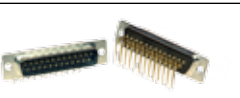
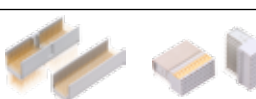
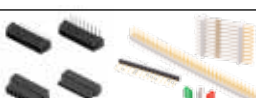
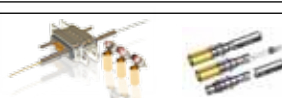




|                                                  |           |                                                   |                |
|--------------------------------------------------|-----------|---------------------------------------------------|----------------|
| <b>Plastic Hoods</b>                             | <b>01</b> | <b>Sub-D Connectors, MHD Standard Series</b>      | <b>06</b>      |
| DPPK-SLIM Top Entry                              | 6-7       | Sub-D Solder Cup                                  | 52             |
| DSSK-P Side & Top Entry                          | 8         | Sub-D Dip Solder Type                             | 53             |
| DTPPK Top Entry                                  | 9         | Sub-D Crimp Connectors                            | 54             |
| D45PPK Side Entry                                | 10        | Sub-D IDC Connectors                              | 55             |
| TRI-P 3-way Entry                                | 11        | Sub-D High Density Solder Cup                     | 56             |
| CCOV-SN Top Entry                                | 12-13     | Sub-D High Density Dip Solder Type                | 57             |
| ED Top Entry                                     | 14-15     | Sub-D High Density Crimp Connectors               | 58             |
|                                                  |           | Sub-D - MH105 IDC Series                          | 59             |
|                                                  |           | <i>Mounting Options MHD-Series</i>                | 60             |
| <b>Metalized Plastic Hoods</b>                   | <b>02</b> | <b>Sub-D Connectors, High Quality Series</b>      | <b>07</b>      |
| DPPK-MET Top Entry                               | 16        | Sub-D Solder Cup                                  | 63             |
| DSSK-MET Side & Top Entry                        | 17        | Sub-D Dip Solder Straight                         | 64             |
| DTPK Top Entry                                   | 18        | Sub-D Dip Solder Crooked                          | 65             |
| D45PK Side Entry                                 | 19        | Sub-D Wire Wrap                                   | 66             |
| TRI-M 3-way Entry                                | 20        | Sub-D Dip Solder Angled                           | 67-69          |
| C88E2 Side Entry                                 | 21        | Sub-D Crimp Connectors                            | 70-71          |
| C88E3 Top Entry                                  | 22        | Sub-D IDC Connectors                              | 72             |
| CCOV-MP Top Entry                                | 23        | Sub-D 90° SMD Connectors                          | 73-75          |
|                                                  |           | Sub-D High Density Solder Cup                     | 76             |
|                                                  |           | Sub-D High Density Dip Solder Straight            | 77             |
|                                                  |           | Sub-D High Density Dip Solder Angled              | 78             |
| <b>Full Metal Hoods</b>                          | <b>03</b> | <b>Sub-D Filter Connectors</b>                    | <b>08</b>      |
| MULTI HOOD Top Entry                             | 24        | Sub-D Solder Cup                                  | 80             |
| MULTI HOOD Side Entry                            | 25        | Sub-D Dip Solder Straight                         | 81             |
| DTZK Top Entry                                   | 26-29     | Sub-D Dip Solder Angled                           | 82-84          |
| D45ZK Side Entry                                 | 30        | Sub-D 90° SMD Connectors                          | 85-87          |
| DVSL Side Entry                                  | 31        |                                                   |                |
| DTZK - BLACK - Top Entry                         | 32        | <b>Sub-D COMBO Connectors</b>                     | <b>09</b>      |
| D45ZK - BLACK - Side Entry                       | 33        | Sub-D Solder Cup                                  | 90             |
| DTZK-CZK Top Entry                               | 34        | Sub-D Dip Solder Straight                         | 91             |
| D45ZK-CZK Side Entry                             | 35        | Sub-D Dip Solder Angled                           | 92             |
| DTSL Top & Side Entry                            | 36-37     | High Power Contacts                               | 93             |
| DTZI Top Entry                                   | 38        | Coaxial Contacts                                  | 94-95          |
| DSCK Side Entry                                  | 39        | High Voltage & Pneumatic Contacts                 | 96             |
| DCMR Side Entry                                  | 40-41     | <i>Mounting Options High Quality Series</i>       | 98-106         |
| C88E000 Side & Top Entry                         | 42        |                                                   |                |
| ED-N Diecast Crimp Hood                          | 43        | <b>BUS Connector Systems</b>                      | <b>107-109</b> |
| CCOV-ME Top Entry                                | 44-45     |                                                   | <b>10</b>      |
|                                                  |           | <b>DVI &amp; HDMI Connectors</b>                  | <b>110-115</b> |
|                                                  |           |                                                   | <b>11</b>      |
| <b>Special Hoods - Shielded &amp; Unshielded</b> | <b>04</b> | <b>DIN 416 12 Connectors</b>                      | <b>116-127</b> |
| DTK / DTPK I-Series Top Entry                    | 46        |                                                   | <b>12</b>      |
| Flat Cable Hoods                                 | 47        | <b>Hard Metric Connectors</b>                     | <b>128-129</b> |
| Drawn Metal Hoods / Cans                         | 47        |                                                   | <b>13</b>      |
|                                                  |           | <b>2,0mm &amp; 2,54mm PCB Connectors</b>          | <b>130-135</b> |
| <b>Adapter Housings &amp; Kits</b>               | <b>05</b> |                                                   | <b>14</b>      |
| DAPK - Shielded & Unshielded                     | 48        | <b>Flat Pin Connectors, 1-pole &amp; 2-pole</b>   | <b>15</b>      |
| DA - Adapter Kits                                | 49        | 1-pol Power Connectors, 15/25/30/45/75 Amp        | 136            |
| GA - Adapter Kits                                | 50        | 1-pol Power Connectors, 120/180 Amp               | 137            |
|                                                  |           | 2-pol Power Connectors, 50/120 Amp                | 138            |
|                                                  |           | 2-pol Power Connectors, 175/350 Amp               | 139            |
| <b>Moulded Rubber Gaskets and Housings</b>       | <b>05</b> | Euroconnectors & IP68 Waterproof Power Connectors | 139            |
| DIP Moulded Series                               | 51        |                                                   |                |
|                                                  |           | <b>Nano &amp; Micro Connector Series</b>          | <b>16</b>      |
|                                                  |           | Bi-Lobe Nano Connectors                           | 140            |
|                                                  |           | Circular Nano Connectors                          | 141            |
|                                                  |           | Strip Connectors, Micro                           | 142            |
|                                                  |           | <b>Fiber Optic Connector Series</b>               | <b>144-145</b> |
|                                                  |           |                                                   | <b>17</b>      |

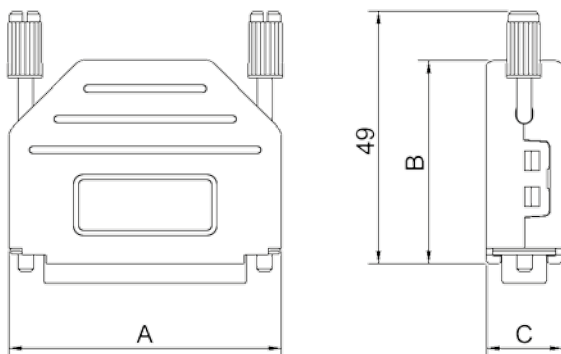
|                                                 |                                                                                       |           |
|-------------------------------------------------|---------------------------------------------------------------------------------------|-----------|
| <b>Plastic Hoods</b>                            |     | <b>01</b> |
| <b>Metalized Plastic Hoods</b>                  |    | <b>02</b> |
| <b>Full Metal Hoods</b>                         |    | <b>03</b> |
| <b>Special Hoods</b>                            |    | <b>04</b> |
| <b>Adapter Housings &amp; Moulded Gaskets</b>   |    | <b>05</b> |
| <b>Sub-D Standard Connectors</b>                |    | <b>06</b> |
| <b>Sub-D High Quality Connectors</b>            |    | <b>07</b> |
| <b>Sub-D Filter Connectors</b>                  |    | <b>08</b> |
| <b>Sub-D Combo Connectors</b>                   |   | <b>09</b> |
| <b>BUS Connector Systems</b>                    |  | <b>10</b> |
| <b>DVI &amp; HDMI Connectors &amp; Housings</b> |  | <b>11</b> |
| <b>DIN 416 12 Connectors</b>                    |  | <b>12</b> |
| <b>Hard Metric Connectors</b>                   |  | <b>13</b> |
| <b>2,0mm &amp; 2,54mm PCB Connectors</b>        |  | <b>14</b> |
| <b>Flat Pin Connectors</b>                      |  | <b>15</b> |
| <b>Nano &amp; Micro Connectors</b>              |  | <b>16</b> |
| <b>Fiber Optic Connector Series</b>             |  | <b>17</b> |

|                                                        |                |           |
|--------------------------------------------------------|----------------|-----------|
| <b>Modular Plugs &amp; Jacks</b>                       |                | <b>18</b> |
| RJ – Series, Plugs & Strain Relief Boots               | 146-148        |           |
| RJ – Series, Jacks & Couplers                          | 149            |           |
| <b>Bel-Stewart Connector Systems</b>                   |                | <b>19</b> |
| Cat 6a / 7a – Shielded & Unshielded Plugs & Jacks      | 150-151        |           |
| Modular Plugs, Series 30, 36, 37, 39                   | 152            |           |
| Modular Jacks, Series 60, 64, 65, 70, 71               | 153            |           |
| Modular Jacks, Series 66, 71, 73, 73100, 73500         | 154            |           |
| Modular Jacks, Series 80, 82, Voice, 31-32, 61-62      | 154            |           |
| MagJacks                                               | 155-156        |           |
| Tooling, Professional & Semi-Professional              | 157            |           |
| <b>Bel-Fuse</b>                                        |                | <b>19</b> |
| SMP, SIP & FC Fuse-Clips                               | 158            |           |
| MRF, MRT, RST Series                                   | 158            |           |
| 5E, 5H, 5S, 5V IEC 5x20mm, 250V                        | 158            |           |
| C1, C2, SS Surface Mount Series                        | 159            |           |
| 3A, 3S, GS Fast & Slow Blow UL/CSA 1/4 x 11/4          | 159            |           |
| MQ, MS Fast & Slow Blow UL/CSA 125V Micro Series       | 159            |           |
| RJS UL/CSA 4,6 x 15,5mm                                | 159            |           |
| 2J, 3J, MJS UL/CSA 5 x 15mm (2AG)                      | 159            |           |
| 5M, 5T UL/CSA 5 x 20mm 250V                            | 159            |           |
| <b>Waterproof Connectors</b>                           |                | <b>20</b> |
| Sub-D Connectors                                       | 160-163        |           |
| RJ45 Modular Connector Series                          | 164-166        |           |
| Mini-DIN Connector Series                              | 167            |           |
| USB Connector Series                                   | 168-169        |           |
| Sensor Connector Series                                | 170-171        |           |
| Circular Connector & Circular Connector II Series      | 172-177        |           |
| <b>Solar / Photovoltaic Connector Systems</b>          | <b>178-179</b> | <b>21</b> |
| <b>Waterproof Cable &amp; Pipe Entry Series</b>        |                | <b>22</b> |
| Klikseal® - IP65/67                                    | 180            |           |
| Rutaseal® - IP67                                       | 181            |           |
| TSS - IP67                                             | 182            |           |
| Design-A-Flange - Modular system                       | 183            |           |
| RG M63 - Circular Kits                                 | 184            |           |
| C RS T - Circular Kits                                 | 185            |           |
| CF8 & CF32 - Rectangular Kits                          | 186            |           |
| CF16 - Rectangular Kits                                | 187            |           |
| ComSeal - Rectangular Kits                             | 188            |           |
| EzEntry™ - Rectangular Kits                            | 189            |           |
| <b>Accessories</b>                                     |                | <b>23</b> |
| Rubber & Plastic Grommets and Ferrules for Sub-D Hoods | 190            |           |
| Slide Locks & Slide Lock Posts                         | 191            |           |
| Retainer Clips                                         | 191            |           |
| Jackscrews & Screw Kits                                | 192            |           |
| Male & Female Screw Locks                              | 192            |           |
| Hex Extenders / Hex Nuts                               | 192            |           |
| BNC Strain Relief Boots                                | 193            |           |
| Miniature Gender Changers                              | 193            |           |
| Dust Caps for Sub-D Connectors                         | 193            |           |
| Crimp Tooling / Hexagonal Crimp                        | 194            |           |
| Crimp Tooling / Sub-D Crimp Contacts                   | 194            |           |
| Cutter - For Plastic Grommets                          | 194            |           |
| <b>Assembly Instructions - Sub-D Hoods</b>             | <b>196-206</b> | <b>24</b> |

|                                                 |                                                                                     |    |
|-------------------------------------------------|-------------------------------------------------------------------------------------|----|
| <b>Modular Plugs &amp; Jacks</b>                |   | 18 |
| <b>Bel-Stewart Connector System</b>             |  | 19 |
| <b>Waterproof Connectors IP66 - IP68</b>        |  | 20 |
| <b>Solar / Photovoltaic Connectors</b>          |  | 21 |
| <b>Waterproof Cable &amp; Pipe Entry Series</b> |  | 22 |
| <b>Accessories</b>                              |  | 23 |
| <b>Assembly Instructions - Sub-D Hoods</b>      |  | 24 |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Polyamid, UL-recognised                      |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Top                                          |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 11,5mm                                 |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 196                                 |



| Size   | Dim A | Dim B | Dim C |
|--------|-------|-------|-------|
| 9-way  | 31,5  | 34,0  | 15,0  |
| 15-way | 40,0  | 34,0  | 15,0  |
| 25-way | 53,5  | 34,0  | 15,0  |
| 37-way | 70,0  | 40,0  | 15,0  |
| 50-way | 67,5  | 40,0  | 15,0  |

## Features:

- Available in sizes 9-15-25-37-50-way
- Suitable for any common Sub-D connector
- Quick-snap locking system
- Standard Colour Black, other colour on request
- Company logo can be moulded on request

## Ordering information: *Standard - Black*

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6260-0101-01  | DPPK09-BK-K   |
| 15-way | 6260-0101-02  | DPPK15-BK-K   |
| 25-way | 6260-0101-03  | DPPK25-BK-K   |
| 37-way | 6260-0101-04  | DPPK37-BK-K   |
| 50-way | 6260-0101-05  | DPPK50-BK-K   |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6261-0101-01 | DPPK09-BK     |
| 15-way | 6261-0101-02 | DPPK15-BK     |
| 25-way | 6261-0101-03 | DPPK25-BK     |
| 37-way | 6261-0101-04 | DPPK37-BK     |
| 50-way | 6261-0101-05 | DPPK50-BK     |

## Ordering information:

**Light Grey**

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6353-0101-01  | DPPK09-LG-K   |
| 15-way | 6353-0101-02  | DPPK15-LG-K   |
| 25-way | 6353-0101-03  | DPPK25-LG-K   |
| 37-way | 6353-0101-04  | DPPK37-LG-K   |
| 50-way | 6353-0101-05  | DPPK50-LG-K   |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6354-0101-01 | DPPK09-LG     |
| 15-way | 6354-0101-02 | DPPK15-LG     |
| 25-way | 6354-0101-03 | DPPK25-LG     |
| 37-way | 6354-0101-04 | DPPK37-LG     |
| 50-way | 6354-0101-05 | DPPK50-LG     |

**DEC Grey**

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6353-0102-01  | DPPK09-DEC-K  |
| 15-way | 6353-0102-02  | DPPK15-DEC-K  |
| 25-way | 6353-0102-03  | DPPK25-DEC-K  |
| 37-way | 6353-0102-04  | DPPK37-DEC-K  |
| 50-way | 6353-0102-05  | DPPK50-DEC-K  |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6354-0102-01 | DPPK09-DEC    |
| 15-way | 6354-0102-02 | DPPK15-DEC    |
| 25-way | 6354-0102-03 | DPPK25-DEC    |
| 37-way | 6354-0102-04 | DPPK37-DEC    |
| 50-way | 6354-0102-05 | DPPK50-DEC    |

**Red**

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6353-0103-01  | DPPK09-R-K    |
| 15-way | 6353-0103-02  | DPPK15-R-K    |
| 25-way | 6353-0103-03  | DPPK25-R-K    |
| 37-way | 6353-0103-04  | DPPK37-R-K    |
| 50-way | 6353-0103-05  | DPPK50-R-K    |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6354-0103-01 | DPPK09-R      |
| 15-way | 6354-0103-02 | DPPK15-R      |
| 25-way | 6354-0103-03 | DPPK25-R      |
| 37-way | 6354-0103-04 | DPPK37-R      |
| 50-way | 6354-0103-05 | DPPK50-R      |

**Blue**

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6353-0104-01  | DPPK09-B-K    |
| 15-way | 6353-0104-02  | DPPK15-B-K    |
| 25-way | 6353-0104-03  | DPPK25-B-K    |
| 37-way | 6353-0104-04  | DPPK37-B-K    |
| 50-way | 6353-0104-05  | DPPK50-B-K    |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6354-0104-01 | DPPK09-B      |
| 15-way | 6354-0104-02 | DPPK15-B      |
| 25-way | 6354-0104-03 | DPPK25-B      |
| 37-way | 6354-0104-04 | DPPK37-B      |
| 50-way | 6354-0104-05 | DPPK50-B      |

**Yellow**

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6353-0105-01  | DPPK09-Y-K    |
| 15-way | 6353-0105-02  | DPPK15-Y-K    |
| 25-way | 6353-0105-03  | DPPK25-Y-K    |
| 37-way | 6353-0105-04  | DPPK37-Y-K    |
| 50-way | 6353-0105-05  | DPPK50-Y-K    |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6354-0105-01 | DPPK09-Y      |
| 15-way | 6354-0105-02 | DPPK15-Y      |
| 25-way | 6354-0105-03 | DPPK25-Y      |
| 37-way | 6354-0105-04 | DPPK37-Y      |
| 50-way | 6354-0105-05 | DPPK50-Y      |

**Green**

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6353-0106-01  | DPPK09-G-K    |
| 15-way | 6353-0106-02  | DPPK15-G-K    |
| 25-way | 6353-0106-03  | DPPK25-G-K    |
| 37-way | 6353-0106-04  | DPPK37-G-K    |
| 50-way | 6353-0106-05  | DPPK50-G-K    |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6354-0106-01 | DPPK09-G      |
| 15-way | 6354-0106-02 | DPPK15-G      |
| 25-way | 6354-0106-03 | DPPK25-G      |
| 37-way | 6354-0106-04 | DPPK37-G      |
| 50-way | 6354-0106-05 | DPPK50-G      |

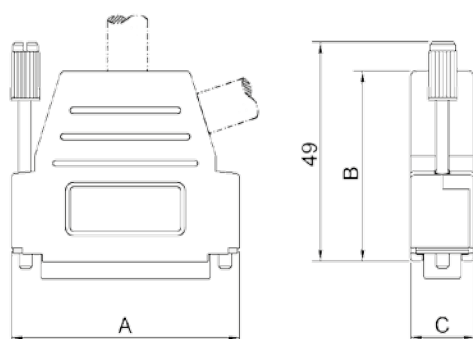
**White**

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6353-0107-01  | DPPK09-W-K    |
| 15-way | 6353-0107-02  | DPPK15-W-K    |
| 25-way | 6353-0107-03  | DPPK25-W-K    |
| 37-way | 6353-0107-04  | DPPK37-W-K    |
| 50-way | 6353-0107-05  | DPPK50-W-K    |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6354-0107-01 | DPPK09-W      |
| 15-way | 6354-0107-02 | DPPK15-W      |
| 25-way | 6354-0107-03 | DPPK25-W      |
| 37-way | 6354-0107-04 | DPPK37-W      |
| 50-way | 6354-0107-05 | DPPK50-W      |

## TECHNICAL SPECIFICATIONS

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| <b>Material:</b>              | Polyamid, UL-recognised                           |
| <b>Operating Temperature:</b> | -55°C to +110°C                                   |
| <b>Cable Entry:</b>           | Side and Top (L)<br>Side Only (S)<br>Top Only (T) |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request      |
| <b>Cable O.D:</b>             | Up to 11,5mm                                      |
| <b>Colour:</b>                | Black                                             |
| <b>Accessories:</b>           | See page 190-194                                  |
| <b>Assembly Instruction:</b>  | See page 198                                      |



| Size DSSK-T/P | Dim A | Dim B | Dim B |
|---------------|-------|-------|-------|
| 9-way         | 31,5  | 40,0  | 43,0* |
| 15-way        | 40,0  | 40,0  | -     |
| 25-way        | 53,5  | 43,0  | -     |
| 37-way        | 71,3  | 40,0  | -     |

\* Top only

## Features:

- Available in sizes 9-15-25-37
- Suitable for any common Sub-D connector
- Quick-snap locking system
- Re-openable
- Company logo available upon request
- Also available in Metalized Version, See page 17

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: | L |
|--------|---------------|---------------|---|
| 9-way  | 6260-0107-01  | DSSK-P-09-L-K |   |
| 15-way | 6260-0107-02  | DSSK-P-15-L-K |   |
| 25-way | 6260-0107-03  | DSSK-P-25-L-K |   |

| Size:  | P/N - Kitted: | Product Code: | S |
|--------|---------------|---------------|---|
| 9-way  | 6260-0107-11  | DSSK-P-09-S-K |   |
| 15-way | 6260-0107-12  | DSSK-P-15-S-K |   |
| 25-way | 6260-0107-13  | DSSK-P-25-S-K |   |
| 37-way | 6260-0107-14  | DSSK-P-37-S-K |   |

| Size:  | P/N - Kitted: | Product Code: | T |
|--------|---------------|---------------|---|
| 9-way  | 6260-0107-21  | DSSK-P-09-T-K |   |
| 15-way | 6260-0107-22  | DSSK-P-15-T-K |   |
| 25-way | 6260-0107-23  | DSSK-P-25-T-K |   |

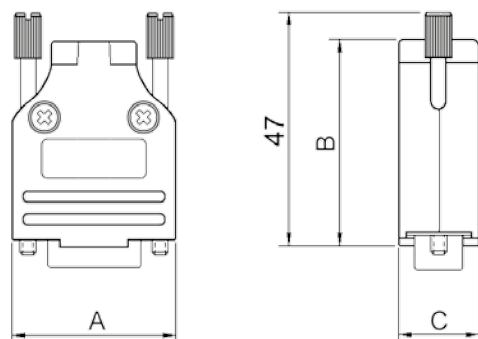
| Size:  | P/N - BULK:  | Product Code: | L |
|--------|--------------|---------------|---|
| 9-way  | 6261-0107-01 | DSSK-P-09-L   |   |
| 15-way | 6261-0107-02 | DSSK-P-15-L   |   |
| 25-way | 6261-0107-03 | DSSK-P-25-L   |   |

| Size:  | P/N - BULK:  | Product Code: | S |
|--------|--------------|---------------|---|
| 9-way  | 6261-0107-11 | DSSK-P-09-S   |   |
| 15-way | 6261-0107-12 | DSSK-P-15-S   |   |
| 25-way | 6261-0107-13 | DSSK-P-25-S   |   |
| 37-way | 6261-0107-14 | DSSK-P-37-S   |   |

| Size:  | P/N - BULK:  | Product Code: | T |
|--------|--------------|---------------|---|
| 9-way  | 6261-0107-21 | DSSK-P-09-T   |   |
| 15-way | 6261-0107-22 | DSSK-P-15-T   |   |
| 25-way | 6261-0107-23 | DSSK-P-25-T   |   |

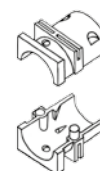
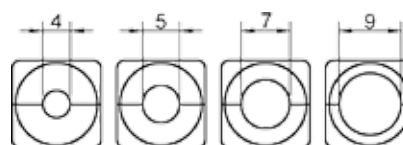
## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | UL 94 V-0 Plastic Material                   |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Top                                          |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Colour:</b>                | Black                                        |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 197                                 |



| Size MHDTPPK | Dim A | Dim B | Dim C |
|--------------|-------|-------|-------|
| 9-way        | 31,2  | 39,9  | 15,0  |
| 15-way       | 39,5  | 41,5  | 15,0  |
| 25-way       | 53,4  | 48,6  | 15,0  |
| 37-way       | 69,7  | 53,6  | 15,0  |

Grommet Sizes MHDTPPK 9-37:



## Features:

- Available in sizes 9-15-25-37
- Suitable for any common Sub-D connector
- Strain relief inserts ensure a secure termination
- Re-openable
- Also available in Metalized Version, See page 18

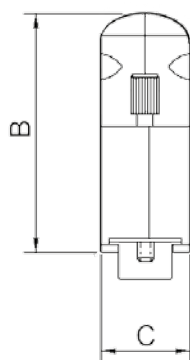
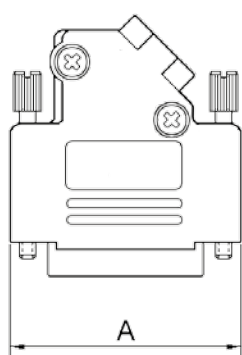
## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0108-01  | DTPPK-9-BK-K  |
| 15-way | 6560-0108-02  | DTPPK-15-BK-K |
| 25-way | 6560-0108-03  | DTPPK-25-BK-K |
| 37-way | 6560-0108-04  | DTPPK-37-BK-K |

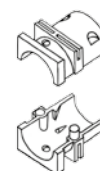
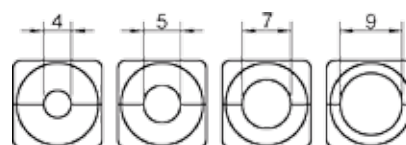
| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0108-01 | DTPPK-9-BK    |
| 15-way | 6561-0108-02 | DTPPK-15-BK   |
| 25-way | 6561-0108-03 | DTPPK-25-BK   |
| 37-way | 6561-0108-04 | DTPPK-37-BK   |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | UL 94 V-0 Plastic Material                   |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Side                                         |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Colour:</b>                | Black                                        |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 197                                 |



Grommet Sizes MHD45PPK 9-37:



| Size MHD45PPK | Dim A | Dim B | Dim C |
|---------------|-------|-------|-------|
| 9-way         | 31,0  | 36,3  | 15,0  |
| 15-way        | 39,5  | 40,3  | 15,0  |
| 25-way        | 53,2  | 40,3  | 15,0  |
| 37-way        | 69,7  | 40,3  | 15,0  |

## Features:

- Available in sizes 9-15-25-37
- Suitable for any common Sub-D connector
- Strain relief inserts ensure a secure termination
- Re-openable
- Also available in Metalized Version, See page 19

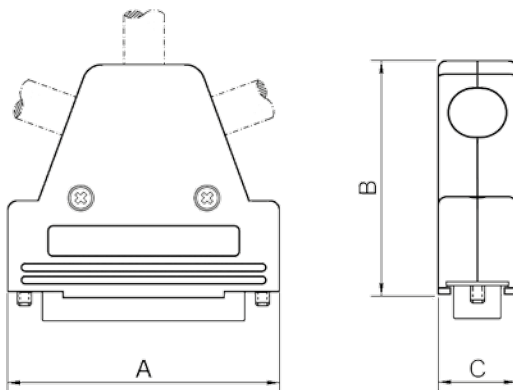
## Ordering information:

| Size:  | P/N - Kitted: | Product Code:  |
|--------|---------------|----------------|
| 9-way  | 6560-0107-11  | D45PPK-9-BK-K  |
| 15-way | 6560-0107-12  | D45PPK-15-BK-K |
| 25-way | 6560-0107-13  | D45PPK-25-BK-K |
| 37-way | 6560-0107-14  | D45PPK-37-BK-K |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0107-11 | D45PPK-9-BK   |
| 15-way | 6561-0107-12 | D45PPK-15-BK  |
| 25-way | 6561-0107-13 | D45PPK-25-BK  |
| 37-way | 6561-0107-14 | D45PPK-37-BK  |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | UL 94 V-0 Plastic Material                   |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Side / Top / Side                            |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 11,5mm                                 |
| <b>Colour:</b>                | Black                                        |



| Size MHTRI-P | Dim A | Dim B | Dim C |
|--------------|-------|-------|-------|
| 9-way        | 31,0  | 45,2  | 15,0  |
| 15-way       | 40,3  | 45,2  | 15,0  |
| 25-way       | 53,5  | 45,2  | 15,0  |
| 37-way       | 70,0  | 45,2  | 15,0  |

### Features:

- Available in sizes 9-15-25-37
- All sizes feature 3-Way Entry solution
- Re-openable
- Hood is supplied with 2 Blanking Plates and 2 Strain Relief Clamps. Extra Blanking Plates and/or Strain Reliefs are available on request.
- Also available in Metalized Version, See page 20

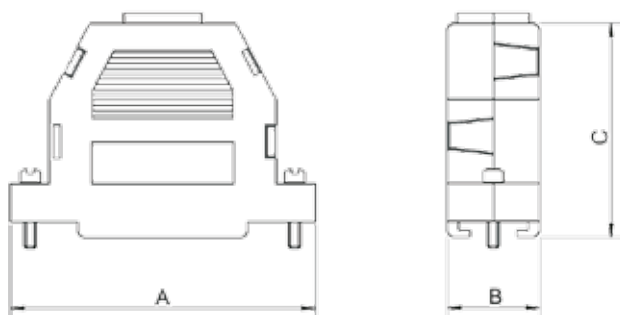
### Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6550-0101-01  | TRI-P-09-K    |
| 15-way | 6550-0101-02  | TRI-P-15-K    |
| 25-way | 6550-0101-03  | TRI-P-25-K    |
| 37-way | 6550-0101-04  | TRI-P-37-K    |

| Size:  | P/N - BULK: | Product Code: |
|--------|-------------|---------------|
| 9-way  | On Request  |               |
| 15-way | On Request  |               |
| 25-way | On Request  |               |
| 37-way | On Request  |               |

## TECHNICAL SPECIFICATIONS SN-Series

|                               |                                |
|-------------------------------|--------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material |
| <b>Operating Temperature:</b> | -55°C to +110°C                |
| <b>Cable Entry:</b>           | Top                            |
| <b>Thumbscrews:</b>           | UNC 4-40                       |
| <b>Cable O.D:</b>             | Up to 11,5mm                   |
| <b>Colour:</b>                | Black or Light Grey            |



| Size   | A    | B    | C    |
|--------|------|------|------|
| 9-way  | 30,5 | 15,5 | 39,2 |
| 15-way | 40,1 | 15,5 | 39,6 |
| 25-way | 53,6 | 16,0 | 43,0 |

## Ordering information:

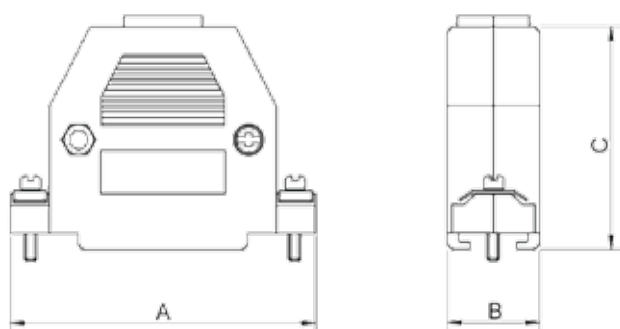
| Size:  | P/N - Kitted: | Product Code BLACK: |
|--------|---------------|---------------------|
| 9-way  | 2360-0101-01  | CCOV 9-SN-BK        |
| 15-way | 2360-0101-02  | CCOV15-SN-BK        |
| 25-way | 2360-0101-03  | CCOV25-SN-BK        |

| Size:  | P/N - Kitted: | Product Code LIGHT GREY |
|--------|---------------|-------------------------|
| 9-way  | 2360-0101-11  | CCOV 9-SN-LG            |
| 15-way | 2360-0101-12  | CCOV15-SN-LG            |
| 25-way | 2360-0101-13  | CCOV25-SN-LG            |

## TECHNICAL SPECIFICATIONS SC-Series

|                               |                                |
|-------------------------------|--------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material |
| <b>Operating Temperature:</b> | -55°C to +110°C                |
| <b>Cable Entry:</b>           | Top                            |
| <b>Thumbscrews:</b>           | UNC 4-40                       |
| <b>Cable O.D:</b>             | Up to 11,5mm                   |
| <b>Colour:</b>                | Black or Light Grey            |

Also available in Shielded version, See page 23



| Size   | A    | B    | C    |
|--------|------|------|------|
| 9-way  | 31,0 | 16,0 | 40,2 |
| 15-way | 39,6 | 17,4 | 38,0 |
| 25-way | 55,0 | 16,5 | 44,5 |
| 37-way | 69,0 | 24,0 | 52,5 |
| 50-way | 69,5 | 19,5 | 44,5 |

## Ordering information - SHORT Jackscrews:

| Size:  | P/N - Kitted: | Product Code BLACK: |
|--------|---------------|---------------------|
| 9-way  | 2360-0102-01  | CCOV 9-SC-BK        |
| 15-way | 2360-0102-02  | CCOV15-SC-BK        |
| 25-way | 2360-0102-03  | CCOV25-SC-BK        |
| 37-way | 2360-0102-04  | CCOV37-SC-BK        |
| 50-way | 2360-0102-05  | CCOV50-SC-BK        |

| Size:  | P/N - Kitted: | Product Code LIGHT GREY: |
|--------|---------------|--------------------------|
| 9-way  | 2360-0102-11  | CCOV 9-SC-LG             |
| 15-way | 2360-0102-12  | CCOV15-SC-LG             |
| 25-way | 2360-0102-13  | CCOV25-SC-LG             |
| 37-way | 2360-0102-14  | CCOV37-SC-LG             |
| 50-way | 2360-0102-15  | CCOV50-SC-LG             |

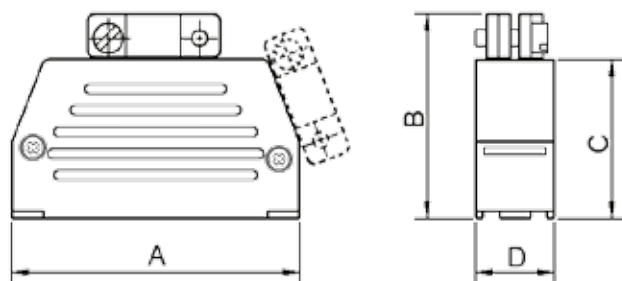
## Ordering information - LONG Jackscrews:

| Size:  | P/N - Kitted: | Product Code BLACK: |
|--------|---------------|---------------------|
| 9-way  | 2360-0102-21  | CCOV 9-SCL-BK       |
| 15-way | 2360-0102-22  | CCOV15-SCL-BK       |
| 25-way | 2360-0102-23  | CCOV25-SCL-BK       |
| 37-way | 2360-0102-24  | CCOV37-SCL-BK       |
| 50-way | 2360-0102-25  | CCOV50-SCL-BK       |

| Size:  | P/N - Kitted: | Product Code LIGHT GREY: |
|--------|---------------|--------------------------|
| 9-way  | 2360-0102-31  | CCOV 9-SCL-LG            |
| 15-way | 2360-0102-32  | CCOV15-SCL-LG            |
| 25-way | 2360-0102-33  | CCOV25-SCL-LG            |
| 37-way | 2360-0102-34  | CCOV37-SCL-LG            |
| 50-way | 2360-0102-35  | CCOV50-SCL-LG            |

## TECHNICAL SPECIFICATIONS

|                               |                                |
|-------------------------------|--------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material |
| <b>Operating Temperature:</b> | -55°C to +110°C                |
| <b>Cable Entry:</b>           | Top + Side Entry               |
| <b>Cable O.D:</b>             | Up to 9mm                      |
| <b>Colour:</b>                | Black                          |



### Features:

- Suitable for sizes 9, 15, 25, 37 and 50-way
- Easy to re-open
- Slide-Lock system integrated inside hood with special spring and slide lever
- Hoods are supplied complete with Slide-Lock system
- Slide-Lock and Spring Lever also available as accessories - Please see page 187
- Hood without Slide-Lock delivered on request
- Metalized version available on special request

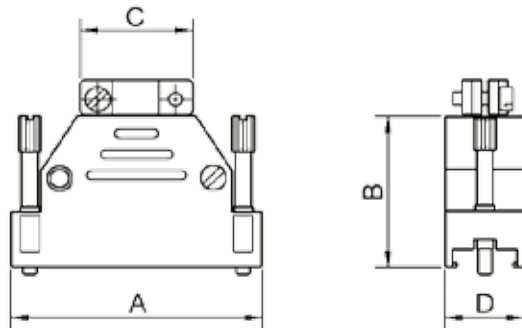
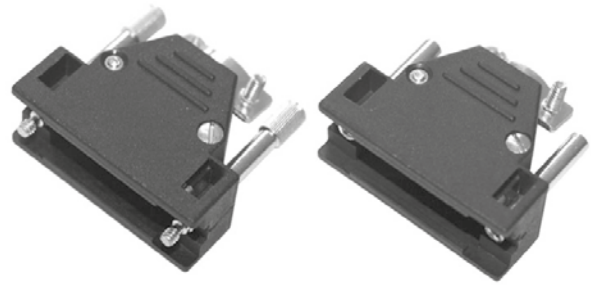
| Size | A    | B    | C    | D    |
|------|------|------|------|------|
| 9    | 32,2 | 28,6 | 22,1 | 15,0 |
| 15   | 39,8 | 34,1 | 26,1 | 15,0 |
| 25   | 54,2 | 38,3 | 30,3 | 15,0 |
| 37   | 70,7 | 46,2 | 38,2 | 15,0 |
| 50   | 68,0 | 46,2 | 38,2 | 18,0 |

### Ordering information: Hood with Slide-Locks

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2801-0101-01  | ED-DS09S-K    |
| 15-way | 2801-0101-02  | ED-DS15S-K    |
| 25-way | 2801-0101-03  | ED-DS25S-K    |
| 37-way | 2801-0101-04  | ED-DS37S-K    |
| 50-way | 2801-0101-05  | ED-DS50S-K    |

## TECHNICAL SPECIFICATIONS

|                               |                                    |
|-------------------------------|------------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material     |
| <b>Operating Temperature:</b> | -55°C to +110°C                    |
| <b>Cable Entry:</b>           | Top Entry                          |
| <b>Cable O.D:</b>             | Up to 9mm                          |
| <b>Colour:</b>                | Black                              |
| <b>Jackscrew:</b>             | UNC 4-40<br>Male or Female Version |



## Features:

- Suitable for sizes 9, 15, 25 and 37
- Easy to re-open
- Male or female Jackscrew

| Size | A    | B    | C    | D    | E    |
|------|------|------|------|------|------|
| 9    | 31,4 | 24,0 | 14,5 | 38,0 | 18,2 |
| 15   | 42,0 | 30,0 | 14,5 | 38,0 | 18,2 |
| 25   | 55,5 | 36,0 | 25,1 | 38,0 | 18,2 |
| 37   | 69,8 | 38,0 | 39,2 | 38,0 | 18,2 |

## Ordering information: Male Jackscrew

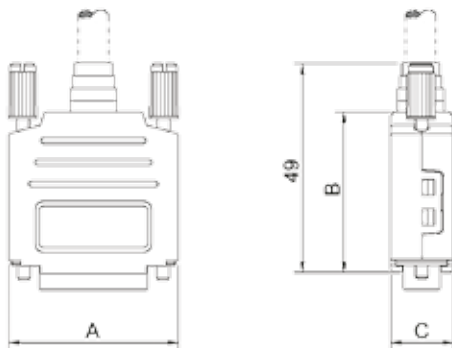
| Size:           | P/N - Kitted: | Product Code: |
|-----------------|---------------|---------------|
| 9-way, Male JS  | 2801-0102-01  | ED-D09T-K     |
| 15-way, Male JS | 2801-0102-02  | ED-D15T-K     |
| 25-way, Male JS | 2801-0102-03  | ED-D25T-K     |
| 37-way, Male JS | 2801-0102-04  | ED-D37T-K     |

## Ordering information: Female Jackscrew

| Size:             | P/N - Kitted: | Product Code: |
|-------------------|---------------|---------------|
| 9-way, Female JS  | 2801-0102-11  | ED-D09TF-K    |
| 15-way, Female JS | 2801-0102-12  | ED-D15TF-K    |
| 25-way, Female JS | 2801-0102-13  | ED-D25TF-K    |
| 37-way, Female JS | 2801-0102-14  | ED-D37TF-K    |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material               |
| <b>Plating:</b>               | Nickel over Copper                           |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Top Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 11,5mm                                 |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 198                                 |



| Size   | Dim A | Dim B | Dim C |
|--------|-------|-------|-------|
| 9-way  | 32,5  | 38,0  | 15,0  |
| 15-way | 41,0  | 38,0  | 15,0  |
| 25-way | 54,5  | 40,0  | 15,0  |
| 37-way | 71,0  | 40,0  | 15,0  |

### Features:

- Available in sizes 9, 15, 25 and 37-way
- Suitable for any common Sub-D Connector
- Quick-Snap locking system
- Re-openable
- Company logo available upon request
- Recyclable

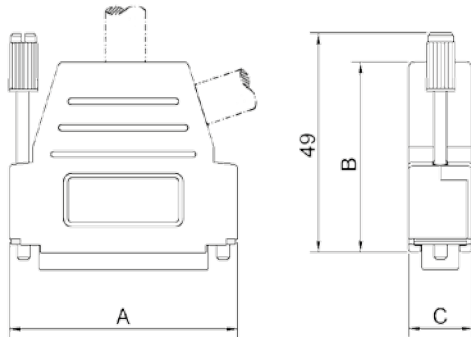
### Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6260-0105-01  | DPPK-M-09-K   |
| 15-way | 6260-0105-02  | DPPK-M-15-K   |
| 25-way | 6260-0105-03  | DPPK-M-25-K   |
| 37-way | 6260-0105-04  | DPPK-M-37-K   |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6261-0105-01 | DPPK-M-09     |
| 15-way | 6261-0105-02 | DPPK-M-15     |
| 25-way | 6261-0105-03 | DPPK-M-25     |
| 37-way | 6261-0105-04 | DPPK-M-37     |

## TECHNICAL SPECIFICATIONS

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material                    |
| <b>Plating:</b>               | Nickel over Copper                                |
| <b>Operating Temperature:</b> | -55°C to +110°C                                   |
| <b>Cable Entry:</b>           | Side and Top (L)<br>Side Only (S)<br>Top Only (T) |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request      |
| <b>Cable O.D:</b>             | Up to 11,5mm                                      |
| <b>Accessories:</b>           | See page 190-194                                  |
| <b>Assembly Instruction:</b>  | See page 198                                      |



| Size DSSK-T/P | Dim A | Dim B | Dim B | DimC |
|---------------|-------|-------|-------|------|
| 9-way         | 31,5  | 40,0  | 43,0* | 15,0 |
| 15-way        | 40,0  | 40,0  | -     | 15,0 |
| 25-way        | 53,5  | 43,0  | -     | 15,0 |
| 37-way        | 71,3  | 40,0  | -     | 15,0 |

\* Top only



## Features:

- Available in sizes 9-15-25-37
- Suitable for any common Sub-D connector
- Quick-snap locking system
- Re-openable
- Company logo available upon request
- Also available in Unshielded Version, See page 8
- Recyclable

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: | L |
|--------|---------------|---------------|---|
| 9-way  | 6260-0106-01  | DSSK-M-09-L-K |   |
| 15-way | 6260-0106-02  | DSSK-M-15-L-K |   |
| 25-way | 6260-0106-03  | DSSK-M-25-L-K |   |

| Size:  | P/N - Kitted: | Product Code: | S |
|--------|---------------|---------------|---|
| 9-way  | 6260-0106-11  | DSSK-M-09-S-K |   |
| 15-way | 6260-0106-12  | DSSK-M-15-S-K |   |
| 25-way | 6260-0106-13  | DSSK-M-25-S-K |   |
| 37-way | 6260-0106-14  | DSSK-M-37-S-K |   |

| Size:  | P/N - Kitted: | Product Code: | T |
|--------|---------------|---------------|---|
| 9-way  | 6260-0106-21  | DSSK-M-09-T-K |   |
| 15-way | 6260-0106-22  | DSSK-M-15-T-K |   |
| 25-way | 6260-0106-23  | DSSK-M-25-T-K |   |

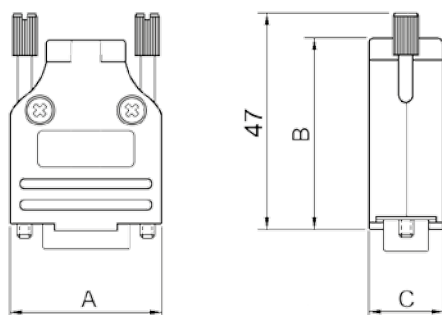
| Size:  | P/N - BULK:  | Product Code: | L |
|--------|--------------|---------------|---|
| 9-way  | 6261-0106-01 | DSSK-M-09-L   |   |
| 15-way | 6261-0106-02 | DSSK-M-15-L   |   |
| 25-way | 6261-0106-03 | DSSK-M-25-L   |   |

| Size:  | P/N - BULK:  | Product Code: | S |
|--------|--------------|---------------|---|
| 9-way  | 6261-0106-11 | DSSK-M-09-S   |   |
| 15-way | 6261-0106-12 | DSSK-M-15-S   |   |
| 25-way | 6261-0106-13 | DSSK-M-25-S   |   |
| 37-way | 6261-0106-14 | DSSK-M-37-S   |   |

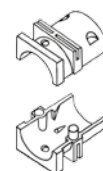
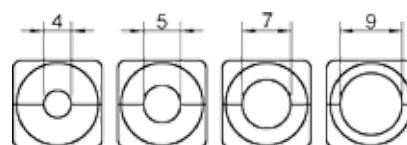
| Size:  | P/N - BULK:  | Product Code: | T |
|--------|--------------|---------------|---|
| 9-way  | 6261-0106-21 | DSSK-M-09-T   |   |
| 15-way | 6261-0106-22 | DSSK-M-15-T   |   |
| 25-way | 6261-0106-23 | DSSK-M-25-T   |   |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | UL 94 V-0 Plastic Material                   |
| <b>Plating:</b>               | Nickel over Copper                           |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Top Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 199                                 |



Grommet Sizes MHDTPK 9-37:



| Size MHDTPK | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,2  | 39,9  | 15,0  |
| 15-way      | 39,5  | 41,5  | 15,0  |
| 25-way      | 53,4  | 48,6  | 15,0  |
| 37-way      | 69,7  | 53,6  | 15,0  |

## Features:

- Available in sizes 9-15-25-37
- Suitable for any common Sub-D Connector
- Strain relief inserts ensure a secure termination
- Re-openable
- Company logo available upon request
- Also available in Unshielded Version, See page 9
- Recyclable

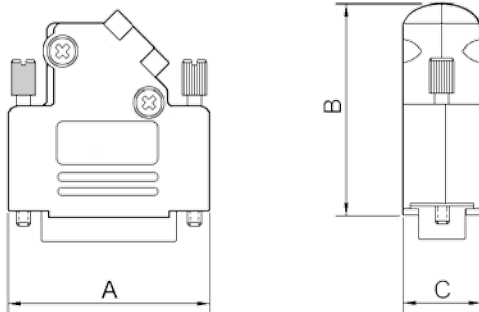
## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0145-01  | DTPK-9-K      |
| 15-way | 6560-0145-02  | DTPK-15-K     |
| 25-way | 6560-0145-03  | DTPK-25-K     |
| 37-way | 6560-0145-04  | DTPK-37-K     |

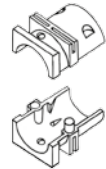
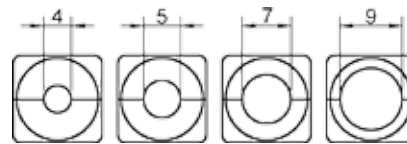
| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0145-01 | DTPK-9        |
| 15-way | 6561-0145-02 | DTPK-15       |
| 25-way | 6561-0145-03 | DTPK-25       |
| 37-way | 6561-0145-04 | DTPK-37       |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | UL 94 V-0 Plastic Material                   |
| <b>Plating:</b>               | Nickel over Copper                           |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Side Entry                                   |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 199                                 |



Grommet Sizes MHD45PK 9-37:



| Size MHD45PK | Dim A | Dim B | Dim C |
|--------------|-------|-------|-------|
| 9-way        | 31,0  | 36,3  | 15,0  |
| 15-way       | 39,5  | 40,3  | 15,0  |
| 25-way       | 53,2  | 40,3  | 15,0  |
| 37-way       | 69,7  | 40,3  | 15,0  |

## Features:

- Available in sizes 9-15-25-37
- Suitable for any common Sub-D Connector
- Strain relief inserts ensure a secure termination
- Re-openable
- Company logo available upon request
- Also available in Unshielded Version, See page 10
- Recyclable

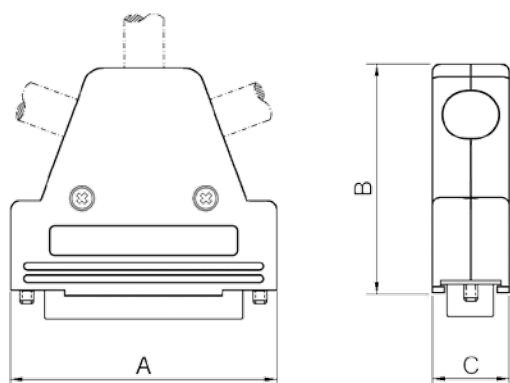
## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0146-11  | D45PK-9-K     |
| 15-way | 6560-0146-12  | D45PK-15-K    |
| 25-way | 6560-0146-13  | D45PK-25-K    |
| 37-way | 6560-0146-14  | D45PK-37-K    |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0146-11 | D45PK-9       |
| 15-way | 6561-0146-12 | D45PK-15      |
| 25-way | 6561-0146-13 | D45PK-25      |
| 37-way | 6561-0146-14 | D45PK-37      |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material               |
| <b>Plating:</b>               | Nickel over Copper                           |
| <b>Operating Temperature:</b> | -55°C to +110°C                              |
| <b>Cable Entry:</b>           | Top Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 13mm                                   |



| Size MHTRI-M | Dim A | Dim B | Dim C |
|--------------|-------|-------|-------|
| 9-way        | 31,0  | 45,2  | 15,0  |
| 15-way       | 40,3  | 45,2  | 15,0  |
| 25-way       | 53,5  | 45,2  | 15,0  |
| 37-way       | 70,0  | 45,2  | 15,0  |

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6550-0100-01  | TRI-M-09-K    |
| 15-way | 6550-0100-02  | TRI-M-15-K    |
| 25-way | 6550-0100-03  | TRI-M-25-K    |
| 37-way | 6550-0100-04  | TRI-M-37-K    |

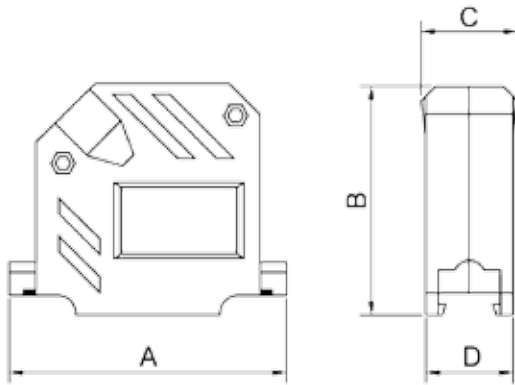
## Features:

- Available in sizes 9-15-25-37
- All sizes feature 3-Way Entry solution
- Re-openable
- Hood is supplied with 2 Blanking Plates and 2 Strain Relief clamps. Extra Blanking Plates and/or Strain Reliefs are available on request.
- Also available in Unshielded Version, See page 11

## TECHNICAL SPECIFICATIONS

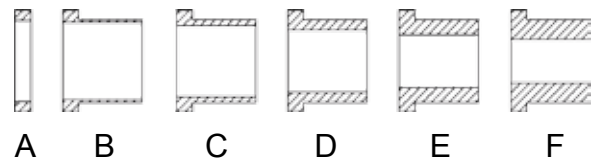
|                               |                                |
|-------------------------------|--------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material |
| <b>Plating:</b>               | Nickel over Copper             |
| <b>Operating Temperature:</b> | -40°C to +120°C                |
| <b>Cable Entry:</b>           | Side Entry                     |
| <b>Thumbscrews:</b>           | UNC 4-40                       |
| <b>Cable O.D:</b>             | Up to 16,5mm*                  |

\* For specific values - see dimensions below.



| Size   | Dim A | Dim B | Dim C | Dim D |
|--------|-------|-------|-------|-------|
| 9-way  | 31,3  | 40,0  | 16,3  | 16,3  |
| 15-way | 39,1  | 43,5  | 16,3  | 16,3  |
| 25-way | 53,1  | 47,7  | 18,0  | 16,3  |
| 37-way | 69,3  | 53,9  | 23,0  | 16,3  |

## Compression Inserts - Inner Diameters:



| Size   | A     | B     | C     | D     | E     | F    |
|--------|-------|-------|-------|-------|-------|------|
| 9-way  | 8,10  | 8,00  | 7,25  | 6,50  | 5,30  | -    |
| 15-way | 8,10  | 8,00  | 7,25  | 6,50  | 5,30  | -    |
| 25-way | 11,40 | 10,40 | 9,40  | 7,60  | 5,80  | -    |
| 37-way | 16,50 | 15,75 | 14,50 | 12,70 | 10,80 | 8,90 |

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: | 45° SIDE |
|--------|---------------|---------------|----------|
| 9-way  | 1060-0106-11  | C88E200000    |          |
| 15-way | 1060-0106-12  | C88E210000    |          |
| 25-way | 1060-0106-13  | C88E220000    |          |
| 37-way | 1060-0106-14  | C88E230000    |          |

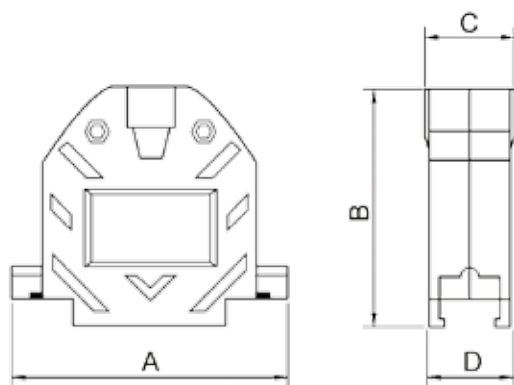
## Features:

- Available in sizes 9-15-25-37
- Re-openable
- Strain Relief / Compression Insert manufactured in Thermoplastic compound.
- Also available in Top Entry, See page 22

## TECHNICAL SPECIFICATIONS

|                               |                                |
|-------------------------------|--------------------------------|
| <b>Material:</b>              | UL Recognised Plastic Material |
| <b>Plating:</b>               | Nickel over Copper             |
| <b>Operating Temperature:</b> | -40°C to +120°C                |
| <b>Cable Entry:</b>           | Top Entry                      |
| <b>Thumbscrews:</b>           | UNC 4-40                       |
| <b>Cable O.D:</b>             | Up to 16,5mm*                  |

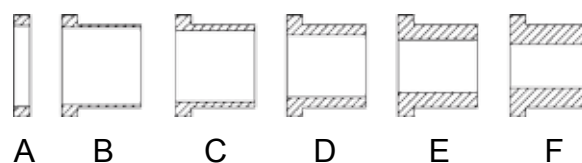
\* For specific values - see dimensions below.



| Size   | Dim A | Dim B | Dim C | Dim D |
|--------|-------|-------|-------|-------|
| 9-way  | 31,3  | 40,0  | 16,3  | 16,3  |
| 15-way | 39,1  | 43,5  | 16,3  | 16,3  |
| 25-way | 53,1  | 47,7  | 18,0  | 16,3  |
| 37-way | 69,3  | 53,9  | 23,0  | 16,3  |
| 50-way | 67,2  | 50,8  | 23,9  | 19,6  |



## Compression Inserts - Inner Diameters:



| Size   | A     | B     | C     | D     | E     | F    |
|--------|-------|-------|-------|-------|-------|------|
| 9-way  | 8,10  | 8,00  | 7,25  | 6,50  | 5,30  | -    |
| 15-way | 8,10  | 8,00  | 7,25  | 6,50  | 5,30  | -    |
| 25-way | 11,40 | 10,40 | 9,40  | 7,60  | 5,80  | -    |
| 37-way | 16,50 | 15,75 | 14,50 | 12,70 | 10,80 | 8,90 |
| 50-way | 16,50 | 15,75 | 14,50 | 12,70 | 10,80 | 8,90 |

## Ordering information:

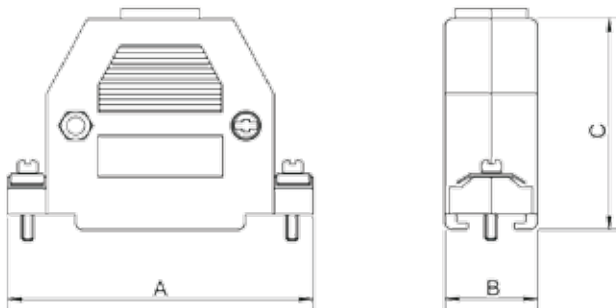
| Size:  | P/N - Kitted: | Product Code: | TOP |
|--------|---------------|---------------|-----|
| 9-way  | 1060-0105-01  | C88E300000    |     |
| 15-way | 1060-0105-02  | C88E310000    |     |
| 25-way | 1060-0105-03  | C88E320000    |     |
| 37-way | 1060-0105-04  | C88E330000    |     |
| 50-way | 1060-0105-05  | C88E340000    |     |

## Features:

- Available in sizes 9-15-25-37-50
- Re-openable
- Strain Relief / Compression Insert manufactured in Thermoplastic compound.
- Also available in Side Entry, See page 21

## TECHNICAL SPECIFICATIONS

|                               |                                |
|-------------------------------|--------------------------------|
| <b>Material:</b>              | UL recognised Plastic Material |
| <b>Plating:</b>               | Nickel over Copper             |
| <b>Operating Temperature:</b> | -40°C to +120°C                |
| <b>Cable Entry:</b>           | Top Entry                      |
| <b>Thumbscrews:</b>           | UNC 4-40 (Short)               |
| <b>Cable O.D:</b>             | Up to 13mm                     |



| Size   | Dim A | Dim B | Dim C |
|--------|-------|-------|-------|
| 9-way  | 31,0  | 16,0  | 40,2  |
| 15-way | 39,6  | 17,4  | 38,0  |
| 25-way | 55,0  | 16,5  | 44,5  |
| 37-way | 69,0  | 24,0  | 52,5  |
| 50-way | 69,5  | 19,5  | 44,5  |

## Features:

- Available in sizes 9-15-25-37-50
- Re-openable
- Also available in Unshielded version, See page 13

Ordering information: *Short Jackscrews*

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2360-0105-01  | CCOV 9-SC-MP  |
| 15-way | 2360-0105-02  | CCOV15-SC-MP  |
| 25-way | 2360-0105-03  | CCOV25-SC-MP  |
| 37-way | 2360-0105-04  | CCOV37-SC-MP  |
| 50-way | 2360-0105-05  | CCOV50-SC-MP  |

*Long Jackscrews*

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2360-0105-11  | CCOV 9-SCL-MP |
| 15-way | 2360-0105-12  | CCOV15-SCL-MP |
| 25-way | 2360-0105-13  | CCOV25-SCL-MP |
| 37-way | 2360-0105-14  | CCOV37-SCL-MP |
| 50-way | 2360-0105-15  | CCOV50-SCL-MP |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                          |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | Top Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 13mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 202-203                             |

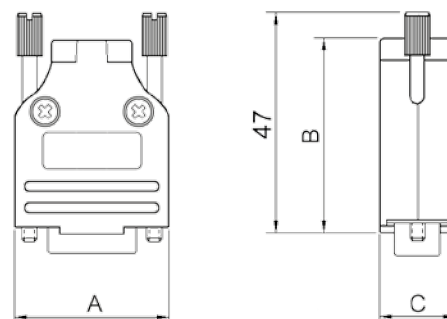


## Features:

- Available in sizes 9-15-25-37
- 360° EMI Shielding
- 3 versions of same concept
- Quick assembly
- Supports all types of cables
- Suitable for any common D-Sub connector

## Types available:

- MHC: Crimp Version
- MHDM: Metalized Grommet Kit + Clamp
- MHEE: Metalized Cone + Clamp



| Size:  | Dim A | Dim B | Dim C |
|--------|-------|-------|-------|
| 9-way  | 32,2  | 41,3  | 15,4  |
| 15-way | 40,6  | 43,3  | 15,4  |
| 25-way | 54,5  | 49,5  | 15,4  |
| 37-way | 70,7  | 54,3  | 15,4  |

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0135-01  | MHC-9-K       |
| 15-way | 6560-0135-02  | MHC-15-K      |
| 25-way | 6560-0135-03  | MHC-25-K      |
| 37-way | 6560-0135-04  | MHC-37-K      |

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0136-01  | MHDM-9-K      |
| 15-way | 6560-0136-02  | MHDM-15-K     |
| 25-way | 6560-0136-03  | MHDM-25-K     |
| 37-way | 6560-0136-04  | MHDM-37-K     |

### MHC-Series



| Size: | P/N:         | Product Code: |
|-------|--------------|---------------|
| 5,3mm | 6522-0119-11 | MHC-5,3       |
| 6,0mm | 6522-0119-12 | MHC-6,0       |
| 7,0mm | 6522-0119-13 | MHC-7,0       |
| 7,5mm | 6522-0119-14 | MHC-7,5       |
| 8,6mm | 6522-0119-15 | MHC-8,6       |

### MHDM-Series



Included when ordering

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                          |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | Side Entry                                   |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 13mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 202-203                             |

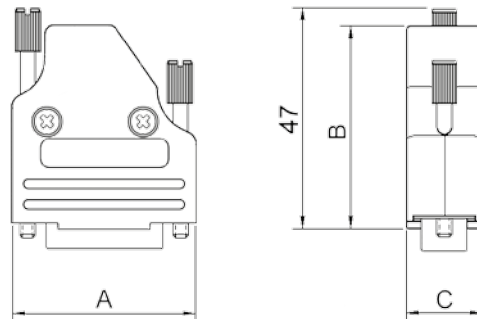


## Features:

- Available in sizes 9-15-25-37
- 360° EMI Shielding
- 3 versions of same concept
- Quick assembly
- Supports all types of cables
- Suitable for any common D-Sub connector

## Types available:

- MHC35: Crimp Version
- MHDM35: Metalized Grommet Kit + Clamp
- MHEE35: Metalized Cone + Clamp



| Size:  | Dim A | Dim B | Dim C |
|--------|-------|-------|-------|
| 9-way  | 43,0  | 32,0  | 15,5  |
| 15-way | 43,0  | 40,4  | 15,5  |
| 25-way | 48,0  | 54,0  | 15,5  |
| 37-way | 53,0  | 70,5  | 15,5  |

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0138-11  | MHC35-9-K     |
| 15-way | 6560-0138-12  | MHC35-15-K    |
| 25-way | 6560-0138-13  | MHC35-25-K    |
| 37-way | 6560-0138-14  | MHC35-37-K    |

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0139-11  | MHDM35-9-K    |
| 15-way | 6560-0139-12  | MHDM35-15-K   |
| 25-way | 6560-0139-13  | MHDM35-25-K   |
| 37-way | 6560-0139-14  | MHDM35-37-K   |

## MHC35-Series

| Size: | P/N:         | Product Code: |
|-------|--------------|---------------|
| 5,3mm | 6522-0119-11 | MHC-5,3       |
| 6,0mm | 6522-0119-12 | MHC-6,0       |
| 7,0mm | 6522-0119-13 | MHC-7,0       |
| 7,5mm | 6522-0119-14 | MHC-7,5       |
| 8,6mm | 6522-0119-15 | MHC-8,6       |

## MHDM35-Series



Included when ordering

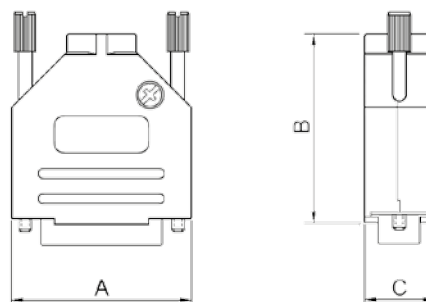
## TECHNICAL SPECIFICATIONS

|                               |                                                |
|-------------------------------|------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                            |
| <b>Operating Temperature:</b> | -40°C to +120°C                                |
| <b>Cable Entry:</b>           | Top Entry                                      |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request   |
| <b>Cable O.D:</b>             | Up to 12mm (Size 9-37)<br>Up to 17mm (Size 50) |
| <b>Accessories:</b>           | See page 190-194                               |
| <b>Assembly Instruction:</b>  | See page 200                                   |



## Features:

- Available in sizes 9-15-25-37-50\*
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Full Metal Jackscrew as standard.
- Also available with Metalized (RAHI) grommets  
See page 28

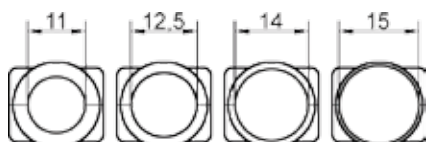


NEW: Size 50 now available

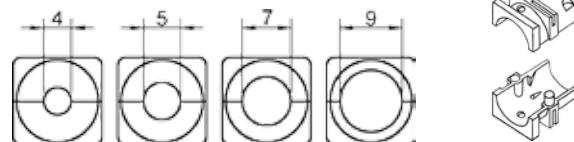


| Size MHDTZK | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,0  | 39,5  | 15,0  |
| 15-way      | 39,5  | 41,5  | 15,0  |
| 25-way      | 53,5  | 48,5  | 15,0  |
| 37-way      | 71,0  | 53,0  | 15,0  |
| 50-way      | 67,5  | 54,0  | 18,7  |

Grommet Sizes / DTZK50:



Grommet Sizes / DTZK09-37:



## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0105-01  | DTZK09-RA-K   |
| 15-way | 6560-0105-02  | DTZK15-RA-K   |
| 25-way | 6560-0105-03  | DTZK25-RA-K   |
| 37-way | 6560-0105-04  | DTZK37-RA-K   |
| 50-way | 6560-0105-05  | DTZK50-RA-K   |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0105-01 | DTZK09-RA     |
| 15-way | 6561-0105-02 | DTZK15-RA     |
| 25-way | 6561-0105-03 | DTZK25-RA     |
| 37-way | 6561-0105-04 | DTZK37-RA     |
| 50-way | 6561-0105-05 | DTZK50-RA     |

## TECHNICAL SPECIFICATIONS

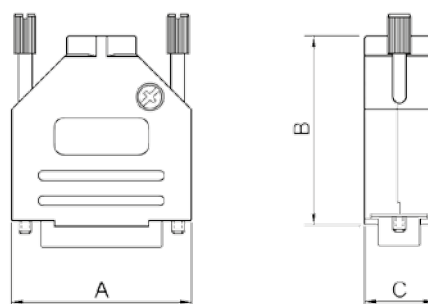
|                               |                                                |
|-------------------------------|------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                            |
| <b>Operating Temperature:</b> | -40°C to +120°C                                |
| <b>Cable Entry:</b>           | Top Entry                                      |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request   |
| <b>Cable O.D:</b>             | Up to 12mm (Size 9-37)<br>Up to 17mm (Size 50) |
| <b>Accessories:</b>           | See page 190-194                               |
| <b>Assembly Instruction:</b>  | See page 200                                   |



## Features:

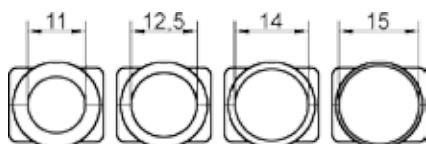
- Available in sizes 9-15-25-37-50\*
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Jackscrew with Black Plastic Knob as standard. Grey Plastic Knob available on Request.
- Also available with Metalized (RAHI) grommets See page 29

NEW: Size 50 now available

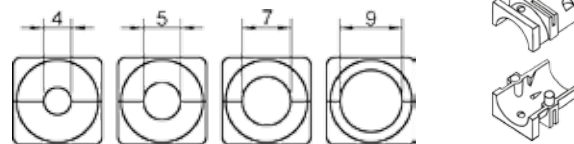


| Size MHTZK | Dim A | Dim B | Dim C |
|------------|-------|-------|-------|
| 9-way      | 31,0  | 39,5  | 15,0  |
| 15-way     | 39,5  | 41,5  | 15,0  |
| 25-way     | 53,5  | 48,5  | 15,0  |
| 37-way     | 71,0  | 53,0  | 15,0  |
| 50-way     | 67,5  | 54,0  | 18,7  |

Grommet Sizes / DTZK50:



Grommet Sizes / DTZK09-37:



## Ordering information:

| Size:  | P/N - Kitted: | Product Code:    |
|--------|---------------|------------------|
| 9-way  | 6560-3105-01  | DTZK09-RA-PCBK-K |
| 15-way | 6560-3105-02  | DTZK15-RA-PCBK-K |
| 25-way | 6560-3105-03  | DTZK25-RA-PCBK-K |
| 37-way | 6560-3105-04  | DTZK37-RA-PCBK-K |
| 50-way | 6560-3105-05  | DTZK50-RA-PCBK-K |

| Size:  | P/N - BULK:  | Product Code:  |
|--------|--------------|----------------|
| 9-way  | 6561-3105-01 | DTZK09-RA-PCBK |
| 15-way | 6561-3105-02 | DTZK15-RA-PCBK |
| 25-way | 6561-3105-03 | DTZK25-RA-PCBK |
| 37-way | 6561-3105-04 | DTZK37-RA-PCBK |
| 50-way | 6561-3105-05 | DTZK50-RA-PCBK |

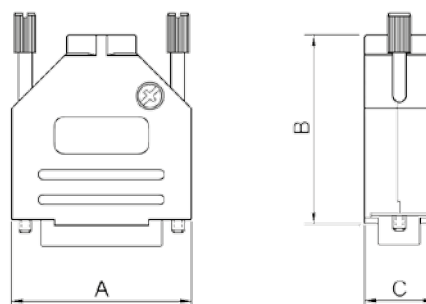
## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                          |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | Top Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 200                                 |

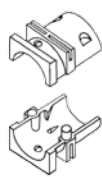
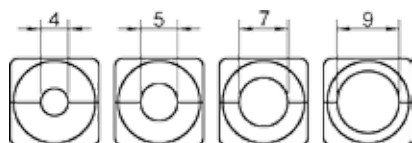


## Features:

- Available in sizes 9-15-25-37
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Full Metal Jackscrew as standard.
- Available with Standard (RA) grommets - See page 26



Grommet Sizes / DTZK09-37:



| Size MHDTZK | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,0  | 39,5  | 15,0  |
| 15-way      | 39,5  | 41,5  | 15,0  |
| 25-way      | 53,5  | 48,5  | 15,0  |
| 37-way      | 71,0  | 53,0  | 15,0  |

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0705-01  | DTZK09-RAHI-K |
| 15-way | 6560-0705-02  | DTZK15-RAHI-K |
| 25-way | 6560-0705-03  | DTZK25-RAHI-K |
| 37-way | 6560-0705-04  | DTZK37-RAHI-K |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0705-01 | DTZK09-RAHI   |
| 15-way | 6561-0705-02 | DTZK15-RAHI   |
| 25-way | 6561-0705-03 | DTZK25-RAHI   |
| 37-way | 6561-0705-04 | DTZK37-RAHI   |

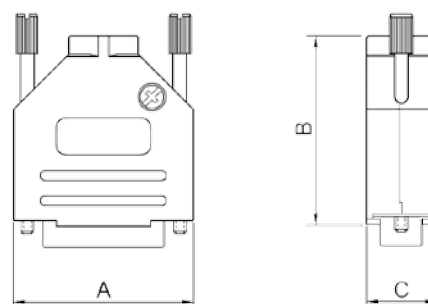
## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                          |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | Top Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 200                                 |

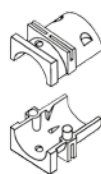
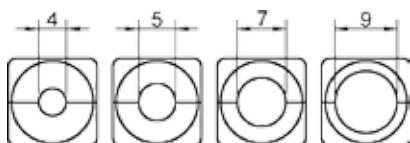


## Features:

- Available in sizes 9-15-25-37
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Jackscrew with Black Plastic Knob as standard.  
Grey Plastic Knob available on Request.
- Available with Standard (RA) grommets - See page 27



Grommet Sizes / DTZK09-37:



| Size MHDTZK | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,0  | 39,5  | 15,0  |
| 15-way      | 39,5  | 41,5  | 15,0  |
| 25-way      | 53,5  | 48,5  | 15,0  |
| 37-way      | 71,0  | 53,0  | 15,0  |

## Ordering information:

| Size:  | P/N - Kitted: | Product Code:      |
|--------|---------------|--------------------|
| 9-way  | 6560-3705-01  | DTZK09-RAHI-PCBK-K |
| 15-way | 6560-3705-02  | DTZK15-RAHI-PCBK-K |
| 25-way | 6560-3705-03  | DTZK25-RAHI-PCBK-K |
| 37-way | 6560-3705-04  | DTZK37-RAHI-PCBK-K |

| Size:  | P/N - BULK:  | Product Code:    |
|--------|--------------|------------------|
| 9-way  | 6561-3705-01 | DTZK09-RAHI-PCBK |
| 15-way | 6561-3705-02 | DTZK15-RAHI-PCBK |
| 25-way | 6561-3705-03 | DTZK25-RAHI-PCBK |
| 37-way | 6561-3705-04 | DTZK37-RAHI-PCBK |

## TECHNICAL SPECIFICATIONS

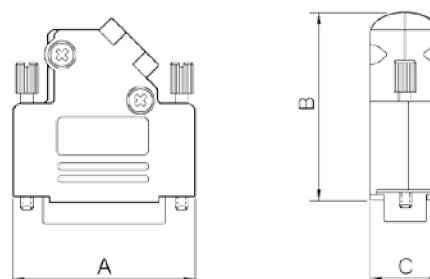
|                               |                                                |
|-------------------------------|------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                            |
| <b>Operating Temperature:</b> | -40°C to +120°C                                |
| <b>Cable Entry:</b>           | 45° Side Entry                                 |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request   |
| <b>Cable O.D:</b>             | Up to 12mm (Size 9-37)<br>Up to 17mm (Size 50) |
| <b>Accessories:</b>           | See page 190-194                               |
| <b>Assembly Instruction:</b>  | See page 200                                   |



### Features:

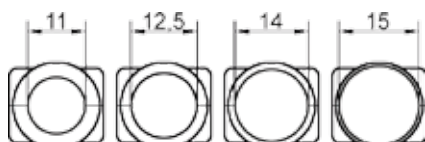
- Available in sizes 9-15-25-37-50
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Metalized (RAHI) grommets on request. see page 186

NEW: Size 50 now available

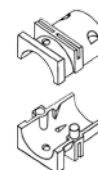
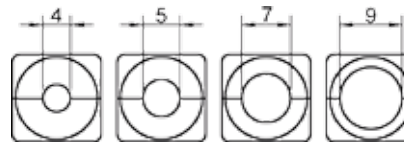


| Size MHD45ZK | Dim A | Dim B | Dim C |
|--------------|-------|-------|-------|
| 9-way        | 31,0  | 36,3  | 14,5  |
| 15-way       | 39,5  | 40,3  | 14,5  |
| 25-way       | 53,2  | 40,3  | 14,5  |
| 37-way       | 69,7  | 40,3  | 14,5  |
| 50-way       | 67,4  | 44,9  | 17,4  |

### Grommet Sizes / D45ZK50:



### Grommet Sizes / D45ZK09-37:



## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0106-11  | D45ZK09-RA-K  |
| 15-way | 6560-0106-12  | D45ZK15-RA-K  |
| 25-way | 6560-0106-13  | D45ZK25-RA-K  |
| 37-way | 6560-0106-14  | D45ZK37-RA-K  |
| 50-way | 6560-0106-15  | D45ZK50-RA-K  |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0106-11 | D45ZK09-RA    |
| 15-way | 6561-0106-12 | D45ZK15-RA    |
| 25-way | 6561-0106-13 | D45ZK25-RA    |
| 37-way | 6561-0106-14 | D45ZK37-RA    |
| 50-way | 6561-0106-15 | D45ZK50-RA    |

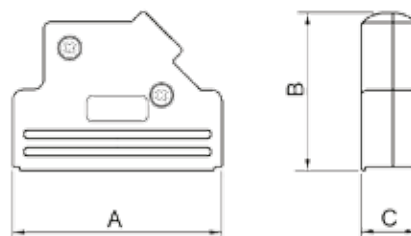
## TECHNICAL SPECIFICATIONS

|                               |                     |
|-------------------------------|---------------------|
| <b>Material:</b>              | Zinc, Nickel Plated |
| <b>Operating Temperature:</b> | -40°C to +120°C     |
| <b>Cable Entry:</b>           | Side Entry          |
| <b>Cable O.D:</b>             | Up to 12mm          |
| <b>Accessories:</b>           | See page 190-194    |
| <b>Assembly Instruction:</b>  | See page 200        |



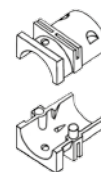
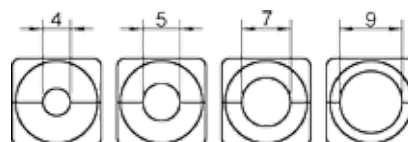
## Features:

- Full Metal Slide-Lock System Hood
- Available in sizes 9-15-25-37
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Metalized (RAHI) grommets on request - See page 186



| Size MHDVSL | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 14,5  | 36,3  | 31,0  |
| 15-way      | 14,5  | 40,3  | 39,5  |
| 25-way      | 14,5  | 40,3  | 53,2  |
| 37-way      | 14,5  | 40,3  | 69,7  |

## Grommet Sizes / D45ZK09-37:



## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0206-31  | DVSL09-K      |
| 15-way | 6560-0206-32  | DVSL15-K      |
| 25-way | 6560-0206-33  | DVSL25-K      |
| 37-way | 6560-0206-34  | DVSL37-K      |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0206-31 | DVSL09        |
| 15-way | 6561-0206-32 | DVSL15        |
| 25-way | 6561-0206-33 | DVSL25        |
| 37-way | 6561-0206-34 | DVSL37        |

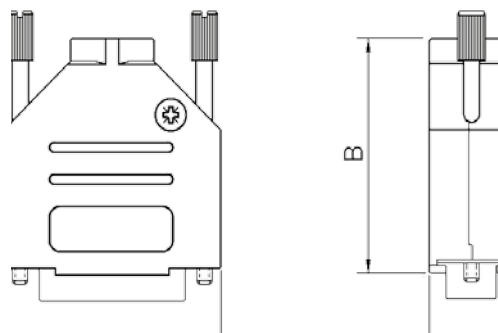
## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Black                                  |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | Top Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 200                                 |



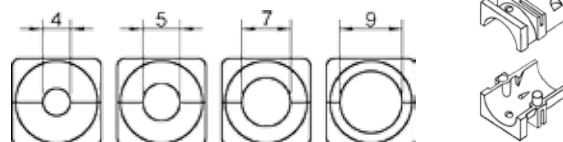
### Features:

- Rapid Assembly (RA)
- Available in sizes 9-15-25-37
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Full Metal Jackscrew as standard
- Plastic Cap Jackscrew on request



| Size MHDTZK | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,2  | 39,9  | 15,0  |
| 15-way      | 39,5  | 41,5  | 15,0  |
| 25-way      | 53,4  | 48,6  | 15,0  |
| 37-way      | 69,7  | 53,6  | 15,0  |

### Grommet Sizes / D45ZK09-37:



### Ordering information:

#### Rapid Assembly (RA) Style

| Size:  | P/N - Kitted: | Product Code:  |
|--------|---------------|----------------|
| 9-way  | 6560-0115-01  | DTZK09-RA-BK-K |
| 15-way | 6560-0115-02  | DTZK15-RA-BK-K |
| 25-way | 6560-0115-03  | DTZK25-RA-BK-K |
| 37-way | 6560-0115-04  | DTZK37-RA-BK-K |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0115-01 | DTZK09-RA-BK  |
| 15-way | 6561-0115-02 | DTZK15-RA-BK  |
| 25-way | 6561-0115-03 | DTZK25-RA-BK  |
| 37-way | 6561-0115-04 | DTZK37-RA-BK  |

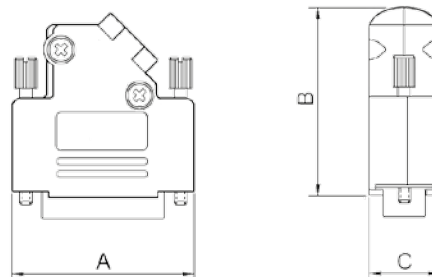
## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Black                                  |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | 45° Side Entry                               |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 12mm                                   |
| <b>Accessories:</b>           | See page 190-194                             |
| <b>Assembly Instruction:</b>  | See page 200                                 |



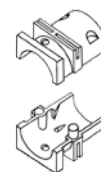
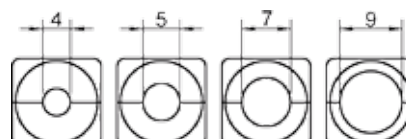
## Features:

- Available in sizes 9-15-25-37
- Excellent EMI Shielding
- Strain relief inserts ensure a secure termination



| Size MHD45ZK | Dim A | Dim B | Dim C |
|--------------|-------|-------|-------|
| 9-way        | 31,0  | 36,3  | 14,5  |
| 15-way       | 39,5  | 40,3  | 14,5  |
| 25-way       | 53,2  | 40,3  | 14,5  |
| 37-way       | 69,7  | 40,3  | 14,5  |

## Grommet Sizes / D45ZK09-37:



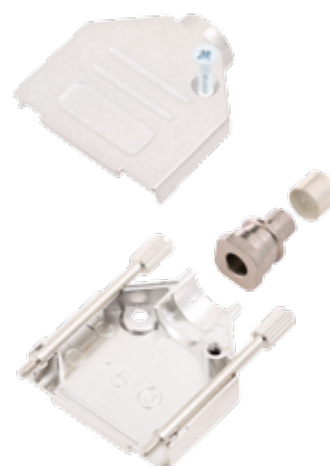
## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0116-11  | D45ZK09-BK-K  |
| 15-way | 6560-0116-12  | D45ZK15-BK-K  |
| 25-way | 6560-0116-13  | D45ZK25-BK-K  |
| 37-way | 6560-0116-14  | D45ZK37-BK-K  |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0116-11 | D45ZK09-BK    |
| 15-way | 6561-0116-12 | D45ZK15-BK    |
| 25-way | 6561-0116-13 | D45ZK25-BK    |
| 37-way | 6561-0116-14 | D45ZK37-BK    |

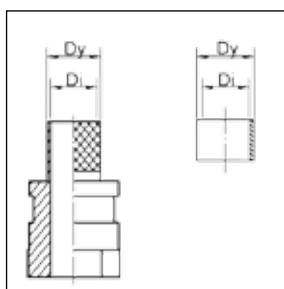
## TECHNICAL SPECIFICATIONS

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated<br>Brass Ferrule / Brass Ring |
| <b>Operating Temperature:</b> | -40°C to +120°C                                   |
| <b>Cable Entry:</b>           | Top Entry                                         |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request      |
| <b>Cable O.D.:</b>            | Up to 9,5mm                                       |
| <b>Accessories:</b>           | See page 190-194                                  |
| <b>Assembly Instruction:</b>  | See page 201                                      |

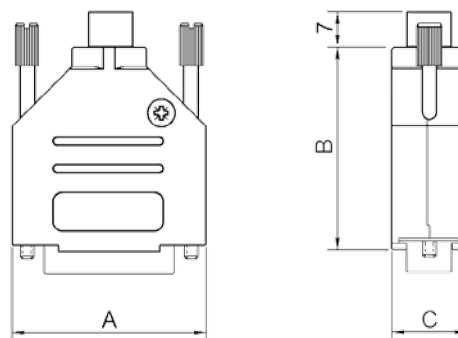


### Features:

- Available in sizes 9-15-25-37
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Full Metal Jackscrew as standard



| Max Cable O.D. (mm) | Body: Dy / Di | Ring: Dy / Di | Order Code <b>X</b> : |
|---------------------|---------------|---------------|-----------------------|
| 6,0                 | 5,0 / 4,0     | 7,0 / 6,0     | <b>1</b>              |
| 7,5                 | 7,0 / 6,0     | 9,0 / 8,0     | <b>2</b>              |
| 8,5                 | 8,0 / 7,0     | 10,0 / 9,0    | <b>3</b>              |
| 9,5                 | 9,0 / 8,0     | 11,0 / 10,0   | <b>4</b>              |



| Size MHDTZK | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,2  | 39,9  | 15,0  |
| 15-way      | 39,5  | 41,5  | 15,0  |
| 25-way      | 53,4  | 48,6  | 15,0  |
| 37-way      | 69,7  | 53,6  | 15,0  |

## Ordering information:

| Size:  | P/N - Kitted:         | Product Code: |
|--------|-----------------------|---------------|
| 9-way  | 6560-06 <b>X</b> 5-01 | DTZK09-CZK-K  |
| 15-way | 6560-06 <b>X</b> 5-02 | DTZK15-CZK-K  |
| 25-way | 6560-06 <b>X</b> 5-03 | DTZK25-CZK-K  |
| 37-way | 6560-06 <b>X</b> 5-04 | DTZK37-CZK-K  |

| Size:  | P/N - BULK:           | Product Code: |
|--------|-----------------------|---------------|
| 9-way  | 6561-06 <b>X</b> 5-01 | DTZK09-CZK    |
| 15-way | 6561-06 <b>X</b> 5-02 | DTZK15-CZK    |
| 25-way | 6561-06 <b>X</b> 5-03 | DTZK25-CZK    |
| 37-way | 6561-06 <b>X</b> 5-04 | DTZK37-CZK    |

|                       |                                  |
|-----------------------|----------------------------------|
| Example:              | (Size 15 with 7,5mm Ferrule Kit) |
| 6560-06 <b>2</b> 5-02 | DTZK15-CZK-K                     |

