

Series HA



Series HA

Series HA 3 - 48 pole Screw connection

- Screw clamp termination
- Pole numbers: 3, 4, 10, 16, 32, 48

Note:

The 3-pole connector is a 4-pole connector with 3 poles assembled;
32-pole connectors are composed of two 16-pole inserts numbered 1-16 and 17-32;
48-pole connectors are composed of three 16-pole inserts numbered 1-16, 17-32 and 33-48.

Series HA

Technical data

Standards	DIN VDE 0627
	DIN VDE 0110
Approvals	
Inserts	
No. of poles	3, 4, 10, 16, 32, 48 (+ PE)
Rated current	
- 3 + 4 pole	10 A max.
- 10 - 48 pole	16 A max.
Insulation group	C
Rated voltage (VDE 110/1.89)	
- 3 + 4 pole	400 V
- 10 - 48 pole	250 V
Rated impulse voltage HA10, HA16	4 kV
Pollution degree HA10,HA16	3
Contact resistance HA3	10 ¹⁵ Ohmcm
Contact resistance HA4,HA10,HA16	10 ¹³ Ohmcm
Material	PC glass-fibre reinforced (UL listed)
Temperature range	-40° + 125° C
Flammability	
class acc. UL 94	V-0
Mechanical durability insertion frequency Ag	≤ 100
Rated voltage aa. UL / CSA	600 V
Connection method: HA - inserts	Screw connection

Contacts

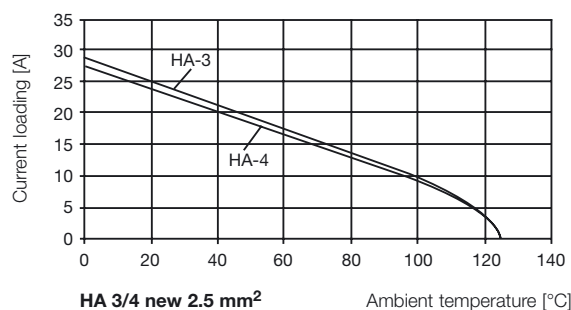
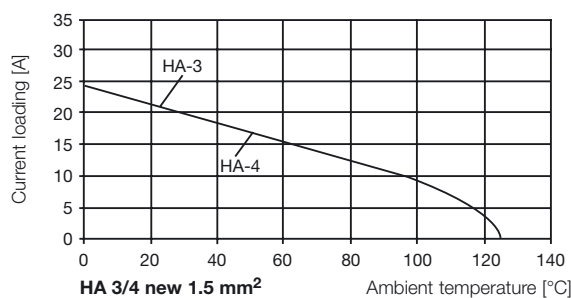
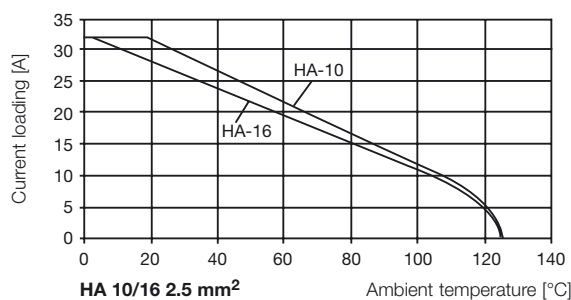
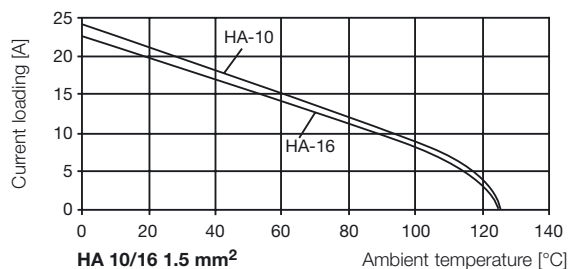
Material	Copper alloy
Plating	3 mm Ag
Through resistance HA - inserts	≤1.5 - 4.0 mOhm
Clamping range	
mm ²	0.5 - 2.5
AWG	22 ... 14
Torque	0.5 Nm
Insulating stripping length	
3 + 4-pole	6.0 mm
10 - 48-pole	7.0 mm

Hoods and Housing

Material	
Group size 1	Die cast zinc / thermoplastic
Group size 2 -12	Aluminium die cast AL-Si 12
Flammability class acc. UL 94	
(Group size 1 in thermoplastic)	V-0
Surface	Powder coating, grey
Locking	
- Standard	Steel, zinc plated
Gasket	NBR
Temperature range	-40° + 125° C
Protection class i.a.w DIN when locked	
3 + 4-pole	IP 54
10 - 48-pole	IP 65

Series HA

Derating curves



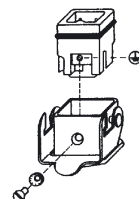
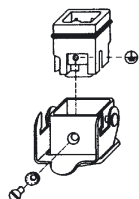
Inserts Group Size 1

New

Screw connection HA-3

3-pole + PE

400 V-/max. 10 A



Version	Type	Cat. No.	Qty.
Male	HDC-HA-3SS	1498100000	10
Female	HDC-HA-3BS	1498200000	10

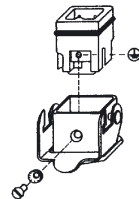
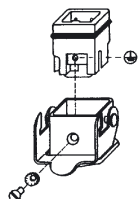
For accessories see section "Accessories"

New

Screw connection HA-4

4-pole + PE

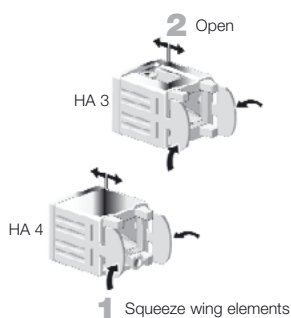
400 V-/max. 10 A



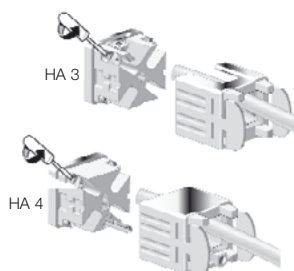
Version	Type	Cat. No.	Qty.
Male	HDC-HA-4SS	1498300000	10
Female	HDC-HA-4BS	1498400000	10

For accessories see section "Accessories"

Mounting instructions HA-3 and HA-4 male / female inserts



3 Loosen 4 screws

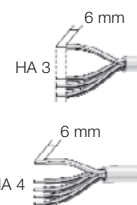


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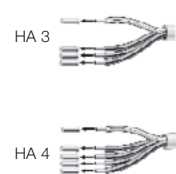
HA 3: 30-35 mm
HA 4: 35-40 mm



