KIT-HE 10.110 | 1712510000 | I.13 |
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| HDC-KIT-HE 10.111 | 1712670000 | I.13 |
| HDC-KIT-HE 10.111 M | 1802410000 | I.12 |
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| HDC-KIT-HE 24.130 | 1712530000 | I.21 |
| HDC-KIT-HE 24.130 M | 1802380000 | I.20 |
| HDC-KIT-HE 24.131 | 1712690000 | I.21 |
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|---|---|---|
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| IE-BIC-HYB-P-0,5-300 | 1096150000 | J.9 |
| IE-BIC-HYB-P-0,5-300 | 1096150000 | D.22 |
| IE-BI-HYB-10P | 1069010000 | D.22 |
| IE-BI-LCD-MM-C | 1964420000 | D.21 |
| IE-BI-LCD-SM-C | 1962880000 | D.21 |
| IE-BI-RJ45-C | 1962840000 | H.13 |
| IE-BI-RJ45-C | 1962840000 | D.21 |
| IE-BI-RJ45-FJ-A | 1962850000 | H.13 |
| IE-BI-RJ45-FJ-A | 1962850000 | D.21 |
| IE-BI-RJ45-FJ-B | 1963840000 | H.13 |
| IE-BI-RJ45-FJ-B | 1963840000 | D.21 |
| IE-BI-RJ45-FJ-P | 1963830000 | H.13 |
| IE-BI-RJ45-FJ-P | 1963830000 | D.21 |
| IE-BI-SCRJ2SC-MM-C | 1964430000 | D.21 |
| IE-BI-SCRJ2SC-SM-C | 1962870000 | D.21 |
| IE-BI-USB-A | 1019570000 | H.14 |
| IE-BI-USB-AB | 1131380000 | H.14 |
| IE-BP-V05M | 1968930000 | H.11 |
| IE-BS-V05M-RJ45-C | 1963510000 | H.11 |
| IE-BS-V05M-RJ45-FJ-A | 1963460000 | H.11 |
| IE-BS-V05M-RJ45-FJ-P | 1963700000 | H.11 |
| IE-CST | 9204350000 | K.11 |
| IE-CST | 9204350000 | D.22 |
| IE-CTC-AS-LC-GOF | 1033350000 | D.22 |
| IE-CTC-AS-SC-POF | 1033360000 | D.22 |
| IE-CTC-SCST-GOF | 1032030000 | D.22 |
| IE-CTI-LC-GOF | 9205290000 | K.18 |
| IE-CTI-SC-GOF | 9205280000 | K.18 |
| IE-CTI-SC-GOF-P | 9205310000 | K.18 |
| IE-CTI-SC-POF | 9205300000 | K.18 |
| IE-CT-LC-GOF | 9205330000 | K.18 |
| IE-CT-LC-GOF | 9205330000 | D.22 |
| IE-CT-SC-GOF | 9205320000 | K.18 |
| IE-CT-SC-GOF | 9205320000 | D.22 |
| IE-CT-SC-GOF-P | 9205350000 | K.18 |
| IE-CT-SC-GOF-P | 9205350000 | D.22 |
| IE-CT-SC-POF | 9205340000 | K.18 |
| IE-CT-SC-POF | 9205340000 | D.22 |
| IE-KO-HAT | 1966810000 | K.6 |
| IE-PH-V05M | 1962540000 | H.10 |
| IE-PI-2LC-MM | 1962780000 | D.21 |
| IE-PI-2LC-SM | 1962790000 | D.21 |
| IE-PI-2SC-MM | 1962750000 | D.21 |
| IE-PI-2SC-POF | 1962770000 | D.21 |
| IE-PI-2SC-SM | 1962760000 | D.21 |
| IE-PIC-HYB-S-0,5-300 | 1096180000 | J.9 |
| IE-PIC-HYB-S-0,5-300 | 1096180000 | D.22 |
| IE-PI-HYB-10P | 1068990000 | D.22 |
| IE-PI-RJ45-FH | 1962730000 | H.12 |
| IE-PI-RJ45-FH | 1962730000 | D.21 |
| IE-PI-RJ45-FH-A | 1132010000 | H.12 |
| IE-PI-RJ45-FH-A | 1132010000 | D.21 |
| IE-PI-RJ45-FH-B | 1132020000 | H.12 |
| IE-PI-RJ45-FH-B | 1132020000 | D.21 |
| IE-PI-RJ45-FH-P | 1132030000 | H.12 |
| IE-PI-RJ45-FH-P | 1132030000 | D.21 |
| IE-PI-RJ45-TH | 1962720000 | H.12 |
| IE-PI-RJ45-TH | 1962720000 | D.21 |
| IE-PP-V05M | 1968920000 | H.10 |
| IE-PS-V05M-A-RJ45-FH | 1077300000 | H.10 |
| IE-PS-V05M-RJ45-FH | 1963200000 | H.10 |
| IE-PS-V05M-RJ45-FH-B | 1271250000 | H.10 |
| IE-PS-V05M-RJ45-TH | 1963110000 | H.10 |
| IS 2 KG | 1806630000 | K.24 |
| IS 2 KG | 1806630000 | B.111 |
| IS 3 KG | 1806650000 | K.24 |
| IS 3 KG | 1806650000 | B.111 |
| IS 4 KG | 1806660000 | K.24 |
| IS 4 KG | 1806660000 | B.111 |


## K


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| KOBBS 19X55 | 9205040000 | K.6 |
| KOBBS 19X75 | 9204780000 | K.6 |
| KOBBS 9.5X50 | 9205030000 | K.6 |
| KOK-112X36 | 9204870000 | K.6 |
| KOK-52X36 | 9204820000 | K.6 |
| KOK-65X36 | 9204830000 | K.6 |
| KOK-86X36 | 9204850000 | K.6 |
| KT 12 | 9002660000 | K.4 |
| KT 45 R | 9202040000 | K.5 |
| KT 8 | 9002650000 | K.4 |
| KT 8 | 9002650000 | J.11 |
| KT 8 | 9002650000 | D.22 |
| KV 11-M | 1656390000 | L.11 |
| KV 13-M | 1656400000 | L.11 |
| KV 16-M | 1656410000 | L.11 |
| KV 21-M | 1656420000 | L.11 |
| KV 29-M | 1656430000 | L.11 |


## L


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|---|---|---|
| LM MT300 105X105 SI | 1975160000 | M.7 |
| LM MT300 105X148 GE | 1724171687 | M.7 |
| LM MT300 105X148 SI | 1724170001 | M.7 |
| LM MT300 105X148 WS | 1724171044 | M.7 |
| LM MT300 12X6 GE | 1882910000 | M.7 |
| LM MT300 15X4,63 GE | 1724141687 | M.7 |
| LM MT300 15X4,63 SI | 1724140001 | M.7 |
| LM MT300 15X4,63 WS | 1724141044 | M.7 |
| LM MT300 15X6 GE | 1686361687 | M.7 |
| LM MT300 15X6 SI I | 1686360001 | M.7 |
| LM MT300 15X6 WS | 1686361044 | M.7 |
| LM MT300 15X9 GE | 1882890000 | M.7 |
| LM MT300 17x6 GE | 1835820000 | M.7 |
| LM MT300 17X9 GE | 1724151687 | M.7 |
| LM MT300 17X9 SI | 1724150001 | M.7 |
| LM MT300 17X9 WS | 1724151044 | M.7 |
| LM MT300 18X6,5 GE | 1749321687 | M.7 |
| LM MT300 18X6,5 SI | 1749320001 | M.7 |
| LM MT300 18X6,5 WS | 1749321044 | M.7 |
| LM MT300 19.05x6.3 GE | 1835830000 | M.7 |
| LM MT300 202x12 GE | 1915320000 | M.7 |
| LM MT300 20X8 GE | 1686381687 | M.7 |
| LM MT300 20X8 SI | 1686380001 | M.7 |
| LM MT300 20X8 WS | 1686381044 | M.7 |
| LM MT300 210X148 GE | 1724181687 | M.7 |
| LM MT300 210X148 SI | 1724180001 | M.7 |
| LM MT300 210X148 WS | 1724181044 | M.7 |
| LM MT300 210X297 GE | 1686441687 | M.7 |
| LM MT300 210X297 SI | 1686440001 | M.7 |
| LM MT300 210X297 WS | 1686441044 | M.7 |
| LM MT300 25,4X12,7 GE | 1686391687 | M.7 |
| LM MT300 25,4X12,7 SI | 1686390001 | M.7 |
| LM MT300 25,4X12,7 WS | 1686391044 | M.7 |
| LM MT300 26,5/17,5 SI | 1784340000 | M.7 |
| LM MT300 26X10 GE | 1686401687 | M.7 |
| LM MT300 26X10 SI | 1686400001 | M.7 |
| LM MT300 26X10 WS | 1686401044 | M.7 |
| LM MT300 27/8 GE | 1861510000 | M.7 |
| LM MT300 27x18 SI | 1873810000 | M.7 |
| LM MT300 30X20 GE | 1724161687 | M.7 |
| LM MT300 30X20 SI | 1724160001 | M.7 |
| LM MT300 30X20 WS | 1724161044 | M.7 |
| LM MT300 40X6 WS | 1760461044 | M.7 |
| LM MT300 56X22 GE | 1686421687 | M.7 |
| LM MT300 56X22 SI | 1686420001 | M.7 |
| LM MT300 56X22 WS | 1686421044 | M.7 |
| LM MT300 60X36 GE | 1686431687 | M.7 |
| LM MT300 60X36 SI | 1686430001 | M.7 |
| LM MT300 60X36 WS | 1686431044 | M.7 |
| LM MT300 89X34 WS | 1003400000 | M.7 |
| LM MT300 PA 20x8 GE | 1874860000 | M.7 |


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|---|---|---|
| MCP AP BASIC | 1139880000 | M.13 |
| MCP AP LABLES | 1924370000 | M.13 |
| MCP AP PLUS | 1924360000 | M.13 |
| MCP AP SF4-6 | 1924310000 | M.13 |
| MCP BASIC | 1139400000 | M.12 |
| MCP COVER | 1924350000 | M.13 |
| MCP EP | 1935130000 | M.13 |
| MCP EP SFC 3 | 1058090000 | M.13 |
| MCP KLEBESTREIFEN | 1924320000 | M.13 |
| MCP PLUS | 1925000000 | M.11 |
| MCP TP-KOF BASIC | 1139890000 | M.13 |
| M-D-STRIPAX LWL | 9003750000 | K.19 |
| M-D-STRIPAX LWL | 9003750000 | D.22 |
| MEHA KP LWL M-D-SPX | 9003760000 | K.19 |
| MODUFLEX C-CR | 1746060000 | D.45 |
| MODUFLEX C-KITO.M.MW-1F | 1765570000 | D.46 |
| MODUFLEX C-KITO.M.MW-2F | 1765580000 | D.46 |
| MODUFLEX C-KITO.M.MW-3F | 1765590000 | D.46 |
| MODUFLEX C-KITO.M.MW-4F | 1765600000 | D.46 |
| MODUFLEX C-KITO.M.MW-5F | 1765610000 | D.46 |
| MODUFLEX C-MH/ZE | 1752970000 | D.46 |
| MODUFLEX C-MW | 1746070000 | D.45 |
| MOFU 35 | 0495660000 | D.45 |
| M-PRINT PRO | 1905490000 | M.15 |
| M-PRINT PRO ADVANCED | 1905500000 | M.15 |
| MTR 160 | 9017250000 | K.16 |
| MTR 160 | 9017250000 | J.7 |
| MTR 160 | 9017250000 | J.6 |
| MTR 160 | 9017250000 | C.13 |
| MTR 160 | 9017250000 | C.8 |
| MTR 300 | 9021390000 | K.16 |
| MTR 300 | 9021390000 | J.7 |
| MTR 300 | 9021390000 | J.6 |
| MTR 300 | 9021390000 | C.13 |
| MTR 300 | 9021390000 | C.8 |
| Multi-Stripax 0.25-1.5S | 9204540000 | K.9 |
| multi-stripax 0.75-4²SL | 9203610000 | K.9 |
| Multi-Stripax 1.5-6.0S | 9204560000 | K.9 |
| multi-stripax 16 SL | 9202220000 | K.9 |
| multi-stripax 6-16 | 9202210000 | K.9 |
| multi-stripax ASI | 9202250000 | K.9 |
| multi-stripax AWG | 9202230000 | K.9 |
| multi-stripax® GKW LW | 9205760000 | K.9 |
| multi-stripax® POF | 1208880000 | K.9 |
| multi-stripax® PV | 1190490000 | K.9 |


## P


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|---|---|---|
| PB LWL/POF | 9020400000 | K.19 |
| PB LWL/POF | 9020400000 | J.11 |
| P-CLEANER | 1924330000 | M.13 |
| P-Ink 2.0 | 1924340000 | M.13 |
| PJ PRO TINTENSET FARBE | 1027110000 | M.10 |
| PJ PRO TNAW | 1024140000 | M.10 |
| PJ PRO TNTK INK C | 1027050000 | M.10 |
| PJ PRO TNTK INK K | 1027040000 | M.10 |
| PJ PRO TNTK INK M | 1027060000 | M.10 |
| PJ PRO TNTK INK Y | 1027070000 | M.10 |
| PLOTTER PEN 0.25 P-INK | 1920640000 | M.13 |
| PLOTTER PEN 0.35 P-INK | 1920650000 | M.13 |
| PLOTTER PEN 0.50 P-INK | 1005710000 | M.13 |
| PLOTTER PEN 0.70 P-INK | 1011450000 | M.13 |
| Plotterpen 0,18 | 1768570000 | M.13 |
| Plotterpen 0,25 | 1768540000 | M.13 |
| Plotterpen 0,35 | 1768550000 | M.13 |
| Plotterpen 0,5 | 1768560000 | M.13 |
| PLOTTERPEN 0,7 | 1011440000 | M.13 |
| PRINTJET PRO 115V | 1024050000 | M.10 |
| PRINTJET PRO 230V | 1001180001 | M.10 |
| PS LWL/POF | 9020390000 | K.19 |
| PS LWL/POF | 9020390000 | J.11 |
| PTSC KB 3.0X6 WN1412 | 1766120000 | D.46 |
| PTSC KB 3.0X6 WN1412 | 1766120000 | D.45 |
| PWZ RJ45 | 1118040000 | H.13 |
| PWZ RJ45 | 1118040000 | H.12 |
| PZ 6 Roto | 9014350000 | K.13 |


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|---|---|---|
| Reiniger 2000 25ml | 1772130000 | M.13 |
| Removal Tool CM 3 | 1866710000 | K.25 |
| Removal Tool CM 3 | 1866710000 | J.8 |
| Removal Tool CM 3 | 1866710000 | D.9 |
| Removal Tool CM 3 | 1866710000 | D.4 |
| Removal Tool CM 5 | 1866720000 | K.25 |
| Removal Tool CM 5 | 1866720000 | J.8 |
| Removal Tool CM 5 | 1866720000 | D.7 |
| REMOVAL TOOL HD | 1866730000 | K.25 |
| Removal Tool HE | 1866750000 | K.25 |
| Removal Tool HX | 1002990000 | K.25 |
| RIBBON THM HIRES | 1790650000 | M.14 |


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|---|---|---|
| SCHRAUBENDREHER CST | 9005720000 | K.11 |
| SCHRAUBENHALTER CST | 9032060000 | K.11 |
| SD 0,4x2,0x60 | 9037160000 | K.22 |
| SD 0,4x2,5x75 | 9009030000 | K.22 |
| SD 0,5x3,0x80 | 9008320000 | K.22 |
| SD 0,6x3,5x100 | 9008330000 | K.22 |
| SD 0,6x3,5x200 | 9010110000 | K.22 |
| SD 0,8x4,0x100 | 9008340000 | K.22 |
| SD 0,8x4,0x100 | 9008340000 | G.4 |
| SD 0,8x4,5x125 | 9009020000 | K.22 |
| SD 1,0x5,5x150 | 9008350000 | K.22 |
| SD 1,2x6,5x150 | 9009010000 | K.22 |
| SD TH10 | 9009180000 | K.22 |
| SD TH15 | 9009170000 | K.22 |
| SD TH20 | 9009160000 | K.22 |
| SD TH8 | 9009190000 | K.22 |
| SDK PH0 | 9008470000 | K.22 |
| SDK PH1 | 9008480000 | K.22 |
| SDK PH2 | 9008490000 | K.22 |
| SDK PH3 | 9008500000 | K.22 |
| SDK PZ0 | 9008520000 | K.22 |
| SDK PZ1 | 9008530000 | K.22 |
| SDK PZ2 | 9008540000 | K.22 |
| SDK PZ3 | 9008550000 | K.22 |
| SDS 2,5-5,5/PH1/2 | 9009740000 | K.23 |
| SDS 2.0-5.5 | 9205560000 | K.23 |
| SHIELD CLAMP 10.0 WO S | 1018110000 | J.20 |
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| SHIELD CLAMP 6 WO S | 1018150000 | J.20 |
| SHIELD CLAMP 7 WO S | 1018160000 | J.20 |
| SHIELD CLAMP 8 WO S | 1018170000 | J.20 |
| SHIELD CLAMP 9 WO S | 1018180000 | J.20 |
| SHIELD LEVER 3 CSB 45° | 1017040000 | J.19 |
| SHIELD LEVER 3 MOD | 1983910000 | J.18 |
| SHIELD LEVER 4 CSB 45° | 1017050000 | J.19 |
| SHIELD LEVER 4 MOD | 1983920000 | J.18 |
| SHIELD LEVER 6 CSB 45° | 1017060000 | J.19 |
| SHIELD LEVER 6 MOD | 1983930000 | J.18 |
| SHIELD LEVER 8 CSB 45° | 1017070000 | J.19 |
| SHIELD LEVER 8 CSB 45°L | 1018760000 | J.19 |
| SHIELD LEVER 8 MOD | 1983940000 | J.18 |
| SHIELD LEVER 8 MOD 35mm | 1000950001 | J.17 |
| SHIELD LEVER 8 MOD HIGH | 1009310000 | J.18 |
| SHIELD LEVER 8 MOD HIGH | 1009310000 | J.17 |
| SK 10,0x125 | 9009070000 | K.22 |
| SKS 2,0-8,0 | 9008860000 | K.24 |
| SM 18/9.5 K MC NE GE | 1248590000 | M.5 |
| SM 18/9.5 K MC NE GR | 1248610000 | M.5 |
| SM 18/9.5 K MC NE WS | 1248580000 | M.5 |
| SM 18/9.5 K MC SDR | 1248550000 | M.5 |
| SM 19/42 K MC NE GE | 1248630000 | M.5 |
| SM 19/42 K MC NE GR | 1248640000 | M.5 |
| SM 19/42 K MC NE WS | 1248620000 | M.5 |
| SM 19/42 K MC SDR | 1248560000 | M.5 |
| SM 22/22 K MC NE GE | 1131830000 | M.5 |
| SM 22/22 K MC NE GR | 1014650000 | M.5 |
| SM 22/22 K MC NEUTR. SI | 1877590000 | M.5 |
| SM 22/22 K MC NEUTR. WS | 1877570000 | M.5 |
| SM 22/22 K MC SONDERD. | 1877580000 | M.5 |
| SM 27/12.5 K MC NE GE | 1131810000 | M.5 |
| SM 27/12.5 K MC NE GR | 1027830000 | M.5 |
| SM 27/12.5 K SI NEUTRAL | 1713720000 | M.5 |
| SM 27/12.5 K SONDERDRUCK | 1699890000 | M.5 |
| SM 27/12.5 K WS NEUTR. | 1699880000 | M.5 |
| SM 27/18 K MC NE GR | 1073340000 | M.5 |
| SM 27/18 K MC NE WS | 1707270000 | M.5 |
| SM 27/18 K NEUTRAL GE | 1915340000 | M.5 |
| SM 27/18 K NEUTRAL ROT | 1906120000 | M.5 |
| SM 27/18 K NEUTRAL SI | 1713760000 | M.5 |
| SM 27/18 K SONDERDRUCK | 1707280000 | M.5 |
| SM 27/27 K MC NE GE | 1131800000 | M.5 |
| SM 27/27 K MC NE GR | 1079520000 | M.5 |
| SM 27/27 K SI NEUTRAL | 1782990000 | M.5 |
| SM 27/27 K SONDERDRUCK | 1783010000 | M.5 |
| SM 27/27 K WS NEUTRAL | 1783000000 | M.5 |
| SM 27/8 K MC NE GE | 1131820000 | M.5 |
| SM 27/8 K MC NE GR | 1079480000 | M.5 |
| SM 27/8 K SI NEUTRAL | 1771930000 | M.5 |
| SM 27/8 K SONDERDRUCK | 1713690000 | M.5 |
| SM 27/8 K WS NEUTRAL | 1812630000 | M.5 |
| SPB-M 3 | 1203600000 | J.12 |
| STI Waterproof schwarz | 0508401694 | M.13 |
| STRIPAX | 9005000000 | K.7 |
| STRIPAX 16 | 9005610000 | K.7 |
| STRIPAX PLUS 2.5 | 9020000000 | K.12 |
| stripping unit M-SPX GKW LW | 9205770000 | K.9 |
| stripping unit M-SPX POF | 1212770000 | K.9 |
| stripping unit M-SPX PV | 1204280000 | K.9 |
| SYSTEM 11+1 | 9009750000 | K.23 |