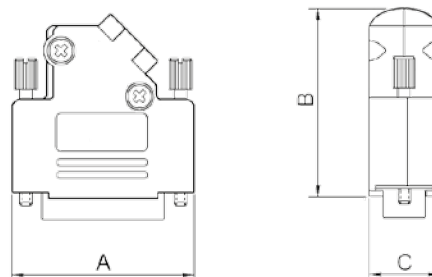
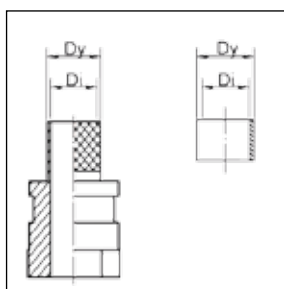
## TECHNICAL SPECIFICATIONS

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated<br>Brass Ferrule / Brass Ring |
| <b>Operating Temperature:</b> | -40°C to +120°C                                   |
| <b>Cable Entry:</b>           | 45° Side Entry                                    |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request      |
| <b>Cable O.D.:</b>            | Up to 9,5mm                                       |
| <b>Accessories:</b>           | See page 190-194                                  |
| <b>Assembly Instruction:</b>  | See page 201                                      |



## Features:

- Available in sizes 9-15-25-37
- Excellent EMI Shielding
- Re-openable
- Strain relief inserts ensure a secure termination
- Full Metal Jackscrew as standard



| Max Cable O.D. (mm) | Body: Dy / Di | Ring: Dy / Di | Order Code <b>X</b> : |
|---------------------|---------------|---------------|-----------------------|
| 6,0                 | 5,0 / 4,0     | 7,0 / 6,0     | <b>1</b>              |
| 7,5                 | 7,0 / 6,0     | 9,0 / 8,0     | <b>2</b>              |
| 8,5                 | 8,0 / 7,0     | 10,0 / 9,0    | <b>3</b>              |
| 9,5                 | 9,0 / 8,0     | 11,0 / 10,0   | <b>4</b>              |

| Size MHD45ZK | Dim A | Dim B | Dim C |
|--------------|-------|-------|-------|
| 9-way        | 31,0  | 36,3  | 14,5  |
| 15-way       | 39,5  | 40,3  | 14,5  |
| 25-way       | 53,2  | 40,3  | 14,5  |
| 37-way       | 69,7  | 40,3  | 14,5  |

## Ordering information:

| Size:  | P/N - Kitted:         | Product Code: |
|--------|-----------------------|---------------|
| 9-way  | 6560-06 <b>X</b> 6-11 | D45ZK09-CZK-K |
| 15-way | 6560-06 <b>X</b> 6-12 | D45ZK15-CZK-K |
| 25-way | 6560-06 <b>X</b> 6-13 | D45ZK25-CZK-K |
| 37-way | 6560-06 <b>X</b> 6-14 | D45ZK37-CZK-K |

| Size:  | P/N - BULK:           | Product Code: |
|--------|-----------------------|---------------|
| 9-way  | 6561-06 <b>X</b> 6-11 | D45ZK09-CZK   |
| 15-way | 6561-06 <b>X</b> 6-12 | D45ZK15-CZK   |
| 25-way | 6561-06 <b>X</b> 6-13 | D45ZK25-CZK   |
| 37-way | 6561-06 <b>X</b> 6-14 | D45ZK37-CZK   |

|                       |                                  |
|-----------------------|----------------------------------|
| Example:              | (Size 15 with 7,5mm Ferrule Kit) |
| 6560-06 <b>2</b> 6-12 | D45ZK15-CZK-K                    |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                          |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | Top or Side Entry                            |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 11.5mm                                 |

### Features:

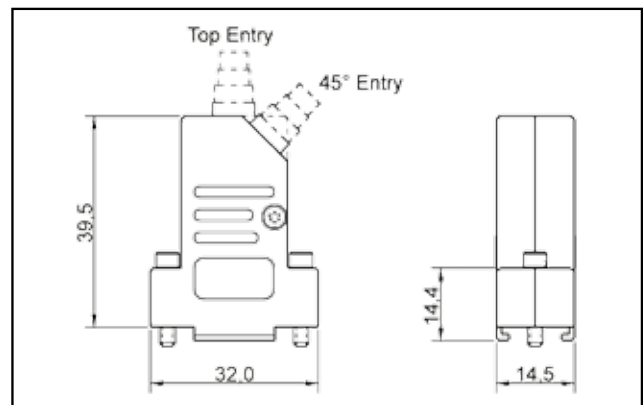
- 360° EMI Shielding
- Quick assembly
- Supports all types of cables
- Suitable for any common D-Sub connector

### Applications:

- Railway Systems
- Medical
- Industry
- Military

### Types available:

- DTSL-JS Jackscrew Version
- DTSL-SL Slide Lock Version



### DTSL-JS - With Rubber Grommet



DTSL-JSFR

### DTSL-JS - With Metalized Cone



DTSL-JS

### Ordering information:

DTSL-JSFR

| Size:      | P/N - Kitted: | Product Code:     |
|------------|---------------|-------------------|
| 9-way-TOP  | 6560-0237-31  | MHDTSL09-JSFR-T-K |
| 9-way-SIDE | 6560-0238-31  | MHDTSL09-JSFR-S-K |
| Size:      | P/N - BULK:   | Product Code:     |
| 9-way-TOP  | 6561-0237-31  | MHDTSL09-JSFR-T   |
| 9-way-SIDE | 6561-0238-31  | MHDTSL09-JSFR-S   |

DTSL-JS

| Size:      | P/N - Kitted: | Product Code:   |
|------------|---------------|-----------------|
| 9-way-TOP  | 6560-0207-31  | MHDTSL09-JS-T-K |
| 9-way-SIDE | 6560-0208-31  | MHDTSL09-JS-S-K |
| Size:      | P/N - BULK:   | Product Code:   |
| 9-way-TOP  | 6561-0207-31  | MHDTSL09-JS-T   |
| 9-way-SIDE | 6561-0208-31  | MHDTSL09-JS-S   |

## TECHNICAL SPECIFICATIONS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                          |
| <b>Operating Temperature:</b> | -40°C to +120°C                              |
| <b>Cable Entry:</b>           | Top or Side Entry                            |
| <b>Thumbscrews:</b>           | UNC 4-40 (Standard)<br>M2,5 or M3 on request |
| <b>Cable O.D:</b>             | Up to 11.5mm                                 |

**Features:**

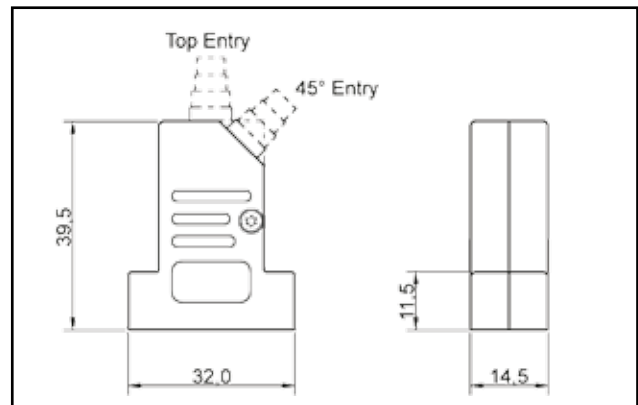
- 360° EMI Shielding
- Quick assembly
- Supports all types of cables
- Suitable for any common D-Sub connector

**Applications:**

- Railway Systems
- Medical
- Industry
- Military

**Types available:**

- DTSL-JS Jackscrew Version
- DTSL-SL Slide Lock Version



## DTSL-SL - With Rubber Grommet



DTSL-SLFR

## Ordering information:

DTSL-SLFR

| Size:      | P/N - Kitted: | Product Code:   |
|------------|---------------|-----------------|
| 9-way-TOP  | 6560-0235-31  | DTSL09-SLFR-T-K |
| 9-way-SIDE | 6560-0239-31  | DTSL09-SLFR-S-K |
| Size:      | P/N - BULK:   | Product Code:   |
| 9-way-TOP  | 6561-0235-31  | DTSL09-SLFR-T   |
| 9-way-SIDE | 6561-0239-31  | DTSL09-SLFR-S   |

## DTSL-SL - With Metalized Cone



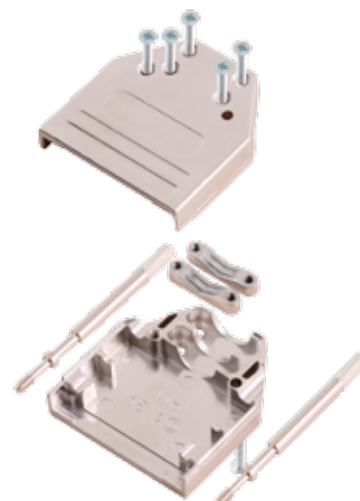
DTSL-SL

DTSL-SL

| Size:      | P/N - Kitted: | Product Code: |
|------------|---------------|---------------|
| 9-way-TOP  | 6560-0205-31  | DTSL09-SL-T-K |
| 9-way-SIDE | 6560-0209-31  | DTSL09-SL-S-K |
| Size:      | P/N - BULK:   | Product Code: |
| 9-way-TOP  | 6561-0205-31  | DTSL09-SL-T   |
| 9-way-SIDE | 6561-0209-31  | DTSL09-SL-S   |

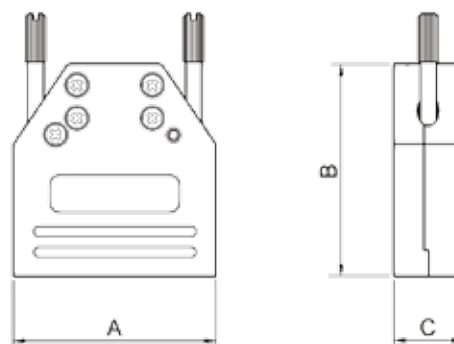
## TECHNICAL SPECIFICATIONS

|                               |                                                |
|-------------------------------|------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                            |
| <b>Operating Temperature:</b> | -40°C to +120°C                                |
| <b>Cable Entry:</b>           | Top Entry                                      |
| <b>Jackscrews:</b>            | UNC 4-40 (Standard)<br>Other thread on request |
| <b>Cable O.D:</b>             | Up to 13mm                                     |



## Features:

- Available in sizes 9-15-25-37-50
- Excellent EMI Shielding
- Re-openable
- Double strain relief for strong and secure cable clamping



| Size MHDZTI | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 34,0  | 45,0  | 14,6  |
| 15-way      | 43,0  | 45,0  | 14,6  |
| 25-way      | 56,5  | 45,0  | 14,6  |
| 37-way      | 73,0  | 45,0  | 14,6  |
| 50-way      | 71,0  | 45,0  | 17,4  |

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0305-01  | DTZI09-K      |
| 15-way | 6560-0305-02  | DTZI15-K      |
| 25-way | 6560-0305-03  | DTZI25-K      |
| 37-way | 6560-0305-04  | DTZI37-K      |
| 50-way | 6560-0305-05  | DTZI50-K      |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0305-01 | DTZI09        |
| 15-way | 6561-0305-02 | DTZI15        |
| 25-way | 6561-0305-03 | DTZI25        |
| 37-way | 6561-0305-04 | DTZI37        |
| 50-way | 6561-0305-05 | DTZI50        |

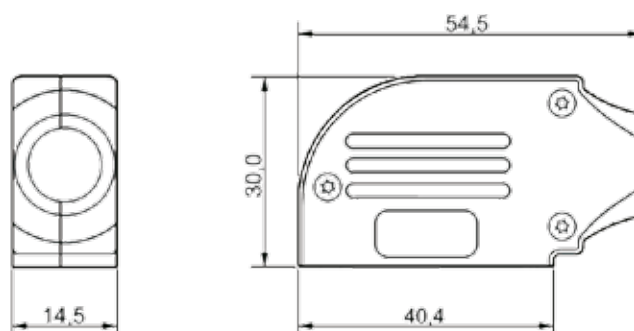
## TECHNICAL SPECIFICATIONS

|                               |                             |
|-------------------------------|-----------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated         |
| <b>Operating Temperature:</b> | -40°C to +120°C             |
| <b>Cable Entry:</b>           | Side Entry                  |
| <b>Cable O.D:</b>             | Up to 12mm                  |
| <b>Type of grommets:</b>      | 2 piece Plastic Ferrule Kit |
| <b>Assembly Instruction:</b>  | See page 200                |

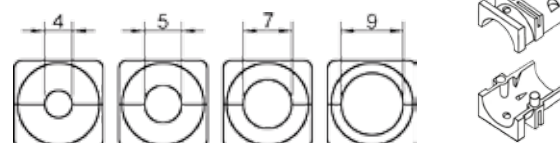


## Features:

- Mull Metal Slide Lock System Hood
- Available in size 15 only
- Suitable for any common Sub-D connector
- Re-Openable
- Perfect Solution for Ethernet Applications
- Metalized (RAHI) grommets on request - See page 186



## Grommet Sizes - MHDSCK:



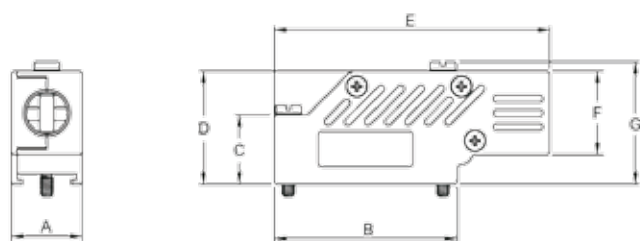
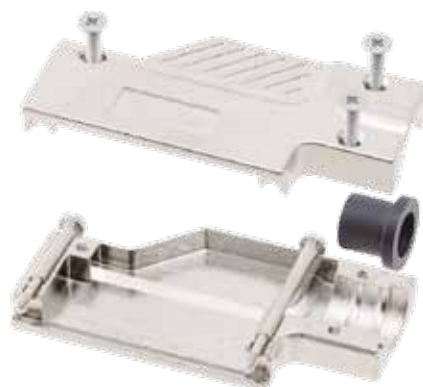
## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 15-way | 6560-0406-32  | DSCK-15-SL-K  |

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 15-way | 6561-0406-32 | DSCK-15-SL    |

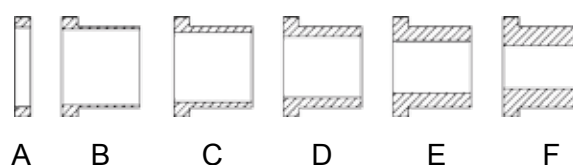
## TECHNICAL SPECIFICATIONS

|                               |                     |
|-------------------------------|---------------------|
| <b>Material:</b>              | Zinc, Nickel Plated |
| <b>Operating Temperature:</b> | -25°C to +90°C      |
| <b>Cable Entry:</b>           | Side Entry          |
| <b>Jack screws:</b>           | UNC 4-40            |
| <b>Cable O.D:</b>             | Up to 16,5mm        |
| <b>Type of grommets:</b>      | Compression Inserts |



| Size | A    | B    | C    | D    | E    | F    | G    |
|------|------|------|------|------|------|------|------|
| 9    | 15,0 | 30,8 | 15,0 | 24,4 | 50,8 | 18,0 | 26,2 |
| 15   | 15,2 | 39,4 | 15,0 | 24,4 | 59,3 | 18,0 | 26,4 |
| 25   | 15,8 | 53,3 | 23,1 | 34,5 | 72,4 | 24,3 | 35,0 |
| 37   | 15,8 | 69,9 | 23,1 | 40,9 | 89,7 | 30,7 | 42,9 |
| 50   | 18,0 | 67,1 | -    | 40,9 | 86,9 | 30,7 | 42,9 |

### Compression Inserts - Inner Diameters:



| Size  | A     | B     | C     | D     | E     | F    |
|-------|-------|-------|-------|-------|-------|------|
| 9/15  | 8,10  | 8,00  | 7,25  | 6,50  | 5,30  | -    |
| 25    | 11,40 | 10,40 | 9,40  | 7,60  | 5,80  | -    |
| 37/50 | 16,50 | 15,75 | 14,50 | 12,70 | 10,80 | 8,90 |

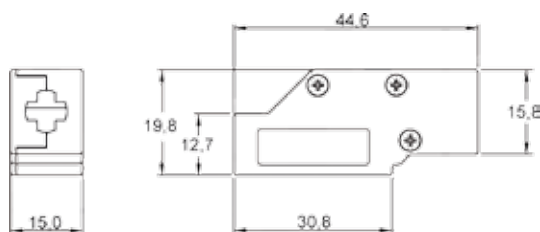
### Features:

- Available in sizes 9, 15, 25 and 37-way  
Size 50 on request
- Suitable for any common Sub-D connector
- Re-Openable
- Compression Inserts in Thermoplastic Compound

### Order codes:

|        |              |            |
|--------|--------------|------------|
| 9-way  | 1060-0135-01 | DCMR9-ULP  |
| 15-way | 1060-0135-02 | DCMR15-ULP |
| 25-way | 1060-0135-03 | DCMR25-ULP |
| 37-way | 1060-0135-04 | DCMR37-ULP |
| 50-way | 1060-0135-05 | DCMR50-ULP |

### Slide Lock Version:



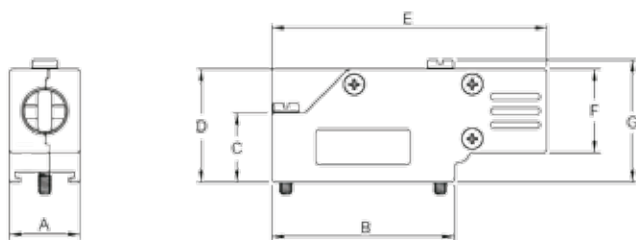
- Material as above ULP-version
- Available in size 9 only

### Order codes:

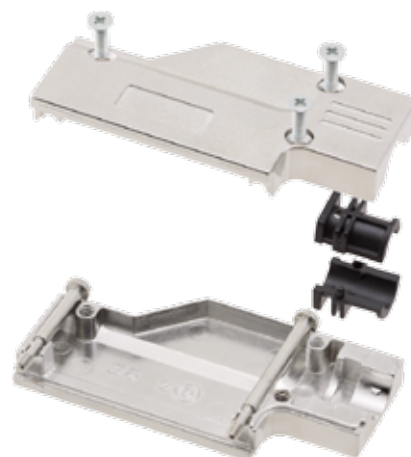
|       |              |             |
|-------|--------------|-------------|
| 9-way | 1060-0135-11 | MHDCMR09-SL |
|-------|--------------|-------------|

## TECHNICAL SPECIFICATIONS

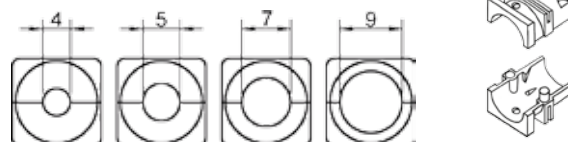
|                               |                                  |
|-------------------------------|----------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated              |
| <b>Operating Temperature:</b> | -40°C to +120°C                  |
| <b>Cable Entry:</b>           | Side Entry                       |
| <b>Jackscrews:</b>            | UNC 4-40                         |
| <b>Cable O.D:</b>             | Up to 12mm                       |
| <b>Type of grommets:</b>      | 2 piece Plastic Ferrule Kit (RA) |
| <b>Assembly Instruction:</b>  | See page 200                     |



| Size | A    | B    | C    | D    | E    | F    | G    |
|------|------|------|------|------|------|------|------|
| 9    | 15,0 | 30,8 | 15,0 | 24,4 | 50,8 | 18,0 | 26,2 |
| 25   | 15,8 | 53,3 | 23,1 | 34,5 | 72,4 | 24,3 | 36,6 |



Grommet Sizes - MHDCMR-RA:



## Features:

- Available in sizes 9 and 25-way  
Other sizes on request
- Suitable for any common Sub-D connector
- Re-Openable
- Metalized (RAHI) grommets on request - See page 186

## Ordering information:

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 6560-0501-01  | DCMR09-RA-K   |
| 15-way | 6560-0501-02  | On request    |
| 25-way | 6560-0501-03  | DCMR25-RA-K   |
| 37-way | 6560-0501-04  | On request    |

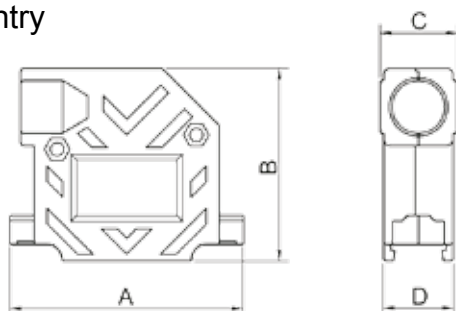
| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 9-way  | 6561-0501-01 | DCMR09-RA     |
| 15-way | 6561-0501-02 | On request    |
| 25-way | 6561-0501-03 | DCMR25-RA     |
| 37-way | 6561-0501-04 | On request    |

## TECHNICAL SPECIFICATIONS

**Material:** Zinc, Nickel Plated  
**Operating Temperature:** -25°C to +90°C  
**Cable Entry:** Side or Top Entry  
 Flat Cable Entry  
**Jackscrews:** UNC 4-40

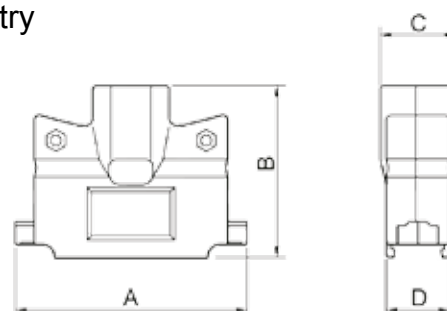


### Side Entry



| Size | Dim A | Dim B | Dim C | Dim D |
|------|-------|-------|-------|-------|
| 25   | 53,1  | 43,6  | 18,0  | 16,3  |

### Top Entry



| Size | Dim A | Dim B | Dim C | Dim D |
|------|-------|-------|-------|-------|
| 9    | 31,1  | 37,2  | 15,7  | 15,7  |
| 15   | 39,1  | 40,6  | 15,7  | 15,7  |
| 25   | 53,1  | 39,1  | 17,5  | 15,7  |
| 37   | 66,6  | 45,7  | 21,9  | 18,5  |
| 50   | 66,6  | 45,7  | 21,9  | 18,5  |

### Ordering information:

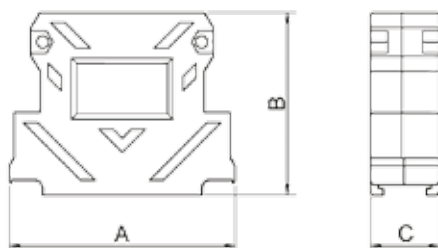
*Side Entry*

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 25-way | 1060-0206-03  | C88E420000    |

*Top Entry*

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 1060-0205-01  | C88E000209    |
| 15-way | 1060-0205-02  | C88E000211    |
| 25-way | 1060-0205-03  | C88E000204    |
| 37-way | 1060-0205-04  | C88E000210    |
| 50-way | 1060-0205-05  | C88E000212    |

## MHC88E - Flat Cable Entry Hood



| Size:         | Dim A | Dim B | Dim C |
|---------------|-------|-------|-------|
| Flat - 25-way | 55,5  | 45,7  | 17,5  |



### Ordering information:

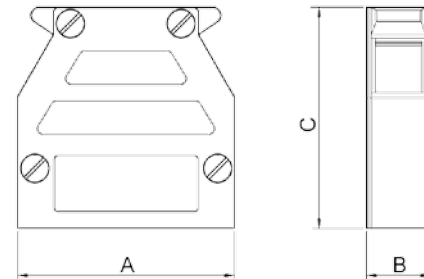
| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 25-way | 1060-0207-03  | C88E520000    |

## TECHNICAL SPECIFICATIONS

|                               |                            |
|-------------------------------|----------------------------|
| <b>Material:</b>              | Zinc Alloy, Natural Finish |
| <b>Operating Temperature:</b> | -40°C to +120°C            |
| <b>Cable Entry:</b>           | Side-Top-Side Entry        |
| <b>Cable O.D:</b>             | Up to 14,3mm               |

## Features:

- Available in sizes 9, 15, 25, 37 and 50-way
- Re-openable
- Flanges & Crimp Ferrules are ordered separately.
- 2 Shouldered screws to retain connector
- Can be equipped with standard Slide-Lock System (Sold Separately - See Accessories, page 186-190)



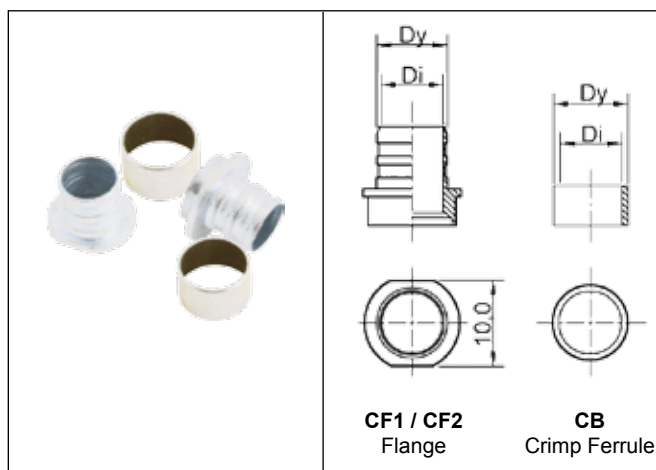
## Ordering information:

Slide-Lock Version

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2801-0107-01  | ED-H09-M1-K   |
| 15-way | 2801-0107-02  | ED-H15-M1-K   |
| 25-way | 2801-0107-03  | ED-H25-M1-K   |
| 37-way | 2801-0107-04  | ED-H37-M1-K   |
| 50-way | 2801-0107-05  | ED-H50-M1-K   |

| Size MHED-H | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,4  | 16,2  | 48,3  |
| 15-way      | 40,2  | 16,2  | 48,3  |
| 25-way      | 53,0  | 16,2  | 48,3  |
| 37-way      | 69,2  | 16,2  | 48,3  |
| 50-way      | 67,0  | 18,4  | 48,3  |

## Accessories for MHED-H:

CF1 / CF2  
FlangeCB  
Crimp Ferrule

| Flange:     | Di: | Dy:  | Max Cable O.D: | Part Number: |
|-------------|-----|------|----------------|--------------|
| CFx-030/040 | 3,0 | 4,0  | 6,3mm          | 2802-x000-01 |
| CFx-035/045 | 3,5 | 4,5  | 7,3mm          | 2802-x000-02 |
| CFx-040/050 | 4,0 | 5,0  | 8,3mm          | 2802-x000-03 |
| CFx-045/055 | 4,5 | 5,5  | 8,8mm          | 2802-x000-04 |
| CFx-050/060 | 5,0 | 6,0  | 9,3mm          | 2802-x000-05 |
| CFx-055/065 | 5,5 | 6,5  | 9,8mm          | 2802-x000-06 |
| CFx-060/070 | 6,0 | 7,0  | 10,3mm         | 2802-x000-07 |
| CFx-065/075 | 6,5 | 7,5  | 10,8mm         | 2802-x000-08 |
| CFx-070/080 | 7,0 | 8,0  | 11,8mm         | 2802-x000-09 |
| CFx-075/085 | 7,5 | 8,5  | 12,3mm         | 2802-x000-10 |
| CFx-080/090 | 8,0 | 9,0  | 12,8mm         | 2802-x000-11 |
| CFx-085/095 | 8,5 | 9,5  | 13,3mm         | 2802-x000-12 |
| CFx-090/100 | 9,0 | 10,0 | 13,8mm         | 2802-x000-13 |
| CFx-095/105 | 9,5 | 10,5 | 14,3mm         | 2802-x000-14 |

| Crimp Ferrule: | Di:  | Dy:  | Suitable Flange: | Part Number: |
|----------------|------|------|------------------|--------------|
| CB055/065      | 5,5  | 6,5  | CFx030/040       | 2802-3000-01 |
| CB065/075      | 6,5  | 7,5  | CFx035/045       | 2802-3000-02 |
| CB075/085      | 7,5  | 8,5  | CFx040/050       | 2802-3000-03 |
| CB080/090      | 8,0  | 9,0  | CFx045/055       | 2802-3000-04 |
| CB085/095      | 8,5  | 9,5  | CFx050/060       | 2802-3000-05 |
| CB090/100      | 9,0  | 10,0 | CFx055/065       | 2802-3000-06 |
| CB095/105      | 9,5  | 10,5 | CFx060/070       | 2802-3000-07 |
| CB100/110      | 10,0 | 11,0 | CFx065/075       | 2802-3000-08 |
| CB110/120      | 11,0 | 12,0 | CFx070/080       | 2802-3000-09 |
| CB115/125      | 11,5 | 12,5 | CFx075/085       | 2802-3000-10 |
| CB120/130      | 12,0 | 13,0 | CFx080/090       | 2802-3000-11 |
| CB125/135      | 12,5 | 13,5 | CFx085/095       | 2802-3000-12 |
| CB130/140      | 13,0 | 14,0 | CFx090/100       | 2802-3000-13 |
| CB135/145      | 13,5 | 14,5 | CFx095/105       | 2802-3000-14 |

## How To Order Flange:

Suite Hood Sizes:

|              |             |      |
|--------------|-------------|------|
| 2802-1000-xx | CF1-Di / Dy | 9-37 |
| 2802-2000-xx | CF2-Di / Dy | 50   |

## How To Order Crimp Ferrule:

Suite Hood Sizes:

|              |            |      |
|--------------|------------|------|
| 2802-3000-xx | CB-Di / Dy | 9-50 |
|--------------|------------|------|

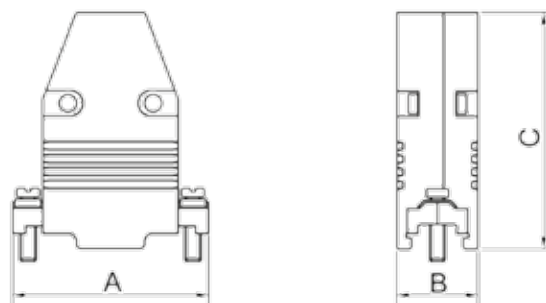
## TECHNICAL SPECIFICATIONS

|                               |                                                                            |
|-------------------------------|----------------------------------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                                                        |
| <b>Operating Temperature:</b> | -40°C to +120°C                                                            |
| <b>Cable Entry:</b>           | Top Entry                                                                  |
| <b>Cable O.D:</b>             | Up to 16mm                                                                 |
| <b>Jackscrews:</b>            | UNC 4-40<br>Short Jackscrews (ME-version)<br>Long Jackscrews (MEL-version) |



## Features:

- Available in sizes 9, 15, 25, 37 and 50
- Suitable for any common Sub-D connector
- Re-Openable
- Available also with Long Jackscrews (MEL)



| Size MHCCOV | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,4  | 16,2  | 48,3  |
| 15-way      | 40,2  | 16,2  | 48,3  |
| 25-way      | 53,0  | 16,2  | 48,3  |
| 37-way      | 69,2  | 16,2  | 48,3  |
| 50-way      | 67,0  | 18,4  | 48,3  |

## Ordering information: (Short Jackscrews)

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2360-0106-01  | CCOV 9-ME     |
| 15-way | 2360-0106-02  | CCOV15-ME     |
| 25-way | 2360-0106-03  | CCOV25-ME     |
| 37-way | 2360-0106-04  | CCOV37-ME     |
| 50-way | 2360-0106-05  | CCOV50-ME     |

## (Long Jackscrews)

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2360-0106-11  | CCOV 9-MEL    |
| 15-way | 2360-0106-12  | CCOV15-MEL    |
| 25-way | 2360-0106-13  | CCOV25-MEL    |
| 37-way | 2360-0106-14  | CCOV37-MEL    |
| 50-way | 2360-0106-15  | CCOV50-MEL    |

## TECHNICAL SPECIFICATIONS

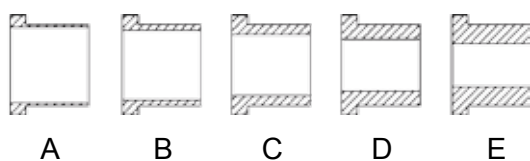
|                               |                                                                            |
|-------------------------------|----------------------------------------------------------------------------|
| <b>Material:</b>              | Zinc, Nickel Plated                                                        |
| <b>Operating Temperature:</b> | -25°C to +90°C                                                             |
| <b>Cable Entry:</b>           | Top Entry                                                                  |
| <b>Cable O.D:</b>             | Up to 16mm*                                                                |
| <b>Jackscrews:</b>            | UNC 4-40<br>Short Jackscrews (ME-version)<br>Long Jackscrews (MEL-version) |

\* Cable Diameter Max 16mm if Compression Insert is not used.  
Recommended diameters with Inserts - Please see table below.

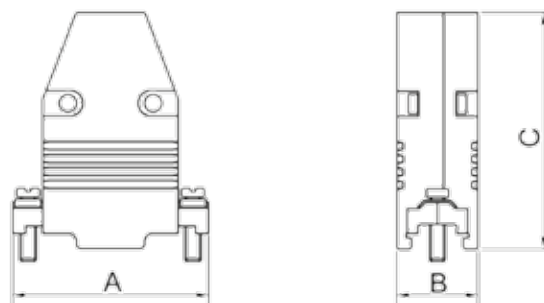
### Features:

- Available in sizes 9, 15, 25, 37 and 50
- Suitable for any common Sub-D connector
- Re-Openable
- Available also with Long Jackscrews (MEL)

### Compression Inserts - Inner Diameters:



| Size  | A     | B     | C     | D    | E    |
|-------|-------|-------|-------|------|------|
| 9/15  | 8,00  | 7,50  | 7,00  | 6,00 | 4,50 |
| 25    | 9,50  | 8,30  | 7,90  | 6,75 | 5,80 |
| 37/50 | 13,50 | 13,00 | 11,00 | 9,00 | 8,00 |



| Size MHCCOV | Dim A | Dim B | Dim C |
|-------------|-------|-------|-------|
| 9-way       | 31,4  | 16,2  | 53,0  |
| 15-way      | 40,2  | 16,2  | 48,3  |
| 25-way      | 53,0  | 16,2  | 48,3  |
| 37-way      | 69,2  | 16,2  | 48,3  |
| 50-way      | 67,0  | 18,4  | 48,3  |

### Ordering information: (Short Jackscrews)

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2360-0107-01  | CCOV 9-ME-RG  |
| 15-way | 2360-0107-02  | CCOV15-ME-RG  |
| 25-way | 2360-0107-03  | CCOV25-ME-RG  |
| 37-way | 2360-0107-04  | CCOV37-ME-RG  |
| 50-way | 2360-0107-05  | CCOV50-ME-RG  |

### (Long Jackscrews)

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 9-way  | 2360-0107-11  | CCOV 9-MEL-RG |
| 15-way | 2360-0107-12  | CCOV15-MEL-RG |
| 25-way | 2360-0107-13  | CCOV25-MEL-RG |
| 37-way | 2360-0107-14  | CCOV37-MEL-RG |
| 50-way | 2360-0107-15  | CCOV50-MEL-RG |

## TECHNICAL SPECIFICATIONS

**Material:**

Plastic Hood: Polyamid - UL-recognised  
 Metal Hood: Steel, Zinc plated

**Operating Temperature:** -55°C to +110°C

**Thumbscrews:** UNC 4-40 (Standard)  
 M2,5 or M3 on request

**Cable Entry:** Top Entry

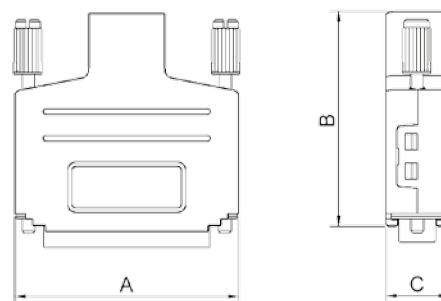
**Cable O.D:** Up to 12,5mm

**Accessories:** See page 190-194

**Assembly Instruction:** See page 205-206

**Features:**

- Available in sizes 9-15-25-37
- Suitable for IDC connectors
- Quick-Snap locking system
- Crimping method ensures a 360° shielding

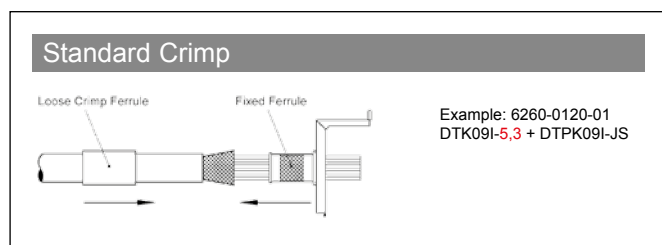


## Ordering information:

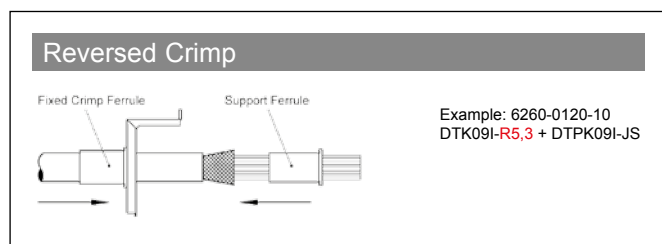
| Size:  | P/N - Kitted: | Product Code:              |
|--------|---------------|----------------------------|
| 9-way  | 6260-0120-xx  | DTK09I-[size] + DTPK09I-JS |
| 15-way | 6260-0121-xx  | DTK15I-[size] + DTPK15I-JS |
| 25-way | 6260-0122-xx  | DTK25I-[size] + DTPK25I-JS |
| 37-way | 6260-0123-xx  | DTK37I-[size] + DTPK37I-JS |

| Size DTK/DTPK | Dim A | Dim B | Dim C |
|---------------|-------|-------|-------|
| 9-way         | 35,0  | 54,0  | 19,0  |
| 15-way        | 43,0  | 54,0  | 19,0  |
| 25-way        | 54,0  | 53,0  | 18,0  |
| 37-way        | 74,0  | 54,0  | 19,0  |

## Code for correct ferrule:



| Cable O.D    | Size | Order Code xx | Suits Hood size |
|--------------|------|---------------|-----------------|
| Up to 7 mm   | 5,3  | -01           | 9-15-25-37      |
| 6,8–8,6 mm   | 6,0  | -02           | 9-15-25-37      |
| 8,4–9,8 mm   | 7,0  | -03           | 9-15-25-37      |
| 9,6–10,3 mm  | 7,5  | -04           | 9-15-25-37      |
| 10,1–11,0 mm | 8,6  | -05           | 15-25-37        |
| 10,8–12,5 mm | 10,5 | -07           | 25-37           |



| Cable O.D    | Size  | Order Code xx | Suits Hood size |
|--------------|-------|---------------|-----------------|
| Up to 5,1 mm | R5,3  | -10           | 9-15-25-37      |
| 4,3–6,9 mm   | R7,1  | -12           | 9-15-25-37      |
| 7,0–7,9 mm   | R8,0  | -13           | 9-15-25-37      |
| 6,1–8,8 mm   | R9,0  | -14           | 9-15-25-37      |
| 8,0–10,3 mm  | R10,5 | -15           | 15-25-37        |
| 9,5–11,5 mm  | R11,7 | -16           | 25-37           |

## SPECIAL HOODS

### Flat Cable Connector Hood

Material: ABS Plastic  
Unshielded version (Standard)  
Shielded version on request

Sizes: 9-15-25-37

Screws: UNC 4-40 locking screw



DFCK

#### Ordering information:

| Size:  | Part Number: | Product Code: |
|--------|--------------|---------------|
| 9-way  | 1520-0101-01 | MHDFCK09-P    |
| 15-way | 1520-0101-02 | MHDFCK15-P    |
| 25-way | 1520-0101-03 | MHDFCK25-P    |
| 37-way | 1520-0101-04 | MHDFCK37-P    |

04

### Flat Cable Grip Cap

Material: ABS Plastic, Black

Sizes: 9-15-25

Each kit contains fastening bolts



DFCC

#### Ordering information:

| Size:  | Part Number: | Product Code: |
|--------|--------------|---------------|
| 9-way  | 1520-0201-01 | MHDFCC09-P    |
| 15-way | 1520-0201-02 | MHDFCC15-P    |
| 25-way | 1520-0201-03 | MHDFCC25-P    |

### Drawn D-Connector Metal Cans

Material: Steel, Zinc Plated

Sizes: 9-15-25-37

#### Ordering information:

| Size:  | Part Number: | Product Code: | Max Cable O.D: |
|--------|--------------|---------------|----------------|
| 9-way  | 2901-0101-01 | DMCK09 - 5.5  | 5,3mm          |
| 9-way  | 2901-0101-11 | DMCK09 - 7.2  | 7,1mm          |
| 9-way  | 2901-0101-21 | DMCK09 - 9.5  | 9,3mm          |
| 15-way | 2901-0101-02 | DMCK15 - 7.2  | 7,1mm          |
| 15-way | 2901-0101-12 | DMCK15 - 9.5  | 9,3mm          |
| 25-way | 2901-0101-03 | DMCK25 - 7.2  | 7,1mm          |
| 25-way | 2901-0101-13 | DMCK25 - 9.5  | 9,3mm          |
| 25-way | 2901-0101-23 | DMCK25 - 10.8 | 10,5mm         |
| 37-way | 2901-0101-04 | DMCK37 - 10.8 | 10,5mm         |



DMCK

The drawn metal cans are normally used as a press fit shielding cover prior to overmoulding with PVC. The cable-to-can entry can be heat shrink sleeved to provide sealing against dust.

## TECHNICAL SPECIFICATIONS

### Materials:

**Unshielded Hood:** Polyamid - UL-recognised

**Operating Temperature:** -55°C to +110°C

**Thumbscrews:** UNC 4-40 (Standard)

**Shielded Hood:** ABS/PC - UL-recognised

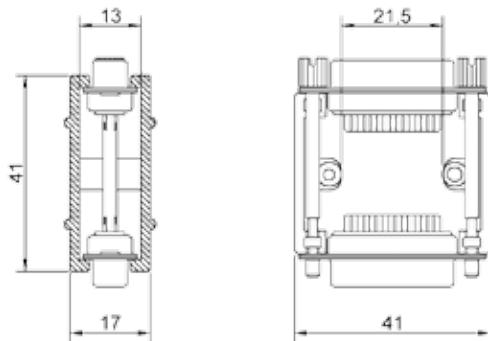
**Plating:** Nickel over Copper

**Operating Temperature:** -55°C to +110°C

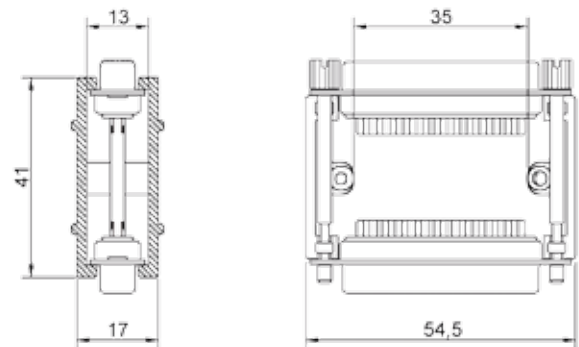
**Thumbscrews:** UNC 4-40 (Standard)



MHDAPK 15



MHDAPK 25



### Ordering information:

Unshielded Version

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 15-way | 6211-0100-32  | DAPK15-JS     |
| 25-way | 6211-0100-33  | DAPK25-JS     |

### Ordering information:

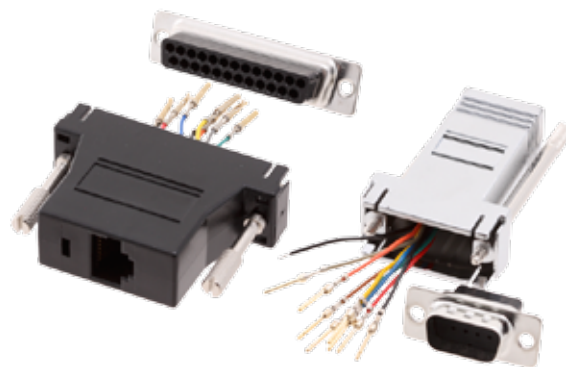
Shielded Version

| Size:  | P/N - Kitted: | Product Code: |
|--------|---------------|---------------|
| 15-way | 6211-0100-42  | DAPK15-JS/MET |
| 25-way | 6211-0100-43  | DAPK25-JS/MET |

### Note:

All adapters are delivered with 2 long jackscrews in standard versions as seen in above drawings and ordering information.

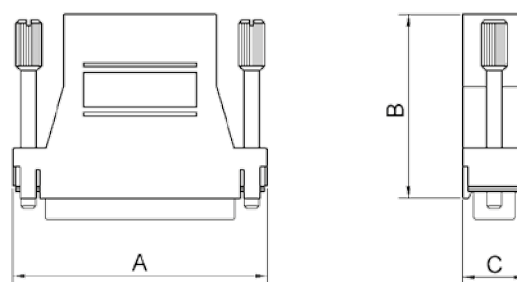
## TECHNICAL SPECIFICATIONS

**Materials:****Unshielded Hood:** UL-recognised plastic material**Operating Temperature:** -30°C to +110°C**Colour:** Black (Standard)  
Other colour on request**Shielded Hood:** UL-recognised plastic material**Plating:** Nickel over Copper**Operating Temperature:** -30°C to +90°C**Thumbscrews:** UNC 4-40 (Standard)

05

**Features:**

- Available in sizes 9 and 25 (15 on request)
- Available in EMI-shielded and unshielded version
- Delivered complete with wires and Sub-D
- Pre-wired connectors on request



| Size MHDA | Dim A | Dim B | Dim C |
|-----------|-------|-------|-------|
| 9-way     | 33,0  | 15,0  | 49,5  |
| 15-way    | 41,3  | 15,0  | 39,0  |
| 25-way    | 55,1  | 15,0  | 39,0  |

**Ordering information:**

Unshielded Version

| Size:  | P/N - Kitted: | Product Code:  |
|--------|---------------|----------------|
| 9-way  | 2112-0100-01  | DA09-SMJ6-K-RC |
| 25-way | 2112-0100-03  | DA25-SMJ6-K-RC |
| 9-way  | 2112-0100-11  | DA09-PMJ6-K-RC |
| 25-way | 2112-0100-13  | DA25-PMJ6-K-RC |
| 9-way  | 2112-0101-01  | DA09-SMJ8-K-RC |
| 25-way | 2112-0101-03  | DA25-SMJ8-K-RC |
| 9-way  | 2112-0101-11  | DA09-PMJ8-K-RC |
| 25-way | 2112-0101-13  | DA25-PMJ8-K-RC |

**Ordering information:**

Shielded Version

| Size:  | P/N - Kitted: | Product Code:    |
|--------|---------------|------------------|
| 9-way  | 2112-0105-01  | DA09-SMJ8-M-K-RC |
| 25-way | 2112-0105-03  | DA25-SMJ8-M-K-RC |
| 9-way  | 2112-0105-11  | DA09-PMJ8-M-K-RC |
| 25-way | 2112-0105-13  | DA25-PMJ8-M-K-RC |

SMJ6 = Sub-D Female to RJ11

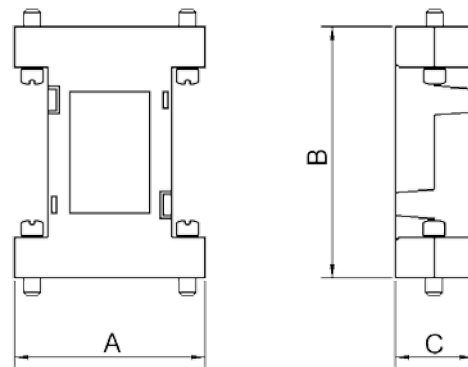
PMJ6 = Sub-D Male to RJ11

SMJ8 = Sub-D Female to RJ45

PMJ8 = Sub-D Male to RJ45

## TECHNICAL SPECIFICATIONS

|                               |                                                  |
|-------------------------------|--------------------------------------------------|
| <b>Materials:</b>             |                                                  |
| <b>Unshielded Hood:</b>       | UL-recognised plastic material                   |
| <b>Operating Temperature:</b> | -30°C to +110°C                                  |
| <b>Colour:</b>                | Light Grey (Standard)<br>Other colour on request |
| <b>Shielded Hood:</b>         | UL-recognised plastic material                   |
| <b>Plating:</b>               | Nickel over Copper                               |
| <b>Operating Temperature:</b> | -30°C to +90°C                                   |
| <b>Jackscrews:</b>            | UNC 4-40 (Standard)                              |



MM = Male to Male Sub-D  
MF = Male to Female Sub-D  
FF = Female to Female Sub-D

| Size MHGA | Dim A | Dim B | Dim C |
|-----------|-------|-------|-------|
| 9-way     | 33,2  | 62,0  | 16,5  |
| 15-way    | 41,0  | 62,0  | 16,5  |
| 25-way    | 56,0  | 62,0  | 16,5  |

### Ordering information: *Unshielded Version*

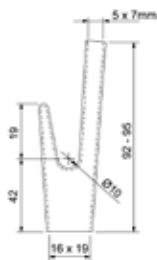
| Size:  | P/N - Kitted: | Product Code:     |
|--------|---------------|-------------------|
| 9-way  | 2111-0101-01  | GA0909-MM-LG-K-RC |
| 15-way | 2111-0101-02  | GA1515-MM-LG-K-RC |
| 25-way | 2111-0101-03  | GA2525-MM-LG-K-RC |
| 9-way  | 2111-0101-11  | GA0909-MF-LG-K-RC |
| 15-way | 2111-0101-12  | GA1515-MF-LG-K-RC |
| 25-way | 2111-0101-13  | GA2525-MF-LG-K-RC |
| 9-way  | 2111-0101-21  | GA0909-FF-LG-K-RC |
| 15-way | 2111-0101-22  | GA1515-FF-LG-K-RC |
| 25-way | 2111-0101-23  | GA2525-FF-LG-K-RC |

### Ordering information: *Shielded Version*

| Size:  | P/N - Kitted: | Product Code:    |
|--------|---------------|------------------|
| 9-way  | 2111-0105-01  | GA0909-MM-M-K-RC |
| 15-way | 2111-0105-02  | GA1515-MM-M-K-RC |
| 25-way | 2111-0105-03  | GA2525-MM-M-K-RC |
| 9-way  | 2111-0105-11  | GA0909-MF-M-K-RC |
| 15-way | 2111-0105-12  | GA1515-MF-M-K-RC |
| 25-way | 2111-0105-13  | GA2525-MF-M-K-RC |
| 9-way  | 2111-0105-21  | GA0909-FF-M-K-RC |
| 15-way | 2111-0105-22  | GA1515-FF-M-K-RC |
| 25-way | 2111-0105-23  | GA2525-FF-M-K-RC |

## DIP-MOULDED GASKET SERIES

### Battery Clip Insulating Covers – 20A



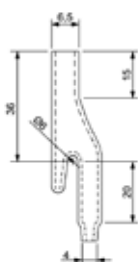
#### Features:

- Red or Black colour
- Suitable for 20 Amp
- Material: PVC

| Order Code:   | Colour: |
|---------------|---------|
| DIP-IBC20A-R  | RED     |
| DIP-IBC20A-BK | BLACK   |



### Battery Clip Insulating Covers – 5A



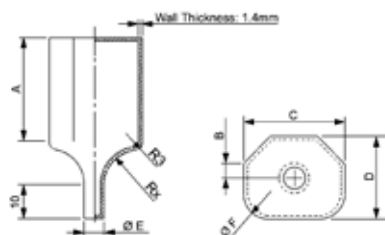
#### Features:

- Red or Black colour
- Suitable for 5 Amp
- Material: PVC

| Order Code: | Colour: |
|-------------|---------|
| DIP-IC5A-R  | RED     |
| DIP-IC5A-BK | BLACK   |



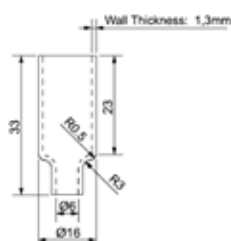
### IEC Insulating Covers



For protecting a variety of IEC Inlets, Outlets and Filters

| Order Code:  | A  | B    | C    | D    | ØE  | ØF | Rx   | Material:          | Colour: |
|--------------|----|------|------|------|-----|----|------|--------------------|---------|
| DIP-IEC4-BK  | 35 | -    | 27,0 | 19,0 | 4,0 | 4  | 10,0 | UL94 V-0-rated PVC | Black   |
| DIP-IEC5-BK  | 30 | -    | 27,0 | 19,0 | 4,0 | 4  | 10,0 | UL94 V-0-rated PVC | Black   |
| DIP-IEC6S-BK | 22 | -    | 27,0 | 19,0 | 6,0 | 4  | 10,5 | UL94 V-0-rated PVC | Black   |
| DIP-IEC6L-BK | 35 | 8,25 | 26,5 | 30,5 | 6,4 | -  | 10,0 | UL94 V-0-rated PVC | Black   |
| DIP-IEC7-BK  | 38 | 4,25 | 30,0 | 24,0 | 6,4 | 16 | 9,0  | UL94 V-0-rated PVC | Black   |

### Rear Insulating Cover



#### Features:

- Rear Insulating Cover
- Black PVC
- Suitable for electrical connections of 3, 4 and 6-pole 3A Mini Inlet and Outlet Plugs & Sockets

| Order Code:  | Colour: |
|--------------|---------|
| DIP-IMI3A-BK | BLACK   |



# SUB-D CONNECTORS

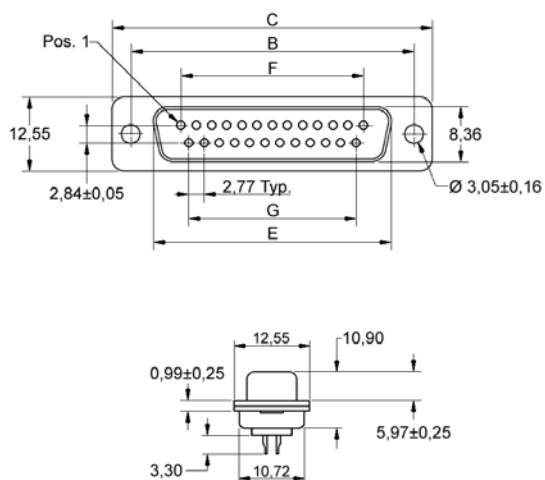
## DB-DM-Series – Solder Cup

### Material Specification:

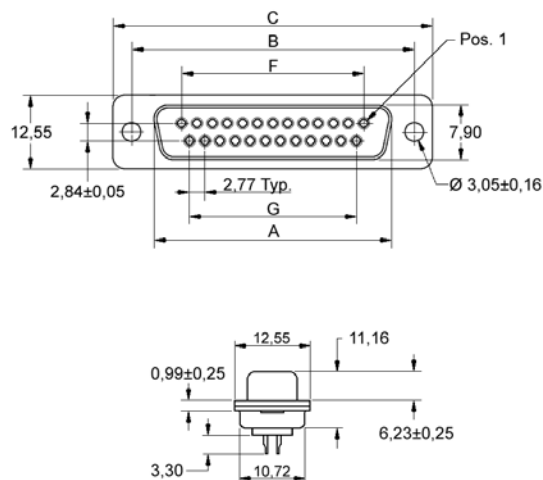
|                       |                                           |
|-----------------------|-------------------------------------------|
| Insulator:            | Glass filled Polyester, Black<br>UL94 V-0 |
| Shell:                | Stamped Steel, Tin Plated                 |
| Contact pins:         | Copper Alloy                              |
| Stamped & Formed Pins | Class 3, 100 inserts min. <b>(DB)</b>     |
| Machined Pins:        | Class 1, 500 inserts min. <b>(DM)</b>     |
| Contact Plating:      | Selective Gold over Nickel                |
| Mounting Options:     | See page 60                               |



Plug connector



Socket connector



| Size | A                    | B     | C     | E     | F     | G     |
|------|----------------------|-------|-------|-------|-------|-------|
| 9    | 16,92                | 24,99 | 30,81 | 16,33 | 11,08 | 8,31  |
| 15   | 25,25                | 33,32 | 39,14 | 24,66 | 19,39 | 16,62 |
| 25   | 38,96                | 47,04 | 53,04 | 38,38 | 33,24 | 30,47 |
| 37   | 55,25                | 63,50 | 69,32 | 54,84 | 49,86 | 47,09 |
| 50*  | Available on request |       |       |       |       |       |

### Order Codes:

| Plug Connector |              | Stamped & Formed |
|----------------|--------------|------------------|
| 09             | 2101-0180-01 | DB09-SP          |
| 15             | 2101-0180-02 | DB15-SP          |
| 25             | 2101-0180-03 | DB25-SP          |
| 37             | 2101-0180-04 | DB37-SP          |
| 50             | 2101-0180-05 | DB50-SP          |

| Plug Connector |              | Machined Contacts |
|----------------|--------------|-------------------|
| 09             | 2101-0200-01 | DM09-SP           |
| 15             | 2101-0200-02 | DM15-SP           |
| 25             | 2101-0200-03 | DM25-SP           |
| 37             | 2101-0200-04 | DM37-SP           |
| 50             | On request   |                   |

| Socket Connector |              | Stamped & Formed |
|------------------|--------------|------------------|
| 09               | 2101-0180-11 | DB09-SS          |
| 15               | 2101-0180-12 | DB15-SS          |
| 25               | 2101-0180-13 | DB25-SS          |
| 37               | 2101-0180-14 | DB37-SS          |
| 50               | 2101-0180-15 | DB50-SS          |

| Socket Connector |              | Machined Contacts |
|------------------|--------------|-------------------|
| 09               | 2101-0200-11 | DM09-SS           |
| 15               | 2101-0200-12 | DM15-SS           |
| 25               | 2101-0200-13 | DM25-SS           |
| 37               | 2101-0200-14 | DM37-SS           |
| 50               | On request   |                   |

# SUB-D CONNECTORS

## DD-Series – PCB Mount Straight & Angled D Connectors, 9.4mm

### Material Specification:

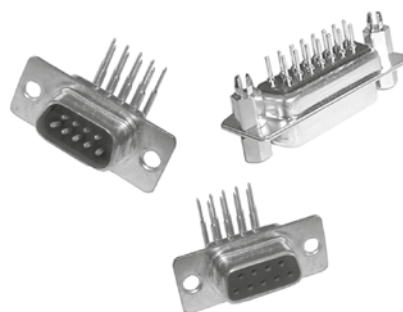
Insulator: Glass filled Polyester, Black  
UL94 V-0

Shell: Stamped Steel, Tin Plated

Contact pins: Copper Alloy, Machined  
Class 1, 500 inserts min.

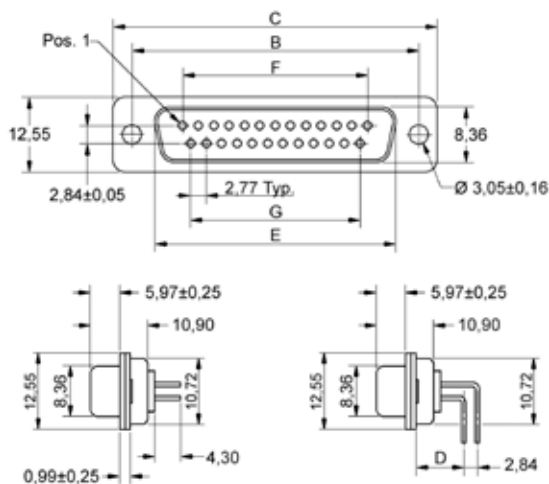
Contact Plating: Selective Gold over Nickel

7.2mm (RAM) available on request.  
Size 50 available on request.

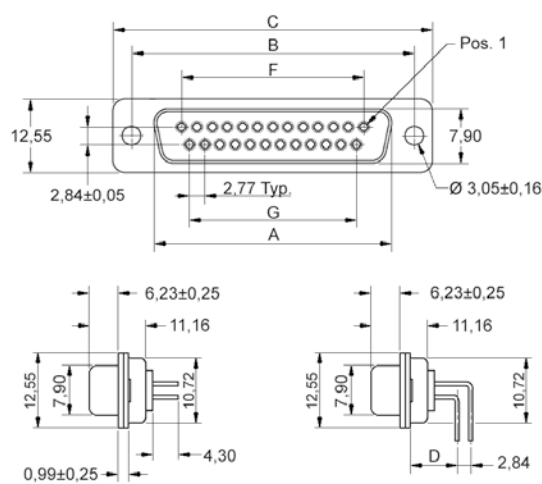


Mounting Options: See page 60

Plug connector



Socket connector



| Size | A                    | B     | C     | D: RAM/ RBM | E     | F     | G     |
|------|----------------------|-------|-------|-------------|-------|-------|-------|
| 9    | 16,92                | 24,99 | 30,81 | 7,2 / 9,4   | 16,33 | 11,08 | 8,31  |
| 15   | 25,25                | 33,32 | 39,14 | 7,2 / 9,4   | 24,66 | 19,39 | 16,62 |
| 25   | 38,96                | 47,04 | 53,04 | 7,2 / 9,4   | 38,38 | 33,24 | 30,47 |
| 37   | 55,25                | 63,50 | 69,32 | 7,2 / 9,4   | 54,84 | 49,86 | 47,09 |
| 50*  | Available on request |       |       |             |       |       |       |

### Order Codes:

| Plug Connector  | Straight PCB Mount |
|-----------------|--------------------|
| 09 2103-0100-01 | DD09-M-T-B-S       |
| 15 2103-0100-02 | DD15-M-T-B-S       |
| 25 2103-0100-03 | DD25-M-T-B-S       |
| 37 2103-0100-04 | DD37-M-T-B-S       |
| 50              | On request         |

| Plug Connector  | Angled RBM (9.4mm) |
|-----------------|--------------------|
| 09 2103-2100-01 | DD09-M-T-B-S-RBM   |
| 15 2103-2100-02 | DD15-M-T-B-S-RBM   |
| 25 2103-2100-03 | DD25-M-T-B-S-RBM   |
| 37 2103-2100-04 | DD37-M-T-B-S-RBM   |
| 50              | On request         |

| Socket Connector | Straight PCB Mount |
|------------------|--------------------|
| 09 2103-0100-11  | DD09-F-T-B-S       |
| 15 2103-0100-12  | DD15-F-T-B-S       |
| 25 2103-0100-13  | DD25-F-T-B-S       |
| 37 2103-0100-14  | DD37-F-T-B-S       |
| 50               | On request         |

| Socket Connector | Angled RBM (9.4mm) |
|------------------|--------------------|
| 09 2103-2100-11  | DD09-F-T-B-S-RBM   |
| 15 2103-2100-12  | DD15-F-T-B-S-RBM   |
| 25 2103-2100-13  | DD25-F-T-B-S-RBM   |
| 37 2103-2100-14  | DD37-F-T-B-S-RBM   |
| 50               | On request         |

# SUB-D CONNECTORS

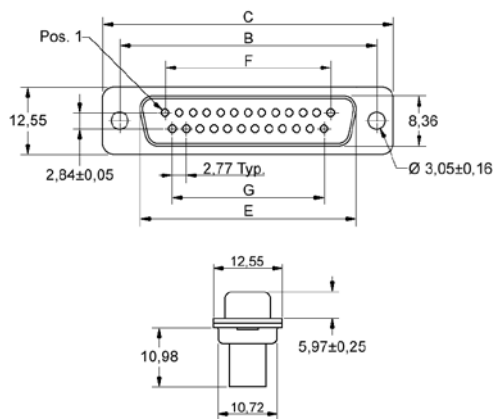
## DBC-Series – D-Crimp Connectors

### Material Specification:

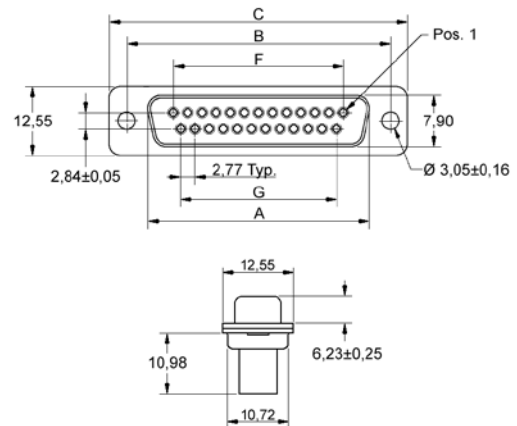
|                   |                                                         |
|-------------------|---------------------------------------------------------|
| Insulator:        | Glass filled Polyester, Black<br>UL94 V-0               |
| Shell:            | Stamped Steel, Tin Plated                               |
| Contacts:         | Copper Alloy, Stamped & Formed Pins<br>100 inserts min. |
| Contact Plating:  | Selective Gold over Nickel                              |
| Mounting Options: | See page 60                                             |



Plug connector



Socket connector



| Size | A                    | B     | C     | E     | F     | G     |
|------|----------------------|-------|-------|-------|-------|-------|
| 9    | 16,92                | 24,99 | 30,81 | 16,33 | 11,08 | 8,31  |
| 15   | 25,25                | 33,32 | 39,14 | 24,66 | 19,39 | 16,62 |
| 25   | 38,96                | 47,04 | 53,04 | 38,38 | 33,24 | 30,47 |
| 37   | 55,25                | 63,50 | 69,32 | 54,84 | 49,86 | 47,09 |
| 50*  | Available on request |       |       |       |       |       |

### Order Codes:

Plug Connector

|    |              |          |
|----|--------------|----------|
| 09 | 2101-0190-01 | DBC09-SP |
| 15 | 2101-0190-02 | DBC15-SP |
| 25 | 2101-0190-03 | DBC25-SP |
| 37 | 2101-0190-04 | DBC37-SP |
| 50 | On request   |          |

Socket Connector

|    |              |          |
|----|--------------|----------|
| 09 | 2101-0190-11 | DBC09-SS |
| 15 | 2101-0190-12 | DBC15-SS |
| 25 | 2101-0190-13 | DBC25-SS |
| 37 | 2101-0190-14 | DBC37-SS |
| 50 | On request   |          |

### Order Codes - CRIMP Contacts, AWG 24-28:

Crimp Contacts on REEL - 5000pcs

|                 |              |        |
|-----------------|--------------|--------|
| Male Contacts   | 2101-0199-01 | DBCTMR |
| Female Contacts | 2101-0199-11 | DBCTFR |

Other AWG available on request

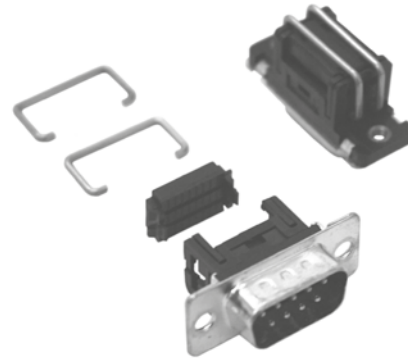


# SUB-D CONNECTORS

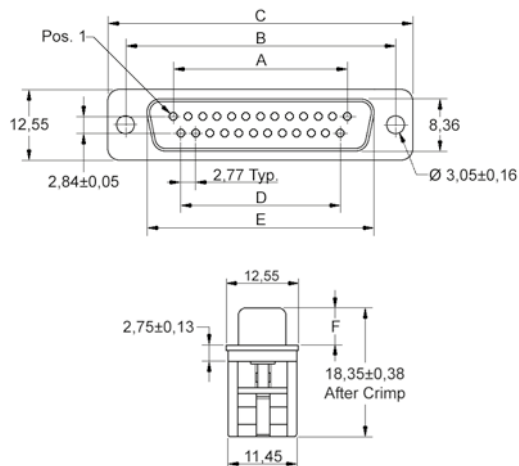
## DF2-Series – Economy IDC's

### Material Specification:

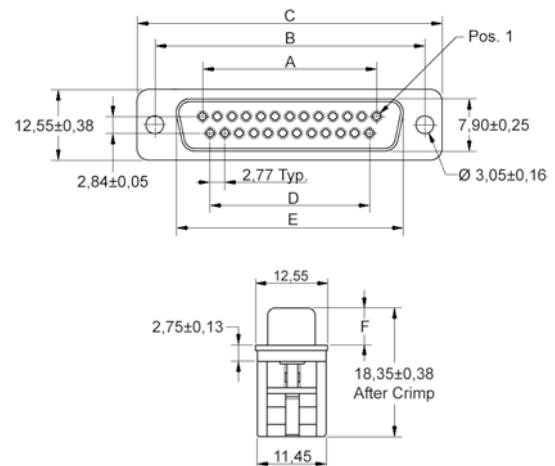
|                  |                                                               |
|------------------|---------------------------------------------------------------|
| Insulator:       | Glass filled Polyester, Black<br>UL94 V-0                     |
| Shell:           | Stamped Steel, Tin Plated                                     |
| Contacts:        | Phosphor Bronze,<br>Stamped & Formed Pins<br>100 inserts min. |
| Contact Plating: | Selective Gold over Nickel                                    |
| Wire Size:       | AWG 26 or 28<br>1,27 mm conductor Centre, Flat Cable          |



Plug connector



Socket connector



| Size | A     | B     | C     | D     | (E) Plug / Socket | (F) Plug /Socket |
|------|-------|-------|-------|-------|-------------------|------------------|
| 9    | 11,08 | 24,99 | 30,80 | 8,31  | 16,92 / 16,33     | 5,84 / 6,00      |
| 15   | 19,39 | 33,32 | 39,10 | 16,62 | 25,25 / 24,66     | 5,84 / 6,00      |
| 25   | 33,24 | 47,04 | 53,09 | 30,47 | 38,96 / 38,38     | 5,84 / 6,00      |
| 37   | 49,86 | 63,50 | 69,40 | 47,09 | 55,25 / 54,84     | 5,84 / 6,00      |

### Order Codes:

| Plug Connector  | 3.1 mm Thru-Holes |
|-----------------|-------------------|
| 09 2104-0201-31 | DF2-09-SP-SM      |
| 15 2104-0201-32 | DF2-15-SP-SM      |
| 25 2104-0201-33 | DF2-25-SP-SM      |
| 37 2104-0201-34 | DF2-37-SP-SM      |

| Plug Connector  | Clinch Nuts  |
|-----------------|--------------|
| 09 2104-0201-01 | DF2-09-SP-TM |
| 15 2104-0201-02 | DF2-15-SP-TM |
| 25 2104-0201-03 | DF2-25-SP-TM |
| 37 2104-0201-04 | DF2-37-SP-TM |

| Socket Connector | 3.1 mm Thru-Holes |
|------------------|-------------------|
| 09 2104-0201-41  | DF2-09-SS-SM      |
| 15 2104-0201-42  | DF2-15-SS-SM      |
| 25 2104-0201-43  | DF2-25-SS-SM      |
| 37 2104-0201-44  | DF2-37-SS-SM      |

| Socket Connector | Clinch Nuts  |
|------------------|--------------|
| 09 2104-0201-11  | DF2-09-SS-TM |
| 15 2104-0201-12  | DF2-15-SS-TM |
| 25 2104-0201-13  | DF2-25-SS-TM |
| 37 2104-0201-14  | DF2-37-SS-TM |

# SUB-D CONNECTORS

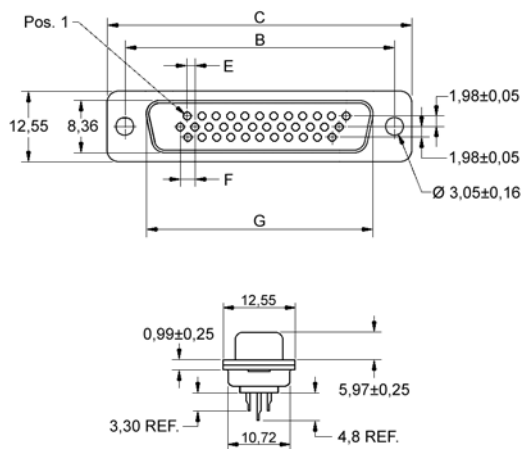
## HDS-Series – Solder Cup

### Material Specification:

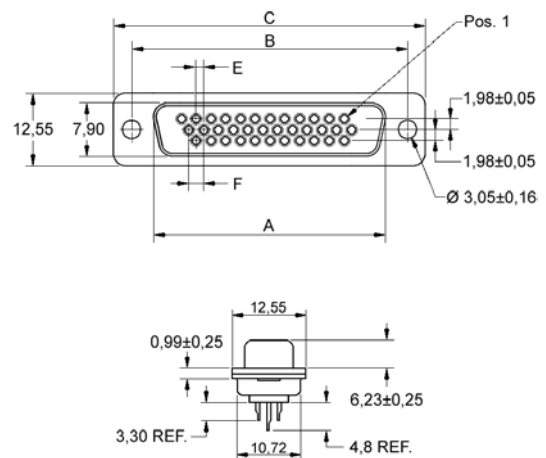
|                   |                                                                                                                              |
|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| Insulator:        | Glass filled Polyester, Black<br>UL94 V-0                                                                                    |
| Shell:            | Stamped Steel, Tin Plated                                                                                                    |
| Contacts:         | <b>Stamped &amp; Formed Pins:</b> Copper Alloy<br>100 inserts min.<br><b>Machined Pins:</b> Copper Alloy<br>500 inserts min. |
| Contact Plating:  | Selective Gold over Nickel                                                                                                   |
| Mounting Options: | See page 60                                                                                                                  |



Plug connector



Socket connector



| Size | A     | B     | C     | E     | F    | G     |
|------|-------|-------|-------|-------|------|-------|
| HD15 | 16,33 | 24,99 | 30,81 | 1,145 | 2,99 | 16,62 |
| HD26 | 24,66 | 33,32 | 39,14 | 1,145 | 2,99 | 25,25 |
| HD44 | 38,38 | 47,04 | 53,04 | 1,145 | 2,99 | 38,96 |
| HD62 | 54,84 | 63,50 | 69,32 | 1,205 | 2,41 | 55,25 |

### Order Codes:

| Plug Connector  | Stamped & Formed |
|-----------------|------------------|
| 15 2101-0300-01 | HDS-15-M-T-B-S   |
| 26 2101-0300-02 | HDS-26-M-T-B-S   |
| 44 2101-0300-03 | HDS-44-M-T-B-S   |
| 62 2101-0300-04 | HDS-62-M-T-B-S   |

| Plug Connector  | Machined Contacts |
|-----------------|-------------------|
| 15 2101-0400-01 | HDS-15-M-T-B-M    |
| 26 2101-0400-02 | HDS-26-M-T-B-M    |
| 44 2101-0400-03 | HDS-44-M-T-B-M    |
| 62 2101-0400-04 | HDS-62-M-T-B-M    |

| Socket Connector | Stamped & Formed |
|------------------|------------------|
| 15 2101-0300-11  | HDS-15-F-T-B-S   |
| 26 2101-0300-12  | HDS-26-F-T-B-S   |
| 44 2101-0300-13  | HDS-44-F-T-B-S   |
| 62 2101-0300-14  | HDS-62-F-T-B-S   |

| Socket Connector | Machined Contacts |
|------------------|-------------------|
| 15 2101-0400-11  | HDS-15-F-T-B-M    |
| 26 2101-0400-12  | HDS-26-F-T-B-M    |
| 44 2101-0400-13  | HDS-44-F-T-B-M    |
| 62 2101-0400-14  | HDS-62-F-T-B-M    |

# SUB-D CONNECTORS

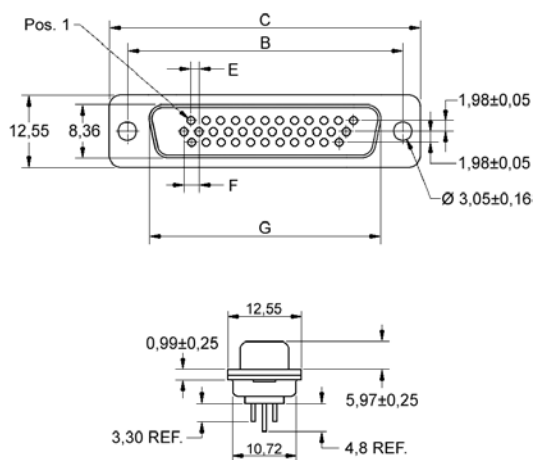
## HDD-Series – DIP Solder (PCB-Type)

### Material Specification:

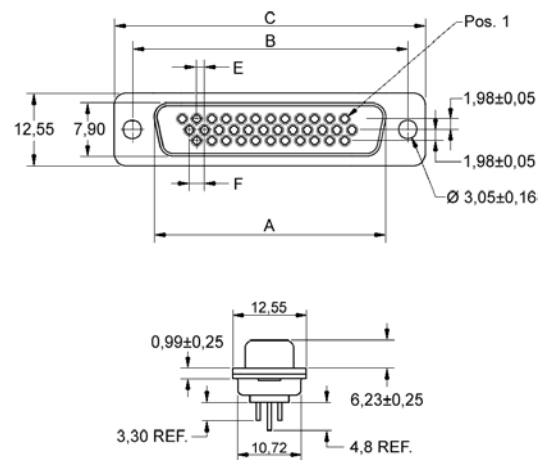
|                   |                                                                                                                              |
|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| Insulator:        | Glass filled Polyester, Black<br>UL94 V-0                                                                                    |
| Shell:            | Stamped Steel, Tin Plated                                                                                                    |
| Contacts:         | <b>Stamped &amp; Formed Pins:</b> Copper Alloy<br>100 inserts min.<br><b>Machined Pins:</b> Copper Alloy<br>500 inserts min. |
| Contact Plating:  | Selective Gold over Nickel                                                                                                   |
| Mounting Options: | See page 60                                                                                                                  |



Plug connector



Socket connector



| Size | A     | B     | C     | E     | F    | G     |
|------|-------|-------|-------|-------|------|-------|
| HD15 | 16,33 | 24,99 | 30,81 | 1,145 | 2,99 | 16,62 |
| HD26 | 24,66 | 33,32 | 39,14 | 1,145 | 2,99 | 25,25 |
| HD44 | 38,38 | 47,04 | 53,04 | 1,145 | 2,99 | 38,96 |
| HD62 | 54,84 | 63,50 | 69,32 | 1,205 | 2,41 | 55,25 |

### Order Codes:

| Plug Connector  | Stamped & Formed |
|-----------------|------------------|
| 15 2103-0300-01 | HDD-15-M-T-B-S   |
| 26 2103-0300-02 | HDD-26-M-T-B-S   |
| 44 2103-0300-03 | HDD-44-M-T-B-S   |
| 62 2103-0300-04 | HDD-62-M-T-B-S   |

| Plug Connector  | Machined Contacts |
|-----------------|-------------------|
| 15 2103-0400-01 | HDD-15-M-T-B-M    |
| 26 2103-0400-02 | HDD-26-M-T-B-M    |
| 44 2103-0400-03 | HDD-44-M-T-B-M    |
| 62 2103-0400-04 | HDD-62-M-T-B-M    |

| Socket Connector | Stamped & Formed |
|------------------|------------------|
| 15 2103-0300-11  | HDD-15-F-T-B-S   |
| 26 2103-0300-12  | HDD-26-F-T-B-S   |
| 44 2103-0300-13  | HDD-44-F-T-B-S   |
| 62 2103-0300-14  | HDD-62-F-T-B-S   |

| Socket Connector | Machined Contacts |
|------------------|-------------------|
| 15 2103-0400-11  | HDD-15-F-T-B-M    |
| 26 2103-0400-12  | HDD-26-F-T-B-M    |
| 44 2103-0400-13  | HDD-44-F-T-B-M    |
| 62 2103-0400-14  | HDD-62-F-T-B-M    |

# SUB-D CONNECTORS

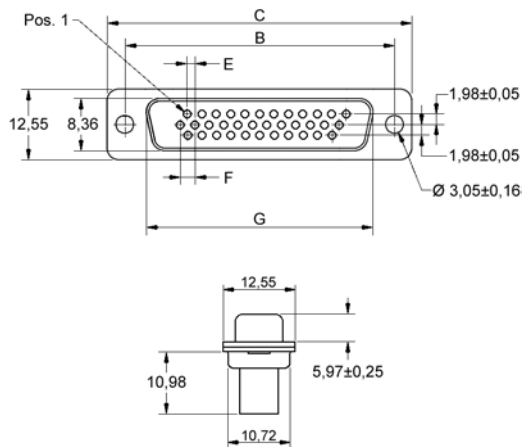
## HDBC-Series – D-Crimp Connectors

### Material Specification:

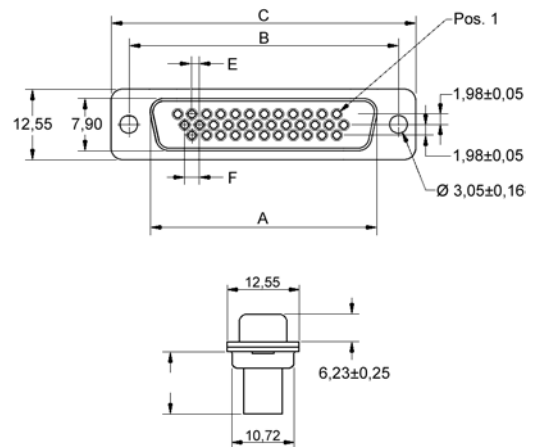
|                   |                                                         |
|-------------------|---------------------------------------------------------|
| Insulator:        | Glass filled Polyester, Black<br>UL94 V-0               |
| Shell:            | Stamped Steel, Tin Plated                               |
| Contacts:         | Copper Alloy, Stamped & Formed Pins<br>100 inserts min. |
| Contact Plating:  | Selective Gold over Nickel                              |
| Mounting Options: | See page 60                                             |



Plug connector



Socket connector



| Size | A     | B     | C     | E     | F    | G     |
|------|-------|-------|-------|-------|------|-------|
| HD15 | 16,33 | 24,99 | 30,81 | 1,145 | 2,99 | 16,62 |
| HD26 | 24,66 | 33,32 | 39,14 | 1,145 | 2,99 | 25,25 |
| HD44 | 38,38 | 47,04 | 53,04 | 1,145 | 2,99 | 38,96 |
| HD62 | 54,84 | 63,50 | 69,32 | 1,205 | 2,41 | 55,25 |

Size 78 available on request.