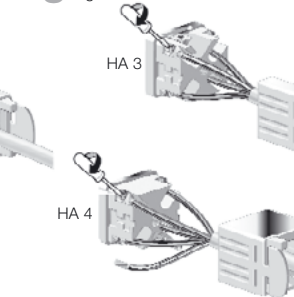
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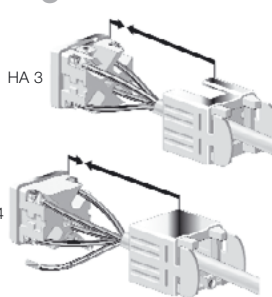
6 Crimp ferrules



8 Tighten 4 screws



9 Close



10 Insert PE conductor (HA 4)



11 Tighten screw (HA 4)



Housings Group Size 1

Plug hood HA-3/HAD-7

End locking / lower side



TOVL

Plug hood HA-3/HAD-7

End locking / lower side



TWVL

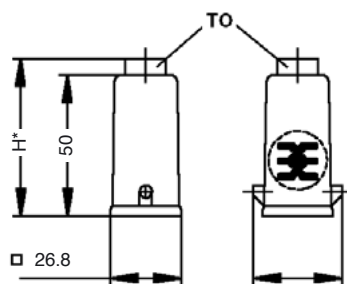
Base housing HA-3/HAD-7

End locking



SVL

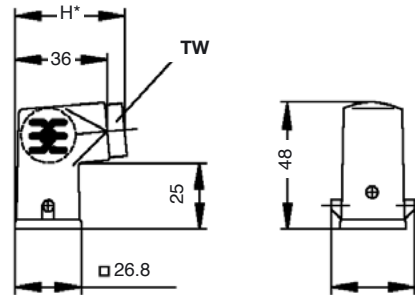
Dimensions



H* M = 50
PG, Metal = 57
PG, Plastic = 62

HAD=36
HA=33.5

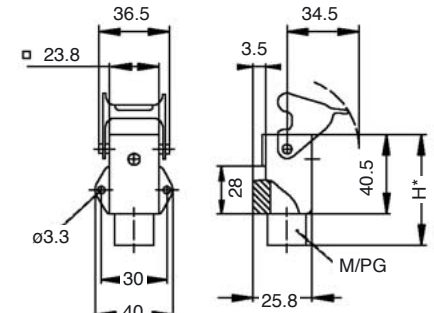
Dimensions



H* M = 36
PG, Metal = 43
PG, Plastic = 48

HAD=36
HA=33.5

Dimensions



H* M = 40.5
PG, Metal = 57
PG, Plastic = 62

Version	Type	Cat. No.	Qty.
Plastic housing, metric thread			
1 x M 20 thread	HDC HAD7 TOVL 1xM20G	1788520000	10
Plastic housing, PG thread			
1 x Pg 11 complete	HDC-HAD-7-TOVL1/11P	1652370000	10
1 x Pg 11 sleeve	HDC-HAD-7-TOVL1/11	1652380000	10
Metal housing, metric thread			
1 x M 20 thread	HDC HA3 TOVL 1xM20G	1788820000	10
Metal housing, PG thread			
1 x Pg 11 complete	HDC-HA-3-TOVL1/11P	1498500000	10
1 x Pg 11 sleeve	HDC-HA-3-TOVL1/11	1652470000	10

TOVL = Plug hood; Top cable entry, end locking
HAD-7 = Plastic housing
HA-3 = Metal housing

Version	Type	Cat. No.	Qty.
Plastic housing, metric thread			
1 x M 20 thread	HDC HAD7 TWVL 1xM20G	1788510000	10
Plastic housing, PG thread			
1 x Pg 11 complete	HDC-HAD-7-TWVL1/11P	1652390000	10
1 x Pg 11 sleeve	HDC-HAD-7-TWVL1/11	1652400000	10
Metal housing, metric thread			
1 x M 20 thread	HDC HA3 TWVL 1xM20G	1788810000	10
Metal housing, PG thread			
1 x Pg 11 complete	HDC-HA-3-TWVL1/11P	1498600000	10
1 x Pg 11 sleeve	HDC-HA-3-TWVL1/11	1652480000	10

TWVL = Plug hood angled, end locking
HAD-7 = Plastic housing
HA-3 = Metal housing

Version	Type	Cat. No.	Qty.
Plastic housing, metric thread			
1 x M 20 thread	HDC HAD7 SVL 1xM20G	1788530000	10
Plastic housing, PG thread			
1 x Pg 11 complete	HDC-HAD-7-SVL1/11P	1652430000	10
1 x Pg 11 sleeve	HDC-HAD-7-SVL1/11	1652440000	10
Metal housing, metric thread			
1 x M 20 sleeve	HDC HA3 SVL 1xM20	1788830000	10
Metal housing, PG thread			
1 x Pg 11 complete	HDC-HA-3-SVL1/11P	1497800000	10
1 x Pg 11 sleeve	HDC-HA-3-SVL1/11	1652490000	10

SVL = Base housing, end locking
HAD-7 = Plastic housing
HA-3 = Metal housing

For accessories see section "Accessories"

Housings Group Size 1

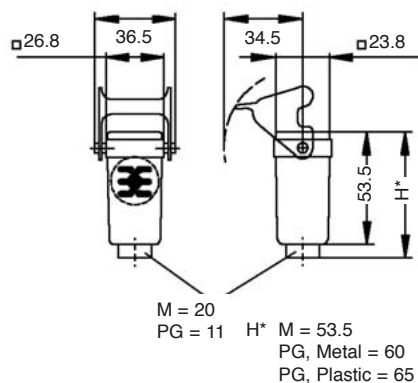
Coupling hood HA-3/HAD-7

End locking



KVL

Dimensions



Version	Type	Cat. No.	Qty.
Plastic housing, metric thread			
1 x M 20 thread	HDC HAD7 KVL 1xM20G	1788540000	10
Plastic housing, PG thread			
1 x Pg 11 complete	HDC-HAD-7-KVL1/11P	1652450000	10
1 x Pg 11 sleeve	HDC-HAD-7-KVL1/11	1652460000	10
Metal housing, metric thread			
1 x M 20 thread	HDC HA3 KVL 1xM20G	1788840000	10
Metal housing, PG thread			
1 x Pg 11 complete	HDC-HA-3-KVL1/11P	1497900000	10
1 x Pg 11 sleeve	HDC-HA-3-KVL1/11	1652500000	10

