



## Technical characteristics M8

| Type | 3 poles | 4 poles |
|------|---------|---------|
|------|---------|---------|

### General data

|  |   |   |
|--|---|---|
| Conductor cross section  | max. 0.5 mm <sup>2</sup><br>max. AWG 20 | max. 0.5 mm <sup>2</sup><br>max. AWG 20 |
| Cable diameter   | 4 – 5.5 mm                              | 4 – 5.5 mm                              |
| Temperature range  | -30 °C ... +85 °C                       | -30 °C ... +85 °C                       |
| Degree of protection   | IP67                                    | IP67                                    |
| Mating cycles  | ≥ 100                                   | ≥ 100                                   |
| Recommended tightening torque /<br>Hexagonal wrench<br>Knurled screw / nut | 0.4 Nm / SW 13                          | 0.4 Nm / SW 13                          |
| Recommended tightening torque<br>screw termination                         | 0.1 Nm                                  | 0.1 Nm                                  |

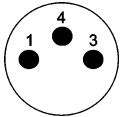
### Electrical characteristics

|               |             |             |
|---------------|-------------|-------------|
| Rated current | 4 A @ 40 °C | 4 A @ 40 °C |
| Rated voltage | 60 V        | 30 V        |

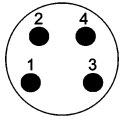
### Materials

|                              |                              |                              |
|------------------------------|------------------------------|------------------------------|
| Contact material             | Brass                        | Brass                        |
| Contact plating              | Gold                         | Gold                         |
| Contact carrier material     | PA                           | PA                           |
| Housing material             | PA, zinc die-cast (shielded) | PA, zinc die-cast (shielded) |
| Material knurled screw / nut | Zinc die-cast                | Zinc die-cast                |

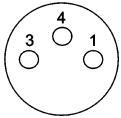
# M8 with screw termination, unshielded



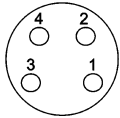
Male, 3 poles



Male, 4 poles



Female, 3 poles



Female, 4 poles



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

## M8 screw, unshielded



Male, straight version

3 poles  
4 poles

21 02 359 1301  
21 02 359 1401



Male, angled version

3 poles  
4 poles

21 02 359 3301  
21 02 359 3401



Female, straight version

3 poles  
4 poles

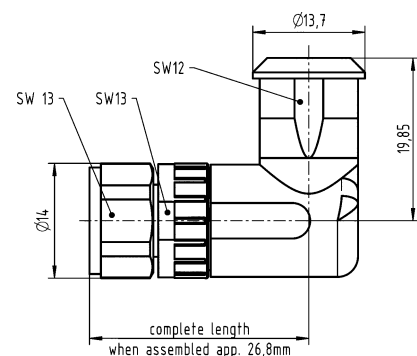
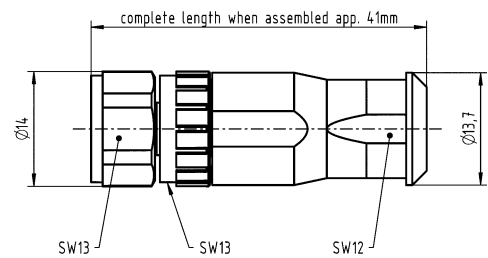
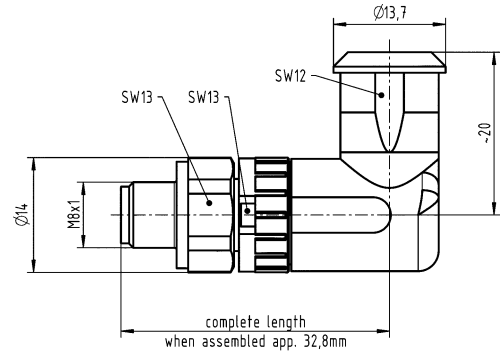
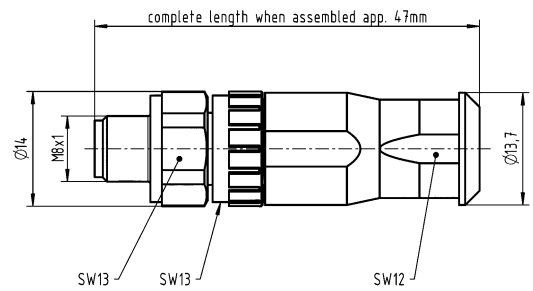
21 02 359 2301  
21 02 359 2401