### Order Codes:

Plug Connector

|    |              |           |
|----|--------------|-----------|
| 15 | 2101-0390-01 | HDBC15-SP |
| 26 | 2101-0390-02 | HDBC26-SP |
| 44 | 2101-0390-03 | HDBC44-SP |
| 62 | 2101-0390-04 | HDBC62-SP |

Socket Connector

|    |              |           |
|----|--------------|-----------|
| 15 | 2101-0390-11 | HDBC15-SS |
| 26 | 2101-0390-12 | HDBC26-SS |
| 44 | 2101-0390-13 | HDBC44-SS |
| 62 | 2101-0390-14 | HDBC62-SS |

### Order Codes: CRIMP Contacts, AWG 24-28

Crimp Contacts on REEL - 5000pcs

|                 |              |         |
|-----------------|--------------|---------|
| Male Contacts   | 2101-0199-21 | HDBCTMR |
| Female Contacts | 2101-0199-31 | HDBCTFR |

Other AWG available on request



## 105-Series – IDC-Sub Connectors

### Material Specification:

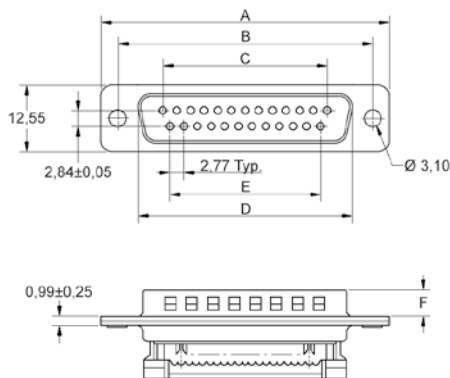
|                  |                                           |
|------------------|-------------------------------------------|
| Insulator:       | Glass filled Polyester, Black<br>UL94 V-0 |
| Shell:           | Stamped Steel Tin Plated                  |
| Contacts:        | Copper Alloy                              |
| Contact Plating: | 1,5 micron Tin and<br>0,2 micron Gold     |

### Electrical Specification:

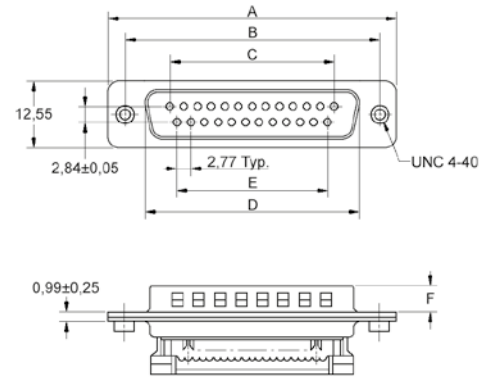
|                        |                 |
|------------------------|-----------------|
| Working current:       | 1,5 A           |
| Test Voltage:          | 1000 V          |
| Insulation Resistance: | 500 MΩ          |
| Contact Resistance:    | less than 10 mΩ |
| Temperature Range:     | -55 to +125 °C  |



With 3.1 mm Thru-Holes



With Clinch Nuts



| Size: | A     | B     | C     | D (Plug/Socket) | E     | F (Plug/Socket) |
|-------|-------|-------|-------|-----------------|-------|-----------------|
| 9     | 30,81 | 24,99 | 11,08 | 16,92 / 16,33   | 8,31  | 5,90 / 6,23     |
| 15    | 39,14 | 33,32 | 19,39 | 25,25 / 24,66   | 16,62 | 5,90 / 6,23     |
| 25    | 53,04 | 47,04 | 33,24 | 38,96 / 38,38   | 30,47 | 5,90 / 6,23     |
| 37    | 69,36 | 63,50 | 49,86 | 55,25 / 54,84   | 47,09 | 5,90 / 6,23     |

### Order Codes:

| Plug Connector  | 3.1 mm Thru-Holes |
|-----------------|-------------------|
| 09 1701-0300-01 | 10551             |
| 15 1701-0300-02 | 10552             |
| 25 1701-0300-03 | 10553             |
| 37 1701-0300-04 | 10554             |

| Plug Connector  | Clinch Nuts |
|-----------------|-------------|
| 09 1701-0300-21 | 10567       |
| 15 1701-0300-22 | 10568       |
| 25 1701-0300-23 | 10569       |
| 37 1701-0300-24 | 10570       |

| Socket Connector | 3.1 mm Thru-Holes |
|------------------|-------------------|
| 09 1701-0300-11  | 10575             |
| 15 1701-0300-12  | 10576             |
| 25 1701-0300-13  | 10577             |
| 37 1701-0300-14  | 10578             |

| Socket Connector | Clinch Nuts |
|------------------|-------------|
| 09 1701-0300-31  | 10591       |
| 15 1701-0300-32  | 10592       |
| 25 1701-0300-33  | 10593       |
| 37 1701-0300-34  | 10594       |

### Order Code - Strain Relief Bars

|                 |       |
|-----------------|-------|
| 09 1711-0100-01 | 10175 |
| 15 1711-0100-02 | 10176 |
| 25 1711-0100-03 | 10177 |
| 37 1711-0100-04 | 10178 |



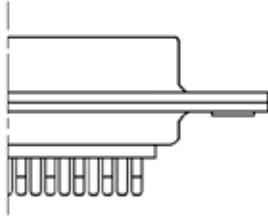
Strain Relief Bar



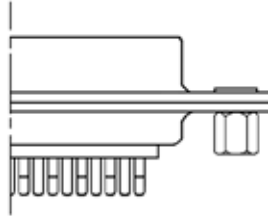
Standard IDC



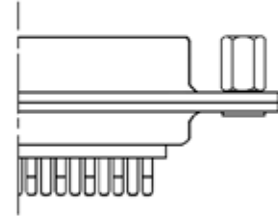
With Strain Relief Bar



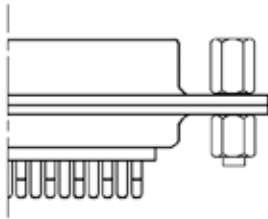
Option X (Standard)  
Ø 3.05mm Holes



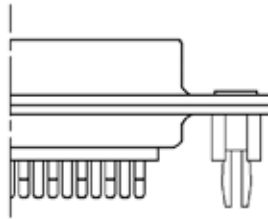
Option K  
Fixed Clinch Nuts  
UNC 4-40 Thread



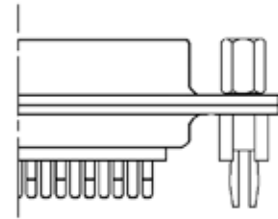
Option J  
Fixed Jackscrews  
UNC 4-40 Thread



Option KJ  
Jackscrews and Clinch Nuts  
UNC 4-40 Thread



Option BR  
Riveted Brackets  
UNC 4-40 Thread



Option BRJ  
Riveted Brackets & Jackscrews  
UNC 4-40 Thread

| Series:                       | Mounting Options Available:     |
|-------------------------------|---------------------------------|
| DB                            | X (Standard), K, J, KJ          |
| DM                            | X (Standard), K, J, KJ          |
| DBC                           | X (Standard), K, J, KJ          |
| DD Stamped & Formed, Straight | X (Standard), K, J, KJ, BR, BRJ |
| DD Machined Pins, Straight    | X (Standard), K, J, KJ          |
| DD Machined Pins, Angled      | X (Standard), K, J, KJ          |
| HDD Stamped & Formed          | X (Standard), K, J, KJ, BR, BRJ |
| HDD Machined Pins             | X (Standard), K, J, KJ, BR, BRJ |
| HDS Stamped & Formed          | X (Standard), K, J, KJ          |
| HDS Machined Pins             | X (Standard), K, J, KJ          |
| HDBC                          | X (Standard), K, J              |



**Technical Data****Material Specifications:**

|                  |                                      |
|------------------|--------------------------------------|
| Insulator:       | Self extinguishing TP, UL94 V-0      |
| Shell:           | Steel, Tin Plated, Plug with dimples |
| Contacts:        | Copper Alloy                         |
| Contact Plating: | Hard Gold plated over Nickel         |
| Quality Class:   | Class 2 (standard) Other on request  |

**Electrical Specifications:**

|                                |                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------|
| Test Voltage:                  | 1000 V                                                                                                     |
| Working Voltage:               |                                                                                                            |
| Standard Sub-D & IDC:          | 125 V                                                                                                      |
| High Density Sub-D:            | 60 V                                                                                                       |
| Current Rating:                |                                                                                                            |
| Standard Sub-D:                | 5 Amp                                                                                                      |
| IDC Connector:                 | 1 Amp                                                                                                      |
| High Density Sub-D:            | 3 Amp                                                                                                      |
| Contact Resistance:            | Max. 10mΩ before strain<br>ΔR max. 10mΩ after strain<br>DIN 41652, part 2 (MIL-C-24308)                    |
| Insulation Resistance:         | ≤ 5GΩ                                                                                                      |
| Clearance & Creepage distance: |                                                                                                            |
| Standard Sub-D:                | Contact – contact > 1.0 mm<br>Contact – ground > 1.0 mm                                                    |
| High Density Sub-D:            | Contact – contact > 0.6 mm<br>Contact – ground > 0.6 mm                                                    |
| Operating Temperature:         | – 55 to +125°C                                                                                             |
| Quality Classes:               | 1 – 500 mating cycles (0,8μ Au)<br>2 – 200 mating cycles (0,2μ Au)<br>S – 200 mating cycles (selective Au) |

**High Quality Sub-D Contents:**

|                                            |    |
|--------------------------------------------|----|
| Solder Cup                                 | 63 |
| Solder Pin Straight (PCB)                  | 64 |
| Solder Pin Crooked for PCB 1.6 mm          | 65 |
| Wire Wrap                                  | 66 |
| 90° Angled Solder Pin, 9.4 mm              | 67 |
| 90° Angled Solder Pin, 7.18 mm             | 68 |
| 90° Angled Solder Pin, Eurostyle, 8.4 mm   | 69 |
| Crimp Connector Housings                   | 70 |
| Crimp Contacts                             | 71 |
| IDC Connectors                             | 72 |
| SMD Connectors, 90° Angled                 | 73 |
| High Density Solder Cup                    | 76 |
| High Density Solder Pin Straight (PCB)     | 77 |
| 90° Angled High Density Solder Pin, 7.9 mm | 78 |

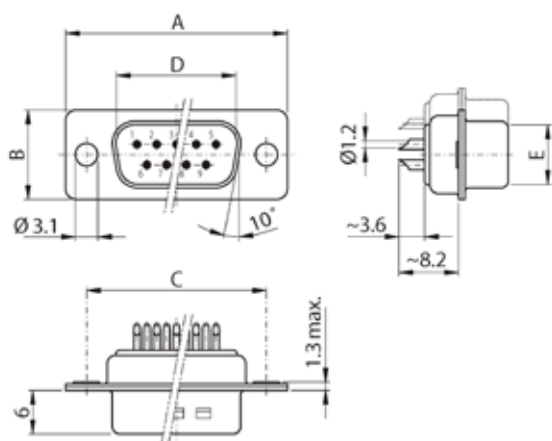
## Solder cup

Machined contacts / Suitable for cable AWG 18  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

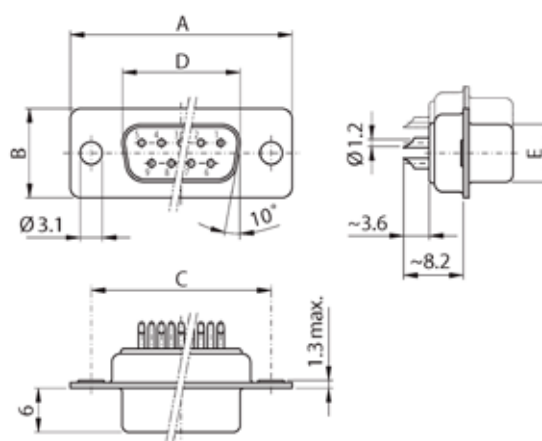


### Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 15   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 25   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 37   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| 50   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

### Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 15   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 25   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 37   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| 50   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

07

## Order Codes:

### Plug Connector

|    |              |
|----|--------------|
| 09 | 3301-0100-01 |
| 15 | 3301-0100-02 |
| 25 | 3301-0100-03 |
| 37 | 3301-0100-04 |
| 50 | 3301-0100-05 |

### Socket Connector

|    |              |
|----|--------------|
| 09 | 3301-0100-11 |
| 15 | 3301-0100-12 |
| 25 | 3301-0100-13 |
| 37 | 3301-0100-14 |
| 50 | 3301-0100-15 |

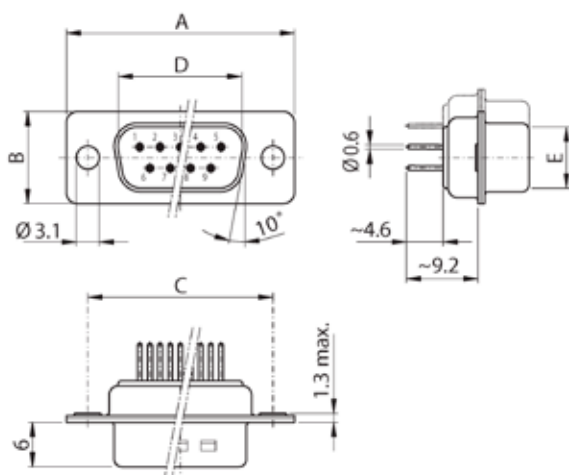
## Solder pin Straight

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

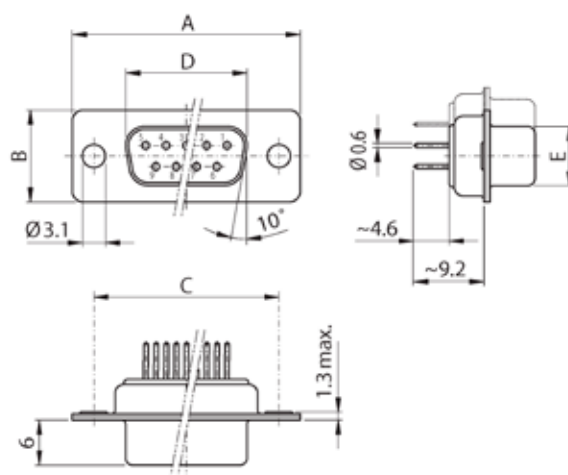


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 15   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 25   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 37   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| 50   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 15   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 25   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 37   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| 50   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 09 | 3301-0200-01 |
| 15 | 3301-0200-02 |
| 25 | 3301-0200-03 |
| 37 | 3301-0200-04 |
| 50 | 3301-0200-05 |

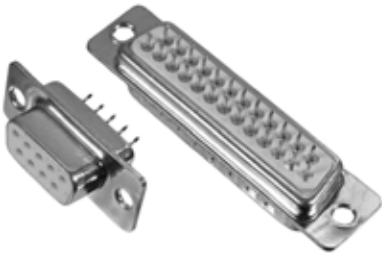
Socket Connector

|    |              |
|----|--------------|
| 09 | 3301-0200-11 |
| 15 | 3301-0200-12 |
| 25 | 3301-0200-13 |
| 37 | 3301-0200-14 |
| 50 | 3301-0200-15 |

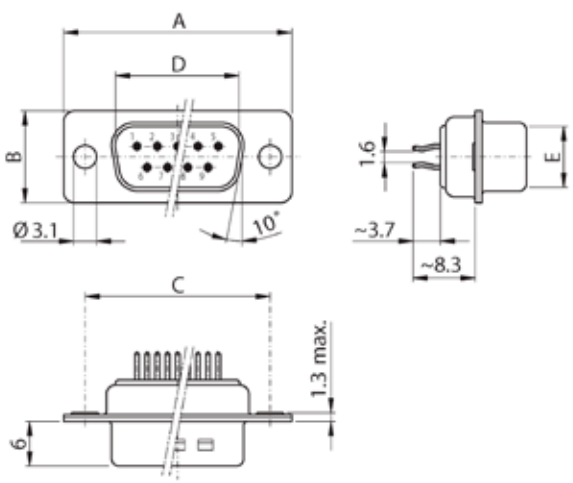
Solder pin Crooked

Machined contacts / For PCB 1.6 mm  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

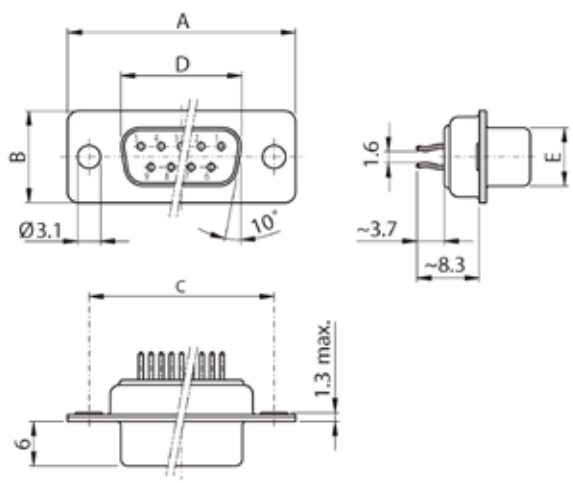


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 15   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 25   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 37   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 15   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 25   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 37   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |

07

Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 09 | 3301-0300-01 |
| 15 | 3301-0300-02 |
| 25 | 3301-0300-03 |
| 37 | 3301-0300-04 |

Socket Connector

|    |              |
|----|--------------|
| 09 | 3301-0300-11 |
| 15 | 3301-0300-12 |
| 25 | 3301-0300-13 |
| 37 | 3301-0300-14 |

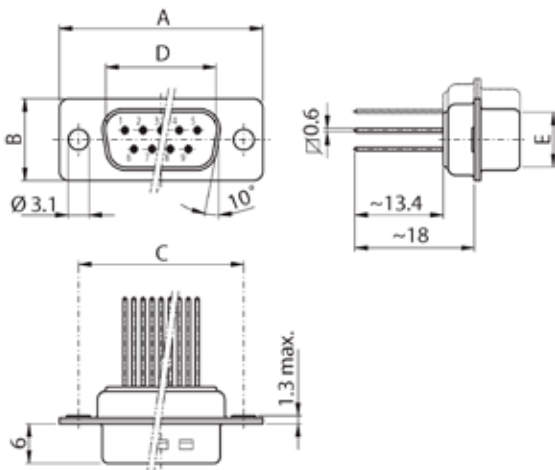
## Wire Wrap

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

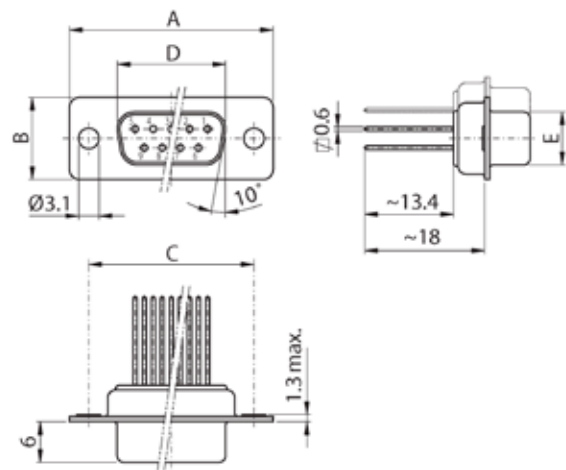


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 15   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 25   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 37   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| 50   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 15   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 25   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 37   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| 50   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 09 | 3302-0100-01 |
| 15 | 3302-0100-02 |
| 25 | 3302-0100-03 |
| 37 | 3302-0100-04 |
| 50 | 3302-0100-05 |

Socket Connector

|    |              |
|----|--------------|
| 09 | 3302-0100-11 |
| 15 | 3302-0100-12 |
| 25 | 3302-0100-13 |
| 37 | 3302-0100-14 |
| 50 | 3302-0100-15 |

## SUB-D CONNECTORS

## High Quality Machined Pins

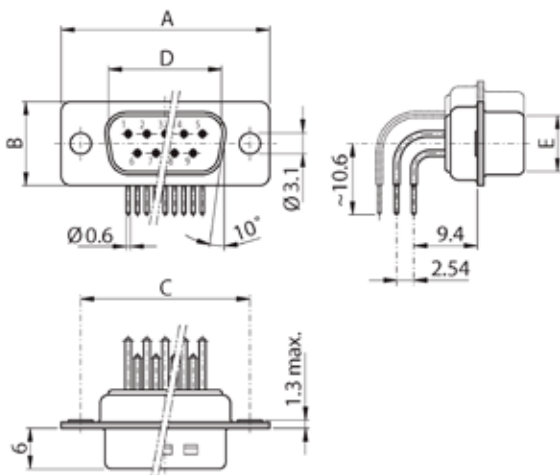
## 90° Angled Solder Pin, 9.4 mm

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

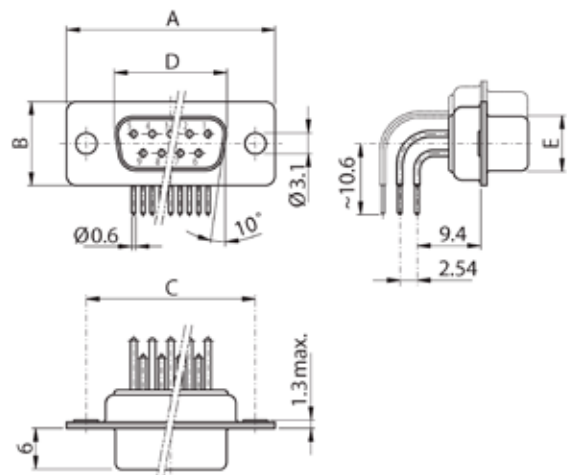


## Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 15   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 25   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 37   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| 50   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

## Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 15   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 25   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 37   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| 50   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

### Order Codes:

## Plug Connector

|    |              |
|----|--------------|
| 09 | 3301-0400-01 |
| 15 | 3301-0400-02 |
| 25 | 3301-0400-03 |
| 37 | 3301-0400-04 |
| 50 | 3301-0400-05 |

## Socket Connector

|    |              |
|----|--------------|
| 09 | 3301-0400-11 |
| 15 | 3301-0400-12 |
| 25 | 3301-0400-13 |
| 37 | 3301-0400-14 |
| 50 | 3301-0400-15 |

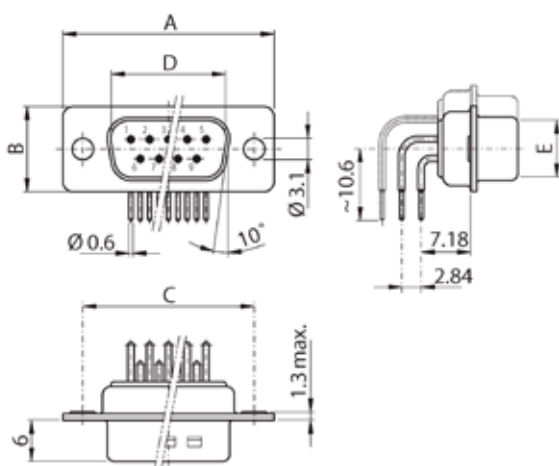
## 90° Angled Solder Pin, 7.18 mm

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

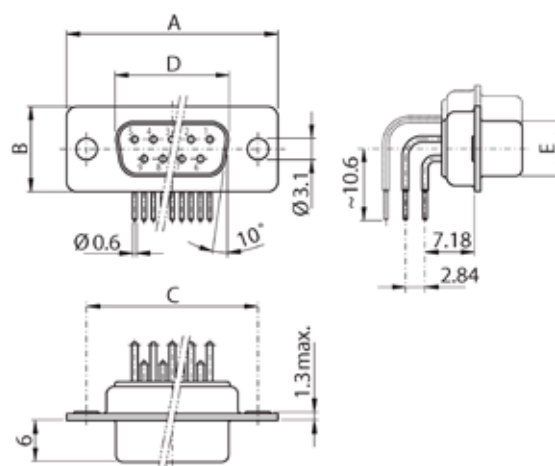


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 15   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 25   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 37   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| 50   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 15   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 25   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 37   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| 50   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 09 | 3301-0500-01 |
| 15 | 3301-0500-02 |
| 25 | 3301-0500-03 |
| 37 | 3301-0500-04 |
| 50 | 3301-0500-05 |

Socket Connector

|    |              |
|----|--------------|
| 09 | 3301-0500-11 |
| 15 | 3301-0500-12 |
| 25 | 3301-0500-13 |
| 37 | 3301-0500-14 |
| 50 | 3301-0500-15 |

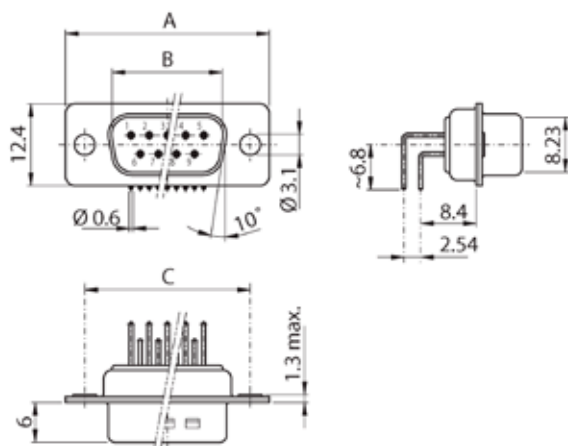
## 90° Angled Solder Pin, 8.4 mm

Machined contacts / Eurostyle  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

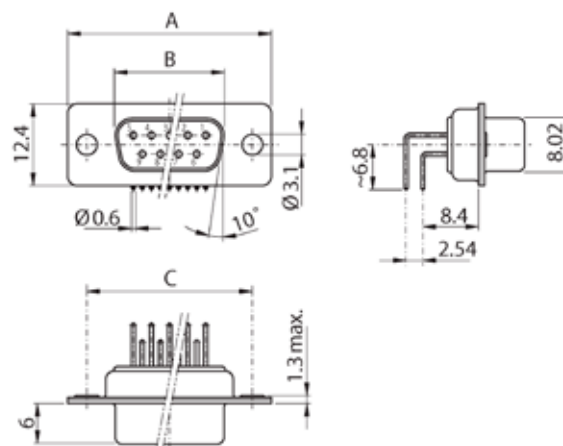


Plug connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 |
| 15   | 39.20 | 12.40 | 33.30 |
| 25   | 53.10 | 12.40 | 47.00 |
| 37   | 69.50 | 12.40 | 63.50 |
| 50   | 67.00 | 15.40 | 61.10 |

Socket connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 |
| 15   | 39.20 | 12.40 | 33.30 |
| 25   | 53.10 | 12.40 | 47.00 |
| 37   | 69.50 | 12.40 | 63.50 |
| 50   | 67.00 | 15.40 | 61.10 |

07

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 09 | 3301-0600-01 |
| 15 | 3301-0600-02 |
| 25 | 3301-0600-03 |
| 37 | 3301-0600-04 |
| 50 | 3301-0600-05 |

Socket Connector

|    |              |
|----|--------------|
| 09 | 3301-0600-11 |
| 15 | 3301-0600-12 |
| 25 | 3301-0600-13 |
| 37 | 3301-0600-14 |
| 50 | 3301-0600-15 |

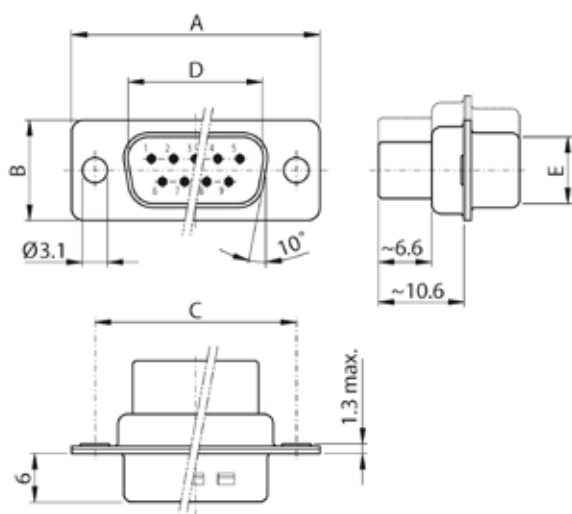
## Housing for Crimp contacts

Tinned Shell as Standard  
Other Plating on request.  
Crimp contacts listed on following page.

Technical Information on page 62  
Mounting options on page 98-106

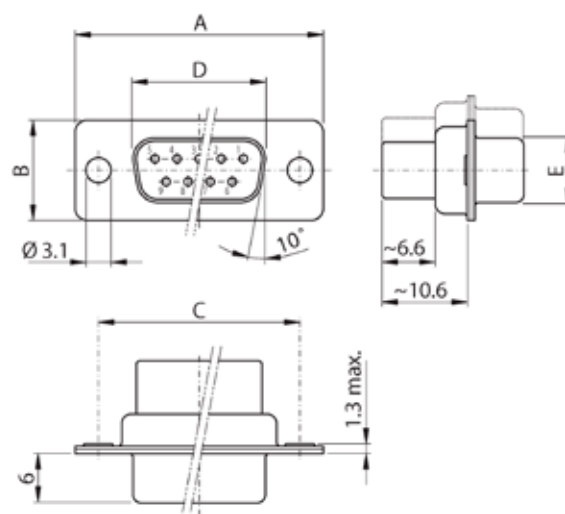


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 15   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 25   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 37   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| 50   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 15   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 25   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 37   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| 50   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 09 | 3303-0100-01 |
| 15 | 3303-0100-02 |
| 25 | 3303-0100-03 |
| 37 | 3303-0100-04 |
| 50 | 3303-0100-05 |

Socket Connector

|    |              |
|----|--------------|
| 09 | 3303-0100-11 |
| 15 | 3303-0100-12 |
| 25 | 3303-0100-13 |
| 37 | 3303-0100-14 |
| 50 | 3303-0100-15 |

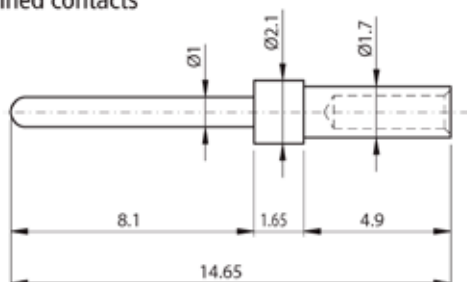
## Crimp contacts

Suitable for AWG 24-20 and AWG 28-24  
Class 3 as standard. Other classes on request.

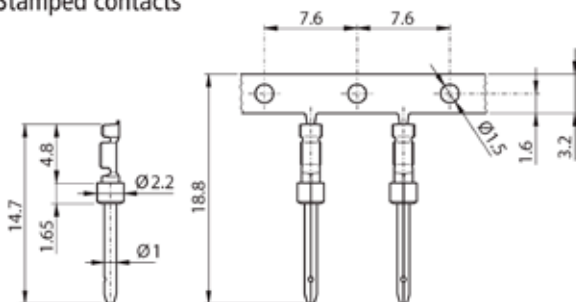


### Plug connector

#### PX Machined contacts

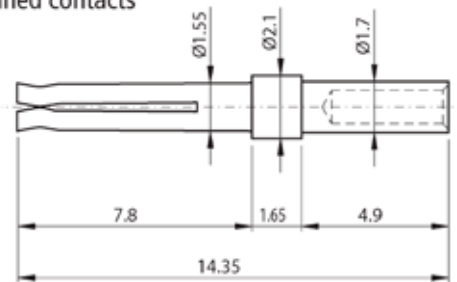


#### P-XA Stamped contacts

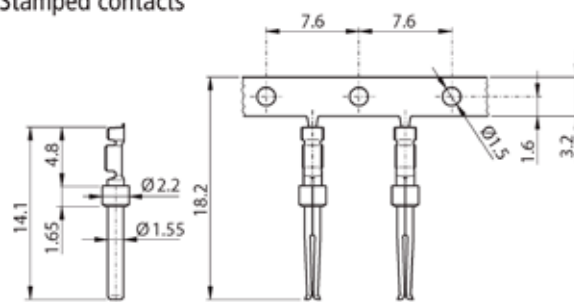


### Socket connector

#### SX Machined contacts



#### S-XA Stamped contacts



07

## Order Codes:

### Plug Contacts, Machined

|           |                           |              |
|-----------|---------------------------|--------------|
| AWG 20-24 | 0.20–0.60 mm <sup>2</sup> | 3303-0199-21 |
| AWG 24-28 | 0.08–0.20 mm <sup>2</sup> | 3303-0199-22 |

### Socket Contacts, Machined

|           |                           |              |
|-----------|---------------------------|--------------|
| AWG 20-24 | 0.20–0.60 mm <sup>2</sup> | 3303-0199-31 |
| AWG 24-28 | 0.08–0.20 mm <sup>2</sup> | 3303-0199-32 |

### Plug Contacts, Stamped & Formed (REEL)

| Size:     | Direction: | Part No:     |
|-----------|------------|--------------|
| AWG 20-24 | Left       | 3303-0199-01 |
| AWG 20-24 | Right      | 3303-0199-41 |
| AWG 24-28 | Left       | 3303-0199-02 |
| AWG 24-28 | Right      | 3303-0199-42 |

### Socket Contacts, Stamped & Formed (REEL)

| Size:     | Direction: | Part No:     |
|-----------|------------|--------------|
| AWG 20-24 | Left       | 3303-0199-11 |
| AWG 20-24 | Right      | 3303-0199-51 |
| AWG 24-28 | Left       | 3303-0199-12 |
| AWG 24-28 | Right      | 3303-0199-52 |

REEL: Standard 10.000 contacts, class 3

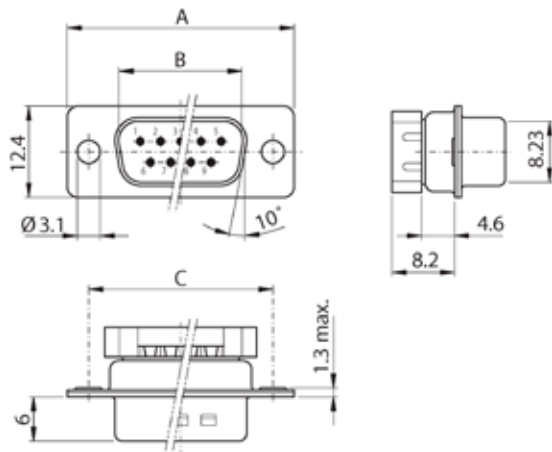
## IDC Connectors (Flat Cable)

Stamped & Formed contacts, suitable for AWG 28-26  
Tinned Shell as Standard  
Class 3 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

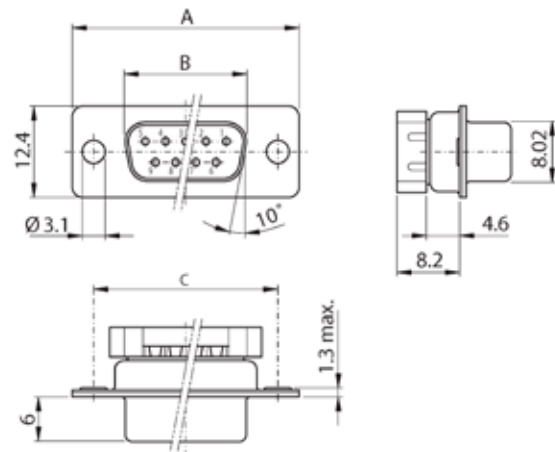


Plug connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.79 | 25.00 |
| 15   | 39.20 | 25.12 | 33.30 |
| 25   | 53.10 | 38.84 | 47.00 |
| 37   | 69.50 | 55.30 | 63.50 |

Socket connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.46 | 25.00 |
| 15   | 39.20 | 24.79 | 33.30 |
| 25   | 53.10 | 38.50 | 47.00 |
| 37   | 69.50 | 54.96 | 63.50 |

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 09 | 3304-0100-01 |
| 15 | 3304-0100-02 |
| 25 | 3304-0100-03 |
| 37 | 3304-0100-04 |

Socket Connector

|    |              |
|----|--------------|
| 09 | 3304-0100-11 |
| 15 | 3304-0100-12 |
| 25 | 3304-0100-13 |
| 37 | 3304-0100-14 |

## Strain Relief:

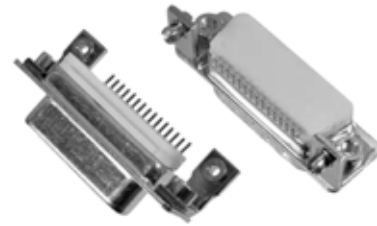
|    |              |
|----|--------------|
| 09 | 3304-1000-01 |
| 15 | 3304-1000-02 |
| 25 | 3304-1000-03 |
| 37 | 3304-1000-04 |



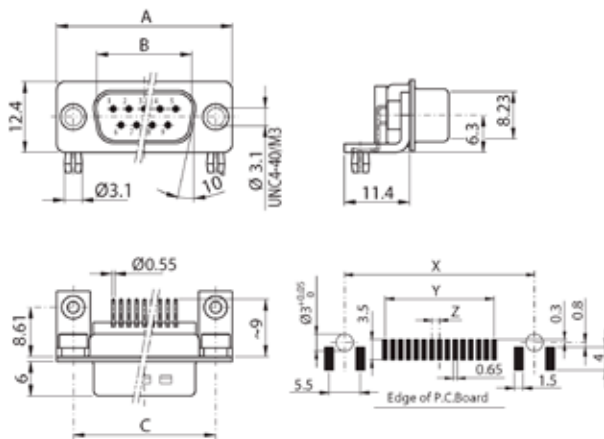
## 90° SMD Connectors

Machined contacts, Mounting height 6.3 mm  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62

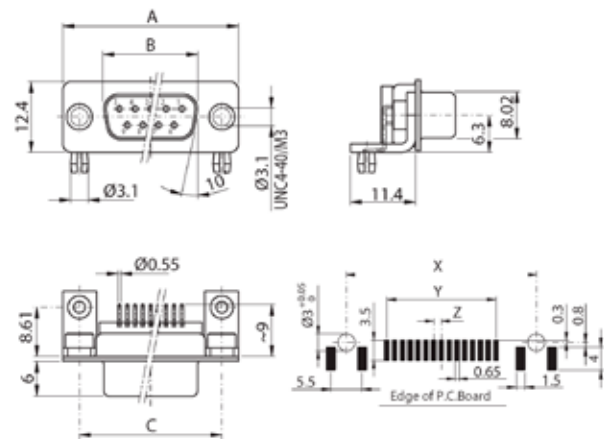


Plug connector



| Size | A     | B     | C/X   | Y     | Z    |
|------|-------|-------|-------|-------|------|
| 09   | 30.80 | 16.79 | 25.00 | 10.98 | 1.37 |
| 15   | 39.20 | 25.12 | 33.30 | 19.20 | 1.37 |
| 25   | 53.10 | 38.84 | 47.00 | 33.12 | 1.38 |
| 37   | 69.50 | 55.30 | 63.50 | 49.68 | 1.38 |

Socket connector



| Size | A     | B     | C/X   | Y     | Z    |
|------|-------|-------|-------|-------|------|
| 09   | 30.80 | 16.46 | 25.00 | 10.98 | 1.37 |
| 15   | 39.20 | 24.79 | 33.30 | 19.20 | 1.37 |
| 25   | 53.10 | 38.50 | 47.00 | 33.12 | 1.38 |
| 37   | 69.50 | 54.96 | 63.50 | 49.68 | 1.38 |

07

## Order Codes:

### Plug Connector

|    |              |
|----|--------------|
| 09 | 3320-0100-01 |
| 15 | 3320-0100-02 |
| 25 | 3320-0100-03 |
| 37 | 3320-0100-04 |

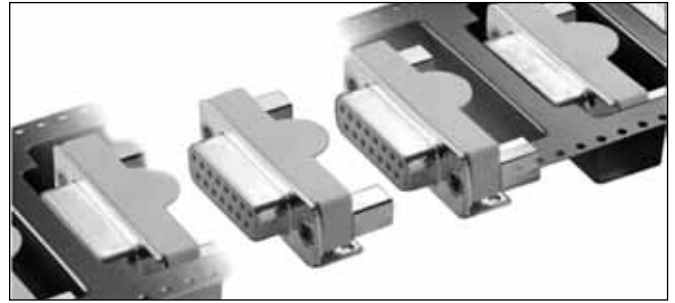
### Socket Connector

|    |              |
|----|--------------|
| 09 | 3320-0100-11 |
| 15 | 3320-0100-12 |
| 25 | 3320-0100-13 |
| 37 | 3320-0100-14 |

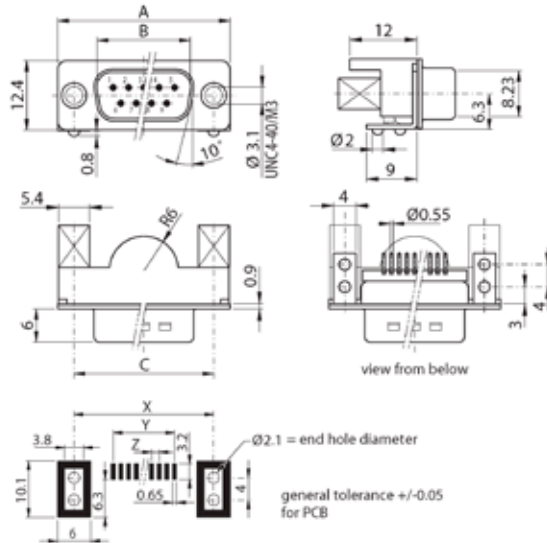
## 90° SMD Connectors - Tape & Reel

Machined contacts, Mounting height 6.3 mm  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
UNC 4-40 Thread type, M3 available on request.  
Other Plating and/or class on request.

Technical Information on page 62

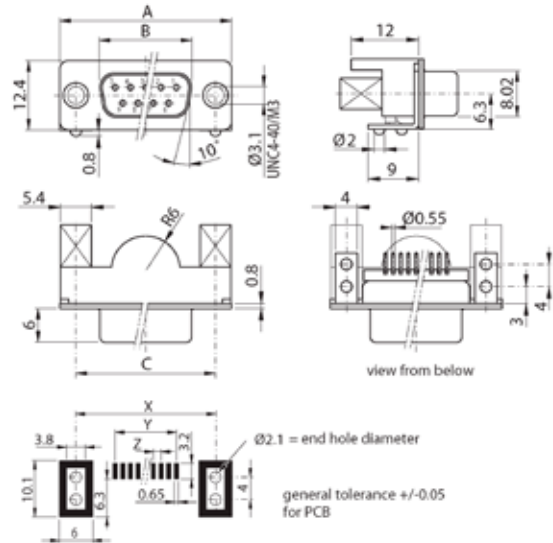


### Plug connector



| Size | A     | B     | C/X   | Y     | Z    |
|------|-------|-------|-------|-------|------|
| 09   | 30.80 | 16.79 | 25.00 | 10.98 | 1.37 |
| 15   | 39.20 | 25.12 | 33.30 | 19.20 | 1.37 |
| 25   | 53.10 | 38.84 | 47.00 | 33.12 | 1.38 |
| 37   | 69.50 | 55.30 | 63.50 | 49.68 | 1.38 |

### Socket connector



| Size | A     | B     | C/X   | Y     | Z    |
|------|-------|-------|-------|-------|------|
| 09   | 30.80 | 16.46 | 25.00 | 10.98 | 1.37 |
| 15   | 39.20 | 24.79 | 33.30 | 19.20 | 1.37 |
| 25   | 53.10 | 38.50 | 47.00 | 33.12 | 1.38 |
| 37   | 69.50 | 54.96 | 63.50 | 49.68 | 1.38 |

## Order Codes:

### Plug Connector

|    |              |
|----|--------------|
| 09 | 3320-0102-01 |
| 15 | 3320-0102-02 |
| 25 | 3320-0102-03 |
| 37 | 3320-0102-04 |

### Socket Connector

|    |              |
|----|--------------|
| 09 | 3320-0102-11 |
| 15 | 3320-0102-12 |
| 25 | 3320-0102-13 |
| 37 | 3320-0102-14 |

Reel Outer Diameter: 330 mm  
Amount of Connectors: 150 pcs / reel



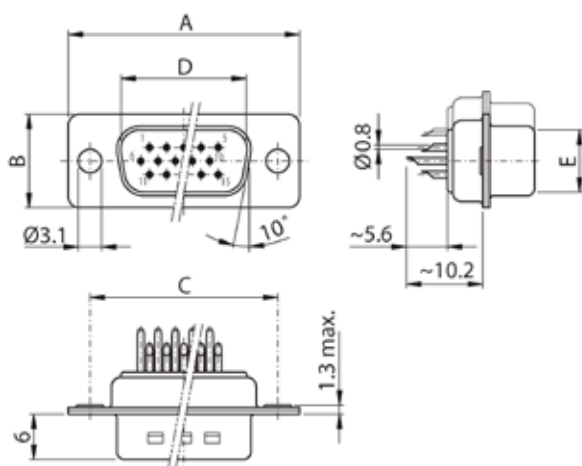
## High-Density Solder Cup

Machined contacts / Suitable cable AWG 20  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

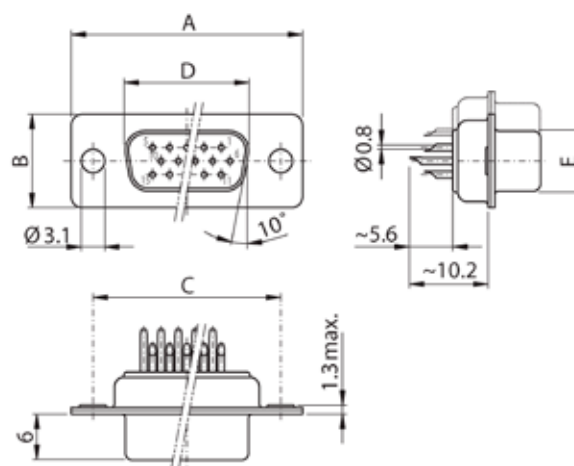


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 15   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 26   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 44   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 62   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 15   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 26   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 44   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 62   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 15 | 3301-0110-01 |
| 26 | 3301-0110-02 |
| 44 | 3301-0110-03 |
| 62 | 3301-0110-04 |

Socket Connector

|    |              |
|----|--------------|
| 15 | 3301-0110-11 |
| 26 | 3301-0110-12 |
| 44 | 3301-0110-13 |
| 62 | 3301-0110-14 |

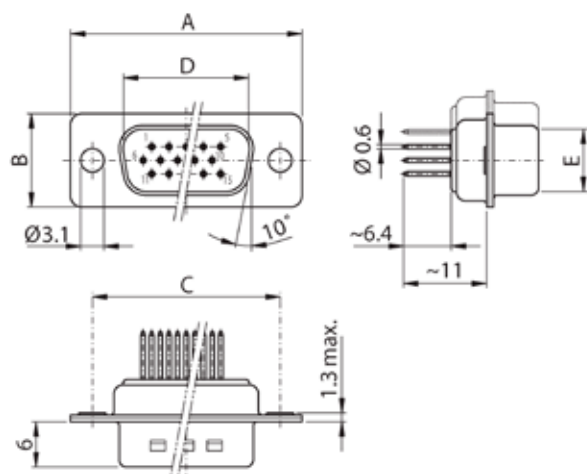
## High-Density Solder Pin Straight

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

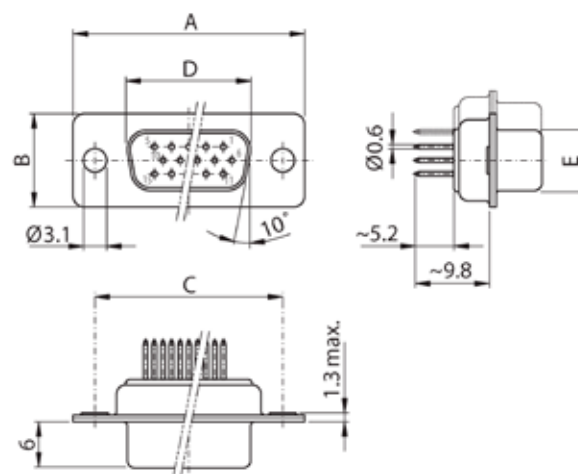


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 15   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 26   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 44   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 62   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 15   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 26   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 44   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 62   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |

07

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 15 | 3301-0210-01 |
| 26 | 3301-0210-02 |
| 44 | 3301-0210-03 |
| 62 | 3301-0210-04 |

Socket Connector

|    |              |
|----|--------------|
| 15 | 3301-0210-11 |
| 26 | 3301-0210-12 |
| 44 | 3301-0210-13 |
| 62 | 3301-0210-14 |

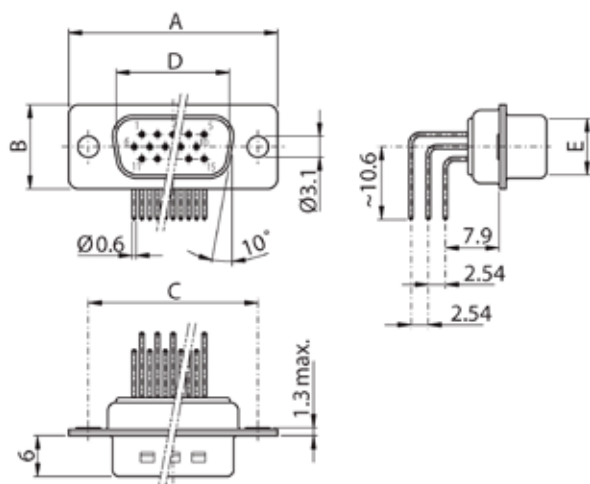
## 90° High-Density Solder Pin, 7.9 mm

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 62  
Mounting options on page 98-106

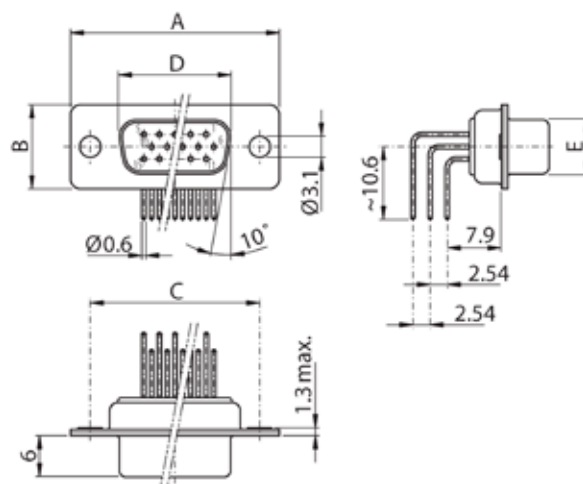


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 15   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| 26   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| 44   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| 62   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| 15   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| 26   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| 44   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| 62   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |

## Order Codes:

Plug Connector

|    |              |
|----|--------------|
| 15 | 3301-0310-01 |
| 26 | 3301-0310-02 |
| 44 | 3301-0310-03 |
| 62 | 3301-0310-04 |

Socket Connector

|    |              |
|----|--------------|
| 15 | 3301-0310-11 |
| 26 | 3301-0310-12 |
| 44 | 3301-0310-13 |
| 62 | 3301-0310-14 |

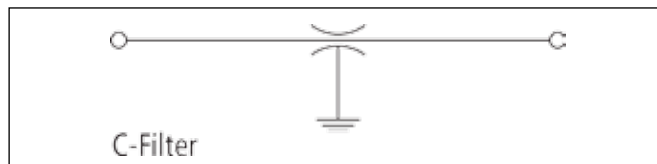
## Introduction to Filter Connectors

Filter Connectors are available in FP, FT & PI versions.

FP: Planar Filter Type

FT: Tubular Type

PI: Pi Tubular Filter Type - On request



Our Filter Connectors are especially designed for Industrial Applications. They provide excellent protection against EMI/RFI. By using standard components - a cost effective production can be achieved as well as 100% compatibility with equivalent products according to DIN 41652, ML-C-24308 and IEC 807F-2.

Planar Filter Types (FP) are equipped with planar chip capacitors. (ceramic material X7R).

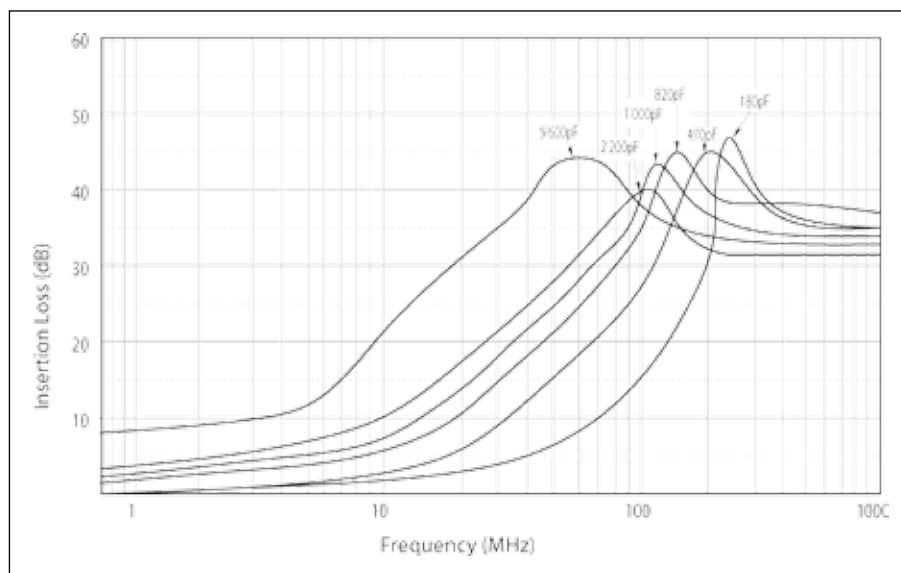
Tubular Filter Types (FT) are equipped with tubular ceramic capacitors. (ceramic material X7R).

Pi Tubular Filter Types (PI) are equipped with Pi Tubular capacitors.

These capacitors are metalized on the back side to guarantee a high HF-tightness.

Standard value is 1000pF, but other values can be supplied upon request.

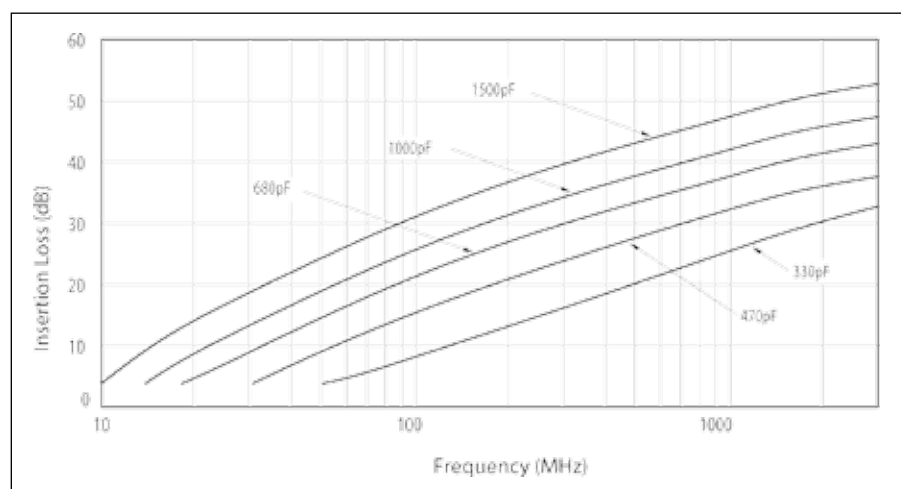
## Attenuation characteristics - FP



### Technical Data (FP)

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Insulator:                | UL 94 V-0 Thermoplastic                            |
| Contacts:                 | Copper Alloy                                       |
| Plating:                  | Hard Gold over Nickel                              |
| Shell:                    | Steel, Tin plated                                  |
| Test Voltage V.r.m.s./NM: | 250V DC                                            |
| Working Voltage:          | 100V DC                                            |
| Current Rating:           | 5A (20°C)                                          |
| Contact Resistance:       | max 10mΩ before strain<br>ΔR max 10mΩ after strain |
| Insulation Resistance:    | ≥ 5GΩ at 100V DC                                   |
| Clearance & Creepage:     | contact-contact > 1.0mm<br>contact-ground > 1.0mm  |
| Operating Temperature:    | -55°C to +125°C                                    |

## Attenuation characteristics - FT



### Technical Data (FT)

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Insulator:                | UL 94 V-0 Thermoplastic                            |
| Contacts:                 | Copper Alloy                                       |
| Plating:                  | Hard Gold over Nickel                              |
| Shell:                    | Steel, Tin plated                                  |
| Test Voltage V.r.m.s./NM: | 250V DC                                            |
| Working Voltage:          | 100V DC                                            |
| Current Rating:           | 5A (20°C)                                          |
| Contact Resistance:       | max 10mΩ before strain<br>ΔR max 10mΩ after strain |
| Insulation Resistance:    | ≥ 1GΩ at 100V DC                                   |
| Clearance & Creepage:     | contact-contact > 1.0mm<br>contact-ground > 1.0mm  |
| Operating Temperature:    | -55°C to +125°C                                    |

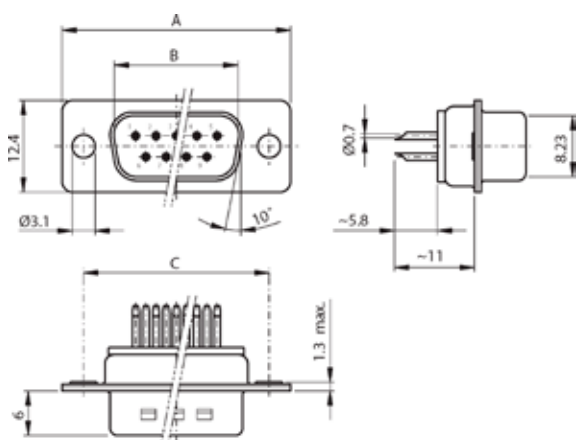
## Solder cup (FP)

Machined contacts / Suitable for cable AWG 22  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other class on request.  
1000pF as standard. Other on request.

Technical Information on page 79  
Mounting options on page 98-106

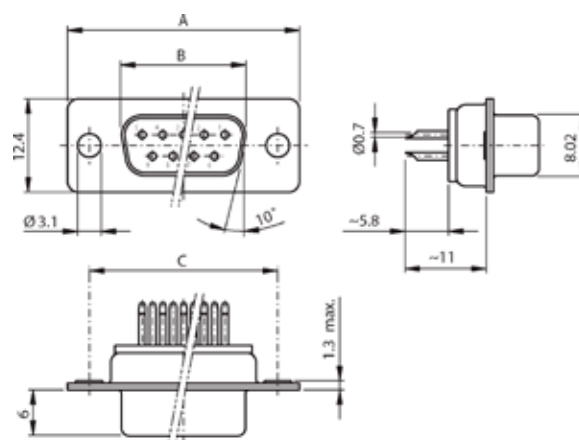


### Plug connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.79 | 25.00 |
| 15   | 39.20 | 25.12 | 33.30 |
| 25   | 53.10 | 38.84 | 47.00 |
| 37   | 69.50 | 55.30 | 63.50 |

### Socket connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.46 | 25.00 |
| 15   | 39.20 | 24.79 | 33.30 |
| 25   | 53.10 | 38.50 | 47.00 |
| 37   | 69.50 | 54.96 | 63.50 |

## Order Codes:

### Plug Connector

|    |              |
|----|--------------|
| 09 | 3305-0100-01 |
| 15 | 3305-0100-02 |
| 25 | 3305-0100-03 |
| 37 | 3305-0100-04 |

### Socket Connector

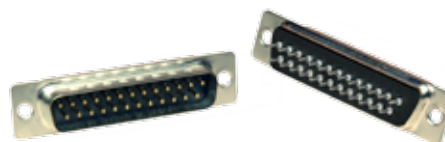
|    |              |
|----|--------------|
| 09 | 3305-0100-11 |
| 15 | 3305-0100-12 |
| 25 | 3305-0100-13 |
| 37 | 3305-0100-14 |

## Solder Pin, Straight (FP)

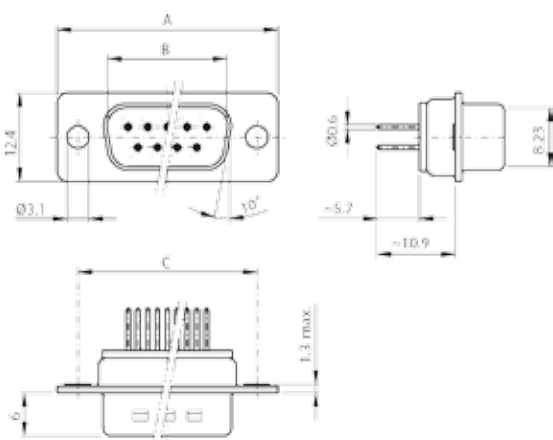
Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other class on request.  
1000pF as standard. Other on request.

Available in Tubular- or Pi Tubular Filter Type  
(FT/PI) on request.

Technical Information on page 79  
Mounting options on page 98-106

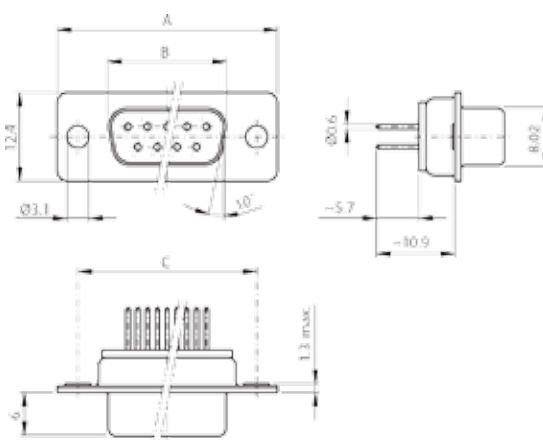


### Plug connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.79 | 25.00 |
| 15   | 39.20 | 25.12 | 33.30 |
| 25   | 53.10 | 38.84 | 47.00 |
| 37   | 69.50 | 55.30 | 63.50 |

### Socket connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.46 | 25.00 |
| 15   | 39.20 | 24.79 | 33.30 |
| 25   | 53.10 | 38.50 | 47.00 |
| 37   | 69.50 | 54.96 | 63.50 |

## Order Codes:

| Plug Connector |              |
|----------------|--------------|
| 09             | 3305-0200-01 |
| 15             | 3305-0200-02 |
| 25             | 3305-0200-03 |
| 37             | 3305-0200-04 |

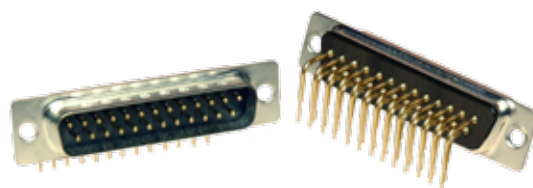
| Socket Connector |              |
|------------------|--------------|
| 09               | 3305-0200-11 |
| 15               | 3305-0200-12 |
| 25               | 3305-0200-13 |
| 37               | 3305-0200-14 |

## Solder Pin, Angled 9.4 mm (FP)

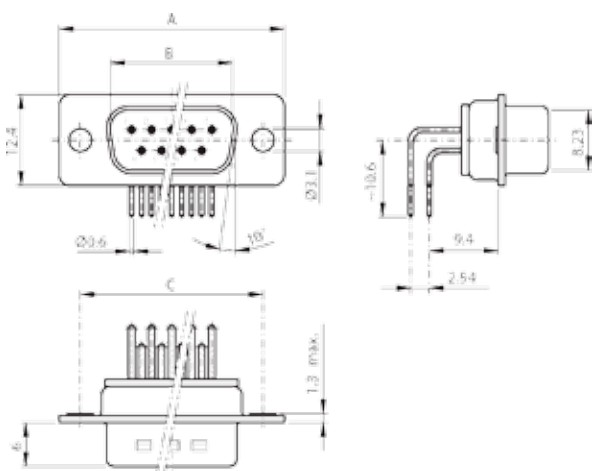
Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other class on request.  
1000pF as standard. Other on request.

Available in Tubular Filter Type (FT) on request.

Technical Information on page 79  
Mounting options on page 98-106

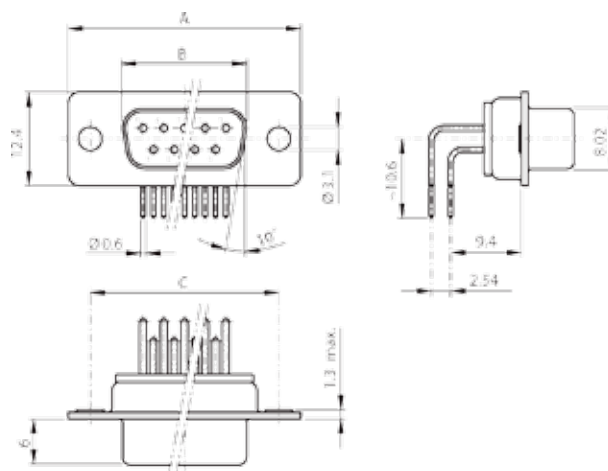


Plug connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.79 | 25.00 |
| 15   | 39.20 | 25.12 | 33.30 |
| 25   | 53.10 | 38.84 | 47.00 |
| 37   | 69.50 | 55.30 | 63.50 |

Socket connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.46 | 25.00 |
| 15   | 39.20 | 24.79 | 33.30 |
| 25   | 53.10 | 38.50 | 47.00 |
| 37   | 69.50 | 54.96 | 63.50 |

## Order Codes:

| Plug Connector |              |
|----------------|--------------|
| 09             | 3305-0300-01 |
| 15             | 3305-0300-02 |
| 25             | 3305-0300-03 |
| 37             | 3305-0300-04 |

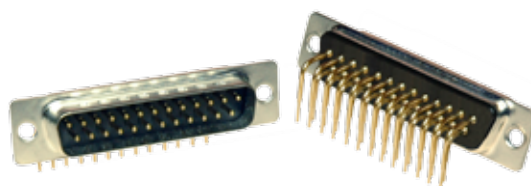
| Socket Connector |              |
|------------------|--------------|
| 09               | 3305-0300-11 |
| 15               | 3305-0300-12 |
| 25               | 3305-0300-13 |
| 37               | 3305-0300-14 |

## Solder Pin, Angled 7.18 mm (FP)

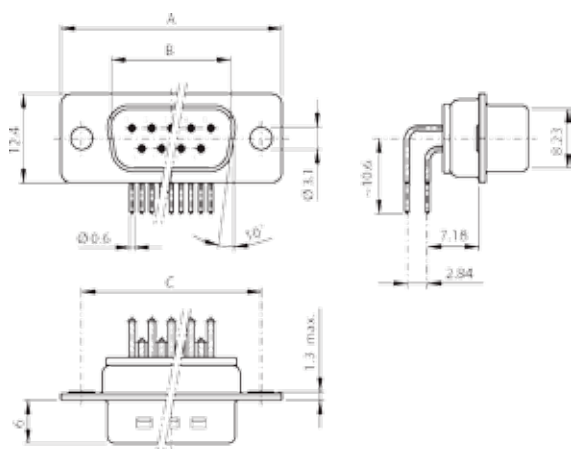
Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other class on request.  
1000pF as standard. Other on request.

Available in Tubular Filter Type (FT) on request.

Technical Information on page 79  
Mounting options on page 98-106

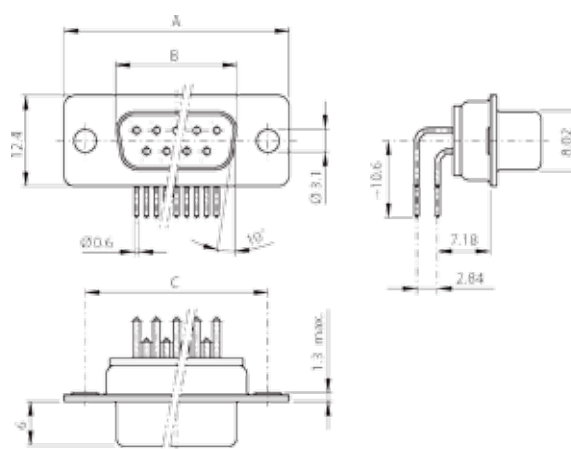


Plug connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.79 | 25.00 |
| 15   | 39.20 | 25.12 | 33.30 |
| 25   | 53.10 | 38.84 | 47.00 |
| 37   | 69.50 | 55.30 | 63.50 |

Socket connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.46 | 25.00 |
| 15   | 39.20 | 24.79 | 33.30 |
| 25   | 53.10 | 38.50 | 47.00 |
| 37   | 69.50 | 54.96 | 63.50 |

08

## Order Codes:

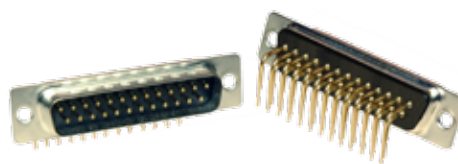
| Plug Connector |              |
|----------------|--------------|
| 09             | 3305-0400-01 |
| 15             | 3305-0400-02 |
| 25             | 3305-0400-03 |
| 37             | 3305-0400-04 |

| Socket Connector |              |
|------------------|--------------|
| 09               | 3305-0400-11 |
| 15               | 3305-0400-12 |
| 25               | 3305-0400-13 |
| 37               | 3305-0400-14 |

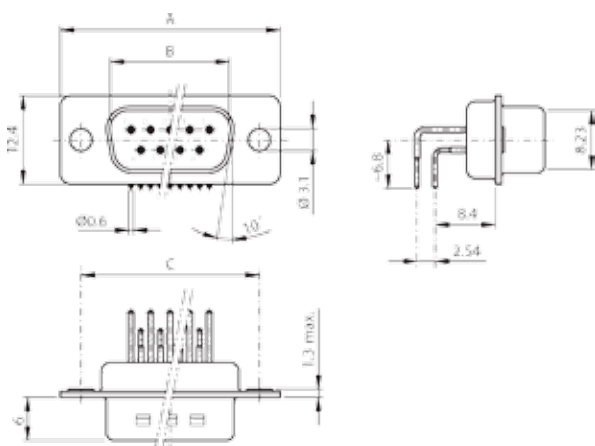
## Solder Pin, 8.4 mm (FP)

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other class on request.  
1000pF as standard. Other on request.

Technical Information on page 79  
Mounting options on page 98-106

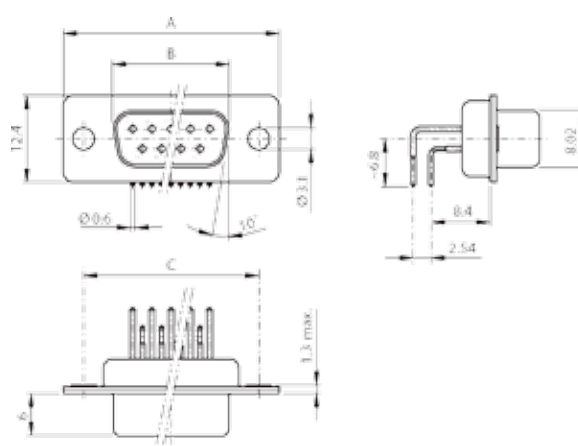


### Plug connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.79 | 25.00 |
| 15   | 39.20 | 25.12 | 33.30 |
| 25   | 53.10 | 38.84 | 47.00 |
| 37   | 69.50 | 55.30 | 63.50 |

### Socket connector



| Size | A     | B     | C     |
|------|-------|-------|-------|
| 09   | 30.80 | 16.46 | 25.00 |
| 15   | 39.20 | 24.79 | 33.30 |
| 25   | 53.10 | 38.50 | 47.00 |
| 37   | 69.50 | 54.96 | 63.50 |

## Order Codes:

### Plug Connector

|    |              |
|----|--------------|
| 09 | 3305-0500-01 |
| 15 | 3305-0500-02 |
| 25 | 3305-0500-03 |
| 37 | 3305-0500-04 |

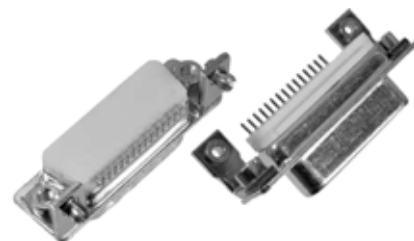
### Socket Connector

|    |              |
|----|--------------|
| 09 | 3305-0500-11 |
| 15 | 3305-0500-12 |
| 25 | 3305-0500-13 |
| 37 | 3305-0500-14 |

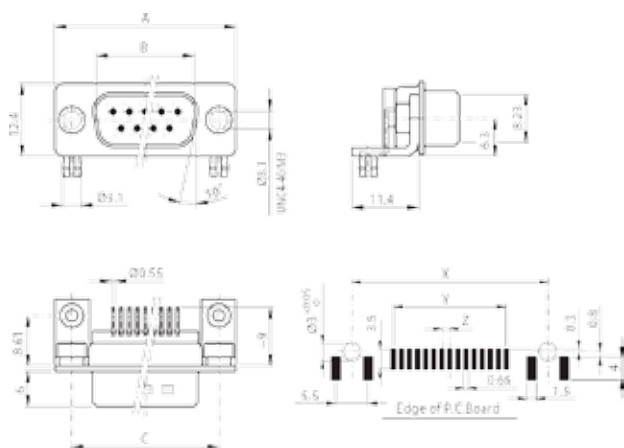
## SMD Connectors, 6.3 mm (FP)

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other class on request.  
1000pF as standard. Other on request.

Technical Information on page 79

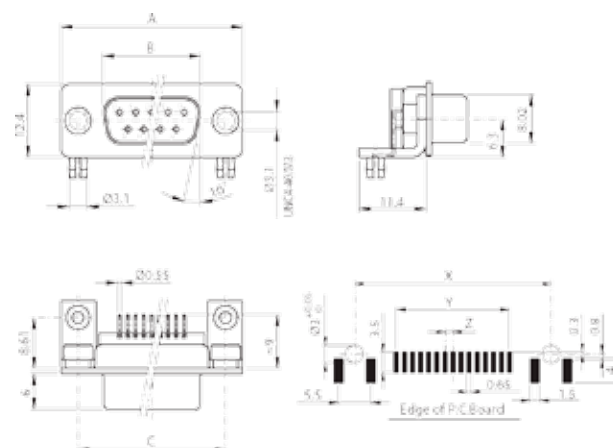


### Plug connector



| Size | A     | B     | C/X   | Y     | Z     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 16.79 | 25.00 | 10.98 | 01.37 |
| 15   | 39.20 | 25.12 | 33.30 | 19.20 | 01.37 |
| 25   | 53.10 | 38.84 | 47.00 | 33.12 | 01.38 |
| 37   | 69.50 | 55.30 | 63.50 | 49.68 | 01.38 |

### Socket connector



| Size | A     | B     | C/X   | Y     | Z     |
|------|-------|-------|-------|-------|-------|
| 09   | 30.80 | 16.46 | 25.00 | 10.98 | 01.37 |
| 15   | 39.20 | 24.79 | 33.30 | 19.20 | 01.37 |
| 25   | 53.10 | 38.50 | 47.00 | 33.12 | 01.38 |
| 37   | 69.50 | 54.96 | 63.50 | 49.68 | 01.38 |

08

## Order Codes:

### Plug Connector

|    |              |
|----|--------------|
| 09 | 3305-0600-01 |
| 15 | 3305-0600-02 |
| 25 | 3305-0600-03 |
| 37 | 3305-0600-04 |

### Socket Connector

|    |              |
|----|--------------|
| 09 | 3305-0600-11 |
| 15 | 3305-0600-12 |
| 25 | 3305-0600-13 |
| 37 | 3305-0600-14 |

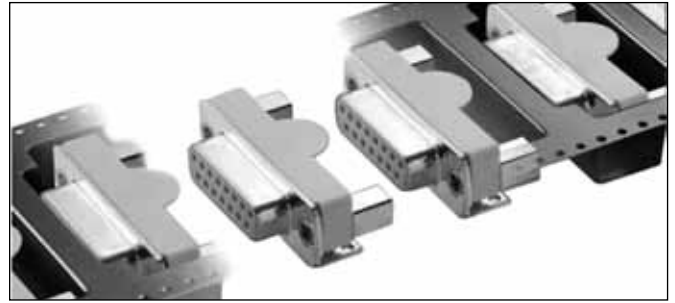
Standard Connectors are supplied with Metal bracket including P.o.F. and with UNC 4-40 threaded Insert.

For other Thread - please contact your local MH Office.

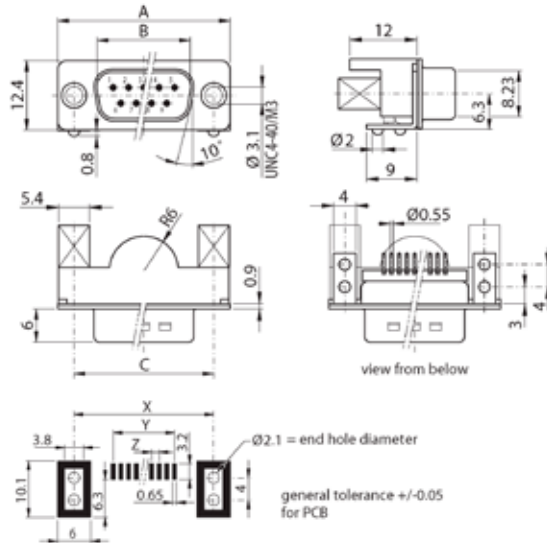
## 90° SMD Connectors - Tape & Reel

Machined contacts, Mounting height 6.3 mm  
 Tinned Shell as Standard  
 Class 2 connector pins as Standard  
 UNC 4-40 Thread type, M3 available on request.  
 Other Plating and/or class on request.  
 1000pF as standard. Other on request.

Technical Information on page 79

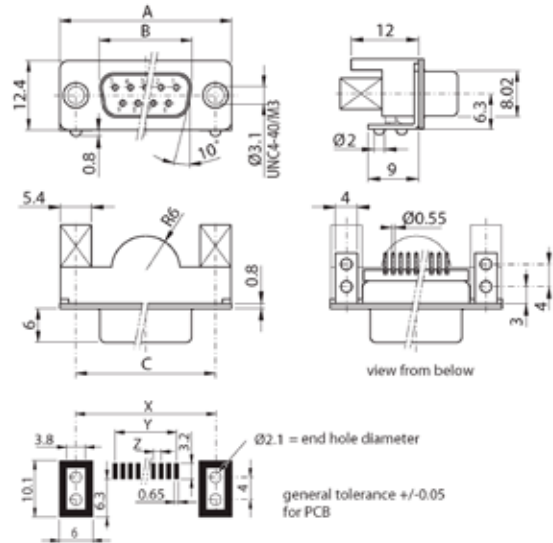


Plug connector



| Size | A     | B     | C/X   | Y     | Z    |
|------|-------|-------|-------|-------|------|
| 09   | 30.80 | 16.79 | 25.00 | 10.98 | 1.37 |
| 15   | 39.20 | 25.12 | 33.30 | 19.20 | 1.37 |
| 25   | 53.10 | 38.84 | 47.00 | 33.12 | 1.38 |
| 37   | 69.50 | 55.30 | 63.50 | 49.68 | 1.38 |

Socket connector



| Size | A     | B     | C/X   | Y     | Z    |
|------|-------|-------|-------|-------|------|
| 09   | 30.80 | 16.46 | 25.00 | 10.98 | 1.37 |
| 15   | 39.20 | 24.79 | 33.30 | 19.20 | 1.37 |
| 25   | 53.10 | 38.50 | 47.00 | 33.12 | 1.38 |
| 37   | 69.50 | 54.96 | 63.50 | 49.68 | 1.38 |

## Order Codes:

### Plug Connector

|    |              |
|----|--------------|
| 09 | 3305-0700-01 |
| 15 | 3305-0700-02 |
| 25 | 3305-0700-03 |
| 37 | 3305-0700-04 |

### Socket Connector

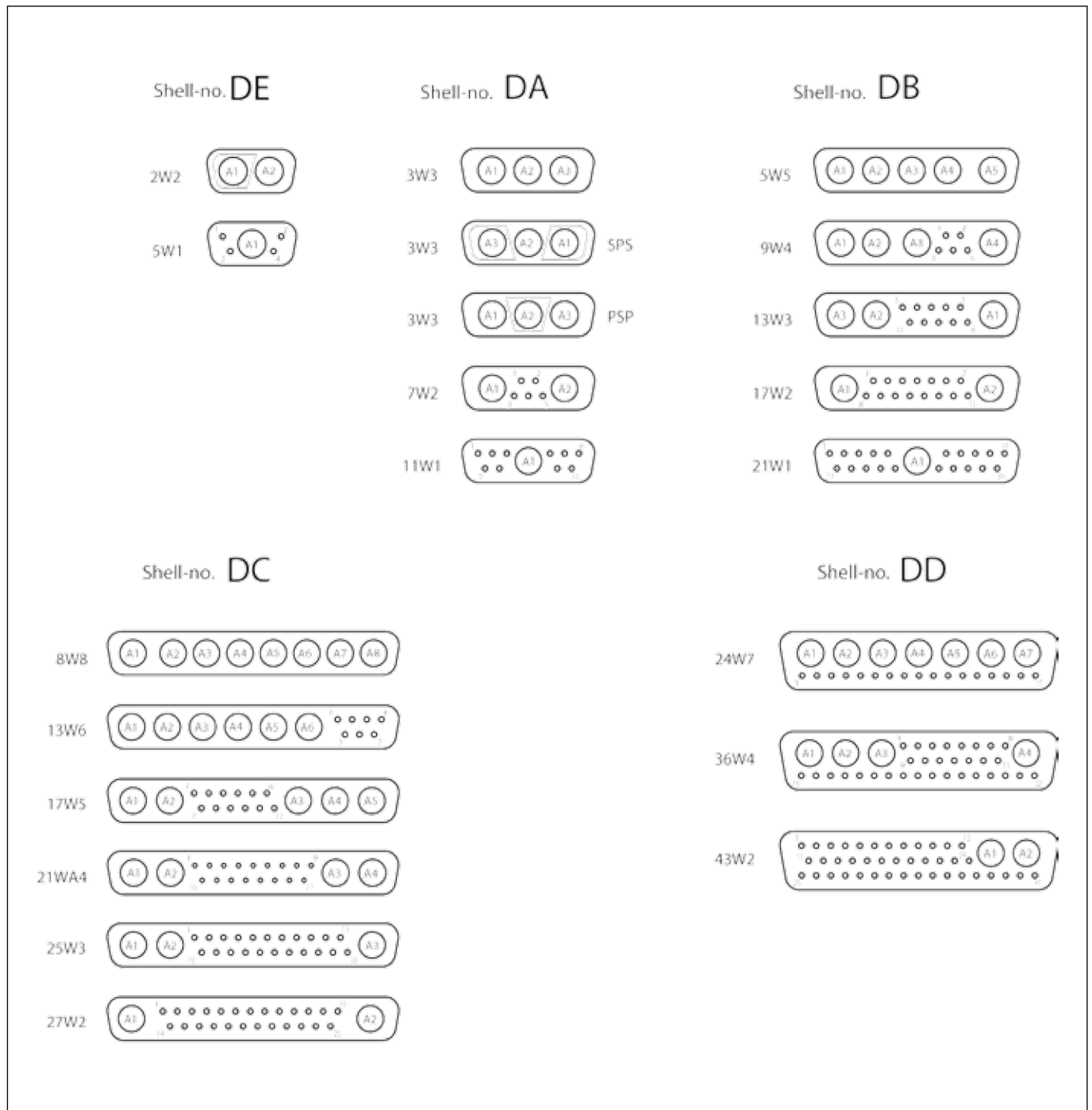
|    |              |
|----|--------------|
| 09 | 3305-0700-11 |
| 15 | 3305-0700-12 |
| 25 | 3305-0700-13 |
| 37 | 3305-0700-14 |

Reel Outer Diameter: 330 mm  
 Amount of Connectors: 150 pcs / reel



## Introduction to Combo Connectors

All Contact arrangements apply to Plug Connectors. When using Socket - Hole pattern must be mirrored.



## Introduction to Combo Connectors

### Technical Data - Housings + Contacts

|                           |                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------|
| Insulator:                | UL94 V-0 Thermoplastic                                                              |
| Contacts:                 | Copper Alloy                                                                        |
| Contact Plating:          | Hard Gold over Nickel                                                               |
| Shell:                    | Steel, Tin plated                                                                   |
| Test Voltage V.r.m.s./NM: | 1000V                                                                               |
| Working Voltage:          | 125V                                                                                |
| Current Rating:           | 5A (20°C)                                                                           |
| Contact Resistance:       | max 10mΩ before strain ΔR max. 10mΩ after strain<br>DIN 41652, part 2 (MIL-C-24308) |
| Insulation Resistance:    | ≥ 5GΩ                                                                               |
| Clearance & Creepage:     | contact-contact >1.0 mm<br>contact-ground >1.0 mm                                   |
| Operating Temperature:    | -55°C to +125°C                                                                     |

### Technical Data - Coax & Power Contacts

|                   |                  |
|-------------------|------------------|
| Contact material: | Copper Alloy     |
| Contact plating:  | Gold over Nickel |

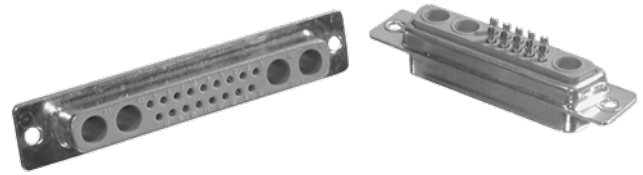
|                                        | COAX<br>Contacts | High Volt.<br>Contacts | High Power Contacts |        |       |
|----------------------------------------|------------------|------------------------|---------------------|--------|-------|
|                                        |                  |                        | AWG 16              | AWG 12 | AWG 8 |
| Insulator Material:                    | Teflon           | Polyamide              | –                   | –      | –     |
| Temperature range per DIN              | -55°C / +150°C   |                        |                     |        |       |
| Test Voltage                           | 1000V rms        | 2800V rms              | 1000V rms           |        |       |
| Contact Rating (25°C)                  | 5A               | 5A                     | 10A                 | 20A    | 40A   |
| Insulation Resistance                  | 5000 MΩ          | 5000 MΩ                | –                   | –      | –     |
| Wave Impedance <sup>1)</sup>           | 50 Ω             | –                      | –                   | –      | –     |
| Frequency <sup>1)</sup>                | 0-2 GHz          | –                      | –                   | –      | –     |
| Standard Wave Ratio max. <sup>1)</sup> | 1,2              | –                      | –                   | –      | –     |
| Attenuation max. <sup>1)</sup>         | 0,2 dB           | –                      | –                   | –      | –     |
| Mating & Separation Force              | 7 N              | 3 N                    | 5 N                 | 5 N    | 5 N   |
| Mating Cycle min.                      | 250              |                        |                     |        |       |
| Contact retention Force min.           | 40 N             |                        |                     |        |       |

<sup>1)</sup> Standard Value

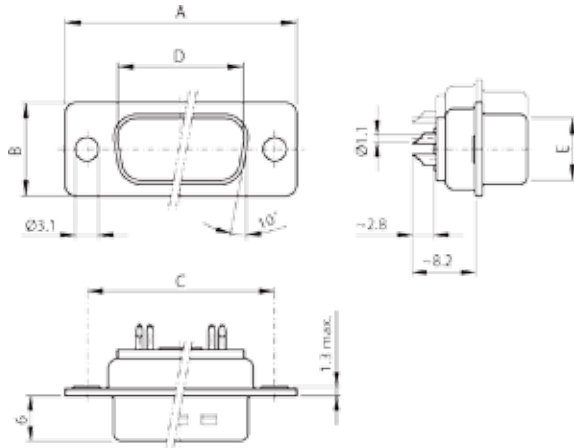
## Solder Cup

Machined contacts / AWG 18  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 88-89  
Mounting options on page 98-106

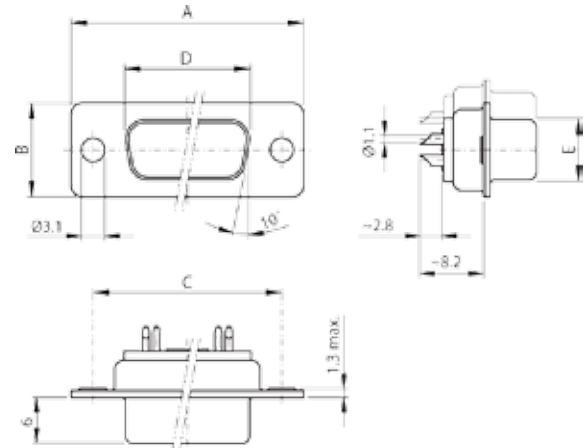


### Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| DE   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| DA   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| DB   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| DC   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| DD   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

### Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| DE   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| DA   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| DB   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| DC   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| DD   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

## Order Codes:

### Plug Connector

| No. Pos: | Special Contacts | Name:        | Part No:     |
|----------|------------------|--------------|--------------|
| 05       | 1                | DTS 5W1 PZ   | 3310-0100-01 |
| 02       | 2                | DTS 2W2 PS   | 3310-0100-02 |
| 03       | 3                | DTS 3W3 P    | 3310-0101-01 |
| 03       | 3                | DTS 3W3 PSP  | 3310-0101-02 |
| 07       | 2                | DTS 7W2 PZ   | 3310-0101-03 |
| 11       | 1                | DTS 11W1 PZ  | 3310-0101-04 |
| 05       | 5                | DTS 5W5 P    | 3310-0102-01 |
| 09       | 4                | DTS 9W4 PZ   | 3310-0102-02 |
| 13       | 3                | DTS 13W3 PZ  | 3310-0102-03 |
| 17       | 2                | DTS 17W2 PZ  | 3310-0102-04 |
| 21       | 1                | DTS 21W1 PZ  | 3310-0102-05 |
| 08       | 8                | DTS 8W8 P    | 3310-0103-01 |
| 13       | 6                | DTS 13W6 PZ  | 3310-0103-02 |
| 17       | 5                | DTS 17W5 PZ  | 3310-0103-03 |
| 21       | 4                | DTS 21WA8 PZ | 3310-0103-04 |
| 25       | 3                | DTS 25W3 PZ  | 3310-0103-05 |
| 27       | 2                | DTS 27W2 PZ  | 3310-0103-06 |
| 24       | 7                | DTS 24W7 PZ  | 3310-0104-01 |
| 36       | 4                | DTS 36W4 PZ  | 3310-0104-02 |
| 43       | 2                | DTS 43W2 PZ  | 3310-0104-03 |

### Socket Connector

| No. Pos: | Special Contacts | Name:        | Part No:     |
|----------|------------------|--------------|--------------|
| 05       | 1                | DTS 5W1 SZ   | 3310-0100-11 |
| 02       | 2                | DTS 2W2 SP   | 3310-0100-12 |
| 03       | 3                | DTS 3W3 S    | 3310-0101-11 |
| 03       | 3                | DTS 3W3 SPS  | 3310-0101-12 |
| 07       | 2                | DTS 7W2 SZ   | 3310-0101-13 |
| 11       | 1                | DTS 11W1 SZ  | 3310-0101-14 |
| 05       | 5                | DTS 5W5 S    | 3310-0102-11 |
| 09       | 4                | DTS 9W4 SZ   | 3310-0102-12 |
| 13       | 3                | DTS 13W3 SZ  | 3310-0102-13 |
| 17       | 2                | DTS 17W2 SZ  | 3310-0102-14 |
| 21       | 1                | DTS 21W1 SZ  | 3310-0102-15 |
| 08       | 8                | DTS 8W8 S    | 3310-0103-11 |
| 13       | 6                | DTS 13W6 SZ  | 3310-0103-12 |
| 17       | 5                | DTS 17W5 SZ  | 3310-0103-13 |
| 21       | 4                | DTS 21WA8 SZ | 3310-0103-14 |
| 25       | 3                | DTS 25W3 SZ  | 3310-0103-15 |
| 27       | 2                | DTS 27W2 SZ  | 3310-0103-16 |
| 24       | 7                | DTS 24W7 SZ  | 3310-0104-11 |
| 36       | 4                | DTS 36W4 SZ  | 3310-0104-12 |
| 43       | 2                | DTS 43W2 SZ  | 3310-0104-13 |

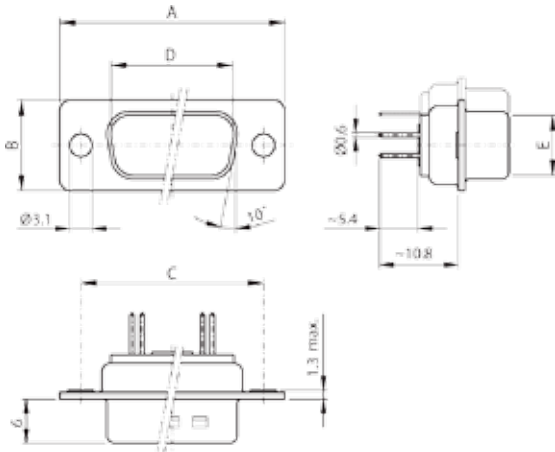
## Solder Pin, Straight

Machined contacts  
Tinned Shell as Standard  
Class 2 connector pins as Standard  
Other Plating and/or class on request.