## T


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|---|---|---|
| THM BASIC 300 | 1276230000 | M.14 |
| THM GEW 15/6 GE | 1059790000 | M.8 |
| THM GEW 15/6 WS | 1059780000 | M.8 |
| THM GEW 17/9 GE | 1059810000 | M.8 |
| THM GEW 17/9 WS | 1059800000 | M.8 |
| THM GEW 18/6 GE | 1059830000 | M.8 |
| THM GEW 18/6 WS | 1059820000 | M.8 |
| THM GEW 18/9 GE | 1059850000 | M.8 |
| THM GEW 18/9 WS | 1059840000 | M.8 |
| THM GEW 20/8 GE | 1059880000 | M.8 |
| THM GEW 20/8 WS | 1059870000 | M.8 |
| THM GEW 30/8 GE | 1114450000 | M.8 |
| THM MT30x 101/150 SI/G | 1778170000 | M.8 |
| THM MT30X 101/48 GE/M | 1751821687 | M.8 |
| THM MT30X 101/48 SI/M | 1751820001 | M.8 |
| THM MT30X 101/48 WS/M | 1751821044 | M.8 |
| THM MT30x 101/74 GE | 1061810000 | M.8 |
| THM MT30x 101/74 si | 1762960001 | M.8 |
| THM MT30X 15/4 GE/M | 1072690000 | M.8 |
| THM MT30x 15/5,08 GE | 1964130000 | M.8 |
| THM MT30X 15/6 GE/M | 1753231687 | M.8 |
| THM MT30X 15/6 SI/M | 1753230001 | M.8 |
| THM MT30X 15/6 WS/M | 1753231044 | M.8 |
| THM MT30x 16/7 GE | 1852520000 | M.8 |
| THM MT30x 17/8 GE | 1027620000 | M.8 |
| THM MT30X 17/9 GE/M | 1856650000 | M.8 |
| THM MT30X 17/9 WS | 1968130000 | M.8 |
| THM MT30X 18/6 GE/M | 1753271687 | M.8 |
| THM MT30X 18/6 SI/M | 1753270001 | M.8 |
| THM MT30X 18/6 WS/M | 1753271044 | M.8 |
| THM MT30X 18/9 GE/M | 1753251687 | M.8 |
| THM MT30X 18/9 SI/M | 1753250001 | M.8 |
| THM MT30X 18/9 WS/M | 1753251044 | M.8 |
| THM MT30X 20/8 GE/M | 1753241687 | M.8 |
| THM MT30X 20/8 SI/M | 1753240001 | M.8 |
| THM MT30X 20/8 WS/M | 1753241044 | M.8 |
| THM MT30X 25,9/7,1 WS | 1891770000 | M.8 |
| THM MT30X 25/12 GE/M | 1751751687 | M.8 |
| THM MT30X 25/12 SI/M | 1751750001 | M.8 |
| THM MT30X 25/12 WS/M | 1751751044 | M.8 |
| THM MT30x 26,5/17,5 SI/M | 1770090000 | M.8 |
| THM MT30X 26/10 GE/M | 1751761687 | M.8 |
| THM MT30X 26/10 SI/M | 1751760001 | M.8 |
| THM MT30X 26/10 WS/M | 1751761044 | M.8 |
| THM MT30X 30/20 GE/M | 1753261687 | M.8 |
| THM MT30X 30/20 SI/M | 1753260001 | M.8 |
| THM MT30X 30/20 WS/M | 1753261044 | M.8 |
| THM MT30x 30/52 SI | 1014680000 | M.8 |
| THM MT30X 32/9 SI/M | 1751770001 | M.8 |
| THM MT30X 32/9 WS/M | 1751771044 | M.8 |
| THM MT30x 38,1/31,75 SI | 1862350000 | M.8 |
| THM MT30x 38/17 WS | 1011610000 | M.8 |
| THM MT30X 38/19 GE/M | 1751801687 | M.8 |
| THM MT30X 38/19 SI/M | 1751800001 | M.8 |
| THM MT30X 38/19 WS/M | 1751801044 | M.8 |
| THM MT30X 45/23 GE/M | 1751811687 | M.8 |
| THM MT30X 45/23 SI/M | 1751810001 | M.8 |
| THM MT30X 45/23 WS/M | 1751811044 | M.8 |
| THM MT30x 57/27 SI | 1852540000 | M.8 |
| THM MT30X 65/35 GE/M | 1751831687 | M.8 |
| THM MT30X 65/35 SI/M | 1751830001 | M.8 |
| THM MT30X 65/35 WS/M | 1751831044 | M.8 |
| THM MT30x 8/8 WS | 1954070000 | M.8 |
| THM MT30x 89/60 SI | 1003410000 | M.8 |
| Tinte 2000 25ml | 1772120000 | M.13 |
| TRAGEKASTEN MTR 300 | 9021420000 | K.16 |
| TRAGETASCHE MTR 160 | 9017270000 | K.16 |
| TT 8 RS MP 8 | 9202800000 | K.17 |
| TT 8 RS MP 8 | 9202800000 | H.12 |
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| VG 11-K68 | 1568990000 | L.5 |
| VG 11-K68 | 1568990000 | I.7 |
| VG 11-K68 | 1568990000 | I.5 |
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| VG 11-MS54 | 0260700000 | L.7 |
| VG 11-MS54-ZE | 1718820000 | L.9 |
| VG 11-MS68 | 1569080000 | L.13 |
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| VG 11-MS68 | 1569080000 | I.5 |
| VG 11-SS 68 KB 5-10 | 1009760000 | L.16 |
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| VG 13,5-K68 SKS | 1720500000 | L.6 |
| VG 13,5-MS54 | 0260800000 | L.7 |
| VG 13,5-MS54-ZE | 1718830000 | L.9 |
| VG 13,5-MS68 | 1569090000 | L.13 |
| VG 13.5-SS 68 KB 6-12 | 1009770000 | L.16 |
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| VG 16-K68 SKS | 1720510000 | L.6 |
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| VG 16-MS54-ZE | 1718840000 | L.9 |
| VG 16-MS68 | 1569100000 | L.13 |
| VG 16-MS68 | 1569100000 | I.15 |
| VG 16-MS68 | 1569100000 | I.13 |
| VG 16-MS68 | 1569100000 | I.11 |
| VG 16-MS68 | 1569100000 | I.9 |
| VG 16-SS 68 KB 10-14 | 1009780000 | L.16 |
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| VG 21 HQ EMV68 14-18 | 1016130000 | L.12 |
| VG 21 HQ MS68 11.5-15.5 | 1016100000 | L.12 |
| VG 21 HQ MS68 14-18 | 1016110000 | L.12 |
| VG 21 HQ MS68 9-13 | 1016090000 | L.12 |
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| VG 21-K68 SKS | 1720520000 | L.6 |
| VG 21-MS54 | 0260900000 | L.7 |
| VG 21-MS54-ZE | 1718850000 | L.9 |
| VG 21-MS68 | 1569110000 | L.13 |
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| VG 21-MS68 | 1569110000 | I.23 |
| VG 21-MS68 | 1569110000 | I.21 |
| VG 21-MS68 | 1569110000 | I.19 |
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| VG 21-SS 68 KB 13-18 | 1009790000 | L.16 |
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| VG 29-MS54 | 0261000000 | L.7 |
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| VG M20 - MS 68 | 1772220000 | L.13 |
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| VGM25-MS54ZE BS9-19 | 1005230000 | L.10 |
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| VGM25-MS68 11-20 BG | 1193600000 | C.8 |
| VGM25-SS 68 KB 10-14 | 1009870000 | L.16 |
| VGM25-SS68 11-20 BG | 1193570000 | C.13 |
| VGM25-SS68 11-20 BG | 1193570000 | C.8 |
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| VGM32-MS54ZE BS17-27 | 1005240000 | L.10 |
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| VGM32-MS68 15-25 BG | 1193610000 | C.8 |
| VGM32-SS 68 KB 13-18 | 1009880000 | L.16 |
| VGM32-SS68 15-25 BG | 1193580000 | C.13 |
| VGM32-SS68 15-25 BG | 1193580000 | C.8 |
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| VGM40/1-MS68 20-32 BG | 1205890000 | C.8 |
| VGM40/1-SS68 20-32 BG | 1205920000 | C.13 |
| VGM40/1-SS68 20-32 BG | 1205920000 | C.8 |
| VGM40-MS54 | 1778330000 | L.7 |
| VGM40-MS54 ZE | 1778500000 | L.9 |
| VGM40-MS68 20-32 BG | 1193620000 | C.13 |
| VGM40-MS68 20-32 BG | 1193620000 | C.8 |
| VGM40-SS 68 KB 18-25 | 1009890000 | L.16 |
| VGM40-SS68 20-32 BG | 1193590000 | C.13 |
| VGM40-SS68 20-32 BG | 1193590000 | C.8 |
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| VP 16-K54 | 0295060000 | L.21 |
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| VP 7-MS65 | 0521600000 | L.22 |
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| WK IK PH0 | 9918460000 | K.21 |
| WK IK PH1 | 9918470000 | K.21 |
| WK IK PH2 | 9918480000 | K.21 |
| WK IK PZ0 | 9918490000 | K.21 |
| WK IK PZ1 | 9918500000 | K.21 |
| WK IK PZ2 | 9918510000 | K.21 |
| WK K PH0 | 9918570000 | K.20 |
| WK K PH1 | 9918580000 | K.20 |
| WK K PH2 | 9918590000 | K.20 |
| WK K PZ0 | 9918600000 | K.20 |
| WK K PZ1 | 9918610000 | K.20 |
| WK K PZ2 | 9918620000 | K.20 |
| WK S 0,4x2,5 | 9918520000 | K.20 |
| WK S 0,5x3,0 | 9918530000 | K.20 |
| WK S 0,6x3,5 | 9918540000 | K.20 |
| WK S 0,8x4,0 | 9918550000 | K.20 |
| WK S 1,0x5,5 | 9918560000 | K.20 |
| WK SI 0,4x2,5 | 9918410000 | K.21 |
| WK SI 0,5x3,0 | 9918420000 | K.21 |
| WK SI 0,6x3,5 | 9918430000 | K.21 |
| WK SI 0,8x4,0 | 9918440000 | K.21 |
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| 0260900000 | VG 21-MS54 | L.7 |
| 0261000000 | VG 29-MS54 | L.7 |
| 0261400000 | VG 16-MS54 | L.7 |
| 0261500000 | VG 9-MS54 | L.7 |

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| 0294700000 | VP 9-MS65 | L.22 |
| 0294760000 | VP 9-K54 | L.21 |
| 0294800000 | VP 11-MS65 | L.22 |
| 0294860000 | VP 11-K54 | L.21 |
| 0294900000 | VP 13,5-MS65 | L.22 |
| 0294960000 | VP 13,5-K54 | L.21 |
| 0295000000 | VP 16-MS65 | L.22 |
| 0295060000 | VP 16-K54 | L.21 |
| 0295100000 | VP 21-MS65 | L.22 |
| 0295160000 | VP 21-K54 | L.21 |

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| 0497600000 | VG 36-MS54 | L.7 |
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| 0501160000 | VP 29-K54 | L.21 |
| 0501200000 | VP 36-MS65 | L.22 |
| 0501260000 | VP 36-K54 | L.21 |
| 0501300000 | VP 42-MS65 | L.22 |
| 0501360000 | VP 42-K54 | L.21 |
| 0508401694 | STI Waterproof schwarz | M.13 |

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| 1002790000 | HDC SCHRAUBADAPTER | J.23 |
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| 1002980000 | HDC C HX BM6.0AG | J.5 |
| 1002990000 | Removal Tool HX | K.25 |
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| 1003040000 | HDC HQP ALU | B.107 |
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| 1003050000 | HDC HQM ALU | E.11 |
| 1003050000 | HDC HQM ALU | B.105 |
| 1003060000 | HDC HQP AWLU | E.9 |
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| 1009880000 | VGM32-SS 68 KB 13-18 | L.16 |
| 1009890000 | VGM40-SS 68 KB 18-25 | L.16 |
| 1009900000 | VGM50-SS 68 KB 22-32 | L.16 |
| 1009910000 | VGM63-SS 68 KB 34-44 | L.16 |

## 1010000000

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|---|---|---|
| 1011380000 | HDC SHIELD LEVER 8 LL | J.17 |
| 1011440000 | PLOTTERPEN 0,7 | M.13 |
| 1011450000 | PLOTTER PEN 0.70 P-INK | M.13 |
| 1011610000 | THM MT30x 38/17 WS | M.8 |
| 1014080000 | HDC CM BUS SV GCA M | D.17 |
| 1014650000 | SM 22/22 K MC NE GR | M.5 |
| 1014680000 | THM MT30x 30/52 SI | M.8 |
| 1016070000 | VG 16 HQ K68 9-13 | L.12 |
| 1016080000 | VG 16 HQ K68 11.5-15.5 | L.12 |
| 1016090000 | VG 21 HQ MS68 9-13 | L.12 |
| 1016100000 | VG 21 HQ MS68 11.5-15.5 | L.12 |
| 1016110000 | VG 21 HQ MS68 14-18 | L.12 |
| 1016120000 | VG 21 HQ EMV68 11-15.5 | L.12 |
| 1016130000 | VG 21 HQ EMV68 14-18 | L.12 |
| 1017010000 | HDC ADAPTER W. SCREW | J.23 |
| 1017040000 | SHIELD LEVER 3 CSB 45° | J.19 |
| 1017050000 | SHIELD LEVER 4 CSB 45° | J.19 |
| 1017060000 | SHIELD LEVER 6 CSB 45° | J.19 |
| 1017070000 | SHIELD LEVER 8 CSB 45° | J.19 |
| 1018110000 | SHIELD CLAMP 10.0 WO S | J.20 |
| 1018120000 | SHIELD CLAMP 4.5 WO S | J.20 |
| 1018130000 | SHIELD CLAMP 5 WO S | J.20 |
| 1018150000 | SHIELD CLAMP 6 WO S | J.20 |
| 1018160000 | SHIELD CLAMP 7 WO S | J.20 |
| 1018170000 | SHIELD CLAMP 8 WO S | J.20 |
| 1018180000 | SHIELD CLAMP 9 WO S | J.20 |
| 1018760000 | SHIELD LEVER 8 CSB 45°L | J.19 |
| 1018950000 | HDC HEE 32 SCM 33-64 | B.42 |
| 1018960000 | HDC HEE 32 BCM 33-64 | B.42 |
| 1019570000 | IE-BI-USB-A | H.14 |
| 1019870000 | HDC 06B ALU O-RING | E.15 |

## 1020000000

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|---|---|---|
| 1020520000 | HDC HB 24 TEK TOS2XM40G | F.14 |
| 1021250000 | HDC 10B KBU 1M25G | E.17 |
| 1021330000 | HDC 06B KLU 1M25G | E.15 |
| 1021450000 | HDC 10A ALU SL | E.13 |
| 1023040000 | HDC HD 25 MC „Z“ | B.56 |
| 1023050000 | HDC HD 25 FC „Z“ | B.56 |
| 1023210000 | HDC S4/0 FS | B.120 |
| 1023220000 | HDC S4/0 MS | B.120 |
| 1023230000 | HDC S4/2 FS | B.122 |
| 1023240000 | HDC S4/2 MS | B.122 |
| 1023250000 | HDC S4/8 FS | B.130 |
| 1023260000 | HDC S4/8 MS | B.130 |
| 1023270000 | HDC S8/24 FC | B.116 |
| 1023290000 | HDC S8/24 MC | B.116 |
| 1023310000 | HDC S6/36 FC | B.124 |
| 1023320000 | HDC S6/36 MC | B.124 |
| 1023330000 | HDC S12/2 FC | B.128 |
| 1023340000 | HDC S12/2 MC | B.128 |
| 1023350000 | HDC S8/0 FAS | B.134 |
| 1023360000 | HDC S8/0 MAS | B.134 |
| 1023880000 | HDC HTC F | G.4 |
| 1023890000 | HDC HTC M | G.4 |
| 1024050000 | PRINTJET PRO 115V | M.10 |
| 1024140000 | PJ PRO TNAW | M.10 |
| 1025660000 | HDC PE HA SCREW M4X5.5 | J.21 |
| 1025670000 | HDC PE HE SCREW M4X7.8 | J.21 |
| 1027040000 | PJ PRO TNTK INK K | M.10 |
| 1027050000 | PJ PRO TNTK INK C | M.10 |
| 1027060000 | PJ PRO TNTK INK M | M.10 |
| 1027070000 | PJ PRO TNTK INK Y | M.10 |
| 1027110000 | PJ PRO TINTENSET FARBE | M.10 |
| 1027260000 | HDC-C-CM-BUS-S0.33-0.52 | H.6 |
| 1027260000 | HDC-C-CM-BUS-S0.33-0.52 | D.18 |
| 1027270000 | HDC-C-CM-BUS-B0.33-0.52 | H.6 |
| 1027270000 | HDC-C-CM-BUS-B0.33-0.52 | D.18 |
| 1027620000 | THM MT30x 17/8 GE | M.8 |
| 1027640000 | HDC KIT HE-P 16.120 | I.19 |
| 1027650000 | HDC KIT HE-P 06.10 M | I.10 |
| 1027660000 | HDC KIT HE-P 06.10 | I.11 |
| 1027670000 | HDC KIT HE-P 10.110 M | I.14 |
| 1027680000 | HDC KIT HE-P 10.110 | I.15 |
| 1027690000 | HDC KIT HE-P 16.120 M | I.18 |
| 1027830000 | SM 27/12.5 K MC NE GR | M.5 |
| 1028030000 | HDC SCREW ADAPTER W/O T | J.23 |
| 1029440000 | HDC PE HD/ HDD/CF SCREW M4x6 | J.21 |
| 1029470000 | HDC PE HSB/S SCREW M5x8 | J.21 |
| 1029510000 | HDC FIXING SCREW M3x10 | J.21 |
| 1029520000 | HDC PE S6/6 SCREW M4x8 | J.21 |

## 1030000000

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|---|---|---|
| 1032030000 | IE-CTC-SCST-GOF | D.22 |
| 1033350000 | IE-CTC-AS-LC-GOF | D.22 |
| 1033360000 | IE-CTC-AS-SC-POF | D.22 |

## 1040000000

| | | |
|---|---|---|
| 1041490000 | SHIELD CLAMP 14.0 WO S | J.20 |
| 1041760000 | HDC 16A TSLU 1M20G | E.24 |
| 1043120000 | HDC CM BUS SV F8 CT | H.5 |
| 1043120000 | HDC CM BUS SV F8 CT | D.17 |
| 1043130000 | HDC CM BUS SV M8 CT | H.5 |
| 1043130000 | HDC CM BUS SV M8 CT | D.17 |
| 1044080000 | HÜLSE REMOVAL TOOL CM 3 | K.25 |
| 1044090000 | HÜLSE REMOVAL TOOL CM 5 | K.25 |
| 1044100000 | HUELSE REMOVAL TOOL HD | K.25 |
| 1044480000 | HDC FLDG 04A | J.25 |
| 1044490000 | HDC FLDG 10A | J.25 |
| 1044500000 | HDC FLDG 06B | J.25 |
| 1044510000 | HDC FLDG 10B | J.25 |
| 1044520000 | HDC FLDG 16A | J.25 |
| 1044530000 | HDC FLDG 16B | J.25 |
| 1044540000 | HDC FLDG 32A | J.25 |
| 1044550000 | HDC FLDG 24B | J.25 |
| 1044560000 | HDC FLDG 32B | J.25 |
| 1044570000 | HDC FLDG 48B | J.25 |
| 1044580000 | HDC DG 07A | J.25 |
| 1044590000 | HDC DG 10A | J.25 |
| 1044600000 | HDC DG 16A | J.25 |
| 1044610000 | HDC DG 06B | J.25 |
| 1044620000 | HDC DG 10B | J.25 |
| 1044630000 | HDC DG 16B | J.25 |
| 1044640000 | HDC DG 32A | J.25 |
| 1044650000 | HDC DG 24B | J.25 |
| 1044660000 | HDC DG 48A 32B | J.25 |
| 1044670000 | HDC DG 48B | J.25 |
| 1045530000 | VG16 HQ K68 9-12SH | L.12 |
| 1045540000 | VG16 HQ K68 11,5-15,5SH | L.12 |
| 1045560000 | HDC 64D TOBU 1M40G | E.36 |
| 1049370000 | HDC HTC MOUNTING | G.4 |

## 1050000000

| | | |
|---|---|---|
| 1052430000 | HDC 10B ABO | E.21 |
| 1058090000 | MCP EP SFC 3 | M.13 |
| 1059780000 | THM GEW 15/6 WS | M.8 |
| 1059790000 | THM GEW 15/6 GE | M.8 |
| 1059800000 | THM GEW 17/9 WS | M.8 |
| 1059810000 | THM GEW 17/9 GE | M.8 |
| 1059820000 | THM GEW 18/6 WS | M.8 |
| 1059830000 | THM GEW 18/6 GE | M.8 |
| 1059840000 | THM GEW 18/9 WS | M.8 |
| 1059850000 | THM GEW 18/9 GE | M.8 |
| 1059870000 | THM GEW 20/8 WS | M.8 |
| 1059880000 | THM GEW 20/8 GE | M.8 |

## 1060000000

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|---|---|---|
| 1061700000 | HDC KIT HE-P 24.131 M | I.22 |
| 1061710000 | HDC KIT HE-P 06.11 | I.11 |
| 1061720000 | HDC KIT HE-P 06.11 M | I.10 |
| 1061730000 | HDC KIT HE-P 10.111 | I.15 |
| 1061740000 | HDC KIT HE-P 10.111 M | I.14 |
| 1061750000 | HDC KIT HE-P 16.121 | I.19 |
| 1061770000 | HDC KIT HE-P 16.121 M | I.18 |
| 1061780000 | HDC KIT HE-P 24.130 | I.23 |
| 1061790000 | HDC KIT HE-P 24.130 M | I.22 |
| 1061800000 | HDC KIT HE-P 24.131 | I.23 |
| 1061810000 | THM MT30x 101/74 GE | M.8 |
| 1068990000 | IE-PI-HYB-10P | D.22 |
| 1069010000 | IE-BI-HYB-10P | D.22 |

## 1070000000

| | | |
|---|---|---|
| 1072650000 | CC 15/60 K MC NE GR | M.6 |
| 1072680000 | CC 30/60 K MC NE GR | M.6 |
| 1072690000 | THM MT30X 15/4 GE/M | M.8 |
| 1073340000 | SM 27/18 K MC NE GR | M.5 |
| 1077300000 | IE-PS-V05M-A-RJ45-FH | H.10 |
| 1078320000 | CC 30/60 K MC NE GE | M.6 |
| 1079480000 | SM 27/8 K MC NE GR | M.5 |
| 1079520000 | SM 27/27 K MC NE GR | M.5 |
| 1079540000 | CC 15/17 K MC NE GR | M.6 |
| 1079560000 | CC 15/27 K MC NE GR | M.6 |
| 1079580000 | CC 15/49 K MC NE GR | M.6 |
| 1079640000 | HDC 24B HP250 MPL3 TYP1 | J.14 |
| 1079640000 | HDC 24B HP250 MPL3 TYP1 | C.7 |
| 1079650000 | HDC 24B SL 3X95 | C.13 |
| 1079650000 | HDC 24B SL 3X95 | C.7 |
| 1079680000 | HDC HP 250 M 35 | J.6 |
| 1079680000 | HDC HP 250 M 35 | C.6 |
| 1079690000 | HDC HP 250 M 25 | J.6 |
| 1079690000 | HDC HP 250 M 25 | C.6 |
| 1079720000 | HDC HP 250 F 25 | J.6 |
| 1079720000 | HDC HP 250 F 25 | C.6 |
| 1079730000 | HDC HP 250 F 35 | J.6 |
| 1079730000 | HDC HP 250 F 35 | C.6 |
| 1079740000 | HDC HP 250 F 50 | J.6 |
| 1079740000 | HDC HP 250 F 50 | C.6 |
| 1079750000 | HDC HP 250 F 70 | J.6 |
| 1079750000 | HDC HP 250 F 70 | C.6 |
| 1079770000 | HDC HP 250 F 95 | J.6 |
| 1079770000 | HDC HP 250 F 95 | C.6 |
| 1079780000 | HDC HP 550 M 120 | J.7 |
| 1079780000 | HDC HP 550 M 120 | C.12 |
| 1079790000 | HDC HP 550 M 95 | J.7 |
| 1079790000 | HDC HP 550 M 95 | C.12 |
| 1079810000 | HDC HP 550 F 95 | J.7 |
| 1079810000 | HDC HP 550 F 95 | C.12 |
| 1079820000 | HDC HP 550 F 120 | J.7 |
| 1079820000 | HDC HP 550 F 120 | C.12 |
| 1079830000 | HDC HP 550 F 150 | J.7 |
| 1079830000 | HDC HP 550 F 150 | C.12 |
| 1079840000 | HDC HP 550 F 185 | J.7 |
| 1079840000 | HDC HP 550 F 185 | C.12 |
| 1079910000 | HDC IP68 24B MD 3M25 | C.12 |
| 1079910000 | HDC IP68 24B MD 3M25 | C.7 |
| 1079920000 | HDC IP68 24B ASS | C.12 |
| 1079920000 | HDC IP68 24B ASS | C.6 |
| 1079930000 | HDC IP68 24B TO | C.12 |
| 1079930000 | HDC IP68 24B TO | C.6 |

## 1080000000

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|---|---|---|
| 1081180000 | HDC IP68 06B SS 1M20 | F.7 |
| 1081190000 | HDC IP68 06B SS 1M25 | F.7 |
| 1081210000 | HDC IP68 06B SS 1M32 | F.7 |
| 1081220000 | HDC IP68 06B SS 2M32 | F.7 |
| 1081230000 | HDC IP68 06B SS 1PG29 | F.7 |
| 1081240000 | HDC IP68 06B SS 2M25 | F.7 |
| 1081250000 | HDC IP68 06B SS 2M20 | F.7 |
| 1081260000 | HDC IP68 06B SS 2PG29 | F.7 |
| 1081270000 | HDC IP68 10B SS 1M20 | F.9 |
| 1081280000 | HDC IP68 10B SS 1M32 | F.9 |
| 1081290000 | HDC IP68 10B SS 1PG29 | F.9 |
| 1081310000 | HDC IP68 10B SS 2M20 | F.9 |
| 1081320000 | HDC IP68 10B SS 2M32 | F.9 |
| 1081330000 | HDC IP68 10B SS 2PG29 | F.9 |
| 1081340000 | HDC IP68 16B SS | F.11 |
| 1081350000 | HDC IP68 16B SS 1M32 | F.11 |
| 1081360000 | HDC IP68 16B SS 1M40 | F.11 |
| 1081370000 | HDC IP68 16B SS 2M40 | F.11 |
| 1081380000 | HDC IP68 16B SS 1PG36 | F.11 |
| 1081390000 | HDC IP68 16B SS 2M32 | F.11 |
| 1081410000 | HDC IP68 24B SS 1M40 | F.13 |
| 1081420000 | HDC IP68 24B SS 2M40 | F.13 |
| 1081430000 | HDC IP68 24B SS 1PG36 | F.13 |
| 1081440000 | HDC IP68 24B SS 2PG36 | F.13 |
| 1081450000 | HDC IP68 24B SS | F.13 |
| 1081470000 | HDC IP68 04A AS | H.9 |
| 1081470000 | HDC IP68 04A AS | F.5 |
| 1081480000 | HDC IP68 04A AWS 1M20 | H.9 |
| 1081480000 | HDC IP68 04A AWS 1M20 | F.5 |
| 1081490000 | HDC IP68 04A AWS | H.9 |
| 1081490000 | HDC IP68 04A AWS | F.5 |
| 1081510000 | HDC IP68 06B AS | F.7 |
| 1081520000 | HDC IP68 10B AS | F.9 |
| 1081530000 | HDC IP68 16B AS | F.11 |
| 1081540000 | HDC IP68 24B AS | F.13 |
| 1081550000 | HDC IP65 06B FRAME M4 | F.7 |
| 1081560000 | HDC IP65 10B FRAME M4 | F.9 |
| 1081570000 | HDC IP65 16B FRAME M4 | F.11 |
| 1081580000 | HDC IP65 24B FRAME M4 | F.13 |
| 1082390000 | HDC IP68 04A TOS 1M20 | H.8 |
| 1082390000 | HDC IP68 04A TOS 1M20 | F.4 |
| 1082410000 | HDC IP68 04A TOS 1PG13 | H.8 |