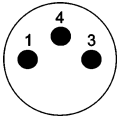
Female, angled version

3 poles  
4 poles

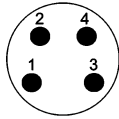
21 02 359 4301  
21 02 359 4401



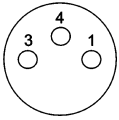
# M8 with screw termination, shielded



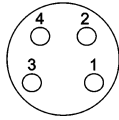
Male, 3 poles



Male, 4 poles



Female, 3 poles



Female, 4 poles



Identification

Part number

Drawing

Dimensions in mm

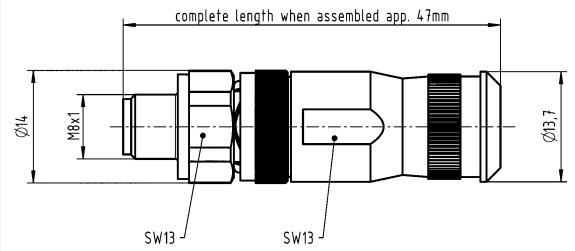
## M8 screw, shielded



Male, straight version

3 poles  
4 poles

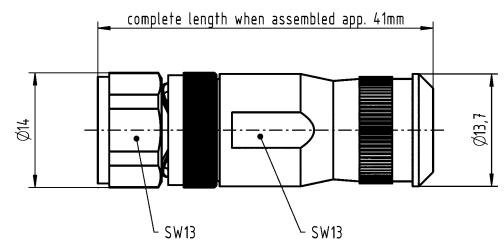
21 02 369 1301  
21 02 369 1401



Female, straight version

3 poles  
4 poles

21 02 369 2301  
21 02 369 2401







## Technical characteristics M12

| Type | 4 poles | 5 poles | 8 poles |
|------|---------|---------|---------|
|------|---------|---------|---------|

### General data

|  |   |   |   |
|--|---|---|---|
| Conductor cross section  | max. 1.5 mm <sup>2</sup><br>max. AWG 16 | max. 1.5 mm <sup>2</sup><br>max. AWG 16 | max. 0.5 mm <sup>2</sup><br>max. AWG 20 |
| Cable diameter   | 4 – 8 mm                                | 4 – 8 mm                                | 4 – 8 mm                                |
| Temperature range  | -30 °C ... +85 °C                       | -30 °C ... +85 °C                       | -30 °C ... +85 °C                       |
| Degree of protection   | IP67                                    | IP67                                    | IP67                                    |
| Mating cycles  | ≥ 100                                   | ≥ 100                                   | ≥ 100                                   |
| Recommended tightening torque /<br>Hexagonal wrench<br>Knurled screw / nut | 0.6 Nm / SW 18                          | 0.6 Nm / SW 18                          | 0.6 Nm / SW 18                          |
| Recommended tightening torque<br>screw termination                         | 0.3 Nm                                  | 0.3 Nm                                  | 0.3 Nm                                  |

### Electrical characteristics

|               |               |               |             |
|---------------|---------------|---------------|-------------|
| Rated current | 7.5 A @ 40 °C | 7.5 A @ 40 °C | 2 A @ 40 °C |
| Rated voltage | 250 V         | 60 V          | 30 V        |

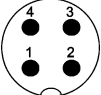
### Materials

|                              |                                 |                                 |                                 |
|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Contact material             | Brass                           | Brass                           | Brass                           |
| Contact plating              | Gold                            | Gold                            | Gold                            |
| Contact carrier material     | PA                              | PA                              | PA                              |
| Housing material             | PA, zinc die-cast<br>(shielded) | PA, zinc die-cast<br>(shielded) | PA, zinc die-cast<br>(shielded) |
| Material knurled screw / nut | Zinc die-cast                   | Zinc die-cast                   | Zinc die-cast                   |

# M12 with screw termination, unshielded

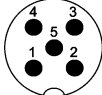


A-coding



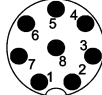
Male, 4 poles

A-coding



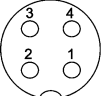
Male, 5 poles

A-coding



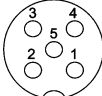
Male, 8 poles

A-coding



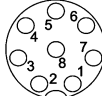
Female, 4 poles

A-coding



Female, 5 poles

A-coding



Female, 8 poles



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

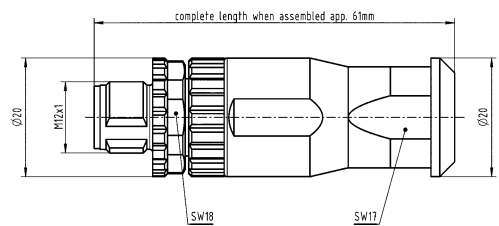
## M12 screw, unshielded



Male, straight version

4 poles, A-coding  
5 poles, A-coding  
8 poles, A-coding

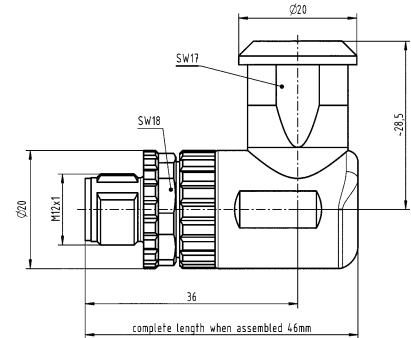
21 03 319 1401  
21 03 319 1501  
21 03 319 1801