KVL = Coupling hood, end locking

HAD-7 = Plastic housing

HA-3 = Metal housing

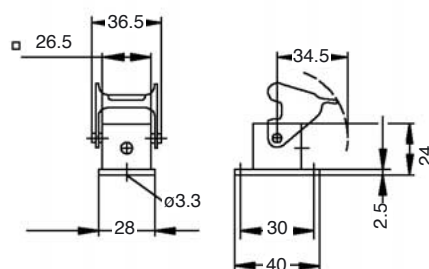
Bulkhead housing HA-3/HAD-7

End locking



AVL

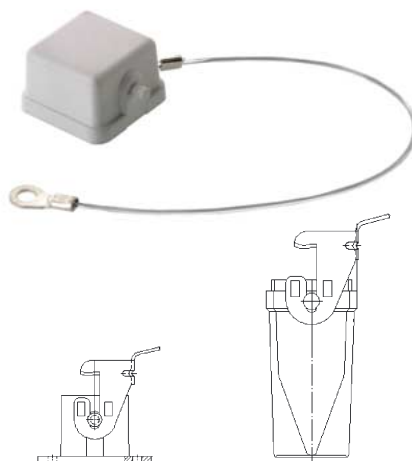
Dimensions



Version	Type	Cat. No.	Qty.
Plastic housing			
	HDC-HAD-7-AVL	1652410000	10
Metal housing			
	HDC-HA-3-AVL	1497600000	10
AVL = Bulkhead housing, end locking			
HAD-7 = Plastic housing			
HA-3 = Metal housing			

Cover for housings with end locking

Plastic / Cover with cord



Version / Type	Cat. No.	Qty.
Plastic cover		
HDC-HA-3-KDBF-S	1665760000	10
HDC-HA-3-KDBF-B	1665770000	10

S = Cover without sealing when using male inserts

B = Cover without sealing when using female inserts

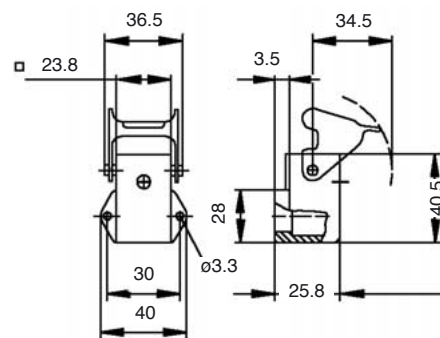
Bulkhead housing angled HA-3/HAD-7

End locking



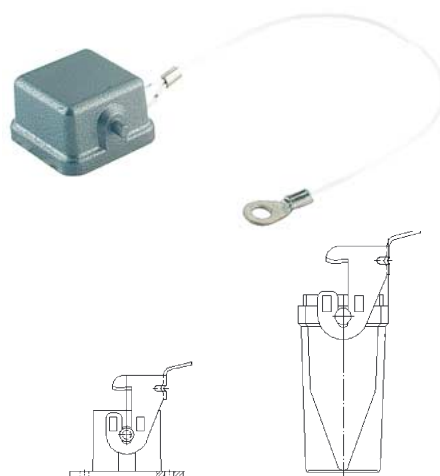
AWVL

Dimensions



Version	Type	Cat. No.	Qty.
Plastic housing			
	HDC-HAD-7-AWVL	1652420000	10
Metal housing			
	HDC-HA-3-AWVL	1497700000	10
AWVL = Bulkhead housing angled, end locking			
HAD-7 = Plastic housing			
HA-3 = Metal housing			

Metal / Cover with cord



Version / Type	Cat. No.	Qty.
Metal cover		
HDC-HA-3-MDBF-S	1665740000	10
HDC-HA-3-MDBF-B	1665750000	10

S = Cover without sealing when using male inserts

B = Cover without sealing when using female inserts

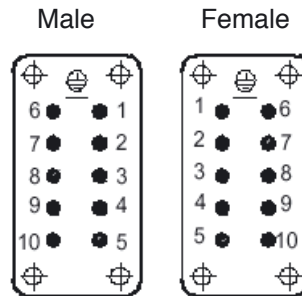
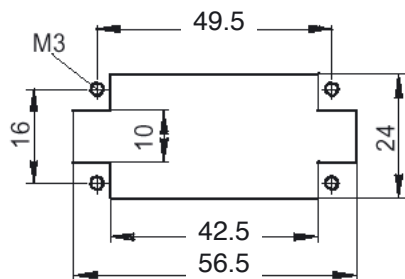
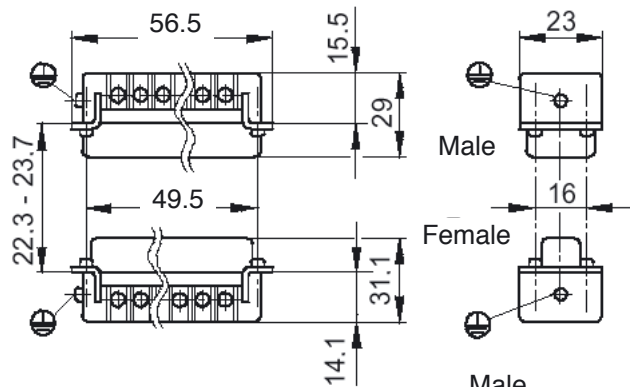
For accessories see section "Accessories"

Inserts Group Size 2

Screw connection HA-10

10-pole

250 V-/max 16 A



view from cable side

Version	Type	Cat. No.	Qty.
Male	HDC-HA-10SS	1650610000	5
Female	HDC-HA-10BS	1650620000	5

Housings Group Size 2

Plug hood HA-10

End locking / lower side

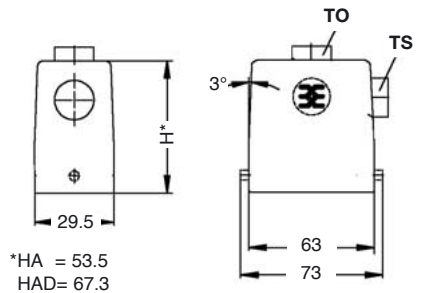


TOVL



TSVL

Dimensions



*HA = 53.5
HAD= 67.3

Version	Type	Cat. No.	Qty.
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Standard housing, metric thread

1 x M 20 thread	HDC HA10 TOVL 1xM20G	1788620000	5
1 x M 25 thread	HDC HA10 TOVL 1xM25G	1788610000	5
1 x M 20 sleeve	HDC HA10 TSVL 1xM20	1788600000	5
1 x M 25 sleeve	HDC HA10 TSVL 1xM25	1788590000	5
1 x M 20 thread	HDC HAD15 TOVL 1xM20G	1788880000	5
1 x M 25 thread	HDC HAD15 TOVL 1xM25G	1788870000	5
1 x M 20 thread	HDC HAD15 TSVL 1xM20G	1788860000	5
1 x M 25 thread	HDC HAD15 TSVL 1xM25G	1788850000	5