Technical Information on page 88-89  
Mounting options on page 98-106

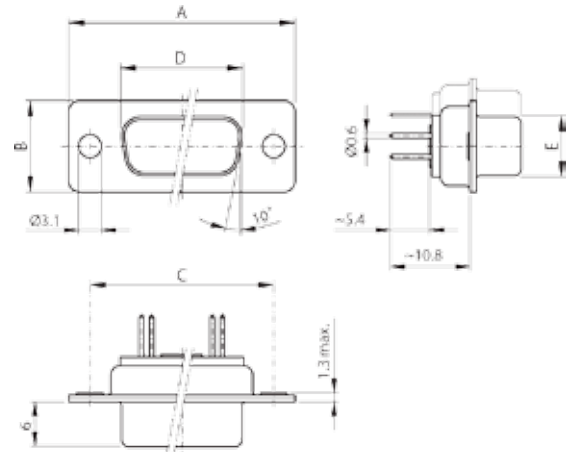


Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| DE   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| DA   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| DB   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| DC   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| DD   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| DE   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| DA   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| DB   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| DC   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| DD   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

09

## Order Codes:

Plug Connector

| No. Pos: | Special Contacts | Name:        | Part No:     |
|----------|------------------|--------------|--------------|
| 05       | 1                | DTS 5W1 PY   | 3310-0200-01 |
| 02       | 2                | DTS 2W2 PS   | 3310-0100-02 |
| 03       | 3                | DTS 3W3 P    | 3310-0101-01 |
| 03       | 3                | DTS 3W3 PSP  | 3310-0101-02 |
| 07       | 2                | DTS 7W2 PY   | 3310-0201-03 |
| 11       | 1                | DTS 11W1 PY  | 3310-0201-04 |
| 05       | 5                | DTS 5W5 P    | 3310-0102-01 |
| 09       | 4                | DTS 9W4 PY   | 3310-0202-02 |
| 13       | 3                | DTS 13W3 PY  | 3310-0202-03 |
| 17       | 2                | DTS 17W2 PY  | 3310-0202-04 |
| 21       | 1                | DTS 21W1 PY  | 3310-0202-05 |
| 08       | 8                | DTS 8W8 P    | 3310-0103-01 |
| 13       | 6                | DTS 13W6 PY  | 3310-0203-02 |
| 17       | 5                | DTS 17W5 PY  | 3310-0203-03 |
| 21       | 4                | DTS 21WA8 PY | 3310-0203-04 |
| 25       | 3                | DTS 25W3 PY  | 3310-0203-05 |
| 27       | 2                | DTS 27W2 PY  | 3310-0203-06 |
| 24       | 7                | DTS 24W7 PY  | 3310-0204-01 |
| 36       | 4                | DTS 36W4 PY  | 3310-0204-02 |
| 43       | 2                | DTS 43W2 PY  | 3310-0204-03 |

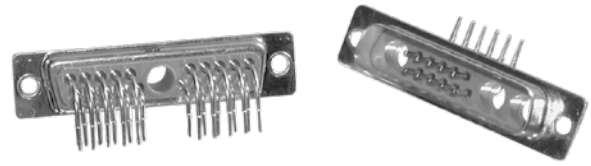
Socket Connector

| No. Pos: | Special Contacts | Name:        | Part No:     |
|----------|------------------|--------------|--------------|
| 05       | 1                | DTS 5W1 SY   | 3310-0200-11 |
| 02       | 2                | DTS 2W2 SP   | 3310-0100-12 |
| 03       | 3                | DTS 3W3 S    | 3310-0101-11 |
| 03       | 3                | DTS 3W3 SPS  | 3310-0101-12 |
| 07       | 2                | DTS 7W2 SY   | 3310-0201-13 |
| 11       | 1                | DTS 11W1 SY  | 3310-0201-14 |
| 05       | 5                | DTS 5W5 S    | 3310-0102-11 |
| 09       | 4                | DTS 9W4 SY   | 3310-0202-12 |
| 13       | 3                | DTS 13W3 SY  | 3310-0202-13 |
| 17       | 2                | DTS 17W2 SY  | 3310-0202-14 |
| 21       | 1                | DTS 21W1 SY  | 3310-0202-15 |
| 08       | 8                | DTS 8W8 S    | 3310-0103-11 |
| 13       | 6                | DTS 13W6 SY  | 3310-0203-12 |
| 17       | 5                | DTS 17W5 SY  | 3310-0203-13 |
| 21       | 4                | DTS 21WA8 SY | 3310-0203-14 |
| 25       | 3                | DTS 25W3 SY  | 3310-0203-15 |
| 27       | 2                | DTS 27W2 SY  | 3310-0203-16 |
| 24       | 7                | DTS 24W7 SY  | 3310-0204-11 |
| 36       | 4                | DTS 36W4 SY  | 3310-0204-12 |
| 43       | 2                | DTS 43W2 SY  | 3310-0204-13 |

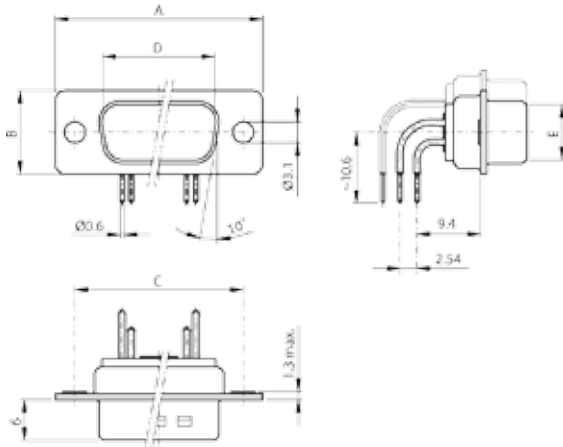
## Solder Pin, Angled 9.4 mm

Machined contacts.  
Tinned Shell as Standard.  
Class 2 connector pins as Standard.  
Other Plating and/or class on request.  
Angled 7.18 mm version on request.

Technical Information on page 88-89  
Mounting options on page 98-106

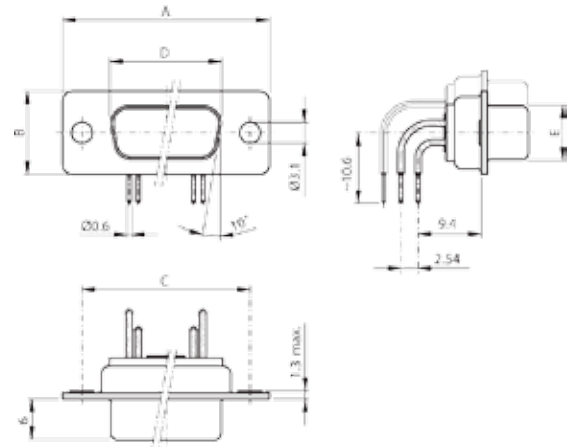


### Plug connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| DE   | 30.80 | 12.40 | 25.00 | 16.79 | 08.23 |
| DA   | 39.20 | 12.40 | 33.30 | 25.12 | 08.23 |
| DB   | 53.10 | 12.40 | 47.00 | 38.84 | 08.23 |
| DC   | 69.50 | 12.40 | 63.50 | 55.30 | 08.23 |
| DD   | 67.00 | 15.40 | 61.10 | 52.68 | 10.95 |

### Socket connector



| Size | A     | B     | C     | D     | E     |
|------|-------|-------|-------|-------|-------|
| DE   | 30.80 | 12.40 | 25.00 | 16.46 | 08.02 |
| DA   | 39.20 | 12.40 | 33.30 | 24.79 | 08.02 |
| DB   | 53.10 | 12.40 | 47.00 | 38.50 | 08.02 |
| DC   | 69.50 | 12.40 | 63.50 | 54.96 | 08.02 |
| DD   | 67.00 | 15.40 | 61.10 | 52.55 | 10.87 |

## Order Codes:

### Plug Connector

| No. Pos: | Special Contacts | Name:        | Part No:     |
|----------|------------------|--------------|--------------|
| 05       | 1                | DTS 5W1 PYC  | 3310-0300-01 |
| 02       | 2                | DTS 2W2 PS   | 3310-0100-02 |
| 03       | 3                | DTS 3W3 P    | 3310-0101-01 |
| 03       | 3                | DTS 3W3 PSP  | 3310-0101-02 |
| 07       | 2                | DTS 7W2 PYC  | 3310-0301-03 |
| 11       | 1                | DTS 11W1 PYC | 3310-0301-04 |
| 05       | 5                | DTS 5W5 P    | 3310-0102-01 |
| 09       | 4                | DTS 9W4 PYC  | 3310-0302-02 |
| 13       | 3                | DTS 13W3 PYC | 3310-0302-03 |
| 17       | 2                | DTS 17W2 PYC | 3310-0302-04 |
| 21       | 1                | DTS 21W1 PYC | 3310-0302-05 |
| 08       | 8                | DTS 8W8 P    | 3310-0103-01 |
| 13       | 6                | DTS 13W6 PYC | 3310-0303-02 |
| 17       | 5                | DTS 17W5 PYC | 3310-0303-03 |
| 21       | 4                | DTS 21W4 PYC | 3310-0303-04 |
| 25       | 3                | DTS 25W3 PYC | 3310-0303-05 |
| 27       | 2                | DTS 27W2 PYC | 3310-0303-06 |
| 24       | 7                | DTS 24W7 PYC | 3310-0304-01 |
| 36       | 4                | DTS 36W4 PYC | 3310-0304-02 |
| 43       | 2                | DTS 43W2 PYC | 3310-0304-03 |

### Socket Connector

| No. Pos: | Special Contacts | Name:        | Part No:     |
|----------|------------------|--------------|--------------|
| 05       | 1                | DTS 5W1 SYC  | 3310-0300-11 |
| 02       | 2                | DTS 2W2 SP   | 3310-0100-12 |
| 03       | 3                | DTS 3W3 S    | 3310-0101-11 |
| 03       | 3                | DTS 3W3 SPS  | 3310-0101-12 |
| 07       | 2                | DTS 7W2 SYC  | 3310-0301-13 |
| 11       | 1                | DTS 11W1 SYC | 3310-0301-14 |
| 05       | 5                | DTS 5W5 S    | 3310-0102-11 |
| 09       | 4                | DTS 9W4 SYC  | 3310-0302-12 |
| 13       | 3                | DTS 13W3 SYC | 3310-0302-13 |
| 17       | 2                | DTS 17W2 SYC | 3310-0302-14 |
| 21       | 1                | DTS 21W1 SYC | 3310-0302-15 |
| 08       | 8                | DTS 8W8 S    | 3310-0103-11 |
| 13       | 6                | DTS 13W6 SYC | 3310-0303-12 |
| 17       | 5                | DTS 17W5 SYC | 3310-0303-13 |
| 21       | 4                | DTS 21W4 SYC | 3310-0303-14 |
| 25       | 3                | DTS 25W3 SYC | 3310-0303-15 |
| 27       | 2                | DTS 27W2 SYC | 3310-0303-16 |
| 24       | 7                | DTS 24W7 SYC | 3310-0304-11 |
| 36       | 4                | DTS 36W4 SYC | 3310-0304-12 |
| 43       | 2                | DTS 43W2 SYC | 3310-0304-13 |

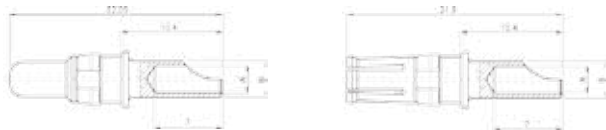
## Solder & Crimp Versions

Machined contacts.  
Class 2 connector pins as Standard.  
Other Plating and/or class on request.

Technical Information on page 88-89

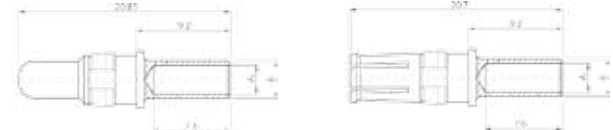


### Solder Version



| Amp. | Plug         | Socket       | ØA   | ØB   |
|------|--------------|--------------|------|------|
| 10 A | 3311-0001-01 | 3311-0001-11 | 1.80 | 2.55 |
| 20 A | 3311-0001-02 | 3311-0001-12 | 2.80 | 3.70 |
| 40 A | 3311-0001-03 | 3311-0001-13 | 4.80 | 5.60 |

### Crimp Version



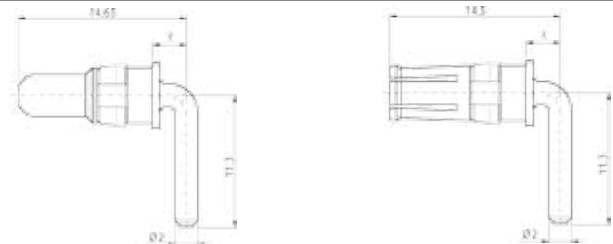
| Amp. | Plug         | Socket       | ØA   | ØB   |
|------|--------------|--------------|------|------|
| 10 A | 3311-0002-01 | 3311-0002-11 | 1.80 | 2.55 |
| 20 A | 3311-0002-02 | 3311-0002-12 | 2.80 | 3.70 |
| 40 A | 3311-0002-03 | 3311-0002-13 | 4.80 | 5.60 |

### PCB Straight Version



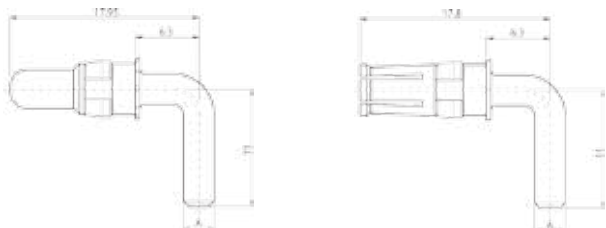
| Amp. | Plug         | Socket       | ØA   |
|------|--------------|--------------|------|
| 10 A | 3311-0003-01 | 3311-0003-11 | 2.00 |
| 20 A | 3311-0003-02 | 3311-0003-12 | 2.60 |
| 40 A | 3311-0003-03 | 3311-0003-13 | 3.20 |

### 90° PCB-A Version



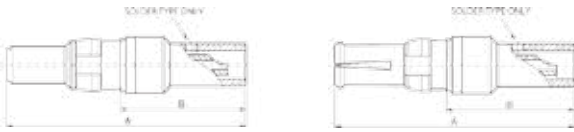
| Amp. | Plug         | Socket       |
|------|--------------|--------------|
| 10 A | 3311-0004-01 | 3311-0004-14 |

### 90° PCB Version



| Amp. | Plug         | Socket       | ØA   |
|------|--------------|--------------|------|
| 10 A | 3311-0005-01 | 3311-0005-11 | 2,00 |
| 20 A | 3311-0005-02 | 3311-0005-12 | 2,85 |
| 30 A | 3311-0005-03 | 3311-0005-13 | 3,20 |
| 40 A | 3311-0005-04 | 3311-0005-14 | 3,75 |

## Solder Version



## Coaxial Contacts - 50 / 75 Ohm

|                     |                       |
|---------------------|-----------------------|
| Contact Material:   | Copper Alloy          |
| Insulator Material: | Teflon                |
| Crimp Sleeve:       | PTFE                  |
| Other metal parts:  | Copper Alloy          |
| Surface Plating:    | Inner Contact 1,3µ Au |
|                     | Outer Contact 0,8µ Au |

|     | Cable                     | Plug         | Socket       | A     | B    |
|-----|---------------------------|--------------|--------------|-------|------|
| 50Ω | 178 B/U, 196 A/U, 404 U   | 3311-0020-01 | 3311-0020-11 | 23.0  | 11.2 |
| 50Ω | 174 U, 188 A/U, 316 U     | 3311-0020-02 | 3311-0020-12 | 23.0  | 11.2 |
| 50Ω | 180 B/U                   | 3311-0020-03 | 3311-0020-13 | 23.0  | 11.2 |
| 50Ω | 58 C/U, 141 A/U           | 3311-0020-04 | 3311-0020-14 | 26.8  | 14.8 |
| 50Ω | 316 U (Double Braided)    | 3311-0020-05 | 3311-0020-15 | 24.0  | 12.2 |
| 75Ω | 179 B/U, 187 A/U (B=7,3)  | 3311-0020-06 | 3311-0020-16 | 19.05 | 7.3  |
| 75Ω | 179 B/U, 187 A/U (B=11,2) | 3311-0020-07 | 3311-0020-17 | 23.0  | 11.2 |

## Crimp / Solder Version



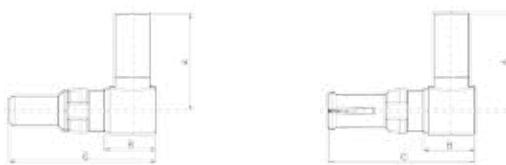
|     | Cable                     | Plug         | Socket       | A     | B    |
|-----|---------------------------|--------------|--------------|-------|------|
| 50Ω | 178 B/U, 196 A/U, 404 U   | 3311-0021-01 | 3311-0021-11 | 23.0  | 11.2 |
| 50Ω | 174 U, 188 A/U, 316 U     | 3311-0021-02 | 3311-0021-12 | 23.0  | 11.2 |
| 50Ω | 180 B/U                   | 3311-0021-03 | 3311-0021-13 | 23.0  | 11.2 |
| 50Ω | 58 C/U, 141 A/U           | 3311-0021-04 | 3311-0021-14 | 26.8  | 14.8 |
| 75Ω | 179 B/U, 187 A/U (B=7,3)  | 3311-0021-05 | 3311-0021-15 | 19.05 | 7.3  |
| 75Ω | 179 B/U, 187 A/U (B=11,2) | 3311-0021-06 | 3311-0021-16 | 23.0  | 11.2 |

## 90° Solder / Solder Version



|     | Cable            | Plug         | Socket       | A    | B   | C    |
|-----|------------------|--------------|--------------|------|-----|------|
| 50Ω | 178 B/U, 196 A/U | 3311-0024-01 | 3311-0024-11 | 18.5 | 8.2 | 19.8 |
| 50Ω | 188 A/U, 316 U   | 3311-0024-02 | 3311-0024-12 | 18.5 | 8.2 | 19.8 |
| 50Ω | 195 A/U, 180 B/U | 3311-0024-03 | 3311-0024-13 | 18.2 | 8.2 | 19.8 |
| 50Ω | 58 C/U           | 3311-0024-04 | 3311-0024-14 | 18.2 | 8.2 | 19.8 |
| 75Ω | 179 B/U, 187 A/U | 3311-0024-05 | 3311-0024-15 | 18.5 | 8.2 | 19.8 |

## 90° Crimp / Solder Version



|     | Cable            | Plug         | Socket       | A    | B   | C    |
|-----|------------------|--------------|--------------|------|-----|------|
| 50Ω | 178 B/U, 196 A/U | 3311-0025-01 | 3311-0025-11 | 18.5 | 8.2 | 19.8 |
| 50Ω | 188 A/U, 316 U   | 3311-0025-02 | 3311-0025-12 | 18.5 | 8.2 | 19.8 |
| 50Ω | 195 A/U, 180 B/U | 3311-0025-03 | 3311-0025-13 | 18.2 | 8.2 | 19.8 |
| 50Ω | 58 C/U           | 3311-0025-04 | 3311-0025-14 | 18.2 | 8.2 | 19.8 |
| 75Ω | 179 B/U, 187 A/U | 3311-0025-05 | 3311-0025-15 | 18.5 | 8.2 | 19.8 |

## Crimp / Crimp Version



|     | Cable                  | Plug         | Socket       | A     | B    |
|-----|------------------------|--------------|--------------|-------|------|
| 50Ω | 174 U, 188 A/U, 316 U  | 3311-0022-01 | 3311-0022-11 | 23.0  | 11.2 |
| 50Ω | 316 U (Double Braided) | 3311-0022-02 | 3311-0022-12 | 23.0  | 11.2 |
| 50Ω | 58 C/U, 141 A/U        | 3311-0022-03 | 3311-0022-13 | 22.7  | 10.9 |
| 75Ω | 179 B/U, 187 A/U       | 3311-0022-04 | 3311-0022-14 | 22.45 | 11.2 |
| 75Ω | 180 B/U                | 3311-0022-05 | 3311-0022-15 | 21.65 | 10.4 |

## 90° Crimp / Crimp Version



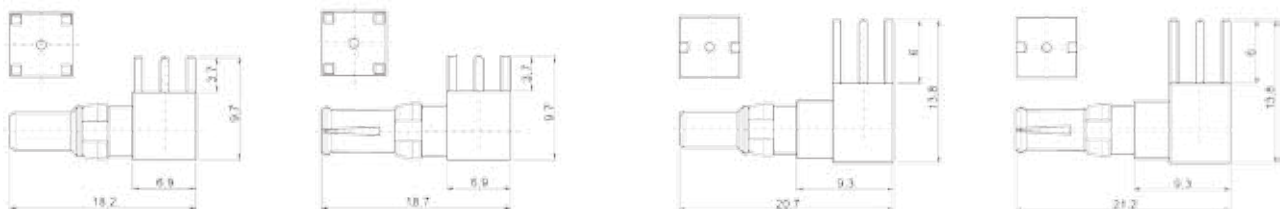
|     | Plug         | Socket       | Cable                 |
|-----|--------------|--------------|-----------------------|
| 50Ω | 3311-0026-01 | 3311-0026-11 | 174 U, 188 A/U, 316 U |
| 75Ω | 3311-0026-02 | 3311-0026-12 | 179 B/U, 187 A/U      |

## PCB Version



|     | Plug         | Socket       |
|-----|--------------|--------------|
| 50Ω | 3311-0023-01 | 3311-0023-11 |
| 50Ω | 3311-0023-02 | 3311-0023-12 |

## 90° PCB Version



|            | Plug         | Socket       |
|------------|--------------|--------------|
| 50Ω - 5leg | 3311-0027-01 | 3311-0027-11 |
| 75Ω - 5leg | 3311-0027-02 | 3311-0027-12 |
| 50Ω - 3leg | 3311-0027-03 | 3311-0027-13 |
| 75Ω - 3leg | 3311-0027-04 | 3311-0027-14 |

## High Voltage Contacts

## High Quality Machined Pins

### High Voltage, Solder Version



Plug

3311-0016-01

Socket

3311-0016-11

### High Voltage Contacts:

|                  |              |
|------------------|--------------|
| Body:            | PTFE         |
| Male Contacts:   | Cu Zn 40 Pb3 |
| Female Contacts: | Copper Alloy |
| Retainer Clip:   | Cu Be 2      |

### High Voltage, 90° Solder Version



Plug

3311-0016-05

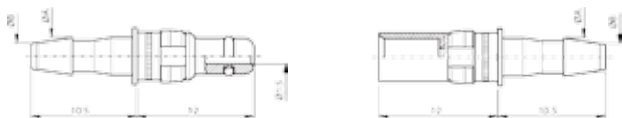
Socket

3311-0016-15

## Pneumatic Contacts

## High Quality Machined Pins

### Pneumatic Contacts

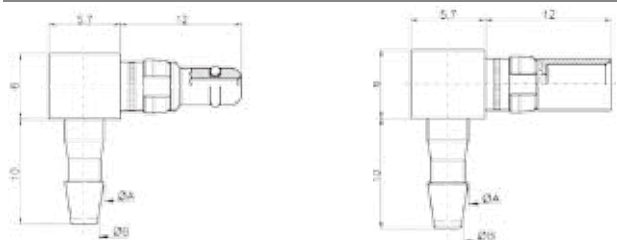


### Pneumatic Contacts:

|                       |                    |
|-----------------------|--------------------|
| Contact Material:     | German Silver      |
| Material O-ring:      | Viton              |
| Max. Pressure (68°F): | 7 bar / 101.5 psi. |
| Temperature Range:    | -10°C to +60°C     |

| Tube Inner Ø | ØA  | ØB  | Air Tube   | Plug         | Socket       |
|--------------|-----|-----|------------|--------------|--------------|
| 2.0          | 2.6 | 1.5 | PU-2       | 3311-0017-01 | 3311-0017-11 |
| 2.6          | 3.1 | 2.0 | PUN4 x 2.5 | 3311-0017-02 | 3311-0017-12 |
| 3.0          | 3.4 | 2.3 | PU-3       | 3311-0017-03 | 3311-0017-13 |
| 4.0          | 4.8 | 3.7 | PU-4       | 3311-0017-04 | 3311-0017-14 |

### 90° Pneumatic Contacts



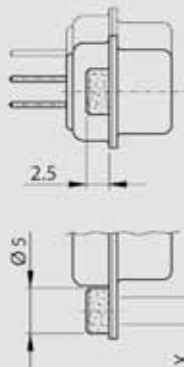
| Tube Inner Ø | ØA  | ØB  | Air Tube | Plug         | Socket       |
|--------------|-----|-----|----------|--------------|--------------|
| 2.0          | 2.6 | 1.5 | PU-2     | 3311-0018-01 | 3311-0018-11 |
| 3.0          | 3.4 | 2.3 | PU-3     | 3311-0018-02 | 3311-0018-12 |



# ASSEMBLIES

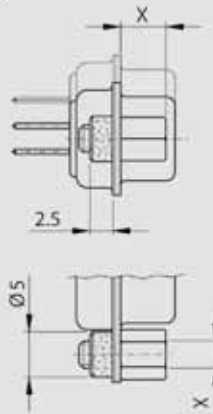
For straight versions

**M85 x**



|        |          |          |
|--------|----------|----------|
| M85 UN | Back Nut | UNC 4-40 |
| M85 M3 | Back Nut | M3       |

**M85 xx**



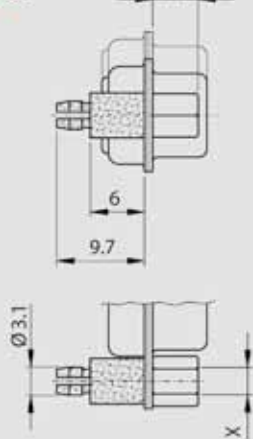
|           |                         |          |
|-----------|-------------------------|----------|
| M85 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M85 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M85 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M85 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

**M86 x**



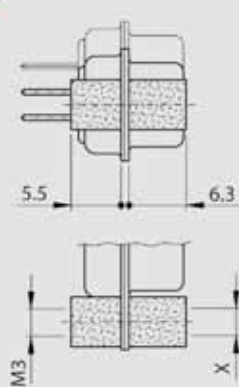
|        |         |          |
|--------|---------|----------|
| M86 UN | Push-On | UNC 4-40 |
| M86 M3 | Push-On | M3       |

**M86 xx**



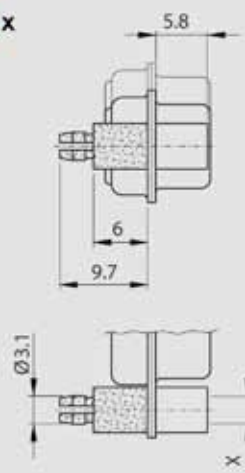
|           |                         |          |
|-----------|-------------------------|----------|
| M86 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M86 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M86 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M86 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

**M15 x**



|        |      |          |
|--------|------|----------|
| M15 UN | Bolt | UNC 4-40 |
| M15 M3 | Bolt | M3       |

**M88 x**

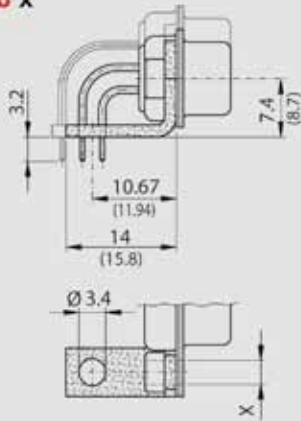


|        |              |          |
|--------|--------------|----------|
| M88 UN | Bolt         | UNC 4-40 |
|        | with Push-On |          |
| M88 M3 | Bolt         | M3       |
|        | with Push-On |          |

# ASSEMBLIES, Mounting Height 7.4 mm

For solder pin 90°, 9.4 mm (YC)

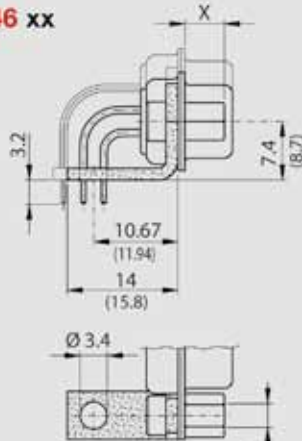
**M46 x**



**Metal Bracket**

|        |          |          |
|--------|----------|----------|
| M46 D3 | Rivet    | Ø 3.1 mm |
| M46 UN | Back Nut | UNC 4-40 |
| M46 M3 | Back Nut | M3       |

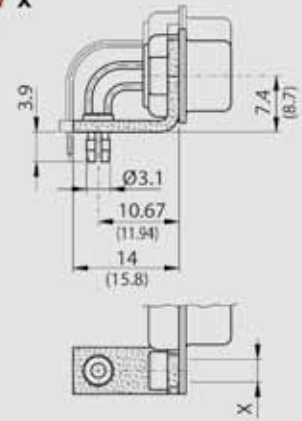
**M46 xx**



**Metal Bracket**

|           |                         |          |
|-----------|-------------------------|----------|
| M46 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M46 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M46 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M46 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

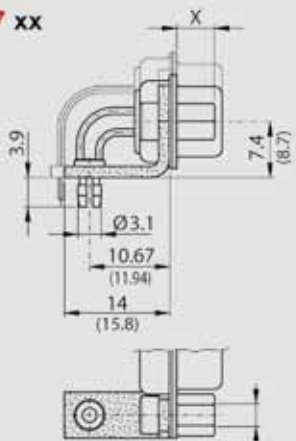
**M47 x**



**Metal Bracket with P.o.F.**

|        |          |          |
|--------|----------|----------|
| M47 D3 | Rivet    | Ø 3.1 mm |
| M47 UN | Back Nut | UNC 4-40 |
| M47 M3 | Back Nut | M3       |

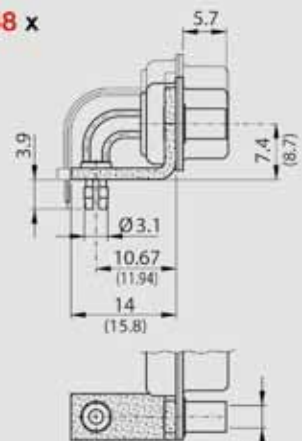
**M47 xx**



**Metal Bracket with P.o.F.**

|           |                         |          |
|-----------|-------------------------|----------|
| M47 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M47 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M47 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M47 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

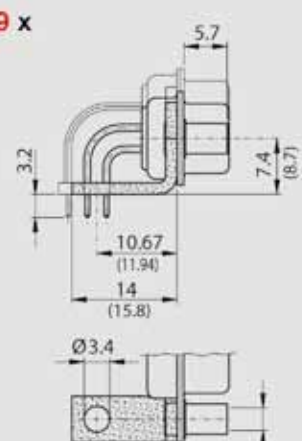
**M48 x**



**Metal Bracket with P.o.F.**

|        |           |          |
|--------|-----------|----------|
| M48 UN | Front Nut | UNC 4-40 |
| M48 M3 | Front Nut | M3       |

**M49 x**



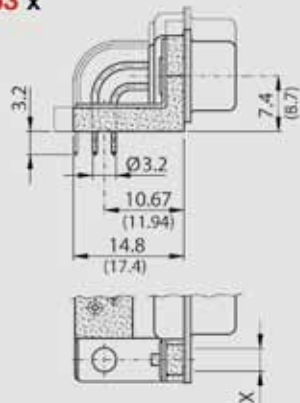
**Metal Bracket**

|        |           |          |
|--------|-----------|----------|
| M49 UN | Front Nut | UNC 4-40 |
| M49 M3 | Front Nut | M3       |

# ASSEMBLIES, Mounting Height 7.4 mm

For solder pin 90°, 9.4 mm (YC)

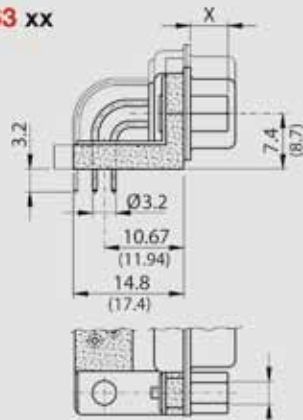
**M63 x**



Plastic Bracket with Ground Strap

|        |          |          |
|--------|----------|----------|
| M63 D3 | Rivet    | Ø 3.1 mm |
| M63 UN | Back Nut | UNC 4-40 |
| M63 M3 | Back Nut | M3       |

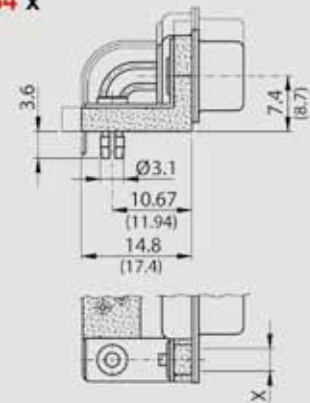
**M63 xx**



Plastic Bracket with Ground Strap

|           |                         |          |
|-----------|-------------------------|----------|
| M63 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M63 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M63 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M63 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

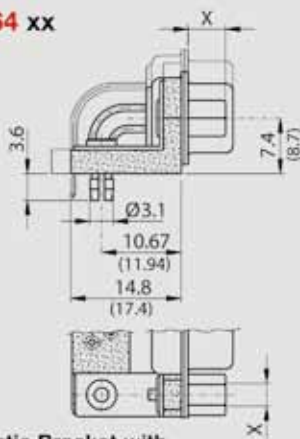
**M64 x**



Plastic Bracket with Ground Strap and P.o.F.

|        |          |          |
|--------|----------|----------|
| M64 D3 | Rivet    | Ø 3.1 mm |
| M64 UN | Back Nut | UNC 4-40 |
| M64 M3 | Back Nut | M3       |

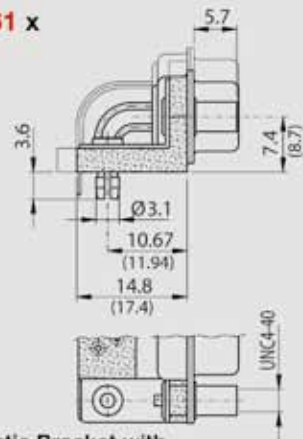
**M64 xx**



Plastic Bracket with Ground Strap and P.o.F.

|           |                         |          |
|-----------|-------------------------|----------|
| M64 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M64 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M64 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M64 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

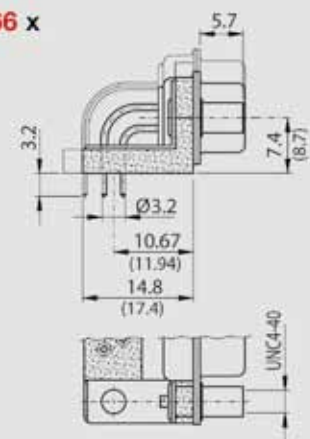
**M61 x**



Plastic Bracket with Ground Strap and P.o.F.

|        |           |          |
|--------|-----------|----------|
| M61 UN | Front Nut | UNC 4-40 |
| M61 M3 | Front Nut | M3       |

**M66 x**



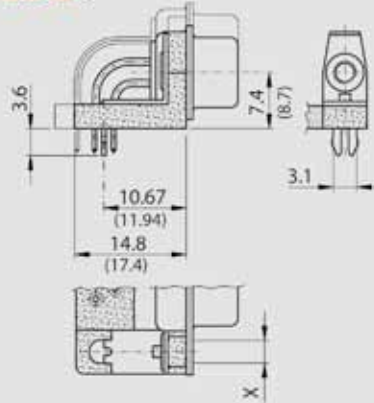
Plastic Bracket with Ground Strap

|        |           |          |
|--------|-----------|----------|
| M66 UN | Front Nut | UNC 4-40 |
| M66 M3 | Front Nut | M3       |

ASSEMBLIES, Mounting Height 7.4 mm

For solder pin 90°, 9.4 mm (YC)

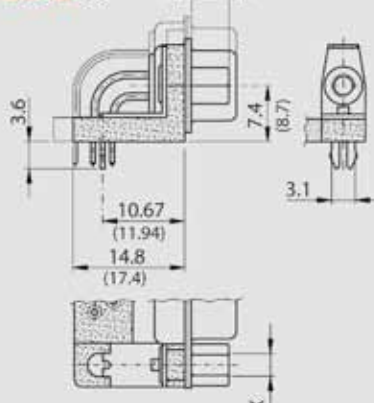
M64Z x



Plastic Bracket with Ground Clip

|         |          |          |
|---------|----------|----------|
| M64Z D3 | Rivet    | Ø 3.1 mm |
| M64Z UN | Back Nut | UNC 4-40 |
| M64Z M3 | Back Nut | M3       |

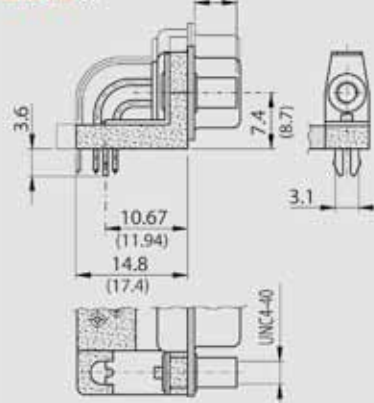
M64Z xx



Plastic Bracket with Ground Clip

|            |                         |          |
|------------|-------------------------|----------|
| M64Z UN B5 | Back Nut                | UNC 4-40 |
|            | with Screw, 5 mm thread |          |
| M64Z UN B6 | Back Nut                | UNC 4-40 |
|            | with Screw, 6 mm thread |          |
| M64Z M3 B5 | Back Nut                | M3       |
|            | with Screw, 5 mm thread |          |
| M64Z M3 B6 | Back Nut                | M3       |
|            | with Screw, 6 mm thread |          |

M61Z x



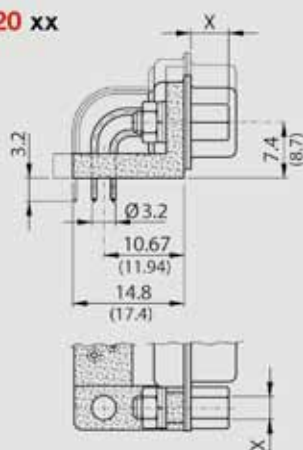
Plastic Bracket with Ground Clip

|         |           |          |
|---------|-----------|----------|
| M61Z UN | Front Nut | UNC 4-40 |
| M61Z M3 | Front Nut | M3       |

# ASSEMBLIES, Mounting Height 7.4 mm

For solder pin 90°, 9.4 mm (YC)

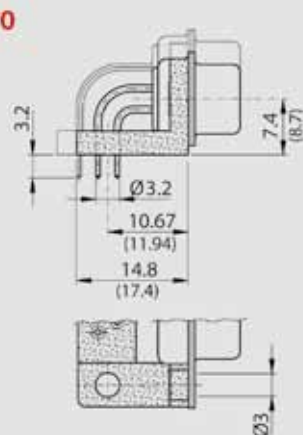
**M20 xx**



Plastic Bracket

|           |             |          |
|-----------|-------------|----------|
| M20 UN B5 | Screw Lock  | UNC 4-40 |
|           | 5 mm thread |          |
| M20 UN B5 | Screw Lock  | UNC 4-40 |
|           | 6 mm thread |          |
| M20 M3 B5 | Screw Lock  | M3       |
|           | 5 mm thread |          |
| M20 M3 B6 | Screw Lock  | M3       |
|           | 6 mm thread |          |

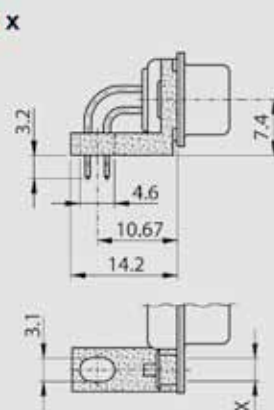
**M70**



Plastic Bracket

|     |       |          |
|-----|-------|----------|
| M70 | Rivet | Ø 3.1 mm |
|-----|-------|----------|

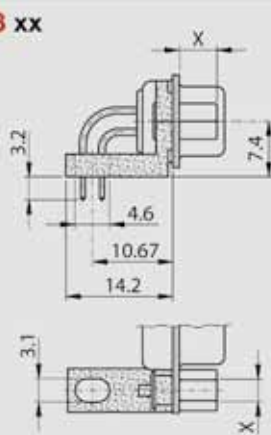
**M73 x**



Plastic Bracket

|        |          |          |
|--------|----------|----------|
| M73 UN | Back Nut | UNC 4-40 |
| M73 M3 | Back Nut | M3       |

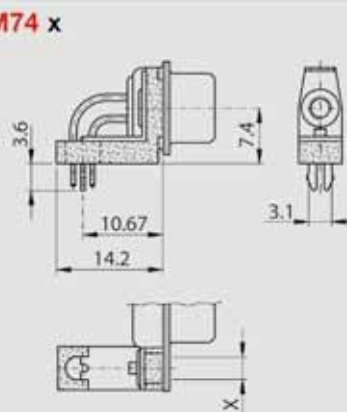
**M73 xx**



Plastic Bracket

|           |                         |          |
|-----------|-------------------------|----------|
| M73 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M73 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M73 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M73 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

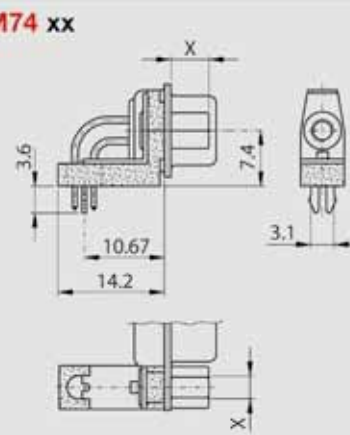
**M74 x**



Plastic Bracket with Ground Strap

|        |          |          |
|--------|----------|----------|
| M74 UN | Back Nut | UNC 4-40 |
| M74 M3 | Back Nut | M3       |

**M74 xx**



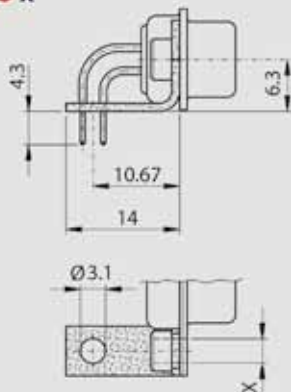
Plastic Bracket with Ground Strap

|           |                         |          |
|-----------|-------------------------|----------|
| M74 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M74 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M74 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M74 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

# ASSEMBLIES, Mounting Height 6.3 mm

For solder pin 90°, 9.4 mm (YC)

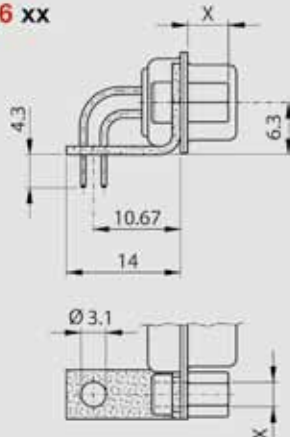
M56 x



Metal Bracket

|        |          |          |
|--------|----------|----------|
| M56 D3 | Rivet    | Ø 3.1 mm |
| M56 UN | Back Nut | UNC 4-40 |
| M56 M3 | Back Nut | M3       |

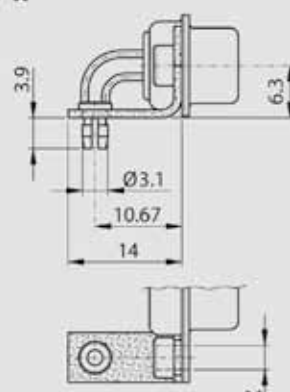
M56 xx



Metal Bracket

|           |                         |          |
|-----------|-------------------------|----------|
| M56 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M56 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M56 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M56 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

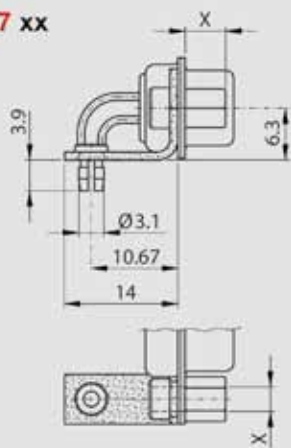
M57 x



Metal Bracket with P.o.F.

|        |          |          |
|--------|----------|----------|
| M57 D3 | Rivet    | Ø 3.1 mm |
| M57 UN | Back Nut | UNC 4-40 |
| M57 M3 | Back Nut | M3       |

M57 xx



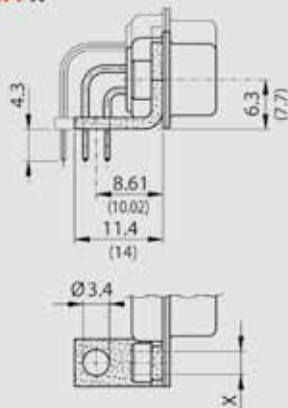
Metal Bracket with P.o.F.

|           |                         |          |
|-----------|-------------------------|----------|
| M57 UN B5 | Back Nut                | UNC 4-40 |
|           | with Screw, 5 mm thread |          |
| M57 UN B6 | Back Nut                | UNC 4-40 |
|           | with Screw, 6 mm thread |          |
| M57 M3 B5 | Back Nut                | M3       |
|           | with Screw, 5 mm thread |          |
| M57 M3 B6 | Back Nut                | M3       |
|           | with Screw, 6 mm thread |          |

# ASSEMBLIES, Mounting Height 6.3 mm

For solder pin 90°, 7.18 mm (YCA)

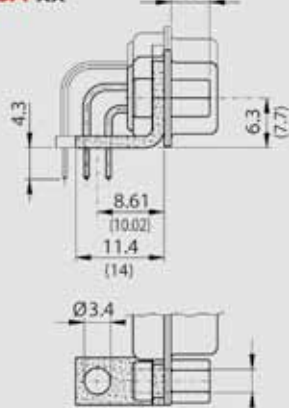
**M46A x**



**Metal Bracket**

|         |          |          |
|---------|----------|----------|
| M46A D3 | Rivet    | Ø 3.1 mm |
| M46A UN | Back Nut | UNC 4-40 |
| M46A M3 | Back Nut | M3       |

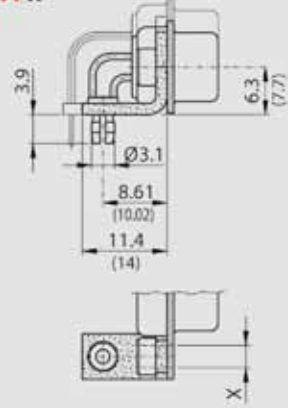
**M46A xx**



**Metal Bracket**

|            |                         |          |
|------------|-------------------------|----------|
| M46A UN B5 | Back Nut                | UNC 4-40 |
|            | with Screw, 5 mm thread |          |
| M46A UN B6 | Back Nut                | UNC 4-40 |
|            | with Screw, 6 mm thread |          |
| M46A M3 B5 | Back Nut                | M3       |
|            | with Screw, 5 mm thread |          |
| M46A M3 B6 | Back Nut                | M3       |
|            | with Screw, 6 mm thread |          |

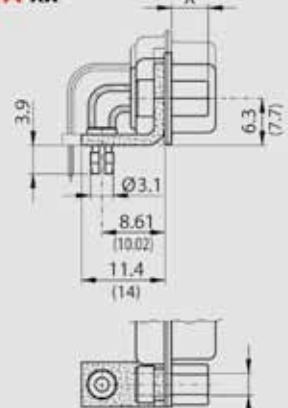
**M47A x**



**Metal Bracket with P.o.F.**

|         |          |          |
|---------|----------|----------|
| M47A D3 | Rivet    | Ø 3.1 mm |
| M47A UN | Back Nut | UNC 4-40 |
| M47A M3 | Back Nut | M3       |

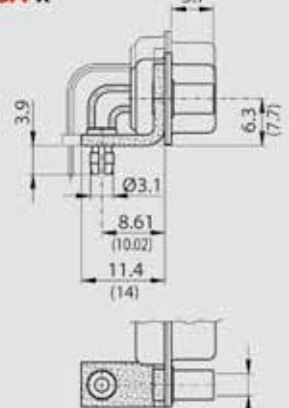
**M47A xx**



**Metal Bracket with P.o.F.**

|            |                         |          |
|------------|-------------------------|----------|
| M47A UN B5 | Back Nut                | UNC 4-40 |
|            | with Screw, 5 mm thread |          |
| M47A UN B6 | Back Nut                | UNC 4-40 |
|            | with Screw, 6 mm thread |          |
| M47A M3 B5 | Back Nut                | M3       |
|            | with Screw, 5 mm thread |          |
| M47A M3 B6 | Back Nut                | M3       |
|            | with Screw, 6 mm thread |          |

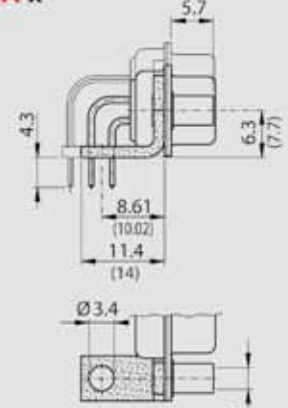
**M48A x**



**Metal Bracket with P.o.F.**

|         |           |          |
|---------|-----------|----------|
| M48A UN | Front Nut | UNC 4-40 |
| M48A M3 | Front Nut | M3       |

**M49A x**



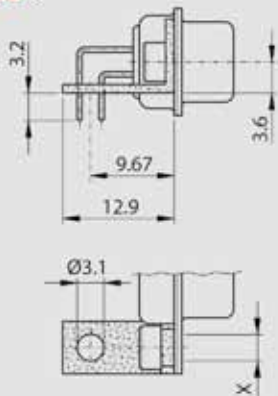
**Metal Bracket**

|         |           |          |
|---------|-----------|----------|
| M49A UN | Front Nut | UNC 4-40 |
| M49A M3 | Front Nut | M3       |

# ASSEMBLIES, Mounting Height 3.6 mm

For solder pin Eurostyle, 8.4 mm (YC-E)

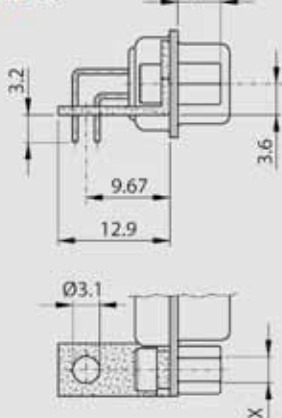
M446 x



Metal Bracket

|         |          |          |
|---------|----------|----------|
| M446 D3 | Rivet    | Ø 3.1 mm |
| M446 UN | Back Nut | UNC 4-40 |
| M446 M3 | Back Nut | M3       |

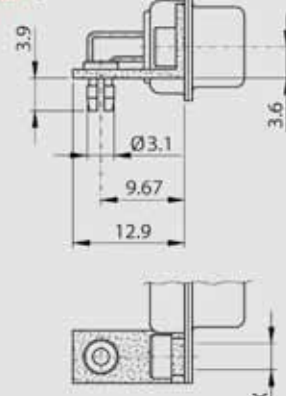
M446 xx



Metal Bracket

|                         |          |          |
|-------------------------|----------|----------|
| M446 UN B5              | Back Nut | UNC 4-40 |
| with Screw, 5 mm thread |          |          |
| M446 UN B6              | Back Nut | UNC 4-40 |
| with Screw, 6 mm thread |          |          |
| M446 M3 B5              | Back Nut | M3       |
| with Screw, 5 mm thread |          |          |
| M446 M3 B6              | Back Nut | M3       |
| with Screw, 6 mm thread |          |          |

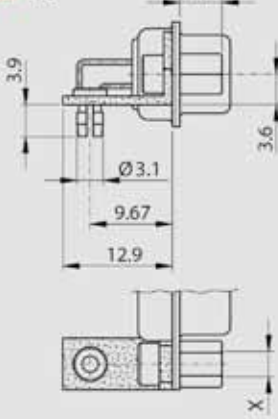
M447 x



Metal Bracket with P.o.F.

|         |          |          |
|---------|----------|----------|
| M447 D3 | Rivet    | Ø 3.1 mm |
| M447 UN | Back Nut | UNC 4-40 |
| M447 M3 | Back Nut | M3       |

M447 xx



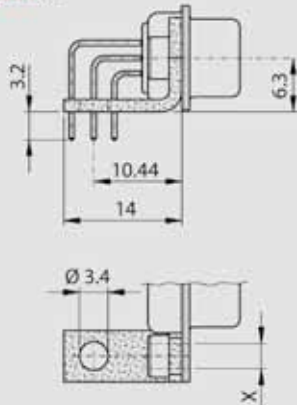
Metal Bracket with P.o.F.

|                         |          |          |
|-------------------------|----------|----------|
| M447 UN B5              | Back Nut | UNC 4-40 |
| with Screw, 5 mm thread |          |          |
| M447 UN B6              | Back Nut | UNC 4-40 |
| with Screw, 6 mm thread |          |          |
| M447 M3 B5              | Back Nut | M3       |
| with Screw, 5 mm thread |          |          |
| M447 M3 B6              | Back Nut | M3       |
| with Screw, 6 mm thread |          |          |

## ASSEMBLIES, Mounting Height 6.3 mm

For solder pin 90°, 7.9 mm (YC-E) High Density Only

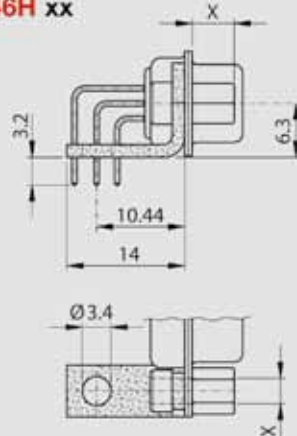
**M46H x**



**Metal Bracket**

|         |          |          |
|---------|----------|----------|
| M46H D3 | Rivet    | Ø 3.1 mm |
| M46H UN | Back Nut | UNC 4-40 |
| M46H M3 | Back Nut | M3       |

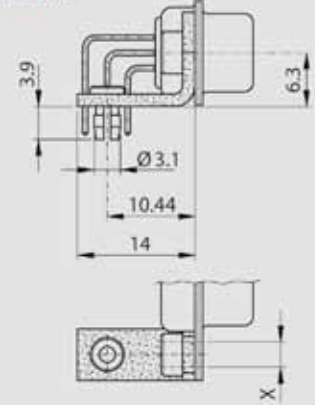
**M46H xx**



**Metal Bracket**

|            |                         |          |
|------------|-------------------------|----------|
| M46H UN B5 | Back Nut                | UNC 4-40 |
|            | with Screw, 5 mm thread |          |
| M46H UN B6 | Back Nut                | UNC 4-40 |
|            | with Screw, 6 mm thread |          |
| M46H M3 B5 | Back Nut                | M3       |
|            | with Screw, 5 mm thread |          |
| M46H M3 B6 | Back Nut                | M3       |
|            | with Screw, 6 mm thread |          |

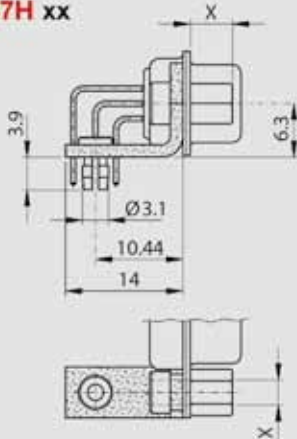
**M47H x**



**Metal Bracket with P.o.F.**

|         |          |          |
|---------|----------|----------|
| M47H D3 | Rivet    | Ø 3.1 mm |
| M47H UN | Back Nut | UNC 4-40 |
| M47H M3 | Back Nut | M3       |

**M47H xx**



**Metal Bracket with P.o.F.**

|            |                         |          |
|------------|-------------------------|----------|
| M47H UN B5 | Back Nut                | UNC 4-40 |
|            | with Screw, 5 mm thread |          |
| M47H UN B6 | Back Nut                | UNC 4-40 |
|            | with Screw, 6 mm thread |          |
| M47H M3 B5 | Back Nut                | M3       |
|            | with Screw, 5 mm thread |          |
| M47H M3 B6 | Back Nut                | M3       |
|            | with Screw, 6 mm thread |          |

## ProfiBus module PB 12 Mbaud

**BUS:** Intermediary connector without switchable resistor-network

**End of BUS:** Connector with switchable resistor network (ON/OFF)

DP = Standard Version

PG = With programming Connection

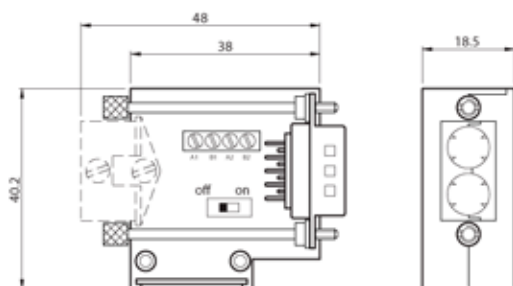
Housing available in Plastic (Black) or Metalized

Also available for Data Rate 1,5 Mbaud on request

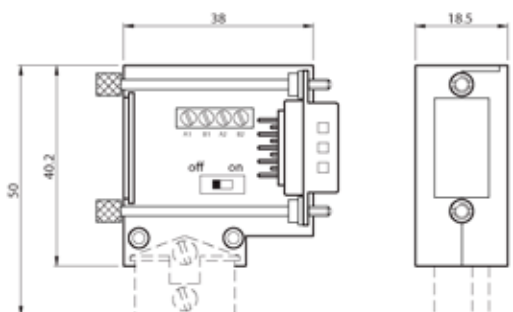
Please contact us for further Technical Information



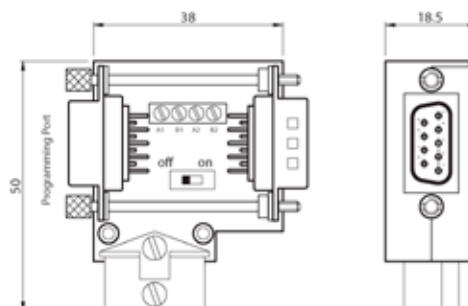
### Horizontal Assembly - DP Version



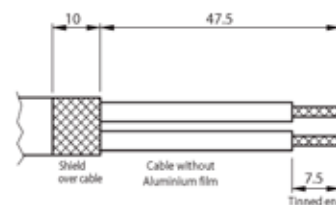
### Vertical Assembly - DP Version



### Vertical Assembly - PG Version



### Cable Preparation



| Line: | D-Sub: | Incoming:  | Outgoing:  |
|-------|--------|------------|------------|
| P     | Pin 3  | B1 / Red   | B2 / Red   |
| N     | Pin 8  | A1 / Green | A2 / Green |

Terminals, rigid from 0.14 to 1.5 mm<sup>2</sup>  
Flexible from 0.14 to 1.0 mm<sup>2</sup>  
Integrated inductors to reduce the Inline reflections.

### Order Codes:

| Part No:     | Product Code: | Version: | Function: Bus/End of Bus | Housing:      |
|--------------|---------------|----------|--------------------------|---------------|
| 3330-0100-01 | PB-B12MB      | DP       | Bus                      | Black Plastic |
| 3330-0100-11 | PB-F-12MB     | DP       | End of Bus               | Black Plastic |
| 3330-0100-02 | PB-MB-12MB    | DP       | Bus                      | Metalized     |
| 3330-0100-12 | PB-MF-12MB    | DP       | End of Bus               | Metalized     |
| 3330-0100-03 | PB-F-12MB-PG  | PG       | End of Bus               | Black Plastic |
| 3330-0100-04 | PB-MF-12MB-PG | PG       | End of Bus               | Metalized     |

## ProfiBus module PBA 12 Mbaud

**BUS:** Intermediary connector without switchable resistor-network

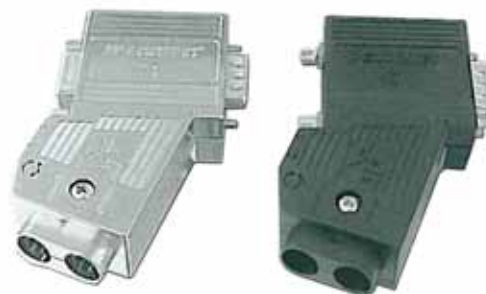
**End of BUS:** Connector with switchable resistor network (ON/OFF)

**DP** = Standard Version

**PG** = With programming Connection

**IDC** = With Insulation Displacement Connection

Please contact us for further Technical Information



### Technical Data:

Terminals, rigid from 0.14 to 1.5 mm<sup>2</sup>  
Flexible from 0.14 to 1.0 mm<sup>2</sup>

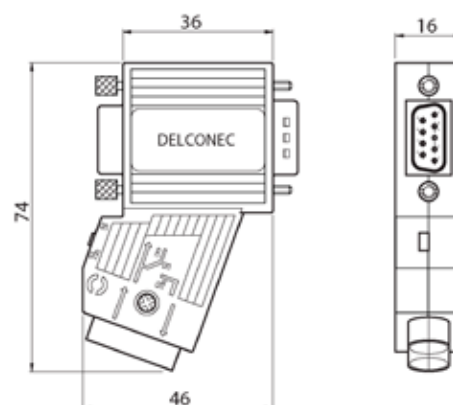
Cable Outlet: 70° Angled  
Temperature Range: -25°C to +85°C

Housing available in Plastic (Black) or Metalized  
Also available in IDC version on request.

| Line: | D-Sub: | Incoming:  | Outgoing:  |
|-------|--------|------------|------------|
| P     | Pin 3  | B1 / Red   | B2 / Red   |
| N     | Pin 8  | A1 / Green | A2 / Green |

### 70° Angled Assembly

### PBA or PBA IDC



**IDC** = Insulation Displacement Connection.  
Max Insulation on IDC Version: Ø 2.8mm

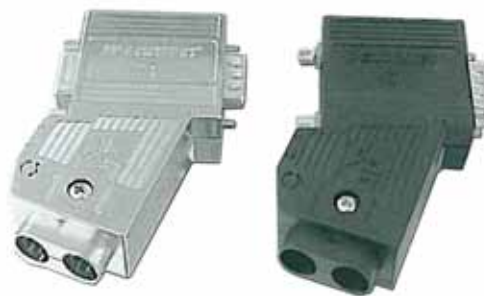
## Order Codes:

| Part No:     | Product Code:      | Version: | Function: Bus/End of Bus | Housing:      |
|--------------|--------------------|----------|--------------------------|---------------|
| 3330-0200-01 | PBA-B12MB          | DP       | Bus                      | Black Plastic |
| 3330-0200-11 | PBA-F-12MB         | DP       | End of Bus               | Black Plastic |
| 3330-0200-02 | PBA-MB-12MB        | DP       | Bus                      | Metalized     |
| 3330-0200-12 | PBA-MF-12MB        | DP       | End of Bus               | Metalized     |
| 3330-0200-03 | PBA-F-12MB-PG      | PG       | End of Bus               | Black Plastic |
| 3330-0200-04 | PBA-MF-12MB-PG     | PG       | End of Bus               | Metalized     |
| 3330-0300-01 | PBA-B12MB-IDC      | DP-IDC   | Bus                      | Black Plastic |
| 3330-0300-11 | PBA-F-12MB-IDC     | DP-IDC   | End of Bus               | Black Plastic |
| 3330-0300-02 | PBA-MB-12MB-IDC    | DP-IDC   | Bus                      | Metalized     |
| 3330-0300-12 | PBA-MF-12MB-IDC    | DP-IDC   | End of Bus               | Metalized     |
| 3330-0300-03 | PBA-F-12MB-PG-IDC  | PG-IDC   | End of Bus               | Black Plastic |
| 3330-0300-04 | PBA-MF-12MB-PG-IDC | PG-IDC   | End of Bus               | Metalized     |

## CanBus Module (CBA) up to 1 Mbaud

DIN 11898, 9-pole

**PG** = With programming Connection



Please contact us for further Technical Information

### Technical Data:

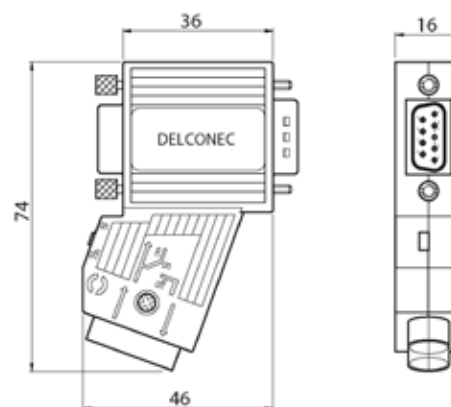
Terminals, rigid from 0.14 to 1.5 mm<sup>2</sup>  
Flexible from 0.14 to 1.0 mm<sup>2</sup>  
Integrated, Switchable Resistor

Cable Outlet: 70° Angled  
Temperature Range: -25°C to +85°C  
Power Consumption: ≤ 5mA  
Data Rate: 1 Mbit/s  
Power Supply: Over FieldBus 4.75 to 5.25V DC  
Housing: Black Plastic or Metalized Plastic

|          | D-Sub: | Incoming: | Outgoing: |
|----------|--------|-----------|-----------|
| Can-Low  | Pin 2  | A1        | A2        |
| Can-High | Pin 7  | B1        | B2        |
| Can-GND  | Pin 3  | C1        | C2        |
| Shield   | Pin 5  |           |           |

### 70° Angled Assembly

CBA



10

### Order Codes:

| Part No:     | Product Code:   | PG Connection | Housing:          |
|--------------|-----------------|---------------|-------------------|
| 3330-0900-01 | DP-CBA-DE008242 |               | Black Plastic     |
| 3330-0900-02 | DP-CBA-DE008455 |               | Metalized Plastic |
| 3330-0900-03 | DP-CBA-DE008464 | X             | Black Plastic     |
| 3330-0900-04 | DP-CBA-DE008465 | X             | Metalized Plastic |

## TECHNICAL SPECIFICATIONS

### Material:

Connector Housing: Glass-Filled TP BLACK  
UL94 V-0 Class

Contacts: Brass

Shell: Steel, Tin-plated over Ni

### Electrical Specifications:

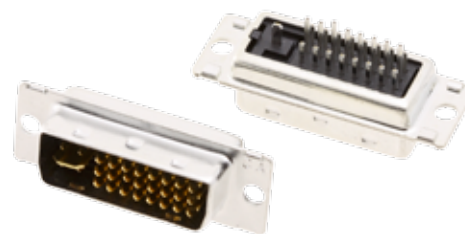
Voltage Rating: 500 V AC R.M.S.

Current Rating: 1,5 Amp

Insulation Resistance: 1000 MΩ Min.

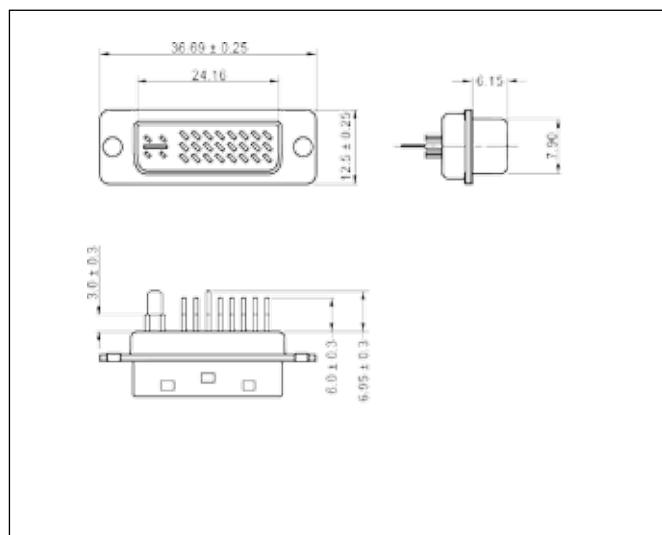
Contact Resistance: 20 mΩ Max. (Initial)

Operating Temperature: -20°C to +85°C



### Male Connector

- Suitable for Cable and Hood Mounting



|  |                                              |
|--|----------------------------------------------|
|  | 17 Contacts<br>Analog<br>12+4+Key            |
|  | 19 Contacts<br>Digital Single Link<br>18+Key |
|  | 23 Contacts<br>Analog / Digital<br>18+4+Key  |
|  | 25 Contacts<br>Digital Dual Link<br>24+Key   |
|  | 29 Contacts<br>Analog / Digital<br>24+4+Key  |

## Ordering information:

| Size/Type:       | Part Number: | Product Code: |
|------------------|--------------|---------------|
| 17-pin Analog    | 3401-0101-01 | DVI-17-MCA    |
| 19-pin Digital-S | 3401-0101-02 | DVI-19-MCD    |
| 23-pin A/D       | 3401-0101-03 | DVI-23-MCAD   |
| 25-pin Digital-D | 3401-0101-04 | DVI-25-MCD    |
| 29-pin A/D       | 3401-0101-05 | DVI-29-MCAD   |

The male MHDVI connector suit Shielded Hood MHDVI-CM found on page 112.

## TECHNICAL SPECIFICATIONS

**Material:**

Connector Housing: Glass-Filled TP  
UL94 V-0 Class

Contacts: Phosphor, Bronze  
Gold-Flash

Shell: Zinc Alloy, Ni-plated

**Electrical Specifications:**

Voltage Rating: 500 V AC R.M.S.

Current Rating: 1,5 Amp

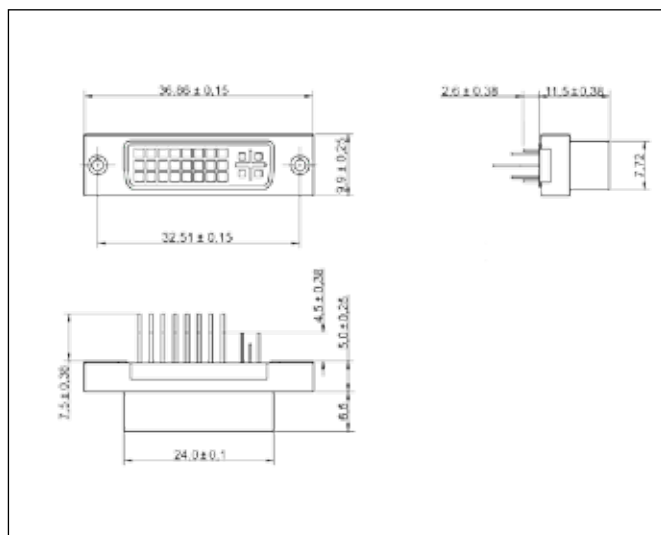
Insulation Resistance: 1000 MΩ Min.

Contact Resistance: 20 mΩ Max. (Initial)

Operating Temperature: -20°C to +85°C

**Female Connector**

- Suitable for Cable and Hood Mounting



## Ordering information:

| Size/Type:       | Part Number: | Product Code: |
|------------------|--------------|---------------|
| 17-pin Analog    | 3401-0101-11 | On request    |
| 19-pin Digital-S | 3401-0101-12 | On request    |
| 23-pin A/D       | 3401-0101-13 | On request    |
| 25-pin Digital-D | 3401-0101-14 | MHDVI-25-FCD  |
| 29-pin A/D       | 3401-0101-15 | MHDVI-29-FCAD |

Standard parts are 25 and 29 pins  
17, 19 and 23 pins are available on request.

The female MHDVI connector suit Shielded Hood  
MHDVI-CF found on page 113.

## TECHNICAL SPECIFICATIONS

**Material:**

Plastic Hood: PVC  
 Metal Hood: SPCC, Nickel over Copper

Operating Temperature: -30°C to +90°C

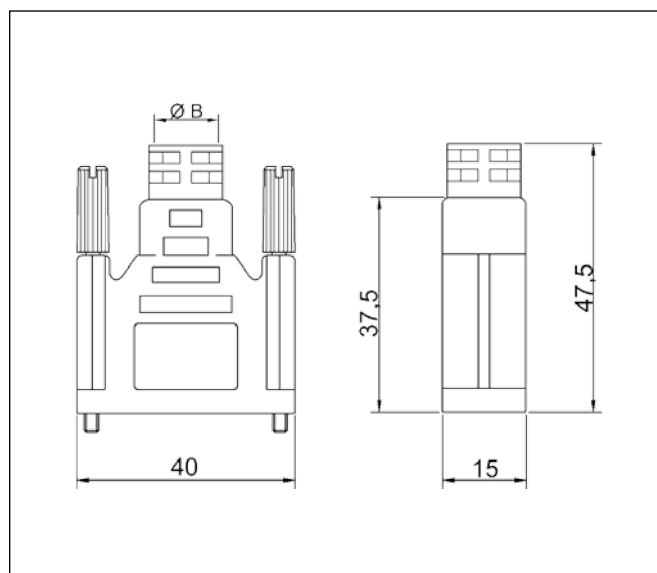
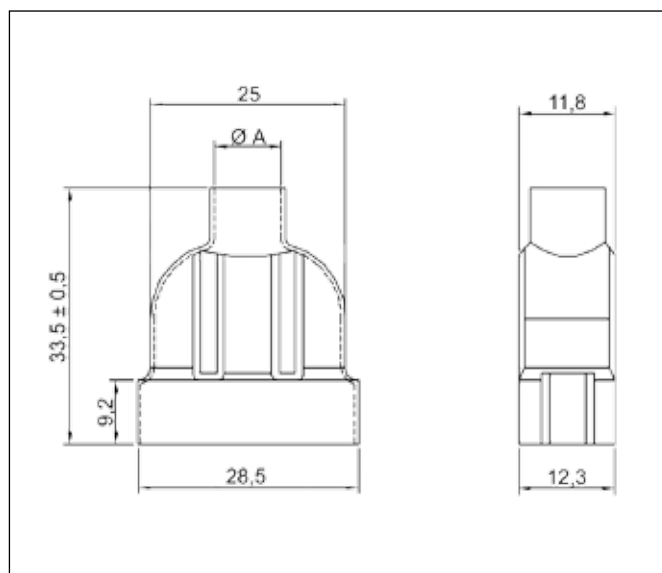
Cable Entry: Top

Thumbscrews: UNC 4-40

Cable Diameter: Up to 11,0 mm



Suitable connector can be found on page 110



## Ordering information:

Plastic and Metal Hoods are delivered as Kits.

| P/N - BULK:  | Product Code: | Cable O.D. (max) | Ø A  | Ø B  | Note:                 |
|--------------|---------------|------------------|------|------|-----------------------|
| 3400-0105-01 | DVI-CM-HA     | 6,5 mm           | 6,5  | 5,5  |                       |
| 3400-0105-02 | DVI-CM-EB     | 7,5 mm           | 7,5  | 6,5  | Commonly ordered Part |
| 3400-0105-03 | DVI-CM-AD     | 8,5 mm           | 8,5  | 7,5  |                       |
| 3400-0105-04 | DVI-CM-FF     | 9,0 mm           | 9,0  | 8,8  | Commonly ordered Part |
| 3400-0105-05 | DVI-CM-BE     | 9,5 mm           | 9,5  | 9,0  |                       |
| 3400-0105-06 | DVI-CM-GG     | 10,0 mm          | 10,0 | 9,5  | Commonly ordered Part |
| 3400-0105-07 | DVI-CM-CH     | 11,0 mm          | 11,0 | 10,0 |                       |
| 3400-0105-08 | DVI-CM-IH     | 11,0 mm          | 11,0 | 11,0 |                       |
| 3400-0105-09 | DVI-CM-DI     | 12,0 mm          | 12,0 | 11,0 |                       |

## TECHNICAL SPECIFICATIONS

### Material:

Plastic Hood: PVC  
Metal Hood: SPCC, Nickel over Copper

Operating Temperature: -30°C to +90°C

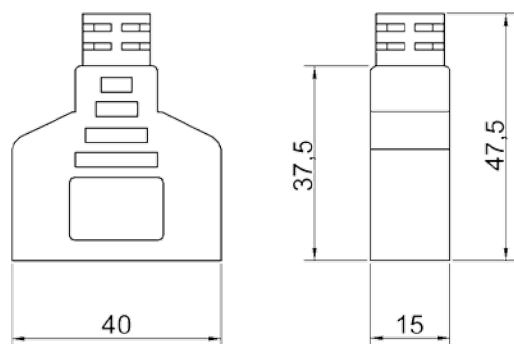
Cable Entry: Top

Cable Diameter: Up to 9,5 mm

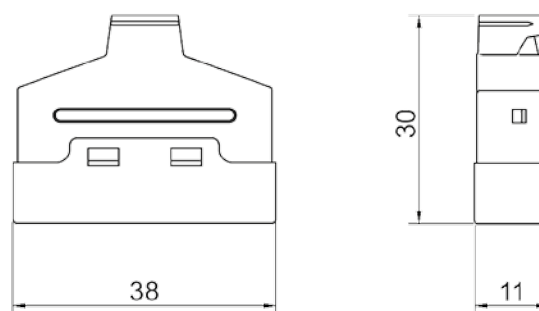


Suitable connector can be found on page 111

DVI-CF-8.0 / 9.5



DVI-CF-MC



### Ordering Information:

#### Plastic Hoods

| P/N - BULK:  | Product Code: | Cable O.D. (max) |
|--------------|---------------|------------------|
| 3400-0106-01 | DVI-CF-8.0    | 8,0 mm           |
| 3400-0106-02 | DVI-CF-9.5    | 9,5 mm           |

#### Metal Hoods

| P/N - BULK:  | Product Code: | Cable O.D. (max) |
|--------------|---------------|------------------|
| 3400-0106-10 | DVI-CF-MC     | 9,5 mm           |

Plastic and Metal Hoods are ordered separately.  
The Metal Hood DVI-CF-MC suit both the available  
Female Plastic Hoods (8,0mm - 9,5mm)

## TECHNICAL SPECIFICATIONS

### Material:

Connector Housing: Glass-Filled TP  
UL94 V-0 Class

Contacts: Phosphor, Bronze  
Gold-Flash

Shell: Zinc Alloy, Ni-plated

### Electrical Specifications:

Voltage Rating: 500 V AC R.M.S.

Current Rating: 1,5 Amp

Insulation Resistance: 1000 MΩ Min.