Male, angled version

4 poles, A-coding  
5 poles, A-coding  
8 poles, A-coding

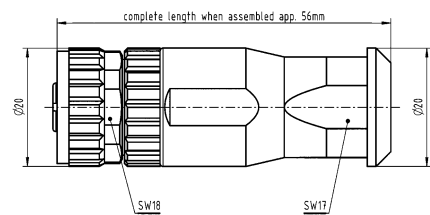
21 03 319 3401  
21 03 319 3501  
21 03 319 3801



Female, straight version

4 poles, A-coding  
5 poles, A-coding  
8 poles, A-coding

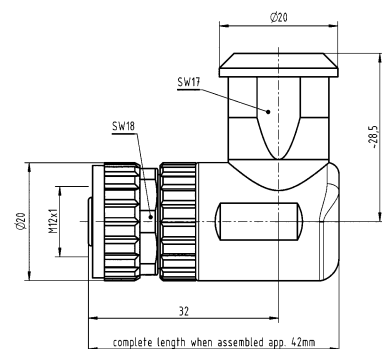
21 03 319 2401  
21 03 319 2501  
21 03 319 2801



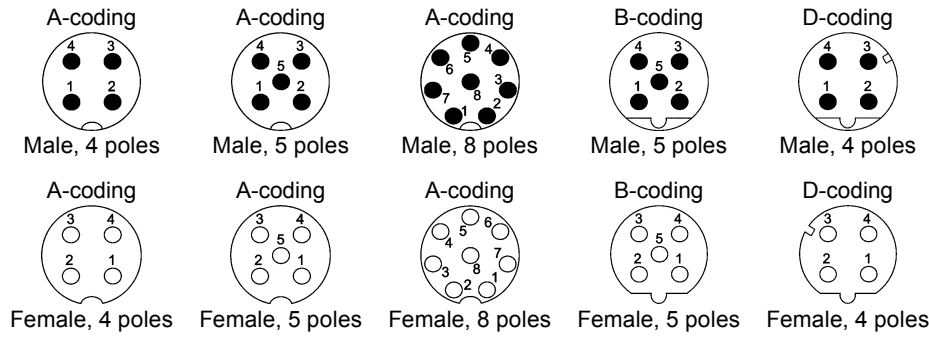
Female, angled version

4 poles, A-coding  
5 poles, A-coding  
8 poles, A-coding

21 03 319 4401  
21 03 319 4501  
21 03 319 4801



# M12 with screw termination, shielded



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

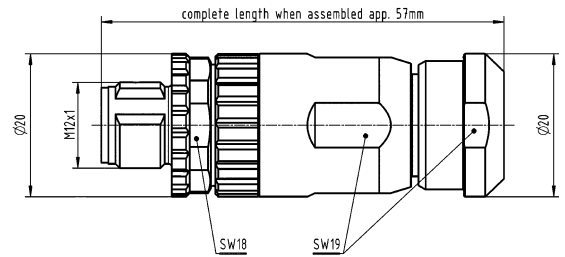
## M8 screw, shielded



Male, straight version

4 poles, A-coding  
 5 poles, A-coding  
 8 poles, A-coding  
 5 poles, B-coding  
 4 poles, D-coding

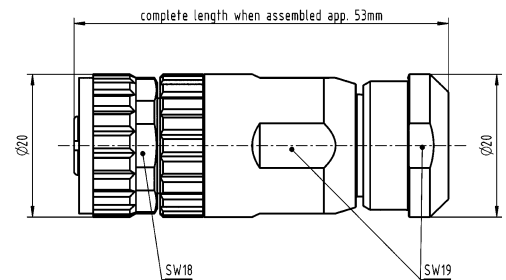
21 03 329 1401  
 21 03 329 1501  
 21 03 329 1801  
 21 03 349 1501  
 21 03 389 1402



Female, straight version

4 poles, A-coding  
 5 poles, A-coding  
 8 poles, A-coding  
 5 poles, B-coding  
 4 poles, D-coding