Standard housing , PG thread

1 x Pg16 complete	HDC-HA-10-TOVL1/16P	1663920000	5
1 x Pg16 sleeve	HDC-HA-10-TOVL1/16	1663930000	5
1 x Pg16 complete	HDC-HA-10-TSVL1/16P	1663800000	5
1 x Pg16 sleeve	HDC-HA-10-TSVL1/16	1663810000	5
1 x Pg16 complete	HDC-HAD-15-TOVL1/16P	1663960000	5
1 x Pg21 complete	HDC-HAD-15-TOVL1/21P	1663980000	5
1 x Pg21 sleeve	HDC-HAD-15-TOVL1/21	1663990000	5
1 x Pg16 complete	HDC-HAD-15-TSVL1/16P	1663840000	5
1 x Pg16 sleeve	HDC-HAD-15-TSVL1/16	1663850000	5
1 x Pg21 complete	HDC-HAD-15-TSVL1/21P	1663860000	5
1 x Pg21 sleeve	HDC-HAD-15-TSVL1/21	1663870000	5

TOVL = Plug hood; Top cable entry, end locking

TSVL = Plug hood; Side cable entry, end locking

For accessories see section "Accessories"

Housings Group Size 2

Base housing HA-10

End locking / with/without cover

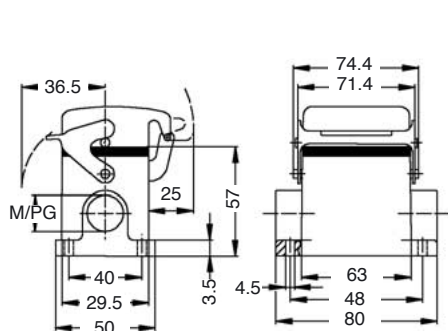


SVL



SDVL

Dimensions



Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
2 x M 20 thread	HDC HA10 SVL 2xM20G	1788640000	5
2 x M 25 thread	HDC HA10 SVL 2xM25G	1788630000	5
Standard housing with cover, metric thread			
2 x M 20 thread	HDC HA10 SDVL 2xM20G	1788660000	5
2 x M 25 thread	HDC HA10 SDVL 2xM25G	1788650000	5
Standard housing, PG thread			
1 x Pg16 complete	HDC-HA-10-SVL1/16P	1664160000	5
1 x Pg16 sleeve	HDC-HA-10-SVL1/16	1664170000	5
1 x Pg21 complete	HDC-HA-10-SVL1/21P	1664200000	5
1 x Pg21 sleeve	HDC-HA-10-SVL1/21	1664210000	5
2 x Pg16 complete	HDC-HA-10-SVL2/16P	1664180000	5
2 x Pg16 sleeve	HDC-HA-10-SVL2/16	1664190000	5
Standard housing with cover, PG thread			
1 x Pg16 complete	HDC-HA-10-SDVL1/16P	1664400000	5
1 x Pg16 sleeve	HDC-HA-10-SDVL1/16	1664410000	5
2 x Pg16 complete	HDC-HA-10-SDVL2/16P	1664420000	5

SVL = Base housing, end locking

SDVL = Base housing with cover, end locking

For accessories see section "Accessories"

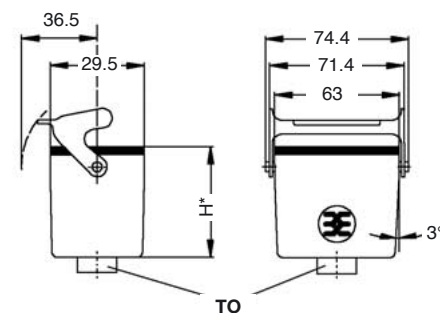
Coupling hood HA-10 / HAD-15

End locking



KVL

Dimensions

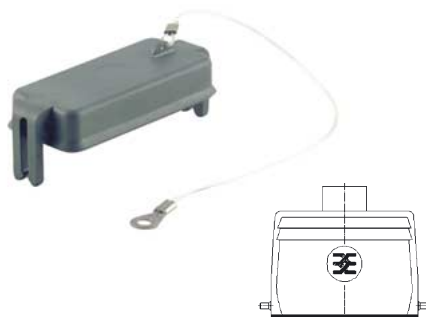
*HA = 48
HAD = 62

Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
1 x M 25 thread	HDC HA10 KVL 1xM25G	1788670000	5
1 x M 25 thread	HDC HAD15 KVL 1xM25G	1788890000	2
Standard housing, PG thread			
1 x Pg16 complete	HDC-HA-10-KVL1/16P	1664560000	5
1 x Pg21 complete	HDC-HAD-15-KVL1/21P	1664620000	2
1 x Pg21 sleeve	HDC-HAD-15-KVL1/21	1664630000	2

KVL = Coupling hood, end locking

Cover for plug hood

Cover with cord



Version / Type	Cat. No.	Qty.
Plastic cover		
HDC-HA-10-KDF	1665890000	5

Bulkhead housing HA-10

End locking / with/without cover

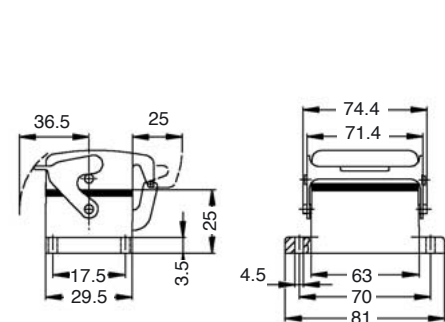


AVL



ADVL

Dimensions



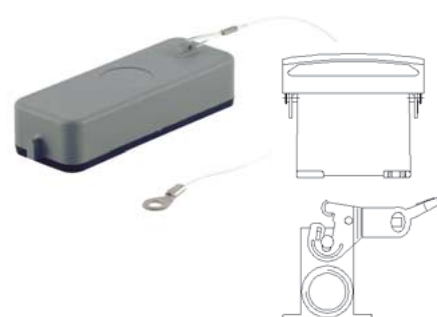
Version	Type	Cat. No.	Qty.
Standard housing			
	HDC-HA-10-AVL	1664040000	5
Standard housing with cover			
	HDC-HA-10-ADVL	1664060000	5