Contact Resistance: 20 mΩ Max. (Initial)

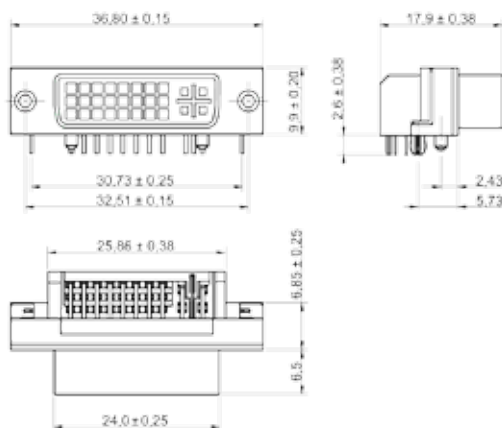
Operating Temperature: -20°C to +85°C



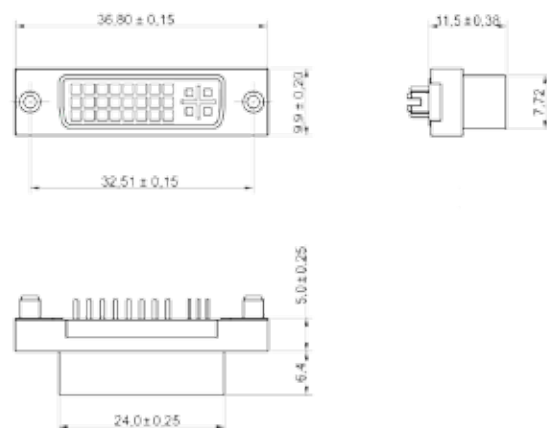
### Female Connector

- Suitable for PCB Mounting

#### Angled PCB Connector



#### Straight PCB Connector



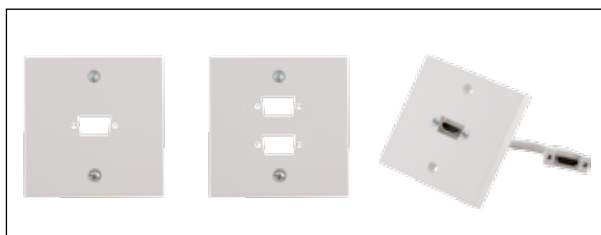
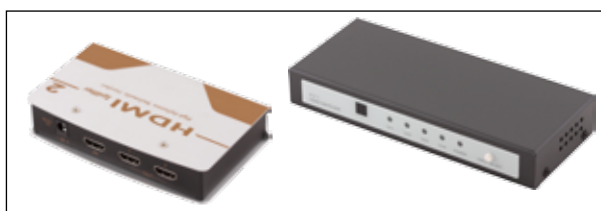
### Ordering information:

Angled Version

| Size/Type:       | Part Number: | Product Code: |
|------------------|--------------|---------------|
| 17-pin Analog    | 3401-0102-01 | On request    |
| 19-pin Digital-S | 3401-0102-02 | On request    |
| 23-pin A/D       | 3401-0102-03 | On request    |
| 25-pin Digital-D | 3401-0102-04 | DVI-A25-FCD   |
| 29-pin A/D       | 3401-0102-05 | DVI-A29-FCAD  |

Straight Version

| Size/Type:       | Part Number: | Product Code: |
|------------------|--------------|---------------|
| 17-pin Analog    | 3401-0102-11 | On request    |
| 19-pin Digital-S | 3401-0102-12 | On request    |
| 23-pin A/D       | 3401-0102-13 | On request    |
| 25-pin Digital-D | 3401-0102-14 | DVI-S25-FCD   |
| 29-pin A/D       | 3401-0102-15 | DVI-S29-FCAD  |

**Features:**

Ready-to-use HDMI Cables and Accessories

**Technical Specifications:**

Type A and C, 1080p (Full HD) compatible products

| Cable (m): | Part Number: | Size/Type:    | Version: |
|------------|--------------|---------------|----------|
| 0.5m       | 5000-0001-01 | 28AWG, Type A | 1.3      |
| 1.0m       | 5000-0001-02 | 28AWG, Type A | 1.3      |
| 2.0m       | 5000-0001-03 | 28AWG, Type A | 1.3      |
| 3.0m       | 5000-0001-04 | 28AWG, Type A | 1.3      |
| 5.0m       | 5000-0001-05 | 28AWG, Type A | 1.3      |
| 8.0m       | 5000-0001-06 | 24AWG, Type A | 1.3      |
| 10.0m      | 5000-0001-07 | 24AWG, Type A | 1.3      |
| 15.0m      | 5000-0001-08 | 24AWG, Type A | 1.3      |

| Product:      | Part Number: | Size/Type:                         |
|---------------|--------------|------------------------------------|
| HDMI Splitter | 5001-0001-01 | Type A, 19 Pin, 1 Input / 2 Output |
| HDMI Splitter | 5001-0001-02 | Type A, 19 Pin, 1 Input / 4 Output |
| HDMI Switch   | 5001-0002-01 | 2.25Gbps, 4 Input / 1 Output       |

| Product:       | Part Number: | Size/Type:                    |
|----------------|--------------|-------------------------------|
| HDMI Repeater  | 5003-0001-01 | 2.25Gbps, w.Power Supp, 1080p |
| HDMI over Cat5 | 5004-0001-01 | with Power Supply, 1080p      |

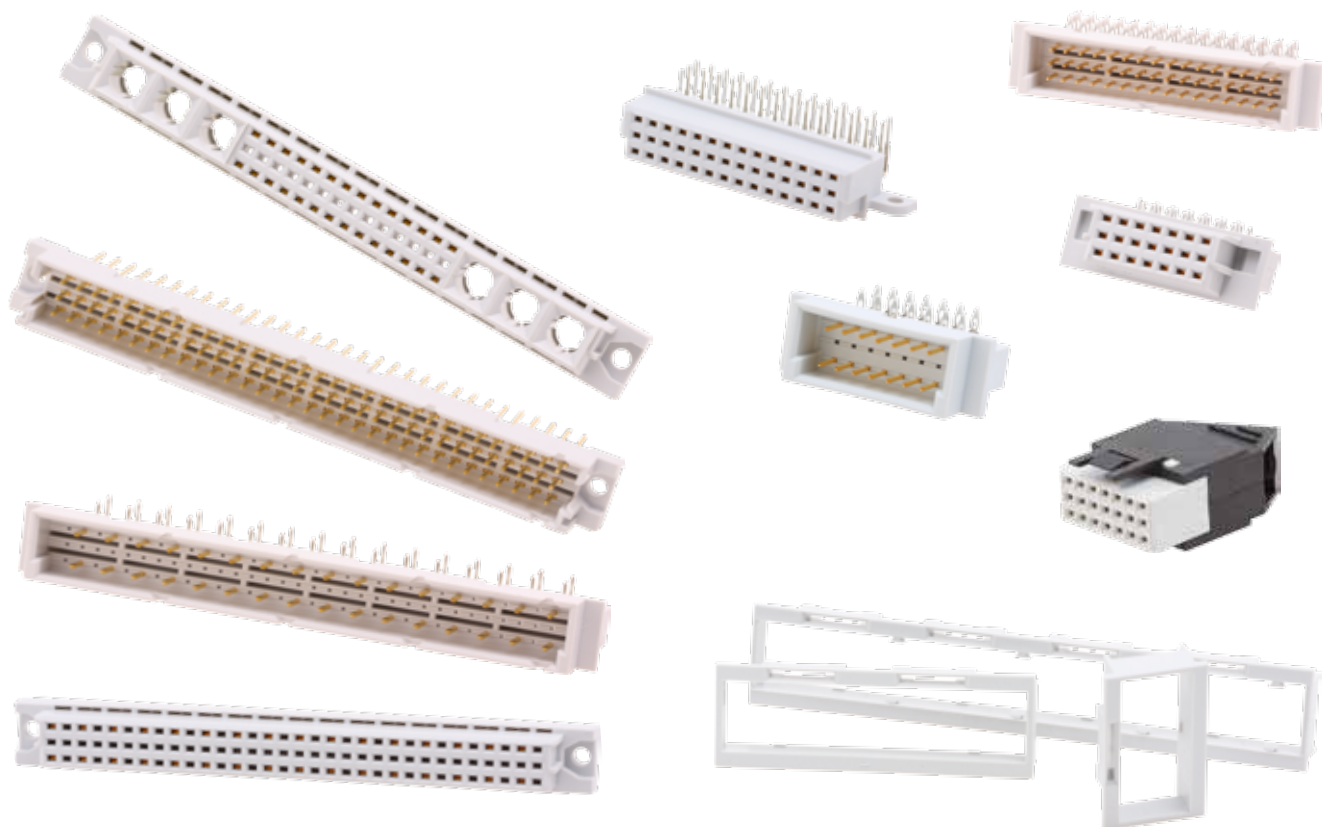
| Product:     | Part Number: | Size/Type:                    |
|--------------|--------------|-------------------------------|
| Adapter (RA) | 5004-0001-02 | Male to Female (Right Angled) |
| Adapter A-C  | 5004-0001-03 | Male to Female, Type A to C   |
| Adapter A-A  | 5004-0001-04 | Female to Female, Type A to A |
| Adapter DVI  | 5004-0001-05 | Female DVI-D to Male HDMI     |
| Adapter DVI  | 5004-0001-06 | Male DVI-D to Female HDMI     |

| Product:      | Part Number: | Size/Type:                     |
|---------------|--------------|--------------------------------|
| Wall Plate 1  | 5049-0001-01 | HDMI, Sub-D 9, HD15 x 1        |
| Wall Plate 2  | 5049-0001-02 | HDMI, Sub-D 9, HD15 x 2        |
| Wall Plate 1L | 5049-0001-03 | Loaded, 1 x HDMI + 155mm Cable |
| Wall Plate 2L | 5049-0001-04 | Loaded, 2 x HDMI + 155mm Cable |

Clip-in-module for Wall Port System available on request.

| Product:      | Part Number: | Size/Type:                   |
|---------------|--------------|------------------------------|
| Switch Cable  | 5002-0001-01 | 2.25Gbps, 2 Input / 1 Output |
| Chassis Cable | 5010-0001-01 | Female - Female, 155mm       |

## General Information MHDIN 41612

**Materials:**

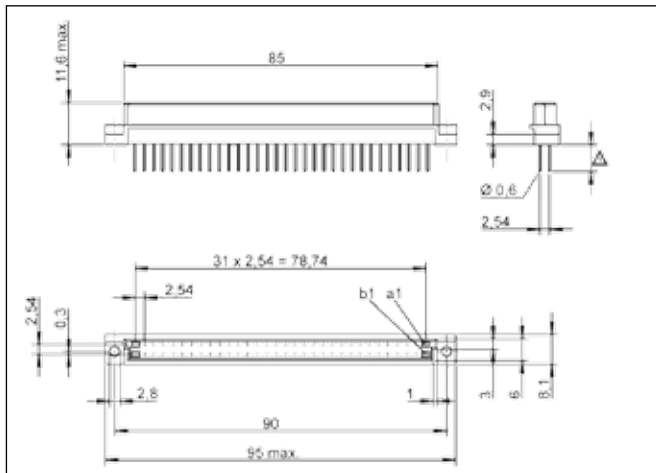
|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connector Housing:                                                                                  | Glass-Filled PE<br>UL94 V-0 Class                                                                                                                                                                                                                                                                                                                       |
| Female Contacts:                                                                                    | Phosphor, Bronze<br>Nickel all over + hard gold<br>MIL-G-45204 B Type II<br>(99.0 % gold minimum)<br>Grade C (Knoop hardness 130-200)                                                                                                                                                                                                                   |
| Male Contacts:                                                                                      | Copper alloy<br>Gold over nickel as standard or Gold flash<br>over nickelpalladium over nickel on request                                                                                                                                                                                                                                               |
| Contact Finish:                                                                                     | <ul style="list-style-type: none"> <li>• 0.8 <math>\mu\text{m}</math> hard gold over 2 <math>\mu\text{m}</math> nickel</li> <li>• 1.25 <math>\mu\text{m}</math> hard gold over 2 <math>\mu\text{m}</math> nickel</li> <li>• 2.5 <math>\mu\text{m}</math> hard gold over 3 <math>\mu\text{m}</math> nickel</li> <li>Other platings on request</li> </ul> |
| Termination Finish:                                                                                 | <ul style="list-style-type: none"> <li>• 1 <math>\mu\text{m}</math> tinlead over nickel on press-in area</li> <li>• 5 <math>\mu\text{m}</math> tin over nickel</li> <li>• 1.25 <math>\mu\text{m}</math> gold over nickel on contact area</li> <li>• 0.1 <math>\mu\text{m}</math> gold over nickel</li> <li>Other platings on request</li> </ul>         |
| Mechanical endurance, salt mist, industrial atmosphere and other requirements according to IEC 603. |                                                                                                                                                                                                                                                                                                                                                         |
| Contact surfaces mechanically polished.<br>Dual-beam female contact profiled to trapezoidal form.   |                                                                                                                                                                                                                                                                                                                                                         |

**Electrical Specifications:**

|                         |                                  |
|-------------------------|----------------------------------|
| Current Rating:         | 1.5 A at 20 °C                   |
| (Type B, C, I, M, Q, R) | 1 A at 80 °C                     |
|                         | 0.75 A at 100 °C                 |
| Current Rating:         | 5.5 A at 20 °C                   |
| (Type D only)           | 4 A at 80 °C                     |
|                         | 2.5 A at 100 °C                  |
| Proof voltage:          | Contact/contact: 1000 V (rms)    |
|                         | Contact/test panel: 1550 V (rms) |
| Insulation resistance:  | $\geq 10^6$ M $\Omega$           |
| Contact resistance:     | $\leq 20$ m $\Omega$             |
| <b>Physical Data:</b>   |                                  |
| Temperature range:      | -55°C to +125°C                  |
| Insertion force:        | 21 pole $\leq 20$ N              |
|                         | 32 pole $\leq 30$ N              |
|                         | 42 pole $\leq 40$ N              |
|                         | 48 pole $\leq 50$ N              |
|                         | 60 pole $\leq 57$ N              |
|                         | 64 pole $\leq 60$ N              |
|                         | 78 pole $\leq 74$ N              |
|                         | 96 pole $\leq 90$ N              |
| Retention force:        | $\geq 0.15$ N/contact pair       |

## DIN41612 - Type B

## Two Row Body



| TERMINATION STYLE:                                                      |   | F | FP |
|-------------------------------------------------------------------------|---|---|----|
| Straight solder tail for 1.6 mm thick PCB                               | D |   |    |
| Straight solder tail for 2.4 mm thick PCB (Press-in from 1.5 to 4.0 mm) | E |   |    |
| Wire wrap tail                                                          | F |   |    |
| Wire wrap tail                                                          | H |   |    |

## CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS

| 1   | 2  | 3  | 4  |
|-----|----|----|----|
| 5   | 6  | 7  | 8  |
| 9   | 10 | 11 | 12 |
| 13  | 14 | 15 | 16 |
| 17  | 18 | 19 | 20 |
| 21  | 22 | 23 | 24 |
| 25  | 26 | 27 | 28 |
| 29  | 30 | 31 | 32 |
| a   | b  |    |    |
| 016 |    |    |    |
| 1   | 2  | 3  | 4  |
| 5   | 6  | 7  | 8  |
| 9   | 10 | 11 | 12 |
| 13  | 14 | 15 | 16 |
| 17  | 18 | 19 | 20 |
| 21  | 22 | 23 | 24 |
| 25  | 26 | 27 | 28 |
| 29  | 30 | 31 | 32 |
| a   | b  |    |    |
| 032 |    |    |    |
| 1   | 2  | 3  | 4  |
| 5   | 6  | 7  | 8  |
| 9   | 10 | 11 | 12 |
| 13  | 14 | 15 | 16 |
| 17  | 18 | 19 | 20 |
| 21  | 22 | 23 | 24 |
| 25  | 26 | 27 | 28 |
| 29  | 30 | 31 | 32 |
| a   | b  |    |    |
| 064 |    |    |    |
| 1   | 2  | 3  | 4  |
| 5   | 6  | 7  | 8  |
| 9   | 10 | 11 | 12 |
| 13  | 14 | 15 | 16 |
| 17  | 18 | 19 | 20 |
| 21  | 22 | 23 | 24 |
| 25  | 26 | 27 | 28 |
| 29  | 30 | 31 | 32 |
| a   | b  |    |    |
| A32 |    |    |    |
| 1   | 2  | 3  | 4  |
| 5   | 6  | 7  | 8  |
| 9   | 10 | 11 | 12 |
| 13  | 14 | 15 | 16 |
| 17  | 18 | 19 | 20 |
| 21  | 22 | 23 | 24 |
| 25  | 26 | 27 | 28 |
| 29  | 30 | 31 | 32 |
| a   | b  |    |    |
| B32 |    |    |    |
| 1   | 2  | 3  | 4  |
| 5   | 6  | 7  | 8  |
| 9   | 10 | 11 | 12 |
| 13  | 14 | 15 | 16 |
| 17  | 18 | 19 | 20 |
| 21  | 22 | 23 | 24 |
| 25  | 26 | 27 | 28 |
| 29  | 30 | 31 | 32 |
| a   | b  |    |    |
| X32 |    |    |    |

## How to order:

DIN - B 064 F S - C1 E - 0,8 / 5 -001 -NP

ALTERNATIVE CONTACT FINISH  
Gold flash over Nickel Palladium over Nickel

MARKING FOR SPECIAL TYPES  
Eg First Make – Last Break Option:  
Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer.

TERMINATION FINISH  
1 1 µm tinlead over nickel on press-in area  
5 5 µm tin over nickel  
1.25 1,25 µm gold over nickel on contact area (5mm from the end)  
0.1 0.1 µm gold over nickel  
other platings on request

CONTACT FINISH  
0.8 0.8 µm hard gold over 2 µm nickel  
1.25 1,25 µm hard gold over 2 µm nickel  
2.5 2.5 µm hard gold over 3 µm nickel  
other platings on request

Complete connector with gold contact finish

TYPE OF TERMINATION  
S Solder  
W Wire Wrap  
P Press-Fit

F Female Connector

CONNECTOR TYPE  
B Two Row Body 1A

## Three Row Body

| TERMINATION STYLE:                                                         |  | F                                                                                   | FP                                                                                  | M                                                                                   | MP                                                                                  |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Angled solder tail for 1.6 mm thick PCB                                    | A                                                                                   |                                                                                     |                                                                                     |  |  |
| Straight solder tail for 1.6 mm thick PCB                                  | D                                                                                   |  |  |  |                                                                                     |
| Straight solder tail for 2.4 mm thick PCB<br>(Press-in from 1.5 to 4.0 mm) | E                                                                                   |  |  |  |                                                                                     |
| Wire wrap tail                                                             | F                                                                                   |  |                                                                                     |  |                                                                                     |
| Wire wrap tail                                                             | H                                                                                   |  |  |  |                                                                                     |
| Hand Solder Eyelet                                                         | O                                                                                   |  |                                                                                     |                                                                                     |                                                                                     |

 $\triangle_2$ [illegible]

2

|     |   |   |     |   |   |   |    |   |   |     |   |   |      |     |
|-----|---|---|-----|---|---|---|----|---|---|-----|---|---|------|-----|
| DIN | - | C | 064 | M | S | - | C1 | A | - | 0,8 | / | 5 | -001 | -NP |
|-----|---|---|-----|---|---|---|----|---|---|-----|---|---|------|-----|

|   |                                       |
|---|---------------------------------------|
| C | CONNECTOR TYPE<br>C Three Row Body 1A |
|---|---------------------------------------|

|   |                                        |
|---|----------------------------------------|
| M | M Male Connector<br>F Female Connector |
|---|----------------------------------------|

|   |                                                               |
|---|---------------------------------------------------------------|
| S | TYPE OF TERMINATION<br>S Solder<br>W Wire Wrap<br>P Press-Fit |
|---|---------------------------------------------------------------|

|    |                                             |
|----|---------------------------------------------|
| C1 | Complete connector with gold contact finish |
|----|---------------------------------------------|

|     |                                                                                                                                                                          |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0,8 | CONTACT FINISH<br>0.8 0,8 µm hard gold over 2 µm nickel<br>1.25 1,25 µm hard gold over 2 µm nickel<br>2.5 2,5 µm hard gold over 3 µm nickel<br>other platings on request |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|   |                                                                                                                                                                                                          |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | TERMINATION FINISH<br>1 1 µm tinlead over nickel on press-in area<br>5 5 µm tin over nickel<br>1.25 1,25 µm gold over nickel on contact area<br>0.1 0.1 µm gold over nickel<br>other platings on request |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|      |                                                                                                                                                                                     |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -001 | MARKING FOR SPECIAL TYPES<br>Eg First Make – Last Break Option:<br>Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer. |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

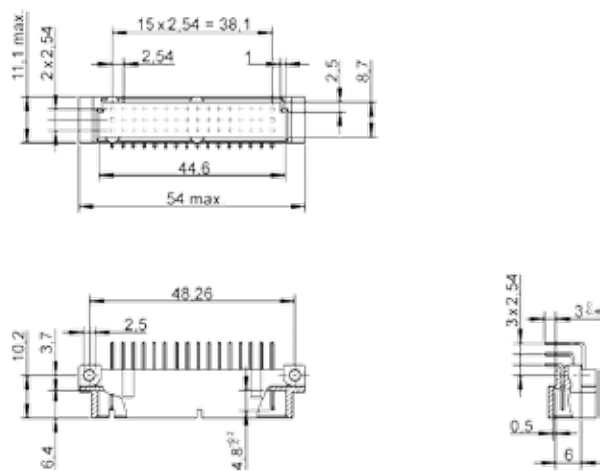
  

|     |                                                                            |
|-----|----------------------------------------------------------------------------|
| -NP | ALTERNATIVE CONTACT FINISH<br>Gold flash over Nickel Palladium over Nickel |
|-----|----------------------------------------------------------------------------|

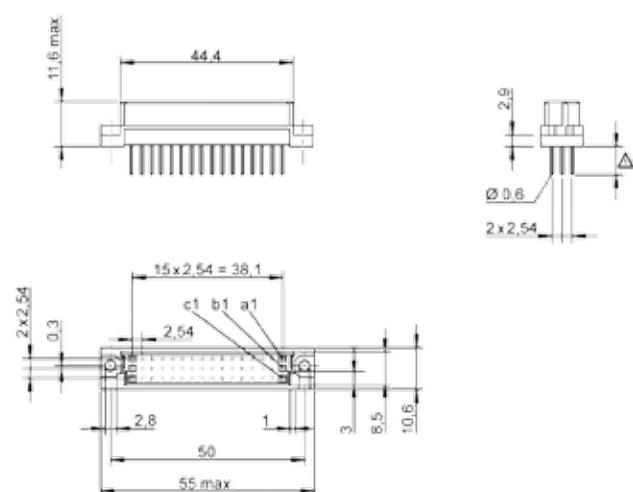
## DIN41612 - Type C/2

## Half Length Type C / Three Row Body

## MALE



## FEMALE



| TERMINATION STYLE:                                                      |   | F | FP | M | MP |
|-------------------------------------------------------------------------|---|---|----|---|----|
| Angled solder tail for 1.6 mm thick PCB                                 | A |   |    |   |    |
| Straight solder tail for 1.6 mm thick PCB                               | D |   |    |   |    |
| Straight solder tail for 2.4 mm thick PCB (Press-in from 1.5 to 4.0 mm) | E |   |    |   |    |
| Wire wrap tail                                                          | F |   |    |   |    |
| Wire wrap tail                                                          | H |   |    |   |    |
| Hand Solder Eyelet                                                      | O |   |    |   |    |

## CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS



|  |     |
|--|-----|
|  | 008 |
|  | 016 |
|  | 024 |
|  | 032 |
|  | 048 |
|  | A16 |
|  | B16 |
|  | X16 |
|  | B32 |

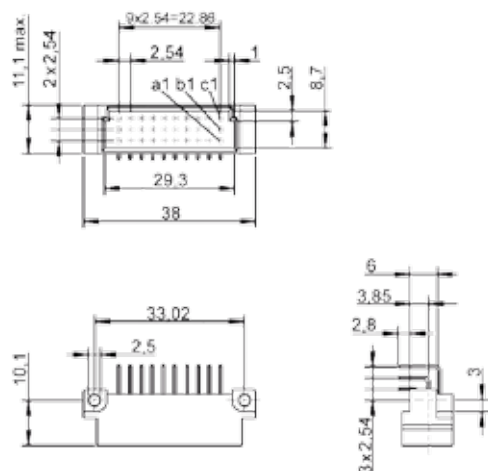
## How to order:

|      |                                                                                                                                                                                                                                                          |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----|-----|---|---|---|----|---|---|-----|---|---|------|-----|
| DIN  | -                                                                                                                                                                                                                                                        |  | C/2 | 032 | M | S | - | C1 | A | - | 0,8 | / | 5 | -001 | -NP |
| C/2  | CONNECTOR TYPE<br>C/2 Three Row Body 1A, Half Length                                                                                                                                                                                                     |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| M    | M Male Connector<br>F Female Connector                                                                                                                                                                                                                   |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| S    | TYPE OF TERMINATION<br>S Solder<br>W Wire Wrap<br>P Press-Fit                                                                                                                                                                                            |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| C1   | Complete connector with gold contact finish                                                                                                                                                                                                              |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| 0,8  | CONTACT FINISH<br>0.8 0,8 µm hard gold over 2 µm nickel<br>1.25 1,25 µm hard gold over 2 µm nickel<br>2.5 2,5 µm hard gold over 3 µm nickel<br>other platings on request                                                                                 |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| 5    | TERMINATION FINISH<br>1 1 µm tinlead over nickel on press-in area<br>5 5 µm tin over nickel<br>1.25 1,25 µm gold over nickel on contact area<br>0.1 0.1 µm gold over nickel<br>other platings on request                                                 |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| -001 | MARKING FOR SPECIAL TYPES<br>Eg First Make – Last Break Option:<br>Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer.<br>E Female Body w/o mounting flanges - Please contact manufacturer. |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| -NP  | ALTERNATIVE CONTACT FINISH<br>Gold flash over Nickel Palladium over Nickel                                                                                                                                                                               |  |     |     |   |   |   |    |   |   |     |   |   |      |     |

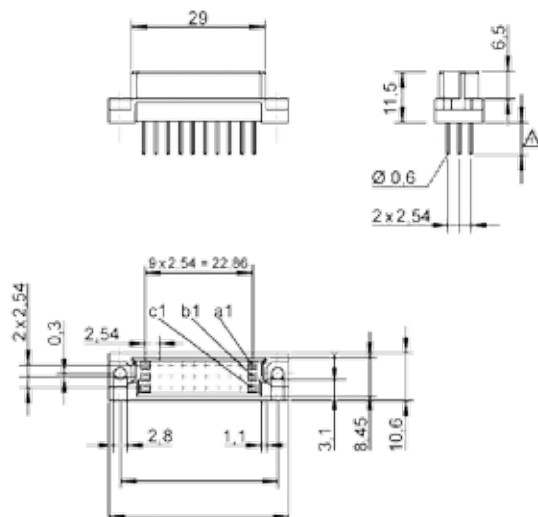
## DIN41612 - Type C/3

## Complementary Type C / Three Row Body

## MALE



## FEMALE



| TERMINATION STYLE:                                                      |   | F | FP | M | MP |
|-------------------------------------------------------------------------|---|---|----|---|----|
| Angled solder tail for 1.6 mm thick PCB                                 | A |   |    |   |    |
| Straight solder tail for 1.6 mm thick PCB                               | D |   |    |   |    |
| Straight solder tail for 2.4 mm thick PCB (Press-in from 1.5 to 4.0 mm) | E |   |    |   |    |
| Wire wrap tail                                                          | F |   |    |   |    |
| Wire wrap tail                                                          | H |   |    |   |    |
| Hand Solder Eyelet                                                      | O |   |    |   |    |

## CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS



020



030

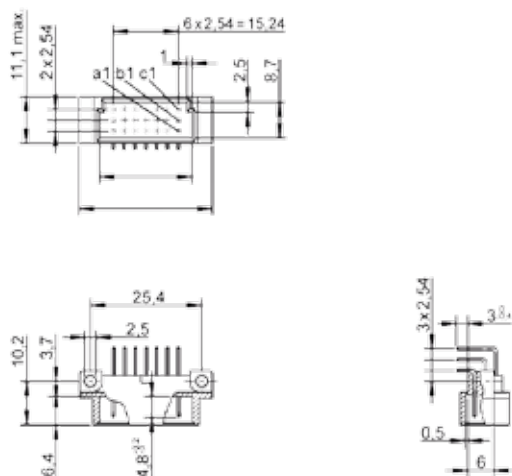
## How to order:

|      |                                                                                                                                                                                                          |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----|-----|---|---|---|----|---|---|-----|---|---|------|-----|
| DIN  | -                                                                                                                                                                                                        |  | C/3 | 020 | M | S | - | C1 | A | - | 0,8 | / | 5 | -001 | -NP |
| C/3  | CONNECTOR TYPE<br>C/3 Three Row Body 1A                                                                                                                                                                  |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| M    | M Male Connector<br>F Female Connector                                                                                                                                                                   |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| S    | TYPE OF TERMINATION<br>S Solder<br>W Wire Wrap<br>P Press-Fit                                                                                                                                            |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| C1   | Complete connector with gold contact finish                                                                                                                                                              |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| 0,8  | CONTACT FINISH<br>0.8 0,8 µm hard gold over 2 µm nickel<br>1.25 1,25 µm hard gold over 2 µm nickel<br>2.5 2,5 µm hard gold over 3 µm nickel<br>other platings on request                                 |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| 5    | TERMINATION FINISH<br>1 1 µm tinlead over nickel on press-in area<br>5 5 µm tin over nickel<br>1.25 1,25 µm gold over nickel on contact area<br>0.1 0.1 µm gold over nickel<br>other platings on request |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| -001 | MARKING FOR SPECIAL TYPES<br>Eg First Make – Last Break Option:<br>Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer.                      |  |     |     |   |   |   |    |   |   |     |   |   |      |     |
| -NP  | ALTERNATIVE CONTACT FINISH<br>Gold flash over Nickel Palladium over Nickel                                                                                                                               |  |     |     |   |   |   |    |   |   |     |   |   |      |     |

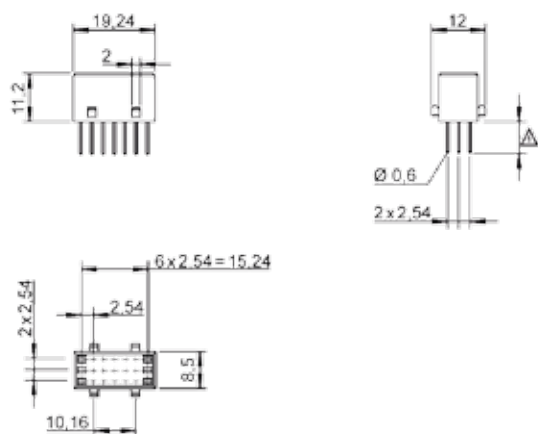
## DIN41612 - Type C/4

## Quarter Length Type C / Three Row Body

## MALE



## FEMALE

CONTACT ARRANGEMENTS AND  
NUMBER OF POSITIONS

008



012



014



021



A07



B07



X10



B14

Special Types

Z

## How to order:

DIN - C/4 014 M S - C1 A - 0,8 / 5 -001 -NP

C/4

CONNECTOR TYPE  
C/4 Three Row Body 1A, Quarter Length C

M

M Male Connector  
F Female Connector

S

TYPE OF TERMINATION  
S Solder  
W Wire Wrap  
P Press-Fit

C1

Complete connector with gold contact finish

0,8

CONTACT FINISH  
0.8 0,8 µm hard gold over 2 µm nickel  
1.25 1,25 µm hard gold over 2 µm nickel  
2.5 2,5 µm hard gold over 3 µm nickel  
other platings on request

5

TERMINATION FINISH  
1 1 µm tinlead over nickel on press-in area  
5 5 µm tin over nickel  
1.25 1,25 µm gold over nickel on contact area  
0.1 0.1 µm gold over nickel  
other platings on request

-001

MARKING FOR SPECIAL TYPES  
Eg First Make – Last Break Option:  
Male pins in any row may be extended 0.50 mm for ground before  
signal applications, please contact manufacturer.

-NP

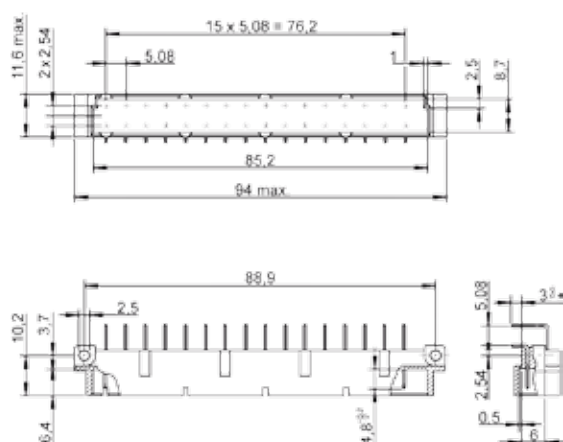
ALTERNATIVE CONTACT FINISH  
Gold flash over Nickel Palladium over Nickel

| TERMINATION STYLE:                                                      |   | F | FP | M | MP |
|-------------------------------------------------------------------------|---|---|----|---|----|
| Angled solder tail for 1.6 mm thick PCB                                 | A |   |    |   |    |
| Straight solder tail for 1.6 mm thick PCB                               | D |   |    |   |    |
| Straight solder tail for 2.4 mm thick PCB (Press-in from 1.5 to 4.0 mm) | E |   |    |   |    |
| Wire wrap tail                                                          | F |   |    |   |    |
| Wire wrap tail                                                          | H |   |    |   |    |
| Hand Solder Eyelet                                                      | O |   |    |   |    |

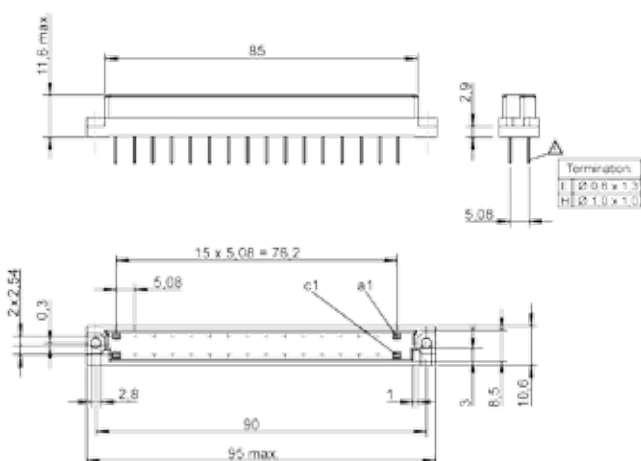
## DIN41612 - Type D

## Two Row Body

## MALE

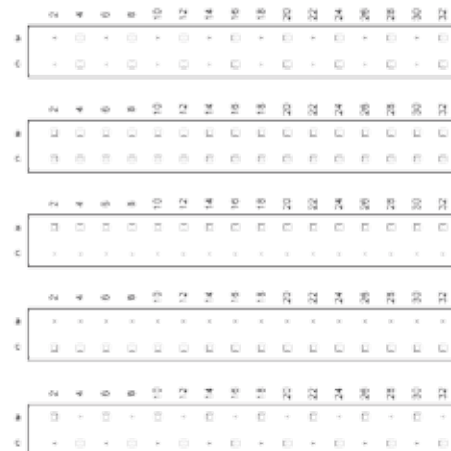


## FEMALE



| TERMINATION STYLE:                        |   |  | F | M |  |
|-------------------------------------------|---|--|---|---|--|
| Angled solder tail for 1.6 mm thick PCB   | A |  |   |   |  |
| Straight solder tail for 2.4 mm thick PCB | E |  |   |   |  |
| Wire wrap tail                            | H |  |   |   |  |
|                                           |   |  |   |   |  |

## CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS



## Special Types

Z

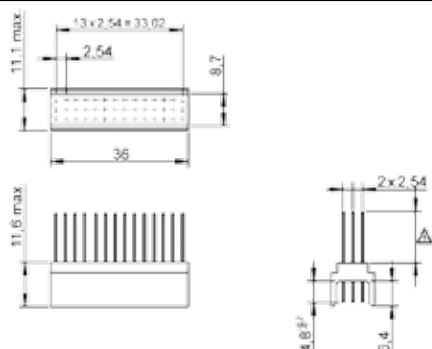
## How to order:

|      |                                                                                                                                                                                                          |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|-----|---|---|---|----|---|---|-----|---|---|------|-----|
| DIN  | -                                                                                                                                                                                                        |  | D | 032 | M | S | - | C1 | A | - | 0,8 | / | 5 | -001 | -NP |
| D    | CONNECTOR TYPE<br>D Two Row Body 4A                                                                                                                                                                      |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
| M    | M Male Connector<br>F Female Connector                                                                                                                                                                   |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
| S    | TYPE OF TERMINATION<br>S Solder<br>W Wire Wrap<br>P Press-Fit                                                                                                                                            |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
| C1   | Complete connector with gold contact finish                                                                                                                                                              |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
| 0,8  | CONTACT FINISH<br>0.8 0,8 µm hard gold over 2 µm nickel<br>1.25 1,25 µm hard gold over 2 µm nickel<br>2.5 2,5 µm hard gold over 3 µm nickel<br>other platings on request                                 |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
| 5    | TERMINATION FINISH<br>1 1 µm tinlead over nickel on press-in area<br>5 5 µm tin over nickel<br>1.25 1,25 µm gold over nickel on contact area<br>0.1 0.1 µm gold over nickel<br>other platings on request |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
| -001 | MARKING FOR SPECIAL TYPES<br>Eg First Make – Last Break Option:<br>Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer.                      |  |   |     |   |   |   |    |   |   |     |   |   |      |     |
| -NP  | ALTERNATIVE CONTACT FINISH<br>Gold flash over Nickel Palladium over Nickel                                                                                                                               |  |   |     |   |   |   |    |   |   |     |   |   |      |     |

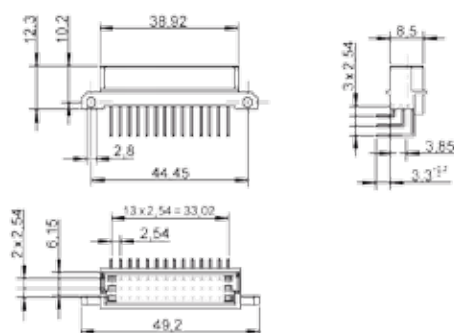
## DIN41612 - Type I

## Three Row Body

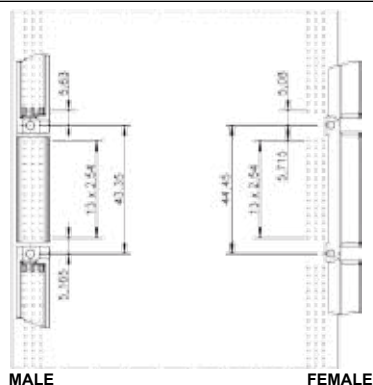
## MALE



## FEMALE



## PCB Layout



## CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS



|               |     |
|---------------|-----|
|               | 007 |
|               | 014 |
|               | 021 |
|               | 028 |
|               | 042 |
|               | A14 |
|               | B14 |
|               | X14 |
|               | B28 |
| Special Types | Z   |

## How to order:

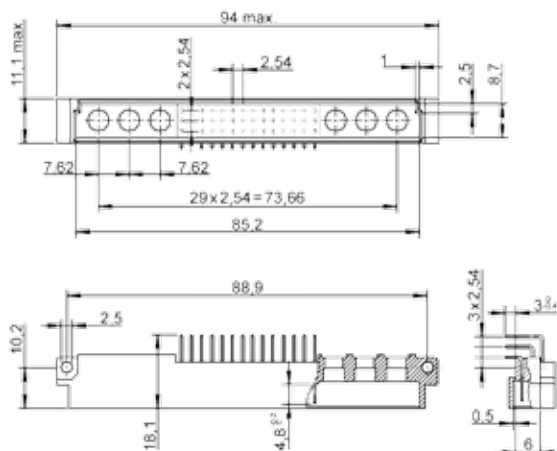
|      |                                                                                                                                                                                                          |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|---|---|---|----|---|---|-----|---|---|---|-----|---|----|
| DIN  | -                                                                                                                                                                                                        | I | 028 | M | S | - | C1 | A | - | 0,8 | / | 5 | - | 001 | - | NP |
| I    | CONNECTOR TYPE<br>I Three Row Body 1A                                                                                                                                                                    |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| M    | M Male Connector<br>F Female Connector                                                                                                                                                                   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| S    | TYPE OF TERMINATION<br>S Solder<br>W Wire Wrap<br>P Press-Fit                                                                                                                                            |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| C1   | Complete connector with gold contact finish                                                                                                                                                              |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| 0,8  | CONTACT FINISH<br>0.8 0,8 µm hard gold over 2 µm nickel<br>1.25 1,25 µm hard gold over 2 µm nickel<br>2.5 2,5 µm hard gold over 3 µm nickel<br>other platings on request                                 |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| 5    | TERMINATION FINISH<br>1 1 µm tinlead over nickel on press-in area<br>5 5 µm tin over nickel<br>1.25 1,25 µm gold over nickel on contact area<br>0.1 0.1 µm gold over nickel<br>other platings on request |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| -001 | MARKING FOR SPECIAL TYPES<br>Eg First Make – Last Break Option:<br>Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer.                      |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| -NP  | ALTERNATIVE CONTACT FINISH<br>Gold flash over Nickel Palladium over Nickel                                                                                                                               |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |

| TERMINATION STYLE:                                                      |   | F | MP | M |
|-------------------------------------------------------------------------|---|---|----|---|
| Angled solder tail for 1.6 mm thick PCB                                 | A |   |    |   |
| Straight solder tail for 1.6 mm thick PCB                               | D |   |    |   |
| Straight solder tail for 2.4 mm thick PCB (Press-in from 1.5 to 4.0 mm) | E |   |    |   |
| Wire wrap tail                                                          | F |   |    |   |
| Wire wrap tail                                                          | H |   |    |   |
| Wire wrap tail                                                          | L |   |    |   |

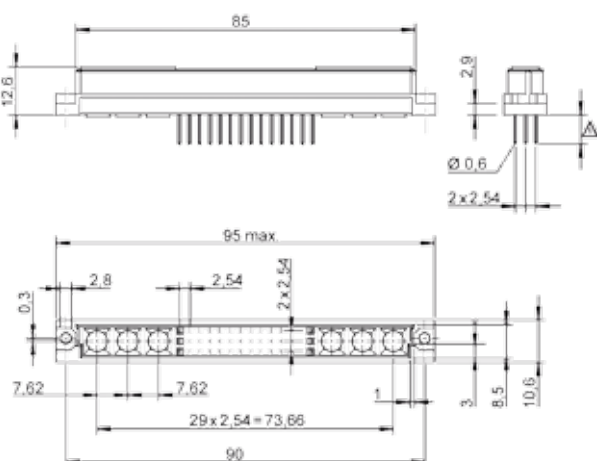
## DIN41612 - Type M

## Three Row Body

### MALE

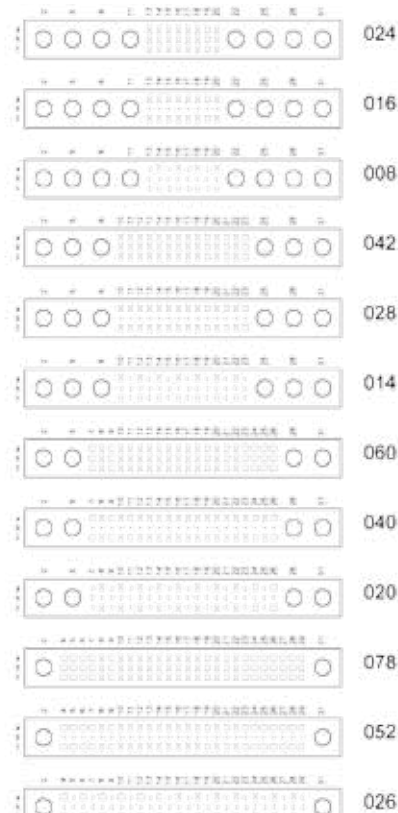


### FEMALE



| TERMINATION STYLE:                                                      |   | F | FP | M | MP |
|-------------------------------------------------------------------------|---|---|----|---|----|
| Angled solder tail for 1.6 mm thick PCB                                 | A |   |    |   |    |
| Straight solder tail for 1.6 mm thick PCB                               | D |   |    |   |    |
| Straight solder tail for 2.4 mm thick PCB (Press-in from 1.5 to 4.0 mm) | E |   |    |   |    |
| Wire wrap tail                                                          | F |   |    |   |    |
| Wire wrap tail                                                          | H |   |    |   |    |
| Hand Solder Eyelet                                                      | O |   |    |   |    |

### CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS



Special Types

Z

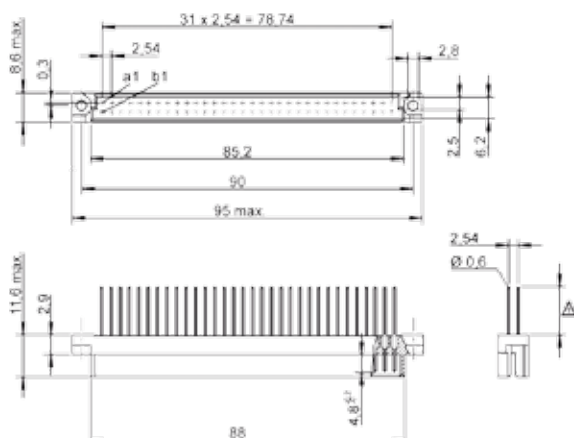
### How to order:

|      |                                                                                                                                                                                                          |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|---|---|---|----|---|---|-----|---|---|---|-----|---|----|
| DIN  | -                                                                                                                                                                                                        | M | 052 | M | S | - | C1 | A | - | 0,8 | / | 5 | - | 001 | - | NP |
| M    | CONNECTOR TYPE<br>M Three Row Body 4A                                                                                                                                                                    |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| M    | M Male Connector<br>F Female Connector                                                                                                                                                                   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| S    | TYPE OF TERMINATION<br>S Solder<br>W Wire Wrap<br>P Press-Fit                                                                                                                                            |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| C1   | Complete connector with gold contact finish                                                                                                                                                              |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| 0,8  | CONTACT FINISH<br>0,8 0,8 µm hard gold over 2 µm nickel<br>1,25 1,25 µm hard gold over 2 µm nickel<br>2,5 2,5 µm hard gold over 3 µm nickel<br>other platings on request                                 |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| 5    | TERMINATION FINISH<br>1 1 µm tinlead over nickel on press-in area<br>5 5 µm tin over nickel<br>1,25 1,25 µm gold over nickel on contact area<br>0,1 0,1 µm gold over nickel<br>other platings on request |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| -001 | MARKING FOR SPECIAL TYPES<br>Eg First Make – Last Break Option:<br>Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer.                      |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| -NP  | ALTERNATIVE CONTACT FINISH<br>Gold flash over Nickel Palladium over Nickel                                                                                                                               |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |

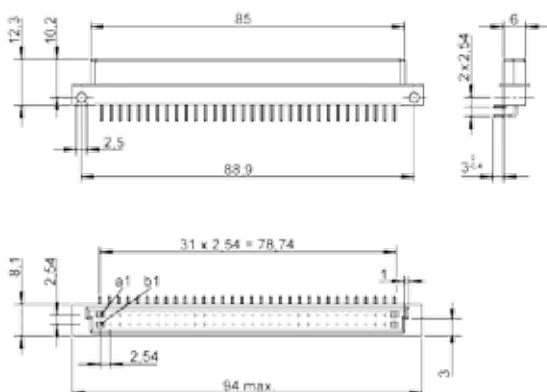
## DIN41612 - Type Q

## Two Row Body

## MALE



## FEMALE



## CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS



|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| a | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |
| b | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |

016

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| a | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |
| b | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |

032

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| a | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |
| b | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |

064

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| a | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |
| b | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |

A32

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| a | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |
| b | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |

B32

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| a | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |
| b | + | + | + | + | + | + | + | + | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |

X32

## How to order:

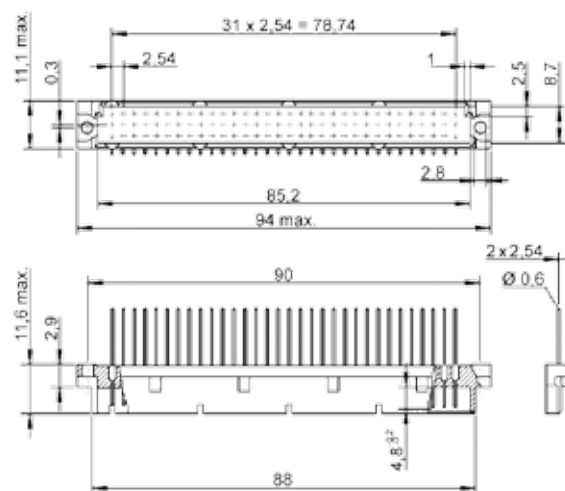
|      |                                                                                                                                                                                                          |   |     |   |   |   |    |   |   |     |   |   |      |     |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|---|---|---|----|---|---|-----|---|---|------|-----|
| DIN  | -                                                                                                                                                                                                        | Q | 064 | M | S | - | C1 | A | - | 0,8 | / | 5 | -001 | -NP |
| Q    | CONNECTOR TYPE<br>Q Two Row Body 1A                                                                                                                                                                      |   |     |   |   |   |    |   |   |     |   |   |      |     |
| M    | M Male Connector<br>F Female Connector                                                                                                                                                                   |   |     |   |   |   |    |   |   |     |   |   |      |     |
| S    | TYPE OF TERMINATION<br>S Solder<br>W Wire Wrap<br>P Press-Fit                                                                                                                                            |   |     |   |   |   |    |   |   |     |   |   |      |     |
| C1   | Complete connector with gold contact finish                                                                                                                                                              |   |     |   |   |   |    |   |   |     |   |   |      |     |
| 0,8  | CONTACT FINISH<br>0.8 0,8 µm hard gold over 2 µm nickel<br>1.25 1,25 µm hard gold over 2 µm nickel<br>2.5 2,5 µm hard gold over 3 µm nickel<br>other platings on request                                 |   |     |   |   |   |    |   |   |     |   |   |      |     |
| 5    | TERMINATION FINISH<br>1 1 µm tinlead over nickel on press-in area<br>5 5 µm tin over nickel<br>1.25 1,25 µm gold over nickel on contact area<br>0.1 0.1 µm gold over nickel<br>other platings on request |   |     |   |   |   |    |   |   |     |   |   |      |     |
| -001 | MARKING FOR SPECIAL TYPES<br>Eg First Make – Last Break Option:<br>Male pins in any row may be extended 0.50 mm for ground before signal applications, please contact manufacturer.                      |   |     |   |   |   |    |   |   |     |   |   |      |     |
| -NP  | ALTERNATIVE CONTACT FINISH<br>Gold flash over Nickel Palladium over Nickel                                                                                                                               |   |     |   |   |   |    |   |   |     |   |   |      |     |

| TERMINATION STYLE:                        |   | F | M |  |
|-------------------------------------------|---|---|---|--|
| Angled solder tail for 1.6 mm thick PCB   | A |   |   |  |
| Straight solder tail for 1.6 mm thick PCB | D |   |   |  |
| Straight solder tail for 2.4 mm thick PCB | E |   |   |  |
| Wire wrap tail                            | F |   |   |  |
| Wire wrap tail                            | H |   |   |  |

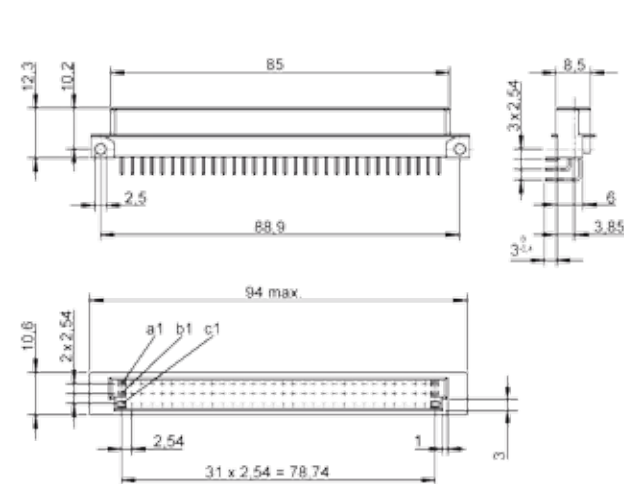
## DIN41612 - Type R

## Three Row Body - Reversed

### MALE



### FEMALE



| TERMINATION STYLE:                                                      |   | F | MP | M |
|-------------------------------------------------------------------------|---|---|----|---|
| Angled solder tail for 1.6 mm thick PCB                                 | A |   |    |   |
| Straight solder tail for 1.6 mm thick PCB                               | D |   |    |   |
| Straight solder tail for 2.4 mm thick PCB (Press-in from 1.5 to 4.0 mm) | E |   |    |   |
| Wire wrap tail                                                          | F |   |    |   |
| Wire wrap tail                                                          | H |   |    |   |
| Wire wrap tail                                                          | L |   |    |   |

### CONTACT ARRANGEMENTS AND NUMBER OF POSITIONS

|               |     |
|---------------|-----|
|               | 016 |
|               | 032 |
|               | 048 |
|               | 064 |
|               | 096 |
|               | A32 |
|               | B32 |
|               | X32 |
|               | B64 |
| Special Types | Z   |

### How to order:

|      |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
|------|---|---|-----|---|---|---|----|---|---|-----|---|---|---|-----|---|----|
| DIN  | - | R | 064 | M | S | - | C1 | E | - | 0,8 | / | 5 | - | 001 | - | NP |
| R    |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| M    |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| S    |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| C1   |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| 0,8  |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| 5    |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| -001 |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |
| -NP  |   |   |     |   |   |   |    |   |   |     |   |   |   |     |   |    |



## HARD METRIC CONNECTORS

Type A, B, C & AB Versions

### Material:

|                        |                                                                   |
|------------------------|-------------------------------------------------------------------|
| Connector Housing:     | Glass-fibre Filled PBT, Grey<br>UL94 V-0 Class                    |
| Contacts & Plating:    | Copper Alloy, Gold over Nickel<br>or Nickel-Palladium over Nickel |
| Performance:           | Level 1: (Au / NiPd 1,25µm)<br>Level 2: (Au / NiPd 0,8µm)         |
| Press-in Zone Plating: | Tinlead over Nickel                                               |

### Electrical Specifications:

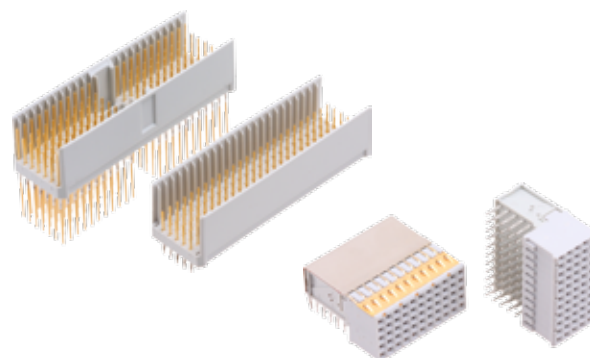
|                        |                      |
|------------------------|----------------------|
| Current Rating:        | 1 Amp at 70°C        |
| Insulation Resistance: | 10G Ω Min.           |
| Contact Resistance:    | 20 mΩ Max. (Initial) |
| Operating Temperature: | -55°C to +125°C      |

### Physical Specifications:

|                  |                                                |
|------------------|------------------------------------------------|
| Press-in Force:  | 26 ± 6N/pin on nominal diam.<br>(0,6 ± 0,05mm) |
| Retention Force: | 20 ± 5N/pin on nominal diam.<br>(0,6 ± 0,05mm) |
| Mating Force:    | 0,75N/contact Max.                             |
| Unmating Force:  | 0,15N/contact min.                             |

### PCB Data:

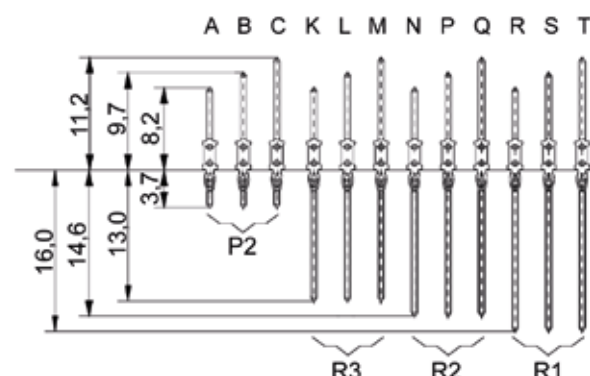
|                      |                               |
|----------------------|-------------------------------|
| Through-Holes:       | 0,6 ± 0,05mm                  |
| Recommended Plating: | Cu 25-50µm, Sn or SnPb < 10µm |
| PCB Thickness:       | 1,4 - 5,6mm                   |



|                 |                                                                                                                                                                                                                                                                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type A:</b>  | 110 signal contacts, 22 columns<br>110 signal + 44 grounding contacts, 22 columns                                                                                                                                                                                                                                                            |
| <b>Type B:</b>  | 55 signal contacts, 11 columns<br>55 signal + 22 grounding contacts, 11 columns<br>95 signal contacts, 19 columns<br>95 signal + 38 grounding contacts, 19 columns<br>110 signal contacts, 22 columns<br>110 signal + 44 grounding contacts, 22 columns<br>125 signal contacts, 25 columns<br>125 signal + 50 grounding contacts, 25 columns |
| <b>Type C:</b>  | 55 signal contacts, 11 columns<br>55 signal + 22 grounding contacts, 11 columns                                                                                                                                                                                                                                                              |
| <b>Type AB:</b> | 95 signal contacts, 19 columns<br>95 signal + 32 grounding contacts, 19 columns<br>125 signal contacts, 25 columns<br>125 signal + 44 grounding contacts, 25 columns                                                                                                                                                                         |

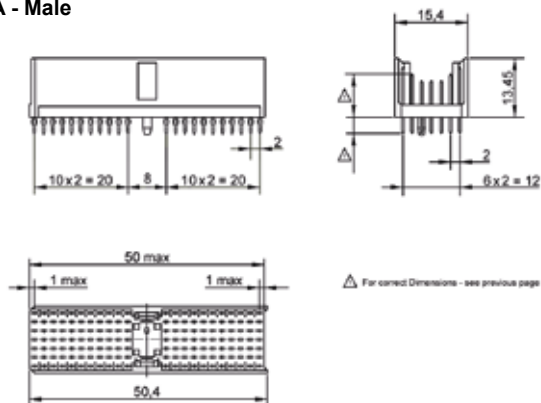
### Features:

- According to IEC 61076-4-101 and IEC 917
- 25mm basic system unit
- High contact density with 2mm grid spacing
- 50mm connector module
- Three different contact levels on Male A, B & AB Type Available
- Different termination lengths available
- All terminations with press-fit design
- Plated through-hole diameter 0,6mm
- Available with grounding rows
- Different coding devices available

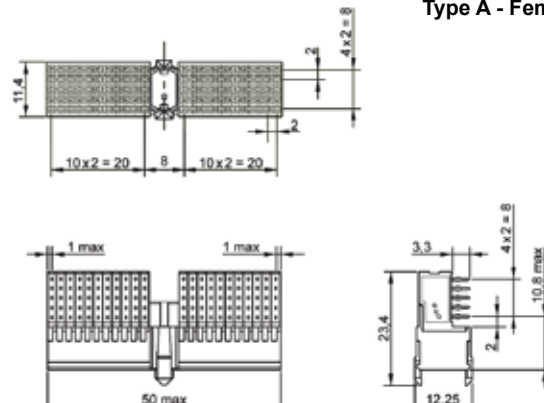


# Mechanical dimensions:

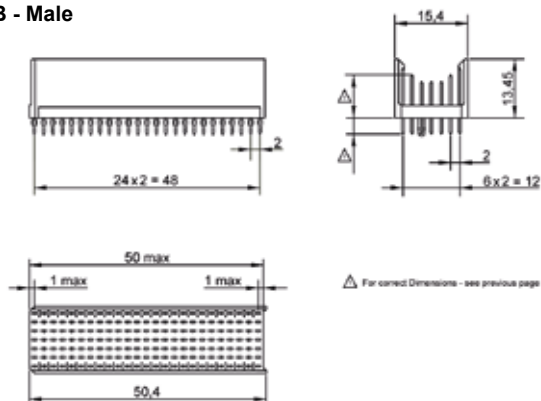
Type A - Male



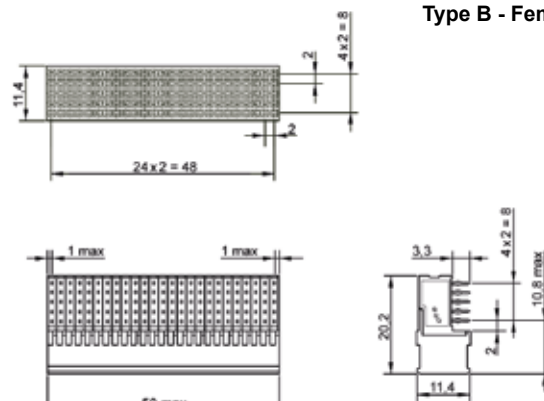
Type A - Female



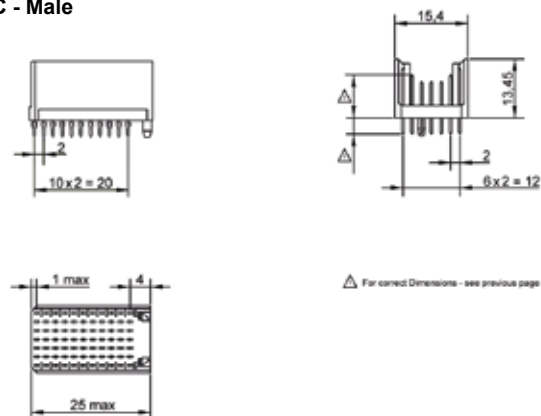
Type B - Male



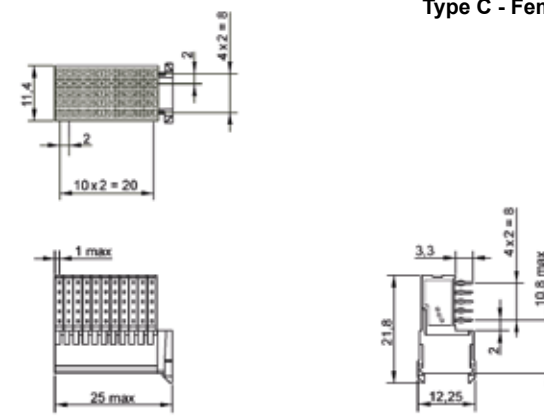
Type B - Female



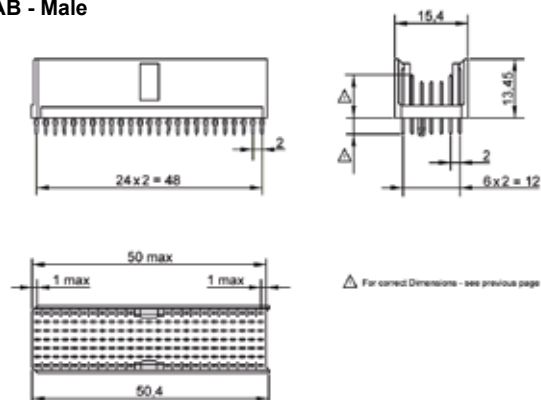
Type C - Male



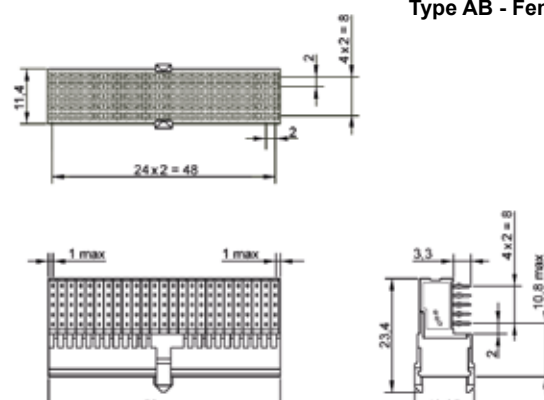
Type C - Female



Type AB - Male



Type AB - Female



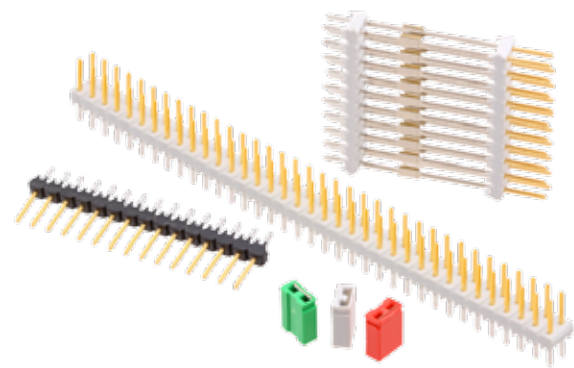
## Material:

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Connector Housing:  | Glass-fiber Filled Polyester<br>UL 94 V-0                                           |
| Contacts & Plating: | Copper Alloy<br>Gold over Nickel or Gold Flash<br>over Nickel-Palladium over Nickel |

## Electrical Specifications:

|                        |                              |
|------------------------|------------------------------|
| Current Rating:        | 3 Amp at 20°C                |
| Insulation Resistance: | ≥ 10G Ω.                     |
| Proof Voltage:         | Contact/contact 1000 V (rms) |
| Operating Temperature: | -55°C to +125°C              |

## Accessories upon request



## How to order:

PBBC 020MS - C1 - 19 - 0,8/5\*

|       |                                                                                                                                                                                |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 020MS | LOAD & TYPE<br>20pin Male Connector                                                                                                                                            |
| 19    | HEIGHT<br>19mm<br>Other length according to list                                                                                                                               |
| 0,8/5 | TERMINATION FINISH<br>0,8/5 0,8 µm Hard Gold on contact area + 5 µm Sn on tails.<br>2,5/5 2,5 µm Hard Gold on contact area + 5 µm Sn on tails.<br>(According to MIL-G-45204 B) |

Female PBBC - Same as PLP - Female Version

## How to order:

PLP 010MS - C1D - 0,8/5 - P

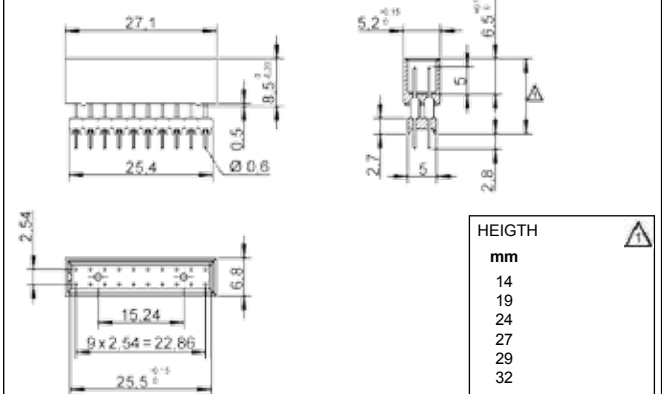
|       |                                                                                                                                                                                |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 010MS | LOAD & TYPE<br>010MS 10pin Male Connector<br>020MS 20pin Male Connector                                                                                                        |
| 0,8/5 | TERMINATION FINISH<br>0,8/5 0,8 µm Hard Gold on contact area + 5 µm Sn on tails.<br>2,5/5 2,5 µm Hard Gold on contact area + 5 µm Sn on tails.<br>(According to MIL-G-45204 B) |
| P     | P POLARIZED FORM ON REQUEST                                                                                                                                                    |

## How to order:

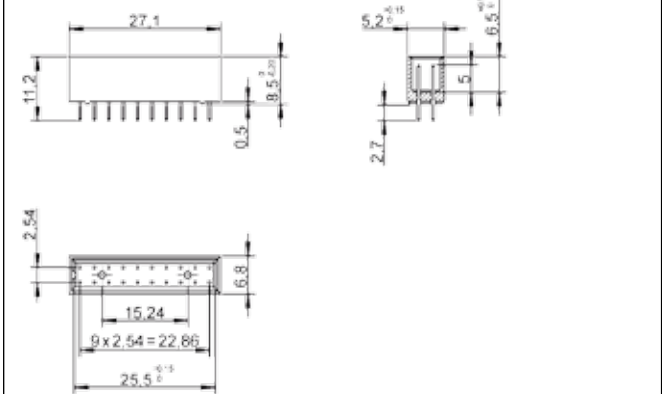
PLP 010FS - C1D - 0,8/5 - P

|       |                                                                                                                                                                                |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 010FS | LOAD & TYPE<br>010FS 10pin Female Connector<br>020FS 20pin Female Connector                                                                                                    |
| 0,8/5 | TERMINATION FINISH<br>0,8/5 0,8 µm Hard Gold on contact area + 5 µm Sn on tails.<br>2,5/5 2,5 µm Hard Gold on contact area + 5 µm Sn on tails.<br>(According to MIL-G-45204 B) |
| P     | P POLARIZED FORM ON REQUEST                                                                                                                                                    |

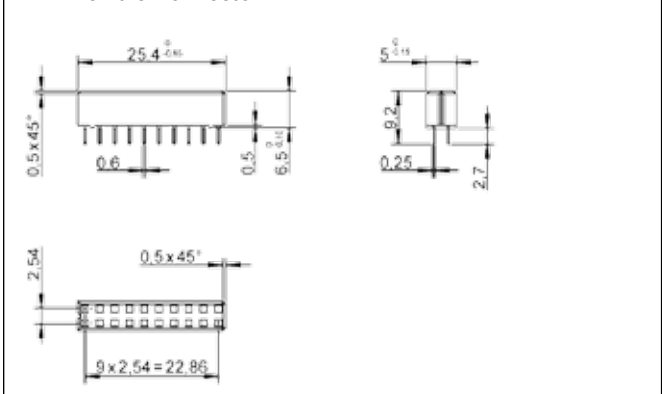
## PBBC - Male Connector



## PLP - Male Connector



## PLP - Female Connector

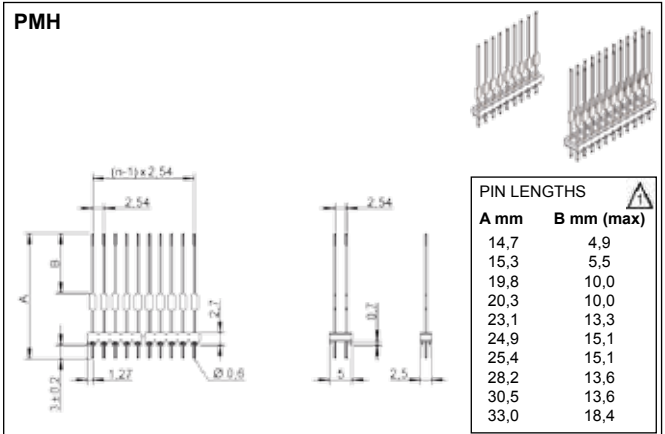


## How to order:

PMH 15,3 - 1 X 32 - 5

|      |                                                                                                                                                                                                                                       |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15,3 | PIN LENGTH<br>15,3 (A mm)                                                                                                                                                                                                             |
| 1    | NUMBER OF ROWS<br>1 1 Row<br>2 2 Rows                                                                                                                                                                                                 |
| 32   | No. OF PINS IN ONE ROW<br>32 Standard<br>1-31 On Request                                                                                                                                                                              |
| 5    | TERMINATION FINISH<br>0,8/5 0,8 µm Au on contact area + 5 µm Sn on tails. Grey Body<br>0,2/5 0,2 µm Au on contact area + 5 µm Sn on tails. Black Body<br>5 5 µm Sn on contact area and tails. Black Body<br>Other platings on request |

## PMH

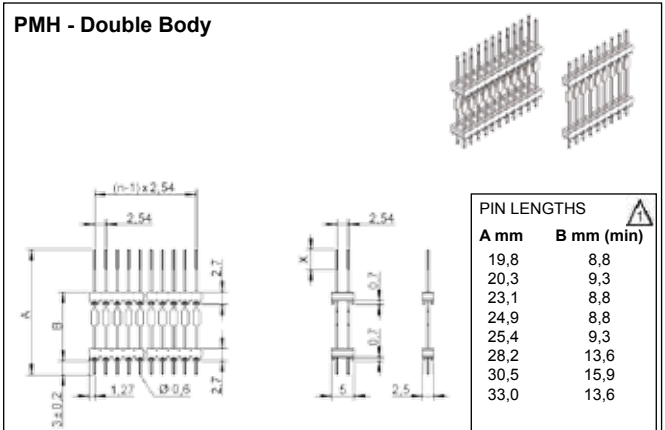


## How to order:

PMH 8,8/19,8 - 2 X 18 - 0,8/5

|          |                                                                                                                                                                                                                                       |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8,8/19,8 | PIN LENGTH (A): 19,8mm<br>SPACING HEIGHT (B): 8,8mm                                                                                                                                                                                   |
| 2        | NUMBER OF ROWS<br>1 1 Row<br>2 2 Rows                                                                                                                                                                                                 |
| 18       | No. OF PINS IN ONE ROW<br>1-32 On Request                                                                                                                                                                                             |
| 0,8/5    | TERMINATION FINISH<br>0,8/5 0,8 µm Au on contact area + 5 µm Sn on tails. Grey Body<br>0,2/5 0,2 µm Au on contact area + 5 µm Sn on tails. Black Body<br>5 5 µm Sn on contact area and tails. Black Body<br>Other platings on request |

## PMH - Double Body

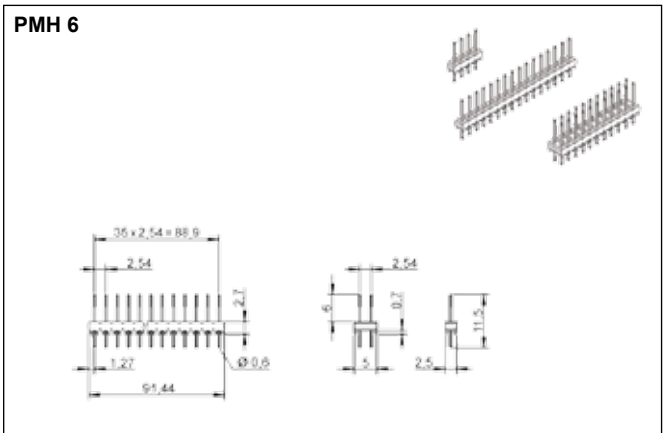


## How to order:

PMH 6 - 1 X 36 - 0,8/5

|       |                                                                                                                                                                                                                                       |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6     | PIN LENGTH 6 mm<br>Other length on request                                                                                                                                                                                            |
| 1     | NUMBER OF ROWS<br>1 1 Row<br>2 2 Rows                                                                                                                                                                                                 |
| 36    | No. OF PINS IN ONE ROW<br>36 Standard<br>1-35 On Request                                                                                                                                                                              |
| 0,8/5 | TERMINATION FINISH<br>0,8/5 0,8 µm Au on contact area + 5 µm Sn on tails. Grey Body<br>0,2/5 0,2 µm Au on contact area + 5 µm Sn on tails. Black Body<br>5 5 µm Sn on contact area and tails. Black Body<br>Other platings on request |

## PMH 6

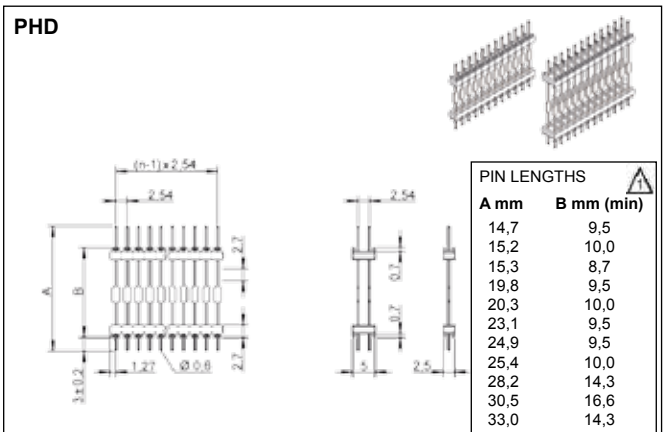


## How to order:

PHD 8,7/15,3 - 1 X 14 - 5

|          |                                                                                                                                                                                                                                       |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8,7/15,3 | LENGTH OF PIN (A): 15,3mm<br>SPACING HEIGHT (B): 8,7mm                                                                                                                                                                                |
| 1        | NUMBER OF ROWS<br>1 1 Row<br>2 2 Rows                                                                                                                                                                                                 |
| 14       | No. OF PINS IN ONE ROW<br>1-32 On Request                                                                                                                                                                                             |
| 5        | TERMINATION FINISH<br>0,8/5 0,8 µm Au on contact area + 5 µm Sn on tails. Grey Body<br>0,2/5 0,2 µm Au on contact area + 5 µm Sn on tails. Black Body<br>5 5 µm Sn on contact area and tails. Black Body<br>Other platings on request |

## PHD



## Male, Single Row

2,0mm PCB Connectors, straight or Angled

### Technical Specifications:

Bodymaterial: PBT, 30% Glass Filled  
 UL 94 V-0 Black/Grey  
 Contacts: Phosphor-Bronze,  
 Goldflash 0,2µ min. over Nickel (Contact zone)  
 Goldflash 2µ min. over Nickel (Termination zone)  
 Working voltage: 120 V AC  
 Current / Contact: 3 Amp  
 Contact resistance: 20mΩ max

Test Voltage: 360 V AC

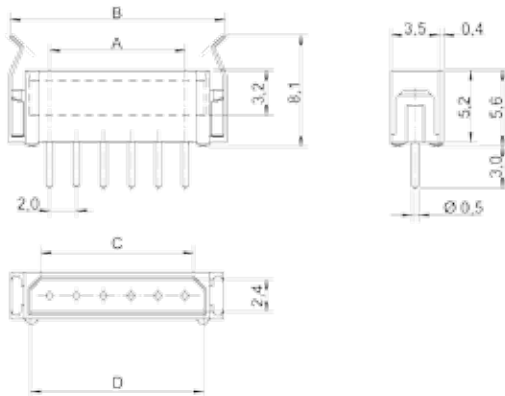
Connectors available in 2,3,4,5,6,7,8 and 10 positions.

Parts are supplied without latches in standard versions. Latches can be fitted onto parts on request. (Se page 135 for suitable Latches)



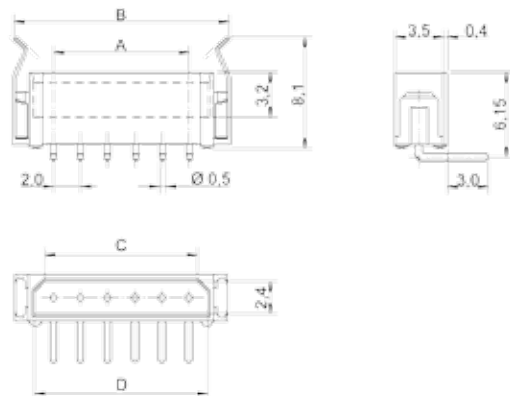
**Note: PCB Locking Clamp is attached with Angled version.**

### Straight Single Row Connector



| Size | A    | B    | C    | D    |
|------|------|------|------|------|
| 02   | 2,0  | 7,3  | 3,3  | 4,8  |
| 03   | 4,0  | 9,3  | 5,3  | 6,8  |
| 04   | 6,0  | 11,3 | 7,3  | 8,8  |
| 05   | 8,0  | 13,3 | 9,3  | 10,8 |
| 06   | 10,0 | 15,3 | 11,3 | 12,8 |
| 07   | 12,0 | 17,3 | 13,3 | 14,8 |
| 08   | 14,0 | 19,3 | 15,3 | 16,8 |
| 10   | 18,0 | 23,3 | 19,3 | 20,8 |

### Angled Single Row Connector



| Size | A    | B    | C    | D    |
|------|------|------|------|------|
| 02   | 2,0  | 7,3  | 3,3  | 4,8  |
| 03   | 4,0  | 9,3  | 5,3  | 6,8  |
| 04   | 6,0  | 11,3 | 7,3  | 8,8  |
| 05   | 8,0  | 13,3 | 9,3  | 10,8 |
| 06   | 10,0 | 15,3 | 11,3 | 12,8 |
| 07   | 12,0 | 17,3 | 13,3 | 14,8 |
| 08   | 14,0 | 19,3 | 15,3 | 16,8 |
| 10   | 18,0 | 23,3 | 19,3 | 20,8 |

### Ordering information:

### Straight Type

| Size | Name:        | Part No:     |
|------|--------------|--------------|
| 02   | HS-02DS-0070 | 3700-0001-01 |
| 03   | HS-03DS-0070 | 3700-0001-02 |
| 04   | HS-04DS-0070 | 3700-0001-03 |
| 05   | HS-05DS-0070 | 3700-0001-04 |
| 06   | HS-06DS-0070 | 3700-0001-05 |
| 07   | HS-07DS-0070 | 3700-0001-06 |
| 08   | HS-08DS-0070 | 3700-0001-07 |
| 10   | HS-10DS-0070 | 3700-0001-08 |

### Ordering information:

### Angled Type

| Size | Name:        | Part No:     |
|------|--------------|--------------|
| 02   | HS-02DS-1070 | 3700-0002-01 |
| 03   | HS-03DS-1070 | 3700-0002-02 |
| 04   | HS-04DS-1070 | 3700-0002-03 |
| 05   | HS-05DS-1070 | 3700-0002-04 |
| 06   | HS-06DS-1070 | 3700-0002-05 |
| 07   | HS-07DS-1070 | 3700-0002-06 |
| 08   | HS-08DS-1070 | 3700-0002-07 |
| 10   | HS-10DS-1070 | 3700-0002-08 |

## Male, Double Row

2,0mm PCB Connectors, straight or Angled

### Technical Specifications:

Bodymaterial: PBT, 30% Glass Filled  
 UL 94 V-0 Black/Grey  
 Contacts: Phosphor-Bronze,  
 Goldflash 0,2µ min. over Nickel (Contact zone)  
 Goldflash 2µ min. over Nickel (Termination zone)  
 Working voltage: 120 V AC  
 Current / Contact: 3 Amp  
 Contact resistance: 20mΩ max

Test Voltage: 360 V AC

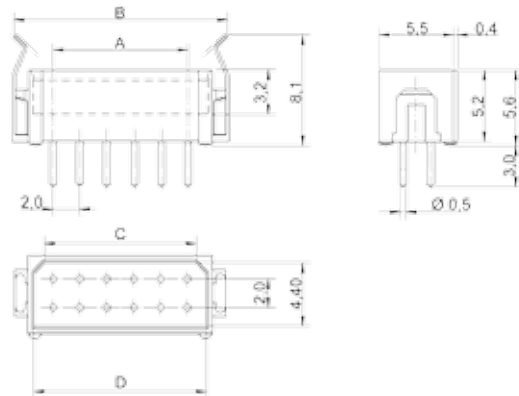
Connectors available in 2,3,4,5,6,7,8 and 10 positions.

Parts are supplied without latches in standard versions. Latches can be fitted onto parts on request. (Se page 135 for suitable Latches)



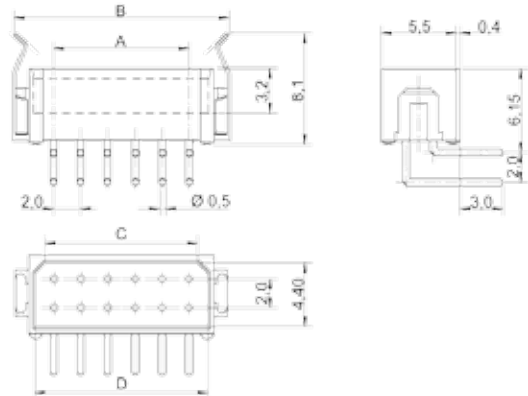
**Note: PCB Locking Clamp is attached with Angled version.**

### Straight Dual Row Connector



| Size | A    | B    | C    | D    |
|------|------|------|------|------|
| 04   | 2,0  | 7,6  | 3,3  | 4,8  |
| 06   | 4,0  | 9,6  | 5,3  | 6,8  |
| 08   | 6,0  | 11,6 | 7,3  | 8,8  |
| 10   | 8,0  | 13,6 | 9,3  | 10,8 |
| 06   | 10,0 | 15,6 | 11,3 | 12,8 |
| 12   | 12,0 | 17,6 | 13,3 | 14,8 |
| 16   | 14,0 | 19,6 | 15,3 | 16,8 |
| 26   | 24,0 | 29,6 | 25,3 | 26,8 |
| 34   | 32,0 | 37,6 | 33,3 | 34,8 |

### Angled Dual Row Connector



| Size | A    | B    | C    | D    |
|------|------|------|------|------|
| 04   | 2,0  | 7,6  | 3,3  | 4,8  |
| 06   | 4,0  | 9,6  | 5,3  | 6,8  |
| 08   | 6,0  | 11,6 | 7,3  | 8,8  |
| 10   | 8,0  | 13,6 | 9,3  | 10,8 |
| 06   | 10,0 | 15,6 | 11,3 | 12,8 |
| 12   | 12,0 | 17,6 | 13,3 | 14,8 |
| 16   | 14,0 | 19,6 | 15,3 | 16,8 |
| 26   | 24,0 | 29,6 | 25,3 | 26,8 |
| 34   | 32,0 | 37,6 | 33,3 | 34,8 |

### Ordering information:

### Straight Type

| Size | Name:        | Part No:     |
|------|--------------|--------------|
| 04   | HD-04DS-0070 | 3700-0003-01 |
| 06   | HD-06DS-0070 | 3700-0003-02 |
| 08   | HD-08DS-0070 | 3700-0003-03 |
| 10   | HD-10DS-0070 | 3700-0003-04 |
| 12   | HD-12DS-0070 | 3700-0003-05 |
| 14   | HD-14DS-0070 | 3700-0003-06 |
| 16   | HD-16DS-0070 | 3700-0003-07 |
| 26   | HD-26DS-0070 | 3700-0003-08 |
| 34   | HD-34DS-0070 | 3700-0003-09 |

### Ordering information:

### Angled Type

| Size | Name:        | Part No:     |
|------|--------------|--------------|
| 04   | HD-04DS-1070 | 3700-0004-01 |
| 06   | HD-06DS-1070 | 3700-0004-02 |
| 08   | HD-08DS-1070 | 3700-0004-03 |
| 10   | HD-10DS-1070 | 3700-0004-04 |
| 12   | HD-12DS-1070 | 3700-0004-05 |
| 14   | HD-14DS-1070 | 3700-0004-06 |
| 16   | HD-16DS-1070 | 3700-0004-07 |
| 26   | HD-26DS-1070 | 3700-0004-08 |
| 34   | HD-34DS-1070 | 3700-0004-09 |

### Features:

2,0mm PBC Connectors, Straight or Angled  
Suitable to mate with Male 2,0mm PCB Connectors

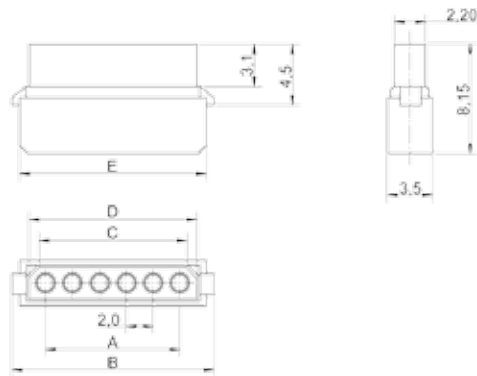
### Technical Specifications:

Material: PBT, 30% Glass Filled  
UL 94 V-0 Black/Grey  
Insulations resistance: 1000 MΩ min

Parts are supplied without mounted contact pins.  
Contact pins and accessories are listed on next page.

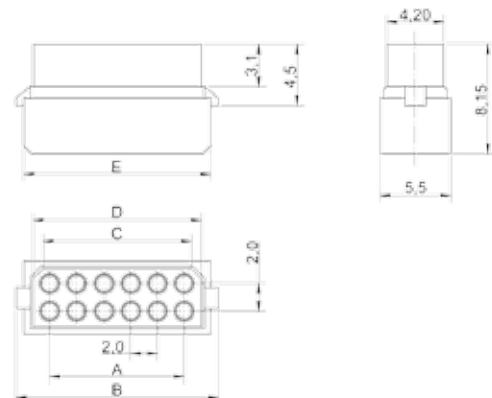


### Single Row Connector



| Size | A    | B    | C    | D    | E    |
|------|------|------|------|------|------|
| 02   | 2,0  | 7,3  | 3,0  | 4,5  | 5,9  |
| 03   | 4,0  | 9,3  | 5,0  | 6,5  | 7,9  |
| 04   | 6,0  | 11,3 | 7,0  | 8,5  | 9,9  |
| 05   | 8,0  | 13,3 | 9,0  | 10,5 | 11,9 |
| 06   | 10,0 | 15,3 | 11,0 | 12,5 | 13,9 |
| 07   | 12,0 | 17,3 | 13,0 | 14,5 | 15,9 |
| 08   | 14,0 | 19,3 | 15,0 | 16,5 | 17,9 |
| 10   | 18,0 | 23,3 | 19,0 | 20,5 | 21,9 |

### Dual Row Connector



| Size | A    | B    | C    | D    | E    |
|------|------|------|------|------|------|
| 04   | 2,0  | 7,3  | 3,0  | 4,5  | 5,9  |
| 06   | 4,0  | 9,3  | 5,0  | 6,5  | 7,9  |
| 08   | 6,0  | 11,3 | 7,0  | 8,5  | 9,9  |
| 10   | 8,0  | 13,3 | 9,0  | 10,5 | 11,9 |
| 06   | 10,0 | 15,3 | 11,0 | 12,5 | 13,9 |
| 12   | 12,0 | 17,3 | 13,0 | 14,5 | 15,9 |
| 16   | 14,0 | 19,3 | 15,0 | 16,5 | 17,9 |
| 26   | 24,0 | 29,3 | 25,0 | 26,5 | 27,9 |
| 34   | 32,0 | 37,3 | 33,0 | 34,5 | 35,9 |

### Ordering information:

#### Single Row

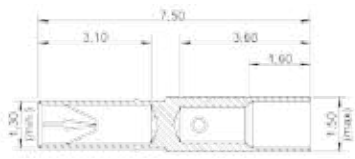
| Size | Name:        | Part No:     |
|------|--------------|--------------|
| 02   | HS-02KK-0000 | 3700-0005-01 |
| 03   | HS-03KK-0000 | 3700-0005-02 |
| 04   | HS-04KK-0000 | 3700-0005-03 |
| 05   | HS-05KK-0000 | 3700-0005-04 |
| 06   | HS-06KK-0000 | 3700-0005-05 |
| 07   | HS-07KK-0000 | 3700-0005-06 |
| 08   | HS-08KK-0000 | 3700-0005-07 |
| 10   | HS-10KK-0000 | 3700-0005-08 |

### Ordering information:

#### Double Row

| Size | Name:        | Part No:     |
|------|--------------|--------------|
| 04   | HD-04KK-0000 | 3700-0006-01 |
| 06   | HD-06KK-0000 | 3700-0006-02 |
| 08   | HD-08KK-0000 | 3700-0006-03 |
| 10   | HD-10KK-0000 | 3700-0006-04 |
| 12   | HD-12KK-0000 | 3700-0006-05 |
| 14   | HD-14KK-0000 | 3700-0006-06 |
| 16   | HD-16KK-0000 | 3700-0006-07 |
| 26   | HD-26KK-0000 | 3700-0006-08 |
| 34   | HD-34KK-0000 | 3700-0006-09 |

## Accessories 2,0mm PCB

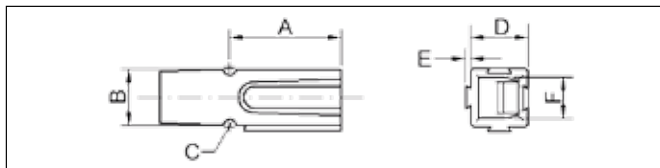
|    |  | <table><tr><th colspan="2">Connector Terminals</th><th>AWG 24-28</th></tr><tr><td>ST-00KT-0030</td><td colspan="2">3700-0100-01</td></tr><tr><td>Contact material:</td><td colspan="2">CuZn36Pb3</td></tr><tr><td>Plating:</td><td colspan="2">Gold Flash over 1,27μ Ni.</td></tr><tr><td>Spring Clip</td><td colspan="2">BeCu, 0,25μ Au over 1,27μ Ni</td></tr></table> | Connector Terminals     |  | AWG 24-28    | ST-00KT-0030 | 3700-0100-01 |  | Contact material: | CuZn36Pb3 |  | Plating: | Gold Flash over 1,27μ Ni. |  | Spring Clip | BeCu, 0,25μ Au over 1,27μ Ni |  |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--|--------------|--------------|--------------|--|-------------------|-----------|--|----------|---------------------------|--|-------------|------------------------------|--|
| Connector Terminals                                                                 |                                                                                   | AWG 24-28                                                                                                                                                                                                                                                                                                                                                                |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
| ST-00KT-0030                                                                        | 3700-0100-01                                                                      |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
| Contact material:                                                                   | CuZn36Pb3                                                                         |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
| Plating:                                                                            | Gold Flash over 1,27μ Ni.                                                         |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
| Spring Clip                                                                         | BeCu, 0,25μ Au over 1,27μ Ni                                                      |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
|    |                                                                                   | <table><tr><th colspan="2">Positiv Lock Latches</th></tr><tr><td>HL-00PL-0000</td><td>3700-0200-01</td></tr></table>                                                                                                                                                                                                                                                     | Positiv Lock Latches    |  | HL-00PL-0000 | 3700-0200-01 |              |  |                   |           |  |          |                           |  |             |                              |  |
| Positiv Lock Latches                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
| HL-00PL-0000                                                                        | 3700-0200-01                                                                      |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
|    |                                                                                   | <table><tr><th colspan="2">Friction Lock Latches</th></tr><tr><td>HL-00FL-0000</td><td>3700-0200-02</td></tr></table>                                                                                                                                                                                                                                                    | Friction Lock Latches   |  | HL-00FL-0000 | 3700-0200-02 |              |  |                   |           |  |          |                           |  |             |                              |  |
| Friction Lock Latches                                                               |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
| HL-00FL-0000                                                                        | 3700-0200-02                                                                      |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
|  |                                                                                   | <table><tr><th colspan="2">PCB Locking Metal Clamp</th></tr><tr><td>HB-00MC-0000</td><td>3700-0200-03</td></tr></table>                                                                                                                                                                                                                                                  | PCB Locking Metal Clamp |  | HB-00MC-0000 | 3700-0200-03 |              |  |                   |           |  |          |                           |  |             |                              |  |
| PCB Locking Metal Clamp                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |
| HB-00MC-0000                                                                        | 3700-0200-03                                                                      |                                                                                                                                                                                                                                                                                                                                                                          |                         |  |              |              |              |  |                   |           |  |          |                           |  |             |                              |  |

For connector terminals - we can supply Hand Crimp Tools, Positioner for Hand Crimp Tools, Insertion Tool and Extraction Tools. Please contact your local Sales office for further assistance.