21 03 329 2401  
 21 03 329 2501  
 21 03 329 2801  
 21 03 349 2501  
 21 03 389 2402





## Technical characteristics M12 Slim Design

| Type M12 Slim Design | M12 Crimp<br>A-coding | M12 Crimp<br>D-coding | har-speed M12 Slim Design<br>X-coding |
|----------------------|-----------------------|-----------------------|---------------------------------------|
|----------------------|-----------------------|-----------------------|---------------------------------------|

### General data

|   |  |  |  |
|---|--|--|--|
| Conductor cross section                             | 4/5 poles: 0.13 - 0.82 mm <sup>2</sup><br>AWG 26-18<br>8 poles: 0.13 - 0.33 mm <sup>2</sup><br>AWG 26-22 | 0.13 - 0.82 mm <sup>2</sup><br>AWG 26-18 | 0.08 - 0.25 mm <sup>2</sup><br>AWG 28-23 |
| Cable diameter                                      | 5.7 - 8.8 mm   | 5.7 - 8.8 mm                             | 5.7 - 8.8 mm                             |
| Temperature range                                   | -40 °C ... +85 °C  | -40 °C ... +85 °C                        | -40 °C ... +85 °C                        |
| Degree of protection                                | IP65 / IP67  | IP65 / IP67                              | IP65 / IP67                              |
| Mating cycles                                       | 500  | 500                                      | 500                                      |
| Recommended tightening torque /<br>Hexagonal wrench | 0.6 Nm / SW 15   | 0.6 Nm / SW 15                           | 0.6 Nm / SW 15                           |

### Electrical characteristics

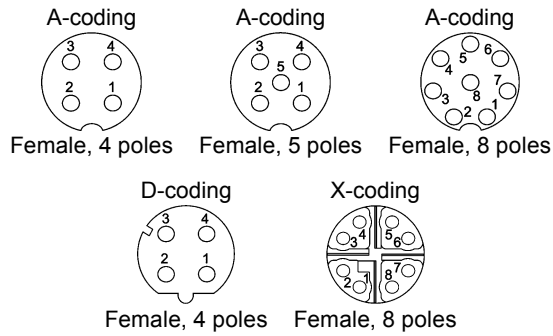
|                                     |  |        |                     |
|-------------------------------------|--|--------|---------------------|
| Rated current                       | 4/5 poles: 4 A<br>8 poles: 2 A                   | 4 A    | 0,5 A               |
| Rated voltage                       | 4 poles: 250 V<br>5 poles: 60 V<br>8 poles: 30 V | 250 V  | 48 V                |
| Transmission performance (Category) | X  | Cat. 5 | Cat. 6 <sub>A</sub> |

### Materials

|                          |       |       |       |
|--------------------------|-------|-------|-------|
| Contact material         | Brass | Brass | Brass |
| Contact plating          | Gold  | Gold  | Gold  |
| Contact carrier material | LCP   | LCP   | LCP   |
| Housing material         | ZP410 | ZP410 | ZP410 |



# M12 Slim Design



Identification      Part number      Drawing      Dimensions in mm

## M12 Slim Design



Female, straight version      4/5 poles, A-coding  
 0.13 - 0.82 mm<sup>2</sup>  
 AWG 26 - 18

21 03 821 2505

Female, straight version      8 poles, A-coding  
 0.13 - 0.33 mm<sup>2</sup>  
 AWG 26 - 22

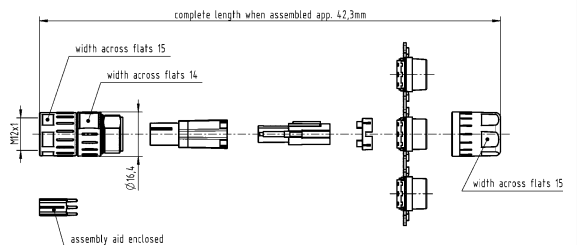
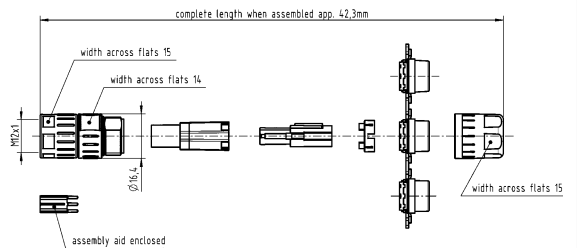
21 03 821 2805

Female, straight version      4 poles, D-coding  
 0.13 - 0.82 mm<sup>2</sup>  
 AWG 26 - 18