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| 1082410000 | HDC IP68 04A TOS 1PG13 | F.4 |
| 1082420000 | HDC IP68 06B TOS 1M20 | F.6 |
| 1082430000 | HDC IP68 06B TOS 1M25 | F.6 |
| 1082440000 | HDC IP68 06B TOS 1M32 | F.6 |
| 1082450000 | HDC IP68 06B TOS 1M40 | F.6 |
| 1082460000 | HDC IP68 06B TOS 1PG16 | F.6 |
| 1082470000 | HDC IP68 06B TOS 1PG21 | F.6 |
| 1082480000 | HDC IP68 06B TOS 1PG29 | F.6 |
| 1082510000 | HDC IP68 06B TSS 1M20 | F.6 |
| 1082530000 | HDC IP68 06B TSS 1M25 | F.6 |
| 1082550000 | HDC IP68 06B TSS 1M32 | F.6 |
| 1082560000 | HDC IP68 06B TSS 1PG16 | F.6 |
| 1082570000 | HDC IP68 06B TSS 1PG21 | F.6 |
| 1082580000 | HDC IP68 10B TOS 1M20 | F.8 |
| 1082590000 | HDC IP68 10B TOS 1M25 | F.8 |
| 1082610000 | HDC IP68 10B TOS 1M32 | F.8 |
| 1082620000 | HDC IP68 10B TOS 1PG16 | F.8 |
| 1082630000 | HDC IP68 10B TOS 1PG21 | F.8 |
| 1082640000 | HDC IP68 10B TOS 1PG29 | F.8 |
| 1082650000 | HDC IP68 10B TSS 1M25 | F.8 |
| 1082660000 | HDC IP68 10B TSS 1M32 | F.8 |
| 1082670000 | HDC IP68 10B TSS 1PG21 | F.8 |
| 1082680000 | HDC IP68 10B TSS 1PG29 | F.8 |
| 1082690000 | HDC IP68 10B TSS 1M20 | F.8 |
| 1082700000 | HDC IP68 16B TOS 1M25 | F.10 |
| 1082710000 | HDC IP68 16B TOS 1M32 | F.10 |
| 1082720000 | HDC IP68 16B TOS 1M40 | F.10 |
| 1082730000 | HDC IP68 16B TOS 1M50 | F.10 |
| 1082740000 | HDC IP68 16B TOS 2PG21 | F.10 |
| 1082750000 | HDC IP68 16B TOS 1PG21 | F.10 |
| 1082760000 | HDC IP68 16B TOS 1PG29 | F.10 |
| 1082770000 | HDC IP68 16B TOS 1PG36 | F.10 |
| 1082780000 | HDC IP68 16B TOS 2M25 | F.10 |
| 1082800000 | HDC IP68 16B TSS 1M32 | F.10 |
| 1082810000 | HDC IP68 16B TSS 1M40 | F.10 |
| 1082820000 | HDC IP68 16B TSS 1M50 | F.10 |
| 1082830000 | HDC IP68 16B TSS 1PG21 | F.10 |
| 1082840000 | HDC IP68 16B TSS 1PG29 | F.10 |
| 1082850000 | HDC IP68 16B TSS 1PG36 | F.10 |
| 1082860000 | HDC IP68 24B TOS 1M32 | F.12 |
| 1082870000 | HDC IP68 24B TOS 1M40 | F.12 |
| 1082880000 | HDC IP68 24B TOS 1M50 | F.12 |
| 1082900000 | HDC IP68 24B TOS 1PG21 | F.12 |
| 1082910000 | HDC IP68 24B TOS 2PG29 | F.12 |
| 1082920000 | HDC IP68 24B TOS 1PG29 | F.12 |
| 1082930000 | HDC IP68 24B TOS 1PG36 | F.12 |
| 1082940000 | HDC IP68 24B TOS 2M32 | F.12 |
| 1082950000 | HDC IP68 24B TOS 2M40 | F.12 |
| 1082960000 | HDC IP68 24B TOS 3M25 | F.12 |
| 1082970000 | HDC IP68 24B TSS 1M32 | F.12 |
| 1082980000 | HDC IP68 24B TSS 1M40 | F.12 |
| 1082990000 | HDC IP68 24B TSS 1M50 | F.12 |
| 1083000000 | HDC IP68 24B TSS 1PG29 | F.12 |
| 1083010000 | HDC IP68 24B TSS 1PG36 | F.12 |
| 1083060000 | HDC IP68 06B COVER | F.7 |
| 1083070000 | HDC IP68 10B COVER | F.9 |
| 1083080000 | HDC IP68 16B COVER | F.11 |
| 1083090000 | HDC IP68 24B COVER | F.13 |
| 1083110000 | HDC IP68 04A COVER | H.9 |
| 1083110000 | HDC IP68 04A COVER | F.5 |
| 1083120000 | HDC IP68 04A ADS 1PG13 | H.9 |
| 1083120000 | HDC IP68 04A ADS 1PG13 | F.5 |
| 1083130000 | HDC IP68 04A ADS | H.9 |
| 1083130000 | HDC IP68 04A ADS | F.5 |
| 1085430000 | CC 30/60 K MC NE RT | M.6 |

## 1090000000

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|---|---|---|
| 1096150000 | IE-BIC-HYB-P-0,5-300 | J.9 |
| 1096150000 | IE-BIC-HYB-P-0,5-300 | D.22 |
| 1096180000 | IE-PIC-HYB-S-0,5-300 | J.9 |
| 1096180000 | IE-PIC-HYB-S-0,5-300 | D.22 |

## 1100000000

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|---|---|---|
| 1103680000 | HDC 06B HP250 MPL1 | J.14 |
| 1103680000 | HDC 06B HP250 MPL1 | C.7 |
| 1103690000 | HDC 24B HP250 MPL2 TYP1 | J.14 |
| 1103690000 | HDC 24B HP250 MPL2 TYP1 | C.7 |
| 1103710000 | HDC 24B HP550 MPL2 TYP1 | C.13 |
| 1103720000 | HDC 24B HP550 MPL3 TYP1 | C.13 |
| 1103740000 | HDC 24B HP250 MPL2 TYP2 | J.14 |
| 1103740000 | HDC 24B HP250 MPL2 TYP2 | C.7 |
| 1103750000 | HDC 24B HP250 MPL3 TYP2 | J.14 |
| 1103750000 | HDC 24B HP250 MPL3 TYP2 | C.7 |
| 1103770000 | HDC 24B HP550 MPL2 TYP2 | C.13 |
| 1103780000 | HDC 24B HP550 MPL3 TYP2 | C.13 |

## 1110000000

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|---|---|---|
| 1110890000 | HDC IP68 06B FRAME M6 | F.7 |
| 1110900000 | HDC IP68 10B FRAME M6 | F.9 |
| 1110910000 | HDC IP68 16B FRAME M6 | F.11 |
| 1110920000 | HDC IP68 24B FRAME M6 | F.13 |
| 1111130000 | HDC 64D TSBU 1M50G | E.36 |
| 1111140000 | HDC 64D TOBU 1M50G | E.36 |
| 1111150000 | HDC 64D TSLU 1M50G | E.38 |
| 1111170000 | HDC 64D TOLU 1M50G | E.38 |
| 1114450000 | THM GEW 30/8 GE | M.8 |
| 1116090000 | HDC CM BUS HE F1 CT | H.5 |
| 1116090000 | HDC CM BUS HE F1 CT | D.17 |
| 1116100000 | HDC CM BUS HE M1 CT | H.5 |
| 1116100000 | HDC CM BUS HE M1 CT | D.17 |
| 1116530000 | HDC-C-HE-BM4.65AU | J.9 |
| 1116530000 | HDC-C-HE-BM4.65AU | J.4 |
| 1116530000 | HDC-C-HE-BM4.65AU | H.6 |
| 1116530000 | HDC-C-HE-BM4.65AU | D.18 |
| 1116540000 | HDC-C-HE-SM4.65AU | J.9 |
| 1116540000 | HDC-C-HE-SM4.65AU | J.4 |
| 1116540000 | HDC-C-HE-SM4.65AU | H.6 |
| 1116540000 | HDC-C-HE-SM4.65AU | D.18 |
| 1118040000 | PWZ RJ45 | H.13 |
| 1118040000 | PWZ RJ45 | H.12 |
| 1119030000 | ERME 10² SPX 4 | K.7 |
| 1119040000 | ERME 16² SPX 4 | K.7 |
| 1119080000 | HDC HP 250 M 50 | J.6 |
| 1119080000 | HDC HP 250 M 50 | C.6 |
| 1119090000 | HDC HP 250 M 70 | J.6 |
| 1119090000 | HDC HP 250 M 70 | C.6 |
| 1119100000 | HDC HP 250 M 95 | J.6 |
| 1119100000 | HDC HP 250 M 95 | C.6 |
| 1119110000 | HDC HP 550 M 150 | J.7 |
| 1119110000 | HDC HP 550 M 150 | C.12 |
| 1119580000 | HTF HYB | J.9 |
| 1119580000 | HTF HYB | D.22 |
| 1119880000 | HDC 24B SL 3X150 | C.13 |
| 1119890000 | HDC 24B SL 3X240 | C.13 |
| 1119900000 | HDC 24B SL 2X95 | C.13 |
| 1119900000 | HDC 24B SL 2X95 | C.7 |
| 1119910000 | HDC 24B SL 2X150 | C.13 |
| 1119920000 | HDC 24B SL 2X240 | C.13 |
| 1119950000 | HDC IP68 24B MD | C.12 |
| 1119950000 | HDC IP68 24B MD | C.7 |
| 1119970000 | HDC IP68 24B MD 3M40 | C.12 |
| 1119970000 | HDC IP68 24B MD 3M40 | C.7 |
| 1119980000 | HDC IP68 24B MD 3M32 | C.12 |
| 1119980000 | HDC IP68 24B MD 3M32 | C.7 |
| 1119990000 | HDC IP68 24B MD 2M40 | C.12 |
| 1119990000 | HDC IP68 24B MD 2M40 | C.7 |

## 1120000000

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|---|---|---|
| 1120000000 | HDC IP68 24B MD 2M32 | C.12 |
| 1120000000 | HDC IP68 24B MD 2M32 | C.7 |
| 1120010000 | HDC IP68 24B MD 2M25 | C.12 |
| 1120010000 | HDC IP68 24B MD 2M25 | C.7 |
| 1120040000 | HDC IP68 HP24 A | C.12 |
| 1120040000 | HDC IP68 HP24 A | C.6 |
| 1120130000 | HDC HP 250 SHOCKPROTEC | C.7 |
| 1120140000 | HDC HP 550 SHOCKPROTEC | C.13 |
| 1120580000 | HDC HP 550 M 185 | J.7 |
| 1120580000 | HDC HP 550 M 185 | C.12 |
| 1120590000 | HDC HP 550 M 240 | J.7 |
| 1120590000 | HDC HP 550 M 240 | C.12 |
| 1120600000 | HDC HP 550 F 240 | J.7 |
| 1120600000 | HDC HP 550 F 240 | C.12 |

## 1130000000

| | | |
|---|---|---|
| 1131380000 | IE-BI-USB-AB | H.14 |
| 1131800000 | SM 27/27 K MC NE GE | M.5 |
| 1131810000 | SM 27/12.5 K MC NE GE | M.5 |
| 1131820000 | SM 27/8 K MC NE GE | M.5 |
| 1131830000 | SM 22/22 K MC NE GE | M.5 |
| 1131890000 | CC 15/60 K MC NE GE | M.6 |
| 1131910000 | CC 15/27 K MC NE GE | M.6 |
| 1131920000 | CC 15/17 K MC NE GE | M.6 |
| 1131970000 | CC 15/49 K MC NE GE | M.6 |
| 1132010000 | IE-PI-RJ45-FH-A | H.12 |
| 1132010000 | IE-PI-RJ45-FH-A | D.21 |
| 1132020000 | IE-PI-RJ45-FH-B | H.12 |
| 1132020000 | IE-PI-RJ45-FH-B | D.21 |
| 1132030000 | IE-PI-RJ45-FH-P | H.12 |
| 1132030000 | IE-PI-RJ45-FH-P | D.21 |
| 1137720000 | HDC 04A CSB MALE | H.4 |
| 1137760000 | HDC 04A CSB FEMALE | H.4 |
| 1138430000 | CC 85/54 K MC NE WS | M.6 |
| 1138440000 | CC 85/54 K MC NE GE | M.6 |
| 1138450000 | CC 85/54 K MC NE GR | M.6 |
| 1138470000 | CC 85/54 K MC SDR | M.6 |
| 1139400000 | MCP BASIC | M.12 |
| 1139880000 | MCP AP BASIC | M.13 |
| 1139890000 | MCP TP-KOF BASIC | M.13 |

## 1150000000

| | | |
|---|---|---|
| 1157800000 | HDC HP 550 M 50 | J.7 |
| 1157800000 | HDC HP 550 M 50 | C.12 |
| 1157970000 | HDC CM ST M | D.21 |
| 1157980000 | HDC CM ST F | D.21 |

## 1160000000

| | | |
|---|---|---|
| 1160390000 | HDC 24B SL 3X16-25 | C.7 |
| 1160400000 | HDC 24B SL 3X50 | C.13 |
| 1160400000 | HDC 24B SL 3X50 | C.7 |
| 1160410000 | HDC 24B SL 2X16-25 | C.7 |
| 1160420000 | HDC 24B SL 2X50 | C.13 |
| 1160420000 | HDC 24B SL 2X50 | C.7 |
| 1160430000 | HDC 24B HP250 MPL4 TYP1 | J.14 |
| 1160430000 | HDC 24B HP250 MPL4 TYP1 | C.7 |
| 1160440000 | HDC 24B HP250 MPL4 TYP2 | J.14 |
| 1160440000 | HDC 24B HP250 MPL4 TYP2 | C.7 |
| 1160450000 | HDC IP68 24B MD 4M25 T1 | C.7 |
| 1165790000 | HDC 32B DODQ 4BO | E.45 |
| 1168850000 | HDC FIXING SC SIZE1 M3x6 | J.21 |

## 1170000000

| | | |
|---|---|---|
| 1177100000 | HDC HP 550 F 50 | J.7 |
| 1177100000 | HDC HP 550 F 50 | C.12 |

## 1190000000

| | | |
|---|---|---|
| 1190490000 | multi-stripax® PV | K.9 |
| 1193570000 | VGM25-SS68 11-20 BG | C.13 |
| 1193570000 | VGM25-SS68 11-20 BG | C.8 |
| 1193580000 | VGM32-SS68 15-25 BG | C.13 |
| 1193580000 | VGM32-SS68 15-25 BG | C.8 |
| 1193590000 | VGM40-SS68 20-32 BG | C.13 |
| 1193590000 | VGM40-SS68 20-32 BG | C.8 |
| 1193600000 | VGM25-MS68 11-20 BG | C.13 |
| 1193600000 | VGM25-MS68 11-20 BG | C.8 |
| 1193610000 | VGM32-MS68 15-25 BG | C.13 |
| 1193610000 | VGM32-MS68 15-25 BG | C.8 |
| 1193620000 | VGM40-MS68 20-32 BG | C.13 |
| 1193620000 | VGM40-MS68 20-32 BG | C.8 |

## 1200000000

| | | |
|---|---|---|
| 1200000000 | HDC HE 6 MS | I.9 |
| 1200000000 | HDC HE 6 MS | I.8 |
| 1200000000 | HDC HE 6 MS | B.20 |
| 1200200000 | HDC HE 6 FS | I.9 |
| 1200200000 | HDC HE 6 FS | I.8 |
| 1200200000 | HDC HE 6 FS | B.20 |
| 1200400000 | HDC HE 6 MC | B.20 |
| 1200500000 | HDC-C-HE-SM0.5AG | J.9 |
| 1200500000 | HDC-C-HE-SM0.5AG | J.4 |
| 1200500000 | HDC-C-HE-SM0.5AG | H.6 |
| 1200600000 | HDC-C-HE-SM0.75-1.00AG | J.9 |
| 1200600000 | HDC-C-HE-SM0.75-1.00AG | J.4 |
| 1200600000 | HDC-C-HE-SM0.75-1.00AG | H.6 |
| 1200700000 | HDC-C-HE-SM1.5AG | J.9 |
| 1200700000 | HDC-C-HE-SM1.5AG | J.4 |
| 1200700000 | HDC-C-HE-SM1.5AG | H.6 |
| 1200800000 | HDC-C-HE-SM2.5AG | J.9 |
| 1200800000 | HDC-C-HE-SM2.5AG | J.4 |
| 1200800000 | HDC-C-HE-SM2.5AG | H.6 |
| 1200900000 | HDC-C-HE-SM4.0AG | J.9 |
| 1200900000 | HDC-C-HE-SM4.0AG | J.4 |
| 1200900000 | HDC-C-HE-SM4.0AG | H.6 |
| 1201000000 | HDC HE 6 FC | B.20 |
| 1201100000 | HDC-C-HE-BM0.5AG | J.9 |
| 1201100000 | HDC-C-HE-BM0.5AG | J.4 |
| 1201100000 | HDC-C-HE-BM0.5AG | H.6 |
| 1201200000 | HDC-C-HE-BM0.75-1.00AG | J.9 |
| 1201200000 | HDC-C-HE-BM0.75-1.00AG | J.4 |
| 1201200000 | HDC-C-HE-BM0.75-1.00AG | H.6 |
| 1201300000 | HDC-C-HE-BM1.5AG | J.9 |
| 1201300000 | HDC-C-HE-BM1.5AG | J.4 |
| 1201300000 | HDC-C-HE-BM1.5AG | H.6 |
| 1201400000 | HDC-C-HE-BM2.5AG | J.9 |
| 1201400000 | HDC-C-HE-BM2.5AG | J.4 |
| 1201400000 | HDC-C-HE-BM2.5AG | H.6 |
| 1201500000 | HDC-C-HE-BM4.0AG | J.9 |
| 1201500000 | HDC-C-HE-BM4.0AG | J.4 |
| 1201500000 | HDC-C-HE-BM4.0AG | H.6 |
| 1202100000 | HDC 06B ALU | I.11 |
| 1202100000 | HDC 06B ALU | I.10 |
| 1202100000 | HDC 06B ALU | I.9 |
| 1202100000 | HDC 06B ALU | I.8 |
| 1202100000 | HDC 06B ALU | E.15 |
| 1202100000 | HDC 06B ALU | D.27 |
| 1202100000 | HDC 06B ALU | D.25 |
| 1202100000 | HDC 06B ALU | B.115 |
| 1202100000 | HDC 06B ALU | B.71 |
| 1202100000 | HDC 06B ALU | B.53 |
| 1202100000 | HDC 06B ALU | B.35 |
| 1202100000 | HDC 06B ALU | B.21 |
| 1202500000 | HDC 06B ADLU | E.15 |
| 1202500000 | HDC 06B ADLU | D.27 |
| 1202500000 | HDC 06B ADLU | D.25 |
| 1202500000 | HDC 06B ADLU | B.115 |
| 1202500000 | HDC 06B ADLU | B.71 |
| 1202500000 | HDC 06B ADLU | B.53 |
| 1202500000 | HDC 06B ADLU | B.35 |
| 1202500000 | HDC 06B ADLU | B.21 |
| 1202660000 | HDC CM GUIDING PIN | J.13 |
| 1202670000 | HDC CM GUIDING SOCKET | J.13 |
| 1203600000 | SPB-M 3 | J.12 |
| 1203900000 | HDC HE 10 MS | I.13 |
| 1203900000 | HDC HE 10 MS | I.12 |
| 1203900000 | HDC HE 10 MS | B.22 |
| 1204100000 | HDC HE 10 FS | I.13 |
| 1204100000 | HDC HE 10 FS | I.12 |
| 1204100000 | HDC HE 10 FS | B.22 |
| 1204280000 | stripping unit M-SPX PV | K.9 |
| 1204300000 | HDC HE 10 MC | B.22 |
| 1204400000 | HDC HE 10 FC | B.22 |
| 1205000000 | HDC 10B ABU | I.15 |
| 1205000000 | HDC 10B ABU | I.14 |
| 1205000000 | HDC 10B ABU | I.13 |
| 1205000000 | HDC 10B ABU | I.12 |
| 1205000000 | HDC 10B ABU | E.17 |
| 1205000000 | HDC 10B ABU | D.31 |
| 1205000000 | HDC 10B ABU | D.29 |
| 1205000000 | HDC 10B ABU | B.117 |
| 1205000000 | HDC 10B ABU | B.85 |
| 1205000000 | HDC 10B ABU | B.73 |
| 1205000000 | HDC 10B ABU | B.55 |
| 1205000000 | HDC 10B ABU | B.37 |
| 1205000000 | HDC 10B ABU | B.23 |
| 1205600000 | HDC 10B ADBO | E.21 |
| 1205890000 | VGM40/1-MS68 20-32 BG | C.13 |
| 1205890000 | VGM40/1-MS68 20-32 BG | C.8 |
| 1205920000 | VGM40/1-SS68 20-32 BG | C.13 |
| 1205920000 | VGM40/1-SS68 20-32 BG | C.8 |
| 1206090000 | HDC 04A TOLU 1M16G | E.6 |
| 1206100000 | HDC 10B ALU | E.19 |
| 1206500000 | HDC 10B ADLU | E.19 |
| 1207500000 | HDC HE 16 MS | I.25 |
| 1207500000 | HDC HE 16 MS | I.24 |
| 1207500000 | HDC HE 16 MS | I.17 |
| 1207500000 | HDC HE 16 MS | I.16 |
| 1207500000 | HDC HE 16 MS | B.28 |
| 1207500000 | HDC HE 16 MS | B.24 |
| 1207700000 | HDC HE 16 FS | I.25 |
| 1207700000 | HDC HE 16 FS | I.24 |
| 1207700000 | HDC HE 16 FS | I.17 |
| 1207700000 | HDC HE 16 FS | I.16 |
| 1207700000 | HDC HE 16 FS | B.28 |
| 1207700000 | HDC HE 16 FS | B.24 |
| 1207900000 | HDC HE 16 MC | B.28 |
| 1207900000 | HDC HE 16 MC | B.24 |
| 1208000000 | HDC HE 16 FC | B.28 |
| 1208000000 | HDC HE 16 FC | B.24 |
| 1208600000 | HDC 16B ABU | I.28 |
| 1208600000 | HDC 16B ABU | I.19 |
| 1208600000 | HDC 16B ABU | I.18 |
| 1208600000 | HDC 16B ABU | I.17 |
| 1208600000 | HDC 16B ABU | I.16 |
| 1208600000 | HDC 16B ABU | E.27 |
| 1208600000 | HDC 16B ABU | D.35 |
| 1208600000 | HDC 16B ABU | D.33 |
| 1208600000 | HDC 16B ABU | B.129 |
| 1208600000 | HDC 16B ABU | B.127 |
| 1208600000 | HDC 16B ABU | B.125 |
| 1208600000 | HDC 16B ABU | B.123 |
| 1208600000 | HDC 16B ABU | B.121 |
| 1208600000 | HDC 16B ABU | B.119 |
| 1208600000 | HDC 16B ABU | B.93 |
| 1208600000 | HDC 16B ABU | B.87 |
| 1208600000 | HDC 16B ABU | B.75 |
| 1208600000 | HDC 16B ABU | B.59 |
| 1208600000 | HDC 16B ABU | B.39 |
| 1208600000 | HDC 16B ABU | B.25 |
| 1208880000 | multi-stripax® POF | K.9 |
| 1209200000 | HDC 16B ADBO | E.31 |
| 1209700000 | HDC 16B ALU | E.29 |