ADVL = Bulkhead housing with cover, end locking

AVL = Bulkhead housing, end locking

Cover for housings with end locking

Cover with cord



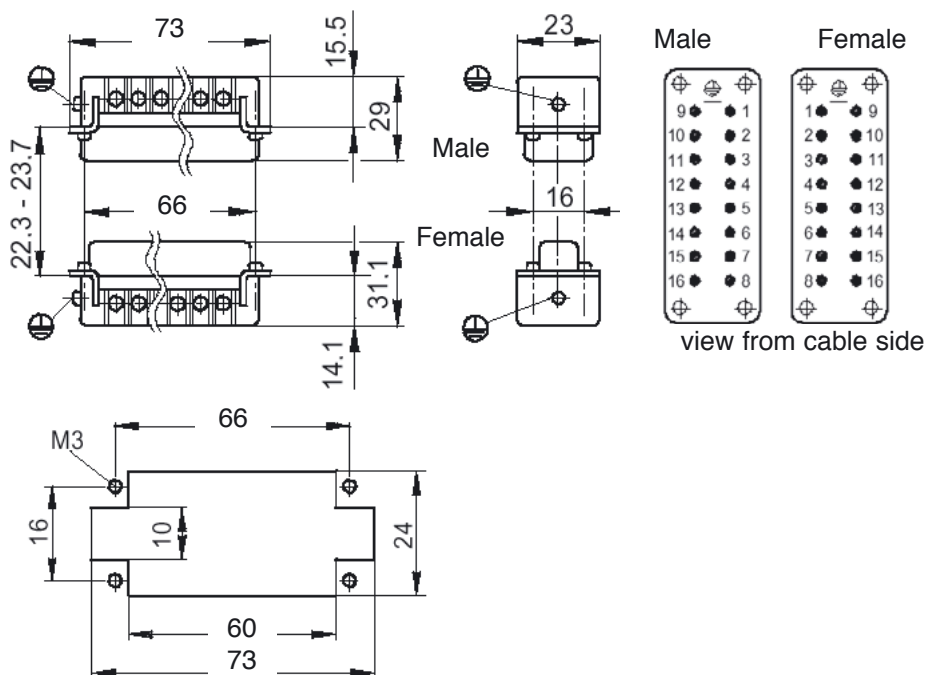
Version / Type	Cat. No.	Qty.
Plastic cover		
HDC-HA-10-KDBF	1665880000	5

Inserts Group Size 5

Screw connection HA-16

16-pole

250 V-/max 16 A

[illegible]

For accessories see section "Accessories"

Housings Group Size 5

Plug hood HA-16 / HAD-25

End locking / lower side

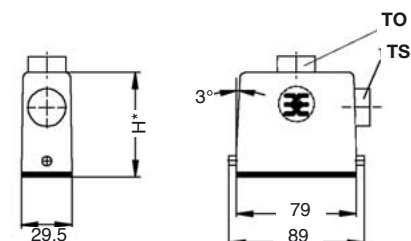


TOVL



TSVL

Dimensions



*HA = 58.3
HAD= 72.3

Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
1 x M 20 thread	HDC HA16 TOVL 1xM20G	1804680000	5
1 x M 25 thread	HDC HA16 TOVL 1xM25G	1788750000	5
1 x M 20 sleeve	HDC HA16 TSVL 1xM20	1804620000	5
1 x M 25 sleeve	HDC HA16 TSVL 1xM25	1788740000	5
1 x M 20 thread	HDC HAD25 TOVL 1xM20G	1788710000	5
1 x M 25 thread	HDC HAD25 TOVL 1xM25G	1788700000	5
1 x M 25 thread	HDC HAD25 TSVL 1xM25G	1788690000	5
1 x M 32 thread	HDC HAD25 TSVL 1xM32G	1788680000	5
Standard housing, PG thread			
1 x Pg16 complete	HDC-HA-16-TOVL1/16P	1664800000	5
1 x Pg16 sleeve	HDC-HA-16-TOVL1/16	1664810000	5
1 x Pg16 complete	HDC-HA-16-TSVL1/16P	1664680000	5
1 x Pg16 sleeve	HDC-HA-16-TSVL1/16	1664690000	5
1 x Pg16 complete	HDC-HAD-25-TOVL1/16P	1664840000	5
1 x Pg16 sleeve	HDC-HAD-25-TOVL1/16	1664850000	5
1 x Pg21 complete	HDC-HAD-25-TSVL1/21P	1664860000	5
1 x Pg21 sleeve	HDC-HAD-25-TOVL1/21	1664870000	5
1 x Pg16 complete	HDC-HAD-25-TSVL1/16P	1664720000	5
1 x Pg16 sleeve	HDC-HAD-25-TSVL1/16	1664730000	5
1 x Pg21 complete	HDC-HAD-25-TSVL1/21P	1664740000	5
1 x Pg21 sleeve	HDC-HAD-25-TSVL1/21	1664750000	5

TOVL = Plug hood; Top cable entry, end locking

TSVL = Plug hood; Side cable entry, end locking

Housings Group Size 5

Base housing HA-16

End locking, with/without Cover

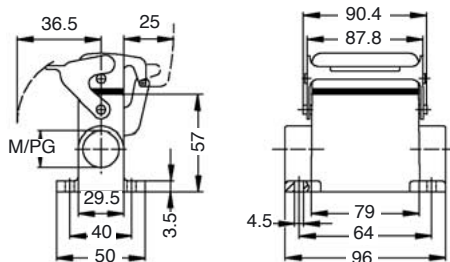


SVL



SDVL

Dimensions



Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
2 x M 20 thread	HDC HA16 SVL 2xM20G	1788770000	2
2 x M 25 thread	HDC HA16 SVL 2xM25G	1788760000	2
Standard housing with cover, metric thread			
2 x M 20 thread	HDC HA16 SDVL 2xM20G	1788790000	2
2 x M 25 thread	HDC HA16 SDVL 2xM25G	1788780000	2
Standard housing, PG thread			
1 x Pg16 complete	HDC-HA-16-SVL1/16P	1665040000	2
1 x Pg16 sleeve	HDC-HA-16-SVL1/16	1665050000	2
1 x Pg21 complete	HDC-HA-16-SVL1/21P	1665080000	2
1 x Pg21 sleeve	HDC-HA-16-SVL1/21	1665090000	2
2 x Pg16 complete	HDC-HA-16-SVL2/16P	1665060000	2
2 x Pg16 sleeve	HDC-HA-16-SVL2/16	1665070000	2
2 x Pg21 complete	HDC-HA-16-SVL2/21P	1665100000	2
Standard housing with cover, PG thread			
1 x Pg16 complete	HDC-HA-16-SDVL1/16P	1665280000	2
2 x Pg16 complete	HDC-HA-16-SDVL2/16P	1665300000	2

SVL = Base housing, end locking

SDVL = Base housing with cover, end locking

For accessories see section "Accessories"