21 03 881 2405

Female, straight version      8 poles, X-coding  
 0.08 - 0.25 mm<sup>2</sup>  
 AWG 28 - 23

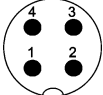
21 03 881 2805



# M12 Slim Design

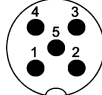


A-coding



Male, 4 poles

A-coding



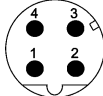
Male, 5 poles

A-coding



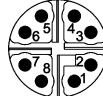
Male, 8 poles

D-coding



Male, 4 poles

X-coding



Male, 8 poles



## Identification

## Part number

## Drawing

## Dimensions in mm

### M12 Slim Design



Male,  
angled version

4/5 poles, A-coding  
0.13 - 0.82 mm<sup>2</sup>  
AWG 26 - 18

21 03 821 3505

Male,  
angled version

8 poles, A-coding  
0.13 - 0.33 mm<sup>2</sup>  
AWG 26 - 22

21 03 821 3805

Male,  
angled version

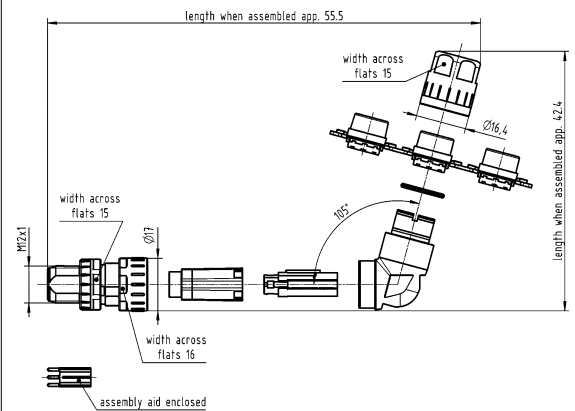
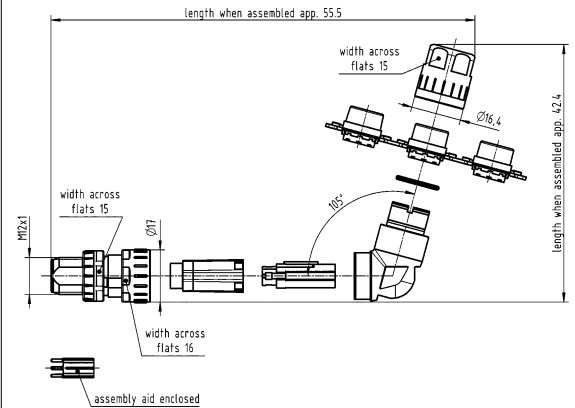
4 poles, D-coding  
0.13 - 0.82 mm<sup>2</sup>  
ÂWG 26 - 18