## 1210000000

| | | |
|---|---|---|
| 1210100000 | HDC 16B ADLU | E.29 |
| 1211100000 | HDC HE 24 MS | I.27 |
| 1211100000 | HDC HE 24 MS | I.26 |
| 1211100000 | HDC HE 24 MS | I.21 |
| 1211100000 | HDC HE 24 MS | I.20 |
| 1211100000 | HDC HE 24 MS | B.30 |
| 1211100000 | HDC HE 24 MS | B.26 |
| 1211300000 | HDC HE 24 FS | I.27 |
| 1211300000 | HDC HE 24 FS | I.26 |
| 1211300000 | HDC HE 24 FS | I.21 |
| 1211300000 | HDC HE 24 FS | I.20 |
| 1211300000 | HDC HE 24 FS | B.30 |
| 1211300000 | HDC HE 24 FS | B.26 |
| 1211500000 | HDC HE 24 MC | B.30 |
| 1211500000 | HDC HE 24 MC | B.26 |
| 1211600000 | HDC HE 24 FC | B.30 |
| 1211600000 | HDC HE 24 FC | B.26 |
| 1212400000 | HDC 24B ABU | I.23 |
| 1212400000 | HDC 24B ABU | I.22 |
| 1212400000 | HDC 24B ABU | I.21 |
| 1212400000 | HDC 24B ABU | I.20 |
| 1212400000 | HDC 24B ABU | E.37 |
| 1212400000 | HDC 24B ABU | D.39 |
| 1212400000 | HDC 24B ABU | D.37 |
| 1212400000 | HDC 24B ABU | B.135 |
| 1212400000 | HDC 24B ABU | B.133 |
| 1212400000 | HDC 24B ABU | B.131 |
| 1212400000 | HDC 24B ABU | B.89 |
| 1212400000 | HDC 24B ABU | B.77 |
| 1212400000 | HDC 24B ABU | B.63 |
| 1212400000 | HDC 24B ABU | B.41 |
| 1212400000 | HDC 24B ABU | B.27 |
| 1212770000 | stripping unit M-SPX POF | K.9 |
| 1212890000 | HDC 24B HP250 MPL4PE T1 | J.14 |
| 1212890000 | HDC 24B HP250 MPL4PE T1 | C.7 |
| 1212910000 | HDC 24B HP250 MPL4PE T2 | J.14 |
| 1212910000 | HDC 24B HP250 MPL4PE T2 | C.7 |

| Order No. | Type | Page |
|---|---|---|
| 1213300000 | HDC 24B ADBO | E.40 |
| 1213900000 | HDC 24B ALU | E.39 |
| 1214300000 | HDC 24B ADLU | E.39 |
| 1214500000 | HDC 24B SDLU 2PG21G | E.39 |
| 1215700000 | HDC HE 16 MS 17-32 | I.25 |
| 1215700000 | HDC HE 16 MS 17-32 | I.24 |
| 1215700000 | HDC HE 16 MS 17-32 | B.28 |
| 1215900000 | HDC 06B DC | J.26 |
| 1215910000 | HDC 10B DC | J.26 |
| 1215920000 | HDC 16B DC | J.26 |
| 1215930000 | HDC 24B DC | J.26 |
| 1216100000 | HDC HE 16 FS 17-32 | I.25 |
| 1216100000 | HDC HE 16 FS 17-32 | I.24 |
| 1216100000 | HDC HE 16 FS 17-32 | B.28 |
| 1216500000 | HDC HE 16 MC 17-32 | B.28 |
| 1216700000 | HDC HE 16 FC 17-32 | B.28 |
| 1217800000 | HDC 32B ABU | I.25 |
| 1217800000 | HDC 32B ABU | I.24 |
| 1217800000 | HDC 32B ABU | E.45 |
| 1218800000 | HDC 32B ADBO | E.48 |
| 1219300000 | HDC 32B TOLU 1PG29G | E.46 |
| 1219500000 | HDC 32B ALU | E.47 |
| 1219500000 | HDC 32B ALU | D.41 |
| 1219500000 | HDC 32B ALU | B.95 |
| 1219500000 | HDC 32B ALU | B.79 |
| 1219500000 | HDC 32B ALU | B.65 |
| 1219500000 | HDC 32B ALU | B.43 |
| 1219500000 | HDC 32B ALU | B.29 |
| 1219800000 | HDC 32B ADLU | E.47 |
| 1219800000 | HDC 32B ADLU | D.41 |
| 1219800000 | HDC 32B ADLU | B.95 |
| 1219800000 | HDC 32B ADLU | B.79 |
| 1219800000 | HDC 32B ADLU | B.65 |
| 1219800000 | HDC 32B ADLU | B.43 |
| 1219800000 | HDC 32B ADLU | B.29 |

## 1220000000

| | | |
|---|---|---|
| 1220750000 | HDC 24B SL 4X95 T1 | C.7 |
| 1220760000 | HDC 24B SL 4X50 T1 | C.7 |
| 1220770000 | HDC 24B SL 4X16-25 T1 | C.7 |
| 1220790000 | HDC 24B SL 4X95 T2 | C.7 |
| 1220800000 | HDC HE 24 MS 25-48 | I.27 |
| 1220800000 | HDC HE 24 MS 25-48 | I.26 |
| 1220800000 | HDC HE 24 MS 25-48 | B.30 |
| 1220810000 | HDC 24B SL 4X50 T2 | C.7 |
| 1220820000 | HDC 24B SL 4X16-25 T2 | C.7 |
| 1220840000 | HDC HP 250 F 50 PE | C.6 |
| 1220850000 | HDC HP 250 M 50 PE | C.6 |
| 1220860000 | HDC IP68 24B MD 4M25 T2 | C.7 |
| 1221200000 | HDC HE 24 FS 25-48 | I.27 |
| 1221200000 | HDC HE 24 FS 25-48 | I.26 |
| 1221200000 | HDC HE 24 FS 25-48 | B.30 |
| 1222900000 | HDC 48B ADLU | I.27 |
| 1222900000 | HDC 48B ADLU | I.26 |
| 1222900000 | HDC 48B ADLU | E.49 |
| 1222900000 | HDC 48B ADLU | D.43 |
| 1222900000 | HDC 48B ADLU | B.81 |
| 1222900000 | HDC 48B ADLU | B.67 |
| 1222900000 | HDC 48B ADLU | B.31 |
| 1226400000 | HDC HE 24 MC 25-48 | B.30 |
| 1226600000 | HDC HE 24 FC 25-48 | B.30 |

## 1230000000

| | | |
|---|---|---|
| 1232680000 | HDC 24B SL 3X120 | C.13 |
| 1232690000 | HDC 24B SL 3X185 | C.13 |
| 1232700000 | HDC 24B SL 2X120 | C.13 |
| 1232710000 | HDC 24B SL 2X185 | C.13 |
| 1232720000 | HDC 24B SL 3X35 | C.7 |
| 1232730000 | HDC 24B SL 3X70 | C.13 |
| 1232730000 | HDC 24B SL 3X70 | C.7 |
| 1232740000 | HDC 24B SL 2X35 | C.7 |
| 1232750000 | HDC 24B SL 2X70 | C.13 |
| 1232750000 | HDC 24B SL 2X70 | C.7 |
| 1232760000 | HDC 24B SL 4X70 T1 | C.7 |
| 1232770000 | HDC 24B SL 4X35 T1 | C.7 |
| 1232780000 | HDC 24B SL 4X70 T2 | C.7 |
| 1232790000 | HDC 24B SL 4X35 T2 | C.7 |

## 1240000000

| | | |
|---|---|---|
| 1248550000 | SM 18/9.5 K MC SDR | M.5 |
| 1248560000 | SM 19/42 K MC SDR | M.5 |
| 1248580000 | SM 18/9.5 K MC NE WS | M.5 |
| 1248590000 | SM 18/9.5 K MC NE GE | M.5 |
| 1248610000 | SM 18/9.5 K MC NE GR | M.5 |
| 1248620000 | SM 19/42 K MC NE WS | M.5 |
| 1248630000 | SM 19/42 K MC NE GE | M.5 |
| 1248640000 | SM 19/42 K MC NE GR | M.5 |

## 1270000000

| | | |
|---|---|---|
| 1271250000 | IE-PS-V05M-RJ45-FH-B | H.10 |
| 1276230000 | THM BASIC 300 | M.14 |

## 1280000000

| | | |
|---|---|---|
| 1282820000 | HDC IP68 24B HP FRAME | C.12 |
| 1282820000 | HDC IP68 24B HP FRAME | C.6 |
| 1288320000 | CC 15/17 K MC NE RT | M.6 |
| 1288330000 | CC 15/27 K MC NE RT | M.6 |
| 1288340000 | CC 15/60 K MC NE RT | M.6 |
| 1288380000 | CC 15/49 K MC NE RT | M.6 |
| 1288390000 | CC 85/54 K MC NE RT | M.6 |

## 1470000000

| | | |
|---|---|---|
| 1471300000 | DSTV COST4 | J.13 |
| 1471500000 | DSTV COBU5 | J.13 |

## 1490000000

| | | |
|---|---|---|
| 1497600000 | HDC 04A ALU | I.7 |
| 1497600000 | HDC 04A ALU | I.6 |
| 1497600000 | HDC 04A ALU | I.5 |
| 1497600000 | HDC 04A ALU | I.4 |
| 1497600000 | HDC 04A ALU | H.7 |
| 1497600000 | HDC 04A ALU | E.7 |
| 1497600000 | HDC 04A ALU | B.101 |
| 1497600000 | HDC 04A ALU | B.99 |
| 1497600000 | HDC 04A ALU | B.9 |
| 1497600000 | HDC 04A ALU | B.7 |
| 1497700000 | HDC 04A AWLU | I.7 |
| 1497700000 | HDC 04A AWLU | I.6 |
| 1497700000 | HDC 04A AWLU | I.5 |
| 1497700000 | HDC 04A AWLU | I.4 |
| 1497700000 | HDC 04A AWLU | E.7 |
| 1498100000 | HDC HA 3 MS | I.5 |
| 1498100000 | HDC HA 3 MS | I.4 |
| 1498100000 | HDC HA 3 MS | B.6 |
| 1498200000 | HDC HA 3 FS | I.5 |
| 1498200000 | HDC HA 3 FS | I.4 |
| 1498200000 | HDC HA 3 FS | B.6 |
| 1498300000 | HDC HA 4 MS | I.7 |
| 1498300000 | HDC HA 4 MS | I.6 |
| 1498300000 | HDC HA 4 MS | B.8 |
| 1498400000 | HDC HA 4 FS | I.7 |
| 1498400000 | HDC HA 4 FS | I.6 |
| 1498400000 | HDC HA 4 FS | B.8 |
| 1498700000 | HDC HSB 6 MS | I.28 |
| 1498700000 | HDC HSB 6 MS | B.94 |
| 1498700000 | HDC HSB 6 MS | B.92 |
| 1498800000 | HDC HSB 6 MS 7 - 12 | B.94 |
| 1498900000 | HDC HSB 6 FS | I.28 |
| 1498900000 | HDC HSB 6 FS | B.94 |
| 1498900000 | HDC HSB 6 FS | B.92 |
| 1499000000 | HDC HSB 6 FS 7 - 12 | B.94 |

## 1560000000

| | | |
|---|---|---|
| 1568980000 | VG 9-K68 | L.5 |
| 1568990000 | VG 11-K68 | L.5 |
| 1568990000 | VG 11-K68 | I.7 |
| 1568990000 | VG 11-K68 | I.5 |
| 1569000000 | VG 13,5-K68 | L.5 |
| 1569010000 | VG 16-K68 | L.5 |
| 1569020000 | VG 21-K68 | L.5 |
| 1569030000 | VG 29-K68 | L.5 |
| 1569040000 | VG 36-K68 | L.5 |
| 1569050000 | VG 42-K68 | L.5 |
| 1569070000 | VG 9-MS68 | L.13 |
| 1569080000 | VG 11-MS68 | L.13 |
| 1569080000 | VG 11-MS68 | I.7 |
| 1569080000 | VG 11-MS68 | I.5 |
| 1569090000 | VG 13,5-MS68 | L.13 |
| 1569100000 | VG 16-MS68 | L.13 |
| 1569100000 | VG 16-MS68 | I.15 |
| 1569100000 | VG 16-MS68 | I.13 |
| 1569100000 | VG 16-MS68 | I.11 |
| 1569100000 | VG 16-MS68 | I.9 |
| 1569110000 | VG 21-MS68 | L.13 |
| 1569110000 | VG 21-MS68 | I.28 |
| 1569110000 | VG 21-MS68 | I.23 |
| 1569110000 | VG 21-MS68 | I.21 |
| 1569110000 | VG 21-MS68 | I.19 |
| 1569110000 | VG 21-MS68 | I.17 |
| 1569120000 | VG 29-MS68 | L.13 |
| 1569120000 | VG 29-MS68 | I.27 |
| 1569120000 | VG 29-MS68 | I.25 |
| 1569130000 | VG 36-MS68 | L.13 |
| 1569140000 | VG 42-MS68 | L.13 |

## 1590000000

| | | |
|---|---|---|
| 1595220000 | DSTV TS 6-24 | J.22 |
| 1595230000 | DSTV TS 6 VH | J.22 |
| 1595240000 | DSTV TS 10-24 VH | J.22 |

## 1600000000

| | | |
|---|---|---|
| 1601710000 | HDC HD 40 MC | B.64 |
| 1601710000 | HDC HD 40 MC | B.58 |
| 1601720000 | HDC HD 64 MC | B.66 |
| 1601720000 | HDC HD 64 MC | B.62 |
| 1601730000 | HDC HD 40 FC | B.64 |
| 1601730000 | HDC HD 40 FC | B.58 |
| 1601740000 | HDC HD 64 FC | B.66 |
| 1601740000 | HDC HD 64 FC | B.62 |
| 1601750000 | HDC-C-HD-SM0.75-1.00AG | J.9 |
| 1601750000 | HDC-C-HD-SM0.75-1.00AG | J.4 |
| 1601750000 | HDC-C-HD-SM0.75-1.00AG | H.5 |
| 1601760000 | HDC-C-HD-BM0.75-1.00AG | J.9 |
| 1601760000 | HDC-C-HD-BM0.75-1.00AG | J.4 |
| 1601760000 | HDC-C-HD-BM0.75-1.00AG | H.5 |

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| 1650580000 | HDC HD 7 FC | B.46 |
| 1650590000 | HDC HD 8 MC | B.48 |
| 1650600000 | HDC HD 8 FC | B.48 |
| 1650610000 | HDC HA 10 MS | B.10 |
| 1650620000 | HDC HA 10 FS | B.10 |
| 1650650000 | HDC HD 15 MC | B.50 |
| 1650660000 | HDC HD 15 FC | B.50 |
| 1650710000 | HDC HD 16 MC | B.52 |
| 1650720000 | HDC HD 16 FC | B.52 |
| 1650770000 | HDC HA 16 MS | B.16 |
| 1650770000 | HDC HA 16 MS | B.14 |
| 1650770000 | HDC HA 16 MS | B.12 |
| 1650780000 | HDC HA 16 FS | B.16 |
| 1650780000 | HDC HA 16 FS | B.14 |
| 1650780000 | HDC HA 16 FS | B.12 |
| 1650810000 | HDC HD 25 MC | B.60 |
| 1650810000 | HDC HD 25 MC | B.56 |
| 1650820000 | HDC HD 25 FC | B.60 |
| 1650820000 | HDC HD 25 FC | B.56 |
| 1650850000 | HDC 48B TSLU 1PG29G | I.27 |
| 1650850000 | HDC 48B TSLU 1PG29G | E.49 |
| 1650860000 | HDC 48B TSLU 1PG36G | E.49 |
| 1650870000 | HDC HD 24 MC | B.54 |
| 1650880000 | HDC HA 16 MS 17-32 | B.16 |
| 1650880000 | HDC HA 16 MS 17-32 | B.14 |
| 1650890000 | HDC HD 24 FC | B.54 |
| 1650900000 | HDC HA 16 FS 17-32 | B.16 |
| 1650900000 | HDC HA 16 FS 17-32 | B.14 |
| 1650980000 | HDC 48B TOLU 1PG29G | E.49 |
| 1650990000 | HDC HA 16 MS 33-48 | B.16 |
| 1651000000 | HDC 48B TOLU 1PG36G | E.49 |
| 1651020000 | HDC HA 16 FS 33-48 | B.16 |
| 1651100000 | HDC 48B SLU 1PG29G | E.49 |
| 1651150000 | HDC HDD 24 MC | B.70 |
| 1651160000 | HDC HDD 24 FC | B.70 |
| 1651170000 | HDC HDD 42 MC | B.72 |
| 1651180000 | HDC HDD 42 FC | B.72 |
| 1651190000 | HDC HDD 72 MC | B.78 |
| 1651190000 | HDC HDD 72 MC | B.74 |
| 1651200000 | HDC HDD 72 FC | B.78 |
| 1651200000 | HDC HDD 72 FC | B.74 |
| 1651210000 | HDC HDD 108 MC | B.80 |
| 1651210000 | HDC HDD 108 MC | B.76 |
| 1651220000 | HDC HDD 108 FC | B.80 |
| 1651220000 | HDC HDD 108 FC | B.76 |
| 1651240000 | HDC HDD 72 MC 73-144 | B.78 |
| 1651260000 | HDC HDD 72 FC 73-144 | B.78 |
| 1651280000 | HDC HDD 108 MC 109-216 | B.80 |
| 1651300000 | HDC HDD 108 FC 109-216 | B.80 |
| 1651310000 | HDC HVE 3+2 MS | B.84 |
| 1651320000 | HDC HVE 3+2 FS | B.84 |
| 1651330000 | HDC HVE 6+2 MS | B.86 |
| 1651340000 | HDC HVE 6+2 FS | B.86 |
| 1651350000 | HDC HVE 10+2 MS | B.88 |
| 1651360000 | HDC HVE 10+2 FS | B.88 |
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| 1651440000 | HDC-C-HE-SM1.5AU | H.6 |
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| 1651450000 | HDC-C-HE-SM2.5AU | J.4 |
| 1651450000 | HDC-C-HE-SM2.5AU | H.6 |
| 1651460000 | HDC-C-HE-SM4.0AU | J.9 |
| 1651460000 | HDC-C-HE-SM4.0AU | J.4 |
| 1651460000 | HDC-C-HE-SM4.0AU | H.6 |
| 1651470000 | HDC-C-HE-BM0.5AU | J.9 |
| 1651470000 | HDC-C-HE-BM0.5AU | J.4 |
| 1651470000 | HDC-C-HE-BM0.5AU | H.6 |
| 1651480000 | HDC-C-HE-BM0.75-1.00AU | J.9 |
| 1651480000 | HDC-C-HE-BM0.75-1.00AU | J.4 |
| 1651480000 | HDC-C-HE-BM0.75-1.00AU | H.6 |
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| 1651490000 | HDC-C-HE-BM1.5AU | J.4 |
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| 1651500000 | HDC-C-HE-BM2.5AU | J.4 |
| 1651500000 | HDC-C-HE-BM2.5AU | H.6 |
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| 1651510000 | HDC-C-HE-BM4.0AU | J.4 |
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| 1651520000 | HDC-C-HD-SM0.14-0.37AG | H.5 |
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| 1651530000 | HDC-C-HD-SM0.5AG | J.4 |
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| 1651550000 | HDC-C-HD-SM1.5AG | J.4 |
| 1651550000 | HDC-C-HD-SM1.5AG | H.5 |
| 1651560000 | HDC-C-HD-SM2.5AG | J.9 |
| 1651560000 | HDC-C-HD-SM2.5AG | J.4 |
| 1651560000 | HDC-C-HD-SM2.5AG | H.5 |
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| 1651580000 | HDC-C-HD-BM0.5AG | H.5 |
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| 1651610000 | HDC-C-HD-BM2.5AG | J.4 |
| 1651610000 | HDC-C-HD-BM2.5AG | H.5 |
| 1651620000 | HDC-C-HD-SM0.14-0.37AU | J.9 |
| 1651620000 | HDC-C-HD-SM0.14-0.37AU | J.4 |
| 1651620000 | HDC-C-HD-SM0.14-0.37AU | H.5 |
| 1651630000 | HDC-C-HD-SM0.5AU | J.9 |
| 1651630000 | HDC-C-HD-SM0.5AU | J.4 |
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| 1651640000 | HDC-C-HD-SM0.75-1.00AU | J.4 |
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| 1651650000 | HDC-C-HD-SM1.5AU | J.9 |
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| 1651660000 | HDC-C-HD-SM2.5AU | J.4 |
| 1651660000 | HDC-C-HD-SM2.5AU | H.5 |
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| 1651670000 | HDC-C-HD-BM0.14-0.37AU | J.4 |
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| 1651680000 | HDC-C-HD-BM0.5AU | J.9 |
| 1651680000 | HDC-C-HD-BM0.5AU | J.4 |
| 1651680000 | HDC-C-HD-BM0.5AU | H.5 |
| 1651690000 | HDC-C-HD-BM0.75-1.00AU | J.9 |
| 1651690000 | HDC-C-HD-BM0.75-1.00AU | J.4 |
| 1651690000 | HDC-C-HD-BM0.75-1.00AU | H.5 |
| 1651700000 | HDC-C-HD-BM1.5AU | J.9 |
| 1651700000 | HDC-C-HD-BM1.5AU | J.4 |
| 1651700000 | HDC-C-HD-BM1.5AU | H.5 |
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| 1665230000 | HDC 10B DODQ 4BO | B.85 |
| 1665230000 | HDC 10B DODQ 4BO | B.73 |
| 1665230000 | HDC 10B DODQ 4BO | B.55 |
| 1665230000 | HDC 10B DODQ 4BO | B.37 |
| 1665230000 | HDC 10B DODQ 4BO | B.23 |
| 1665240000 | HDC 10B DMDQ 2QB | E.16 |
| 1665240000 | HDC 10B DMDQ 2QB | D.31 |
| 1665240000 | HDC 10B DMDQ 2QB | D.29 |
| 1665240000 | HDC 10B DMDQ 2QB | B.117 |
| 1665240000 | HDC 10B DMDQ 2QB | B.85 |
| 1665240000 | HDC 10B DMDQ 2QB | B.73 |
| 1665240000 | HDC 10B DMDQ 2QB | B.55 |
| 1665240000 | HDC 10B DMDQ 2QB | B.37 |
| 1665240000 | HDC 10B DMDQ 2QB | B.23 |
| 1665250000 | HDC 10B DMDQ 4BO | E.21 |
| 1665260000 | HDC 16B DODQ 4BO | E.27 |
| 1665260000 | HDC 16B DODQ 4BO | D.35 |
| 1665260000 | HDC 16B DODQ 4BO | D.33 |
| 1665260000 | HDC 16B DODQ 4BO | B.129 |
| 1665260000 | HDC 16B DODQ 4BO | B.127 |
| 1665260000 | HDC 16B DODQ 4BO | B.125 |
| 1665260000 | HDC 16B DODQ 4BO | B.123 |
| 1665260000 | HDC 16B DODQ 4BO | B.121 |
| 1665260000 | HDC 16B DODQ 4BO | B.119 |
| 1665260000 | HDC 16B DODQ 4BO | B.93 |
| 1665260000 | HDC 16B DODQ 4BO | B.87 |
| 1665260000 | HDC 16B DODQ 4BO | B.75 |
| 1665260000 | HDC 16B DODQ 4BO | B.59 |
| 1665260000 | HDC 16B DODQ 4BO | B.39 |
| 1665260000 | HDC 16B DODQ 4BO | B.25 |
| 1665270000 | HDC 16B DMDQ 2QB | E.26 |
| 1665270000 | HDC 16B DMDQ 2QB | D.35 |
| 1665270000 | HDC 16B DMDQ 2QB | D.33 |
| 1665270000 | HDC 16B DMDQ 2QB | B.129 |
| 1665270000 | HDC 16B DMDQ 2QB | B.127 |
| 1665270000 | HDC 16B DMDQ 2QB | B.125 |
| 1665270000 | HDC 16B DMDQ 2QB | B.123 |
| 1665270000 | HDC 16B DMDQ 2QB | B.121 |
| 1665270000 | HDC 16B DMDQ 2QB | B.119 |
| 1665270000 | HDC 16B DMDQ 2QB | B.93 |
| 1665270000 | HDC 16B DMDQ 2QB | B.87 |
| 1665270000 | HDC 16B DMDQ 2QB | B.75 |
| 1665270000 | HDC 16B DMDQ 2QB | B.59 |
| 1665270000 | HDC 16B DMDQ 2QB | B.39 |
| 1665270000 | HDC 16B DMDQ 2QB | B.25 |
| 1665300000 | HDC 16A SDLU 2PG16G | E.25 |
| 1665450000 | HDC 16A KLU 1PG16G | E.25 |
| 1665620000 | HDC 16B DMDQ 4BO | E.30 |
| 1665630000 | HDC 24B DODQ 4BO | E.37 |
| 1665630000 | HDC 24B DODQ 4BO | D.39 |
| 1665630000 | HDC 24B DODQ 4BO | D.37 |
| 1665630000 | HDC 24B DODQ 4BO | B.135 |
| 1665630000 | HDC 24B DODQ 4BO | B.133 |
| 1665630000 | HDC 24B DODQ 4BO | B.131 |
| 1665630000 | HDC 24B DODQ 4BO | B.89 |
| 1665630000 | HDC 24B DODQ 4BO | B.77 |
| 1665630000 | HDC 24B DODQ 4BO | B.63 |
| 1665630000 | HDC 24B DODQ 4BO | B.41 |
| 1665630000 | HDC 24B DODQ 4BO | B.27 |
| 1665640000 | HDC 24B DMDQ 2QB | E.36 |
| 1665640000 | HDC 24B DMDQ 2QB | D.39 |
| 1665640000 | HDC 24B DMDQ 2QB | D.37 |
| 1665640000 | HDC 24B DMDQ 2QB | B.135 |
| 1665640000 | HDC 24B DMDQ 2QB | B.133 |
| 1665640000 | HDC 24B DMDQ 2QB | B.131 |
| 1665640000 | HDC 24B DMDQ 2QB | B.89 |
| 1665640000 | HDC 24B DMDQ 2QB | B.77 |
| 1665640000 | HDC 24B DMDQ 2QB | B.63 |
| 1665640000 | HDC 24B DMDQ 2QB | B.41 |
| 1665640000 | HDC 24B DMDQ 2QB | B.27 |
| 1665650000 | HDC 24B DMDQ 4BO | E.40 |
| 1665670000 | HDC 32A TSBU 1PG21G | E.32 |
| 1665690000 | HDC 32A TSBU 1PG29G | E.32 |
| 1665740000 | HDC 04A DODL 2BO | H.7 |
| 1665740000 | HDC 04A DODL 2BO | E.7 |
| 1665740000 | HDC 04A DODL 2BO | B.101 |
| 1665740000 | HDC 04A DODL 2BO | B.99 |
| 1665740000 | HDC 04A DODL 2BO | B.9 |
| 1665740000 | HDC 04A DODL 2BO | B.7 |
| 1665750000 | HDC 04A DMDL 2BO | H.7 |
| 1665750000 | HDC 04A DMDL 2BO | E.7 |
| 1665750000 | HDC 04A DMDL 2BO | B.101 |
| 1665750000 | HDC 04A DMDL 2BO | B.99 |
| 1665750000 | HDC 04A DMDL 2BO | B.9 |
| 1665750000 | HDC 04A DMDL 2BO | B.7 |
| 1665760000 | HDC 07A DODL 2BO | E.5 |
| 1665760000 | HDC 07A DODL 2BO | B.49 |
| 1665760000 | HDC 07A DODL 2BO | B.47 |
| 1665770000 | HDC 07A DMDL 2BO | E.5 |
| 1665770000 | HDC 07A DMDL 2BO | B.49 |
| 1665770000 | HDC 07A DMDL 2BO | B.47 |
| 1665790000 | HDC 32A TOBU 1PG21G | E.32 |
| 1665810000 | HDC 32A TOBU 1PG29G | E.32 |
| 1665860000 | HDC 32A ABU | E.33 |
| 1665860000 | HDC 32A ABU | B.61 |
| 1665860000 | HDC 32A ABU | B.15 |
| 1665880000 | HDC 10A DMDL 2BO | E.13 |
| 1665880000 | HDC 10A DMDL 2BO | B.51 |
| 1665880000 | HDC 10A DMDL 2BO | B.11 |
| 1665890000 | HDC 10A DODL 1LB | E.12 |
| 1665890000 | HDC 10A DODL 1LB | B.51 |
| 1665890000 | HDC 10A DODL 1LB | B.11 |
| 1665900000 | HDC 16A DODL 1LB | E.24 |
| 1665900000 | HDC 16A DODL 1LB | B.57 |
| 1665900000 | HDC 16A DODL 1LB | B.13 |
| 1665910000 | HDC 16A DMDL 2BO | E.25 |
| 1665910000 | HDC 16A DMDL 2BO | B.57 |
| 1665910000 | HDC 16A DMDL 2BO | B.13 |
| 1665920000 | HDC 32A DODQ 4BO | E.33 |
| 1665930000 | HDC 32A DMDQ 2QB | E.32 |
| 1665940000 | ADS/6-1/9 | J.24 |
| 1665950000 | ADS/6-2/9 | J.24 |
| 1665980000 | HDC 32A SBU 2PG21G | E.33 |
| 1666010000 | HDC 32A SBU 1PG29G | E.33 |
| 1666200000 | ADS/6-1/15 | J.24 |
| 1666210000 | ADS/6-2/15 | J.24 |
| 1666220000 | ADS/10-1/25 | J.24 |
| 1666230000 | ADS/10-2/25 | J.24 |
| 1666270000 | HDC 32A TSBO 1PG29G | E.34 |
| 1666320000 | ADS/16-1/25 | J.24 |
| 1666330000 | ADS/16-2/25 | J.24 |
| 1666340000 | ADS/16-1/37 | J.24 |
| 1666350000 | ADS/16-2/37 | J.24 |
| 1666440000 | HDC 32A ADBO | E.34 |
| 1666460000 | ADS/16-1/50 | J.24 |
| 1666550000 | HDC 32A SDBO 1PG21G | E.34 |
| 1666590000 | HDC 32A SDBO 1PG29G | E.34 |
| 1666710000 | HDC 48A TSLU 1PG29G | E.42 |
| 1666730000 | HDC 48A TOLU 1PG29G | E.42 |
| 1666740000 | HDC 48A ALU | E.43 |
| 1666740000 | HDC 48A ALU | B.17 |
| 1666750000 | HDC 48A ADLU | E.43 |
| 1666750000 | HDC 48A ADLU | B.17 |
| 1666770000 | HDC 48A SLU 1PG29G | E.43 |
| 1666810000 | HDC 48A SDLU 1PG29G | E.43 |
| 1666840000 | HDC 32B TSBU 1PG29G | I.25 |
| 1666840000 | HDC 32B TSBU 1PG29G | E.44 |
| 1666870000 | HDC 32B TOBU 1PG29G | E.44 |
| 1666920000 | HDC 32B SBU 2PG29G | E.45 |
| 1667120000 | HDC 32B TSLU 1PG29G | E.46 |
| 1667560000 | HDC 48B SDLU 2PG29G | E.49 |