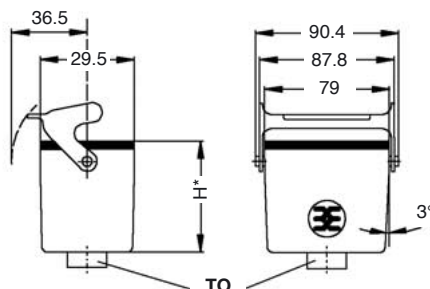
Coupling hood HA-16 / HAD-25

End locking



KVL

Dimensions



*HA = 53

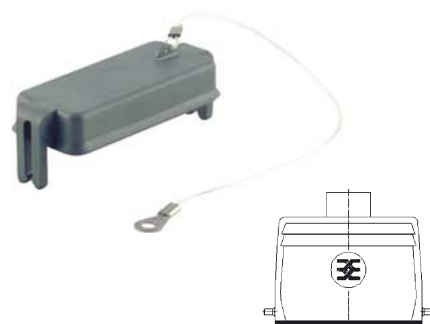
HAD= 67

Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
1 x M 25 thread	HDC HA16 KVL 1xM25G	1788800000	5
1 x M 20 thread	HDC HAD25 KVL 1xM20G	1788730000	2
1 x M 25 thread	HDC HAD25 KVL 1xM25G	1788720000	2
Standard housing, PG thread			
1 x Pg16 complete	HDC-HA-16-KVL1/16P	1665440000	5
1 x Pg16 sleeve	HDC-HA-16-KVL1/16	1665450000	5
1 x Pg16 complete	HDC-HAD-25-KVL1/16P	1665480000	2
1 x Pg21 complete	HDC-HAD-25-KVL1/21P	1665500000	2

KVL = Coupling hood, end locking

Cover for plug hood

Cover with cord



Type	Cat. No.	Qty.
Plastic cover		
HDC-HA-16-KDF	1665910000	5

Bulkhead housing HA-16

End locking / with/without Cover

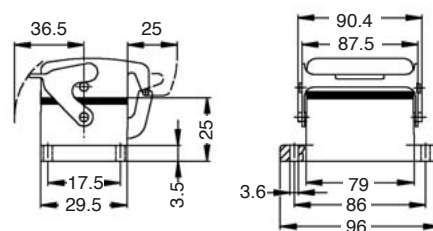


AVL



ADVL

Dimensions



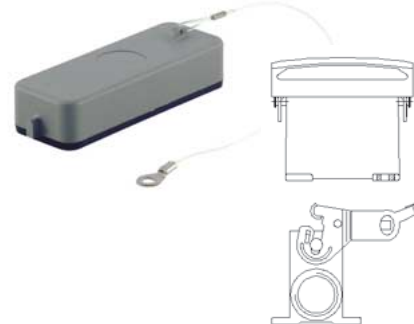
Version	Type	Cat. No.	Qty.
Standard housing			
	HDC-HA-16-AVL	1664920000	5
Standard housing with cover			
	HDC-HA-16-ADVL	1664940000	5

AVL = Bulkhead housing, end locking

ADVL = Bulkhead housing with cover, end locking

Cover for housings with end locking

Cover with cord



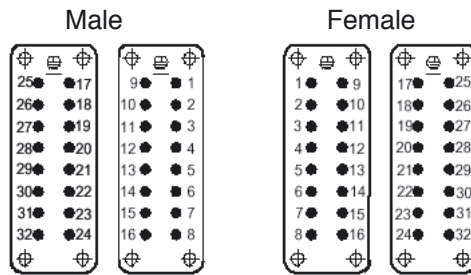
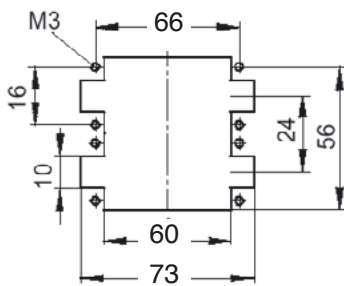
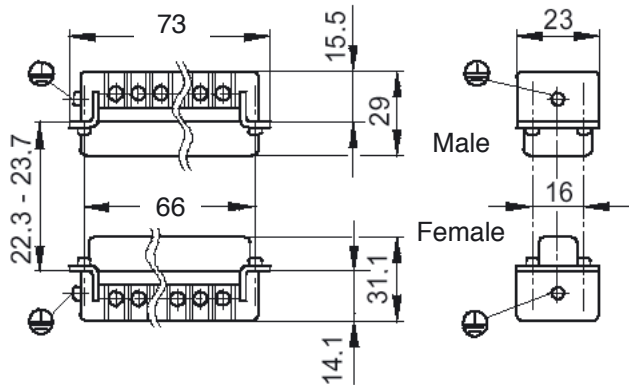
Type	Cat. No.	Qty.
Plastic cover		
HDC-HA-16-KDBF	1665900000	5

Inserts Group Size 7

Screw connection HA-32

32-pole

250 V-/300 V-/max 16 A



view from cable side

Version	Type	Cat. No.	Qty.
Male	HDC-HA-16SS	1650770000	5
Male	HDC-HA-16SS 17-32	1650880000	5
Female	HDC-HA-16BS	1650780000	5
Female	HDC-HA-16BS 17-32	1650900000	5

Please order two inserts per housing

Housings Group Size 7

Plug hood HA-32

Side locking / lower side

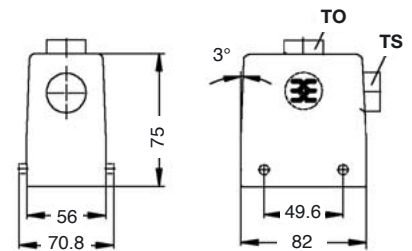


TOVU



TSVU

Dimensions



Version	Type	Cat. No.	Qty.
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Standard housing, metric thread

1 x M 25 thread	HDC HA32 TOVU 1xM25G	1788000000	2
1 x M 32 thread	HDC HA32 TOVU 1xM32G	1787990000	2
1 x M 25 thread	HDC HA32 TSVU 1xM25G	1787960000	2
1 x M 32 thread	HDC HA32 TSVU 1xM32G	1787950000	2

Standard housing, PG thread

1 x Pg21 complete	HDC-HA-32-TOVU1/21P	1665780000	2
1 x Pg21 sleeve	HDC-HA-32-TOVU1/21	1665790000	2
1 x Pg29 complete	HDC-HA-32-TOVU1/29P	1665800000	2
1 x Pg29 sleeve	HDC-HA-32-TOVU1/29	1665810000	2
1 x Pg21 complete	HDC-HA-32-TSVU1/21P	1665660000	2
1 x Pg21 sleeve	HDC-HA-32-TSVU1/21	1665670000	2
1 x Pg29 complete	HDC-HA-32-TSVU1/29P	1665680000	2
1 x Pg29 sleeve	HDC-HA-32-TSVU1/29	1665690000	2

TOVU = Plug hood; Top cable entry,

Side locking / lower side

TSVU = Plug hood; Side cable entry,

side locking / lower side

For accessories see section "Accessories"