21 03 881 3405

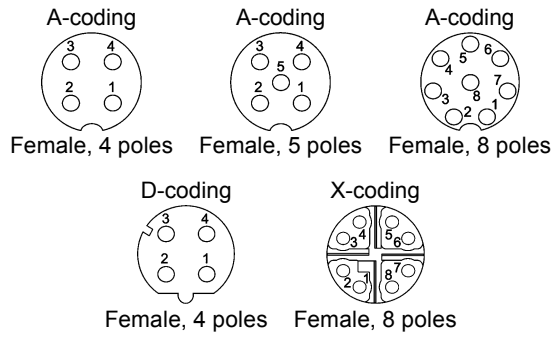
Male,  
angled version

8 poles, X-coding  
0.08 - 0.25 mm<sup>2</sup>  
AWG 28 - 23

21 03 881 3805



# M12 Slim Design



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

## M12 Slim Design



Female, angled version

4/5 poles, A-coding  
0.13 - 0.82 mm<sup>2</sup>  
AWG 26 - 18

21 03 821 4505

Female, angled version

8 poles, A-coding  
0.13 - 0.33 mm<sup>2</sup>  
AWG 26 - 22

21 03 821 4805

Female, angled version

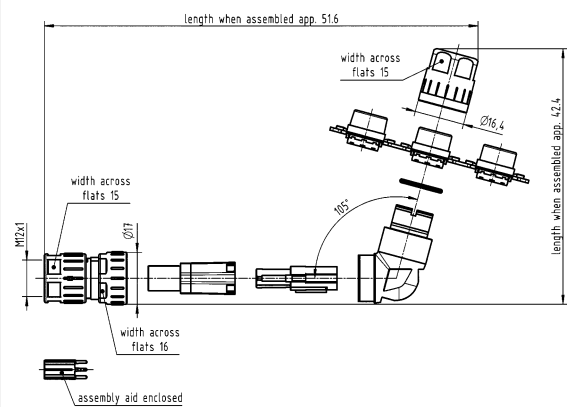
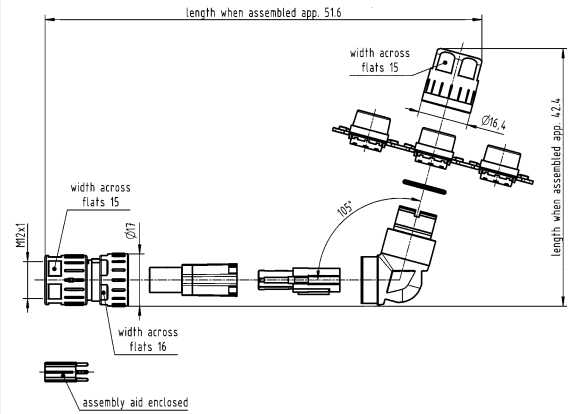
4 poles, D-coding  
0.13 - 0.82 mm<sup>2</sup>  
ÅWG 26 - 18

21 03 881 4405

Female, angled version

8 poles, X-coding  
0.08 - 0.25 mm<sup>2</sup>  
AWG 28 - 23

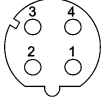
21 03 881 4805



# M12 PFT Slim Design



D-coding



Female, 4 poles

X-coding



Female, 8 poles



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

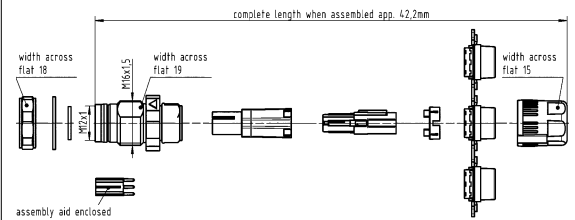
M12 PFT Slim Design



Female

4 poles, D-coding  
0.13 - 0.82 mm<sup>2</sup>  
AWG 26 - 18

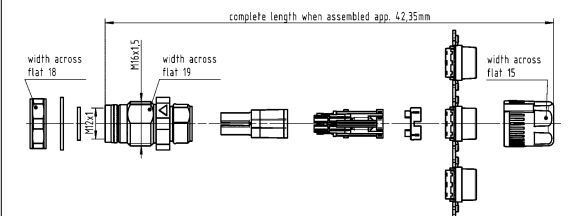
21 03 881 2425



Female

8 poles, X-coding  
0.08 - 0.25 mm<sup>2</sup>  
AWG 28 - 23

21 03 881 2825







## Technical characteristics *har-speed* M12 Panel feed-throughs with cable

### General data

|  |                   |
|--|-------------------|
| Temperature range                                | -40 °C ... +85 °C |
| Degree of protection                             | IP65 / IP67       |
| Mating cycles                                    | 500               |
| Recommended tightening torque / Hexagonal wrench | 2.0 Nm / SW 18    |

### Electrical characteristics

|                                     |                     |
|-------------------------------------|---------------------|
| Rated current                       | 0.5 A               |
| Rated voltage                       | 48 V                |
| Transmission performance (Category) | Cat. 6 <sub>A</sub> |

### Materials

|                          |       |
|--------------------------|-------|
| Contact material         | Brass |
| Contact plating          | Gold  |
| Contact carrier material | LCP   |
| Housing material         | ZP410 |

X-coding



Female, 8 poles



Identification

Part number

Drawing

Dimensions in mm

har-speed M12 PFT with cable

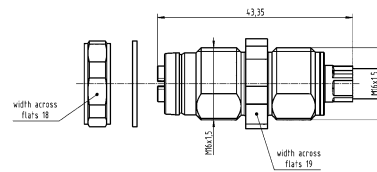


with 0.3 m cable  
 "MegaLine F10-120S/F 11Y flex Cat 7A 4x  
 (2x AWG37/7) PIMF".  
 Other lengths on request

21 33 080 0850 003

with 0.3 m cable  
 "HA-VIS EtherRail Cat7 4x (2x AWG 24/7)".  
 Other lengths on request

21 33 070 0853 003





## Technical characteristics M12 Power

| Type | HARAX® M12 Power | M12 Power Crimp |
|------|------------------|-----------------|
|------|------------------|-----------------|

### General data

|   |   |  |
|---|---|--|
| Conductor cross section                             | 0.75 – 1.5 mm <sup>2</sup><br>AWG 18-16 | 0.5 – 2.5 mm <sup>2</sup><br>AWG 20-14 |
| Cable diameter                                      | 5.8 - 13.5 mm                           | 5.8 - 13.5 mm                          |
| Temperature range                                   | -40 °C ... +85 °C                       | -40 °C ... +85 °C                      |
| Degree of protection                                | IP65 / IP67                             | IP65 / IP67                            |
| Mating cycles                                       | 500                                     | 500                                    |
| Recommended tightening torque /<br>Hexagonal wrench | 0.6 Nm / SW 17                          | 0.6 Nm / SW 17                         |