# FLAT PIN CONNECTORS - Powerpole® SERIES

## TECHNICAL SPECIFICATIONS

|                               |                                     |
|-------------------------------|-------------------------------------|
| Housing:                      | Polycarbonate                       |
| Contacts:                     | Copper                              |
| Contact Plating:              | Tin/Silver                          |
| Spring:                       | Stainless Steel                     |
| Flammability Rating:          | UL94 V-0                            |
| Operating Temperature Range:  | -20°C to 105°C                      |
| Insulation Withstanding Test: | 2200 VDC                            |
| Vibration Resistance:         | Excellent                           |
| Mating Cycles:                | 10.000<br>(For disconnect use only) |



| Model:     | A     | B     | C    | D     | E    | F     |
|------------|-------|-------|------|-------|------|-------|
| 15/30/45 A | 14,70 | 8,40  | 1,30 | 7,90  | 0,50 | 5,00  |
| 75 A       | 29,70 | 16,30 | 2,50 | 16,0  | 1,00 | 11,40 |
| 120 A      | 42,90 | 22,60 | 2,50 | 22,30 | 1,50 | 15,20 |
| 180 A      | 54,10 | 28,70 | 2,50 | 28,40 | 1,50 | 23,10 |



### Features:

- Cost Effective Reliability
- Genderless Connectors
- Provides 600 Volts Continuous AC or DC
- Contacts on REEL or loose piece design
- Low Detent (LD) contacts are also offered for low insertion/withdrawal force applications

## Order Codes:

### 15/25\*/30/45 Amp Housings

| No:      | Colour: | Part No:     |
|----------|---------|--------------|
| 1327*    | Red     | 4530-0101-01 |
| 1327G5*  | Green   | 4530-0101-02 |
| 1327G6*  | Black   | 4530-0101-03 |
| 1327G7*  | White   | 4530-0101-04 |
| 1327G8*  | Blue    | 4530-0101-05 |
| 1327G16* | Yellow  | 4530-0101-06 |
| 1327G17  | Orange  | 4530-0101-07 |
| 1327G18  | Grey    | 4530-0101-08 |
| 1327G21  | Brown   | 4530-0101-09 |
| 1327G22  | Pink    | 4530-0101-10 |
| 1327G23  | Purple  | 4530-0101-11 |

### 15 Amp Contacts: AWG

|                   |       |              |
|-------------------|-------|--------------|
| Individual - LD   | 16/20 | 4530-0001-01 |
| Individual - HD   | 16/20 | 4530-0001-02 |
| REEL - LD         | 16/20 | 4530-1000-01 |
| REEL - HD         | 16/20 | 4530-2000-01 |
| Superflex REEL-LD | 16/20 | 4530-3000-01 |
| Superflex REEL-HD | 16/20 | 4530-4000-01 |

### 30 Amp Contacts: AWG

|                   |       |              |
|-------------------|-------|--------------|
| Individual - LD   | 12/16 | 4530-0002-01 |
| Individual - HD   | 12/16 | 4530-0002-02 |
| REEL - LD         | 12/16 | 4530-1000-02 |
| REEL - HD         | 12/16 | 4530-2000-02 |
| Superflex REEL-LD | 16/20 | 4530-3000-01 |
| Superflex REEL-HD | 16/20 | 4530-4000-01 |

### 45 Amp Contacts: AWG

|                   |       |              |
|-------------------|-------|--------------|
| Individual - LD   | 10/14 | 4530-0003-01 |
| REEL - LD         | 10/14 | 4530-1000-03 |
| REEL - HD         | 10/14 | 4530-2000-03 |
| Superflex REEL-LD | 10/14 | 4530-3000-02 |
| Superflex REEL-HD | 10/14 | 4530-4000-02 |

### 75 Amp Housings

| No:    | Colour: | Part No:     |
|--------|---------|--------------|
| 5916   | Blue    | 4530-0102-01 |
| 5916G4 | Black   | 4530-0102-02 |
| 5916G5 | White   | 4530-0102-03 |
| 5916G6 | Green   | 4530-0102-04 |
| 5916G7 | Red     | 4530-0102-05 |

### 75 Amp - Locking Housings

| Housings: | Colour: | Part No:     |
|-----------|---------|--------------|
| 75LOKBLU  | Blue    | 4530-0102-06 |
| 75LOKGRA  | Grey    | 4530-0102-07 |
| 75LOKBLK  | Black   | 4530-0102-08 |
| 75LOKGRN  | Green   | 4530-0102-09 |
| 75LOKYEL  | Yellow  | 4530-0102-10 |
| 75LOKWHT  | White   | 4530-0102-11 |

### 75 Amp Contacts: AWG

|                          |       |              |
|--------------------------|-------|--------------|
| Individual - LD          | 6     | 4530-0004-01 |
| Individual - LD          | 10/12 | 4530-0004-02 |
| Individual - HD          | 6     | 4530-0004-03 |
| Individual - HD          | 8     | 4530-0004-04 |
| Individual - HD          | 10    | 4530-0004-05 |
| Individual - HD          | 10/12 | 4530-0004-05 |
| REEL, Silver - LD        | 6/8   | 4530-1000-04 |
| REEL, Silver - LD        | 10/12 | 4530-1000-05 |
| REEL, Tin - LD           | 6/8   | 4530-1000-06 |
| REEL, Tin - LD           | 10/12 | 4530-1000-07 |
| REEL, Silver - HD        | 6/8   | 4530-2000-04 |
| REEL, Silver - HD        | 10/12 | 4530-2000-05 |
| REEL, Tin - HD           | 6/8   | 4530-2000-06 |
| REEL, Tin - HD           | 10/12 | 4530-2000-07 |
| Set of 2pcs 4530-0004-02 | 6     | 4560-0004-03 |
| Set of 2pcs 4530-0004-04 | 10/12 | 4560-0004-06 |
| Bus Bar Contact          | -     | 4530-0050-01 |

# FLAT PIN CONNECTORS - Powerpole® SERIES

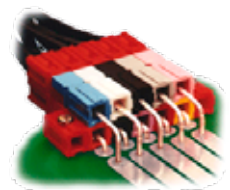
## Order Codes:

| 120 Amp Housings  |         |              |
|-------------------|---------|--------------|
| No:               | Colour: | Part No:     |
| 1321              | Blue    | 4530-0103-01 |
| 1321G1            | Black   | 4530-0103-02 |
| 1321G2            | White   | 4530-0103-03 |
| 1321G3            | Red     | 4530-0103-04 |
| 1321G4            | Green   | 4530-0103-05 |
| 120 Amp Contacts: |         |              |
| AWG               |         |              |
| Individual        | 2       | 4530-0005-01 |
| Individual        | 4       | 4530-0005-02 |
| Individual        | 6       | 4530-0005-03 |
| Individual        | 1       | 4530-0005-04 |
| Individual        | 1/0     | 4530-0005-05 |

| 180 Amp Housings  |         |              |
|-------------------|---------|--------------|
| No:               | Colour: | Part No:     |
| 1381              | Blue    | 4530-0104-01 |
| 1381G1            | Black   | 4530-0104-02 |
| 1381G2            | White   | 4530-0104-03 |
| 1381G3            | Red     | 4530-0104-04 |
| 1381G4            | Green   | 4530-0104-05 |
| 180 Amp Contacts: |         |              |
| AWG               |         |              |
| Individual        | 1       | 4530-0006-01 |
| Individual        | 6       | 4530-0006-02 |
| Individual        | 1/0     | 4530-0006-03 |
| Individual        | 2       | 4530-0006-04 |
| Individual        | 4       | 4530-0006-05 |
| Extended Range    | 2/0     | 4530-0006-06 |
| Extended Range    | 3/0     | 4530-0006-07 |
| Bus Bar Contact   | -       | 4530-0050-02 |

## Order Codes 25 Amp Angled PCB Contacts: (Suit Housings 1327xx \* on previous page)

Right Angle Contacts:



| Type:   | A mm | B mm | D mm |
|---------|------|------|------|
| 1377G1  | 36.8 | 17.8 | 38.6 |
| 1377G2  | 33.0 | 10.2 | 34.5 |
| 1377G11 | 29.0 | 17.8 | 30.7 |
| 1377G12 | 24.2 | 10.2 | 25.7 |
| 1377G14 | 33.0 | 4.6  | 34.5 |
| 1377G15 | 29.0 | 25.9 | 30.7 |
| 1377G16 | 24.1 | 18.3 | 25.4 |
| 1377G17 | 29.0 | 22.4 | 30.7 |
| 1377G18 | 25.4 | 14.7 | 27.2 |
| 1317G1  | 36.8 | 17.8 | 38.6 |
| 1317G2  | 33.0 | 10.2 | 34.5 |
| 1317G11 | 29.0 | 17.8 | 30.7 |
| 1317G14 | 33.0 | 4.6  | 34.5 |
| 1317G15 | 29.0 | 25.9 | 30.7 |
| 1317G16 | 24.1 | 18.3 | 25.4 |
| 1317G17 | 29.0 | 22.4 | 30.7 |
| 1317G18 | 25.4 | 14.7 | 27.2 |

| 25 Amp Angled Pins: |    |             |              |
|---------------------|----|-------------|--------------|
| 1377G1              | LD | Right Angle | 4530-0007-01 |
| 1377G2              | LD | Right Angle | 4530-0007-02 |
| 1377G11             | LD | Right Angle | 4530-0007-03 |
| 1377G12             | LD | Right Angle | 4530-0007-04 |
| 1377G14             | LD | Right Angle | 4530-0007-05 |
| 1377G15             | LD | Right Angle | 4530-0007-06 |
| 1377G16             | LD | Right Angle | 4530-0007-07 |
| 1377G17             | LD | Right Angle | 4530-0007-08 |
| 1377G18             | LD | Right Angle | 4530-0007-09 |
| 1317G1              | HD | Right Angle | 4530-0007-10 |
| 1317G2              | HD | Right Angle | 4530-0007-11 |
| 1317G11             | HD | Right Angle | 4530-0007-12 |
| 1317G14             | HD | Right Angle | 4530-0007-13 |
| 1317G15             | HD | Right Angle | 4530-0007-14 |
| 1317G16             | HD | Right Angle | 4530-0007-15 |
| 1317G17             | HD | Right Angle | 4530-0007-16 |
| 1317G18             | HD | Right Angle | 4530-0007-17 |

## Order Codes 25 Amp Straight PCB Contacts: (Suit Housings 1327xx \* on previous page)

Straight Contacts:



| Type:   | C mm | E mm | F mm |
|---------|------|------|------|
| 1377G3  | 54.9 | 56.4 | 1.65 |
| 1377G4  | 43.2 | 44.7 | 1.65 |
| 1377G13 | 28.2 | 29.7 | 1.65 |
| 1317G3  | 54.9 | 56.4 | 1.85 |
| 1317G4  | 43.2 | 44.7 | 1.85 |
| 1317G13 | 28.2 | 29.7 | 1.85 |

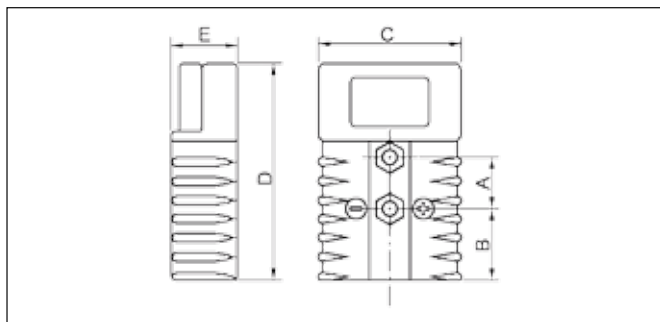
| 25 Amp Straight Pins: |    |          |              |
|-----------------------|----|----------|--------------|
| 1377G3                | LD | Straight | 4530-0007-18 |
| 1377G4                | LD | Straight | 4530-0007-19 |
| 1377G13               | LD | Straight | 4530-0007-20 |
| 1317G3                | HD | Straight | 4530-0007-21 |
| 1317G4                | HD | Straight | 4530-0007-22 |
| 1317G13               | HD | Straight | 4530-0007-23 |

High Power 45 Amp PCB Contacts on Request

# FLAT PIN CONNECTORS - SB® Connector Family

## TECHNICAL SPECIFICATIONS

|                               |                                     |
|-------------------------------|-------------------------------------|
| Housing:                      | Polycarbonate                       |
| Contacts:                     | Copper                              |
| Contact Plating:              | Silver                              |
| Spring:                       | Stainless Steel                     |
| Flammability Rating:          | UL94 V-0                            |
| Operating Temperature Range:  | -20°C to 105°C                      |
| Insulation Withstanding Test: | 2200 VDC                            |
| Vibration Resistance:         | Excellent                           |
| Mating Cycles:                | 10.000<br>(For disconnect use only) |



| Model: | A    | B   | C    | D    | E    |
|--------|------|-----|------|------|------|
| SB50   | 19   | 6,5 | 35,1 | 48   | 15,9 |
| SB120  | 19   | 8,5 | 44,5 | 63,5 | 20,6 |
| SB175  | 28,5 | 11  | 53,1 | 79,5 | 25,4 |
| SB350  | 28,5 | 35  | 69,8 | 108  | 33,3 |

## Features:

- Recognized by Underwriters Laboratories
- Listed by Canadian Standard Association
- Can be delivered kitted Housings + Contacts
- Auxiliary Contacts on request (SBX®)
- Optional Air supply to Battery during Charging

## Market Areas:

- UPS Systems
- Telecom
- Forklift Trucks
- Wheelchairs
- Battery Chargers
- Power Electronics and Much More.

## Order Codes:

|                   |                    |
|-------------------|--------------------|
| <b>MODEL:</b>     | <b>SB50</b>        |
| <b>Current:</b>   | 50 Amp             |
| <b>Wire Size:</b> | AWG 6<br>AWG 10/12 |

| No:   | Colour: | Part No:     |
|-------|---------|--------------|
| 992   | Grey    | 4530-0110-01 |
| 992G1 | Red     | 4530-0110-02 |
| 992G2 | Black   | 4530-0110-03 |
| 992G4 | Blue    | 4530-0110-04 |
| 992G5 | Yellow  | 4530-0110-05 |
| 992G6 | Green   | 4530-0110-06 |
| 992G7 | Orange  | 4530-0110-07 |

| 50 Amp Contacts:                | AWG:  |              |
|---------------------------------|-------|--------------|
| Individual - LD                 | 6     | 4530-0004-01 |
| Individual - LD                 | 10/12 | 4530-0004-02 |
| Individual - HD                 | 6     | 4530-0004-03 |
| Individual - HD                 | 8     | 4530-0004-04 |
| Individual - HD                 | 10    | 4530-0004-05 |
| Individual - HD                 | 10/12 | 4530-0004-05 |
| REEL, Silver - LD               | 6/8   | 4530-1000-04 |
| REEL, Silver - LD               | 10/12 | 4530-1000-05 |
| REEL, Tin - LD                  | 6/8   | 4530-1000-06 |
| REEL, Tin - LD                  | 10/12 | 4530-1000-07 |
| REEL, Silver - HD               | 6/8   | 4530-2000-04 |
| REEL, Silver - HD               | 10/12 | 4530-2000-05 |
| REEL, Tin - HD                  | 6/8   | 4530-2000-06 |
| REEL, Tin - HD                  | 10/12 | 4530-2000-07 |
| Set of 2pcs <b>4530-0004-02</b> | 6     | 4560-0004-03 |
| Set of 2pcs <b>4530-0004-04</b> | 10/12 | 4560-0004-06 |
| Bus Bar Contact                 | -     | 4530-0050-01 |

|                   |                     |
|-------------------|---------------------|
| <b>MODEL:</b>     | <b>SB120</b>        |
| <b>Current:</b>   | 120 Amp             |
| <b>Wire Size:</b> | AWG 2, AWG 4, AWG 6 |

| No:    | Colour: | Part No:     |
|--------|---------|--------------|
| 6810G1 | Grey    | 4530-0111-01 |
| 6810G2 | Blue    | 4530-0111-02 |
| 6810G3 | Red     | 4530-0111-03 |

| 120 Amp Contacts: | AWG: |              |
|-------------------|------|--------------|
| Set of 2pcs       | 2    | 4560-0020-01 |
| Set of 2pcs       | 4    | 4560-0020-02 |
| Set of 2pcs       | 6    | 4560-0020-03 |
| Bus Bar Contact   | -    | 4530-0050-03 |

# FLAT PIN CONNECTORS - SB® Connector Family

## Order Codes:

|                   |                                       |                 |
|-------------------|---------------------------------------|-----------------|
| <b>MODEL:</b>     | <b>SB175</b>                          |                 |
| <b>Current:</b>   | 175 Amp                               |                 |
| <b>Wire Size:</b> | AWG 1, AWG 2, AWG 4<br>AWG 6, AWG 1/0 |                 |
| <b>No:</b>        | <b>Colour:</b>                        | <b>Part No:</b> |
| 940               | Grey                                  | 4530-0112-01    |
| 941               | Blue                                  | 4530-0112-02    |
| 942               | Orange                                | 4530-0112-03    |
| 943               | Yellow                                | 4530-0112-04    |
| 949               | Red                                   | 4530-0112-05    |
| 2-7252G11         | Black*                                | 4530-0112-06    |
| *No Voltage Key   |                                       |                 |

|                          |             |              |
|--------------------------|-------------|--------------|
| <b>175 Amp Contacts:</b> | <b>AWG:</b> |              |
| Individual               | 1           | 4530-0006-01 |
| Individual               | 6           | 4530-0006-02 |
| Individual               | 1/0         | 4530-0006-03 |
| Individual               | 2           | 4530-0006-04 |
| Individual               | 4           | 4530-0006-05 |
| Bus Bar Contact          | -           | 4530-0050-02 |
| Contact Set (2pcs)       | 1           | 4560-0006-01 |
| Contact Set (2pcs)       | 6           | 4560-0006-02 |
| Contact Set (2pcs)       | 1/0         | 4560-0006-03 |
| Contact Set (2pcs)       | 2           | 4560-0006-04 |
| Contact Set (2pcs)       | 4           | 4560-0006-05 |

|                   |                                              |                 |
|-------------------|----------------------------------------------|-----------------|
| <b>MODEL:</b>     | <b>SB350</b>                                 |                 |
| <b>Current:</b>   | 350 Amp                                      |                 |
| <b>Wire Size:</b> | AWG 1/0, AWG 2/0<br>AWG 3/0, AWG 4/0, 300mcm |                 |
| <b>No:</b>        | <b>Colour:</b>                               | <b>Part No:</b> |
| 906               | Grey                                         | 4530-0113-01    |
| 912               | Blue                                         | 4530-0113-02    |
| 913               | Red                                          | 4530-0113-03    |
| 914               | Yellow                                       | 4530-0113-04    |
| 931               | Green                                        | 4530-0113-05    |
| 932               | Orange                                       | 4530-0113-06    |

|                          |             |              |
|--------------------------|-------------|--------------|
| <b>350 Amp Contacts:</b> | <b>AWG:</b> |              |
| Contact Set (2pcs)       | 1/0         | 4560-0021-01 |
| Contact Set (2pcs)       | 2/0         | 4560-0021-02 |
| Contact Set (2pcs)       | 3/0         | 4560-0021-03 |
| Contact Set (2pcs)       | 4/0         | 4560-0021-04 |
| Contact Set (2pcs)       | 300mcm      | 4560-0021-05 |
| Bus Bar Contact          | -           | 4530-0050-04 |

## Available on Request:

### EBC (DIN) Connector Series:



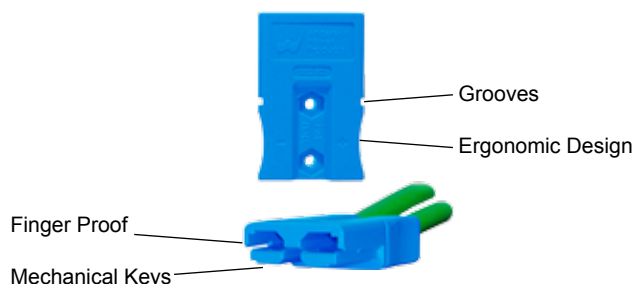
#### Euro Battery Connectors

##### FEATURES:

- Streamlined design
- 3 hexagonal voltage coding pins for wet, dry/gel and air supply
- 2 main contacts, 4 auxiliary contacts, voltage key and air supply

### SBS® Connector:

Available in 50Amp & 75Amp



### SPEC Pak™ Series:



#### IP68 Class

Housings Suitable for:

- 1327 - Series
- 1327FP - Series
- 1827 - Series
- 4327 - Series

Anderson Power Products® (APP®) is an industry leader in the design and manufacture of high power interconnects and accessories. Founded in 1877, APP® manufactured products to support the Mining and Railway Industries.

Today, as a result of innovative design and development, APP® has evolved into a valued supplier for a wide variety of markets including Back-up Power, Telecom/Datacom, and the Material Handling Industries.

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# MICRO & NANO CONNECTOR SERIES

## Bi-Lobe® Connectors

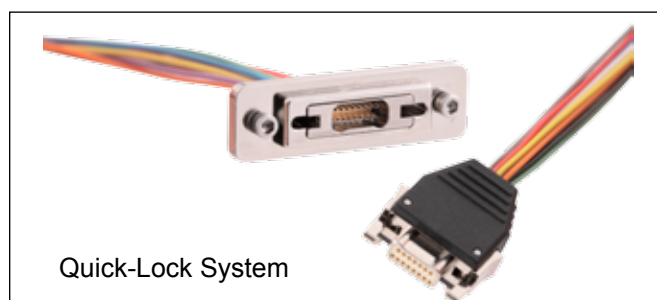
### Features:

- Dual Row Metal Shell Nano Offset Connectors
- Sizes: 9-15-21-25-31-37-51-65 pins at 0,635 mm Pitch
- Mating Pin and Sockets available
- All sizes with 18 inch [45,7cm] pre-wired leads
- Colour Coded as per IAW MIL-STD-681, System 1, using ten solid repeating colours
- All sizes Horizontal Surface Mount
- All sizes Flex-Circuit Mount
- All sizes Vertical Surface Mount
- All sizes Straight Thru-Hole Mount
- All sizes Panel Mount Versions (Female Only)
- Shells are factory installed



### Nano Panel Mount Connectors

Pass tests in MIL-DTL-83513 & MIL-DTL-32139. Mates with Standard MIL-32139 wired plugs. Space required = 1/4 of standard Micro-D's. Locks with Jackscrews to mate. Military Rugged reliability while reducing size, weight and Board Space in a portable and Miniturized Circuitry.



### Tested to and Passed the Following Performance Specifications of MIL-DTL-32139

|                                                |                                                                   |
|------------------------------------------------|-------------------------------------------------------------------|
| Dielectric Withstanding Voltage:               | 250 VAC initial, 100 VAC after Humidity                           |
| Insulation Resistance:                         | 5000 Meg ohms min @ 100 VDC                                       |
| Temperature Cycling:                           | -55°C to +125°C, 5 cycles                                         |
| Humidity (Mated):                              | Per EIA-364, procedure 31-B, except omit steps 7A & 7B            |
| Vibration:                                     | 20 g's - no discontinuity greater than 10 nanoseconds*            |
| Mechanical Shock:                              | 100 g's - no discontinuity greater than 10 nanoseconds*           |
| Durability:                                    | 200 cycles                                                        |
| Contact Resistance after Durability:           | 65 mv max @ 2.5 amps                                              |
| Mating/Unmating after Durability:              | Forces not exceed 7 oz/contact                                    |
| Salt Spray:                                    | Per EIA-364, procedure 26-B                                       |
| Low Level Contact Resistance after Salt Spray: | Max resistance 28 milliohms                                       |
| Contact Resistance after Salt Spray:           | 70 mv max @ 1 amps                                                |
| Mating/Unmating force after Salt Spray:        | Forces not to exceed 7 oz/contact                                 |
| Contact Retention after Salt Spray:            | Minimum of 2 lbs contact retention                                |
| Thermal Vacuum Outgassing:                     | NASA SP-R-0022**                                                  |
| Solder Heat & Contact Retention:               | 360°C for 10 sec. & contacts must withstand 5 lbs retention force |
| Solder ability:                                | Per EIA-364, procedure 56                                         |

\* Tested and passed while monitoring for open circuits greater than 100 nanoseconds.

\*\* NASA requirement

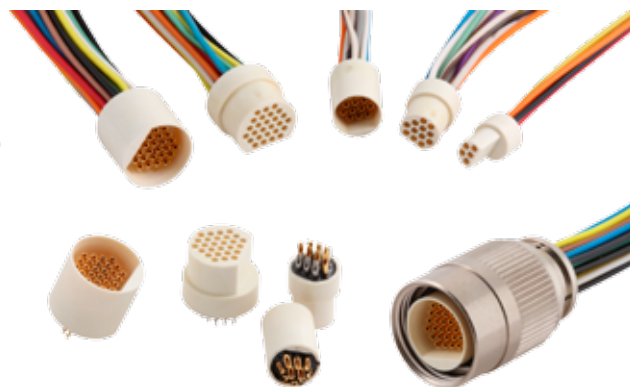
Requiriements in BLUE COLOUR exceed the MIL-DTL-32139 requirements

# MICRO & NANO CONNECTOR SERIES

## Circular Plastic and Metal Shell Connectors

### Specification:

|                   |                                                                                               |
|-------------------|-----------------------------------------------------------------------------------------------|
| Insulator:        | Thermoplastic Polyester per MIL-M-24519,<br>Type GLCP-30F, Natural                            |
| Contact Material: | Pins - BerylliumCopper per ASTM B194, Alloy C17200<br>Socket - Copper Alloy per MIL-DTL-13513 |
| Contact Finish:   | Gold plate per ASTM B488, Type II (Hard Gold),<br>Code C, Class 1.27 (.000050)                |
| Terminal Finish:  | Pin - Hard gold plate per MIL-G-45204<br>Socket - Hard gold plate per ASTM B488               |
| Wire - Standard:  | 26 AWG, 7 Strand, Type E per NEMA HP3                                                         |
| Shells:           | Brass per MIL-DTL-83513                                                                       |
| Shell Finish:     | Electroless Nickel per AMS-C-26074                                                            |



### Features:

- Micro & Nano Offset Circular Connectors
- Sizes: 2 up to 27
- Standard Sizes are 5-12-27 pin
- All sizes with 18 inch [45,7cm] pre-wired leads
- Wiring is Colour Coded as per IAW MIL-STD-681, System 1, using ten solid repeating colours
- Sizes 5 & 12 also in Soldercup style

## Tested to and Passed the Following Performance Specifications of MIL-DTL-83513

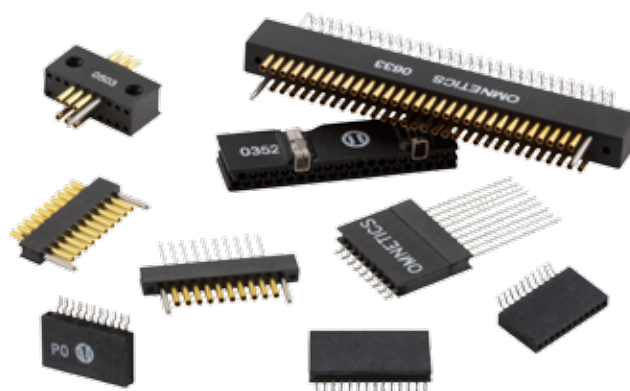
|                                         |                                                              |
|-----------------------------------------|--------------------------------------------------------------|
| Current Rating:                         | 3 Amp max                                                    |
| Dielectric Withstanding Voltage:        | 600 VAC RMS                                                  |
| Insulation Resistance:                  | 5000 Mohms min @ 500 VDC                                     |
| Contact Resistance:                     | 26 mOhms (65 mV) max @ 2.5 Amp                               |
| Mating/Unmating Force:                  | Forces not exceed 6 oz/contact                               |
| Temperature Cycling:                    | -55°C to +125°C, 5 cycles                                    |
| Humidity (Mated):                       | IAW MIL-STD-1344, Method 1002.2, Type II, Omit Steps 7A & 7B |
| Vibration:                              | IAW-MIL-STD-1344, Method 205.1, Test Condition IV, 20 g's    |
| Mechanical Shock:                       | IAW-MIL-STD-1344, Method 2004.1, Test Condition E, 50 g's    |
| Durability:                             | 500 cycles                                                   |
| Contact Resistance after Durability:    | 26 mOhms (65 mV) max @ 2.5 amp                               |
| Mating/Unmating after Durability:       | Forces not to exceed 6 oz/contact                            |
| Salt Spray:                             | 48 hrs IAW-MIL-STD-1344, Method 1001.1, Test Condition B     |
| Contact Resistance after Salt Spray:    | 28 mOhms (70 mV) max @ 2.5 amp                               |
| Mating/Unmating force after Salt Spray: | Forces not to exceed 6 oz/contact                            |
| Contact Retention after Salt Spray:     | Minimum of 2 lbs contact retention                           |
| Thermal Vacuum Outgassing:              | NASA SP-R-0022                                               |
| Solder Heat & Contact Retention:        | 360°C for 10 sec.                                            |
| Solder ability:                         | MIL-STD-202, Method 208                                      |

# MICRO & NANO CONNECTOR SERIES

## Strip Connectors - Single or Dual Row

### Specification:

|                                           |                                                                                                |
|-------------------------------------------|------------------------------------------------------------------------------------------------|
| Insulator:                                | Polyphenylene Sulfide per MIL-M-24519, Type GST 40F, Black                                     |
| Contact Material:                         | Pins - Beryllium Copper per ASTM B194, Alloy C17200<br>Socket - Copper Alloy per MIL-DTL-13513 |
| Contact Finish:                           | Gold plate per ASTM B488, Type II (Hard Gold), Code C, Class 1.27 (.000050)                    |
| Terminal Finish:                          | Hard gold plate per ASTM B488                                                                  |
| Latch:                                    | Beryllium Copper per ASTM B488                                                                 |
| Latch Finish:                             | Electroless Nickel per AMS-C-26074                                                             |
| Guide Post:                               | Brass per ASTM B16, Alloy C36000                                                               |
| Guide Post Finish:                        | Electroless Nickel per AMS-C-26074                                                             |
| Guide Post (DRS ONLY):                    | 303 Stainless Steel per ASTM A582                                                              |
| Wire - Standard:                          | 26 AWG, 7 Strand, Type E per NEMA HP3                                                          |
| Jack Post & Screw Receptacle (DRP & DRS): | 303 Stainless Steel per ASTM A582<br>Passivate per QQ-P35                                      |



### Features:

- Micro & Nano Offset Strip-Connectors
- Single & Double Row
- Sizes: 2 up to 60
- Standard Sizes are 2-4-6 pin (COTS)
- All sizes with 18 inch [45,7cm] pre-wired leads
- Wiring is Colour Coded as per IAW MIL-STD-681, System 1, using ten solid repeating colours
- Latch is factory installed

## Tested to and Passed the Following Performance Specifications of MIL-DTL-83513

|                                         |                                                              |
|-----------------------------------------|--------------------------------------------------------------|
| Current Rating:                         | 3 Amp max                                                    |
| Dielectric Withstanding Voltage:        | 600 VAC RMS                                                  |
| Insulation Resistance:                  | 5000 Mohms min @ 500 VDC                                     |
| Contact Resistance:                     | 26 mOhms (65 mV) max @ 2.5 Amp                               |
| Mating/Unmating Force:                  | Forces not exceed 6 oz/contact                               |
| Temperature Cycling:                    | -55°C to +125°C, 5 cycles                                    |
| Humidity (Mated):                       | IAW MIL-STD-1344, Method 1002.2, Type II, Omit Steps 7A & 7B |
| Vibration:                              | IAW-MIL-STD-1344, Method 205.1, Test Condition IV, 20 g's    |
| Mechanical Shock:                       | IAW-MIL-STD-1344, Method 2004.1, Test Condition E, 50 g's    |
| Durability:                             | 500 cycles                                                   |
| Contact Resistance after Durability:    | 26 mOhms (65 mV) max @ 2.5 amp                               |
| Mating/Unmating after Durability:       | Forces not to exceed 6 oz/contact                            |
| Salt Spray:                             | 48 hrs IAW-MIL-STD-1344, Method 1001.1, Test Condition B     |
| Contact Resistance after Salt Spray:    | 28 mOhms (70 mV) max @ 2.5 amp                               |
| Mating/Unmating force after Salt Spray: | Forces not to exceed 6 oz/contact                            |
| Contact Retention after Salt Spray:     | Minimum of 2 lbs contact retention                           |
| Thermal Vacuum Outgassing:              | NASA SP-R-0022                                               |
| Solder Heat & Contact Retention:        | 360°C for 10 sec.                                            |
| Solder ability:                         | MIL-STD-202, Method 208                                      |

# MICRO & NANO CONNECTOR SERIES

## Omnetics Flex-Pin Technology

### Omnetics Flex-Pin:

Designed and manufactured for Military, Space and medical applications. The cantilever spring uses a two leaf design, with one end fixed to while one is floating. The length and cross-section area is larger than most other designs available on the market - thus to ensure higher mate-demate life and to sustain a more constant insertion and withdrawal force.

The two sizes (Micro and Nano) are designed to mate to Industry Standard.

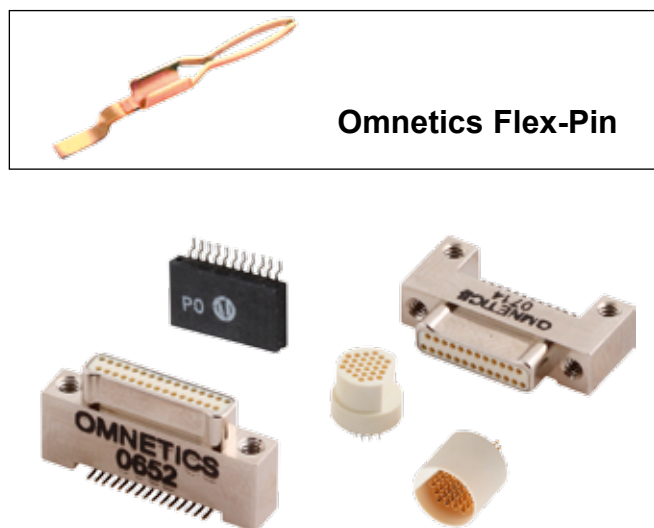
Both sizes are tested according to **MIL-DTL-83513** shock and vibration test.

### Material Selection:

BeCu pins are of ASTM B194 material and alloy 17200 with a min. tensile strength at 120,000 ksi.

Pins are Ni/Au plated per ASTM B488, Type 3.

Sockets are Cu alloy, Ni/Au plated.



## Materials Outgassing Data

Being dedicated to the design and manufacture of quality micro-miniature and nano-miniature connectors, Omnetics Connector Corp. has chosen the highest quality materials; not only for their excellent electrical characteristics, but also for their low outgassing properties.

Listed below are outgassing values of our standard materials:

|       | Material:                                    | %TML: | %CVCM: | %WVR: | Page*:                       |
|-------|----------------------------------------------|-------|--------|-------|------------------------------|
| Epoxy | Hysol<br>EE 4215/HD 3561                     | 0,90  | 0,01   | 0,26  | 264                          |
|       | Emerson & Cummings<br>Stycast 2651 / Cat. 11 | 0,63  | 0,01   | 0,22  | 369                          |
|       | Frey Engineering<br>CF-3003-80 A/B           | 0,24  | 0,02   | 0,08  | website under<br>adhesives** |
| Ink   | Shipley Ronal<br>Ronascreen 752W A/B         | 0,78  | 0,02   | 0,55  | 347                          |
| Body  | Vectra A130                                  | 0,03  | 0      | 0,01  | 386                          |
|       | Fortron PPS 1140L4                           | 0,05  | 0      | 0,01  | 284                          |

\* Outgassing data from NASA Reference Publication 1124, Rev. 4

\*\* Website: <http://epims.gsfc.nasa.gov/og/>

## High Temperature Material Specifications

| Material:                                    | Application:  | MIL-Spec. or Standard:                        | Temperature Rating: |
|----------------------------------------------|---------------|-----------------------------------------------|---------------------|
| Polyphynylene Sulfide<br>Fotron 1140L4 (PPS) | Insulators    | MIL-M24519 Type GST-40F<br>ASTM D684, 264psi  | 265°C               |
| Liquid Crystal Polymer<br>Vectra A130 (LCP)  | Insulators    | MIL-M-24519 Type GST-40F<br>ASTM D684, 264psi | 230°C               |
| BeCu w/Gold Plating                          | Pins          | ASTM B488, Type 3, Code C, Class 1.25         | 260°C               |
| Cu Alloy w/Gold Plating                      | Sockets       | ASTM B488, Type 3, Code C, Class 1.25         | 260°C               |
| BeCu w/Electroless Nickel                    | Micro Latches | AMS-26074                                     | 260°C               |
| Cu Alloy w/Electroless Nickel                | Guide Pins    | AMS-26074                                     | 200°C               |
| PTFE Teflon Insulation                       | Lead Wire     | MIL-W-16878/4 & 6 + MIL-W-22759/11            | 200°C               |
| Frey Engineering 3003*                       | Epoxy         | MIL-I-16923                                   | 200°C               |

\* By request

## The D-sub EBOSA™

Adds state of the art optical expanded beam performance to the yet versatile D-Sub connector family. EBOSA™ suit any common connector housing according to DIN 41612 or DIN 41652.

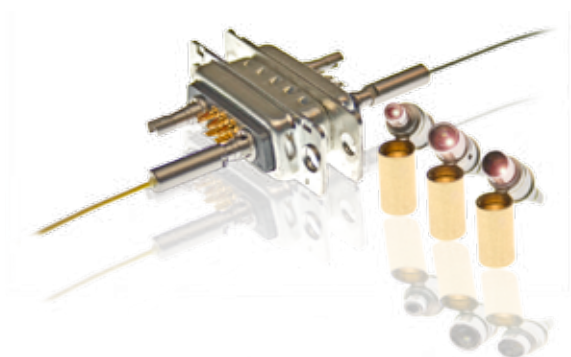
### Features:

- Withstand extreme environmental conditions
- Superior optical performance
- Requires no maintenance
- Utilises the cost effective D-Sub design
- Interchangeable with electrical inserts
- Rear release/rear removable with any standard extraction tool
- Use of LC standard connector makes it easy to field install and field terminate
- RoHS compliant
- Reduced sensitivity to:
  - Dust
  - Vibrations
  - Temperature changes
- Small size
- DIN 41612 & DIN 41652 compatible



### Applications:

- Daisy-chaining of tactical fiber cables
- HD live broadcasting equipment
- Military tactical communications systems
- Mining control and communication systems
- Petrochemical plant installations
- Seismic exploration systems
- Measurement equipment
- Backplane connection
- Board to board connection
- Free air communication



### Main markets:

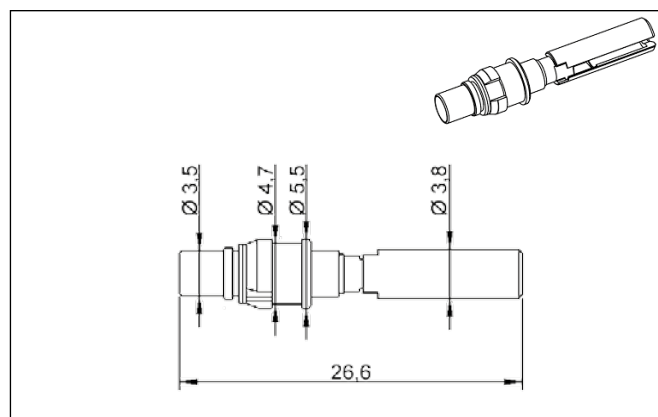
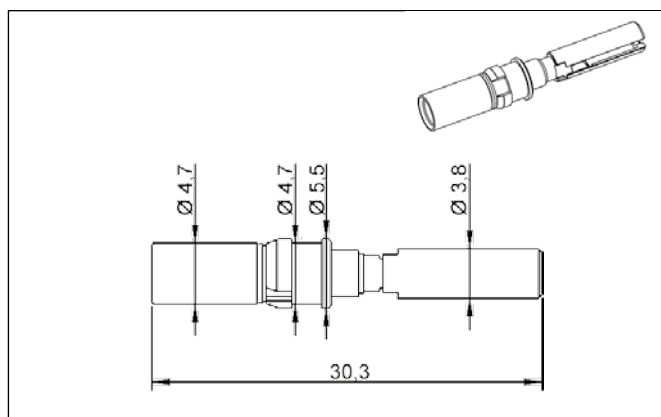
- Aviation
- Marine
- Chemical/petrochemical processing
- Medical devices
- Food processing
- Automotive
- Heavy industrial equipment
- Measurement equipment
- Broadcasting
- Military

### Specification:

| Test                           | SM (Single Mode)              | MM (Multi Mode)               |
|--------------------------------|-------------------------------|-------------------------------|
| Insertion Loss*                | Typical 0.8 dB    Max 1.5 dB  | Typical 0.4 dB    Max 1.0 dB  |
| Temperature (storage)          | -55 to +85°C                  | -55 to +85°C                  |
| Temperature ( operation)       | -40 to +85°C                  | -40 to +85°C                  |
| Size of assembled D-sub EBOSA™ | Diameter: 5mm<br>Length: 26mm | Diameter: 5mm<br>Length: 26mm |

**\*Against reference**

Insertion loss may differ depending on D-Sub brand.



## Description:

- An interchangeable optical pin that fits in standard D-Sub as easy as power or coax pins.
- The interchangeable optical pin is removable with standard D-Sub removal tool.
- It connects to a patch cord with a standard low cost LC connector.
- Available in Singlemode 9/125µm and Multimode 50/125µm, 62.5/125µm versions.



**Figure shows the basic function of the D-sub EBOSA™**

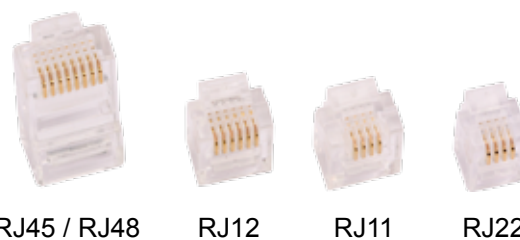
## Ordering information:

| Part Number: | Product Code:  | Description:                               |
|--------------|----------------|--------------------------------------------|
| 4100-0001-01 | GB-EB-SM1-DM1  | Pin, D-Sub, DIN 41652, EBOSA™, SM, V1      |
| 4100-0001-02 | GB-EB-SM1-DF1  | Socket, D-Sub, DIN 41652, EBOSA™ SM V1     |
| 4100-0001-03 | GB-EB-MM61-DM1 | Pin, D-Sub, DIN 41652, EBOSA™ MM62,5 V1    |
| 4100-0001-04 | GB-EB-MM61-DF1 | Socket, D-Sub, DIN 41652, EBOSA™ MM62,5 V1 |
| 4100-0001-05 | GB-EB-MM51-DM1 | Pin, D-Sub, DIN 41652, EBOSA™ MM50 V1      |
| 4100-0001-06 | GB-EB-MM51-DF1 | Socket, D-Sub, DIN 41652, EBOSA™ MM50 V1   |

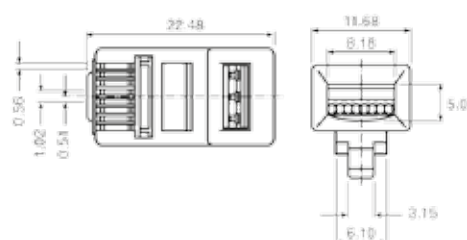
# MODULAR SERIES

## Features:

- UL94V-0 polycarbonate body
- True knife blade, insulating piercing contacts
- Compatible with standard crimping tools
- Compatible with all FCC specifications
- Flat cable Plug available on request
- 50μ" gold plated contacts as standard.  
Other platings on request. (6, 15 & 30μ")

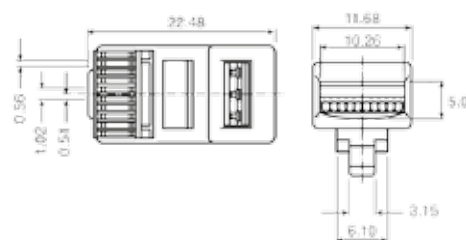


**Eight Conductor / Eight Position Cable Plug  
RJ45**



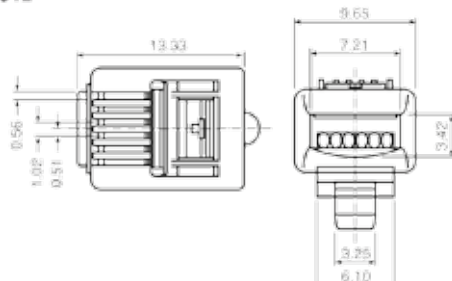
Dimensions in mm

**Ten Conductor / Ten Position Plug  
RJ48**



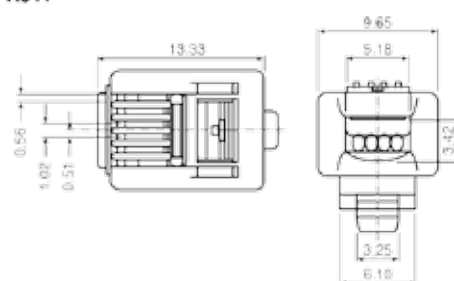
Dimensions in mm

**Six Conductor / Six Position Line Cord Plug  
RJ12**



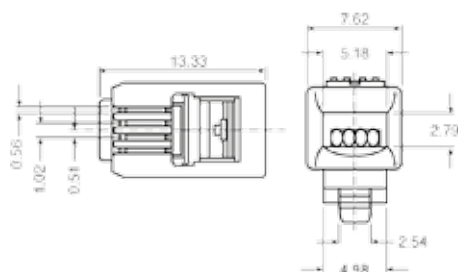
Dimensions in mm

**Four Conductor / Six Position Line Cord Plug  
RJ11**



Dimensions in mm

**Four Conductor / Four Position Handset Cord Plug  
RJ22**



Dimensions in mm

## Ordering information:

| Size:  | P/N - BULK:  | Product Code: |
|--------|--------------|---------------|
| 8P8C   | 6510-0104-01 | RJ45-8P8CR    |
| 4P4C   | 6510-0104-02 | RJ22-4P4CR    |
| 6P4C   | 6510-0104-03 | RJ11-6P4CR    |
| 6P6C   | 6510-0104-04 | RJ12-6P6CR    |
| 10P10C | 6510-0104-05 | RJ48-10P10CR  |

## RJ45SRB - Series



### Features:

- Standard version OD up to 6.0 mm
- Small version OD up to 4.3 mm
- Available in 11 standard colours
- Custom colours available upon request.

## Ordering information:

Standard 6.0 mm

| Colour:    | P/N - BULK:  | Product Code: |
|------------|--------------|---------------|
| Light Grey | 6510-0100-01 | RJ45SRB-LG    |
| Dark Grey  | 6510-0100-02 | RJ45SRB-DG    |
| Blue       | 6510-0100-03 | RJ45SRB-B     |
| Yellow     | 6510-0100-04 | RJ45SRB-Y     |
| Green      | 6510-0100-05 | RJ45SRB-G     |
| Black      | 6510-0100-06 | RJ45SRB-BK    |
| Purple     | 6510-0100-07 | RJ45SRB-P     |
| White      | 6510-0100-08 | RJ45SRB-W     |
| Orange     | 6510-0100-09 | RJ45SRB-O     |
| Red        | 6510-0100-10 | RJ45SRB-R     |
| Pink       | 6510-0100-11 | RJ45SRB-PK    |

For Small version, 4.3 mm: 6510-0101-xx / RJ45SRB-SM-xx

## RJ45SRB - Translucent Series



### Features:

- Standard version OD up to 6.0 mm
- Available in 6 standard colours
- Custom colours available upon request.

## Ordering information:

Standard 6.0 mm

| Colour: | P/N - BULK:  | Product Code:   |
|---------|--------------|-----------------|
| Blue    | 6510-0100-21 | RJ45SRB-TRANS-B |
| Yellow  | 6510-0100-22 | RJ45SRB-TRANS-Y |
| Green   | 6510-0100-23 | RJ45SRB-TRANS-G |
| Purple  | 6510-0100-24 | RJ45SRB-TRANS-P |
| Orange  | 6510-0100-25 | RJ45SRB-TRANS-O |
| Red     | 6510-0100-26 | RJ45SRB-TRANS-R |

## RJ45SRB - Retrofit Series



### Features:

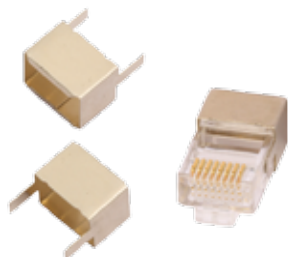
- Retrofit style for provision of strain relief / Colour Coding after Cable Assembly has been made. (On Site Coding)

## Ordering information:

| Colour:    | P/N - BULK:  | Product Code:  |
|------------|--------------|----------------|
| Light Grey | 6510-0102-01 | RJ45SRB-RET-LG |
| Dark Grey  | 6510-0102-02 | RJ45SRB-RET-DG |
| Blue       | 6510-0102-03 | RJ45SRB-RET-B  |
| Yellow     | 6510-0102-04 | RJ45SRB-RET-Y  |
| Green      | 6510-0102-05 | RJ45SRB-RET-G  |
| Black      | 6510-0102-06 | RJ45SRB-RET-BK |
| Purple     | 6510-0102-07 | RJ45SRB-RET-P  |
| White      | 6510-0102-08 | RJ45SRB-RET-W  |
| Orange     | 6510-0102-09 | RJ45SRB-RET-O  |
| Red        | 6510-0102-10 | RJ45SRB-RET-R  |

## MODULAR SERIES

### RJ45-SC - Shielding Can



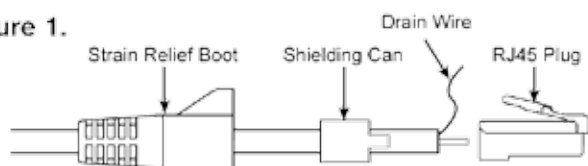
### Ordering information:

| Type:   | P/N - BULK:  | Product Code: |
|---------|--------------|---------------|
| RJ45-SC | 6510-0103-01 | RJ45SC-GS     |

### Features:

- Shielding Can for easy conversion from UTP to FTP
- Recommended for use with MHRJ45-8P8CR and any of the RJ45-SRB boots

Figure 1.



Prepare cable as you would for UTP assemblies. Place the boot onto the cable, followed by the metal can, as shown above.

Figure 2.



Terminate the RJ45 plug prior to fitting the shielding can. Bend the drain wire across the top of the RJ45 body as shown, trim if necessary.

### RJ45-SRI - Series

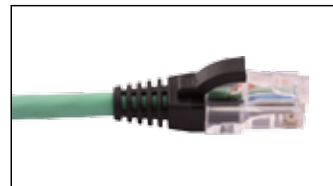


### Ordering information:

| Colour:    | P/N - BULK:  | Product Code: |
|------------|--------------|---------------|
| Light Grey | 6510-0109-01 | RJ45SRI-LG    |
| Dark Grey  | 6510-0109-02 | RJ45SRI-DG    |
| Blue       | 6510-0109-03 | RJ45SRI-B     |
| Yellow     | 6510-0109-04 | RJ45SRI-Y     |
| Green      | 6510-0109-05 | RJ45SRI-G     |
| Black      | 6510-0109-06 | RJ45SRI-BK    |
| Red        | 6510-0109-10 | RJ45SRI-R     |

### Features:

- Standard version OD up to 6.0 mm
- Insert locks into place after crimp
- Available in 7 standard colours
- Custom colours available upon request
- Recommended for use with RJ45-8P8CR plug



## RJJ - Modular Jacks



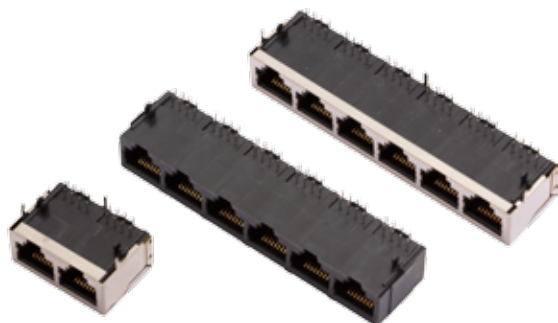
### Features:

- Available in Shielded or Unshielded
- Available in 4, 6 and 8 pos
- Compatible with Industry standard PCB layouts

## Ordering information:

| Type:              | P/N - BULK:  | Product Code: |
|--------------------|--------------|---------------|
| 6P6C-RA-Shielded   | 2101-0100-02 | RJJ-66NF-RA-S |
| 8P8C-RA-Shielded   | 2101-0100-03 | RJJ-88NF-RA-S |
| 4P4C-RA-Unshielded | 2101-0100-11 | RJJ-44NF-RA   |
| 6P6C-RA-Unshielded | 2101-0100-12 | RJJ-66NF-RA   |
| 8P8C-RA-Unshielded | 2101-0100-13 | RJJ-88NF-RA   |
| 6P4C-RA-Unshielded | 2101-0100-14 | RJJ-64NF-RA   |
| 6P6C-V-Shielded    | 2101-0110-02 | RJJ-66NF-V-S  |
| 8P8C-V-Shielded    | 2101-0110-03 | RJJ-88NF-V-S  |
| 4P4C-V-Unshielded  | 2101-0110-11 | RJJ-44NF-V    |
| 6P6C-V-Unshielded  | 2101-0110-12 | RJJ-66NF-V    |
| 8P8C-V-Unshielded  | 2101-0110-13 | RJJ-88NF-V    |
| 6P4C-V-Unshielded  | 2101-0110-14 | RJJ-64NF-V    |

## 3012 - Series



### Features:

- Available in Shielded or Unshielded
- Available in 2, 4, 6 and 8 ports
- Compatible with Industry standard PCB layouts

## Ordering information:

| Type / Size::      | P/N - BULK:  | Product Code: |
|--------------------|--------------|---------------|
| 2port - Shielded   | 2101-0112-01 | 3012-S-02     |
| 4port - Shielded   | 2101-0112-02 | 3012-S-04     |
| 6port - Shielded   | 2101-0112-03 | 3012-S-06     |
| 8port - Shielded   | 2101-0112-04 | 3012-S-08     |
| 2port - Unshielded | 2101-0112-11 | 3012-02       |
| 4port - Unshielded | 2101-0112-12 | 3012-04       |
| 6port - Unshielded | 2101-0112-13 | 3012-06       |
| 8port - Unshielded | 2101-0112-14 | 3012-08       |

## COUPLER



### Features:

- Available in Shielded or Unshielded
- Compatible with Industry standard Panel Cut outs

## Ordering information:

| Type / Size::    | P/N - BULK:  | Product Code: |
|------------------|--------------|---------------|
| Unshielded Cat5e | 2101-0115-01 | 3101-8821     |
| Shielded Cat5e   | 2101-0115-02 | 3101S-8821    |

## CAT6 Shielded and Unshielded - New Design



### CAT6a Unshielded Plugs - New Design

#### Features/Benefits

- High production yields when building CAT6 compliant patch cords
- Integral strain-relief which is the same width as the plug housing
- Patented contact design allow both solid and stranded wires

## CAT6 Unshielded Plugs

### Commonly ordered parts:

| Part Number  | Contacts | Positions | Description                                                             |
|--------------|----------|-----------|-------------------------------------------------------------------------|
| SS-39100-007 | 8        | 8         | Plug, Loadbar and Strain Relief Housing (5.58mm to 5.85 mm Ø)           |
| SS-39100-008 | 8        | 8         | Plug, Loadbar and Snagless Strain Relief Housing (5.58 mm to 5.85 mm Ø) |
| SS-39100-011 | 8        | 8         | Plug, Loadbar and Snagless Strain Relief Housing (6.10 mm to 6.35 mm Ø) |



### CAT6a Shielded Plugs - New Design

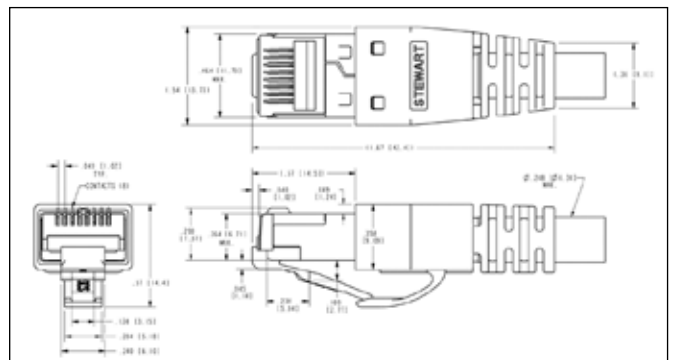
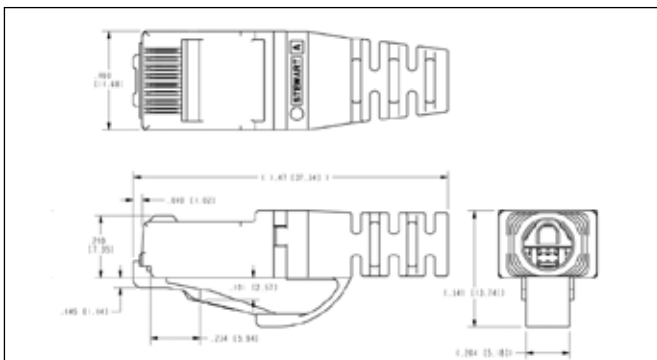
#### Features/Benefits

- One-step termination process. Shield and contacts are crimped in a single operation.
- 360° shield termination
- Plug can be overmoulded or assembled using available snap-on boot with an anti-snag feature
- Loadbar for ease of assembly

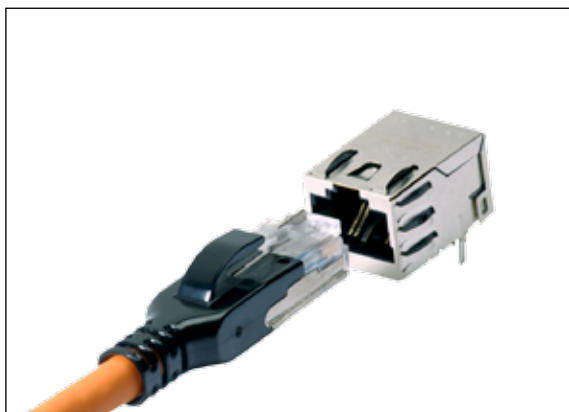
## CAT6 Shielded Plugs

### Commonly ordered parts:

| Part Number  | Contacts | Positions | Description                                                 |
|--------------|----------|-----------|-------------------------------------------------------------|
| SS-39200-010 | 8        | 8         | Plug and Loadbar (6.10mm to 6.60 mm Ø)                      |
| SS-39200-012 | 8        | 8         | Plug and Loadbar (5.60 mm to 6.10 mm Ø)                     |
| SS-39200-011 | 8        | 8         | Plug, Loadbar and Strain Relief Boot (5.90 mm to 6.30 mm Ø) |



## ARJ45™ Category 7a Connector System



### ARJ45™ Category 7a Connector System

#### Features/Benefits

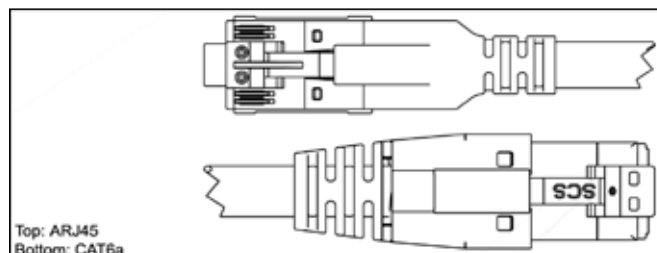
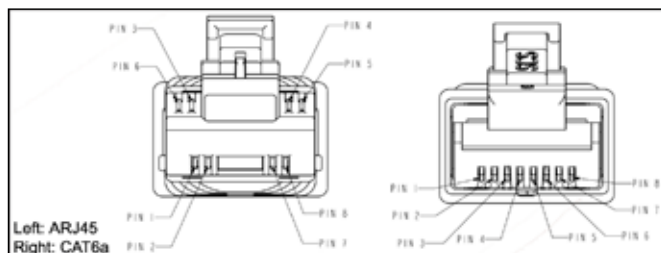
- Meets IEC 60603-7-7 standard for Category 7 performance up to 600MHz
- Meets the proposed Category 7a standard for increased frequency up to 1000MHz
- Meets the interface for Category 7a connectors as defined by IEC 60603-7-7
- Interface compatible with Nexans GG45 Category 7
- Right angle PCB jack available for Category 7a patch panel designs and high speed data transmission applications
- Uses data transmission pair isolation techniques to archive high frequency performance up to 1000MHz

Plug design includes a built-in strain relief boot as well as an anti-snag feature for plug tab protection.

UL 94-V0 plastic components

## ARJ45™ Category 7a Connector System

| Part Number Replace xxx with length in meters. 001, 002 etc. | Contacts | Positions | Description                                                    |
|--------------------------------------------------------------|----------|-----------|----------------------------------------------------------------|
| CA76-xxxM0-8                                                 | 8        | 8         | CAT6 to CAT7a Patch Cord (Available in 1, 2, 3, 5, 7 and 10m)  |
| CA77-xxxM0-8                                                 | 8        | 8         | CAT7a to CAT7a Patch Cord (Available in 1, 2, 3, 5, 7 and 10m) |
| SS77100-004                                                  | 8        | 8         | CAT7a ARJ45 Jack                                               |



## Series 60300 - CAT6a Shielded and Unshielded Jacks



### SS-60300 Series CAT6a PCB Mounted Jacks

#### Features/Benefits

- Easily compensated to CAT6a performance levels through an integrated flexible circuit board design
- Flexible PCB design help cancel Near End Cross Talk (NEXT) at the plug/jack interface
- 180 degree vertical mount and 90 degree right angle mount shielded and unshielded versions available
- Minimal secondary compensation required due to the jack's construction
- Selectively plated contacts with 50 micro-inches of gold
- Designed for use in 10 Gigabit Ethernet applications

## Series 60300 - CAT6a Shielded and Unshielded Jacks Commonly ordered parts

| Part Number  | Contacts | Positions | Description                       |
|--------------|----------|-----------|-----------------------------------|
| SS-60300-021 | 8        | 8         | CAT6a Unshielded Right Angle Jack |
| SS-60300-017 | 8        | 8         | CAT6a Unshielded Vertical Jack    |
| SS-60300-002 | 8        | 8         | CAT6a Shielded Right Angle Jack   |
| SS-60300-014 | 8        | 8         | CAT6a Shielded Vertical Jack      |

## Modular Plugs



Series 30: Standard Performance Unshielded Modular Plugs

Series 36: Standard Performance Shielded Modular Plugs

Series 37: CAT5e Shielded and Unshielded Modular Plugs

Series 39: CAT6 Shielded and Unshielded Modular Plugs

All plugs with part number prefix SS-, 940- or 943- accommodate both solid and stranded conductors.

### Series 30 - Standard-Performance Unshielded Plugs

Commonly ordered parts:

| Part Number       | Contacts | Positions | Description                    |
|-------------------|----------|-----------|--------------------------------|
| 940-SP-3044       | 4        | 4         | 4x4 UTP Plug for Flat Cable    |
| 940-SP-3044R      | 4        | 4         | 4x4 UTP Plug for Round Cable   |
| 940-SP-3046       | 4        | 6         | 4x6 UTP Plug for Flat Cable    |
| 940-SP-3046R      | 4        | 6         | 4x6 UTP Plug for Round Cable   |
| 940-SP-3066       | 6        | 6         | 6x6 UTP Plug for Flat Cable    |
| 940-SP-3066R      | 6        | 6         | 6x6 UTP Plug for Round Cable   |
| 940-SP-3088       | 8        | 8         | 8x8 UTP Plug for Flat Cable    |
| 940-SP-3088R-A133 | 8        | 8         | 8x8 UTP Plug for Round Cable   |
| 940-SP-301010     | 10       | 10        | 10x10 UTP Plug for Flat Cable  |
| 940-SP-301010R    | 10       | 10        | 10x10 UTP Plug for Round Cable |

### Series 36 - Standard-Performance Shielded Plugs

Commonly ordered parts:

|                        |    |    |                                     |
|------------------------|----|----|-------------------------------------|
| 940-SP-360606-A151     | 6  | 6  | 6x6 S/FTP Kit with Load Bar         |
| 940-SP-360808-A108     | 8  | 8  | 8x8 S/FTP Kit with Load Bar         |
| 940-SP-360808-A161     | 8  | 8  | 8x8 S/FTP Kit with Management Bar   |
| 940-SP-360808-031-A108 | 8  | 8  | 8x8 S/FTP Kit with Load Bar, AWG30  |
| 940-SP-361010-A161     | 10 | 10 | 10x10 S/FTP Kit with Management Bar |

### Series 37 - CAT5e Shielded and Unshielded Plugs

Commonly ordered parts:

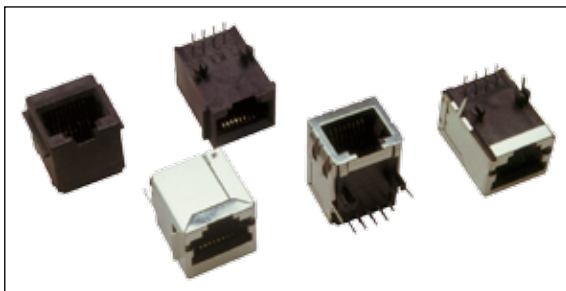
|                       |   |   |                                  |
|-----------------------|---|---|----------------------------------|
| 943-SP-370808M2       | 8 | 8 | 8x8 UTP with Management Bar      |
| SS-37000-002          | 8 | 8 | 8x8 UTP Plug Unibody             |
| SS-37000-009          | 8 | 8 | 8x8 UTP Plug Unibody - Oversized |
| 943-SP-370808SM2      | 8 | 8 | 8x8 S/FTP Kit                    |
| 943-SP-370808SM2-A217 | 8 | 8 | 8x8 S/FTP Kit                    |
| SS-37200-001          | 8 | 8 | 8x8 S/FTP Plug Unibody           |

### Series 39 - CAT6 Shielded and Unshielded Plugs

Commonly ordered parts:

|              |   |   |                                                          |
|--------------|---|---|----------------------------------------------------------|
| SS-39100-004 | 8 | 8 | 8x8 UTP Plug with Management Bar                         |
| SS-39100-008 | 8 | 8 | 8x8 UTP Plug with Load Bar and Strain Relief Boot        |
| SS-39200-006 | 8 | 8 | 8x8 S/FTP Kit with Management Bar                        |
| SS-39200-012 | 8 | 8 | 8x8 S/FTP Kit with Management Bar and Strain Relief Boot |

## Modular Jacks



- Series 64:** Standard Performance Low Profile Jacks
- Series 65:** Standard Performance Vertical Jacks
- Series 70:** Standard Performance Ultralow Profile MICROJACK
- Series 71:** High Performance Harmonica Jacks
- Series 60:** CAT6 Jacks

*High temp. Versions are approved for 260°C reflow soldering.*

### Series 64 - Low Profile Single-Port Jacks

Commonly ordered parts:

| Part Number (High Temp. Version) | Contacts | Positions | Description                       |
|----------------------------------|----------|-----------|-----------------------------------|
| SS-6444-NF (SS64400-002F)        | 4        | 4         | 4x4 Unshielded Right Angle Jack   |
| SS-6446-NF (SS64600-004F)        | 4        | 6         | 4x6 Unshielded Right Angle Jack   |
| SS-6466-NF-A431 (SS64600-020F)   | 6        | 6         | 6x6 Unshielded Right Angle Jack   |
| SS-6488-NF-A431 (SS64800-012F)   | 8        | 8         | 8x8 Unshielded Right Angle Jack   |
| SS-641010-NF-A431 (SS64100-026F) | 10       | 10        | 10x10 Unshielded Right Angle Jack |
| SS-6466S-A-PG1 (SS64600-025F)    | 6        | 6         | 6x6 Shielded Right Angle Jack     |
| SS-6488S-A-NF (SS64800-031F)     | 8        | 8         | 8x8 Shielded Right Angle Jack     |
| SS-641010S-A-NF (SS64100-042F)   | 10       | 10        | 10x10 Shielded Right Angle Jack   |

### Series 65 - Vertical Single-Port Jacks

Commonly ordered parts:

|                                |    |    |                                |
|--------------------------------|----|----|--------------------------------|
| SS-6544-NF (SS65400-003F)      | 4  | 4  | 4x4 Unshielded Vertical Jack   |
| SS-6546-NF (SS65600-002F)      | 4  | 6  | 4x6 Unshielded Vertical Jack   |
| SS-6566-NF (SS65600-007F)      | 6  | 6  | 6x6 Unshielded Vertical Jack   |
| SS-650810-A-NF (SS65100-009F)  | 8  | 10 | 8x10 Unshielded Vertical Jack  |
| SS-651010-A-NF (SS65100-031F)  | 10 | 10 | 10x10 Unshielded Vertical Jack |
| SS-650810S-A-NF (SS65100-024F) | 8  | 10 | 8x10 Shielded Vertical Jack    |
| SS-651010S-A-NF (SS65100-038F) | 10 | 10 | 10x10 Shielded Vertical Jack   |

### Series 70 - MICROJACK®

Commonly ordered parts:

|                                       |    |    |                                      |
|---------------------------------------|----|----|--------------------------------------|
| SS-700810S-A-PG4-BA-50 (SS70100-015F) | 8  | 10 | 8x10 Shielded Right Angle Microjack  |
| SS701010S-A-PG4-1-BA (SS70100-023F)   | 10 | 10 | 10x10 Shielded Right Angle Microjack |

### Series 71 - High-Performanced Harmonica Jacks

Commonly ordered parts:

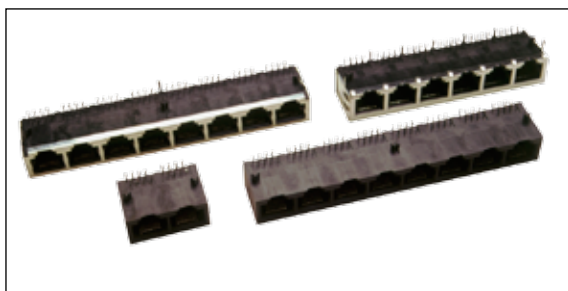
|                              |   |   |                                |
|------------------------------|---|---|--------------------------------|
| SS-7188S-A-NF (SS71800-007F) | 8 | 8 | 1 Port Shielded Harmonica Jack |
|------------------------------|---|---|--------------------------------|

### Series 60 - CAT6 Jacks

Commonly ordered parts:

|              |   |   |                                  |
|--------------|---|---|----------------------------------|
| SS-60000-010 | 8 | 8 | CAT6 Unshielded Right Angle Jack |
| SS-60000-014 | 8 | 8 | CAT6 Unshielded 47.5° Angle Jack |
| SS-60000-007 | 8 | 8 | CAT6 Unshielded Vertical Jack    |
| SS-60000-009 | 8 | 8 | CAT6 Shielded Right Angle Jack   |
| SS-60000-011 | 8 | 8 | CAT6 Shielded 47.5° Angle Jack   |
| SS-60000-008 | 8 | 8 | CAT6 Shielded Vertical Jack      |

## Modular Jacks



- Series 66:** Standard Performance Harmonica Jacks
- Series 71:** High Performance Harmonica Jacks
- Series 73:** Standard Performance Two-Row StackJacks
- Series 73100:** High Performance Two-Row StackJacks
- Series 73500:** High Performance Compressor Jacks

*High temp. Versions are approved for 260°C reflow soldering.*

### Series 66 - Harmonica Jacks

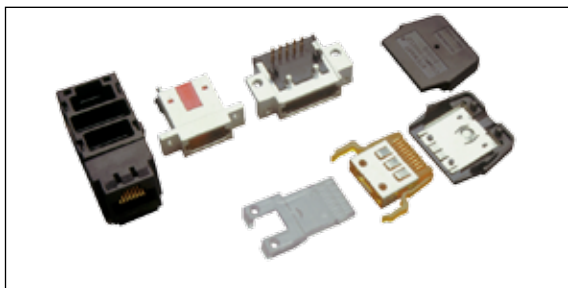
Commonly ordered parts:

| Part Number (High Temp. Version) | Contacts | Positions | Description                      |
|----------------------------------|----------|-----------|----------------------------------|
| SS-668804-NF (SS66800-017F)      | 8        | 8         | 4 Port Unshielded Harmonica Jack |
| SS-668808-NF (SS66800-036F)      | 8        | 8         | 8 Port Unshielded Harmonica Jack |
| SS-668802S-A-NF (SS66800-010F)   | 8        | 8         | 2 Port Shielded Harmonica Jack   |
| SS-668804S-A-NF (SS66800-022F)   | 8        | 8         | 4 Port Shielded Harmonica Jack   |
| SS-668806S-A-NF (SS66800-032F)   | 8        | 8         | 6 Port Shielded Harmonica Jack   |
| SS-668808S-A-NF (SS66800-038F)   | 8        | 8         | 8 Port Shielded Harmonica Jack   |

### Series 71 - High-Performance Harmonica Jacks

Commonly ordered parts:

|                                    |   |   |                                |
|------------------------------------|---|---|--------------------------------|
| SS-7188S-A-NF (SS71800-007F)       | 8 | 8 | 1 Port Shielded Harmonica Jack |
| SS-718802S-A-PG4-AC (SS71800-035F) | 8 | 8 | 2 Port Shielded Harmonica Jack |
| SS-718804S-A-NF (SS71800-038F)     | 8 | 8 | 4 Port Shielded Harmonica Jack |
| SS-718808S-A-PG4-AC (SS71800-055F) | 8 | 8 | 8 Port Shielded Harmonica Jack |



- Series 80:** Standard Performance Cable-Ready Jacks
- Series 82:** High Performance Cable-Ready Jacks
- Voice Series:** Economy Cable-Ready Jacks
- Series 31 & 32:** Compu-Shield Plugs
- Series 61 & 62:** Compu-Shield Jacks

### Voice-Series Cable-Ready Jacks

Commonly ordered parts:

| Part Number     | Contacts | Positions | Description                              |
|-----------------|----------|-----------|------------------------------------------|
| VS-JC88S-W24-C  | 8        | 8         | 8x8 CAT5 Shielded Cable-Ready Jack AWG24 |
| VS-JC88S-W26-C  | 8        | 8         | 8x8 CAT5 Shielded Cable-Ready Jack AWG26 |
| VS-JC88S-W30E-C | 8        | 8         | 8x8 CAT5 Shielded Cable-Ready Jack AWG30 |

### Series 31 Compu-Shield Plugs

Commonly ordered parts:

|              |    |    |                         |
|--------------|----|----|-------------------------|
| SS-310606-5  | 6  | 6  | 6x6 Compu-Shield Plug   |
| SS-310808-5  | 8  | 8  | 8x8 Compu-Shield Plug   |
| SS-311010-26 | 10 | 10 | 10x10 Compu-Shield Plug |

## MagJack®



|                             |                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------|
| <b>Port Configurations:</b> | Single Port                                                                          |
|                             | Harmonica Type Multiport<br>2, 4, 5, 6 or 8 Ports                                    |
|                             | Stacked 2xN Type Multiport<br>2x1, 2x2, 2x3, 2x4, 2x6 or 2x8 Ports                   |
|                             | Combo Type<br>MagJack with 1 or 2 USB-A Connectors<br>MagJack with 1 USB-B Connector |
| <b>Performance:</b>         | 10/100Base-TX Ethernet                                                               |
|                             | 10/100/1000Base-TX Ethernet                                                          |
|                             | 10 Gigabit Ethernet (10GBase-T)                                                      |

### Gigabit Single Port MagJacks Commonly ordered parts:

| Part Number    | Contacts | Positions | Description                                                             |
|----------------|----------|-----------|-------------------------------------------------------------------------|
| 0826-1X1T-23-F | 8        | 8         | 10/100/1000Base-TX, Y/GO LEDs, Tab Up, Right Angle MagJack              |
| L826-1X1T-23-F | 8        | 8         | 10/100/1000Base-TX, Y/GO LEDs, Tab Up, Low Profile, Right Angle MagJack |
| SI-60008-F     | 8        | 8         | 10/100/1000Base-TX, No LEDs, Tab Down, Right Angle MagJack              |
| SI-61001-F     | 8        | 8         | 10/100/1000Base-TX, G/Y LEDs, Tab Down, Right Angle MagJack             |

### Gigabit Multi Port and Combo MagJacks Commonly ordered parts:

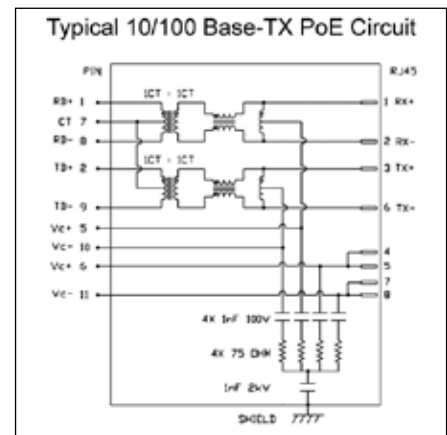
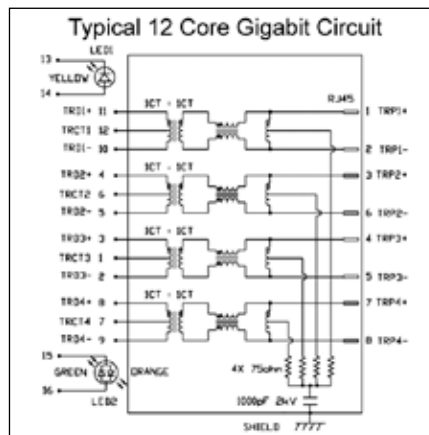
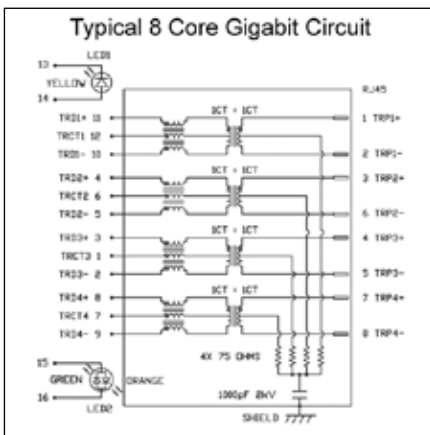
|                |   |   |                                                                              |
|----------------|---|---|------------------------------------------------------------------------------|
| 0826-1X2T-23-F | 8 | 8 | 10/100/1000Base-TX, Y/GO LEDs, Tab Up, 2 Port Harmonica MagJack              |
| L826-1X4T-43-F | 8 | 8 | 10/100/1000Base-TX, Y/GO LEDs, Tab Up, Low Profile, 4 Port Harmonica MagJack |
| 0845-2R1T-E4   | 8 | 8 | 10/100/1000Base-TX, G/GY LEDs, 2 Port Stacked MagJack                        |
| C893-1RX1-E3   | 8 | 8 | 10/100/1000Base-TX, G/GY LEDs, 2xUSB-A, Combo MagJack                        |

### 10/100Base-TX Single Port MagJacks - Power Over Ethernet Commonly ordered parts:

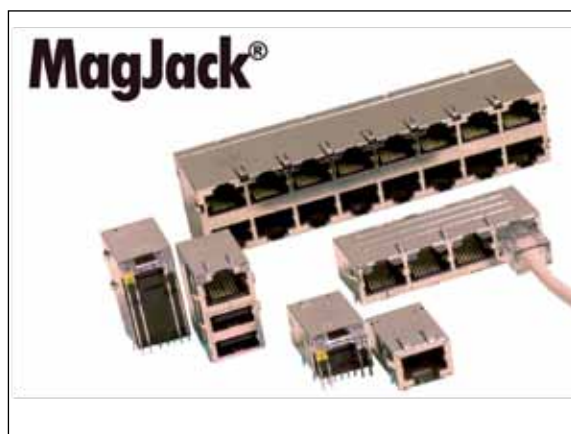
|                |   |   |                                                            |
|----------------|---|---|------------------------------------------------------------|
| SI-52003-F     | 8 | 8 | 10/100Base-TX, G/G LEDs, Tab Up, PoE, Right Angle MagJack  |
| 0813-1X1T-57-F | 8 | 8 | 10/100Base-TX, No LEDs, Tab Down, PoE, Right Angle MagJack |

### Gigabit Single Port MagJacks - Power Over Ethernet Commonly ordered parts:

|                |   |   |                                                                 |
|----------------|---|---|-----------------------------------------------------------------|
| 0826-1X1T-80-F | 8 | 8 | 10/100/1000Base-TX, Y/GO LEDs, Tab Up, PoE, Right Angle MagJack |
| 0816-1X1T-80-F | 8 | 8 | 10/100/1000Base-TX, No LEDs, Tab Up, PoE, Right Angle MagJack   |

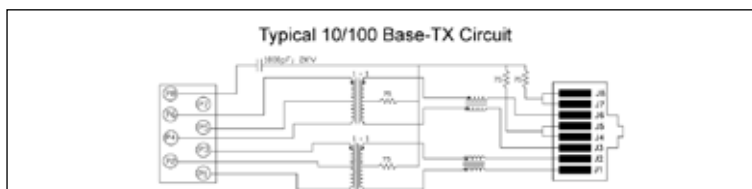


## MagJack®



**MagJack Features:**

- Optional LEDs
- Plug tab down, Plug tab up
- Extended Temp = -40°C to +85°C
- Power over Ethernet (PoE) options
- GR1089 intra-building & ESD surge protection



### 10/100Base-TX Single Port MagJacks

Commonly ordered parts:

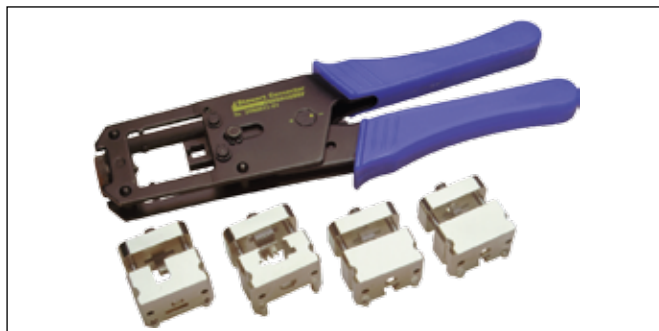
| Part Number    | Contacts | Positions | Description                                                                    |
|----------------|----------|-----------|--------------------------------------------------------------------------------|
| SI-16001-F     | 8        | 8         | 10/100Base-TX, No LEDs, AutoMDIX, Vertical MagJack                             |
| SI-46001-F     | 8        | 8         | 10/100Base-TX, Y/G LEDs, AutoMDIX, Vertical MagJack                            |
| SI-50158-F     | 8        | 8         | 10/100Base-TX, Y/G LEDs, Tab Up, AutoMDIX, Right Angle MagJack                 |
| SI-50162-F     | 8        | 8         | 10/100Base-TX, G/G LEDs, Tab Up, Non-AutoMDIX, Right Angle MagJack             |
| SI-50168-F     | 8        | 8         | 10/100Base-TX, No LEDs, Tab Up, Non-AutoMDIX, Right Angle MagJack              |
| SI-50170-F     | 8        | 8         | 10/100Base-TX, G/G LEDs, Tab Up, AutoMDIX, Right Angle MagJack                 |
| SI-50177-F     | 8        | 8         | 10/100Base-TX, No LEDs, Tab Up, AutoMDIX, Right Angle MagJack                  |
| SI-60001-F     | 8        | 8         | 10/100Base-TX, G/G LEDs, Tab Down, AutoMDIX, Right Angle MagJack               |
| SI-60002-F     | 8        | 8         | 10/100Base-TX, No LEDs, Tab Down, AutoMDIX, Right Angle MagJack                |
| SI-60080-F     | 8        | 8         | 10/100Base-TX, No LEDs, Tab Down, Common Mode Choke Jack                       |
| SI-60062-F     | 8        | 8         | 10/100Base-TX, Y/G LEDs, Tab Down, AutoMDIX, Right Angle MagJack               |
| SI-60118-F     | 8        | 8         | 10/100Base-TX, G/G LEDs, Tab Down, AutoMDIX, Ext. Temp, Right Angle MagJack    |
| SI-60136-F     | 8        | 8         | 10/100Base-TX, No LEDs, Tab Down, AutoMDIX, Ext. Temp, Right Angle MagJack     |
| 08B0-1G1T-06-F | 8        | 8         | 10/100Base-TX, G/G LEDs, Tab Up, AutoMDIX, Alt. Footprint, Right Angle MagJack |
| 08B1-1X1T-06-F | 8        | 8         | 10/100Base-TX, No LEDs, Tab Up, AutoMDIX, Alt. Footprint, Right Angle MagJack  |

### 10/100Base-TX Multi-Port and Combo MagJacks

Commonly ordered parts:

|                |   |   |                                                                       |
|----------------|---|---|-----------------------------------------------------------------------|
| SI-60159-F     | 8 | 8 | 10/100Base-TX, G/Y LEDs, Tab Down, 2 Port Harmonica MagJack           |
| 08B0-1X4T-36-F | 8 | 8 | 10/100Base-TX, Y/GO LEDs, Tab Up, Ext. Temp, 4 Port Harmonica MagJack |
| 0845-2G1T-H5   | 8 | 8 | 10/100Base-TX, G/G LEDs, 2 Port Stacked MagJack                       |
| 0845-2D1T-S4   | 8 | 8 | 10/100Base-TX, Y/G LEDs, Ext. Temp, 2 Port Stacked MagJack            |
| 08C2-1X1T-03-F | 8 | 8 | 10/100Base-TX, Y/GO LEDs, 2xUSB-A, Combo MagJack                      |
| 08C2-1X1T-36-F | 8 | 8 | 10/100Base-TX, Y/GO LEDs, 2xUSB-A, Ext. Temp, Combo MagJack           |
| C893-1DX1-E5   | 8 | 8 | 10/100Base-TX, Y/G LEDs, 2xUSB-A, Combo MagJack                       |

## Tooling



### Order Code

|             |                                  |
|-------------|----------------------------------|
| 2980011-01: | Semi-professional Handtool Frame |
| 2980012-01: | 4P Unshielded Die Set            |
| 2980013-01: | 6P Unshielded Die Set            |
| 2980014-01: | MMJ Unshielded Die Set           |
| 2980015-01: | 8P Unshielded Die Set            |
| 2980016-01: | 10P Unshielded Die Set           |
| 2980017-01: | 8P Shielded Die Set              |



### Order Code

|             |                              |
|-------------|------------------------------|
| 2980019-01: | Professional Handtool Frame  |
| 2980020-01: | 8P Shielded Die Set          |
| 2980024-01: | 4P Unshielded Die Set        |
| 2980025-01: | MMJ Unshielded Die Set       |
| 2980026-01: | 6P Unshielded Die Set        |
| 2980036-01: | 8P Unshielded Die Set        |
| 2980037-01: | 10P Shielded Die Set         |
| 2980038-01: | 10P Unshielded Die Set       |
| 2980039-01: | 8P Cat. 5 Unshielded Die Set |
| 2980047-01: | 8P Cat. 6 Unshielded Die Set |

Professional Hand Tool for use with all Professional hardened Die Sets. The Combi Die Set is specifically for shielded 8p Plugs - allowing users to crimp both the contacts and ferrule within one die set.

|             |                                 |
|-------------|---------------------------------|
| 2980021-01: | 8P Shielded Combi Die Set       |
| 2980022-01: | 4.5mm Ferrule Die Set for Combi |
| 2980023-01: | 5.2mm Ferrule Die Set for Combi |
| 2980034-01: | 3.7mm Ferrule Die Set for Combi |
| 2980035-01: | 6.0mm Ferrule Die Set for Combi |



### Order Code

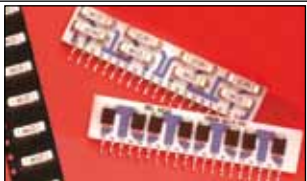
|             |                                           |
|-------------|-------------------------------------------|
| 2980028-01: | Semi-professional Ferrule Hand Tool Frame |
| 2980029-01: | 3.7mm Ferrule Die Set                     |
| 2980030-01: | 4.5mm Ferrule Die Set                     |
| 2980031-01: | 5.2mm Ferrule Die Set                     |
| 2980032-01: | 6.0mm Ferrule Die Set                     |



### Order Code

|             |                                                                                             |
|-------------|---------------------------------------------------------------------------------------------|
| 2980070-01: | Professional Hand Tool with Die Set<br>For use with new CAT6 shielded plugs<br>SS-39200-012 |
| 2980075-01: | Professional Hand Tool with Die Set<br>For use with new CAT6 shielded plugs<br>SS-39200-010 |

## Circuit Protection Modules:

|                                                                                   |     |                                                |          |
|-----------------------------------------------------------------------------------|-----|------------------------------------------------|----------|
|  | SMP | 600V Lighting surge Withstand<br>3812 size SMD | UL SP CE |
|                                                                                   | SIP | Circuit Protection SIP Module                  | RA       |

## IEC 250V Radial:

|                                                                                   |     |                                   |                    |
|-----------------------------------------------------------------------------------|-----|-----------------------------------|--------------------|
|  | MRF | Quick act, radial lead micro type | PSE S RA VDE CE SP |
|                                                                                   | MRT | Time lag, radial lead micro type  |                    |
|                                                                                   | RST | Time lag, radial lead micro type  |                    |

## IEC 5x20 mm, 250V:

|                                                                                    |      |                                                                               |                   |
|------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------|-------------------|
|  | 5ET  | Time lag, enhanced break capacity,<br>high surge proof <b>cartridge type</b>  | SP MY S RA VDE CE |
|                                                                                    | 5ETP | Time lag, enhanced break capacity,<br>high surge proof <b>axial lead type</b> |                   |
|                                                                                    | 5HF  | Quick act, high break capacity,<br><b>cartridge type</b>                      |                   |
|                                                                                    | 5HFP | Quick act, high break capacity,<br><b>axial lead type</b>                     |                   |
|                                                                                    | 5HT  | Time lag, high break capacity,<br><b>cartridge type</b>                       |                   |
|                                                                                    | 5HTP | Time lag, high break capacity,<br><b>axial lead type</b>                      |                   |
|                                                                                    | 5SF  | Quick act, low break capacity,<br><b>cartridge type</b>                       |                   |
|                                                                                    | 5SFP | Quick act, low break capacity,<br><b>axial lead type</b>                      |                   |
|                                                                                    | 5ST  | Time lag, low break capacity,<br><b>cartridge type</b>                        |                   |
|                                                                                    | 5STP | Time lag, low break capacity,<br><b>axial lead type</b>                       |                   |
|                                                                                    | 5VT  | Time lag, low break capacity,<br>high surge proof <b>cartridge type</b>       |                   |
|                                                                                    | 5VTP | Time lag, low break capacity,<br>high surge proof <b>axial lead type</b>      |                   |

## Fuse Clips:

|                                                                                     |    |           |  |
|-------------------------------------------------------------------------------------|----|-----------|--|
|  | FC | Fuse Clip |  |
|-------------------------------------------------------------------------------------|----|-----------|--|

### Surface Mount:

|  |      |                                        |          |
|--|------|----------------------------------------|----------|
|  | C1Q  | Very fast acting chip, 1206 size       | UL SP CE |
|  | C1S  | Slow blow Chip, 1206 size              | UL CE    |
|  | C2Q  | Very fast acting chip, 0603 size       | UL SP CE |
|  | SSQ  | Fast acting, Square ceramic, 2410 size |          |
|  | SST  | Slow blow, Square ceramic, 2410 size   |          |
|  | SSTC | Field receptable 2410 siz, In clips    |          |

### UL/CSA 1/4 x 11/4:

|  |      |                                        |              |
|--|------|----------------------------------------|--------------|
|  | 3AB  | Very fast acting chip, 1206 size       | PSE UL SP CE |
|  | 3ABP | Slow blow Chip, 1206 size              |              |
|  | 3AG  | Very fast acting chip, 0603 size       | UL SP CE     |
|  | 3AP  | Fast acting, Square ceramic, 2410 size | PSE UL SP CE |
|  | 3SB  | Slow blow, Square ceramic, 2410 size   |              |
|  | 3SBP | Field receptable 2410 siz, In clips    |              |
|  | GSA  | Slow blow, Ceramic cartridge type      |              |
|  | GSAP | Slow blow, Ceramic pigtail             |              |

### UL/CSA 125V Micro:

|  |    |                                    |          |
|--|----|------------------------------------|----------|
|  | MQ | Fast acting, axial lead micro type | UL SP CE |
|  | MS | Slow blow, axial lead micro type   |          |

### UL/CSA 4,6 x 15,5 mm:

|  |     |                                                                                |          |
|--|-----|--------------------------------------------------------------------------------|----------|
|  | RJS | Low cost Telecom protection series, 600V lighting Surge Withstand, radial lead | UL SP CE |
|--|-----|--------------------------------------------------------------------------------|----------|

### UL/CSA 5 x 15 mm (2AG):

|  |     |                                       |                    |
|--|-----|---------------------------------------|--------------------|
|  | 2JQ | Fast acting, 350V, 2AG cartridge type | PSE UL UL SP SP CE |
|  | 2JS | Slow blow, 350V, 2AG cartridge type   |                    |
|  | 3JQ | Fast acting, 350V, 2AG cartridge type |                    |
|  | 3JS | Slow blow, 350V, 2AG cartridge type   |                    |
|  | MJS | Ligthing Surge withstand              |                    |

### UL/CSA 5 x 20 mm 250V:

|  |      |                            |              |
|--|------|----------------------------|--------------|
|  | 5MF  | Fast blow cartridge type   | PSE UL SP CE |
|  | 5MFP | Fast blow, pigtail         |              |
|  | 5MT  | Medium blow cartridge type |              |
|  | 5MTP | Medium blow, pigtail       |              |
|  | 5TT  | Slow blow, cartridge type  |              |
|  | 5TTP | Slow blow, pigtail         |              |

## WATER RESISTANT HOODS & CONNECTORS

### Connectors moulded with Cable:



Connectors moulded with cable are available on request; from 1 meter up to 99 meters.  
We can also offer customized cables for special applications, suitable for example VGA (with ferrites), Outdoor Marine or Off-shore, where the demands and specifications on cable material is very specific.