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| 1670470000 | HDC 48B TSLU 1PG42G | E.49 |
| 1670500000 | HDC 06B TOLU 1PG13G | E.14 |
| 1670530000 | HDC 06B TSLU 1PG13G | E.14 |
| 1674760000 | ESG 9/17 K NEUTRAL/WS | M.4 |
| 1674770000 | ESG 9/17 K SONDERDRUCK | M.4 |

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| 1682260000 | HDC-C-M3-SM4.0AG | J.8 |
| 1682260000 | HDC-C-M3-SM4.0AG | D.9 |
| 1682260000 | HDC-C-M3-SM4.0AG | D.4 |
| 1682270000 | HDC-C-M3-BM4.0AG | J.8 |
| 1682270000 | HDC-C-M3-BM4.0AG | D.9 |
| 1682270000 | HDC-C-M3-BM4.0AG | D.4 |
| 1682280000 | HDC-C-M3-SM6.0AG | J.8 |
| 1682280000 | HDC-C-M3-SM6.0AG | D.9 |
| 1682280000 | HDC-C-M3-SM6.0AG | D.4 |
| 1682290000 | HDC-C-M3-BM6.0AG | J.8 |
| 1682290000 | HDC-C-M3-BM6.0AG | D.9 |
| 1682290000 | HDC-C-M3-BM6.0AG | D.4 |
| 1682300000 | HDC-C-M3-SM10.0AG | J.8 |
| 1682300000 | HDC-C-M3-SM10.0AG | D.9 |
| 1682300000 | HDC-C-M3-SM10.0AG | D.4 |
| 1682310000 | HDC-C-M3-BM10.0AG | J.8 |
| 1682310000 | HDC-C-M3-BM10.0AG | D.9 |
| 1682310000 | HDC-C-M3-BM10.0AG | D.4 |
| 1682320000 | HDC-C-M5-SM0.5AG | J.8 |
| 1682320000 | HDC-C-M5-SM0.5AG | D.7 |
| 1682330000 | HDC-C-M5-BM0.5AG | J.8 |
| 1682330000 | HDC-C-M5-BM0.5AG | D.7 |
| 1682340000 | HDC-C-M5-SM0.75-1.0AG | J.8 |
| 1682340000 | HDC-C-M5-SM0.75-1.0AG | D.7 |
| 1682350000 | HDC-C-M5-BM0.75-1.0AG | J.8 |
| 1682350000 | HDC-C-M5-BM0.75-1.0AG | D.7 |
| 1682360000 | HDC-C-M5-SM1.5AG | J.8 |
| 1682360000 | HDC-C-M5-SM1.5AG | D.7 |
| 1682370000 | HDC-C-M5-BM1.5AG | J.8 |
| 1682370000 | HDC-C-M5-BM1.5AG | D.7 |
| 1682380000 | HDC-C-M5-SM2.5AG | J.8 |
| 1682380000 | HDC-C-M5-SM2.5AG | D.7 |
| 1682390000 | HDC-C-M5-BM2.5AG | J.8 |
| 1682390000 | HDC-C-M5-BM2.5AG | D.7 |
| 1682400000 | HDC-C-M5-SM4.0AG | J.8 |
| 1682400000 | HDC-C-M5-SM4.0AG | D.7 |
| 1682410000 | HDC-C-M5-BM4.0AG | J.8 |
| 1682410000 | HDC-C-M5-BM4.0AG | D.7 |
| 1686360001 | LM MT300 15X6 SI I | M.7 |
| 1686361044 | LM MT300 15X6 WS | M.7 |
| 1686361687 | LM MT300 15X6 GE | M.7 |
| 1686380001 | LM MT300 20X8 SI | M.7 |
| 1686381044 | LM MT300 20X8 WS | M.7 |
| 1686381687 | LM MT300 20X8 GE | M.7 |
| 1686390001 | LM MT300 25,4X12,7 SI | M.7 |
| 1686391044 | LM MT300 25,4X12,7 WS | M.7 |
| 1686391687 | LM MT300 25,4X12,7 GE | M.7 |
| 1686400001 | LM MT300 26X10 SI | M.7 |
| 1686401044 | LM MT300 26X10 WS | M.7 |
| 1686401687 | LM MT300 26X10 GE | M.7 |
| 1686420001 | LM MT300 56X22 SI | M.7 |
| 1686421044 | LM MT300 56X22 WS | M.7 |
| 1686421687 | LM MT300 56X22 GE | M.7 |
| 1686430001 | LM MT300 60X36 SI | M.7 |
| 1686431044 | LM MT300 60X36 WS | M.7 |
| 1686431687 | LM MT300 60X36 GE | M.7 |
| 1686440001 | LM MT300 210X297 SI | M.7 |
| 1686441044 | LM MT300 210X297 WS | M.7 |
| 1686441687 | LM MT300 210X297 GE | M.7 |
| 1688200000 | HDC-DW-M0D | K.25 |

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| 1698120000 | HDC-C-M3-SM1.5AG | J.8 |
| 1698120000 | HDC-C-M3-SM1.5AG | D.9 |
| 1698120000 | HDC-C-M3-SM1.5AG | D.4 |
| 1698130000 | HDC-C-M3-BM1.5AG | J.8 |
| 1698130000 | HDC-C-M3-BM1.5AG | D.9 |
| 1698130000 | HDC-C-M3-BM1.5AG | D.4 |
| 1698140000 | HDC-C-M3-SM2.5AG | J.8 |
| 1698140000 | HDC-C-M3-SM2.5AG | D.9 |
| 1698140000 | HDC-C-M3-SM2.5AG | D.4 |
| 1698150000 | HDC-C-M3-BM2.5AG | J.8 |
| 1698150000 | HDC-C-M3-BM2.5AG | D.9 |
| 1698150000 | HDC-C-M3-BM2.5AG | D.4 |
| 1699880000 | SM 27/12.5 K WS NEUTR. | M.5 |
| 1699890000 | SM 27/12.5 K SONDERDRUCK | M.5 |

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| 1706860000 | VG EMV PG 9/11 | L.14 |

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| 1706870000 | VG EMV PG 11 | L.14 |
| 1706880000 | VG EMV PG 13,5 | L.14 |
| 1706890000 | VG EMV PG 16 K14 | L.14 |
| 1706900000 | VG EMV PG 21 K18 | L.14 |
| 1706910000 | VG EMV PG 29 K26 | L.14 |
| 1706940000 | VG EMV M20X1,5 | L.14 |
| 1706950000 | VG EMV M25X1,5 | L.14 |
| 1707270000 | SM 27/18 K MC NE WS | M.5 |
| 1707280000 | SM 27/18 K SONDERDRUCK | M.5 |

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|---|---|---|
| 1712460000 | HDC-KIT-HE 06.100 | I.9 |
| 1712510000 | HDC-KIT-HE 10.110 | I.13 |
| 1712520000 | HDC-KIT-HE 16.120 | I.17 |
| 1712530000 | HDC-KIT-HE 24.130 | I.21 |
| 1712540000 | HDC-KIT-HE 32.140 | I.25 |
| 1712550000 | HDC-KIT-HE 48.150 | I.27 |
| 1712560000 | HDC-KIT-HA 03.300 | I.5 |
| 1712570000 | HDC-KIT-HA 03.301 | I.5 |
| 1712580000 | HDC-KIT-HA 03.302 | I.5 |
| 1712590000 | HDC-KIT-HA 04.400 | I.7 |
| 1712600000 | HDC-KIT-HA 04.401 | I.7 |
| 1712610000 | HDC-KIT-HA 04.402 | I.7 |
| 1712630000 | HDC-KIT-HA 03.404 | I.5 |
| 1712650000 | HDC-KIT-HA 04.406 | I.7 |
| 1712660000 | HDC-KIT-HE 06.101 | I.9 |
| 1712670000 | HDC-KIT-HE 10.111 | I.13 |
| 1712680000 | HDC-KIT-HE 16.121 | I.17 |
| 1712690000 | HDC-KIT-HE 24.131 | I.21 |
| 1713690000 | SM 27/8 K SONDERDRUCK | M.5 |
| 1713720000 | SM 27/12.5 K SI NEUTRAL | M.5 |
| 1713760000 | SM 27/18 K NEUTRAL SI | M.5 |
| 1713880000 | VG EMV PG 16 K18 | L.14 |
| 1713890000 | VG EMV PG K28 | L.14 |
| 1713900000 | VG EMV PG 29 K29 | L.14 |
| 1718770000 | VG 48-K68 | L.5 |
| 1718780000 | VG 48-MS54 | L.7 |
| 1718790000 | VG 48-MS68 | L.13 |
| 1718810000 | VG 9-MS54-ZE | L.9 |
| 1718820000 | VG 11-MS54-ZE | L.9 |
| 1718830000 | VG 13,5-MS54-ZE | L.9 |
| 1718840000 | VG 16-MS54-ZE | L.9 |
| 1718850000 | VG 21-MS54-ZE | L.9 |
| 1718860000 | VG 29-MS54-ZE | L.9 |
| 1718870000 | VG 36-MS54-ZE | L.9 |
| 1718880000 | VG 42-MS54-ZE | L.9 |
| 1718890000 | VG 48-MS54-ZE | L.9 |
| 1719250000 | VP 7-K54 | L.21 |
| 1719260000 | VP 48-K54 | L.21 |
| 1719270000 | VP 48-MS65 | L.22 |
| 1719440000 | GWDR PG7-PO | L.19 |
| 1719450000 | GWDR PG9-PO | L.19 |
| 1719460000 | GWDR PG11-PO | L.19 |
| 1719470000 | GWDR PG13,5-PO | L.19 |
| 1719480000 | GWDR PG16-PO | L.19 |
| 1719490000 | GWDR PG21-PO | L.19 |
| 1719500000 | GWDR PG29-PO | L.19 |
| 1719510000 | GWDR PG36-PO | L.19 |
| 1719520000 | GWDR PG42-PO | L.19 |
| 1719530000 | GWDR PG48-PO | L.19 |
| 1719540000 | GWDR PG7-NP | L.20 |
| 1719550000 | GWDR PG9-NP | L.20 |
| 1719560000 | GWDR PG11-NP | L.20 |
| 1719570000 | GWDR PG13,5-NP | L.20 |
| 1719580000 | GWDR PG16-NP | L.20 |
| 1719590000 | GWDR PG21-NP | L.20 |
| 1719600000 | GWDR PG29-NP | L.20 |
| 1719610000 | GWDR PG36-NP | L.20 |
| 1719620000 | GWDR PG42-NP | L.20 |
| 1719630000 | GWDR PG48-NP | L.20 |

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| 1720480000 | VG 9-K68 SKS | L.6 |
| 1720490000 | VG 11-K68 SKS | L.6 |
| 1720500000 | VG 13,5-K68 SKS | L.6 |
| 1720510000 | VG 16-K68 SKS | L.6 |
| 1720520000 | VG 21-K68 SKS | L.6 |
| 1720570000 | ETO SM 27/8 | M.5 |
| 1720580000 | ETO SM 27/12,5 | M.5 |
| 1720590002 | ETO SM 27/18 TRANSPAR. | M.5 |
| 1724000000 | HDC-KIT-HSB 06.500 | I.28 |
| 1724140001 | LM MT300 15X4,63 SI | M.7 |
| 1724141044 | LM MT300 15X4,63 WS | M.7 |
| 1724141687 | LM MT300 15X4,63 GE | M.7 |
| 1724150001 | LM MT300 17X9 SI | M.7 |
| 1724151044 | LM MT300 17X9 WS | M.7 |
| 1724151687 | LM MT300 17X9 GE | M.7 |
| 1724160001 | LM MT300 30X20 SI | M.7 |
| 1724161044 | LM MT300 30X20 WS | M.7 |
| 1724161687 | LM MT300 30X20 GE | M.7 |
| 1724170001 | LM MT300 105X148 SI | M.7 |
| 1724171044 | LM MT300 105X148 WS | M.7 |
| 1724171687 | LM MT300 105X148 GE | M.7 |
| 1724180001 | LM MT300 210X148 SI | M.7 |
| 1724181044 | LM MT300 210X148 WS | M.7 |
| 1724181687 | LM MT300 210X148 GE | M.7 |

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| 1730120000 | HDC-CM-4SZF AG | D.6 |
| 1730130000 | HDC-CM-4BZF AG | D.6 |
| 1736230000 | GWDR M16-NP | L.20 |
| 1736240000 | GWDR M20-NP | L.20 |
| 1736250000 | GWDR M25-NP | L.20 |
| 1736260000 | GWDR M32-NP | L.20 |
| 1736270000 | GWDR M40-NP | L.20 |
| 1736280000 | GWDR M50-NP | L.20 |
| 1736290000 | GWDR M63-NP | L.20 |
| 1737220000 | VG M20-EXE MS | L.17 |
| 1737230000 | VG M25-EXE MS | L.17 |
| 1737240000 | VG M32-EXE MS | L.17 |
| 1737640000 | ADAP EX 3/4NPT-M20 | L.18 |
| 1737800000 | ADAP EX 3/4NPT-M25 | L.18 |
| 1737950000 | ADAP EX 3/4NPT-M32 | L.18 |
| 1738400000 | ADAP EX 3/4NPT-1/2NPT | L.18 |
| 1738560000 | ADAP EX 3/4NPT-3/4NPT | L.18 |

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| 1745760000 | HDC HE 6 FT | B.20 |
| 1745770000 | HDC HE 10 FT | B.22 |
| 1745780000 | HDC HE 16 FT | B.28 |
| 1745780000 | HDC HE 16 FT | B.24 |
| 1745790000 | HDC HE 24 FT | B.30 |
| 1745790000 | HDC HE 24 FT | B.26 |
| 1745800000 | HDC HE 16 FT 17-32 | B.28 |
| 1745810000 | HDC HE 24 FT 25-48 | B.30 |
| 1745820000 | HDC HE 6 MT | B.20 |
| 1745830000 | HDC HE 10 MT | B.22 |
| 1745840000 | HDC HE 16 MT | B.28 |
| 1745840000 | HDC HE 16 MT | B.24 |
| 1745850000 | HDC HE 24 MT | B.30 |
| 1745850000 | HDC HE 24 MT | B.26 |
| 1745860000 | HDC HE 16 MT 17-32 | B.28 |
| 1745870000 | HDC HE 24 MT 25-48 | B.30 |
| 1746060000 | MODUFLEX C-CR | D.45 |
| 1746070000 | MODUFLEX C-MW | D.45 |
| 1746170000 | HDC 10A TOLU 2PG11G | E.12 |
| 1749320001 | LM MT300 18X6,5 SI | M.7 |
| 1749321044 | LM MT300 18X6,5 WS | M.7 |
| 1749321687 | LM MT300 18X6,5 GE | M.7 |

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|---|---|---|
| 1751750001 | THM MT30X 25/12 SI/M | M.8 |
| 1751751044 | THM MT30X 25/12 WS/M | M.8 |
| 1751751687 | THM MT30X 25/12 GE/M | M.8 |
| 1751760001 | THM MT30X 26/10 SI/M | M.8 |
| 1751761044 | THM MT30X 26/10 WS/M | M.8 |
| 1751761687 | THM MT30X 26/10 GE/M | M.8 |
| 1751770001 | THM MT30X 32/9 SI/M | M.8 |
| 1751771044 | THM MT30X 32/9 WS/M | M.8 |
| 1751800001 | THM MT30X 38/19 SI/M | M.8 |
| 1751801044 | THM MT30X 38/19 WS/M | M.8 |
| 1751801687 | THM MT30X 38/19 GE/M | M.8 |
| 1751810001 | THM MT30X 45/23 SI/M | M.8 |
| 1751811044 | THM MT30X 45/23 WS/M | M.8 |
| 1751811687 | THM MT30X 45/23 GE/M | M.8 |
| 1751820001 | THM MT30X 101/48 SI/M | M.8 |
| 1751821044 | THM MT30X 101/48 WS/M | M.8 |
| 1751821687 | THM MT30X 101/48 GE/M | M.8 |
| 1751830001 | THM MT30X 65/35 SI/M | M.8 |
| 1751831044 | THM MT30X 65/35 WS/M | M.8 |
| 1751831687 | THM MT30X 65/35 GE/M | M.8 |
| 1752970000 | MODUFLEX C-MH/ZE | D.46 |
| 1753230001 | THM MT30X 15/6 SI/M | M.8 |
| 1753231044 | THM MT30X 15/6 WS/M | M.8 |
| 1753231687 | THM MT30X 15/6 GE/M | M.8 |
| 1753240001 | THM MT30X 20/8 SI/M | M.8 |
| 1753241044 | THM MT30X 20/8 WS/M | M.8 |
| 1753241687 | THM MT30X 20/8 GE/M | M.8 |
| 1753250001 | THM MT30X 18/9 SI/M | M.8 |
| 1753251044 | THM MT30X 18/9 WS/M | M.8 |
| 1753251687 | THM MT30X 18/9 GE/M | M.8 |
| 1753260001 | THM MT30X 30/20 SI/M | M.8 |
| 1753261044 | THM MT30X 30/20 WS/M | M.8 |
| 1753261687 | THM MT30X 30/20 GE/M | M.8 |
| 1753270001 | THM MT30X 18/6 SI/M | M.8 |
| 1753271044 | THM MT30X 18/6 WS/M | M.8 |
| 1753271687 | THM MT30X 18/6 GE/M | M.8 |
| 1753500000 | ESG 9/17 K NEUTRAL/GE | M.4 |
| 1758360000 | HDC CM 3 MC | D.4 |
| 1758370000 | HDC CM 3 FC | D.4 |
| 1758380000 | HDC CM 5 MC | D.7 |
| 1758390000 | HDC CM 5 FC | D.7 |
| 1758400000 | HDC CM 10 MC | D.8 |
| 1758410000 | HDC CM 10 FC | D.8 |
| 1758440000 | HDC-CR6-2S GR | D.24 |
| 1758450000 | HDC-CR6-2B GR | D.24 |
| 1758460000 | HDC-CR10-3S GR | D.28 |
| 1758470000 | HDC-CR10-3B GR | D.28 |
| 1758480000 | HDC-CR16-5S GR | D.40 |
| 1758480000 | HDC-CR16-5S GR | D.32 |
| 1758490000 | HDC-CR16-5B GR | D.40 |
| 1758490000 | HDC-CR16-5B GR | D.32 |
| 1758500000 | HDC-CR24-7S GR | D.42 |
| 1758500000 | HDC-CR24-7S GR | D.36 |