Housings Group Size 7

Base housing HA-32

Side locking



SVU

Coupling hood HA-32

Side locking



KVU

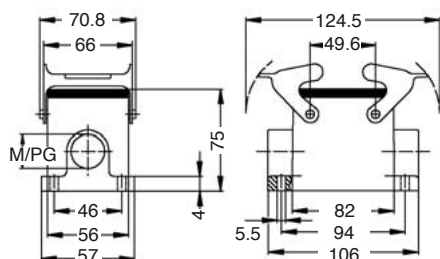
Bulkhead housing HA-32

Side locking

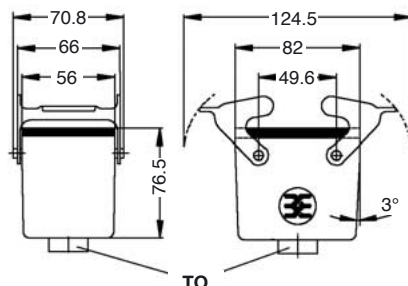


AVU

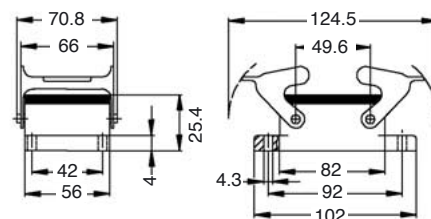
Dimensions



Dimensions



Dimensions



Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
2 x M 25 thread	HDC HA32 SVU 2xM25G	1788040000	2
2 x M 32 thread	HDC HA32 SVU 2xM32G	1788030000	2
Standard housing, PG thread			
1 x Pg21 complete	HDC-HA-32-SVU1/21P	1665960000	2
1 x Pg29 complete	HDC-HA-32-SVU1/29P	1666000000	2
1 x Pg29 sleeve	HDC-HA-32-SVU1/29	1666010000	2
2 x Pg21 complete	HDC-HA-32-SVU2/21P	1665980000	2
2 x Pg29 complete	HDC-HA-32-SVU2/29P	1666020000	2

Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
1 x M 25 thread	HDC HA32 KVU 1xM25G	1788080000	2
1 x M 32 thread	HDC HA32 KVU 1xM32G	1788070000	2
Standard housing, PG thread			
1 x Pg21 complete	HDC-HA-32-KVU1/21P	1666120000	2
1 x Pg29 complete	HDC-HA-32-KVU1/29P	1666140000	2

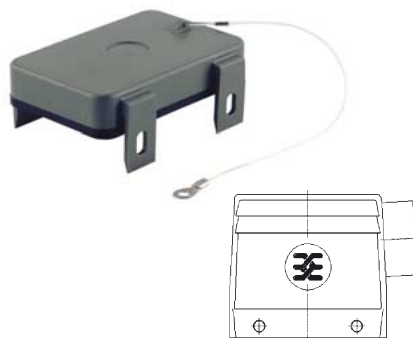
KVU = Coupling hood, side locking

Version	Type	Cat. No.	Qty.
Standard housing			
	HDC-HA-32-AVU	1665860000	2

AVU = Bulkhead housing, side locking / lower side

Cover for plug hood

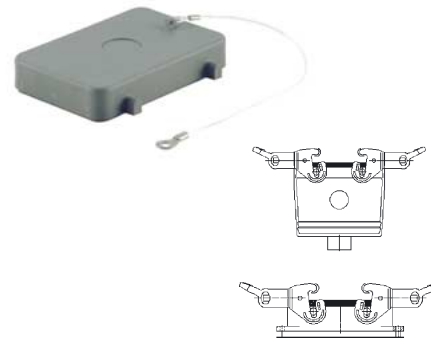
Cover with cord



Type	Cat. No.	Qty.
Plastic cover		
HDC-HA-32-KDF	1665930000	2

Cover for housings with side locking

Cover with cord



Type	Cat. No.	Qty.
Plastic cover		
HDC-HA-32-KDBF	1665920000	2

SVU = Base housing, side locking / lower side

For accessories see section "Accessories"

Housings Group Size 7

Plug hood HA-32

Side locking / upper side

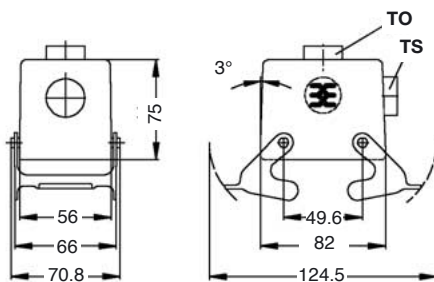


TOVO



TSVO

Dimensions



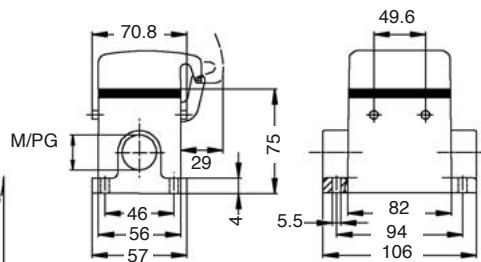
Base housing HA-32

Side locking / upper side



SDVO

Dimensions



Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
1 x M 25 thread	HDC HA32 TOVO 1xM25G	1788020000	2
1 x M 32 thread	HDC HA32 TOVO 1xM32G	1788010000	2
1 x M 25 thread	HDC HA32 TSVO 1xM25G	1787980000	2
1 x M 32 thread	HDC HA32 TSVO 1xM32G	1787970000	2
Standard housing, PG thread			
1 x Pg21 complete	HDC-HA-32-TOVO1/21P	1666360000	2
1 x Pg29 complete	HDC-HA-32-TOVO1/29P	1666380000	2
1 x Pg21 complete	HDC-HA-32-TSVO1/21P	1666240000	2
1 x Pg29 complete	HDC-HA-32-TSVO1/29P	1666260000	2
1 x Pg29 sleeve	HDC-HA-32-TSVO1/29	1666270000	2

Version	Type	Cat. No.	Qty.
Standard housing with cover, metric thread			
2 x M 25 thread	HDC HA32 SDVO 2xM25G	1788060000	2
2 x M 32 thread	HDC HA32 SDVO 2xM32G	1788050000	2
Standard housing with cover, PG thread			
1 x Pg21 complete	HDC-HA-32-SDVO1/21P	1666540000	2
1 x Pg21 sleeve	HDC-HA-32-SDVO1/21	1666550000	2
1 x Pg29 sleeve	HDC-HA-32-SDVO1/29	1666590000	2

TOVO = Plug hood; Top cable entry, side locking
TSVO = Plug hood; Side cable entry, side locking

SDVO = Base housing with cover, side locking / upper side

For accessories see section "Accessories"