**Available Sizes:**

Standard:           Size 9, 15, 25  
High Density:       Size 15, 26, 44

Other sizes on request.

Please contact us for further information

### Full Metal Connectors & Housings:



Full metal Connectors & Housings for High temp and Heavy industry solutions are available in standard and in High density version on request.

**Available Sizes:**

Standard:           Size 15  
High Density:       Size 26

Material: Zinc

Please contact us for further information

### Waterproof CAP for Sub-D:

Waterproof CAP for Panel Mount.  
Can be fitted onto Cable Housing using Joiner / adapter Plate.

**Available Sizes:**

Standard:           9, 15, 25  
High Density:       HD15, HD26, HD44



### Ordering information:

| Size:     | Part Number: | Product Code: |
|-----------|--------------|---------------|
| 9 / HD15  | 2601-1100-01 | CAP-WD1PCSA1  |
| 15 / HD26 | 2601-1100-02 | CAP-WD2PCSA1  |
| 25 / HD44 | 2601-1100-03 | CAP-WD3PCSA1  |

## TECHNICAL SPECIFICATIONS

**Material:**

Connector Body: PBT, UL-recognised  
 Connector Pin: Brass, Gold Flash  
 Connector Shell: Steel, Ni Plated

Operating Temperature: -40°C to +105°C

Cable Entry: Top

Thumbscrews: UNC 4-40

Waterproof: IP67

**Electrical Specifications:**

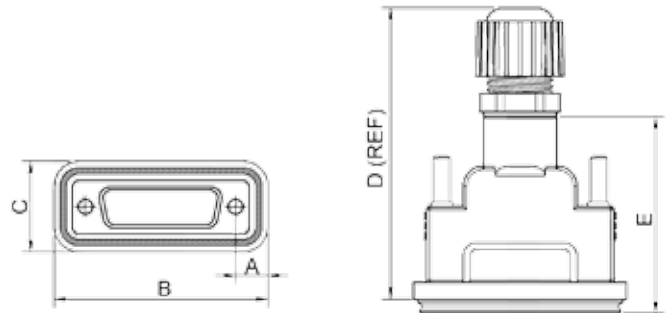
Contact Resistance: < 20mOhm  
 Insulation Resistance: > 500Mohm at DC 500V  
 Current Rating: 2A (High Density),  
 5A (Standard D-Sub)  
 Breakdown Voltage: > AC 500V / rms,  
 60Hz / 1 minute



20

**Features:**

- Field Assembly version with snap-in connector
- Available in (SDB) Standard Sizes 9, 15 and 25-pins
- Available in (HDB) High Density 15, 26 and 44-pins
- Female or Male Versions
- Hood Includes Connector – Solder Type
- Hood with Crimp Connector on request
- Hood without Connector available on request



| Size              | Dim A | Dim B | Dim C | Dim D | Dim E |
|-------------------|-------|-------|-------|-------|-------|
| 9-way – HD15-way  | 8,0   | 39,4  | 21,0  | 39,0  | 32,3  |
| 15-way – HD26-way | 8,0   | 50,6  | 21,0  | 43,2  | 32,3  |
| 25-way – HD44-way | 8,0   | 64,5  | 21,0  | 55,0  | 32,3  |

**Ordering information:**

Standard Version

| Size:          | P/N - Kitted: | Product Code:     |
|----------------|---------------|-------------------|
| 9-way, Female  | 2601-0120-01  | SDB-09BFFA-SL7001 |
| 15-way, Female | 2601-0120-02  | SDB-15BFFA-SL7001 |
| 25-way, Female | 2601-0120-03  | SDB-25BFFA-SL7001 |
| 9-way, Male    | 2601-0120-11  | SDB-09BMMA-SL7001 |
| 15-way, Male   | 2601-0120-12  | SDB-15BMMA-SL7001 |
| 25-way, Male   | 2601-0120-13  | SDB-25BMMA-SL7001 |

High-Density Version

| Size:         | P/N - Kitted: | Product Code:     |
|---------------|---------------|-------------------|
| HD15 - Female | 2601-0130-01  | HDB-15BFFA-SL7001 |
| HD26 - Female | 2601-0130-02  | HDB-26BFFA-SL7001 |
| HD44 - Female | 2601-0130-03  | HDB-44BFFA-SL7001 |
| HD15 - Male   | 2601-0130-11  | HDB-15BMMA-SL7001 |
| HD26 - Male   | 2601-0130-12  | HDB-26BMMA-SL7001 |
| HD44 - Male   | 2601-0130-13  | HDB-44BMMA-SL7001 |

## TECHNICAL SPECIFICATIONS

### Material:

Connector Body: PBT, UL Recognized  
 Connector Pin: Brass, Gold Flash  
 Connector Shell: Steel, Ni Plated

Operating Temperature: -40°C to +105°C

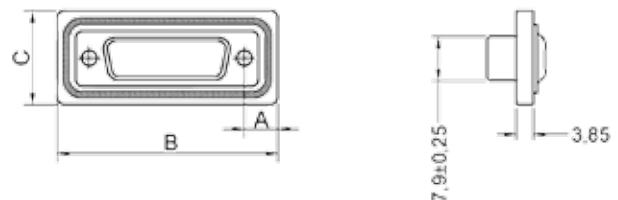
Mounting: Straight or Angled

Screws: UNC 4-40

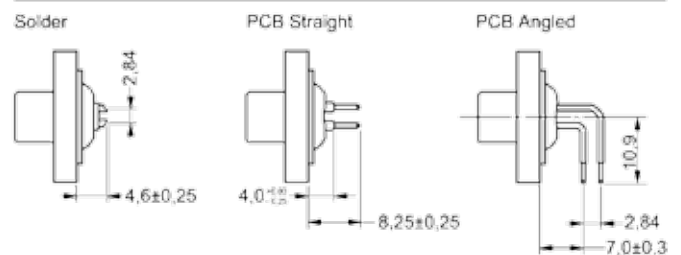
Waterproof: IP67

### Electrical Specifications:

Contact Resistance: < 20mOhm  
 Insulation Resistance: > 500Mohm at DC 500V  
 Current Rating: 2A (High Density),  
 5A (Standard D-Sub)  
 Breakdown Voltage: > AC 500V / rms,  
 60Hz / 1 minute



Standard D-Sub Connectors:



## Features:

- Male & Female Connector for Panel Mount
- Available in Sizes 9, 15 and 25-pins
- Also available in High Density (15, 26 and 44 pins)
- Solder, PCB Straight or PCB Angled Types
- Connectors are delivered with Screw Locks, 5mm and 6mm lengths to accommodate different Panel Thickness.

## Applications:

- Public Traffic Lights & Automatic Parking Systems
- Industrial Automatic Cleaning, Sealing, Packaging
- Security Systems
- Outdoor LED Light and Monitor
- Industrial Computer Systems
- Military Communication Control Systems
- Robotics
- AP Modem

| Size   | Dim A | Dim B | Dim C |
|--------|-------|-------|-------|
| 9-way  | 7,2   | 39,4  | 21,0  |
| 15-way | 7,2   | 47,7  | 21,0  |
| 25-way | 8,5   | 64,0  | 21,0  |

## Order Codes:

## Solder Type

| Plug Connector |              |                   |
|----------------|--------------|-------------------|
| 9-way          | 2601-0100-11 | SDB-09PMMS-SL8001 |
| 15-way         | 2601-0100-12 | SDB-15PMMS-SL8001 |
| 25-way         | 2601-0100-13 | SDB-25PMMS-SL8001 |
|                |              |                   |
| HD15-way       | 2601-0110-11 | HDB-15PMMS-SL8001 |
| HD26-way       | 2601-0110-12 | HDB-26PMMS-SL8001 |
| HD44-way       | 2601-0110-13 | HDB-44PMMS-SL8001 |

| Socket Connector |              |                   |
|------------------|--------------|-------------------|
| 9-way            | 2601-0100-01 | SDB-09PFFS-SL8001 |
| 15-way           | 2601-0100-02 | SDB-15PFFS-SL8001 |
| 25-way           | 2601-0100-03 | SDB-25PFFS-SL8001 |
|                  |              |                   |
| HD15-way         | 2601-0110-01 | HDB-15PFFS-SL8001 |
| HD26-way         | 2601-0110-02 | HDB-26PFFS-SL8001 |
| HD44-way         | 2601-0110-03 | HDB-44PFFS-SL8001 |

## Order Codes:

## PCB Type, Straight

| Plug Connector |              |                   |
|----------------|--------------|-------------------|
| 9-way          | 2601-0200-11 | SDB-09PMMP-SL8001 |
| 15-way         | 2601-0200-12 | SDB-15PMMP-SL8001 |
| 25-way         | 2601-0200-13 | SDB-25PMMP-SL8001 |
|                |              |                   |
| HD15-way       | 2601-0210-11 | HDB-15PMMP-SL8001 |
| HD26-way       | 2601-0210-12 | HDB-26PMMP-SL8001 |
| HD44-way       | 2601-0210-13 | HDB-44PMMP-SL8001 |

| Socket Connector |              |                   |
|------------------|--------------|-------------------|
| 9-way            | 2601-0200-01 | SDB-09PFFP-SL8001 |
| 15-way           | 2601-0200-02 | SDB-15PFFP-SL8001 |
| 25-way           | 2601-0200-03 | SDB-25PFFP-SL8001 |
|                  |              |                   |
| HD15-way         | 2601-0210-01 | HDB-15PFFP-SL8001 |
| HD26-way         | 2601-0210-02 | HDB-26PFFP-SL8001 |
| HD44-way         | 2601-0210-03 | HDB-44PFFP-SL8001 |

## Order Codes:

## PCB Type, Angled

| Plug Connector |              |                   |
|----------------|--------------|-------------------|
| 9-way          | 2601-0300-11 | SDB-09PMMP-SR8001 |
| 15-way         | 2601-0300-12 | SDB-15PMMP-SR8001 |
| 25-way         | 2601-0300-13 | SDB-25PMMP-SR8001 |
|                |              |                   |
| HD15-way       | 2601-0310-11 | HDB-15PMMP-SR8001 |
| HD26-way       | 2601-0310-12 | HDB-26PMMP-SR8001 |
| HD44-way       | 2601-0310-13 | HDB-44PMMP-SR8001 |

| Socket Connector |              |                   |
|------------------|--------------|-------------------|
| 9-way            | 2601-0300-01 | SDB-09PFFP-SR8001 |
| 15-way           | 2601-0300-02 | SDB-15PFFP-SR8001 |
| 25-way           | 2601-0300-03 | SDB-25PFFP-SR8001 |
|                  |              |                   |
| HD15-way         | 2601-0310-01 | HDB-15PFFP-SR8001 |
| HD26-way         | 2601-0310-02 | HDB-26PFFP-SR8001 |
| HD44-way         | 2601-0310-03 | HDB-44PFFP-SR8001 |

# WATERPROOF MODULAR CONNECTORS

## RJ45 Series - Panel Connectors

### Materials:

Contacts: Copper Alloy w/Gold Plate  
Connector Body: PBT (Jack) or PC (Plug)  
Full metal body in Zinc

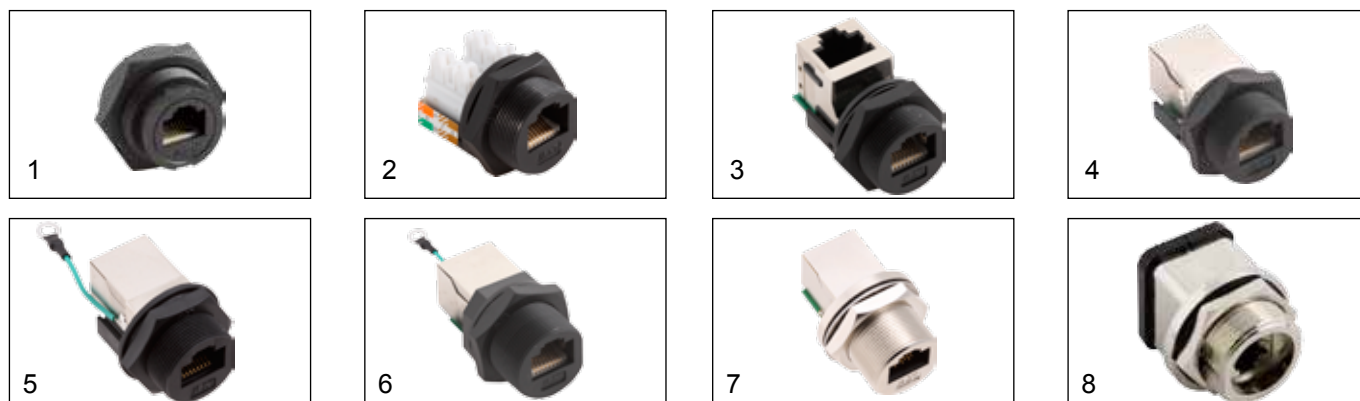
### Accessories:

See page 166

### Specifications:

Operating Temperature: -20°C to +80°C  
Waterproof Rating: IP67 or IP68  
Durability: 500 Cycles  
Flame Test: UL / CSA FT4  
Thermal Shock: 5 cycles at -20°C to +80°C  
Salt Spray: 48 hours

## Circular RJ45 Panel Connectors



| Picture: | Type:                            | Lock Style:      | Category:     | Name:                     | Mating Part:         | Part No:            |
|----------|----------------------------------|------------------|---------------|---------------------------|----------------------|---------------------|
| 1        | Unshielded Panel Jack            | <b>Bayonette</b> | Cat 5e        | RJ-5EPFFP-LC7001          | Picture 9, 10        | 2640-0105-01        |
| 1        | Shielded Panel Jack              | <b>Bayonette</b> | Cat 5e        | RJS-5EPFFP-LC7001         | Picture 9, 10        | 2640-0105-11        |
| 2        | Unshielded Panel Jack            | Screw Nut        | Cat 5e        | RJ-5EPFFD-SC7001          | Picture 9, 10        | 2640-0101-01        |
| 3        | Shielded Panel Jack              | Screw Nut        | Cat 5e        | RJS-5EPFFJ-SC7001         | Picture 9, 10        | 2640-0103-03        |
| 4        | Shielded Panel Jack              | Screw Nut        | Cat 5e        | RJS-5EPFFJ-SC7002         | Picture 9, 10        | 2640-0103-02        |
| 5        | Shielded Panel Jack              | Screw Nut        | Cat 5e        | RJS-5EPFFJ-SC7003         | Picture 9, 10        | 2640-0103-04        |
| 6        | <b>Shielded Panel Jack</b>       | <b>Screw Nut</b> | <b>Cat 5e</b> | <b>RJS-5EPFFJ-SC7004*</b> | <b>Picture 9, 10</b> | <b>2640-0103-05</b> |
| 7        | <b>Shielded Metal Panel Jack</b> | <b>Screw Nut</b> | <b>Cat 5e</b> | <b>RJS-5EPFFJ-SC7008*</b> | <b>Picture 11</b>    | <b>2640-0103-09</b> |
| 8        | Shielded Metal Panel Jack        | Screw Nut        | Cat 5e        | RJS-5EPFFD-SC7001         | Picture 12           | 2640-0107-01        |
| 8        | Shielded Metal Panel Jack        | Screw Nut        | Cat 6         | RJS-06PFFD-SC7001         | Picture 12           | 2640-0107-02        |

\*SC7004 & SC7008 - IP67 when Un-Mated

## Square RJ45 Panel Connectors & Accessories



| Picture: | Type:                     | Lock Style: | Category: | Name:             | Mating Part:  | Part No:     |
|----------|---------------------------|-------------|-----------|-------------------|---------------|--------------|
| 13       | Unshielded Panel Jack     | Screw Nut   | Cat 5e    | RJ-5EPFFD-SS7001  | Picture 20    | 2640-0106-01 |
| 13       | Unshielded Panel Jack     | Screw Nut   | Cat 6     | RJ-06PFFD-SS7001  | Picture 20    | 2640-0106-02 |
| 14       | Shielded Panel Jack       | Screw Nut   | Cat 5e    | RJS-00PFFR-SS7001 | Picture 18,19 | 2640-0104-01 |
| 15       | Shielded Panel Jack       | Screw Nut   | Cat 5e    | RJS-5EPFFD-SS7002 | Picture 18,19 | 2640-0102-01 |
| 16       | Shielded Panel Jack       | Screw Nut   | Cat 5e    | RJS-5EPFFJ-SS7001 | Picture 18,19 | 2640-0103-01 |
| 17       | Shielded Metal Panel Jack | Screw Nut   | Cat 5e    | RJS-5EPFFD-SS7001 | Picture 21    | 2640-0107-03 |
| 17       | Shielded Metal Panel Jack | Screw Nut   | Cat 6     | RJS-06PFFD-SS7001 | Picture 21    | 2640-0107-04 |

# WATERPROOF MODULAR CONNECTORS

## Plug Housings for Circular RJ45 Connectors



| Picture: | Type:                      | Style:                        | Name:            | Mating Part:      | Part No:     |
|----------|----------------------------|-------------------------------|------------------|-------------------|--------------|
| 9        | Housing w/o Strain Relief  | Unshielded / Screw Nut        | RJ-00BMMA-SL7005 | Picture 2,3,4,5,6 | 2640-0101-07 |
| 9        | Housing w/o Strain Relief  | <b>Unshielded / Bayonette</b> | RJ-00BMMA-LL7001 | Picture 1         | 2640-0101-15 |
| 10       | Housing with Strain Relief | Unshielded / Screw Nut        | RJ-00AMMA-SL7002 | Picture 2,3,4,5,6 | 2640-0101-08 |
| 10       | Housing with Strain Relief | <b>Unshielded / Bayonette</b> | RJ-00AMMA-LL7001 | Picture 1         | 2640-0101-14 |
| 11       | Housing w/o Strain Relief  | Shielded / Screw Nut          | RJ-00BMMA-SL7006 | Picture 7, 23     | 2640-0101-06 |
| 12       | Housing w/o Strain Relief  | Shielded / Screw Nut          | RJ-00BMMA-SL7003 | Picture 8         | 2640-0101-16 |

## Plug Housings for Square RJ45 Connectors



| Picture: | Type:                      | Style:               | Name:            | Mating Part:         | Part No:     |
|----------|----------------------------|----------------------|------------------|----------------------|--------------|
| 18       | Housing w/o Strain Relief  | Shielded / Screw Nut | RJ-00BMMA-SL7004 | Picture 14,15,16, 34 | 2640-0101-09 |
| 19       | Housing with Strain Relief | Shielded / Screw Nut | RJ-00AMMA-SL7001 | Picture 14,15,16, 34 | 2640-0101-10 |
| 20       | Housing w/o Strain Relief  | Shielded / Screw Nut | RJ-00BMMA-SL7002 | Picture 13           | 2640-0101-13 |
| 21       | Housing w/o Strain Relief  | Shielded / Screw Nut | RJ-00BMMA-SL7003 | Picture 17           | 2640-0101-16 |

## Ready Cable - Male & Female RJ Connectors



| Picture: | Type:               | Style:                        | Category: | Name:                     | Mating Part:                  | Part No:             |
|----------|---------------------|-------------------------------|-----------|---------------------------|-------------------------------|----------------------|
| 22       | Panel w. Cable      | Shielded / Screw              | Cat 5e    | RJS-5EPFFJ-SC7005*        | Picture 9, 10, 25, 27, 28, 29 | 2640-0103-06         |
| 22       | Panel w. Cable      | Shielded / Screw              | Cat 5e    | RJS-5EPFFJ-SC7006         | Picture 9, 10, 25, 27, 28, 29 | 2640-0103-07         |
| 23       | Panel w. Cable      | Shielded Metal / Screw        | Cat 5e    | RJS-5EPFFJ-SC7009         | Picture 11                    | 2640-0103-10         |
| 24       | Female Cable        | Unshielded / Screw            | Cat 5e    | RJ-5EAFFM-SL7D <b>yy</b>  | Picture 9, 10, 25, 27, 28, 29 | 2641-0002- <b>yy</b> |
| 24       | Female Cable        | Shielded / Screw              | Cat 5e    | RJS-5EAFFM-SL7E <b>yy</b> | Picture 9, 10, 25, 27, 28, 29 | 2641-0010- <b>yy</b> |
| 25       | Male / Straight     | <b>Unshielded / Bayonette</b> | Cat 5e    | RJ-5EAMMM-LL7D <b>yy</b>  | Picture 1                     | 2641-0003- <b>yy</b> |
| 25       | Male / Straight     | <b>Shielded / Bayonette</b>   | Cat 5e    | RJS-5EAMMM-LL7E <b>yy</b> | Picture 1                     | 2641-0011- <b>yy</b> |
| 25       | Male / Right Angled | <b>Unshielded / Bayonette</b> | Cat 5e    | RJ-5EAMMM-LR7D <b>yy</b>  | Picture 1                     | 2641-0004- <b>yy</b> |
| 25       | Male / Right Angled | <b>Shielded / Bayonette</b>   | Cat 5e    | RJS-5EAMMM-LR7E <b>yy</b> | Picture 1                     | 2641-0012- <b>yy</b> |
| 25       | Male / Straight     | Shielded / Screw              | Cat 5e    | RJS-5EBMMM-SL7E <b>yy</b> | Picture 2, 3, 4, 5, 6, 24     | 2641-0015- <b>yy</b> |
| 26       | Male / Straight     | Shielded / Screw              | Cat 5e    | RJS-5EAMMM-SL7E <b>yy</b> | Picture 14, 15, 16, 34        | 2641-0013- <b>yy</b> |
| 26       | Male / Right Angled | Shielded / Screw              | Cat 5e    | RJS-5EAMMM-SR7E <b>yy</b> | Picture 14, 15, 16, 34        | 2641-0014- <b>yy</b> |

### Example product: RJ-5EAFFM-SL7D10

**Example:** (Item #24) RJ-5EAFFM-SL7D10  
2641-0002-**10**  
Unshielded (UTP), Screw Type, **10m** Cable

\* With Earth wire

**Code, yy: (01-99):** 01 meter up to 99 meters

# WATERPROOF MODULAR CONNECTORS

## RJ45 Series - Accessories

### Materials:

Contacts: Copper Alloy w/Gold Plate  
Connector Body: PBT (Jack) or PC (Plug)  
Full metal body in Zinc

### Specifications:

Operating Temperature: -20°C to +80°C  
Waterproof Rating: IP67 or IP68  
Durability: 500 Cycles  
Flame Test: UL / CSA FT4  
Thermal Shock: 5 cycles at -20°C to +80°C  
Salt Spray: 48 hours

## Waterproof Caps for Circular and Square RJ45 panel connectors



| Picture: | Style:               | Name:        | Mating Part:                  | Part No:     |
|----------|----------------------|--------------|-------------------------------|--------------|
| 27       | Screw / Chain        | CAP-WACPMSB1 | Picture 2, 3, 4, 5, 6, 22, 24 | 2649-0101-01 |
| 27       | Screw / Rubber Lead  | CAP-WACPMSC1 | Picture 2, 3, 4, 5, 6, 22, 24 | 2649-0101-14 |
| 27       | Screw / Nylon String | CAP-WACPMSD1 | Picture 2, 3, 4, 5, 6, 22, 24 | 2649-0101-04 |
| 28       | Lock / Chain         | CAP-WADPMLB1 | Picture 1                     | 2649-0101-02 |
| 28       | Lock / Rubber Lead   | CAP-WADPMLC1 | Picture 1                     | 2649-0101-06 |
| 29       | Screw / Chain        | CAP-WAFPMSB1 | Picture 14, 15, 16            | 2649-0101-10 |
| 29       | Screw / Rubber Lead  | CAP-WAFPMSC1 | Picture 14, 15, 16            | 2649-0101-11 |
| 30       | Screw / Chain        | CAP-WACPMSB2 | Picture 7, 23                 | 2649-0101-20 |
| 30       | Screw / Rubber Lead  | CAP-WACPMSC2 | Picture 7, 23                 | 2649-0101-21 |
| 30       | Screw / Nylon String | CAP-WACPMSD2 | Picture 7, 23                 | 2649-0101-22 |

## Couplers & Jack Connectors for RJ45



| Picture: | Style:                           | Name:               | Mating Part: | Part No:     |
|----------|----------------------------------|---------------------|--------------|--------------|
| 31       | Coupler / Panel                  | RJS-00PFFJ-SC7001   | On request   | 2640-0120-01 |
| 32       | Coupler / Panel / Field Assembly | RJS-00PFFA-SC7001   |              | 2640-0108-01 |
| 33       | Coupler / Field Assembly         | RJS-00BFFA-SL7001   |              | 2640-0108-02 |
| 34       | Coupler / Cable to Cable Adapter | RS-000000-OFF-IS001 | 18, 19, 26   | 2640-0120-02 |

## Junction Boxes and Panel Feed-Through Sealing for RJ45



| Picture: | Style:                   | Name:             | Mating Part:                       | Part No:     |
|----------|--------------------------|-------------------|------------------------------------|--------------|
| 37       | Junction Box / Screw -1c | BOX-RJE11         | 9, 10, 25, 27                      | 2649-1000-11 |
| 38       | Junction Box / Screw -2c | BOX-RJE22         | 9, 10, 25, 27                      | 2649-1000-22 |
| 39       | Junction Box / Screw -4c | BOX-RJE44         | 9, 10, 25, 27                      | 2649-1000-44 |
| 40       | Shielded / Field Assy.   | RJM-00BMMA-SL7001 | For non-IP Patch Cable only Ø5-7mm | 2649-0500-01 |
| 40       | Shielded / Field Assy.   | RJM-00BMMA-SL7002 | For non-IP Patch Cable only Ø8-9mm | 2649-0500-02 |

#40 - Also available in Unshielded Black Plastic version on request

# WATERPROOF MINI DIN CONNECTORS

## MINI-DIN Series

### Materials:

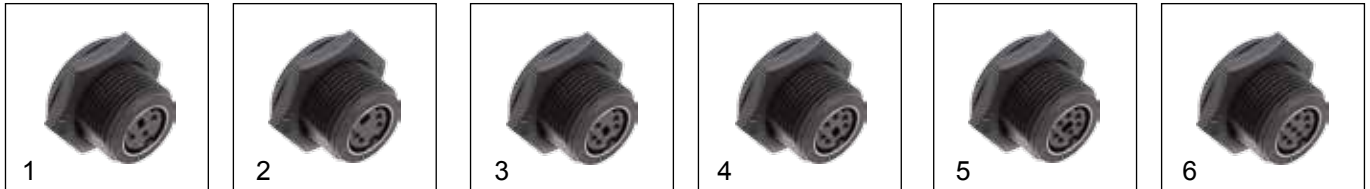
Contacts: Copper Alloy w/Gold Plate  
Connector Body: PBT - UL94 V-0

### Specifications:

Operating Temperature: -20°C to +80°C  
Waterproof Rating: IP67 or IP68  
Contact Resistance:  $\leq 20\text{m}\Omega$  Max  
Insulation Resistance:  $\geq 50\text{M}\Omega$  at DC 250V.  
Breakdown Voltage: AC 250V / minute

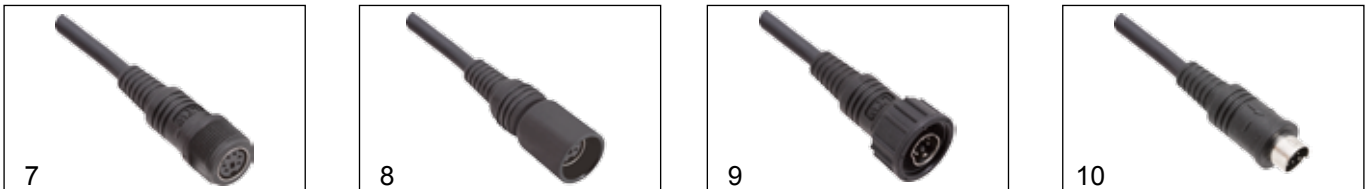
20

## Panel Connectors



| Picture: | Style:            | Lock Style: | Name:             | Mating Part: | Part No:     |
|----------|-------------------|-------------|-------------------|--------------|--------------|
| 1        | 3-pol Panel Conn. | Screw Nut   | MID-03PMFS-SC7001 | Picture 9    | 2670-0101-01 |
| 2        | 4-pol Panel Conn. | Screw Nut   | MID-04PMFS-SC7001 | Picture 9    | 2670-0101-02 |
| 3        | 5-pol Panel Conn. | Screw Nut   | MID-05PMFS-SC7001 | Picture 9    | 2670-0101-03 |
| 4        | 6-pol Panel Conn. | Screw Nut   | MID-06PMFS-SC7001 | Picture 9    | 2670-0101-04 |
| 5        | 7-pol Panel Conn. | Screw Nut   | MID-07PMFS-SC7001 | Picture 9    | 2670-0101-05 |
| 6        | 8-pol Panel Conn. | Screw Nut   | MID-08PMFS-SC7001 | Picture 9    | 2670-0101-06 |

## Connectors Moulded with Cable:



| Picture: | Style:             | Lock Style: | Name:             | Mating Part:                | Part No:     |
|----------|--------------------|-------------|-------------------|-----------------------------|--------------|
| 7        | Female Cable Conn. | Screw Lock  | MID-xxAMFM-SL7Ayy | Picture 9                   | 2670-020*-** |
| 8        | Female Cable Conn. | Quick Lock  | MID-xxAMFM-QL7Ayy | Picture 10                  | 2670-030*-** |
| 9        | Male Cable Conn.   | Screw Lock  | MID-xxAFMM-SL7Ayy | Picture 1, 2, 3, 4, 5, 6, 7 | 2670-040*-** |
| 10       | Male Cable Conn.   | Quick Lock  | MID-xxAFMM-QL7Ayy | Picture 8                   | 2670-050*-** |

### Example product: MID-06AMFM-SL7A02

xx: No. of pins (03, 04, 05, 06, 07, 08) MID-06AMFM-SL7A02  
yy: Length of cable in meters (01...99) 2670-0204-02

\*: 1=3pin, 2=4pin, 3=5pin, 4=6pin, 5=7pin, 6=8pin  
\*\*: Length of cable in meters (01...99)

# WATERPROOF USB CONNECTORS

## USB Series

### Materials:

Contacts: Copper Alloy w/Gold Plate  
Connector Body: PBT UL90 V-0

### Specifications:

Operating Temperature: -20°C to +80°C  
Waterproof Rating: IP67 or IP68  
Contact Resistance: ≤ 30mΩ Max  
Insulation Resistance: ≥ 1000MΩ Min.  
Breakdown Voltage: AC 500V / minute

## Commonly Ordered Parts:

### Female Connectors



| Picture: | Type:                              | Name:            | Mating Part: | Part No:     |
|----------|------------------------------------|------------------|--------------|--------------|
| 1        | USB A - PCB / Bayonette            | UA-20PMFP-LC7001 | Picture 6, 8 | 2630-0501-02 |
| 1        | USB B - PCB / Bayonette            | UB-20PMFP-LC7001 | Picture 6, 8 | 2630-0502-02 |
| 1        | USB A - PCB / Screw Nut            | UA-20PMFP-SC8001 | Picture 5, 7 | 2630-0101-02 |
| 1        | USB B - PCB / Screw Nut            | UB-20PMFP-SC8001 | Picture 5, 7 | 2630-0102-02 |
| 2        | USB A - 2.0 - PCB / Screw Nut      | UA-20PMFP-SC8002 | Picture 5, 7 | 2630-0101-01 |
| 2        | USB B - 2.0 - PCB / Screw Nut      | UB-20PMFP-SC8002 | Picture 5, 7 | 2630-0102-01 |
| 3        | USB A - 2.0 - FA / Screw Nut       | UA-20BMFA-SL8001 | Picture 5, 7 | 2630-0801-01 |
| 3        | USB B - 2.0 - FA / Screw Nut       | UB-20BMFA-SL8001 | Picture 5, 7 | 2630-0801-02 |
| 4        | USB A - 2.0 - Straight / Screw Nut | UA-20AMFM-SL7Axx | Picture 5, 7 | 2630-0201-xx |
| 4        | USB B - 2.0 - Straight / Screw Nut | UB-20AMFM-SL7Axx | Picture 5, 7 | 2630-0202-xx |

xx = Length of cable in meters (01m...99m)  
Example: 2630-0201-05 (5m cable)

## Commonly Ordered Parts:

### Male Connectors & Waterproof Caps



| Picture: | Type:                              | Name:            | Mating Part:    | Part No:     |
|----------|------------------------------------|------------------|-----------------|--------------|
| 5        | USB A - 2.0 - Straight / Screw Nut | UA-20BFMM-SL7Axx | Picture 2, 3, 4 | 2630-0301-xx |
| 5        | USB B - 2.0 - Straight / Screw Nut | UB-20BFMM-SL7Axx | Picture 2, 3, 4 | 2630-0303-xx |
| 6        | USB A - 2.0 - 90° / Bayonette      | UA-20AFMM-LR7Axx | Picture 1       | 2630-0320-xx |
| 6        | USB B - 2.0 - 90° / Bayonette      | UB-20AFMM-LR7Axx | Picture 1       | 2630-0420-xx |
| 7        | CAP - Screw / Chain                | CAP-WACPSMB1     | Picture 2, 3, 4 | 2649-0101-01 |
| 7        | CAP - Screw / Rubber Lead          | CAP-WACPMSC1     | Picture 2, 3, 4 | 2649-0101-14 |
| 7        | CAP - Screw / Nylon String         | CAP-WACPMSD1     | Picture 2, 3, 4 | 2649-0101-04 |
| 8        | CAP - Bayonette / Chain            | CAP-WADPMLB1     | Picture 1       | 2649-0101-02 |
| 8        | CAP - Bayonette / Rubber Lead      | CAP-WADPMLC1     | Picture 1       | 2649-0101-06 |

xx = Length of cable in meters (01m...99m)  
Example: 2630-0301-05 (5m cable)

# WATERPROOF USB CONNECTORS

## Waterproof USB to Non-Waterproof USB, Moulded with Cable

### Materials:

Contacts: Copper Alloy w/Gold Plate  
 Connector Body: PBT UL90 V-0  
 Operating Temperature: -20°C to +80°C  
 Cable Lengths (L): 1 to 5 meters (01....05)

### Notes:

All Cables are delivered with Strain Relief.  
 Standard is USB Type A and USB Type B.  
 Miniature USB on request.  
 Cable Without Strain Relief on request.

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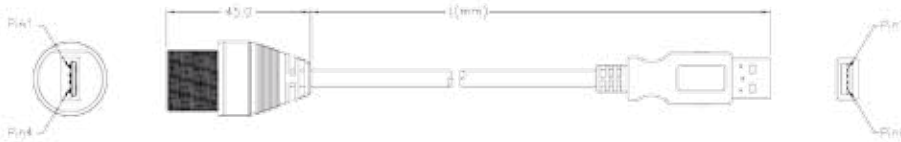
### How to Order:

2630-0401-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

#### Type A Female IP67 to Type A Male Non-IP

LTWUA-20AMF-A7A XX



#### Type A Male IP67 to Type A Male Non-IP

LTWUA-20BFM-A7A XX



2630-0402-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

#### Type A Female IP67 to Type B Male Non-IP

LTWUA-20AMF-B7A XX



2630-0403-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

#### Type A Male IP67 to Type B Male Non-IP

LTWUA-20BFM-B7A XX



2630-0404-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

#### Type B Female IP67 to Type A Male Non-IP

LTWUB-20AMF-A7A XX



2630-0405-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

#### Type B Male IP67 to Type A Male Non-IP

LTWUB-20BFM-A7A XX



2630-0406-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

#### Type B Female IP67 to Type B Male Non-IP

LTWUB-20AMF-B7A XX



2630-0407-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

#### Type B Male IP67 to Type B Male Non-IP

LTWUB-20BFM-B7A XX



2630-0408-XX

XX: 01=1m  
 02=2m  
 03=3m  
 04=4m  
 05=5m

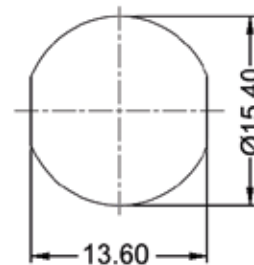
# WATERPROOF SENSOR CONNECTORS

## M12 Series

### Material Specifications:

|                     |                                                                                                |
|---------------------|------------------------------------------------------------------------------------------------|
| Connector Types:    | PCB, Solder, Field Assembly,<br>Moulded with Cable                                             |
| Pin Configurations: | From 2 pins up to 8 pins                                                                       |
| Materials:          | Connector Body: Nylon + GF or PU<br>UL recognized<br>Connector Pins: Copper Alloy, Gold Plated |
| Waterproof:         | IP65 - IP68                                                                                    |
| Temperature Range:  | Connector Body: -25°C to +90°C                                                                 |

### Recommended Panel Cut-Out:



### Technical Specifications:

|                        |                                                      |
|------------------------|------------------------------------------------------|
| Contact Resistance:    | ≤ 10mΩ                                               |
| Insulation Resistance: | ≥ 100MΩ at DC 500V                                   |
| Current Rating:        | 2A, 5A, 10A, 20A                                     |
| Breakdown Voltage:     | > AC 1000V / 1 minute<br>≥ AC 500V / 1 min. (1,5-5A) |
| Type of Codings:       | B-Code, D-Code or I-Style                            |

### Features:

- M8 and M10.5 available on request
- Connectors according to Standard **NMEA 2000** available on request
- All M12 Sensor connectors are according to Industrial Standard
- B-Code and D-Code on request.
- I-Style (Mixed Female / Male connector pins) available on request.

## Hexagonal Rear Mount Style (SH)

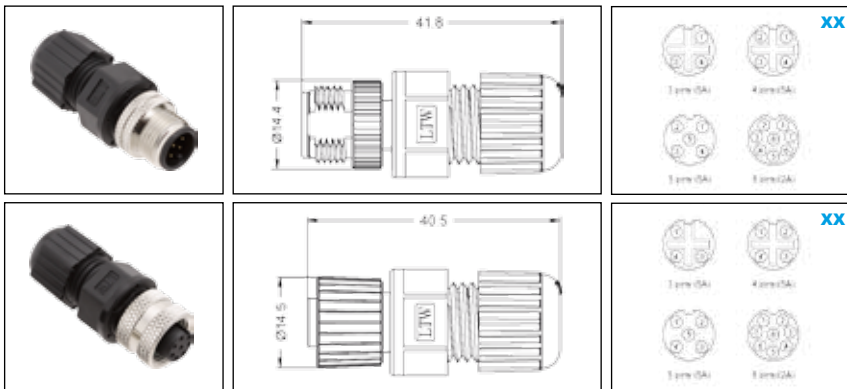
|  |                     |  |                                         |
|--|---------------------|--|-----------------------------------------|
|  |                     |  | <b>Male Panel Connector:</b>            |
|  | Solder Cup <b>S</b> |  | Solder Cup LTW12- <b>XX</b> PMMS-SH8001 |
|  |                     |  | Example: LTW12-04PMMS-SH8001            |
|  |                     |  | <b>Female Panel Connector:</b>          |
|  | Solder Cup <b>S</b> |  | Solder Cup LTW12- <b>XX</b> PFFS-SH8001 |
|  |                     |  | Example: LTW12-04PFFS-SH8001            |

## Hexagonal Front Mount Style (SF)

|  |                                         |  |                                         |
|--|-----------------------------------------|--|-----------------------------------------|
|  |                                         |  | <b>Male Panel Connector:</b>            |
|  | PCB Solder <b>P</b> Solder Cup <b>S</b> |  | PCB Solder LTW12- <b>XX</b> PMMP-SF8001 |
|  |                                         |  | Solder Cup LTW12- <b>XX</b> PMMS-SF8001 |
|  |                                         |  | Example: LTW12-04PMMS-SF8001            |
|  |                                         |  | <b>Female Panel Connector:</b>          |
|  | PCB Solder <b>P</b> Solder Cup <b>S</b> |  | PCB Solder LTW12- <b>XX</b> PFFP-SF8001 |
|  |                                         |  | Solder Cup LTW12- <b>XX</b> PFFS-SF8001 |
|  |                                         |  | Example: LTW12-04PFFS-SF8001            |

# WATERPROOF SENSOR CONNECTORS

## Field Assembly Style Connectors for Cable Mount



### Male Field Assembly Connector:

LTW12-**XX**BMMA-SL8001

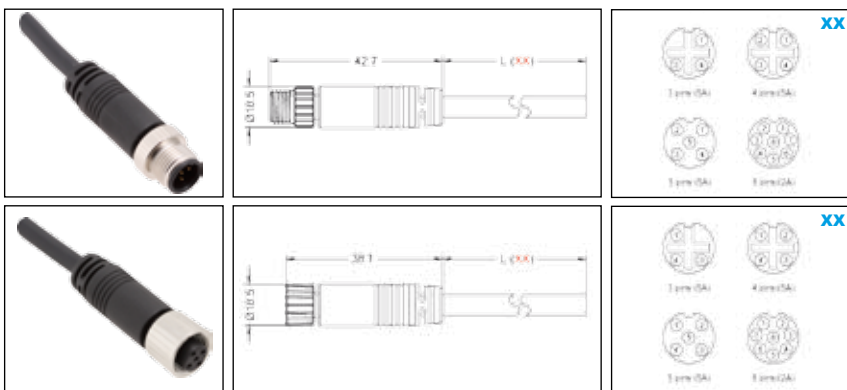
Example: LTW12-**04**BMMA-SL8001

### Female Field Assembly Connector:

LTW12-**XX**BFFA-SL8001

Example: LTW12-**04**BFFA-SL8001

## Connectors moulded with Cable, Straight (180°)



### Male Cable Connector:

LTW12-**XX**AMMM-SL7A**XX**

Example: LTW12-**04**AMMM-SL7A**03**

Lengths **XX**: **01**=01m, **02**=02m.....**99**=99m

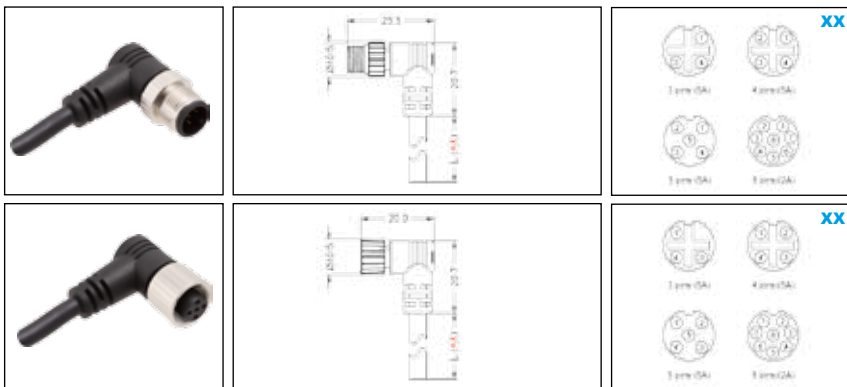
### Female Cable Connector:

LTW12-**XX**AFFM-SL7A**XX**

Example: LTW12-**04**AFFM-SL7A**03**

Lengths **XX**: **01**=01m, **02**=02m.....**99**=99m

## Connectors moulded with Cable, Angled (90°)



### Male Cable Connector:

LTW12-**XX**AMMM-SR7A**XX**

Example: LTW12-**04**AMMM-SR7A**03**

Lengths **XX**: **01**=01m, **02**=02m.....**99**=99m

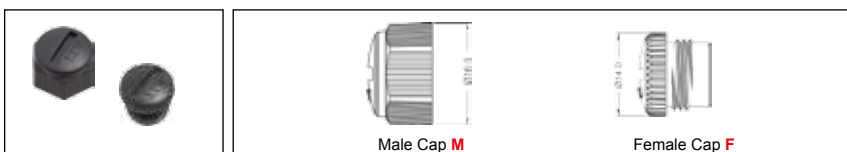
### Female Cable Connector:

LTW12-**XX**AFFM-SR7A**XX**

Example: LTW12-**04**AFFM-SR7A**03**

Lengths **XX**: **01**=01m, **02**=02m.....**99**=99m

## Waterproof Caps for Sensor M12



Male Cap: LTWCAP-WBDM**M**SA1

Female Cap: LTWCAP-WBDM**F**SA1

## Other Accessories - Available on Request



T-Adaptors with and without Cable



Cable Connectors with LED



Y-Adaptor Kits

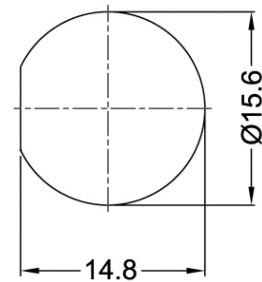
# WATERPROOF CIRCULAR CONNECTORS

## Standard Size Circular Connectors

### Material Specifications:

|                     |                                                                                       |
|---------------------|---------------------------------------------------------------------------------------|
| Connector Types:    | PCB, Solder, Crimp, Field Assembly,                                                   |
| Pin Configurations: | From 2 pins up to 31 pins                                                             |
| Materials:          | Connector Body: Nylon + GF UL recognized<br>Connector Pins: Copper Alloy, Gold Plated |
| Waterproof:         | IP66 - IP67                                                                           |
| Temperature Range:  | Connector Body: -40°C to +105°C                                                       |
| Environmental Spec: | 48 Hours Salt Spray Contact                                                           |
| Durability:         | 3000 Plug / Unplug Cycles Minimum                                                     |

### Recommended Panel Cut-Out:



### Technical Specifications:

|                        |                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------|
| Contact Resistance:    | $\leq 10\text{m}\Omega$                                                                                      |
| Insulation Resistance: | $\geq 100\text{M}\Omega$ at DC 500V                                                                          |
| Current Rating:        | 2A, 5A, 10A, 20A                                                                                             |
| Breakdown Voltage:     | $\geq \text{AC } 1000\text{V} / 1 \text{ minute}$<br>$\geq \text{AC } 500\text{V} / 1 \text{ min. (1,5-5A)}$ |

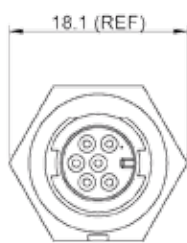
### Features:

We have chosen to feature only the Standard Size Connector in this catalogue.

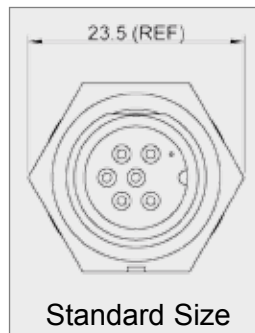
All other sizes are still available from Encitech Connectors AB.

Please consult your local Encitech Office for further information about the available sizes and types.

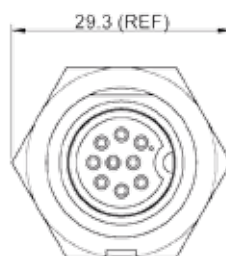
## Available Sizes and Pins:



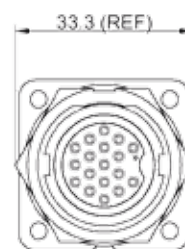
Mini Size



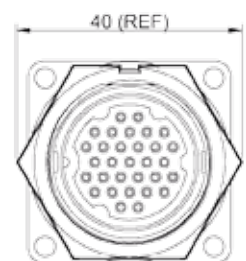
Standard Size



Middle Size



Large Size



Macro Size

Mini Size: Available in 2pin, 3pin, 4pin, 5pin, 6pin

Standard Size: Available in 2pin, 3pin, 4pin, 5pin, 6pin, 7pin, 8pin, 10pin, 12pin

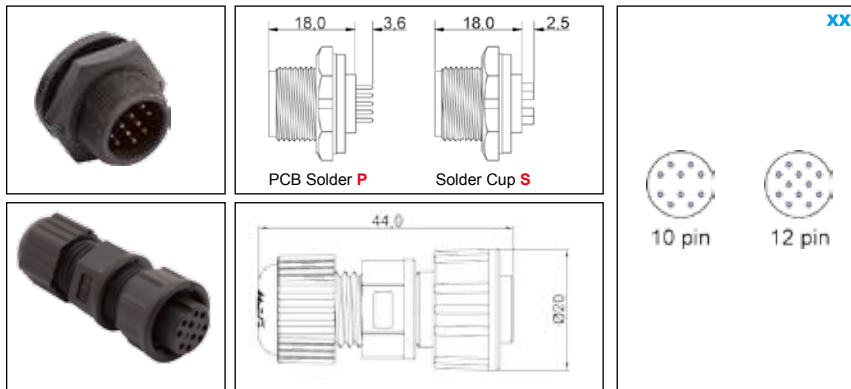
Middle Size: Available in 3pin, 4pin, 5pin, 6pin, 7pin, 8pin, 9pin, 10pin, 11pin, 12pin, 13pin, 14pin, 18pin

Large Size: Available in 2pin, 3pin, 4pin, 5pin, 6pin, 7pin, 18pin, 20pin, 21pin, 22pin

Macro Size: Available in 31pin

# WATERPROOF CIRCULAR CONNECTORS

## 2 Amp - Screw Type, Front Mount + Mating Field Assembly Connector



PCB Solder LTWBU-XXPMM**P**-SC7001

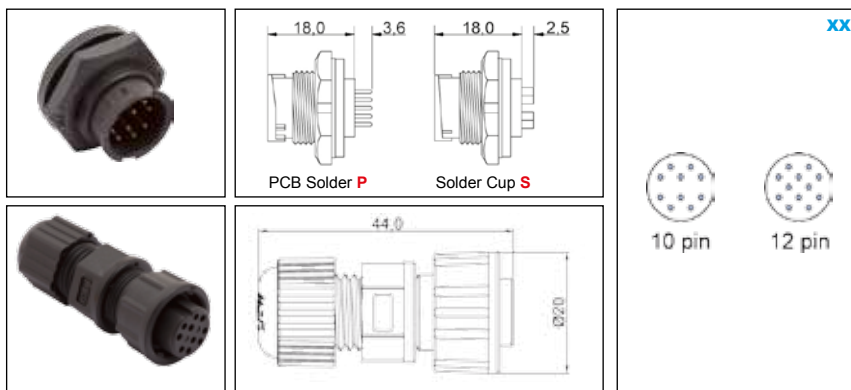
Solder Cup LTWBU-XXPMM**S**-SC7001

Example: LTWBU-10PMM**S**-SC7001

LTWBU-XXBFFA-SL7001

Example: LTWBU-10BFFA-SL7001

## 2 Amp - Lock (Bayonette) Type, Front Mount + Mating Field Assembly Connector



PCB Solder LTWBU-XXPMM**P**-LC7001

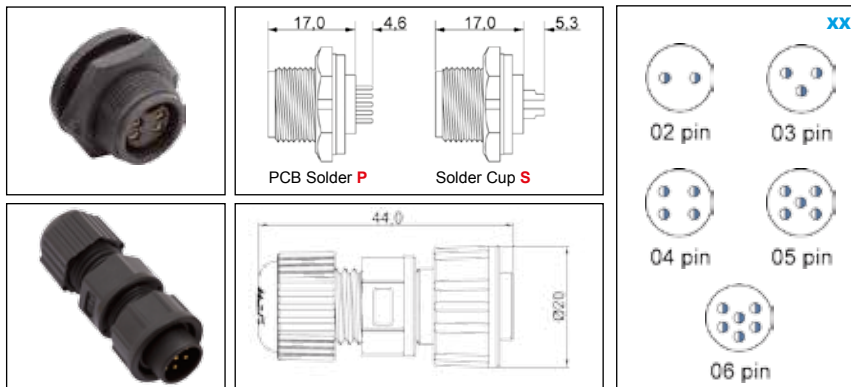
Solder Cup LTWBU-XXPMM**S**-LC7001

Example: LTWBU-10PMM**S**-LC7001

LTWBU-XXBFFA-LL7001

Example: LTWBU-10BFFA-LL7001

## 5 Amp - Screw Type, Front Mount + Mating Field Assembly Connector



PCB Solder LTWBD-XXPMF**P**-SC7001

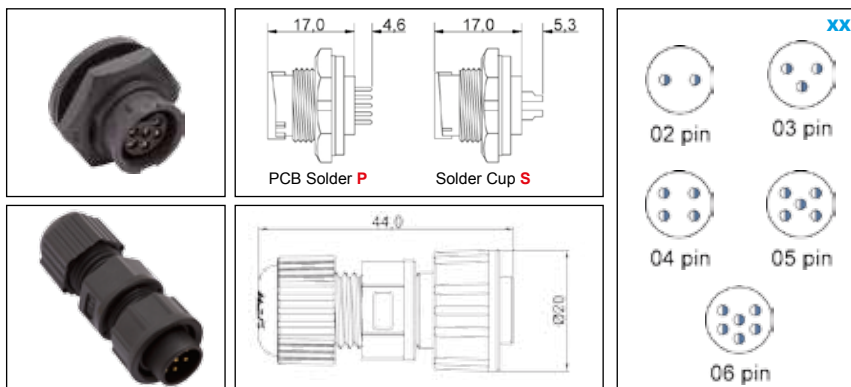
Solder Cup LTWBD-XXPMF**S**-SC7001

Example: LTWBD-04PMF**S**-SC7001

LTWBD-XXBFMA-SL7001

Example: LTWBD-04BFMA-SL7001

## 5 Amp - Lock (Bayonette) Type, Front Mount + Mating Field Assembly Connector



PCB Solder LTWBD-XXPMF**P**-LC7001

Solder Cup LTWBD-XXPMF**S**-LC7001

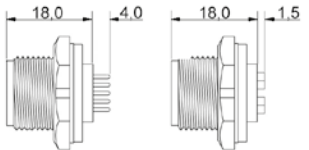
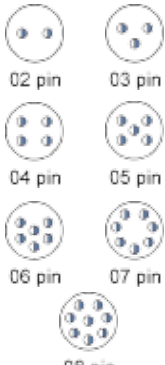
Example: LTWBD-04PMF**S**-LC7001

LTWBD-XXBFMA-LL7001

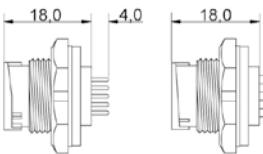
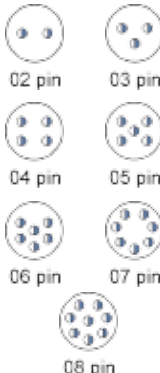
Example: LTWBD-04BFMA-LL7001

# WATERPROOF CIRCULAR CONNECTORS

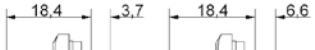
## 5 Amp - Screw Type, Front Mount + Mating Field Assembly Connector

|                                                                                   |                                                                                                              |                                                                                                                                                       |                                        |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
|  |  <p>PCB Solder <b>P</b></p> |  <p>02 pin 03 pin<br/>04 pin 05 pin<br/>06 pin 07 pin<br/>08 pin</p> | PCB SolderLTWBD-XXPMM <b>P</b> -SC7001 |
|                                                                                   |                                                                                                              |                                                                                                                                                       | Solder CupLTWBD-XXPMM <b>S</b> -SC7001 |
|                                                                                   |                                                                                                              |                                                                                                                                                       | Example:LTWBD-06PMM <b>S</b> -SC7001   |
|                                                                                   |                                                                                                              |                                                                                                                                                       | LTWBD-XXBFFA-SL7001                    |
|                                                                                   |                                                                                                              |                                                                                                                                                       | Example:LTWBD-06BFFA-SL7001            |

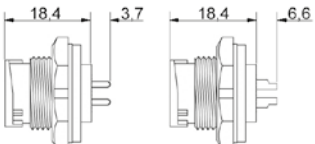
## 5 Amp - Lock (Bayonette) Type, Front Mount + Mating Field Assembly Connector

|                                                                                    |                                                                                                                                       |                                                                                                                                                                 |                                                                                                                                             |            |                             |            |                             |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------|------------|-----------------------------|
|   |  <p>PCB Solder <b>P</b>      Solder Cup <b>S</b></p> |  <p>02 pin    03 pin<br/>04 pin    05 pin<br/>06 pin    07 pin<br/>08 pin</p> | <table><tr><td>PCB Solder</td><td>LTWBD-XXP<b>M</b>P-LC7001</td></tr><tr><td>Solder Cup</td><td>LTWBD-XXP<b>M</b>S-LC7001</td></tr></table> | PCB Solder | LTWBD-XXP <b>M</b> P-LC7001 | Solder Cup | LTWBD-XXP <b>M</b> S-LC7001 |
| PCB Solder                                                                         | LTWBD-XXP <b>M</b> P-LC7001                                                                                                           |                                                                                                                                                                 |                                                                                                                                             |            |                             |            |                             |
| Solder Cup                                                                         | LTWBD-XXP <b>M</b> S-LC7001                                                                                                           |                                                                                                                                                                 |                                                                                                                                             |            |                             |            |                             |
|  |                                                                                                                                       |                                                                                                                                                                 |                                                                                                                                             |            |                             |            |                             |

## 10 Amp - Screw Type, Front Mount + Mating Field Assembly Connector

|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   |            |                              |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------|
|  |  <p>PCB Solder <b>P</b>      Solder Cup <b>S</b></p> | <div>xx</div> <div><br/>02 pin</div> <div><br/>03 pin</div> | PCB Solder | LTWBB-xxPMF <b>P</b> -SC7001 |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   | Solder Cup | LTWBB-xxPMF <b>S</b> -SC7001 |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   | Example:   | LTWBB-03PMF <b>S</b> -SC7001 |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   |            | LTWBB-xxBFMA-SL7001          |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   | Example:   | LTWBB-03BFMA-SL7001          |

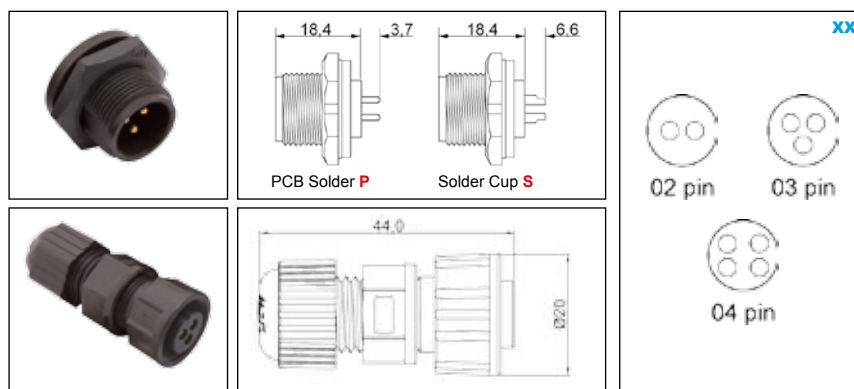
## 10 Amp - Lock (Bayonette) Type, Front Mount + Mating Field Assembly Connector

|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   |            |                              |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------|
|  |  <p>PCB Solder <b>P</b>      Solder Cup <b>S</b></p> | <div>xx</div> <div><br/>02 pin</div> <div><br/>03 pin</div> | PCB Solder | LTWBB-xxPMF <b>P</b> -LC7001 |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   | Solder Cup | LTWBB-xxPMF <b>S</b> -LC7001 |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   | Example:   | LTWBB-03PMF <b>S</b> -LC7001 |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   |            | LTWBB-xxBFMA-LL7001          |
|                                                                                     |                                                                                                                                         |                                                                                                                                                                                                                                   | Example:   | LTWBB-03BFMA-LL7001          |

# WATERPROOF CIRCULAR CONNECTORS

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## 10 Amp - Screw Type, Front Mount + Mating Field Assembly Connector



PCB Solder LTWBB-XXPMM**P**-SC7001

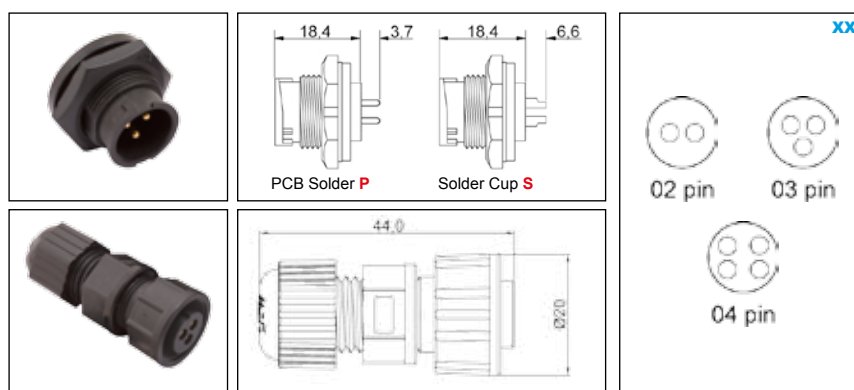
Solder Cup LTWBB-XXPMM**S**-SC7001

Example: LTWBB-04PMM**S**-SC7001

LTWBB-XXBFFA-SL7001

Example: LTWBB-04BFFA-SL7001

## 10 Amp - Lock (Bayonette) Type, Front Mount + Mating Field Assembly Connector



PCB Solder LTWBB-XXPMM**P**-LC7001

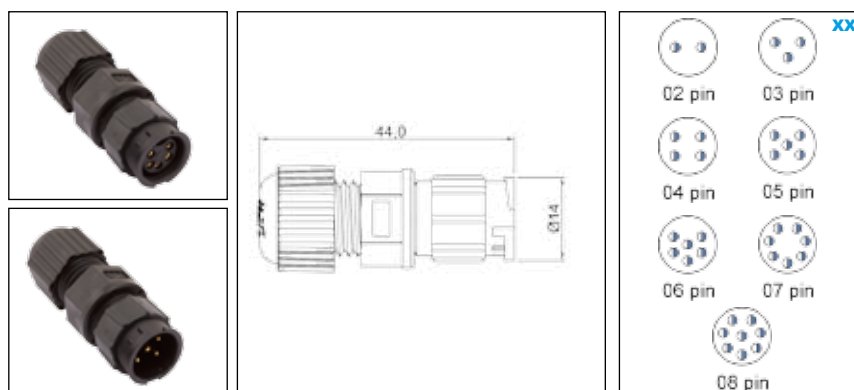
Solder Cup LTWBB-XXPMM**S**-LC7001

Example: LTWBB-04PMM**S**-LC7001

LTWBB-XXBFFA-LL7001

Example: LTWBB-04BFFA-LL7001

## 5 Amp - Lock (Bayonette) Type, Field Assembly Cable Connector



LTWBD-XXBMFA-LL7001

Example: LTWBD-06BMFA-LL7001

BMFA: 2pin, 3pin, 4pin, 5pin & 6pin

LTWBD-XXBMMA-LL7001

Example: LTWBD-08BMMA-LL7001

BMMA: 2pin, 3pin, 4pin, 5pin, 6pin, 7pin & 8pin

## Accessories and Cables



Moulded With Cable



Panel Connector With Cable



Waterproof Caps, IP67



Dust Caps for Panel or Cable

Accessories and Connector Moulded with Cable available upon request.

# WATERPROOF CIRCULAR II CONNECTORS

## Circular II Connector Series - Full Metal

### Specifications:

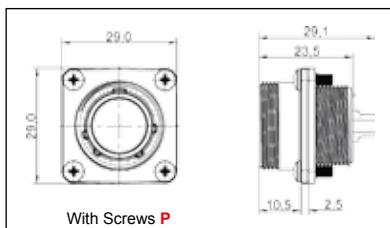
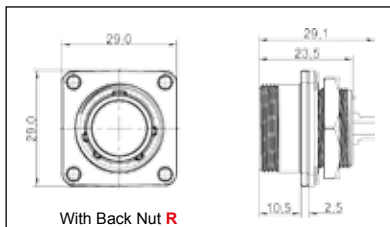
|                     |                                                                                                                                          |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Connector Types:    | Solder Cup, Field Assembly,                                                                                                              |
| Pin Configurations: | From 2 pins up to 14 pins                                                                                                                |
| Materials:          | Connector Body: Zinc Alloy, Nickel Plated<br>Connector Pins: Copper Alloy, Sn/Ni Plated<br>Gasket: Silicone<br>Insulation: Nylon (Black) |
| Waterproof:         | IP68                                                                                                                                     |
| Temperature Range:  | Connector Body: -25°C to +85°C                                                                                                           |
| Environmental Spec: | 48 Hours Salt Spray Contact (L-Type)<br>500 Hours Salt Spray Contact (H-Type)                                                            |
| Current Rating:     | 5A, 10A, 15A                                                                                                                             |
| Maximum Cable O.D:  | Ø 5,5mm up to Ø 12,5mm                                                                                                                   |
| Standard:           | JIS C-5432                                                                                                                               |



### Features:

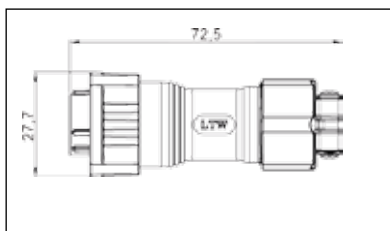
Full Metal Connector, Shell Size 16. This Circular II metal version is based on Japanese standard JIS C-5432 to design and develop; providing weather and corrosion resistance in applications such as industrial automation and outdoor mechanical equipments in rugged environments.

#### 5 Amp Panel Connector



| Type:  | Name:                     | Part No:     |
|--------|---------------------------|--------------|
| L-Type | LD-10 <b>R</b> MFS-SS8001 | 2625-0500-01 |
| L-Type | LD-12 <b>R</b> MFS-SS8001 | 2625-0500-02 |
| L-Type | LD-14 <b>R</b> MFS-SS8001 | 2625-0500-03 |
| H-Type | HD-10 <b>R</b> MFS-SS8001 | 2625-0510-01 |
| H-Type | HD-12 <b>R</b> MFS-SS8001 | 2625-0510-02 |
| H-Type | HD-14 <b>R</b> MFS-SS8001 | 2625-0510-03 |
| L-Type | LD-10 <b>P</b> MFS-SS8001 | 2625-0501-01 |
| L-Type | LD-12 <b>P</b> MFS-SS8001 | 2625-0501-02 |
| L-Type | LD-14 <b>P</b> MFS-SS8001 | 2625-0501-03 |
| H-Type | HD-10 <b>P</b> MFS-SS8001 | 2625-0511-01 |
| H-Type | HD-12 <b>P</b> MFS-SS8001 | 2625-0511-02 |
| H-Type | HD-14 <b>P</b> MFS-SS8001 | 2625-0511-03 |

#### 5 Amp Field Assembly Cable Connector

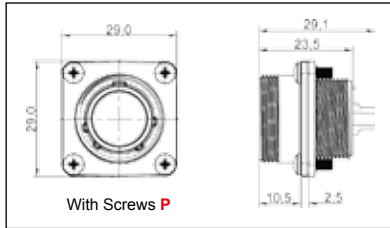
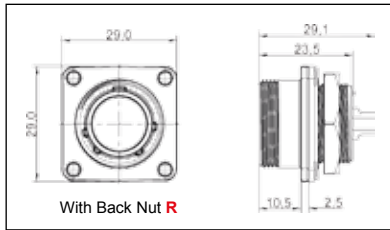


| Type:  | Name:                     | Part No:     |
|--------|---------------------------|--------------|
| L-Type | LD-10 <b>B</b> FMA-SL8001 | 2625-0502-01 |
| L-Type | LD-12 <b>B</b> FMA-SL8001 | 2625-0502-02 |
| L-Type | LD-14 <b>B</b> FMA-SL8001 | 2625-0502-03 |
| H-Type | HD-10 <b>B</b> FMA-SL8001 | 2625-0512-01 |
| H-Type | HD-12 <b>B</b> FMA-SL8001 | 2625-0512-02 |
| H-Type | HD-14 <b>B</b> FMA-SL8001 | 2625-0512-03 |

# WATERPROOF CIRCULAR II CONNECTORS

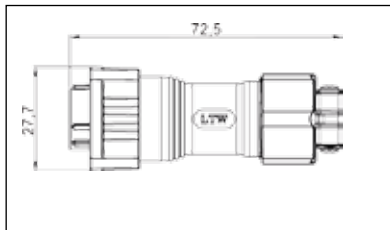
20

## 10 Amp Panel Connector



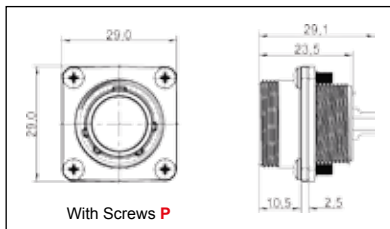
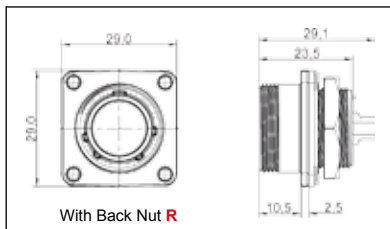
| Type:  | Name:            | Part No:     |
|--------|------------------|--------------|
| L-Type | LB-04RMFS-SS8001 | 2625-1000-01 |
| L-Type | LB-05RMFS-SS8001 | 2625-1000-02 |
| L-Type | LB-07RMFS-SS8001 | 2625-1000-03 |
| H-Type | HB-04RMFS-SS8001 | 2625-1010-01 |
| H-Type | HB-05RMFS-SS8001 | 2625-1010-02 |
| H-Type | HB-07RMFS-SS8001 | 2625-1010-03 |
| L-Type | LB-04PMFS-SS8001 | 2625-1001-01 |
| L-Type | LB-05PMFS-SS8001 | 2625-1001-02 |
| L-Type | LB-07PMFS-SS8001 | 2625-1001-03 |
| H-Type | HB-04PMFS-SS8001 | 2625-1011-01 |
| H-Type | HB-05PMFS-SS8001 | 2625-1011-02 |
| H-Type | HB-07PMFS-SS8001 | 2625-1011-03 |

## 10 Amp Field Assembly Cable Connector



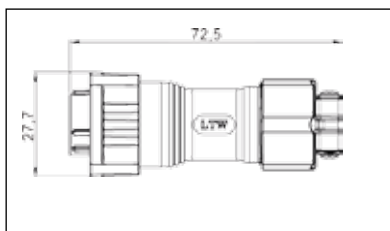
| Type:  | Name:            | Part No:     |
|--------|------------------|--------------|
| L-Type | LB-04BFMA-SL8001 | 2625-1002-01 |
| L-Type | LB-05BFMA-SL8001 | 2625-1002-02 |
| L-Type | LB-07BFMA-SL8001 | 2625-1002-03 |
| H-Type | HB-04BFMA-SL8001 | 2625-1012-01 |
| H-Type | HB-05BFMA-SL8001 | 2625-1012-02 |
| H-Type | HB-07BFMA-SL8001 | 2625-1012-03 |

## 20 Amp Panel Connector



| Type:  | Name:            | Part No:     |
|--------|------------------|--------------|
| L-Type | LC-02RMFS-SS8001 | 2625-1500-01 |
| L-Type | LC-03RMFS-SS8001 | 2625-1500-02 |
| H-Type | HC-02RMFS-SS8001 | 2625-1510-01 |
| H-Type | HC-03RMFS-SS8001 | 2625-1510-02 |
| L-Type | LC-02PMFS-SS8001 | 2625-1501-01 |
| L-Type | LC-03PMFS-SS8001 | 2625-1501-02 |
| H-Type | HC-02PMFS-SS8001 | 2625-1511-01 |
| H-Type | HC-03PMFS-SS8001 | 2625-1511-02 |

## 20 Amp Field Assembly Cable Connector



| Type:  | Name:            | Part No:     |
|--------|------------------|--------------|
| L-Type | LC-02BFMA-SL8001 | 2625-1502-01 |
| L-Type | LC-03BFMA-SL8001 | 2625-1502-02 |
| H-Type | HC-02BFMA-SL8001 | 2625-1512-01 |
| H-Type | HC-03BFMA-SL8001 | 2625-1512-02 |

# SOLAR / PHOTOVOLTAIC CONNECTORS

## Material & Technical Specifications:

|                     |                                                                            |
|---------------------|----------------------------------------------------------------------------|
| Materials:          | UL 94 V-0 Plastic, UV Resistant (PPE)                                      |
| Waterproof:         | IP66 (Box) - IP67 (Connectors)                                             |
| Cable Lengths:      | 0.5m up to 5m (Standard Lengths)<br>Other lengths on request.              |
| Temperature Range:  | -40°C to +90°C                                                             |
| Current Resistance: | 30A (Connector)<br>20A (Box)                                               |
| Voltage Resistance: | 1000V DC                                                                   |
| Contact Resistance: | ≤ 5mΩ                                                                      |
| Test Voltage::      | 6 KV / 1 min (Connector)<br>8 KV / 1 min (Box)                             |
| Certification:      | UL 1703 / TÜV DIN V VDE 0126<br>(Under preparation - Ready Feb/March 2011) |

## Cable:

IEC 60228 class 5, Flame Retardant HAL-Free  
 Certified TÜV Rheinland 04/2008, 2Pfg1169/08/2007 PV1-F  
 UL 4703 03/2006/P70V Wire UL 854 USE-2 07/2008  
 NEC NFPA 70 690.31A



## Assembly Type Connector for Panel Mount



SPC-01RMFS-LC7001

### Male Panel Connector:

### Part No:

SPC-01RMFS-LC7001

2620-0001-01



SPC-01RFMS-LC7001

### Female Panel Connector:

### Part No:

SPC-01RFMS-LC7001

2620-0001-02

## Assembly Type Connector for Cable Mount



SPC-01BMFA-LL7001

### Male Cable Connector:

### Part No:

SPC-01BMFA-LL7001

2620-0004-01



SPC-01BFMA-LL7001

### Female Cable Connector:

### Part No:

SPC-01BFMA-LL7001

2620-0006-01

## Assembly Type Connector for Cable Mount



SL-000000-HHB-YL001

### 2 Male to 1 Female Y-Splitter:

### Part No:

SL-000000-HHB-YL001

2620-0010-01



SL-000000-BBH-YL001

### Female Cable Connector:

### Part No:

SL-000000-BBH-YL001

2620-0010-02

# SOLAR / PHOTOVOLTAIC CONNECTORS

## Junction Boxes, Including Connectors

|                                                                                   |                |
|-----------------------------------------------------------------------------------|----------------|
|  | SBOX-SJA20-001 |
|  | SBOX-SJB20-001 |

| Box, Type A - 6 Cord: | Part No:     |
|-----------------------|--------------|
| SBOX-SJA20-001        | 2620-0009-01 |

| Box, Type B - 2 Cord: | Part No:     |
|-----------------------|--------------|
| SBOX-SJB20-001        | 2620-0009-02 |

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## Junction Boxes, Including Cable + Glands

|                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|
|   | SBOX-SJA22-BXX |
|  | SBOX-SJB22-BXX |

| Box, Type A - 6 Cord:             | Part No:     |
|-----------------------------------|--------------|
| SBOX-SJA22-B05 Cable length: 0,5m | 2620-0009-13 |
| SBOX-SJA22-B10 Cable length: 1,0m | 2620-0009-15 |
| SBOX-SJA22-B20 Cable length: 2,0m | 2620-0009-17 |

| Box, Type B - 2 Cord:             | Part No:     |
|-----------------------------------|--------------|
| SBOX-SJB22-B05 Cable length: 0,5m | 2620-0009-14 |
| SBOX-SJB22-B10 Cable length: 1,0m | 2620-0009-16 |
| SBOX-SJB22-B20 Cable length: 2,0m | 2620-0009-18 |

## Accessories

|                                                                                     |                                                                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | Male Connector,<br>For Junction Box<br><br>SPC-01DMFP-LC7001   |
|  | Female Connector,<br>For Junction Box<br><br>SPC-01DFMP-LC7001 |
|  | Assembly Bracket<br>For Junction Box<br><br>ZSE00102450        |
|  | Male Connector CAP<br><br>CAP-DSOMMLC1                         |
|  | Female Connector CAP<br><br>CAP-DSOMFLC1                       |

| Male Box Connector: | Part No:     |
|---------------------|--------------|
| SPC-01DMFP-LC7001   | 2620-0002-01 |

| Female Box Connector: | Part No:     |
|-----------------------|--------------|
| SPC-01DFMP-LC7001     | 2620-0002-02 |

| Assembly Bracket: | Part No:     |
|-------------------|--------------|
| ZSE00102450       | 2620-0009-10 |

| Male Connector Cap: | Part No:     |
|---------------------|--------------|
| CAP-DSOMMLC1        | 2620-0008-01 |

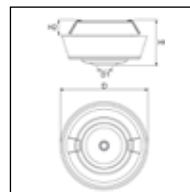
| Female Connector Cap: | Part No:     |
|-----------------------|--------------|
| CAP-DSOMFLC1          | 2620-0008-02 |

# CABLE & PIPE ENTRY PRODUCT SERIES

## KLIKSEAL®

### Material & Technical Specifications:

|                    |                                                                           |
|--------------------|---------------------------------------------------------------------------|
| Material:          | TPE Polyamide 66 - HAL Free<br>UL Approved Material                       |
| Waterproof:        | IP65 / IP67                                                               |
| Temperature Range: | -20°C to +125°C                                                           |
| Test Standard:     | EN60529: 1991+A1<br>EN50262: 1998<br>EMKO-TUI (03-SEC) FI001/84<br>606620 |
| Semko Report:      |                                                                           |



## KLIKSEAL®

| E-number | Size | IP67 and<br>Cable Anchorage<br>Type A*<br>for Cable Ø<br>mm | IP65 for<br>Cable Ø<br>mm | A<br>mm | B for<br>IP67 / 65<br>mm | H<br>mm | H2<br>mm | D1<br>mm | D***<br>mm | Pack<br>pcs |
|----------|------|-------------------------------------------------------------|---------------------------|---------|--------------------------|---------|----------|----------|------------|-------------|
|----------|------|-------------------------------------------------------------|---------------------------|---------|--------------------------|---------|----------|----------|------------|-------------|

### ☒ RAL 7035 - Light Grey

|           |     |          |        |      |       |         |     |     |             |    |
|-----------|-----|----------|--------|------|-------|---------|-----|-----|-------------|----|
| 14 758 03 | M20 | 7 - 11   | 4 - 11 | 20,5 | 2 - 5 | 17 - 20 | 5,5 | 4,0 | 29,3 - 34,5 | 50 |
| 14 758 04 | M25 | 7 - 13** | 4 - 13 | 25,5 | 2 - 5 | 17 - 20 | 5,7 | 5,0 | 34,3 - 40,0 | 50 |

### ☒ RAL 9005 - Black

|           |     |          |        |      |       |         |     |     |             |    |
|-----------|-----|----------|--------|------|-------|---------|-----|-----|-------------|----|
| 14 758 13 | M20 | 7 - 11   | 4 - 11 | 20,5 | 2 - 5 | 17 - 20 | 5,5 | 4,0 | 29,3 - 34,5 | 50 |
| 14 758 14 | M25 | 7 - 13** | 4 - 13 | 25,5 | 2 - 5 | 17 - 20 | 5,7 | 5,0 | 34,3 - 40,0 | 50 |

### ☐ RAL 9010 - White

|           |     |          |        |      |       |         |     |     |             |    |
|-----------|-----|----------|--------|------|-------|---------|-----|-----|-------------|----|
| 14 758 23 | M20 | 7 - 11   | 4 - 11 | 20,5 | 2 - 5 | 17 - 20 | 5,5 | 4,0 | 29,3 - 34,5 | 50 |
| 14 758 24 | M25 | 7 - 13** | 4 - 13 | 25,5 | 2 - 5 | 17 - 20 | 5,7 | 5,0 | 34,3 - 40,0 | 50 |

## KLIKSEAL® - For Thin Materials:

| E-number | Size | IP67 and<br>Cable Anchorage<br>Type A*<br>for Cable Ø<br>mm | IP65 for<br>Cable Ø<br>mm | A<br>mm | B for<br>IP67 / 65<br>mm | H<br>mm | H2<br>mm | D1<br>mm | D***<br>mm | Pack<br>pcs |
|----------|------|-------------------------------------------------------------|---------------------------|---------|--------------------------|---------|----------|----------|------------|-------------|
|----------|------|-------------------------------------------------------------|---------------------------|---------|--------------------------|---------|----------|----------|------------|-------------|

### ☒ RAL 7035 - Light Grey

|           |     |          |        |      |         |         |     |     |             |    |
|-----------|-----|----------|--------|------|---------|---------|-----|-----|-------------|----|
| 14 758 07 | M20 | 7 - 11   | 4 - 11 | 20,5 | 0,7 - 3 | 17 - 20 | 5,5 | 4,0 | 34,2 - 37,2 | 50 |
| 14 758 08 | M25 | 7 - 13** | 4 - 13 | 25,5 | 0,7 - 3 | 17 - 20 | 5,7 | 5,0 | 39,2 - 42,2 | 50 |

### ☒ RAL 9005 - Black

|           |     |          |        |      |         |         |     |     |             |    |
|-----------|-----|----------|--------|------|---------|---------|-----|-----|-------------|----|
| 14 758 17 | M20 | 7 - 11   | 4 - 11 | 20,5 | 0,7 - 3 | 17 - 20 | 5,5 | 4,0 | 34,2 - 37,2 | 50 |
| 14 758 18 | M25 | 7 - 13** | 4 - 13 | 25,5 | 0,7 - 3 | 17 - 20 | 5,7 | 5,0 | 39,2 - 42,2 | 50 |

### ☐ RAL 9010 - White

|           |     |          |        |      |         |         |     |     |             |    |
|-----------|-----|----------|--------|------|---------|---------|-----|-----|-------------|----|
| 14 758 27 | M20 | 7 - 11   | 4 - 11 | 20,5 | 0,7 - 3 | 17 - 20 | 5,5 | 4,0 | 34,2 - 37,2 | 50 |
| 14 758 28 | M25 | 7 - 13** | 4 - 13 | 25,5 | 0,7 - 3 | 17 - 20 | 5,7 | 5,0 | 39,2 - 42,2 | 50 |

# CABLE & PIPE ENTRY PRODUCT SERIES

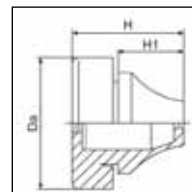
## RUTASEAL®

### Material & Technical Specifications:

|                    |                                       |
|--------------------|---------------------------------------|
| Material:          | EPDM - HAL Free                       |
|                    | Resistant to Chemicals & Weatherproof |
| Waterproof:        | IP67 according to EN60529             |
| Temperature Range: | -40°C to +110°C                       |
| Test Standard:     | SEMKO 44:1984                         |
| Semko Report:      | 300965                                |

### Features:

- Suitable for holes of 1-4mm thickness.
- Quick and simple assembly without the use of tools.