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| 1758510000 | HDC-CR24-7B GR | D.42 |
| 1758510000 | HDC-CR24-7B GR | D.36 |
| 1758520000 | HDC-CR16-5S-2 GR | D.40 |
| 1758530000 | HDC-CR16-5B-2 GR | D.40 |
| 1758540000 | HDC-CR24-7S-2 GR | D.42 |
| 1758550000 | HDC-CR24-7B-2 GR | D.42 |

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| 1760461044 | LM MT300 40X6 WS | M.7 |
| 1762440000 | ADAPTER ALU STI-S | M.13 |
| 1762960001 | THM MT30x 101/74 si | M.8 |
| 1765570000 | MODUFLEX C-KITO.M.MW-1F | D.46 |
| 1765580000 | MODUFLEX C-KITO.M.MW-2F | D.46 |
| 1765590000 | MODUFLEX C-KITO.M.MW-3F | D.46 |
| 1765600000 | MODUFLEX C-KITO.M.MW-4F | D.46 |
| 1765610000 | MODUFLEX C-KITO.M.MW-5F | D.46 |
| 1766120000 | PTSC KB 3.0X6 WN1412 | D.46 |
| 1766120000 | PTSC KB 3.0X6 WN1412 | D.45 |
| 1766130000 | ABST.BOLZ.M3X27+KLSC-KI | D.46 |
| 1766130000 | ABST.BOLZ.M3X27+KLSC-KI | D.45 |
| 1768540000 | Plotterpen 0,25 | M.13 |
| 1768550000 | Plotterpen 0,35 | M.13 |
| 1768560000 | Plotterpen 0,5 | M.13 |
| 1768570000 | Plotterpen 0,18 | M.13 |

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| 1770090000 | THM MT30x 26,5/17,5 SI/M | M.8 |
| 1770410000 | VG EMV PG36 K32-27 | L.14 |
| 1771930000 | SM 27/8 K SI NEUTRAL | M.5 |
| 1772120000 | Tinte 2000 25ml | M.13 |
| 1772130000 | Reiniger 2000 25ml | M.13 |
| 1772210000 | VG M16 - MS 68 | L.13 |
| 1772220000 | VG M20 - MS 68 | L.13 |
| 1772220000 | VG M20 - MS 68 | I.10 |
| 1772220000 | VG M20 - MS 68 | I.8 |
| 1772220000 | VG M20 - MS 68 | I.6 |
| 1772220000 | VG M20 - MS 68 | I.4 |
| 1772230000 | VG M25 - MS 68 | L.13 |
| 1772230000 | VG M25 - MS 68 | I.18 |
| 1772230000 | VG M25 - MS 68 | I.16 |
| 1772230000 | VG M25 - MS 68 | I.14 |
| 1772230000 | VG M25 - MS 68 | I.12 |
| 1772240000 | VG M32 - MS 68 | L.13 |
| 1772240000 | VG M32 - MS 68 | I.24 |
| 1772240000 | VG M32 - MS 68 | I.22 |
| 1772240000 | VG M32 - MS 68 | I.20 |
| 1772250000 | VG M40 - MS 68 | L.13 |
| 1772250000 | VG M40 - MS 68 | I.26 |
| 1772270000 | VG M63 - MS 68 | L.13 |
| 1772290000 | VG M16 - K 68 | L.5 |
| 1772300000 | VG M20-1/K68 | L.5 |
| 1772300000 | VG M20-1/K68 | I.6 |
| 1772300000 | VG M20-1/K68 | I.4 |
| 1772310000 | VG M25 - K 68 | L.5 |
| 1772320000 | VG M32 - K 68 | L.5 |
| 1772330000 | VG M40 - K 68 | L.5 |
| 1772340000 | VG M50 - K 68 | L.5 |
| 1772350000 | VG M63-1/K68 | L.5 |
| 1773630000 | HDC-C-HD-S-LWL1.0POF | J.10 |
| 1773640000 | HDC-C-HD-B-LWL1.0POF | J.10 |
| 1776710000 | VGM16-K68 SKS | L.6 |
| 1776720000 | VGM20-K68 SKS 10,0-14,0 | L.6 |
| 1776730000 | VGM25-K68 SKS | L.6 |
| 1776900000 | VP M25 K54 | L.21 |
| 1776910000 | VP M20 K54 | L.21 |
| 1776920000 | VP M16 K54 | L.21 |
| 1776930000 | VP M12 K54 | L.21 |
| 1776940000 | VP M32 K54 | L.21 |
| 1776950000 | VP M40 K54 | L.21 |
| 1776960000 | VP M50 K54 | L.21 |
| 1776970000 | VP M63 K54 | L.21 |
| 1777720000 | VP M12-MS65 | L.22 |
| 1777730000 | VP M16-MS65 | L.22 |
| 1777740000 | VP M20-MS65 | L.22 |
| 1777750000 | VP M25-MS65 | L.22 |
| 1777760000 | VP M32-MS65 | L.22 |
| 1777770000 | VP M40-MS65 | L.22 |
| 1777780000 | VP M50-MS65 | L.22 |
| 1777790000 | VP M63-MS65 | L.22 |
| 1777920000 | GWDR M12-PO | L.19 |
| 1777930000 | GWDR M16-PO | L.19 |
| 1777940000 | GWDR M20-PO | L.19 |
| 1777950000 | GWDR M25-PO | L.19 |
| 1777960000 | GWDR M32-PO | L.19 |
| 1777970000 | GWDR M40-PO | L.19 |
| 1777980000 | GWDR M50-PO | L.19 |
| 1777990000 | GWDR M63-PO | L.19 |
| 1778150000 | VG NPT 3/4" Eex-e MS | L.17 |
| 1778150000 | VG NPT 3/4" Eex-e MS | G.4 |
| 1778170000 | THM MT30x 101/150 SI/G | M.8 |
| 1778300000 | VGM63-MS54 | L.7 |
| 1778310000 | VGM50-MS54 KB 39,0-41,0 | L.7 |
| 1778320000 | VGM50-MS54 KB 31,0-33,0 | L.7 |
| 1778330000 | VGM40-MS54 | L.7 |
| 1778340000 | VGM32-MS54 | L.7 |
| 1778350000 | VGM25-MS54 KB 15,0-17,0 | L.7 |
| 1778360000 | VGM25-MS54 KB 12,0-14,0 | L.7 |
| 1778370000 | VGM20-MS54 KB 10,0-12,0 | L.7 |

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| 1778380000 | VGM20-MS54 KB 8,0-10,0 | L.7 |
| 1778390000 | VGM16-MS54 | L.7 |
| 1778440000 | VGM16-MS54 ZE | L.9 |
| 1778450000 | VGM20-MS54 ZE | L.9 |
| 1778460000 | VGM20-MS54 ZE 6,0-13,5 | L.9 |
| 1778480000 | VGM25-MS54 ZE | L.9 |
| 1778490000 | VGM32-MS54 ZE | L.9 |
| 1778500000 | VGM40-MS54 ZE | L.9 |
| 1778520000 | VGM50-MS54 ZE | L.9 |
| 1778530000 | VGM63-MS54 ZE | L.9 |
| 1778860000 | VGM20-K68 SKS 6,0-12,0 | L.6 |

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| 1782990000 | SM 27/27 K SI NEUTRAL | M.5 |
| 1783000000 | SM 27/27 K WS NEUTRAL | M.5 |
| 1783010000 | SM 27/27 K SONDERDRUCK | M.5 |
| 1783250000 | HDC 10A KLU 2PG09G | E.13 |
| 1784340000 | LM MT300 26,5/17,5 SI | M.7 |
| 1786770000 | HDC 64D TSBU 1M32G | E.36 |
| 1786770000 | HDC 64D TSBU 1M32G | D.39 |
| 1786770000 | HDC 64D TSBU 1M32G | D.37 |
| 1786770000 | HDC 64D TSBU 1M32G | B.135 |
| 1786770000 | HDC 64D TSBU 1M32G | B.133 |
| 1786770000 | HDC 64D TSBU 1M32G | B.131 |
| 1786770000 | HDC 64D TSBU 1M32G | B.89 |
| 1786770000 | HDC 64D TSBU 1M32G | B.77 |
| 1786770000 | HDC 64D TSBU 1M32G | B.63 |
| 1786770000 | HDC 64D TSBU 1M32G | B.41 |
| 1786770000 | HDC 64D TSBU 1M32G | B.27 |
| 1786780000 | HDC 64D TSBU 1M25G | E.36 |
| 1786780000 | HDC 64D TSBU 1M25G | D.39 |
| 1786780000 | HDC 64D TSBU 1M25G | D.37 |
| 1786780000 | HDC 64D TSBU 1M25G | B.135 |
| 1786780000 | HDC 64D TSBU 1M25G | B.133 |
| 1786780000 | HDC 64D TSBU 1M25G | B.131 |
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| 1786780000 | HDC 64D TSBU 1M25G | B.77 |
| 1786780000 | HDC 64D TSBU 1M25G | B.63 |
| 1786780000 | HDC 64D TSBU 1M25G | B.41 |
| 1786780000 | HDC 64D TSBU 1M25G | B.27 |
| 1786790000 | HDC 64D TSBO 1M32G | E.40 |
| 1786800000 | HDC 64D TSBO 1M25G | E.40 |
| 1786810000 | HDC 64D TSLU 1M32G | E.38 |
| 1786830000 | HDC 64D TOBU 1M32G | E.36 |
| 1786830000 | HDC 64D TOBU 1M32G | D.39 |
| 1786830000 | HDC 64D TOBU 1M32G | D.37 |
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| 1786830000 | HDC 64D TOBU 1M32G | B.27 |
| 1786860000 | HDC 64D TOLU 1M32G | E.38 |
| 1786870000 | HDC 64D TOLU 1M25G | E.38 |
| 1786880000 | HDC 64D SBU 2M32G | E.37 |
| 1786880000 | HDC 64D SBU 2M32G | D.39 |
| 1786880000 | HDC 64D SBU 2M32G | D.37 |
| 1786880000 | HDC 64D SBU 2M32G | B.135 |
| 1786880000 | HDC 64D SBU 2M32G | B.133 |
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| 1786880000 | HDC 64D SBU 2M32G | B.77 |
| 1786880000 | HDC 64D SBU 2M32G | B.63 |
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| 1786890000 | HDC 64D SBU 2M25G | B.133 |
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| 1786890000 | HDC 64D SBU 2M25G | B.41 |
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| 1786900000 | HDC 64D SLU 2M32G | E.39 |
| 1786910000 | HDC 64D SLU 2M25G | E.39 |
| 1786920000 | HDC 64D SDBO 2M32G | E.40 |
| 1786940000 | HDC 64D SDLU 2M32G | E.39 |
| 1786950000 | HDC 64D SDLU 2M25G | E.39 |
| 1786960000 | HDC 64D KBU 1M32G | E.37 |
| 1786960000 | HDC 64D KBU 1M32G | D.39 |
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| 1786960000 | HDC 64D KBU 1M32G | B.27 |
| 1787000000 | HDC 40D TSBU 1M32G | E.26 |
| 1787000000 | HDC 40D TSBU 1M32G | D.35 |
| 1787000000 | HDC 40D TSBU 1M32G | D.33 |
| 1787000000 | HDC 40D TSBU 1M32G | B.129 |
| 1787000000 | HDC 40D TSBU 1M32G | B.127 |

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| 1787000000 | HDC 40D TSBU 1M32G | B.125 |
| 1787000000 | HDC 40D TSBU 1M32G | B.123 |
| 1787000000 | HDC 40D TSBU 1M32G | B.121 |
| 1787000000 | HDC 40D TSBU 1M32G | B.119 |
| 1787000000 | HDC 40D TSBU 1M32G | B.93 |
| 1787000000 | HDC 40D TSBU 1M32G | B.87 |
| 1787000000 | HDC 40D TSBU 1M32G | B.75 |
| 1787000000 | HDC 40D TSBU 1M32G | B.59 |
| 1787000000 | HDC 40D TSBU 1M32G | B.39 |
| 1787000000 | HDC 40D TSBU 1M32G | B.25 |
| 1787010000 | HDC 40D TSBU 1M25G | E.26 |
| 1787010000 | HDC 40D TSBU 1M25G | D.35 |
| 1787010000 | HDC 40D TSBU 1M25G | D.33 |
| 1787010000 | HDC 40D TSBU 1M25G | B.129 |
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| 1787010000 | HDC 40D TSBU 1M25G | B.119 |
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| 1787010000 | HDC 40D TSBU 1M25G | B.25 |
| 1787020000 | HDC 40D TSBO 1M32G | E.30 |
| 1787030000 | HDC 40D TSBO 1M25G | E.30 |
| 1787040000 | HDC 40D TSLU 1M32G | E.28 |
| 1787050000 | HDC 40D TSLU 1M25G | E.28 |
| 1787060000 | HDC 40D TOBU 1M32G | E.26 |
| 1787060000 | HDC 40D TOBU 1M32G | D.35 |
| 1787060000 | HDC 40D TOBU 1M32G | D.33 |
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| 1787060000 | HDC 40D TOBU 1M32G | B.127 |
| 1787060000 | HDC 40D TOBU 1M32G | B.125 |
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| 1787060000 | HDC 40D TOBU 1M32G | B.39 |
| 1787060000 | HDC 40D TOBU 1M32G | B.25 |
| 1787070000 | HDC 40D TOBU 1M25G | E.26 |
| 1787070000 | HDC 40D TOBU 1M25G | D.35 |
| 1787070000 | HDC 40D TOBU 1M25G | D.33 |
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| 1787070000 | HDC 40D TOBU 1M25G | B.127 |
| 1787070000 | HDC 40D TOBU 1M25G | B.125 |
| 1787070000 | HDC 40D TOBU 1M25G | B.123 |
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| 1787070000 | HDC 40D TOBU 1M25G | B.25 |
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| 1787110000 | HDC 40D SBU 2M32G | E.27 |
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| 1787110000 | HDC 40D SBU 2M32G | D.33 |
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| 1787120000 | HDC 40D SBU 2M25G | D.35 |
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| 1787120000 | HDC 40D SBU 2M25G | B.25 |
| 1787170000 | HDC 40D SDLU 2M32G | E.29 |
| 1787180000 | HDC 40D SDLU 2M25G | E.29 |
| 1787190000 | HDC 40D KBU 1M32G | E.27 |
| 1787190000 | HDC 40D KBU 1M32G | D.35 |
| 1787190000 | HDC 40D KBU 1M32G | D.33 |
| 1787190000 | HDC 40D KBU 1M32G | B.129 |
| 1787190000 | HDC 40D KBU 1M32G | B.127 |
| 1787190000 | HDC 40D KBU 1M32G | B.125 |
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| 1787190000 | HDC 40D KBU 1M32G | B.93 |
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| 1787190000 | HDC 40D KBU 1M32G | B.25 |
| 1787200000 | HDC 40D KBU 1M25G | E.27 |
| 1787200000 | HDC 40D KBU 1M25G | D.35 |
| 1787200000 | HDC 40D KBU 1M25G | D.33 |
| 1787200000 | HDC 40D KBU 1M25G | B.129 |
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| 1787200000 | HDC 40D KBU 1M25G | B.39 |
| 1787200000 | HDC 40D KBU 1M25G | B.25 |
| 1787220000 | HDC 40D KLU 1M25G | E.29 |
| 1787230000 | HDC 24D TSBU 1M32G | E.16 |
| 1787230000 | HDC 24D TSBU 1M32G | D.31 |
| 1787230000 | HDC 24D TSBU 1M32G | D.29 |
| 1787230000 | HDC 24D TSBU 1M32G | B.117 |
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| 1788240000 | HDC 16B SBU 2M25G | E.27 |
| 1788240000 | HDC 16B SBU 2M25G | D.35 |
| 1788240000 | HDC 16B SBU 2M25G | D.33 |
| 1788240000 | HDC 16B SBU 2M25G | B.129 |
| 1788240000 | HDC 16B SBU 2M25G | B.127 |
| 1788240000 | HDC 16B SBU 2M25G | B.125 |
| 1788240000 | HDC 16B SBU 2M25G | B.123 |
| 1788240000 | HDC 16B SBU 2M25G | B.121 |
| 1788240000 | HDC 16B SBU 2M25G | B.119 |
| 1788240000 | HDC 16B SBU 2M25G | B.93 |
| 1788240000 | HDC 16B SBU 2M25G | B.87 |
| 1788240000 | HDC 16B SBU 2M25G | B.75 |
| 1788240000 | HDC 16B SBU 2M25G | B.59 |
| 1788240000 | HDC 16B SBU 2M25G | B.39 |
| 1788240000 | HDC 16B SBU 2M25G | B.25 |
| 1788250000 | HDC 16B SLU 2M25G | E.29 |
| 1788260000 | HDC 16B SDBO 2M25G | E.31 |
| 1788270000 | HDC 16B SDLU 2M25G | E.29 |
| 1788290000 | HDC 16B KLU 1M25G | E.29 |
| 1788300000 | HDC 48B TSLU 1M50G | E.49 |
| 1788300000 | HDC 48B TSLU 1M50G | D.43 |
| 1788300000 | HDC 48B TSLU 1M50G | B.81 |
| 1788300000 | HDC 48B TSLU 1M50G | B.67 |
| 1788300000 | HDC 48B TSLU 1M50G | B.31 |
| 1788310000 | HDC 48B TSLU 1M40G | I.26 |
| 1788310000 | HDC 48B TSLU 1M40G | E.49 |
| 1788310000 | HDC 48B TSLU 1M40G | D.43 |
| 1788310000 | HDC 48B TSLU 1M40G | B.81 |
| 1788310000 | HDC 48B TSLU 1M40G | B.67 |
| 1788310000 | HDC 48B TSLU 1M40G | B.31 |
| 1788320000 | HDC 48B TSLU 1M32G | E.49 |
| 1788320000 | HDC 48B TSLU 1M32G | D.43 |
| 1788320000 | HDC 48B TSLU 1M32G | B.81 |
| 1788320000 | HDC 48B TSLU 1M32G | B.67 |
| 1788320000 | HDC 48B TSLU 1M32G | B.31 |
| 1788330000 | HDC 48B TOLU 1M50G | E.49 |
| 1788330000 | HDC 48B TOLU 1M50G | D.43 |
| 1788330000 | HDC 48B TOLU 1M50G | B.81 |
| 1788330000 | HDC 48B TOLU 1M50G | B.67 |
| 1788330000 | HDC 48B TOLU 1M50G | B.31 |
| 1788340000 | HDC 48B TOLU 1M40G | E.49 |
| 1788350000 | HDC 48B TOLU 1M32G | E.49 |
| 1788350000 | HDC 48B TOLU 1M32G | D.43 |
| 1788350000 | HDC 48B TOLU 1M32G | B.81 |
| 1788350000 | HDC 48B TOLU 1M32G | B.67 |
| 1788350000 | HDC 48B TOLU 1M32G | B.31 |
| 1788360000 | HDC 48B SLU 2M40G | E.49 |
| 1788360000 | HDC 48B SLU 2M40G | D.43 |
| 1788360000 | HDC 48B SLU 2M40G | B.81 |
| 1788360000 | HDC 48B SLU 2M40G | B.67 |
| 1788360000 | HDC 48B SLU 2M40G | B.31 |
| 1788370000 | HDC 48B SLU 2M32G | E.49 |
| 1788370000 | HDC 48B SLU 2M32G | D.43 |
| 1788370000 | HDC 48B SLU 2M32G | B.81 |
| 1788370000 | HDC 48B SLU 2M32G | B.67 |
| 1788370000 | HDC 48B SLU 2M32G | B.31 |
| 1788390000 | HDC 48B SDLU 2M32G | E.49 |
| 1788390000 | HDC 48B SDLU 2M32G | D.43 |
| 1788390000 | HDC 48B SDLU 2M32G | B.81 |
| 1788390000 | HDC 48B SDLU 2M32G | B.67 |
| 1788390000 | HDC 48B SDLU 2M32G | B.31 |
| 1788400000 | HDC 32B TSBU 1M32G | I.24 |
| 1788400000 | HDC 32B TSBU 1M32G | E.44 |
| 1788410000 | HDC 32B TSBO 1M32G | E.48 |
| 1788420000 | HDC 32B TSLU 1M32G | E.46 |
| 1788420000 | HDC 32B TSLU 1M32G | D.41 |
| 1788420000 | HDC 32B TSLU 1M32G | B.95 |
| 1788420000 | HDC 32B TSLU 1M32G | B.79 |
| 1788420000 | HDC 32B TSLU 1M32G | B.65 |
| 1788420000 | HDC 32B TSLU 1M32G | B.43 |
| 1788420000 | HDC 32B TSLU 1M32G | B.29 |
| 1788430000 | HDC 32B TOBU 1M32G | E.44 |
| 1788450000 | HDC 32B TOLU 1M32G | E.46 |
| 1788460000 | HDC 32B SBU 2M32G | E.45 |
| 1788470000 | HDC 32B SLU 2M32G | E.47 |
| 1788470000 | HDC 32B SLU 2M32G | D.41 |
| 1788470000 | HDC 32B SLU 2M32G | B.95 |
| 1788470000 | HDC 32B SLU 2M32G | B.79 |
| 1788470000 | HDC 32B SLU 2M32G | B.65 |
| 1788470000 | HDC 32B SLU 2M32G | B.43 |
| 1788470000 | HDC 32B SLU 2M32G | B.29 |
| 1788490000 | HDC 32B SDLU 2M32G | E.47 |
| 1788490000 | HDC 32B SDLU 2M32G | D.41 |
| 1788490000 | HDC 32B SDLU 2M32G | B.95 |
| 1788490000 | HDC 32B SDLU 2M32G | B.79 |
| 1788490000 | HDC 32B SDLU 2M32G | B.65 |
| 1788490000 | HDC 32B SDLU 2M32G | B.43 |
| 1788490000 | HDC 32B SDLU 2M32G | B.29 |
| 1788500000 | HDC 32B KLU 1M32G | E.47 |
| 1788500000 | HDC 32B KLU 1M32G | D.41 |
| 1788500000 | HDC 32B KLU 1M32G | B.95 |
| 1788500000 | HDC 32B KLU 1M32G | B.79 |
| 1788500000 | HDC 32B KLU 1M32G | B.65 |
| 1788500000 | HDC 32B KLU 1M32G | B.43 |
| 1788500000 | HDC 32B KLU 1M32G | B.29 |
| 1788510000 | HDC 07A TWLU 1M20G | E.4 |
| 1788510000 | HDC 07A TWLU 1M20G | B.49 |
| 1788510000 | HDC 07A TWLU 1M20G | B.47 |
| 1788520000 | HDC 07A TOLU 1M20G | I.6 |
| 1788520000 | HDC 07A TOLU 1M20G | I.4 |
| 1788520000 | HDC 07A TOLU 1M20G | E.4 |
| 1788520000 | HDC 07A TOLU 1M20G | B.49 |
| 1788520000 | HDC 07A TOLU 1M20G | B.47 |
| 1788530000 | HDC 07A SLU 1M20G | E.5 |
| 1788530000 | HDC 07A SLU 1M20G | B.49 |
| 1788530000 | HDC 07A SLU 1M20G | B.47 |
| 1788540000 | HDC 07A KOLU 1M20G | E.5 |
| 1788540000 | HDC 07A KOLU 1M20G | B.49 |
| 1788540000 | HDC 07A KOLU 1M20G | B.47 |
| 1788550000 | HDC 48A TSLU 1M32G | E.42 |
| 1788550000 | HDC 48A TSLU 1M32G | B.17 |
| 1788560000 | HDC 48A TOLU 1M32G | E.42 |
| 1788560000 | HDC 48A TOLU 1M32G | B.17 |
| 1788570000 | HDC 48A SLU 2M32G | E.43 |
| 1788570000 | HDC 48A SLU 2M32G | B.17 |
| 1788610000 | HDC 10A TOLU 1M25G | E.12 |
| 1788610000 | HDC 10A TOLU 1M25G | B.51 |
| 1788610000 | HDC 10A TOLU 1M25G | B.11 |
| 1788620000 | HDC 10A TOLU 1M20G | E.12 |
| 1788620000 | HDC 10A TOLU 1M20G | B.51 |
| 1788620000 | HDC 10A TOLU 1M20G | B.11 |
| 1788630000 | HDC 10A SLU 2M25G | E.13 |
| 1788630000 | HDC 10A SLU 2M25G | B.51 |
| 1788630000 | HDC 10A SLU 2M25G | B.11 |
| 1788640000 | HDC 10A SLU 2M20G | E.13 |
| 1788640000 | HDC 10A SLU 2M20G | B.51 |
| 1788640000 | HDC 10A SLU 2M20G | B.11 |
| 1788650000 | HDC 10A SDLU 2M25G | E.13 |
| 1788650000 | HDC 10A SDLU 2M25G | B.51 |
| 1788650000 | HDC 10A SDLU 2M25G | B.11 |
| 1788660000 | HDC 10A SDLU 2M20G | E.13 |
| 1788660000 | HDC 10A SDLU 2M20G | B.51 |
| 1788660000 | HDC 10A SDLU 2M20G | B.11 |
| 1788670000 | HDC 10A KLU 1M25G | E.13 |
| 1788670000 | HDC 10A KLU 1M25G | B.51 |
| 1788670000 | HDC 10A KLU 1M25G | B.11 |
| 1788680000 | HDC 25A TSLU 1M20G | E.24 |
| 1788680000 | HDC 25A TSLU 1M20G | B.57 |
| 1788680000 | HDC 25A TSLU 1M20G | B.13 |
| 1788690000 | HDC 25A TSLU 1M25G | E.24 |
| 1788690000 | HDC 25A TSLU 1M25G | B.57 |
| 1788690000 | HDC 25A TSLU 1M25G | B.13 |
| 1788700000 | HDC 25A TOLU 1M25G | E.24 |
| 1788700000 | HDC 25A TOLU 1M25G | B.57 |
| 1788700000 | HDC 25A TOLU 1M25G | B.13 |
| 1788710000 | HDC 25A TOLU 1M20G | E.24 |
| 1788710000 | HDC 25A TOLU 1M20G | B.57 |
| 1788710000 | HDC 25A TOLU 1M20G | B.13 |
| 1788740000 | HDC 16A TSLU 1M25G | E.24 |
| 1788740000 | HDC 16A TSLU 1M25G | B.57 |
| 1788740000 | HDC 16A TSLU 1M25G | B.13 |
| 1788750000 | HDC 16A TOLU 1M25G | E.24 |
| 1788750000 | HDC 16A TOLU 1M25G | B.57 |
| 1788750000 | HDC 16A TOLU 1M25G | B.13 |
| 1788760000 | HDC 16A SLU 2M25G | E.25 |
| 1788760000 | HDC 16A SLU 2M25G | B.57 |
| 1788760000 | HDC 16A SLU 2M25G | B.13 |
| 1788770000 | HDC 16A SLU 2M20G | E.25 |
| 1788770000 | HDC 16A SLU 2M20G | B.57 |
| 1788770000 | HDC 16A SLU 2M20G | B.13 |
| 1788780000 | HDC 16A SDLU 2M25G | E.25 |
| 1788780000 | HDC 16A SDLU 2M25G | B.57 |
| 1788780000 | HDC 16A SDLU 2M25G | B.13 |
| 1788790000 | HDC 16A SDLU 2M20G | E.25 |
| 1788790000 | HDC 16A SDLU 2M20G | B.57 |
| 1788790000 | HDC 16A SDLU 2M20G | B.13 |
| 1788800000 | HDC 16A KLU 1M25G | E.25 |
| 1788800000 | HDC 16A KLU 1M25G | B.57 |
| 1788800000 | HDC 16A KLU 1M25G | B.13 |
| 1788810000 | HDC 04A TWLU 1M20G | H.7 |
| 1788810000 | HDC 04A TWLU 1M20G | E.6 |
| 1788810000 | HDC 04A TWLU 1M20G | B.101 |
| 1788810000 | HDC 04A TWLU 1M20G | B.99 |
| 1788810000 | HDC 04A TWLU 1M20G | B.9 |
| 1788810000 | HDC 04A TWLU 1M20G | B.7 |
| 1788820000 | HDC 04A TOLU 1M20G | I.6 |
| 1788820000 | HDC 04A TOLU 1M20G | I.4 |
| 1788820000 | HDC 04A TOLU 1M20G | H.7 |
| 1788820000 | HDC 04A TOLU 1M20G | E.6 |
| 1788820000 | HDC 04A TOLU 1M20G | B.101 |
| 1788820000 | HDC 04A TOLU 1M20G | B.99 |
| 1788820000 | HDC 04A TOLU 1M20G | B.9 |
| 1788820000 | HDC 04A TOLU 1M20G | B.7 |
| 1788830000 | HDC 04A SLU 1M20G | H.7 |
| 1788830000 | HDC 04A SLU 1M20G | E.7 |
| 1788830000 | HDC 04A SLU 1M20G | B.101 |
| 1788830000 | HDC 04A SLU 1M20G | B.99 |
| 1788830000 | HDC 04A SLU 1M20G | B.9 |
| 1788830000 | HDC 04A SLU 1M20G | B.7 |
| 1788840000 | HDC 04A KOLU 1M20G | H.7 |
| 1788840000 | HDC 04A KOLU 1M20G | E.7 |
| 1788840000 | HDC 04A KOLU 1M20G | B.101 |
| 1788840000 | HDC 04A KOLU 1M20G | B.99 |
| 1788840000 | HDC 04A KOLU 1M20G | B.9 |
| 1788840000 | HDC 04A KOLU 1M20G | B.7 |
| 1788850000 | HDC 15A TSLU 1M25G | E.12 |
| 1788850000 | HDC 15A TSLU 1M25G | B.51 |
| 1788850000 | HDC 15A TSLU 1M25G | B.11 |
| 1788860000 | HDC 15A TSLU 1M20G | E.12 |
| 1788860000 | HDC 15A TSLU 1M20G | B.51 |
| 1788860000 | HDC 15A TSLU 1M20G | B.11 |
| 1789960000 | HDC S4 0 SAS | B.118 |
| 1789970000 | HDC S4 0 BAS | B.118 |
| 1789980000 | HDC S4 BAS | B.114 |
| 1789990000 | HDC S4 SAS | B.114 |
| 1790000000 | HDC S6 12 SAS | B.126 |
| 1790010000 | HDC S6 12 BAS | B.126 |
| 1790020000 | HDC S6 6 BAS | B.132 |
| 1790030000 | HDC S6 6 SAS | B.132 |
| 1790650000 | RIBBON THM HIRES | M.14 |
| 1799810000 | HDC 48B SDLU 1PG29G | E.49 |