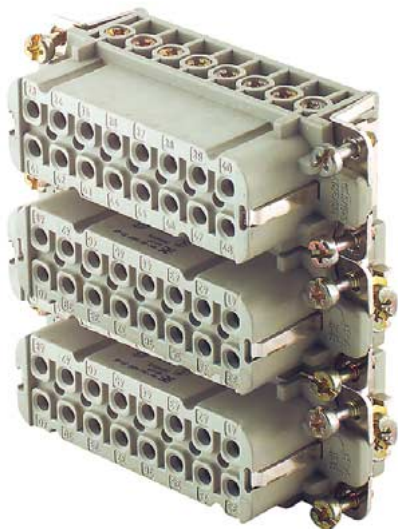
Inserts Group Size 9

Screw connection HA-48

48-pole

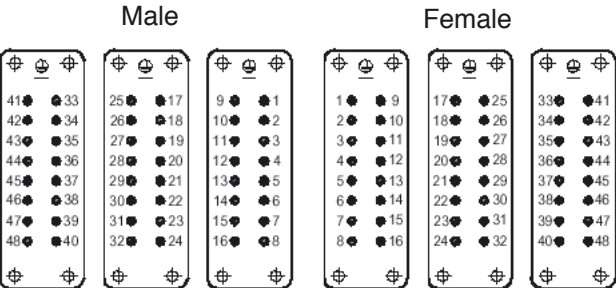
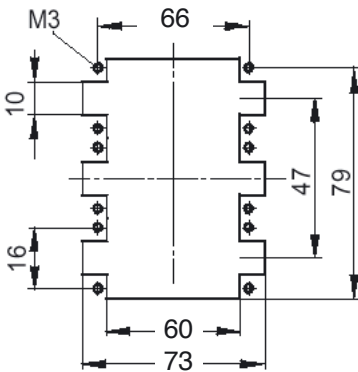
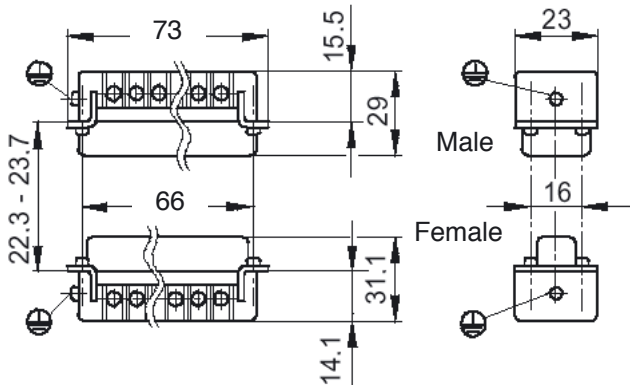
250 V-/300 V-/max 16 A

Series HA



Version	Type	Cat. No.	Qty.
Male	HDC-HA-16SS	1650770000	5
Male	HDC-HA-16SS 17-32	1650880000	5
Male	HDC-HA-16SS 33-48	1650990000	5
Female	HDC-HA-16BS	1650780000	5
Female	HDC-HA-16BS 17-32	1650900000	5
Female	HDC-HA-16BS 33-48	1651020000	5

Please order two inserts per housing



view from cable side

For accessories see section "Accessories"

Housings Group Size 9

Plug hood HA-48

End locking / lower side

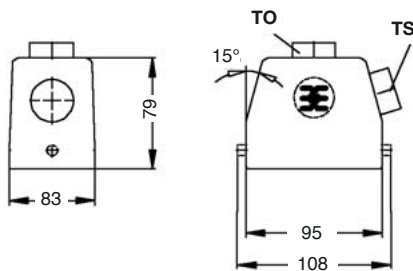


TOVL



TSVL

Dimensions



Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
1 x M 32 thread	HDC HA48 TOVL 1xM32G	1788560000	1
1 x M 32 thread	HDC HA48 TSVL 1xM32G	1788550000	1
Standard housing, PG thread			
1 x Pg29 complete	HDC-HA-48-TOVL1/29P	1666720000	1
1 x Pg29 sleeve	HDC-HA-48-TOVL1/29	1666730000	1
1 x Pg29 complete	HDC-HA-48-TSVL1/29P	1666700000	1
1 x Pg29 sleeve	HDC-HA-48-TSVL1/29	1666710000	1

TOVL = Plug hood; Top cable entry, end locking / lower side
TSVL = Plug hood; Side cable entry, end locking / lower side

For accessories see section "Accessories"

Base housing HA-48

End locking / with cover

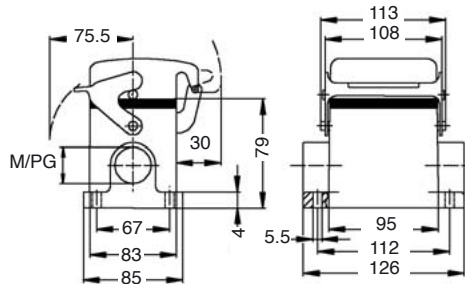


SVL



SDVL

Dimensions



Version	Type	Cat. No.	Qty.
Standard housing, metric thread			
2 x M 32 thread	HDC HA48 SVL 2xM32G	1788570000	1
Standard housing with cover, metric thread			
2 x M 32 thread	HDC HA48 SDVL 2xM32G	1788580000	1
Standard housing, PG thread			
1 x Pg29 complete	HDC-HA-48-SVL1/29P	1666760000	1
1 x Pg29 sleeve	HDC-HA-48-SVL1/29	1666770000	1
2 x Pg29 complete	HDC-HA-48-SVL2/29P	1666780000	1
Standard housing with cover, PG thread			
1 x Pg29 complete	HDC-HA-48-SDVL1/29P	1666800000	1
1 x Pg29 sleeve	HDC-HA-48-SDVL1/29	1666810000	1
2 x Pg29 complete	HDC-HA-48-SDVL2/29P	1666820000	1
2 x Pg29 sleeve	HDC-HA-48-SDVL2/29	1666830000	1

SVL = Base housing, end locking
SDVL = Base housing with cover, end locking

Bulkhead housing HA-48

End locking / with cover

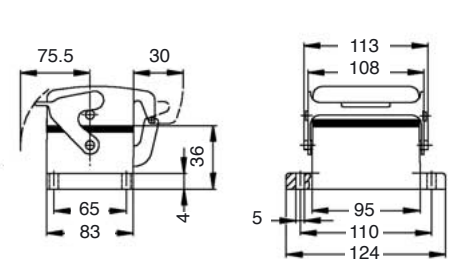


AVL



ADVL

Dimensions



Version	Type	Cat. No.	Qty.
Standard housing			
sleeve	HDC-HA-48-AVL	1666740000	1
Standard housing with cover			
sleeve	HDC-HA-48-ADVL	1666750000	1

AVL = Bulkhead housing, end locking
ADVL = Bulkhead housing with cover, end locking