## RUTASEAL® EPDM Metric

| E-number | Size | For Cable / Pipe Ø mm | A mm | B mm | Da mm | H mm | H1 mm | Pack pcs |
|----------|------|-----------------------|------|------|-------|------|-------|----------|
|----------|------|-----------------------|------|------|-------|------|-------|----------|

### RAL 7001 - Grey

|           |     |         |      |         |      |      |      |    |
|-----------|-----|---------|------|---------|------|------|------|----|
| 14 582 33 | M12 | 4 - 7   | 12,5 | 0,5 - 2 | 20   | 12,8 | 5,6  | 50 |
| 14 582 34 | M16 | 5 - 9   | 16,5 | 1 - 4   | 21   | 17,7 | 11   | 50 |
| 14 582 35 | M20 | 8 - 13  | 20,5 | 1 - 4   | 25,5 | 20   | 13,4 | 50 |
| 14 582 36 | M25 | 11 - 17 | 25,5 | 1 - 4   | 30,5 | 21,3 | 15,3 | 50 |
| 14 582 37 | M32 | 15 - 20 | 32,5 | 1 - 4   | 38,5 | 24,6 | 18,6 | 25 |
| 14 582 38 | M40 | 19 - 28 | 40,5 | 1 - 4   | 48,5 | 29,5 | 21,7 | 25 |
| 14 582 39 | M50 | 27 - 35 | 50,5 | 1 - 4   | 60,5 | 34,8 | 25   | 10 |

### RAL 9005 - Black

|           |     |         |      |         |      |      |      |    |
|-----------|-----|---------|------|---------|------|------|------|----|
| 14 582 93 | M12 | 4 - 7   | 12,5 | 0,5 - 2 | 20   | 12,8 | 5,6  | 50 |
| 14 582 94 | M16 | 5 - 9   | 16,5 | 1 - 4   | 21   | 17,7 | 11   | 50 |
| 14 582 95 | M20 | 8 - 13  | 20,5 | 1 - 4   | 25,5 | 20   | 13,4 | 50 |
| 14 582 96 | M25 | 11 - 17 | 25,5 | 1 - 4   | 30,5 | 21,3 | 15,3 | 50 |
| 14 582 97 | M32 | 15 - 20 | 32,5 | 1 - 4   | 38,5 | 24,6 | 18,6 | 25 |
| 14 582 98 | M40 | 19 - 28 | 40,5 | 1 - 4   | 48,5 | 29,5 | 21,7 | 25 |
| 14 582 99 | M50 | 27 - 35 | 50,5 | 1 - 4   | 60,5 | 34,8 | 25   | 10 |

### RAL 7035 - Light Grey

|           |     |         |      |         |      |      |      |    |
|-----------|-----|---------|------|---------|------|------|------|----|
| 14 583 03 | M12 | 4 - 7   | 12,5 | 0,5 - 2 | 20   | 12,8 | 5,6  | 50 |
| 14 583 04 | M16 | 5 - 9   | 16,5 | 1 - 4   | 21   | 17,7 | 11   | 50 |
| 14 583 05 | M20 | 8 - 13  | 20,5 | 1 - 4   | 25,5 | 20   | 13,4 | 50 |
| 14 583 06 | M25 | 11 - 17 | 25,5 | 1 - 4   | 30,5 | 21,3 | 15,3 | 50 |
| 14 583 07 | M32 | 15 - 20 | 32,5 | 1 - 4   | 38,5 | 24,6 | 18,6 | 25 |
| 14 583 08 | M40 | 19 - 28 | 40,5 | 1 - 4   | 48,5 | 29,5 | 21,7 | 25 |
| 14 583 09 | M50 | 27 - 35 | 50,5 | 1 - 4   | 60,5 | 34,8 | 25   | 10 |

## RUTASEAL LIGHT® EPDM Metric

| E-number | Size | For Cable / Pipe Ø mm | A mm | B mm | Da mm | H mm | H1 mm | Pack pcs |
|----------|------|-----------------------|------|------|-------|------|-------|----------|
|----------|------|-----------------------|------|------|-------|------|-------|----------|

### RAL 7001 - Grey

|           |     |         |      |       |      |      |      |    |
|-----------|-----|---------|------|-------|------|------|------|----|
| 14 583 26 | M16 | 5 - 9   | 16,5 | 1 - 4 | 21   | 17,5 | 11   | 50 |
| 14 583 27 | M20 | 8 - 12  | 20,5 | 1 - 4 | 25,5 | 19,6 | 13,4 | 50 |
| 14 583 28 | M25 | 11 - 16 | 25,5 | 1 - 4 | 30,5 | 20,9 | 15,3 | 50 |

### RAL 9005 - Black

|           |     |         |      |       |      |      |      |    |
|-----------|-----|---------|------|-------|------|------|------|----|
| 14 583 30 | M16 | 5 - 9   | 16,5 | 1 - 4 | 21   | 17,5 | 11   | 50 |
| 14 583 31 | M20 | 8 - 12  | 20,5 | 1 - 4 | 25,5 | 19,6 | 13,4 | 50 |
| 14 583 32 | M25 | 11 - 16 | 25,5 | 1 - 4 | 30,5 | 20,9 | 15,3 | 50 |

### RAL 7035 - Light Grey

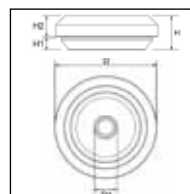
|           |     |         |      |       |      |      |      |    |
|-----------|-----|---------|------|-------|------|------|------|----|
| 14 583 34 | M16 | 5 - 9   | 16,5 | 1 - 4 | 21   | 17,5 | 11   | 50 |
| 14 583 35 | M20 | 8 - 12  | 20,5 | 1 - 4 | 25,5 | 19,6 | 13,4 | 50 |
| 14 583 36 | M25 | 11 - 16 | 25,5 | 1 - 4 | 30,5 | 20,9 | 15,3 | 50 |

# CABLE & PIPE ENTRY PRODUCT SERIES

## TSS - Grommet Series

### Material & Technical Specifications:

|                    |                                                                      |
|--------------------|----------------------------------------------------------------------|
| Material:          | TPE - HAL Free<br>UL Approved Material                               |
| Waterproof:        | IP67                                                                 |
| Temperature Range: | -50°C to +125°C                                                      |
| Test Standard:     | EN60529: 1991+A1<br>EMKO-TUI (03-SEC) FI001/84                       |
| Semko Report:      | M16 - 708555-1<br>M20 - 708555-2<br>M25 - 708555-3<br>M32 - 708555-4 |



## TSS

| E-number | Size | For Cable / Pipe Ø mm | A mm | B mm | D* mm | D1 mm | H mm | H1 mm | H2* mm | Pack pcs |
|----------|------|-----------------------|------|------|-------|-------|------|-------|--------|----------|
|----------|------|-----------------------|------|------|-------|-------|------|-------|--------|----------|

### RAL 7035 - Light Grey

|           |     |         |      |           |      |    |    |   |      |    |
|-----------|-----|---------|------|-----------|------|----|----|---|------|----|
| 14 757 11 | M16 | 5 - 10  | 16,5 | 0,5 - 3   | 23,5 | 4  | 11 | 4 | 6,75 | 50 |
| 14 757 12 | M20 | 6 - 13  | 20,5 | 0,5 - 3   | 27,5 | 5  | 11 | 4 | 6,75 | 50 |
| 14 757 13 | M25 | 8 - 17  | 25,5 | 0,5 - 3,5 | 32,5 | 7  | 11 | 4 | 6,75 | 50 |
| 14 757 14 | M32 | 12 - 24 | 32,5 | 0,5 - 4,5 | 39,5 | 11 | 11 | 4 | 6,75 | 25 |

### RAL 7035 - Black

|           |     |         |      |           |      |    |    |   |      |    |
|-----------|-----|---------|------|-----------|------|----|----|---|------|----|
| 14 757 16 | M16 | 5 - 10  | 16,5 | 0,5 - 3   | 23,5 | 4  | 11 | 4 | 6,75 | 50 |
| 14 757 17 | M20 | 6 - 13  | 20,5 | 0,5 - 3   | 27,5 | 5  | 11 | 4 | 6,75 | 50 |
| 14 757 18 | M25 | 8 - 17  | 25,5 | 0,5 - 3,5 | 32,5 | 7  | 11 | 4 | 6,75 | 50 |
| 14 757 19 | M32 | 12 - 24 | 32,5 | 0,5 - 4,5 | 39,5 | 11 | 11 | 4 | 6,75 | 25 |

### RAL 9010 - White

|           |     |         |      |           |      |    |    |   |      |    |
|-----------|-----|---------|------|-----------|------|----|----|---|------|----|
| 14 757 21 | M16 | 5 - 10  | 16,5 | 0,5 - 3   | 23,5 | 4  | 11 | 4 | 6,75 | 50 |
| 14 757 22 | M20 | 6 - 13  | 20,5 | 0,5 - 3   | 27,5 | 5  | 11 | 4 | 6,75 | 50 |
| 14 757 23 | M25 | 8 - 17  | 25,5 | 0,5 - 3,5 | 32,5 | 7  | 11 | 4 | 6,75 | 50 |
| 14 757 24 | M32 | 12 - 24 | 32,5 | 0,5 - 4,5 | 39,5 | 11 | 11 | 4 | 6,75 | 25 |

## AVAILABLE ON REQUEST:

### Cable Glands - Metric IP67



Cable Glands and accessories are available in:

- UL 94 V-0 Class Plastic Material
- Brass
- Stainless Steel
- EMC Shielded version

All common accessories are available, such as Reducing sleeves, Enlargment sleeves, Adaptors, Screw Plugs, Sealing Rings, O-Rings, Inserts a.o.

Please contact us for more information.



# CABLE & PIPE ENTRY PRODUCT SERIES

## Design-A-Flange



### Material & Technical Specifications:

|                    |                                                                                      |
|--------------------|--------------------------------------------------------------------------------------|
| Material:          | Fiberglass re-inforced Polypropylene and TPE - Halogen Free<br>UL Approved Materials |
| Waterproof:        | IP65                                                                                 |
| Temperature Range: | -20°C to +125°C                                                                      |
| Test Standard:     | EN60529: 1991+A1<br>EN60670-1: 2005                                                  |
| Semko Report:      | 816003                                                                               |
| Colour:            | RAL 7035 - Light Grey<br>RAL 9005 - Black - Only on request                          |



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### Prefabricated Flanges *RAL 7035 - Light Grey*

FL21

26 654 01



FL21

26 654 02



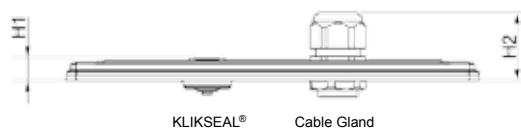
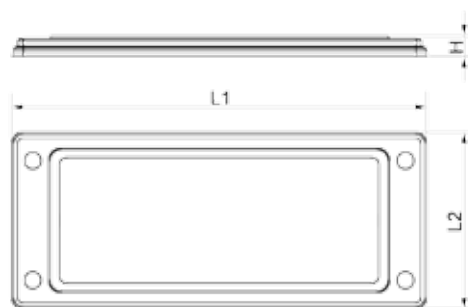
FL21

26 654 03



FL13

26 654 05



| Size: | L1<br>mm | L2<br>mm | H<br>mm | H1<br>mm | H2<br>mm |
|-------|----------|----------|---------|----------|----------|
| FL 13 | 134      | 52       | 6,5     | 12       | 35*      |
| FL 21 | 214      | 90       | 9       | 12       | 35*      |

\* Approximate Height after mounting

### How To Order Frames & Inserts:

**RAL 7035 - Light Grey**



#### Inserts 68x68 for FL21:



2x M25 (8-17mm)  
2x M16 (5-10mm)

26 654 06



KO M32 M40 M50

26 654 07



9x 7-14mm

26 654 08



2x 20-30mm  
2x 10-20mm

26 654 09



30-50mm

26 654 10

#### Inserts 68x34 for FL21:



2x 8-17mm

26 654 11



2x M20 (6-13mm)

26 654 12



10x 4-10mm

26 654 13



#### Inserts 34x68 for FL13:



2x 8-17mm

26 654 14



2x M20 (6-13mm)

26 654 15



10x 4-10mm

26 654 16

#### Inserts 34x34 for FL13:



1x M20 (6-13mm)

26 654 17



## CABLE & PIPE ENTRY PRODUCT SERIES

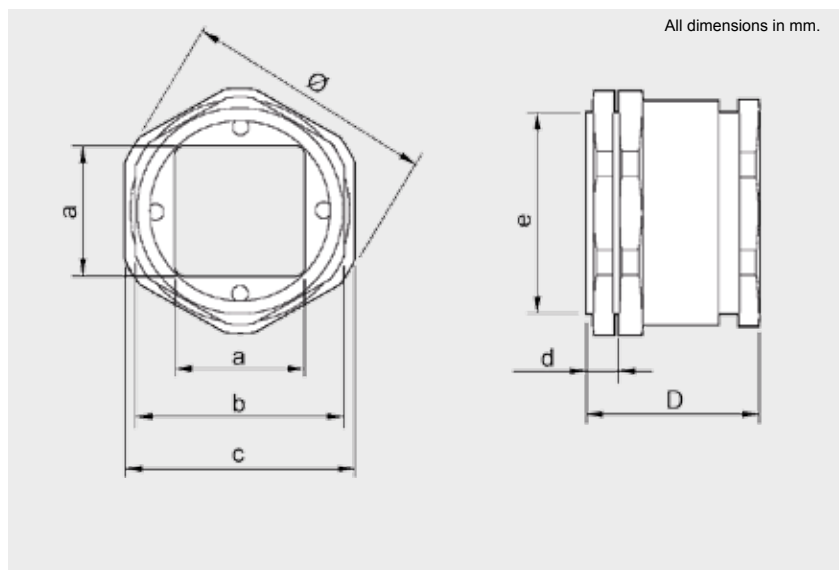
### RG M63 Series



The Roxtec RG M63 is a compact kit sealing solution for cabinets. The three different standardised kit configurations make it possible to seal one to nine pre terminated cables, ranging from Ø 3.5mm to Ø 32.5mm. The Roxtec RG M63 housing is made of nickel plated brass. The sealings are UL/NEMA 4,4X,12,13 and IP 67 rated.

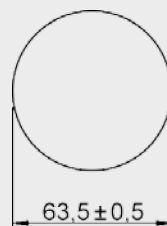


| Kit:     | Aperture dimension<br>Ø mm / Depth: | Number of Cables or Pipes accommodated per Kit: |              |              | Part Number: |
|----------|-------------------------------------|-------------------------------------------------|--------------|--------------|--------------|
|          |                                     | 3,5 - 10,5mm                                    | 3,5 - 16,5mm | 9,5 - 32,5mm |              |
| RG M63/1 | 74 / 51                             |                                                 |              | 1            | 3101-0101-01 |
| RG M63/4 | 74 / 51                             |                                                 | 4            |              | 3101-0101-02 |
| RG M63/9 | 74 / 51                             | 9                                               |              |              | 3101-0101-03 |



| Pos: |           |
|------|-----------|
| a    | 40        |
| b    | SW 64     |
| c    | SW 68     |
| d    | 10        |
| e    | M63 x 1,5 |
| D    | 51        |
| Ø    | 74        |

Recommended Panel Cut-Out:



## CABLE & PIPE ENTRY PRODUCT SERIES

### C R S T Series

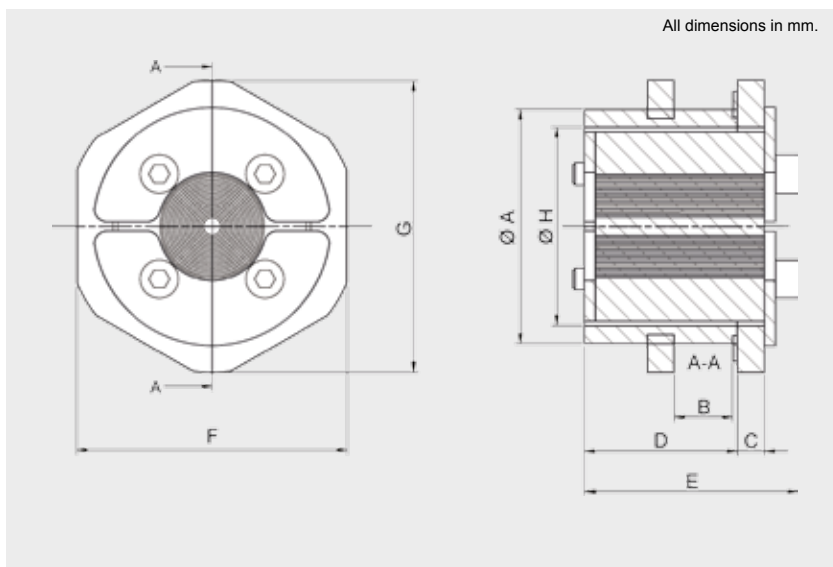


The Roxtec C R S T sealing solution is available in four different sizes, which seal single cables and pipes from Ø3.6mm to Ø30mm. The C R S T kit is a complete sealing solution, which consists of a threaded sleeve with gasket, a counter nut and a round C R S Seal for a single cable or pipe. The Roxtec C R S T kit sealing solution makes installation of pre terminated cables or pipes easy, such as in cabinet walls and other types of similar structures.

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| Kit:       | Aperture dimension Ø A: | For Cable / Pipe Ø: | Ext. Dim. Sleeve: (Ø x Depth) | Part Number: |
|------------|-------------------------|---------------------|-------------------------------|--------------|
| C R S T 25 | 32mm                    | 3,6 - 12mm          | 39 x 20mm                     | 3101-0103-01 |
| C R S T 31 | 40mm                    | 4 - 17mm            | 50 x 20mm                     | 3101-0103-02 |
| C R S T 43 | 50mm                    | 4 - 23mm            | 65 x 40mm                     | 3101-0103-03 |
| C R S T 50 | 63mm                    | 8 - 30mm            | 78 x 40mm                     | 3101-0103-04 |



| Pos: | C R S T 25 | C R S T 31 | C R S T 43 | C R S T 50 |
|------|------------|------------|------------|------------|
| Ø A  | 32         | 40         | 50         | 63         |
| B    | 1-10       | 1-8        | 1-28       | 1-26       |
| C    | 4          | 5          | 5          | 6          |
| D    | 16         | 15         | 35         | 34         |
| E    | 25         | 25         | 48         | 48         |
| F    | 36         | 46         | 60         | 70         |
| G    | 39         | 50         | 65         | 78         |
| Ø H  | 25         | 31         | 43         | 50         |

# CABLE & PIPE ENTRY PRODUCT SERIES

## CF8 & CF32 Frames



The CF8 & CF32 are cast aluminium frames suitable for compact installations in cabinets. The compression is integrated in the frame. CF8 can accommodate up to 15 cables and the CF32 accommodates up to 60 cables. Both frames accommodate a fast installation and the possibility to install pre-assembled cables.



CF 8/5



CF 8/8



CF 8/9



CF 32/20



CF 32/32

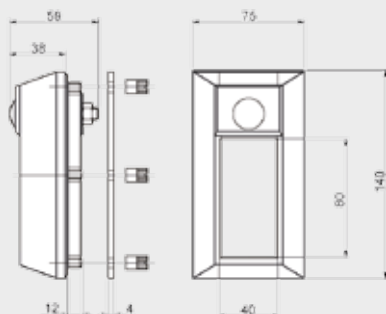


CF 32/41

| Kit:     | Width x Height: | Number of Cables or Pipes accommodated per Kit: |              |           |              | Part Number: |
|----------|-----------------|-------------------------------------------------|--------------|-----------|--------------|--------------|
|          |                 | 3,5 - 10,5mm                                    | 3,5 - 16,5mm | 10 - 25MM | 9,5 - 32,5mm |              |
| CF 8/5   | 75 x 140        |                                                 | 4            |           | 1            | 3102-0101-01 |
| CF 8/8   | 75 x 140        |                                                 | 8            |           |              | 3102-0101-02 |
| CF 8/9   | 75 x 140        | 6                                               | 2            | 1         |              | 3102-0101-03 |
| CF 32/20 | 130 x 230       |                                                 | 16           |           | 4            | 3102-0201-01 |
| CF 32/32 | 130 x 230       |                                                 | 32           |           |              | 3102-0201-02 |
| CF 32/41 | 130 x 230       | 24                                              | 16           |           | 1            | 3102-0201-03 |

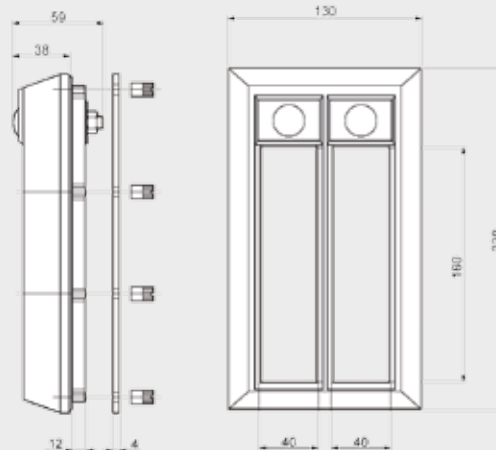
CF 8

All dimensions in mm.



CF 32

All dimensions in mm.



CABLE & PIPE ENTRY PRODUCT SERIES

CF16 Frames



The CF 16 frame has a very low profile and is suitable for enclosures where many cables need to be routed in areas with limited space. The CF 16 frame has integrated compression. Other kit configurations are available upon request.



CF 16/4



CF 16/10

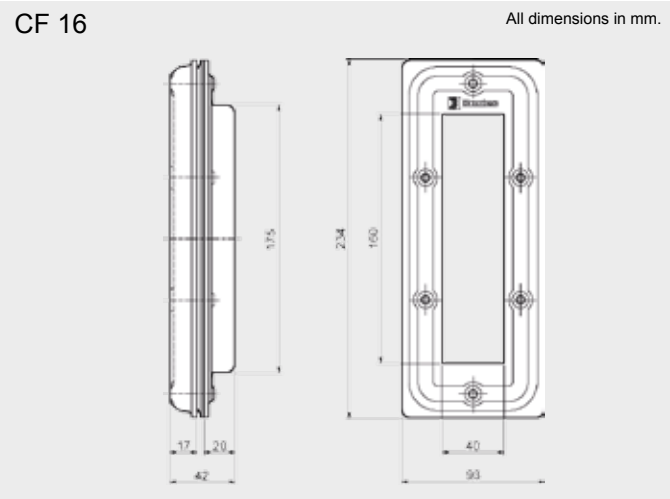


CF 16/16



CF 16/19

| Kit:     | Width x Height: | Number of Cables or Pipes accomodated per Kit: |              |              | Part Number: |
|----------|-----------------|------------------------------------------------|--------------|--------------|--------------|
|          |                 | 3,5 - 10,5mm                                   | 3,5 - 16,5mm | 9,5 - 32,5mm |              |
| CF 16/4  | 93 x 234mm      |                                                |              | 4            | 3102-0301-01 |
| CF 16/10 | 93 x 234mm      |                                                | 8            | 2            | 3102-0301-02 |
| CF 16/16 | 93 x 234mm      |                                                | 16           |              | 3102-0301-03 |
| CF 16/19 | 93 x 234mm      | 12                                             | 6            | 1            | 3102-0301-04 |



# CABLE & PIPE ENTRY PRODUCT SERIES

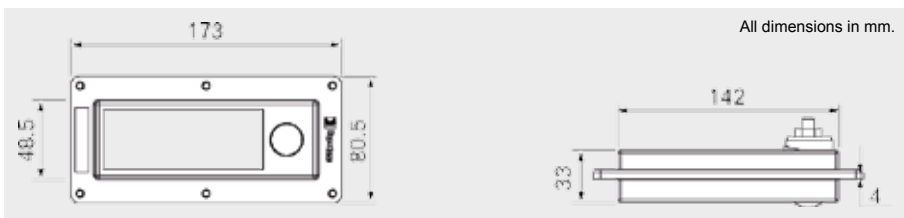
## ComSeal Series



The Roxtec ComSeal is a solution for fast and simple sealing of openings with cables in cabinets. The frames are available in three basic sizes. The Roxtec ComSeal frames are supplied as ready-made kits and can be attached either to the inside or the outside of a cabinet.



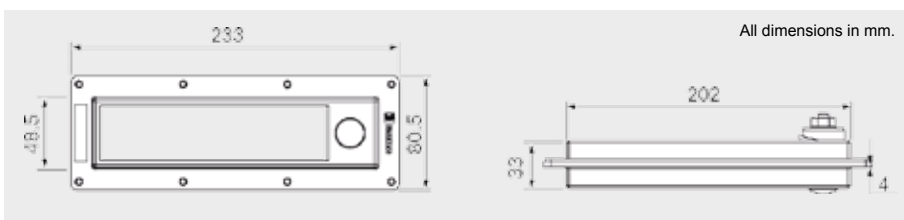
ComSeal 10



| Kit:          | Number of Cables or Pipes per Kit: |              | Holecut<br>Width x Length (mm) | Part Number: |
|---------------|------------------------------------|--------------|--------------------------------|--------------|
|               | 3,5 - 16,5mm                       | 9,5 - 32,5mm |                                |              |
| ComSeal 10/4  | 2                                  | 2            | 56 x 149                       | 3107-0001-01 |
| ComSeal 10/7  | 6                                  | 1            | 56 x 149                       | 3107-0001-02 |
| ComSeal 10/10 | 10                                 |              | 56 x 149                       | 3107-0001-03 |



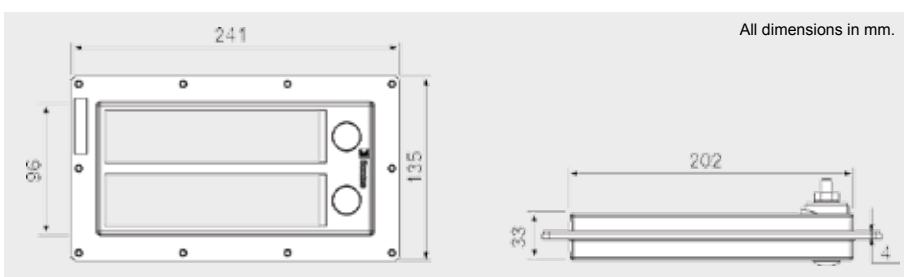
ComSeal 16



| Kit:          | Number of Cables or Pipes per Kit: |              | Holecut<br>Width x Length (mm) | Part Number: |
|---------------|------------------------------------|--------------|--------------------------------|--------------|
|               | 3,5 - 16,5mm                       | 9,5 - 32,5mm |                                |              |
| ComSeal 16/4  |                                    | 4            | 56 x 209                       | 3107-0002-01 |
| ComSeal 16/7  | 4                                  | 3            | 56 x 209                       | 3107-0002-02 |
| ComSeal 16/10 | 8                                  | 2            | 56 x 209                       | 3107-0002-03 |
| ComSeal 16/16 | 16                                 |              | 56 x 209                       | 3107-0002-04 |



ComSeal 32



| Kit:          | Number of Cables or Pipes per Kit: |              | Holecut<br>Width x Length (mm) | Part Number: |
|---------------|------------------------------------|--------------|--------------------------------|--------------|
|               | 3,5 - 16,5mm                       | 9,5 - 32,5mm |                                |              |
| ComSeal 32/8  |                                    | 8            | 103 x 209                      | 3107-0003-01 |
| ComSeal 32/14 | 8                                  | 6            | 103 x 209                      | 3107-0003-02 |
| ComSeal 32/20 | 16                                 | 4            | 103 x 209                      | 3107-0003-03 |
| ComSeal 32/32 | 32                                 |              | 103 x 209                      | 3107-0003-04 |

# CABLE & PIPE ENTRY PRODUCT SERIES

## EzEntry Series



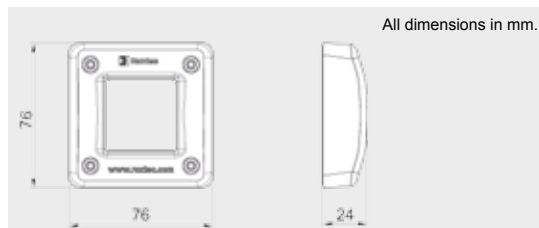
The EzEntry™ seal is designed to simplify cable sealing in the equipment manufacturing industry.

The solution enables routing and sealing multiple pre-terminated cables of different sizes - in one single frame opening.

The seal has a light weight composite frame with integrated gasket. It's a single-side installation with an integrated compression.



EzEntry 4 Mini

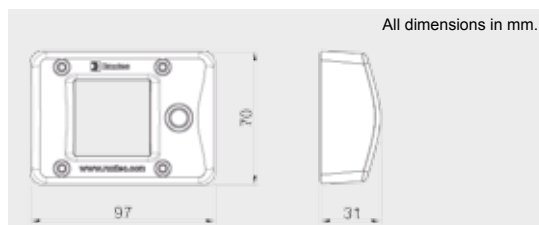


| Number of Cables or Pipes accommodated per Kit: |            |            |            |
|-------------------------------------------------|------------|------------|------------|
| Kit:                                            | 3,5-10,5mm | 3,5-16,5mm | 9,5-32,5mm |
| 4 Mini/4                                        |            | 4          |            |
| 4 Mini/9                                        | 9          |            |            |

| Kit:      | Part Number: |
|-----------|--------------|
| 4 Mini /4 | 3108-0001-01 |
| 4 Mini /9 | 3108-0001-02 |



EzEntry 4

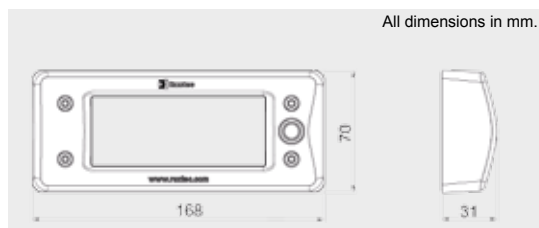


| Number of Cables or Pipes accommodated per Kit: |            |            |            |
|-------------------------------------------------|------------|------------|------------|
| Kit:                                            | 3,5-10,5mm | 3,5-16,5mm | 9,5-32,5mm |
| 4/4                                             |            | 4          |            |

| Kit: | Part Number: |
|------|--------------|
| 4/4  | 3108-0002-01 |



EzEntry 10

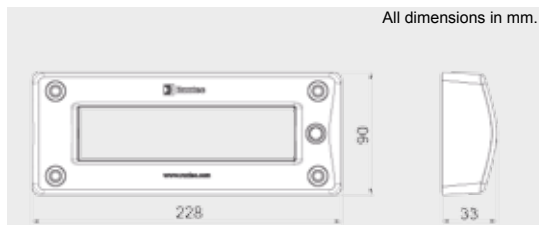


| Number of Cables or Pipes accommodated per Kit: |            |            |            |
|-------------------------------------------------|------------|------------|------------|
| Kit:                                            | 3,5-10,5mm | 3,5-16,5mm | 9,5-32,5mm |
| 10/4                                            |            | 2          | 2          |
| 10/7                                            |            | 6          | 1          |
| 10/10                                           |            | 10         |            |

| Kit:  | Part Number: |
|-------|--------------|
| 10/4  | 3108-0003-01 |
| 10/7  | 3108-0003-02 |
| 10/10 | 3108-0003-03 |



EzEntry 16

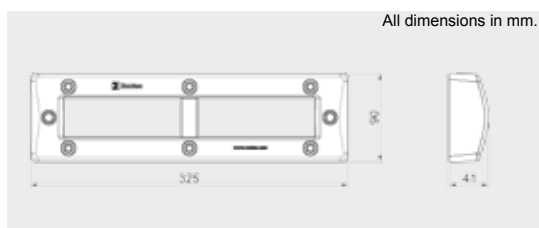


| Number of Cables or Pipes accommodated per Kit: |            |            |            |
|-------------------------------------------------|------------|------------|------------|
| Kit:                                            | 3,5-10,5mm | 3,5-16,5mm | 9,5-32,5mm |
| 16/4                                            |            |            | 4          |
| 16/10                                           |            | 8          | 2          |
| 16/16                                           |            | 16         |            |

| Kit:  | Part Number: |
|-------|--------------|
| 16/4  | 3108-0004-01 |
| 16/10 | 3108-0004-02 |
| 16/16 | 3108-0004-03 |

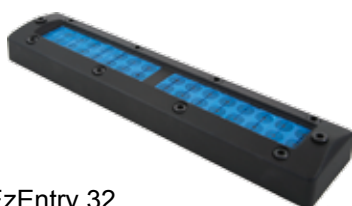


EzEntry 24

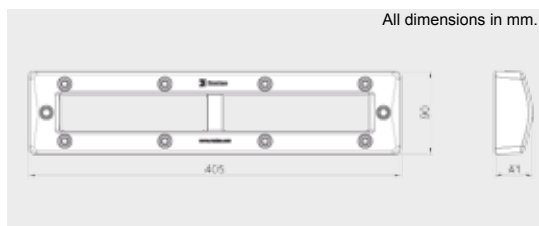


| Number of Cables or Pipes accommodated per Kit: |            |            |            |
|-------------------------------------------------|------------|------------|------------|
| Kit:                                            | 3,5-10,5mm | 3,5-16,5mm | 9,5-32,5mm |
| 24/6                                            |            |            | 6          |
| 24/15                                           |            | 12         | 3          |
| 24/24                                           |            | 24         |            |

| Kit:  | Part Number: |
|-------|--------------|
| 24/6  | 3108-0005-01 |
| 24/15 | 3108-0005-02 |
| 24/24 | 3108-0005-03 |



EzEntry 32

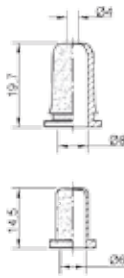


| Number of Cables or Pipes accommodated per Kit: |            |            |            |
|-------------------------------------------------|------------|------------|------------|
| Kit:                                            | 3,5-10,5mm | 3,5-16,5mm | 9,5-32,5mm |
| 32/8                                            |            |            | 8          |
| 32/20                                           |            | 16         | 4          |
| 32/32                                           |            | 32         |            |

| Kit:  | Part Number: |
|-------|--------------|
| 32/8  | 3108-0006-01 |
| 32/20 | 3108-0006-02 |
| 32/32 | 3108-0006-03 |

## ACCESSORIES

### Rubber Grommet



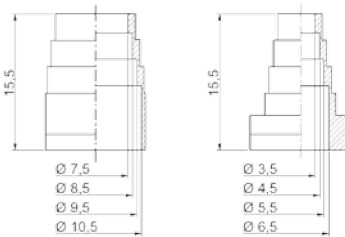
**Large Grommet** - suits all Plastic and also Metalized Plastic hoods in our MHDPPK and MHDSSK-Series, except MHDPPK09-SLIM.

| Order Code:  | Name:                 |
|--------------|-----------------------|
| 6844-0103-01 | Rubber Grommet, Large |

**Small Grommet** - suit only MHDPPK09-SLIM Hoods.

| Order Code:  | Name:                 |
|--------------|-----------------------|
| 6844-0102-01 | Rubber Grommet, Small |

### Plastic Grommets

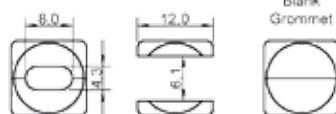


**Plastic Grommet** - suits all Plastic hoods in our MHDPPK and MHDSSK-Series, except MHDPPK09-SLIM.

The grommets are delivered in pair of two sizes, and they suit cable O.D:s from 3,5 mm up to 10,5 mm. Each "step" can be cut to adjust diameter. Use our Cutting Tool – page 107 – for best result.

| Order Code:  | Name:           |
|--------------|-----------------|
| 6822-0121-06 | Plastic Grommet |

### Flat Cable Grommets

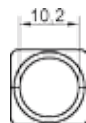


**Flat Grommet** - suits all hoods with a two-piece grommet set. This Grommet is a replacement set for use with Flat cables.

With this set you also get a Blank Grommet, for use in "Dummies" to blank off the cable entry.

| Order Code:  | Name:   |
|--------------|---------|
| 6522-0121-03 | DTZK-D8 |

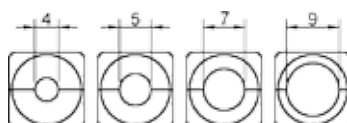
### 10,2 mm Grommet Set



**10,2mm Grommet** - suits all hoods equipped with a two-piece grommet set. This grommet is a replacement set for use with Large O.D. cables. (10mm+)

| Order Code:  | Name:         |
|--------------|---------------|
| 6522-0121-11 | D45ZK-D1-10,2 |

### Metalized Grommets



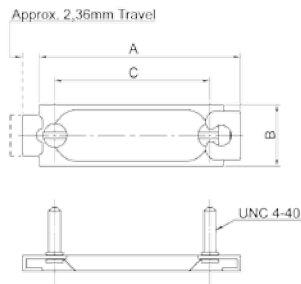
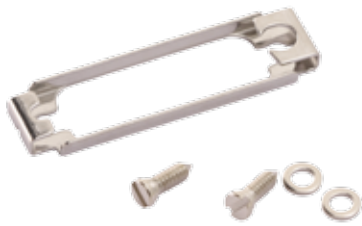
**Metalized (RAH) Grommets** - suits all hoods equipped with a two-piece RA grommet set.

This grommet is a replacement set for standard RA grommet set delivered with Rapid Assembly Hoods.

| Order Code:  | Name:        |
|--------------|--------------|
| 6522-0122-01 | D45ZK-D1-MET |

## ACCESSORIES

### Slide Locks - Standard



#### Slide Locks:

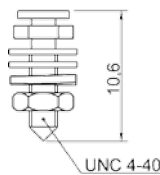
9-15-25 way

Other sizes on request

| Size   | A    | B    | C    |
|--------|------|------|------|
| 9-way  | 35,4 | 12,7 | 25,0 |
| 15-way | 43,7 | 12,7 | 33,3 |
| 25-way | 57,4 | 12,7 | 47,1 |

| Order Code:  | Name:               |
|--------------|---------------------|
| 6250-0113-01 | Slide Lock, Size 9  |
| 6250-0113-02 | Slide Lock, Size 15 |
| 6250-0113-03 | Slide Lock, Size 25 |

### Slide Lock Post - Standard



#### Slide Lock Post:

Suits above Standard Slide Lock System.

| Order Code:  | Name:  |
|--------------|--------|
| 6250-0114-01 | STUD-8 |

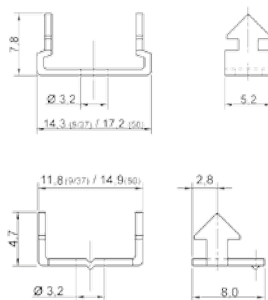
### Slide Locks - Special Type for MHED-Series



**Slide Lock Kits** - for MHED Series are delivered as spare parts - including the Spring Lever. The Slide Lock Kits are normally supplied together in the MHED standard kits - found on page 14.

| Order Code:  | Name:   |
|--------------|---------|
| 2802-0002-01 | ED-09SL |
| 2802-0002-02 | ED-15SL |
| 2802-0002-03 | ED-25SL |
| 2802-0002-04 | ED-37SL |
| 2802-0002-05 | ED-50SL |

### Mounting Flanges - Special Type for MHED-Series



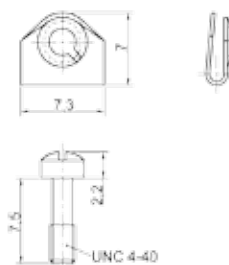
#### Under Flange Mounting Brackets

| Order Code:  | Name:       |
|--------------|-------------|
| 2802-0001-01 | ED-9/37-LUF |
| 2802-0001-02 | ED-50-LUF   |

#### Over Flange Mounting Brackets

| Order Code:  | Name:       |
|--------------|-------------|
| 2802-0001-03 | ED-9/37-ROF |
| 2802-0001-04 | ED-50-ROF   |

### Retainer Clips



#### Retainer Clips:

Normally supplied kitted with screws (2+2pcs)  
Can be supplied without screws in BULK package.

| Order Code:  | Name:                             |
|--------------|-----------------------------------|
| 2170-0100-01 | Retainer Clips, Kit incl. Screws  |
| 2750-0100-02 | Retainer Clips, w/o Screws - BULK |

## ACCESSORIES

### Locking Screws with Plastic Knobs



- Threads:**
- UNC 4-40
  - M2.5
  - M3.0
  - M2.6 on request

| Pic. | Order Code:  | Name:     | Thread   | / Length |
|------|--------------|-----------|----------|----------|
| 1    | 6718-0101-05 | Jackscrew | UNC 4-40 | / 56mm   |
| 2    | 6718-0101-01 | Jackscrew | UNC 4-40 | / 51mm   |
| 2    | 6718-0101-02 | Jackscrew | M 2.5    | / 51mm   |
| 2    | 6718-0101-03 | Jackscrew | M 3      | / 51mm   |
| 3    | 6718-0101-04 | Jackscrew | UNC 4-40 | / 41mm   |
| 4    | 6718-0102-01 | Jackscrew | UNC 4-40 | / 51mm   |
| 4    | 6718-0102-02 | Jackscrew | M 2.5    | / 51mm   |
| 4    | 6718-0102-03 | Jackscrew | M 3      | / 51mm   |
| 5    | 6718-0102-04 | Jackscrew | UNC 4-40 | / 41mm   |

Standard Thread Length is 4,5mm.  
Other colours on knobs are available upon request.

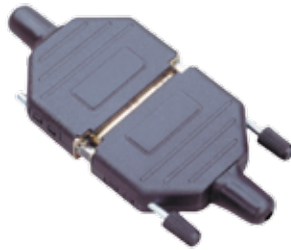
### Locking Screws, Full Metal



- Threads:**
- UNC 4-40
  - M2.5, M2.6 and M3 on request

| Pic. | Order Code:  | Name:         | Thread   | / Length |
|------|--------------|---------------|----------|----------|
| 1    | 6826-0141-02 | Blank JS      | UNC 4-40 | / 47mm   |
| 2    | 6826-0141-01 | Blank JS      | UNC 4-40 | / 31,5mm |
| 3    | 6826-0142-02 | Black Chr. JS | UNC 4-40 | / 47mm   |
| 4    | 6826-0142-03 | Black Chr. JS | UNC 4-40 | / 31,5mm |
| 5    | 6826-0133-01 | JS-DSSK       | UNC 4-40 | / 18,1mm |
| 6    | 6826-0133-04 | JS-DSSK       | UNC 4-40 | / 12,1mm |
| 7    | 6826-0133-11 | JS-DSSK-BK    | UNC 4-40 | / 18,1mm |
| 8    | 6826-0133-14 | JS-DSSK-BK    | UNC 4-40 | / 12,1mm |

### Female Screw Kit



#### Female Screw Kit:

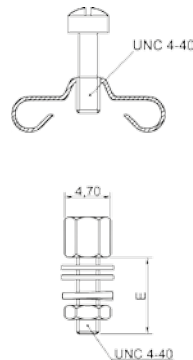
Useful when two cable connectors should be mated together.  
(Hex extender + Jackscrew with slot in one part)

#### Kit consist of:

- 2 pcs of Slotted Jackscrew
- 2 pcs of Hex Extender
- 2 pcs of Washer

| Order Code:  | Name:            |
|--------------|------------------|
| 6250-0112-02 | Female Screw Kit |

### Female & Male Screw Locks



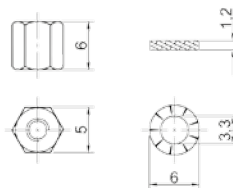
#### Male Screw Lock:

| Order Code:  | Name: |
|--------------|-------|
| 2750-0100-01 | MSL   |

#### Female Screw Lock:

| Order Code:  | Name:  | (E)  |
|--------------|--------|------|
| 2751-0111-01 | DJF-5  | 5mm  |
| 2751-0111-02 | DJF-7  | 7mm  |
| 2751-0111-03 | DJF-8  | 8mm  |
| 2751-0111-04 | DJF-10 | 10mm |
| 2751-0111-05 | DJF-14 | 14mm |

### Hex Extenders



#### HEX-Extender:

Thread: UNC 4-40  
Length: 6 mm

| Order Code:  | Name:        | Note:          |
|--------------|--------------|----------------|
| 6250-0112-01 | CA0270       | With Washer    |
| 6857-0104-01 | HEX-Extender | Without Washer |

## ACCESSORIES

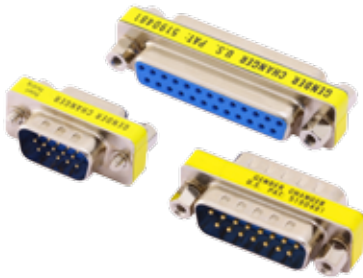
### BNC Strain Relief Boots



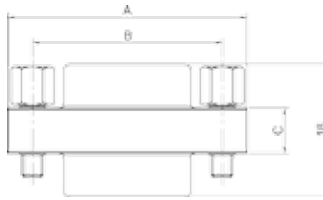
- Available for RG58, RG59 and RG62 BNC Connectors
- Available in Blue, Green, Red, Yellow, Black & Light Grey
- Other Colours on request

| Order Code:    | Name:       |
|----------------|-------------|
| 6855-0101-x1   | RG-yySRB-B  |
| 6855-0101-x2   | RG-yySRB-G  |
| 6855-0101-x3   | RG-yySRB-R  |
| 6855-0101-x4   | RG-yySRB-Y  |
| 6855-0101-x5   | RG-yySRB-BK |
| 6855-0101-x6   | RG-yySRB-LG |
| RG58: x = 0    | yy = 58     |
| RG59/62: x = 1 | yy = 59/62  |

### Miniature Gender Changers



Also available in Filter Connectors



| Size     | Dim A | Dim B | Dim C |
|----------|-------|-------|-------|
| 9-way    | 31,2  | 25,0  | 6,0   |
| 15-way   | 39,5  | 33,3  | 6,0   |
| 25-way   | 53,4  | 47,1  | 6,0   |
| HD15-way | 31,2  | 25,0  | 6,0   |

| Order Code:  | Name:          | Style:         |
|--------------|----------------|----------------|
| 2401-0100-01 | DMGC-0909-MM   | Male-Male      |
| 2401-0100-02 | DMGC-1515-MM   | Male-Male      |
| 2401-0100-03 | DMGC-2525-MM   | Male-Male      |
| 2401-0100-11 | DMGC-0909-MF   | Male-Female    |
| 2401-0100-13 | DMGC-2525-MF   | Male-Female    |
| 2401-0100-21 | DMGC-0909-FF   | Female-Female  |
| 2401-0100-22 | DMGC-1515-FF   | Female-Female  |
| 2401-0100-23 | DMGC-2525-FF   | Female-Female  |
| 2401-0101-02 | DMGC-HD1515-MM | HD-Male-Male   |
| 2401-0101-12 | DMGC-HD1515-MF | HD-Male-Female |

### Dust Caps - Transparent / Unshielded



| Order Code:  | Name:  | Male Style   |
|--------------|--------|--------------|
| 2105-0100-01 | DC09-P |              |
| 2105-0100-02 | DC15-P |              |
| 2105-0100-03 | DC25-P |              |
| 2105-0100-04 | DC37-P |              |
| Order Code:  | Name:  | Female Style |
| 2105-0100-11 | DC09-S |              |
| 2105-0100-12 | DC15-S |              |
| 2105-0100-13 | DC25-S |              |
| 2105-0100-14 | DC37-S |              |

### Dust Caps - Metalized / Shielded



| Order Code:  | Name:      | Male Style   |
|--------------|------------|--------------|
| 2105-0105-01 | DC09-P-MTZ |              |
| 2105-0105-02 | DC15-P-MTZ |              |
| 2105-0105-03 | DC25-P-MTZ |              |
| 2105-0105-04 | DC37-P-MTZ |              |
| Order Code:  | Name:      | Female Style |
| 2105-0105-11 | DC09-S-MTZ |              |
| 2105-0105-12 | DC15-S-MTZ |              |
| 2105-0105-13 | DC25-S-MTZ |              |
| 2105-0105-14 | DC37-S-MTZ |              |

## Tooling

### Crimp Tool & Crimp Dies



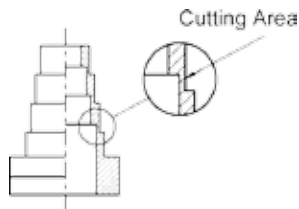
| Order Code:  | Name:        | Description: |
|--------------|--------------|--------------|
| 6852-0116-01 | DTCT         | Tool Frame   |
| 6852-0114-01 | PRESSDIE-6.3 | Die No. 6.3  |
| 6852-0114-02 | PRESSDIE-5.3 | Die No. 8.0  |
| 6852-0114-03 | PRESSDIE-6.0 | Die No. 10.0 |
| 6852-0114-04 | PRESSDIE-7.0 | Die No. 11.5 |
| 6852-0114-05 | PRESSDIE-7.5 | Die No. 12.0 |
| 6852-0114-06 | PRESSDIE-8.6 | Die No. 12.5 |
| 6852-0114-08 | PRESSDIE-9.0 | Die No. 9.0  |

### Crimp Tool Sub-D



| Order Code:  | Name:      | Description:          |
|--------------|------------|-----------------------|
| 6852-0117-01 | DRB-0505L  | For Standard Pins     |
| 6852-0117-03 | DRB-0805HD | For High-Density Pins |

### Cutter



Cutter for cutting plastic and metalized plastic grommets. Recommended to achieve a smooth and burr-free cutting edge when adapting the grommet diameter to the cable.

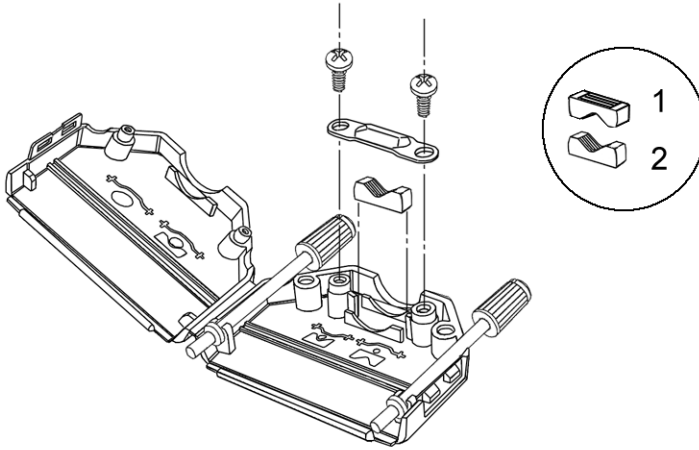
| Order Code:  | Name:  | Description:                 |
|--------------|--------|------------------------------|
| 6852-0131-01 | Cutter | For cutting 2-piece Grommets |



# Assembly Instruction DPPK-SLIM Series

Schematics over the parts that is to be used in the assembly.

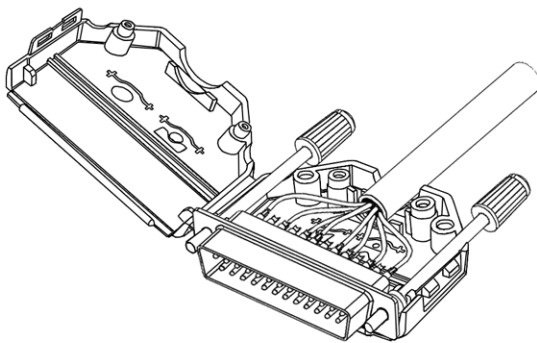
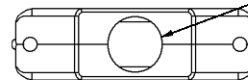
Inside the Connector Hood there is also a brief schematic describing the options.



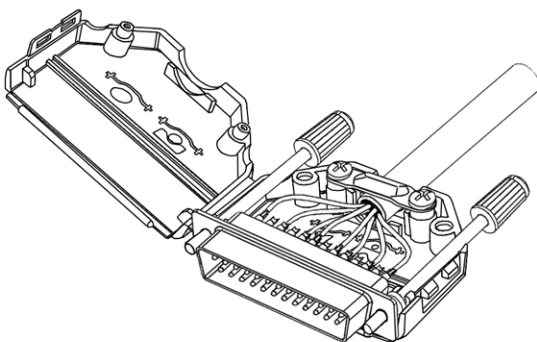
1. Please decide if option 1 or 2 suits your assembly, depending on the outer diameter of the cable.

The plastic insert can also be left out if the O.D. of the cable is large.

Maximum O.D. 12mm

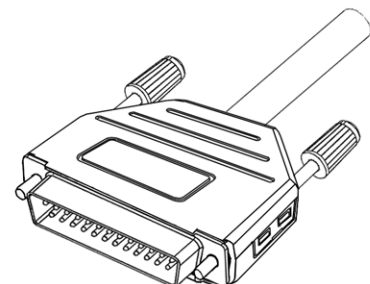


2. Place the mounted cable + connector inside the Connector Hood.



3. Mount the cable clamp and screws. Recommended Torque is 0,25Nm

4. Close the Connector Hood, and your assembly is ready.



# Assembly Instruction DTPPK / D45PPK Series

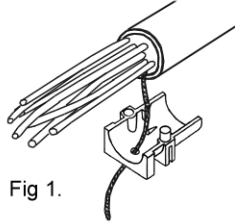


Fig 1.

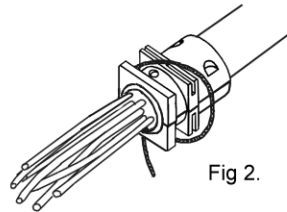
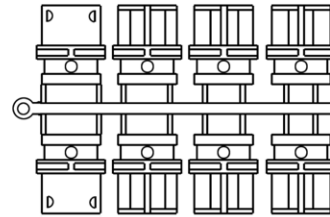


Fig 2.



Select the ferrule halves that most closely match the diameter of the cable.  
(The ferrule halves do not need to match)

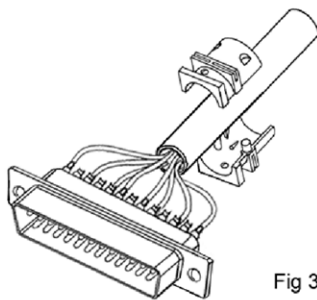


Fig 3.

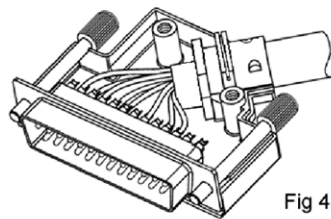
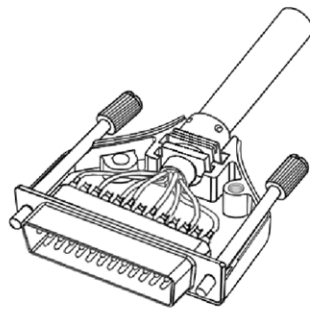


Fig 4.

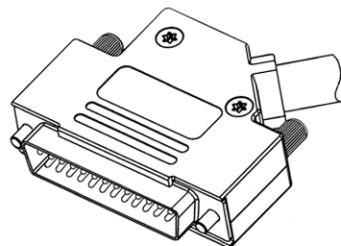
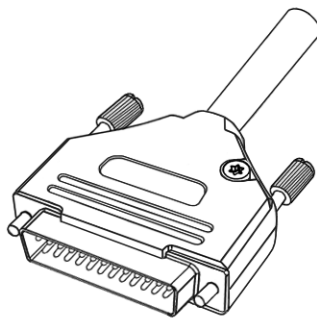
## Foil Cable

Insert the wire through the hole in one of the two ferrule halves as shown in Fig 1.  
Assemble the two halves around the cable and make sure that the insulation runs the full length of the ferrule, then complete as shown in Fig 2.

Loop the earth wire recess as shown, preferably in a "knot".

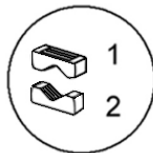
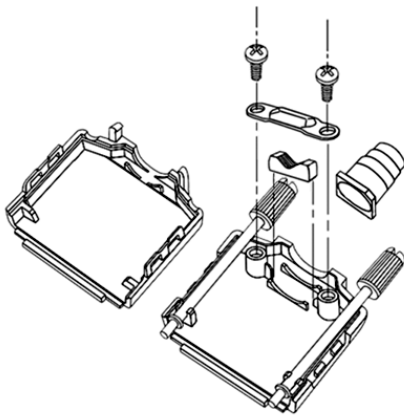
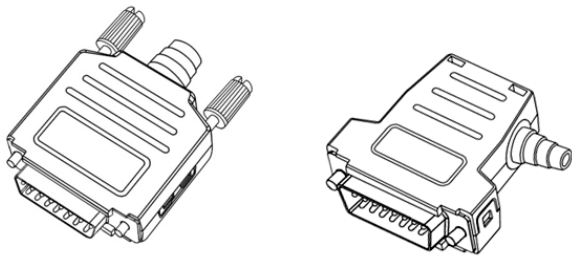
The earth wire can be insulated and extended to a contact on the connector if required.

Place the assembly into the hood half as shown in Fig 4.



Complete the assembly by putting the second hood half over the assembly, and tighten with accompanied screw mounting set.  
Recommended Torque is 150 - 200 Ncm

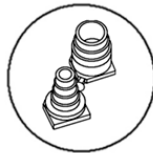
# Assembly Instruction DPPK / DSSK Series



## 1: Preparations

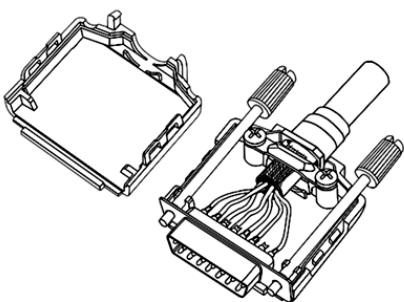
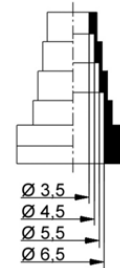
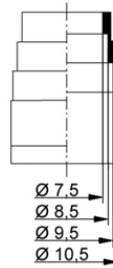
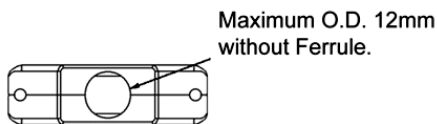
Please decide if option 1 or 2 suits your assembly, depending on the outer diameter of the cable.

The plastic Insert can also be left out if the cable O.D. is large.



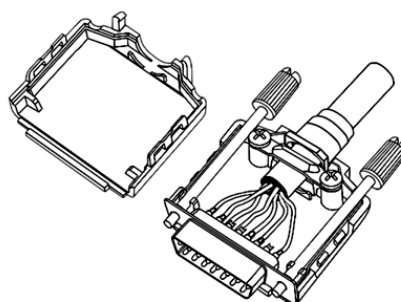
A ferrule set is bypacked, and contain 2 ferrules, with 'steps' that can be cut off to suit the cable O.D.

Please use MH Cutter for optimal result.  
Part No: 6852-0131-01



## 2a: Shielded Hoods

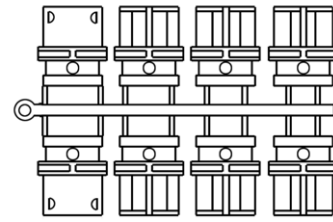
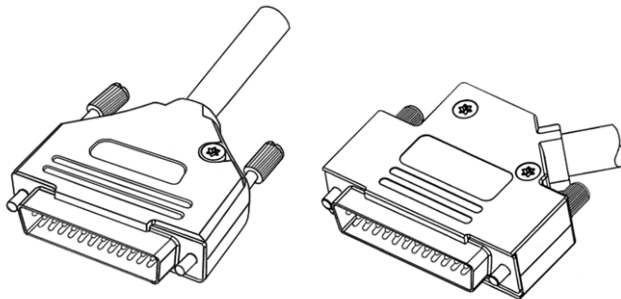
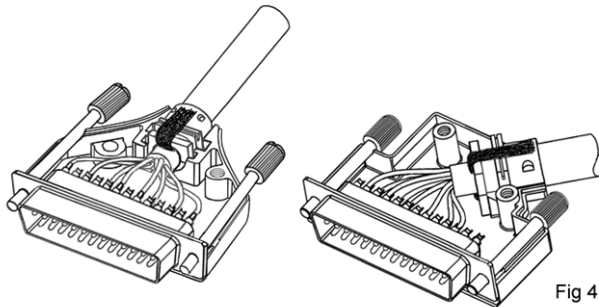
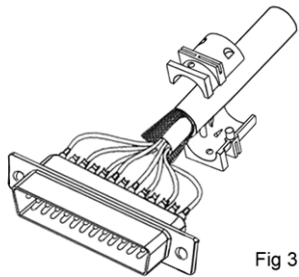
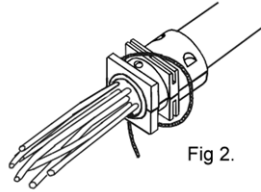
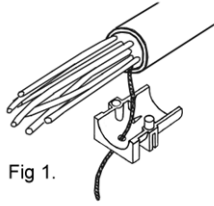
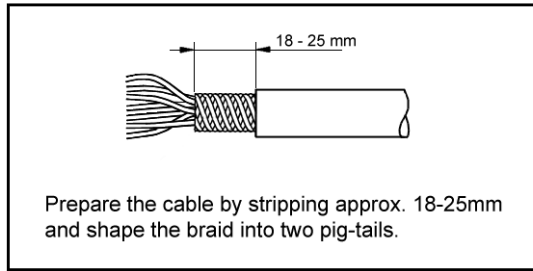
Place the mounted cable + connector inside the Connector Hood.  
Pigtail the Braid and fold it back under the Cable Clamp.  
Mount the cable clamp and screws.  
Recommended Torque is 0,25Nm



## 2b: Unshielded Hoods

Place the mounted cable + connector inside the Connector Hood.  
Mount the cable clamp and screws.  
Recommended Torque is 0,25Nm

# Assembly Instruction DTPK / D45PK Series



Select the ferrule halves that most closely match the diameter of the cable.  
(The ferrule halves do not need to match)

## Foil Cable

Insert the wire through the hole in one of the two ferrule halves as shown in Fig 1. Assemble the two halves around the cable and make sure that the insulation runs the full length of the ferrule, then complete as shown in Fig 2.

Loop the earth wire recess as shown, preferably in a "knot".

The earth wire can be insulated and extended to a contact on the connector if required.

## Braided Cable

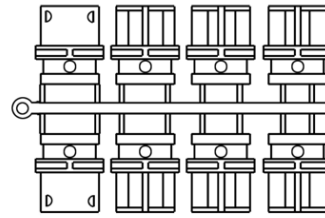
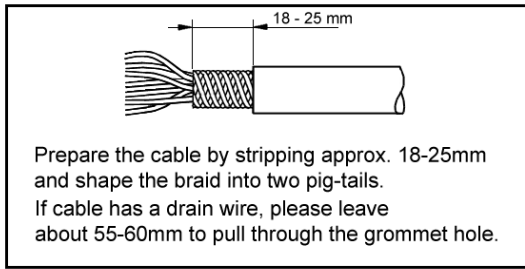
For heavily braided cables, pigtail the braid and turn it back over the ferrule as shown in Fig 3.

For light braided cables, pigtail the braid and turn it back over the ferrule in one direction only.

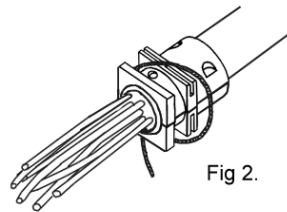
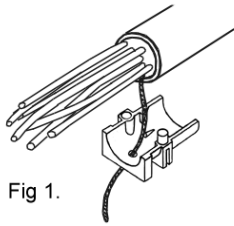
Place the assembly into the hood half as shown in Fig 4.

Complete the assembly by putting the second hood half over the assembly, and tighten with accompanied screw mounting set.  
Recommended Torque is 150 - 200 Ncm

# Assembly Instruction DTZK / D45ZK Rapid Assembly



Select the ferrule halves that most closely match the diameter of the cable.  
(The ferrule halves do not need to match)

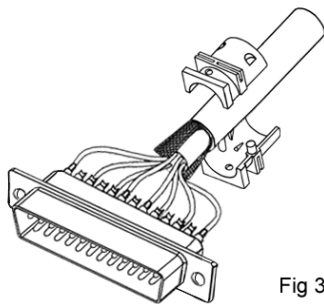


## Foil Cable

Insert the wire through the hole in one of the two ferrule halves as shown in Fig 1.  
Assemble the two halves around the cable and make sure that the insulation runs the full length of the ferrule, then complete as shown in Fig 2.

Loop the earth wire recess as shown, preferably in a "knot".

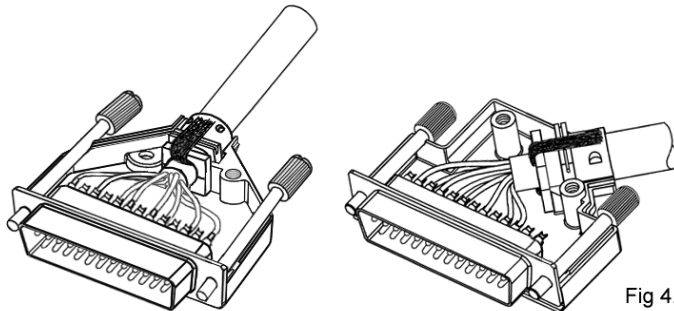
The earth wire can be insulated and extended to a contact on the connector if required.



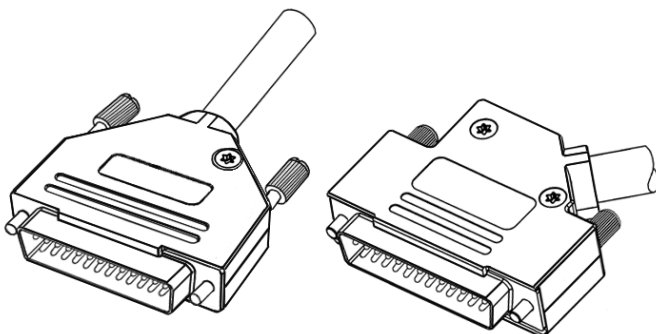
## Braided Cable

For heavily braided cables, pigtail the braid and turn it back over the ferrule as shown in Fig 3.

For light braided cables, pigtail the braid and turn it back over the ferrule in one direction only.

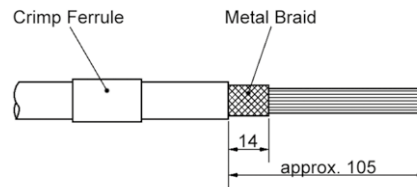


Place the assembly into the hood half as shown in Fig 4.

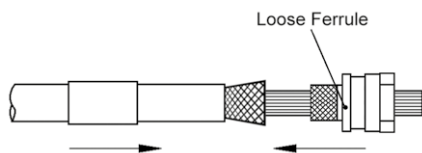


Complete the assembly by putting the second hood half over the assembly, and tighten with accompanied screw mounting set.  
Recommended Torque is 150 - 200 Ncm

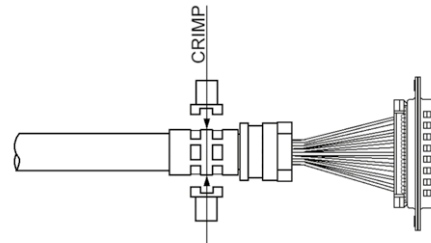
# Assembly Instruction DTZK / D45ZK - CZK Series



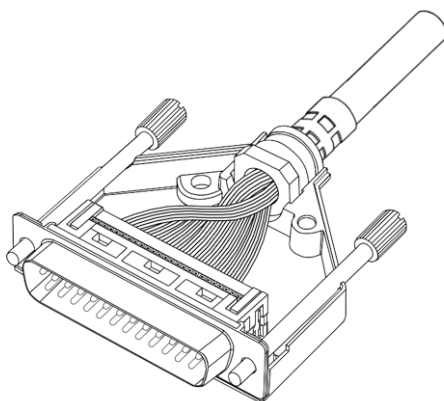
Prepare Cable as shown.  
Slide Crimp Ferrule over Cable.



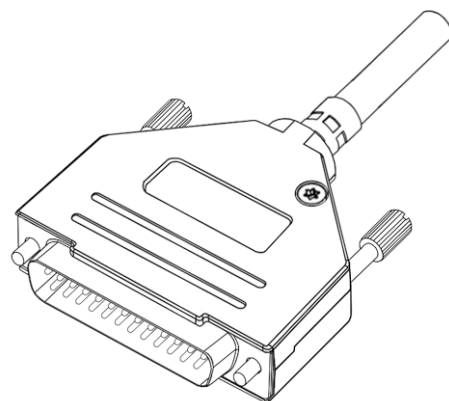
Put wires through and shape Metal Braid around Loose Ferrule.



Crimp over the loose Crimp Ferrule.  
Mount the Sub-D Connector.

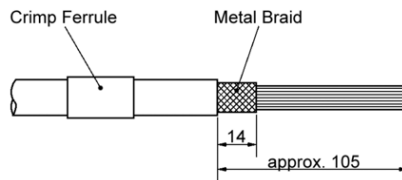


Place the assembly inside the metal cover.

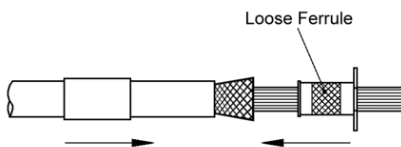


Close assembly by placing the upper Metal Part and screw together with accompanied screws.

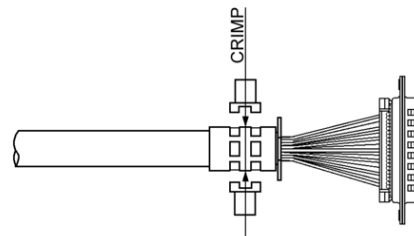
# Assembly Instruction MHC / MHC35 Series



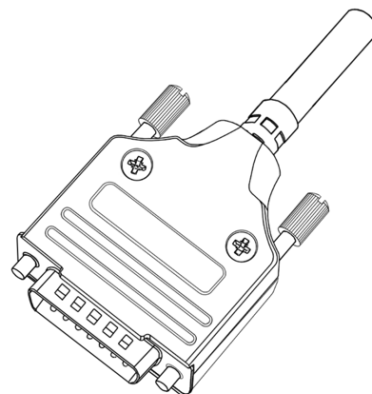
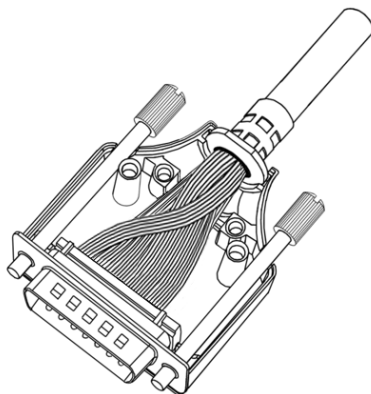
Prepare Cable as shown.  
Slide Crimp Ferrule over Cable.



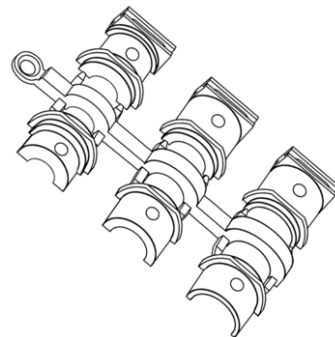
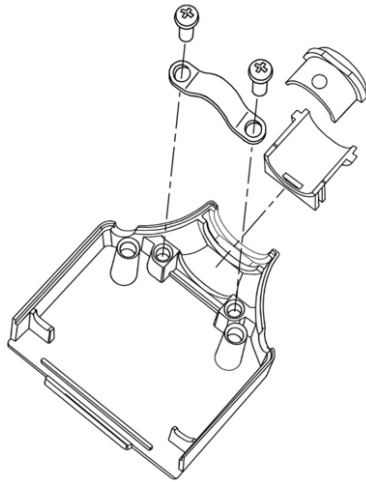
Put wires through and shape Metal Braid around Loose Ferrule.



Crimp over the loose Crimp Ferrule.  
Mount the Sub-D Connector.

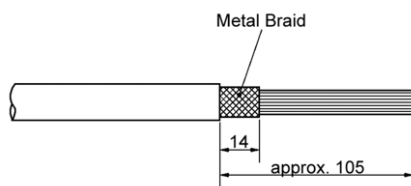


# Assembly Instruction MHDM / MHDM35 Series

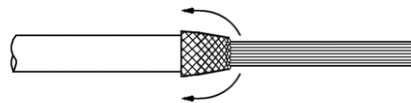


Choose Most Suitable Ferrule Size.  
The Longer Part is to be Placed in  
lower part of the Metal Hood.

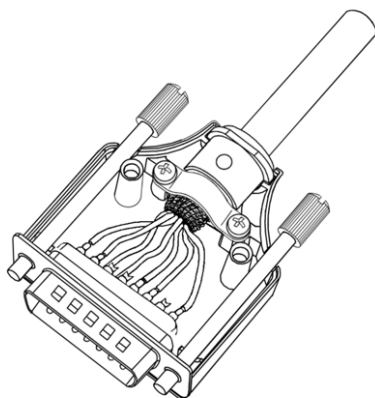
24



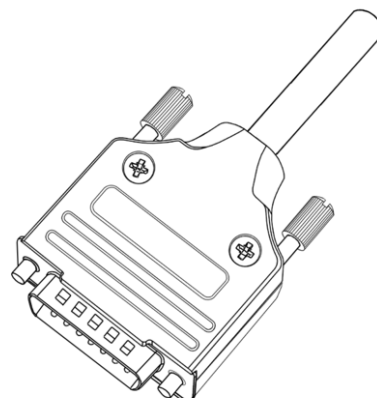
Prepare Cable as shown above.



Pull metal Braid back over the Cable Shield



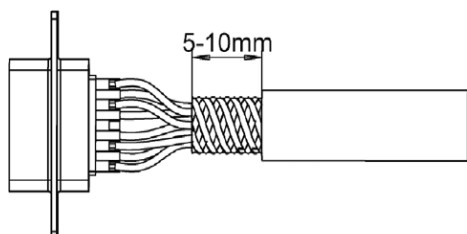
Place the Mounted Sub-D Connector  
and Tighten the Screws over the Clamp.



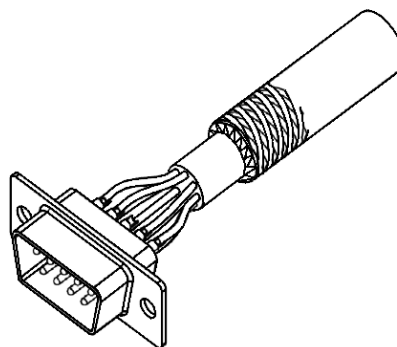
Close assembly by placing the upper  
Metal Part and screw together with  
accompanied screws.

# Assembly Instruction DTSL Series

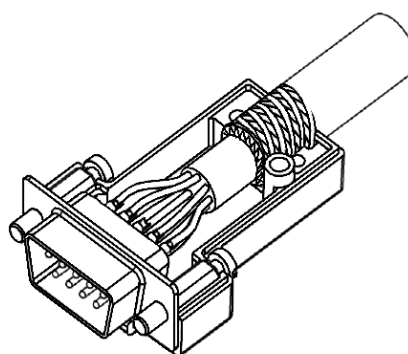
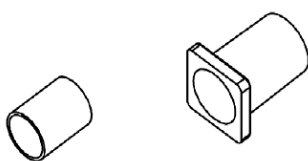
Strip cable.



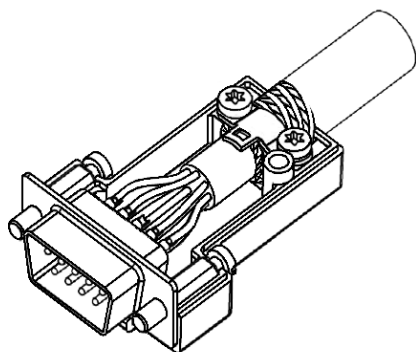
Bend cable shielding back on outside of cable.



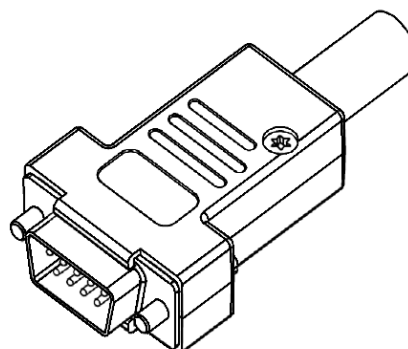
Mount connector and cable into the backshell.  
NOTE! Ferrule and rubber bushing can be delivered as an option.



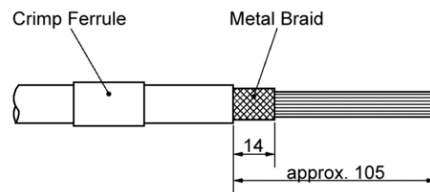
Mount cableclamp and screws.



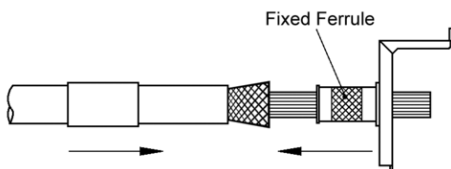
Assemble the other half  
screwing force: 100-120 Ncm.



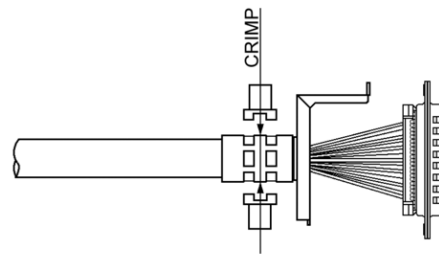
# Assembly Instruction DTK - Standard (N) Series



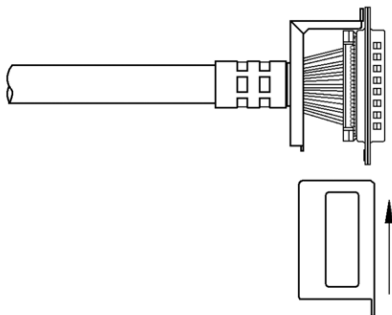
Prepare Cable as shown.  
Slide Crimp Ferrule over Cable.



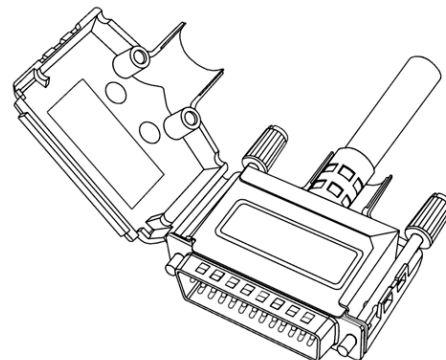
Put wires through and shape Metal Braid around Fixed Ferrule.



Crimp over the loose Crimp Ferrule.  
Mount the Sub-D Connector.

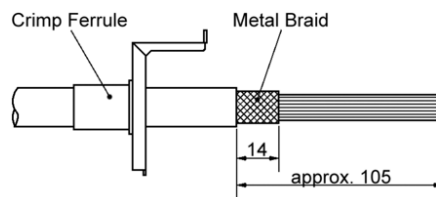


Place other piece of Metal Part which now closes the assembly to gain 360° Shielding.

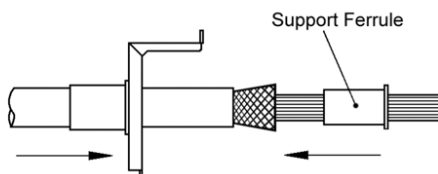


Put completed assembly inside Plastic Cover.  
Your assembly is now finished.

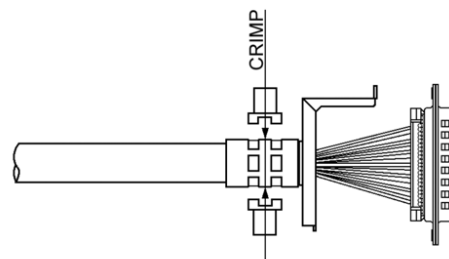
# Assembly Instruction DTK - Reversed (R) Series



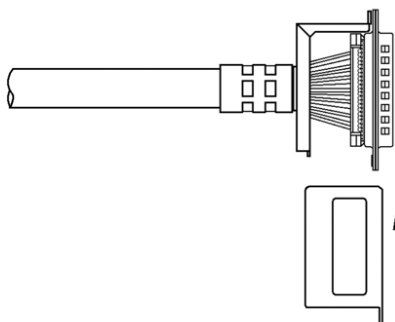
Prepare Cable as shown.  
Slide Upper Metal Part over Cable.



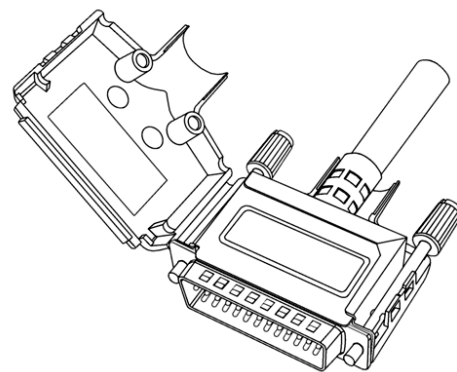
Put wires through and shape Metal Braid around Support ferrule.



Crimp over the Fixed Crimp Ferrule.  
Mount the Sub-D Connector.



Place other piece of Metal Part  
which now closes the assembly  
to gain 360° Shielding.



Put completed assembly inside Plastic Cover.  
Your assembly is now finished.



Handwriting practice lines consisting of 20 horizontal dotted lines.