## 1800000000


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|---|---|---|
| 1802360000 | HDC-KIT-HE 48.150 M | I.26 |
| 1802370000 | HDC-KIT-HE 32.140 M | I.24 |
| 1802380000 | HDC-KIT-HE 24.130 M | I.20 |
| 1802390000 | HDC-KIT-HE 16.121 M | I.16 |
| 1802400000 | HDC-KIT-HE 16.120 M | I.16 |
| 1802410000 | HDC-KIT-HE 10.111 M | I.12 |
| 1802420000 | HDC-KIT-HE 10.110 M | I.12 |
| 1802430000 | HDC-KIT-HA 04.401 M | I.6 |
| 1802440000 | HDC-KIT-HA 04.400 M | I.6 |
| 1802450000 | HDC-KIT-HA 03.302 M | I.4 |
| 1802460000 | HDC-KIT-HA 03.301 M | I.4 |
| 1802470000 | HDC-KIT-HA 03.300 M | I.4 |
| 1802480000 | HDC-KIT-HE 24.131 M | I.20 |
| 1802700000 | HDC KIT HA 04.402 M | I.6 |
| 1802720000 | HDC KIT HA 04.406 M | I.6 |
| 1802730000 | HDC KIT HE 06.100 M | I.8 |
| 1802740000 | HDC KIT HE 06.101 M | I.8 |
| 1804610000 | HDC 64D TSLU 1M40G | E.38 |
| 1804630000 | HDC 16B TOLU 1M32G | E.28 |
| 1804640000 | HDC 16B TSLU 1M32G | E.28 |
| 1804650000 | HDC 40D TSLU 1M40G | E.28 |
| 1804660000 | HDC 40D SLU 2M32G | E.29 |
| 1805840000 | ETO SM 27/27 | M.5 |
| 1806030000 | HDC CM BUS 2BS T PBDP | D.15 |
| 1806060000 | HDC CM BUS 2SS PBDP | D.15 |
| 1806630000 | IS 2 KG | K.24 |
| 1806630000 | IS 2 KG | B.111 |
| 1806650000 | IS 3 KG | K.24 |
| 1806650000 | IS 3 KG | B.111 |
| 1806660000 | IS 4 KG | K.24 |
| 1806660000 | IS 4 KG | B.111 |
| 1809620000 | HDC 16B TSBU 1M40G | E.26 |
| 1809630000 | HDC 64D TSBU 1M40G | E.36 |


## 1810000000


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|---|---|---|
| 1812630000 | SM 27/8 K WS NEUTRAL | M.5 |
| 1814300000 | HDC CM BUS 4BS | D.14 |
| 1814310000 | HDC CM BUS 4SS | D.14 |


## 1820000000


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|---|---|---|
| 1826770000 | HDC HEE 46 SCM | B.40 |
| 1826780000 | HDC HEE 46 BCM | B.40 |
| 1826790000 | HDC HEE 32 SCM | B.42 |
| 1826790000 | HDC HEE 32 SCM | B.38 |
| 1826800000 | HDC HEE 32 BCM | B.42 |
| 1826800000 | HDC HEE 32 BCM | B.38 |
| 1826810000 | HDC HEE 18 SCM | B.36 |
| 1826820000 | HDC HEE 18 BCM | B.36 |
| 1826830000 | HDC HEE 10 SCM | B.34 |
| 1826840000 | HDC HEE 10 BCM | B.34 |
| 1827160000 | HDC HB 24 TEK TSS1xM50G | F.14 |
| 1827170000 | HDC HB 24 TEK TOS1xM50G | F.14 |
| 1827470000 | HDC HB 24 TEK AS M4 | F.15 |
| 1828380000 | HDC CM 2 MS | D.10 |
| 1828390000 | HDC CM 1 MS +PE | D.10 |
| 1828400000 | HDC CM 2 FS | D.10 |
| 1828410000 | HDC CM 1 FS +PE | D.10 |


## 1830000000


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|---|---|---|
| 1835820000 | LM MT300 17x6 GE | M.7 |
| 1835830000 | LM MT300 19.05x6.3 GE | M.7 |


## 1850000000


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|---|---|---|
| 1852520000 | THM MT30x 16/7 GE | M.8 |
| 1852540000 | THM MT30x 57/27 SI | M.8 |
| 1855680000 | HDC-HB10 AWWL FD | J.25 |
| 1856650000 | THM MT30X 17/9 GE/M | M.8 |
| 1857440000 | ESG 9/11K MC NEUTRAL | M.4 |
| 1857450000 | ESG 9/11 K SONDERDRUCK | M.4 |


## 1860000000


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|---|---|---|
| 1861510000 | LM MT300 27/8 GE | M.7 |
| 1861900000 | HDC CM HE 4 FC | D.5 |
| 1861920000 | HDC CM HE 4 MC | D.5 |
| 1862060000 | HDC CM HV 3 FC | D.9 |
| 1862080000 | HDC CM HV 3 MC | D.9 |
| 1862350000 | THM MT30x 38,1/31,75 SI | M.8 |
| 1866710000 | Removal Tool CM 3 | K.25 |
| 1866710000 | Removal Tool CM 3 | J.8 |
| 1866710000 | Removal Tool CM 3 | D.9 |
| 1866710000 | Removal Tool CM 3 | D.4 |
| 1866720000 | Removal Tool CM 5 | K.25 |
| 1866720000 | Removal Tool CM 5 | J.8 |
| 1866720000 | Removal Tool CM 5 | D.7 |
| 1866730000 | REMOVAL TOOL HD | K.25 |
| 1866750000 | Removal Tool HE | K.25 |
| 1867360000 | HDC SHIELD LEVER 8 SC | J.16 |
| 1867370000 | HDC SHIELD LEVER 4 SC | J.16 |
| 1867380000 | HDC SHIELD LEVER 6 SC | J.16 |
| 1867390000 | HDC SHIELD LEVER 3 SC | J.16 |

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## 1870000000

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|---|---|---|
| 1873520000 | HDC HE 6 FP | I.11 |
| 1873520000 | HDC HE 6 FP | I.10 |
| 1873520000 | HDC HE 6 FP | B.20 |
| 1873530000 | HDC HE 6 MP | I.11 |
| 1873530000 | HDC HE 6 MP | I.10 |
| 1873530000 | HDC HE 6 MP | B.20 |
| 1873540000 | HDC HE 10 FP | I.15 |
| 1873540000 | HDC HE 10 FP | I.14 |
| 1873540000 | HDC HE 10 FP | B.22 |
| 1873550000 | HDC HE 10 MP | I.15 |
| 1873550000 | HDC HE 10 MP | I.14 |
| 1873550000 | HDC HE 10 MP | B.22 |
| 1873560000 | HDC HE 16 FP | I.19 |
| 1873560000 | HDC HE 16 FP | I.18 |
| 1873560000 | HDC HE 16 FP | B.28 |
| 1873560000 | HDC HE 16 FP | B.24 |
| 1873570000 | HDC HE 16 MP | I.19 |
| 1873570000 | HDC HE 16 MP | I.18 |
| 1873570000 | HDC HE 16 MP | B.28 |
| 1873570000 | HDC HE 16 MP | B.24 |
| 1873580000 | HDC HE 24 FP | I.23 |
| 1873580000 | HDC HE 24 FP | I.22 |
| 1873580000 | HDC HE 24 FP | B.30 |
| 1873580000 | HDC HE 24 FP | B.26 |
| 1873590000 | HDC HE 24 MP | I.23 |
| 1873590000 | HDC HE 24 MP | I.22 |
| 1873590000 | HDC HE 24 MP | B.30 |
| 1873590000 | HDC HE 24 MP | B.26 |
| 1873810000 | LM MT300 27x18 SI | M.7 |
| 1873860000 | HDC HA 10 FC | B.10 |
| 1873870000 | HDC HA 10 MC | B.10 |
| 1873880000 | HDC HA 16 FC | B.16 |
| 1873880000 | HDC HA 16 FC | B.14 |
| 1873880000 | HDC HA 16 FC | B.12 |
| 1873890000 | HDC HA 16 MC | B.16 |
| 1873890000 | HDC HA 16 MC | B.14 |
| 1873890000 | HDC HA 16 MC | B.12 |
| 1874860000 | LM MT300 PA 20x8 GE | M.7 |
| 1875540000 | HDC HA 16 FC 33 - 48 | B.16 |
| 1875620000 | HDC HA 16 MC 17 - 32 | B.16 |
| 1875620000 | HDC HA 16 MC 17 - 32 | B.14 |
| 1875630000 | HDC HA 16 MC 33 - 48 | B.16 |
| 1875740000 | HDC HE 16 FP 17-32 | B.28 |
| 1875800000 | HDC HE 16 MP 17-32 | B.28 |
| 1875850000 | HDC HE 24 FP 25-48 | B.30 |
| 1875890000 | HDC HE 24 MP 25-48 | B.30 |
| 1876040000 | HDC HA 16 FC 17 - 32 | B.16 |
| 1876040000 | HDC HA 16 FC 17 - 32 | B.14 |
| 1876580000 | CC 15/17 K MC NEUTR. SI | M.6 |
| 1876590000 | CC 15/17 K MC NEUTR. WS | M.6 |
| 1876600000 | CC 15/17 K MC SONDERD. | M.6 |
| 1876640000 | CC 15/27 K MC NEUTR. WS | M.6 |
| 1876750000 | CC 15/27 K MC SONDERD. | M.6 |
| 1876780000 | CC 15/27 K MC NEUTR. SI | M.6 |
| 1877220000 | CC 15/49 K MC NEUTR. WS | M.6 |
| 1877230000 | CC 15/49 K MC SONDERD. | M.6 |
| 1877270000 | CC 15/49 K MC NEUTR. SI | M.6 |
| 1877310000 | CC 15/60 K MC NEUTR. WS | M.6 |
| 1877320000 | CC 15/60 K MC SONDERD. | M.6 |
| 1877360000 | CC 15/60 K MC NEUTR. SI | M.6 |
| 1877570000 | SM 22/22 K MC NEUTR. WS | M.5 |
| 1877580000 | SM 22/22 K MC SONDERD. | M.5 |
| 1877590000 | SM 22/22 K MC NEUTR. SI | M.5 |

## 1880000000

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|---|---|---|
| 1880080000 | ESG 6/17 K SONDERDRUCK | M.4 |
| 1880090000 | ESG 6/15 K SONDERDRUCK | M.4 |
| 1880100000 | ESG 6/15 K MC NEUTR. WS | M.4 |
| 1880110000 | ESG 6/17 K MC NEUTR. GE | M.4 |
| 1880120000 | ESG 6/17 K MC NEUTR. WS | M.4 |
| 1880130000 | ESG 6/15 K MC NEUTR. GE | M.4 |
| 1880720000 | ETO SM 22/22 TRANSPAR. | M.5 |
| 1880810000 | ETO CC 15/27 TRANSPAR. | M.6 |
| 1880830000 | ETO CC 15/49 TRANSPAR. | M.6 |
| 1880840000 | ETO CC 15/60 TRANSPAR. | M.6 |
| 1880850000 | ETO CC 15/17 TRANSPAR. | M.6 |
| 1882890000 | LM MT300 15X9 GE | M.7 |
| 1882910000 | LM MT300 12X6 GE | M.7 |

## 1890000000

| | | |
|---|---|---|
| 1891770000 | THM MT30X 25,9/7,1 WS | M.8 |
| 1894710000 | HDC-CM-2SPN4.0 | D.23 |
| 1894720000 | HDC-CM-1BPN4.0 | D.23 |
| 1894730000 | HDC-CM-1SPN2.5 | D.23 |
| 1894740000 | HDC-CM-1SPN4.0 | D.23 |
| 1894750000 | HDC-CM-2BPN2.5 | D.23 |
| 1894760000 | HDC-CM-2BPN4.0 | D.23 |
| 1894770000 | HDC-CM-2SPN2.5 | D.23 |
| 1894780000 | HDC-CM-1BPN2.5 | D.23 |
| 1896780000 | HDC HA 10 FT | B.10 |
| 1896790000 | HDC HA 10 MT | B.10 |
| 1896800000 | HDC HA 16 FT | B.16 |
| 1896800000 | HDC HA 16 FT | B.14 |
| 1896800000 | HDC HA 16 FT | B.12 |
| 1896810000 | HDC HA 16 FT 17-32 | B.16 |
| 1896810000 | HDC HA 16 FT 17-32 | B.14 |
| 1896820000 | HDC HA 16 FT 33-48 | B.16 |
| 1896830000 | HDC HA 16 MT | B.16 |
| 1896830000 | HDC HA 16 MT | B.14 |
| 1896830000 | HDC HA 16 MT | B.12 |
| 1896840000 | HDC HA 16 MT 17-32 | B.16 |
| 1896840000 | HDC HA 16 MT 17-32 | B.14 |
| 1896850000 | HDC HA 16 MT 33-48 | B.16 |
| 1899800000 | HDC 04A SLU 1PG11G BL | E.7 |
| 1899890000 | HDC 04A AWLU BL | E.7 |
| 1899920000 | HDC 04A KOLU 1PG11S BL | E.7 |
| 1899980000 | HDC 16B SBU 1M25G | E.27 |

## 1900000000

| | | |
|---|---|---|
| 1900080000 | HDC 16B SDBO 1M25G | E.31 |
| 1900170000 | HDC 16B SLU 1M25G | E.29 |
| 1900280000 | HDC 04A TOLU 1PG11S BL | E.6 |
| 1900310000 | HDC 04A TWLU 1PG11S BL | E.6 |
| 1900320000 | HDC 04A ELU 1M20G | H.7 |
| 1900320000 | HDC 04A ELU 1M20G | E.7 |
| 1900320000 | HDC 04A ELU 1M20G | B.101 |
| 1900320000 | HDC 04A ELU 1M20G | B.99 |
| 1900320000 | HDC 04A ELU 1M20G | B.9 |
| 1900320000 | HDC 04A ELU 1M20G | B.7 |
| 1900330000 | HDC 04A ELU 1PG13S | E.7 |
| 1900350000 | HDC 04A ELU 1PG13S bl | E.7 |
| 1900360000 | HDC 06B SDLU 1M20G | E.15 |
| 1900380000 | HDC 06B SDLU 1M25G | E.15 |
| 1900460000 | HDC 06B SLU 1M20G | E.15 |
| 1900480000 | HDC 06B SLU 1M25G | E.15 |
| 1900820000 | HDC 16D SDLU 1M25G | E.15 |
| 1900880000 | HDC 16D SLU 1M25G | E.15 |
| 1900900000 | HDC 16D SLU 1M32G | E.15 |
| 1900990000 | HDC 07A ELU 1PG13G | E.5 |
| 1900990000 | HDC 07A ELU 1PG13G | B.49 |
| 1900990000 | HDC 07A ELU 1PG13G | B.47 |
| 1901010000 | HDC 10A SDLU 1M20G | E.13 |
| 1901040000 | HDC 10A SDLU 1M25G | E.13 |
| 1901100000 | HDC 10A SLU 1M20G | E.13 |
| 1901150000 | HDC 24B SBU 1M25G | E.37 |
| 1901160000 | HDC 10A SLU 1M25G | E.13 |
| 1901360000 | HDC 10B SBU 1M20G | E.17 |
| 1901370000 | HDC 10B SBU 1M25G | E.17 |
| 1901480000 | HDC 24B SDLU 1M25G | E.39 |
| 1901490000 | HDC 10B SDBO 1M20G | E.21 |
| 1901510000 | HDC 10B SDBO 1M25G | E.21 |
| 1901560000 | HDC 24B SLU 1M25G | E.39 |
| 1901570000 | HDC 10B SDLU 1M20G | E.19 |
| 1901620000 | HDC 10B SLU 1M20G | E.19 |
| 1901640000 | HDC 10B SLU 1M25G | E.19 |
| 1901700000 | HDC 10B AZO | E.22 |
| 1902480000 | HDC 24B TSBU 1M40G | E.36 |
| 1902600000 | HDC 32B SBU 1M32G | E.45 |
| 1902610000 | HDC 32B SBU 1PG36G | E.45 |
| 1902640000 | HDC 32B SBU 2PG36G | E.45 |
| 1902650000 | HDC 32B SDLU 1M32G | E.47 |
| 1902670000 | HDC 32B SLU 1M32G | E.47 |
| 1902730000 | HDC 32B KBU 1M40G | E.45 |
| 1902740000 | HDC 32B KBU 1PG29G | E.45 |
| 1902750000 | HDC 32B KBU 1PG36G | E.45 |
| 1902970000 | HDC 40D SBU 1M25G | E.27 |
| 1902980000 | HDC 24B TOBU 1M40G | E.36 |
| 1902990000 | HDC 40D SBU 1M32G | E.27 |
| 1903070000 | HDC 40D SDLU 1M25G | E.29 |
| 1903080000 | HDC 40D SDLU 1M32G | E.29 |
| 1903110000 | HDC 40D SLU 1M32G | E.29 |
| 1903210000 | HDC 24D SBU 1M25G | E.17 |
| 1903220000 | HDC 24D SBU 1M32G | E.17 |
| 1903370000 | HDC 24D SDBO 1M25G | E.21 |
| 1903410000 | HDC 24D SDLU 1M25G | E.19 |
| 1903510000 | HDC 24D SDLU 1M32G | E.19 |
| 1903560000 | HDC 24D SLU 1M32G | E.19 |
| 1903610000 | HDC 24D TSZO 1M25G | E.22 |
| 1903870000 | HDC 32A SBU 1M25G | E.33 |
| 1903900000 | HDC 32A SDBO 1M25G | E.34 |
| 1903910000 | HDC 32A SDBO 1M32G | E.34 |
| 1904150000 | HDC 48B SDLU 1M32G | E.49 |
| 1904190000 | HDC 48B SLU 1M32G | E.49 |
| 1904340000 | HDC 64D SBU 1M25G | E.37 |
| 1904350000 | HDC 64D SBU 1M32G | E.37 |
| 1904400000 | HDC 64D SDBO 1M32G | E.40 |
| 1904430000 | HDC 64D SDLU 1M25G | E.39 |
| 1904440000 | HDC 64D SDLU 1M32G | E.39 |
| 1904480000 | HDC 64D SLU 1M25G | E.39 |
| 1904490000 | HDC 64D SLU 1M32G | E.39 |
| 1904690000 | HDC 64D TSZO 1M40G | E.41 |
| 1904800000 | HDC 40D TSBU 1M40G | E.26 |
| 1905490000 | M-PRINT PRO | M.15 |
| 1905500000 | M-PRINT PRO ADVANCED | M.15 |
| 1906120000 | SM 27/18 K NEUTRAL ROT | M.5 |
| 1909500000 | VG M16 - MS 1/EMV | L.15 |
| 1909510000 | VG M20 - MS 1/EMV | L.15 |
| 1909520000 | VG M25 - MS 1/EMV | L.15 |
| 1909530000 | VG M32 - MS 1/EMV | L.15 |
| 1909540000 | VG M40 - MS 1/EMV | L.15 |
| 1909550000 | VG M50 - MS 1/EMV | L.15 |
| 1909560000 | VG M63 - MS 1/EMV | L.15 |
| 1909860000 | VG M16-1/K68 | L.5 |
| 1909870000 | VG M25-1/K68 | L.5 |
| 1909880000 | VG M32-1/K68 | L.5 |
| 1909890000 | VG M40-1/K68 | L.5 |
| 1909900000 | VG M50-1/K68 | L.5 |
| 1909910000 | VG M16-1/MS68 | L.13 |
| 1909920000 | VG M25-1/MS68 | L.13 |
| 1909930000 | VG M32-1/MS68 | L.13 |
| 1909940000 | VG M40-1/MS68 | L.13 |
| 1909950000 | VG M50-1/MS68 | L.13 |