### Electrical characteristics

|               |         |         |
|---------------|---------|---------|
| Rated current | 12 A    | 16 A    |
| Rated voltage | 63 V DC | 63 V DC |

### Materials

|                          |        |        |
|--------------------------|--------|--------|
| Contact material         | Copper | Copper |
| Contact plating          | Gold   | Gold   |
| Contact carrier material | PA     | PA     |
| Housing material         | ZP410  | ZP410  |

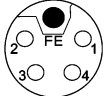


L-coding



Male, 5 poles

L-coding



Female, 5 poles



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

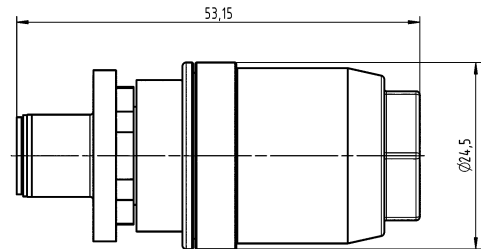
## M12 Power Crimp



Male

5 poles, L-coding

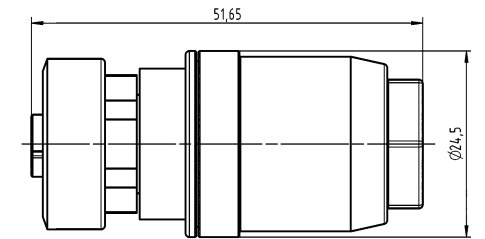
21 03 896 1505



Female

5 poles, L-coding

21 03 896 2505



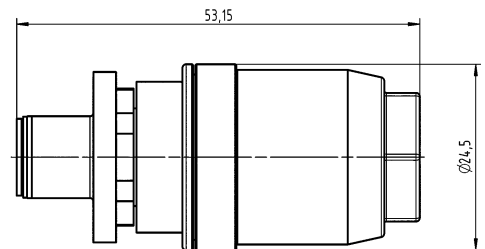
## M12 Power HARAX®



Male

5 poles, L-coding

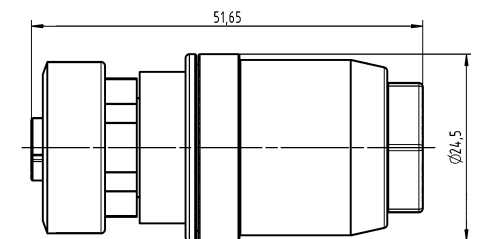
21 03 296 1505



Female

5 poles, L-coding

21 03 296 2505



# M12 Power Panel feed-through

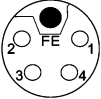


L-coding



Male, 5 poles

L-coding



Female, 5 poles



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

## M12 Power Panel feed-through



Male

5 poles, L-coding  
30 cm conductors, 1.5 mm<sup>2</sup>  
30 cm conductors, 2.5 mm<sup>2</sup>

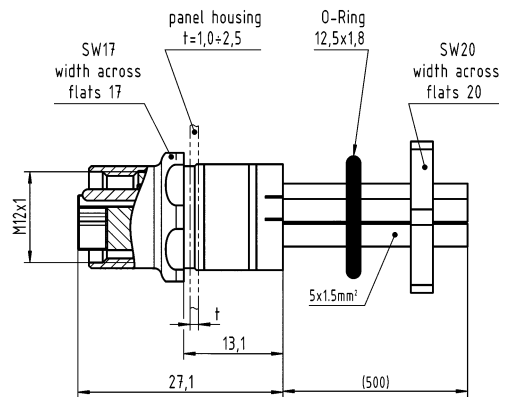
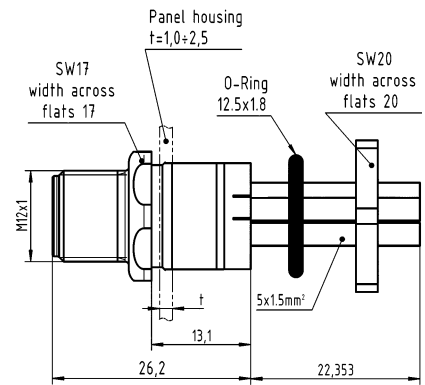
21 03 596 1505  
21 03 599 1505