## 1910000000

| | | |
|---|---|---|
| 1912190000 | HDC SHIELD CLAMP 4.5 | J.20 |
| 1912200000 | HDC SHIELD CLAMP 5.0 | J.20 |
| 1912210000 | HDC SHIELD CLAMP 6.0 | J.20 |
| 1912220000 | HDC SHIELD CLAMP 7.0 | J.20 |
| 1912230000 | HDC SHIELD CLAMP 8.0 | J.20 |
| 1912240000 | HDC SHIELD CLAMP 9.0 | J.20 |
| 1912250000 | HDC SHIELD CLAMP 10.0 | J.20 |
| 1912440000 | HDC HQ 5 MC | B.98 |
| 1912460000 | HDC HQ 5 FC | B.98 |
| 1913320000 | GWDR M12-NP | L.20 |
| 1915320000 | LM MT300 202x12 GE | M.7 |
| 1915340000 | SM 27/18 K NEUTRAL GE | M.5 |
| 1919970000 | HDC HQ 8 MC | B.102 |
| 1919980000 | HDC HQ 8 FC | B.102 |

## 1920000000

| | | |
|---|---|---|
| 1920640000 | PLOTTER PEN 0.25 P-INK | M.13 |
| 1920650000 | PLOTTER PEN 0.35 P-INK | M.13 |
| 1921720000 | VG H M20 MS | L.11 |
| 1921740000 | VG H M25 MS | L.11 |
| 1921760000 | VG H M32 MS | L.11 |
| 1921770000 | VG H M40 MS | L.11 |
| 1924310000 | MCP AP SF4-6 | M.13 |
| 1924320000 | MCP KLEBESTREIFEN | M.13 |
| 1924330000 | P-CLEANER | M.13 |
| 1924340000 | P-Ink 2.0 | M.13 |
| 1924350000 | MCP COVER | M.13 |
| 1924360000 | MCP AP PLUS | M.13 |
| 1924370000 | MCP AP LABLES | M.13 |
| 1925000000 | MCP PLUS | M.11 |

## 1930000000

| | | |
|---|---|---|
| 1934330000 | CC 30/60 K MC NEUTRAL SI | M.6 |
| 1934370000 | CC 30/60 K MC SONDERDRUCK | M.6 |
| 1934390000 | CC 30/60 K MC NEUTRAL WS | M.6 |
| 1934440000 | ETO CC 30/60 TRANSPAR. | M.6 |
| 1934770000 | HDC GRIP PANEL 8 SC | J.21 |
| 1935130000 | MCP EP | M.13 |

## 1950000000

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|---|---|---|
| 1954070000 | THM MT30x 8/8 WS | M.8 |

## 1960000000

| | | |
|---|---|---|
| 1962540000 | IE-PH-V05M | H.10 |
| 1962720000 | IE-PI-RJ45-TH | H.12 |
| 1962720000 | IE-PI-RJ45-TH | D.21 |
| 1962730000 | IE-PI-RJ45-FH | H.12 |
| 1962730000 | IE-PI-RJ45-FH | D.21 |
| 1962750000 | IE-PI-2SC-MM | D.21 |
| 1962760000 | IE-PI-2SC-SM | D.21 |
| 1962770000 | IE-PI-2SC-POF | D.21 |
| 1962780000 | IE-PI-2LC-MM | D.21 |
| 1962790000 | IE-PI-2LC-SM | D.21 |
| 1962840000 | IE-BI-RJ45-C | H.13 |
| 1962840000 | IE-BI-RJ45-C | D.21 |
| 1962850000 | IE-BI-RJ45-FJ-A | H.13 |
| 1962850000 | IE-BI-RJ45-FJ-A | D.21 |
| 1962870000 | IE-BI-SCRJ2SC-SM-C | D.21 |
| 1962880000 | IE-BI-LCD-SM-C | D.21 |
| 1963110000 | IE-PS-V05M-RJ45-TH | H.10 |
| 1963200000 | IE-PS-V05M-RJ45-FH | H.10 |
| 1963460000 | IE-BS-V05M-RJ45-FJ-A | H.11 |
| 1963510000 | IE-BS-V05M-RJ45-C | H.11 |
| 1963530000 | IE-BH-V05M | H.11 |
| 1963690000 | HDC 04A DODL 1LB | E.6 |
| 1963700000 | IE-BS-V05M-RJ45-FJ-P | H.11 |
| 1963830000 | IE-BI-RJ45-FJ-P | H.13 |
| 1963830000 | IE-BI-RJ45-FJ-P | D.21 |
| 1963840000 | IE-BI-RJ45-FJ-B | H.13 |
| 1963840000 | IE-BI-RJ45-FJ-B | D.21 |
| 1964130000 | THM MT30x 15/5,08 GE | M.8 |
| 1964420000 | IE-BI-LCD-MM-C | D.21 |
| 1964430000 | IE-BI-SCRJ2SC-MM-C | D.21 |
| 1966810000 | IE-KO-HAT | K.6 |
| 1967210000 | HDC HVE 10+2 MT CtH | B.88 |
| 1967220000 | HDC HVE 3+2 FT CtH | B.84 |
| 1967230000 | HDC HVE 3+2 MT CtH | B.84 |
| 1967240000 | HDC HVE 6+2 FT CtH | B.86 |
| 1967250000 | HDC HVE 6+2 MT CtH | B.86 |
| 1967260000 | HDC HVE 10+2 FT CtH | B.88 |
| 1967660000 | HDC 10A TSLU 1M20G | E.12 |
| 1967670000 | HDC 40D KBU 1PG29G | E.27 |
| 1967910000 | HDC 24B ABO | E.40 |
| 1968130000 | THM MT30x 17/9 WS | M.8 |
| 1968340000 | HDC 24B KLU 1M25G | E.39 |
| 1968350000 | HDC 24D SZO 2PG21G | E.22 |
| 1968360000 | HDC 24D TSZO 1PG21G | E.22 |
| 1968370000 | HDC 64D SZO 2PG29G | E.41 |
| 1968920000 | IE-PP-V05M | H.10 |
| 1968930000 | IE-BP-V05M | H.11 |

## 1970000000

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|---|---|---|
| 1975160000 | LM MT300 105X105 SI | M.7 |

## 1980000000

| | | |
|---|---|---|
| 1983470000 | HDC 64D TOLU 1M40G | E.38 |
| 1983500000 | HDC 48B SDLU 2M40G | E.49 |
| 1983510000 | HDC 48B SDLU 2M50G | E.49 |
| 1983720000 | HDC CM BUS SV F2 | D.16 |
| 1983750000 | HDC CM BUS SV M2 | D.16 |
| 1983770000 | HDC CM BUS SV F4 CT | H.5 |
| 1983770000 | HDC CM BUS SV F4 CT | D.17 |
| 1983790000 | HDC CM BUS SV M4 CT | H.5 |
| 1983790000 | HDC CM BUS SV M4 CT | D.17 |
| 1983800000 | HDC CM BUS SV F1 CT | H.5 |
| 1983800000 | HDC CM BUS SV F1 CT | D.17 |
| 1983810000 | HDC CM BUS SV M1 CT | H.5 |
| 1983810000 | HDC CM BUS SV M1 CT | D.17 |
| 1983820000 | HDC CM BUS SV GCA F | D.17 |
| 1983830000 | HDC CFM 6 2M | D.26 |
| 1983840000 | HDC CFM 6 2F | D.26 |
| 1983850000 | HDC CFM 10 3M | D.30 |
| 1983860000 | HDC CFM 10 3F | D.30 |
| 1983870000 | HDC CFM 16 5M | D.34 |
| 1983880000 | HDC CFM 16 5F | D.34 |
| 1983890000 | HDC CFM 24 7M | D.38 |
| 1983900000 | HDC CFM 24 7F | D.38 |
| 1983910000 | SHIELD LEVER 3 MOD | J.18 |
| 1983920000 | SHIELD LEVER 4 MOD | J.18 |
| 1983930000 | SHIELD LEVER 6 MOD | J.18 |
| 1983940000 | SHIELD LEVER 8 MOD | J.18 |

## 9000000000

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|---|---|---|
| 9001080000 | AM 35 | K.10 |
| 9001530000 | ERSATZMESSER AM 25/35 | K.10 |
| 9001540000 | AM 25 | K.10 |
| 9002650000 | KT 8 | K.4 |
| 9002650000 | KT 8 | J.11 |
| 9002650000 | KT 8 | D.22 |
| 9002660000 | KT 12 | K.4 |
| 9003750000 | M-D-STRIPAX LWL | K.19 |
| 9003750000 | M-D-STRIPAX LWL | D.22 |
| 9003760000 | MEHA KP LWL M-D-SPX | K.19 |
| 9005000000 | STRIPAX | K.7 |
| 9005610000 | STRIPAX 16 | K.7 |
| 9005720000 | SCHRAUBENDREHER CST | K.11 |
| 9005800000 | EINSTELLBLOCK CST | K.11 |
| 9008320000 | SD 0,5x3,0x80 | K.22 |
| 9008330000 | SD 0,6x3,5x100 | K.22 |
| 9008340000 | SD 0,8x4,0x100 | K.22 |
| 9008340000 | SD 0,8x4,0x100 | G.4 |
| 9008350000 | SD 1,0x5,5x150 | K.22 |
| 9008470000 | SDK PH0 | K.22 |
| 9008480000 | SDK PH1 | K.22 |
| 9008490000 | SDK PH2 | K.22 |
| 9008500000 | SDK PH3 | K.22 |
| 9008520000 | SDK PZ0 | K.22 |
| 9008530000 | SDK PZ1 | K.22 |
| 9008540000 | SDK PZ2 | K.22 |
| 9008550000 | SDK PZ3 | K.22 |
| 9008860000 | SKS 2,0-8,0 | K.24 |
| 9009010000 | SD 1,2x6,5x150 | K.22 |
| 9009020000 | SD 0,8x4,5x125 | K.22 |
| 9009030000 | SD 0,4x2,5x75 | K.22 |
| 9009070000 | SK 10,0x125 | K.22 |
| 9009160000 | SD TH20 | K.22 |
| 9009170000 | SD TH15 | K.22 |
| 9009180000 | SD TH10 | K.22 |
| 9009190000 | SD TH8 | K.22 |
| 9009740000 | SDS 2,5-5,5/PH1/2 | K.23 |
| 9009750000 | SYSTEM 11+1 | K.23 |

## 9010000000

| | | |
|---|---|---|
| 9010110000 | SD 0,6x3,5x200 | K.22 |
| 9010950000 | HTX-HDC/POF | K.19 |
| 9010950000 | HTX-HDC/POF | J.11 |
| 9014350000 | PZ 6 Roto | K.13 |
| 9017250000 | MTR 160 | K.16 |
| 9017250000 | MTR 160 | J.7 |
| 9017250000 | MTR 160 | J.6 |
| 9017250000 | MTR 160 | C.13 |
| 9017250000 | MTR 160 | C.8 |
| 9017270000 | TRAGETASCHE MTR 160 | K.16 |
| 9018480000 | CTX CM 3.6 | K.14 |
| 9018480000 | CTX CM 3.6 | J.8 |
| 9018480000 | CTX CM 3.6 | D.9 |
| 9018480000 | CTX CM 3.6 | D.4 |
| 9018490000 | CTX CM 1.6/2.5 | K.14 |

## 9020000000

| | | |
|---|---|---|
| 9020000000 | STRIPAX PLUS 2.5 | K.12 |

| Order No. | Type | Page |
|---|---|---|
| 9020360000 | AM LWL/POF | K.19 |
| 9020360000 | AM LWL/POF | J.11 |
| 9020390000 | PS LWL/POF | K.19 |
| 9020390000 | PS LWL/POF | J.11 |
| 9020400000 | PB LWL/POF | K.19 |
| 9020400000 | PB LWL/POF | J.11 |
| 9020900000 | EINSATZ MTR 160 10HEX | K.16 |
| 9020910000 | EINSATZ MTR 160 16HEX | K.16 |
| 9020920000 | EINSATZ MTR 160 25HEX | K.16 |
| 9020920000 | EINSATZ MTR 160 25HEX | J.6 |
| 9020920000 | EINSATZ MTR 160 25HEX | C.8 |
| 9020930000 | EINSATZ MTR 160 35HEX | K.16 |
| 9020930000 | EINSATZ MTR 160 35HEX | J.6 |
| 9020930000 | EINSATZ MTR 160 35HEX | C.8 |
| 9020940000 | EINSATZ MTR 160 50HEX | K.16 |
| 9020940000 | EINSATZ MTR 160 50HEX | J.7 |
| 9020940000 | EINSATZ MTR 160 50HEX | J.6 |
| 9020940000 | EINSATZ MTR 160 50HEX | C.13 |
| 9020940000 | EINSATZ MTR 160 50HEX | C.8 |
| 9020950000 | EINSATZ MTR 160 70HEX | K.16 |
| 9020950000 | EINSATZ MTR 160 70HEX | J.6 |
| 9020950000 | EINSATZ MTR 160 70HEX | C.8 |
| 9020960000 | EINSATZ MTR 160 95HEX | K.16 |
| 9020960000 | EINSATZ MTR 160 95HEX | J.7 |
| 9020960000 | EINSATZ MTR 160 95HEX | J.6 |
| 9020960000 | EINSATZ MTR 160 95HEX | C.13 |
| 9020960000 | EINSATZ MTR 160 95HEX | C.8 |
| 9020970000 | EINSATZ MTR 160 120HEX | K.16 |
| 9020970000 | EINSATZ MTR 160 120HEX | J.7 |
| 9020970000 | EINSATZ MTR 160 120HEX | C.13 |
| 9020980000 | EINSATZ MTR 160 150HEX | K.16 |
| 9020980000 | EINSATZ MTR 160 150HEX | J.7 |
| 9020980000 | EINSATZ MTR 160 150HEX | C.13 |
| 9020990000 | EINSATZ MTR 160 185HEX | K.16 |
| 9020990000 | EINSATZ MTR 160 185HEX | J.7 |
| 9020990000 | EINSATZ MTR 160 185HEX | C.13 |
| 9021000000 | EINSATZ MTR 160 240HEX | K.16 |
| 9021000000 | EINSATZ MTR 160 240HEX | J.7 |
| 9021000000 | EINSATZ MTR 160 240HEX | C.13 |
| 9021390000 | MTR 300 | K.16 |
| 9021390000 | MTR 300 | J.7 |
| 9021390000 | MTR 300 | J.6 |
| 9021390000 | MTR 300 | C.13 |
| 9021390000 | MTR 300 | C.8 |
| 9021420000 | TRAGEKASTEN MTR 300 | K.16 |
| 9021430000 | EINSATZP.HEX10QMM | K.16 |
| 9021440000 | EINSATZP.HEX16QMM | K.16 |
| 9021450000 | EINSATZP.HEX25QMM | K.16 |
| 9021450000 | EINSATZP.HEX25QMM | J.6 |
| 9021450000 | EINSATZP.HEX25QMM | C.8 |
| 9021460000 | EINSATZP.HEX35QMM | K.16 |
| 9021460000 | EINSATZP.HEX35QMM | J.6 |
| 9021460000 | EINSATZP.HEX35QMM | C.8 |
| 9021470000 | EINSATZP.HEX50QMM | K.16 |
| 9021470000 | EINSATZP.HEX50QMM | J.7 |
| 9021470000 | EINSATZP.HEX50QMM | J.6 |
| 9021470000 | EINSATZP.HEX50QMM | C.13 |
| 9021470000 | EINSATZP.HEX50QMM | C.8 |
| 9021480000 | EINSATZP.HEX70QMM | K.16 |
| 9021480000 | EINSATZP.HEX70QMM | J.6 |
| 9021480000 | EINSATZP.HEX70QMM | C.8 |
| 9022290000 | EINSATZP.HEX95QMM | K.16 |
| 9022290000 | EINSATZP.HEX95QMM | J.7 |
| 9022290000 | EINSATZP.HEX95QMM | J.6 |
| 9022290000 | EINSATZP.HEX95QMM | C.13 |
| 9022290000 | EINSATZP.HEX95QMM | C.8 |
| 9022300000 | EINSATZP.HEX120QMM | K.16 |
| 9022300000 | EINSATZP.HEX120QMM | J.7 |
| 9022300000 | EINSATZP.HEX120QMM | C.13 |
| 9022310000 | EINSATZP.HEX150QMM | K.16 |
| 9022310000 | EINSATZP.HEX150QMM | J.7 |
| 9022310000 | EINSATZP.HEX150QMM | C.13 |
| 9022320000 | EINSATZP.HEX185QMM | K.16 |
| 9022320000 | EINSATZP.HEX185QMM | J.7 |
| 9022320000 | EINSATZP.HEX185QMM | C.13 |
| 9022330000 | EINSATZP.HEX240QMM | K.16 |
| 9022330000 | EINSATZP.HEX240QMM | J.7 |
| 9022330000 | EINSATZP.HEX240QMM | C.13 |


## 9030000000


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|---|---|---|
| 9030060000 | AM 12 | D.22 |
| 9030500000 | CST | K.11 |
| 9032000000 | CASSETTE CST GRUEN | K.11 |
| 9032010000 | CASSETTE CST BRAUN | K.11 |
| 9032020000 | CASSETTE CST BLAU | K.11 |
| 9032030000 | CASSETTE CST GELB | K.11 |
| 9032040000 | CASSETTE CST ROT | K.11 |
| 9032050000 | CASSETTE CST GRAU | K.11 |
| 9032060000 | SCHRAUBENHALTER CST | K.11 |
| 9032200000 | CASS OR CST | K.11 |
| 9032210000 | CASS HG CST | K.11 |
| 9032220000 | CASS SW CST | K.11 |
| 9037160000 | SD 0,4x2,0x60 | K.22 |


## 9050000000


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|---|---|---|
| 9050340000 | ERSATZMESSER STRIPAX PL | K.12 |



| Order No. | Type | Page |
|---|---|---|


## 9200000000


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|---|---|---|
| 9202040000 | KT 45 R | K.5 |
| 9202210000 | multi-stripax 6-16 | K.9 |
| 9202220000 | multi-stripax 16 SL | K.9 |
| 9202230000 | multi-stripax AWG | K.9 |
| 9202250000 | multi-stripax ASI | K.9 |
| 9202260000 | AIE multi-stripax 6-16 | K.9 |
| 9202270000 | AIE multi-stripax 16 SL | K.9 |
| 9202280000 | AIE multi-stripax AWG | K.9 |
| 9202300000 | AIE multi-stripax ASI | K.9 |
| 9202510000 | WK 1/4" C6,3 E6,3 | K.20 |
| 9202800000 | TT 8 RS MP 8 | K.17 |
| 9202800000 | TT 8 RS MP 8 | H.12 |
| 9202800000 | TT 8 RS MP 8 | D.22 |
| 9203070000 | ERME MULTI-STRIPAX | K.9 |
| 9203100000 | ERAN MULTI-STRIPAX | K.9 |
| 9203610000 | multi-stripax 0.75-4²SL | K.9 |
| 9203730000 | AIE multi-spx 0.75-4²SL | K.9 |
| 9204190000 | AM 16 | K.10 |
| 9204260000 | ERME AM 16 | K.10 |
| 9204270000 | ERME KT 45 R | K.5 |
| 9204340000 | CASS WS CST | K.11 |
| 9204350000 | IE-CST | K.11 |
| 9204350000 | IE-CST | D.22 |
| 9204540000 | Multi-Stripax 0.25-1.5S | K.9 |
| 9204550000 | AIE M-SPX 0.25-1.5 S | K.9 |
| 9204560000 | Multi-Stripax 1.5-6.0S | K.9 |
| 9204570000 | AIE M-SPX 1.5-6.0 S | K.9 |
| 9204780000 | KOBBS 19X75 | K.6 |
| 9204820000 | KOK-52X36 | K.6 |
| 9204830000 | KOK-65X36 | K.6 |
| 9204850000 | KOK-86X36 | K.6 |
| 9204870000 | KOK-112X36 | K.6 |
| 9205030000 | KOBBS 9.5X50 | K.6 |
| 9205040000 | KOBBS 19X55 | K.6 |
| 9205280000 | IE-CTI-SC-GOF | K.18 |
| 9205290000 | IE-CTI-LC-GOF | K.18 |
| 9205300000 | IE-CTI-SC-POF | K.18 |
| 9205310000 | IE-CTI-SC-GOF-P | K.18 |
| 9205320000 | IE-CT-SC-GOF | K.18 |
| 9205320000 | IE-CT-SC-GOF | D.22 |
| 9205330000 | IE-CT-LC-GOF | K.18 |
| 9205330000 | IE-CT-LC-GOF | D.22 |
| 9205340000 | IE-CT-SC-POF | K.18 |
| 9205340000 | IE-CT-SC-POF | D.22 |
| 9205350000 | IE-CT-SC-GOF-P | K.18 |
| 9205350000 | IE-CT-SC-GOF-P | D.22 |
| 9205430000 | CTIN CM 1.6/2.5 | K.14 |
| 9205440000 | CTIN CM 3.6 | K.14 |
| 9205560000 | SDS 2.0-5.5 | K.23 |
| 9205760000 | multi-stripax® GKW LW | K.9 |
| 9205770000 | stripping unit M-SPX GKW LW | K.9 |


## 9450000000


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|---|---|---|
| 9457300000 | ABD-1-Stahlblech | J.24 |


## 9910000000


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|---|---|---|
| 9918370000 | DMS MANUELL 0,5-1,7 | K.20 |
| 9918380000 | DMS MANUELL 2,0-8,0 | K.20 |
| 9918390000 | DMSI MANUELL 0,5-1,7 | K.21 |
| 9918400000 | DMSI MANUELL 2,0-8,0 | K.21 |
| 9918410000 | WK SI 0,4x2,5 | K.21 |
| 9918420000 | WK SI 0,5x3,0 | K.21 |
| 9918430000 | WK SI 0,6x3,5 | K.21 |
| 9918440000 | WK SI 0,8x4,0 | K.21 |
| 9918450000 | WK SI 1,0x5,5 | K.21 |
| 9918460000 | WK IK PH0 | K.21 |
| 9918470000 | WK IK PH1 | K.21 |
| 9918480000 | WK IK PH2 | K.21 |
| 9918490000 | WK IK PZ0 | K.21 |
| 9918500000 | WK IK PZ1 | K.21 |
| 9918510000 | WK IK PZ2 | K.21 |
| 9918520000 | WK S 0,4x2,5 | K.20 |
| 9918530000 | WK S 0,5x3,0 | K.20 |
| 9918540000 | WK S 0,6x3,5 | K.20 |
| 9918550000 | WK S 0,8x4,0 | K.20 |
| 9918560000 | WK S 1,0x5,5 | K.20 |
| 9918570000 | WK K PH0 | K.20 |
| 9918580000 | WK K PH1 | K.20 |
| 9918590000 | WK K PH2 | K.20 |
| 9918600000 | WK K PZ0 | K.20 |
| 9918610000 | WK K PZ1 | K.20 |
| 9918620000 | WK K PZ2 | K.20 |

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