Female

5 poles, L-coding  
30 cm conductors, 1.5 mm<sup>2</sup>  
30 cm conductors, 2.5 mm<sup>2</sup>

21 03 596 2505  
21 03 599 2505



# M12 Power PCB adapter



L-coding



Male, 5 poles



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

M12 Power PCB adapter male

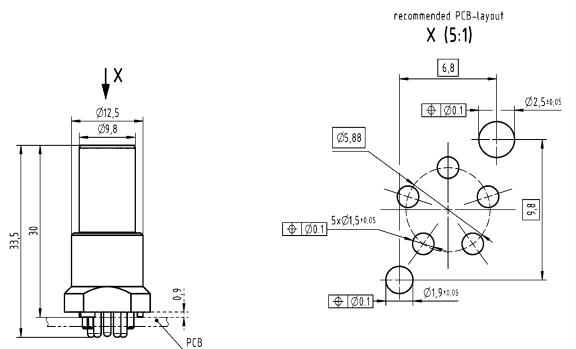
M12 Power PCB adapter



**Packaging: 60 pieces in a tray**  
**Order housings separately**

Male 5 poles, L-coding

21 03 396 1505

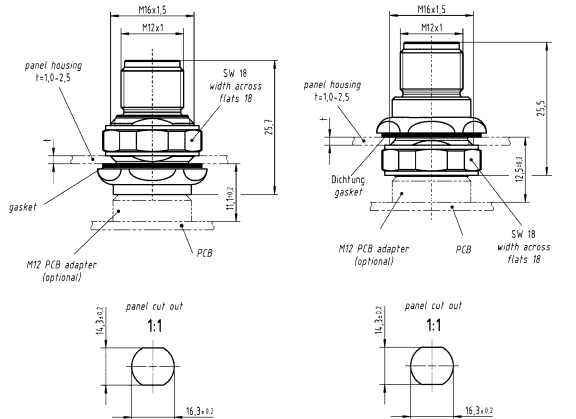


Housing



**Packaging: 60 pieces in a tray**  
for rear mounting  
for front mounting

21 03 302 1000  
21 03 302 1001

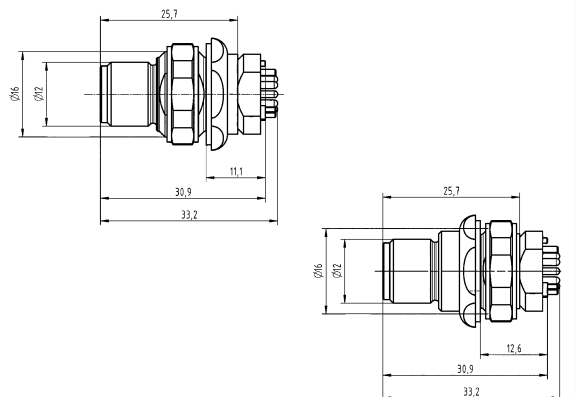


M12 Power PCB adapter incl. housing



**Packaging: 1 piece incl. housing**  
Male 5 poles, L-coding  
for rear mounting  
for front mounting

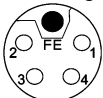
21 03 396 1530  
21 03 396 1531



# M12 Power PCB adapter



L-coding



Female, 5 poles



| Identification | Part number | Drawing | Dimensions in mm |
|----------------|-------------|---------|------------------|
|----------------|-------------|---------|------------------|

M12 Power PCB adapter female

M12 Power PCB adapter



**Packaging: 60 pieces in a tray**  
Order housings separately

Female      5 poles, L-coding

21 03 396 2505

Housing



**Packaging: 60 pieces in a tray**

for rear mounting  
for front mounting

21 03 302 2000  
21 03 302 2001

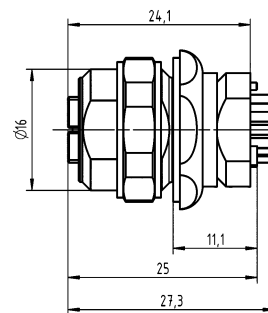
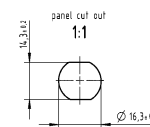
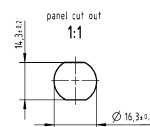
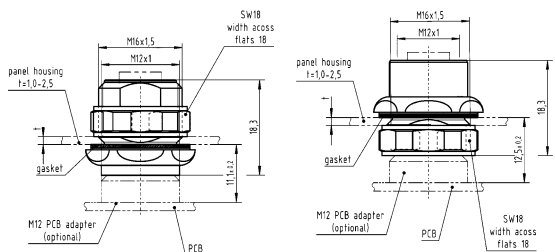
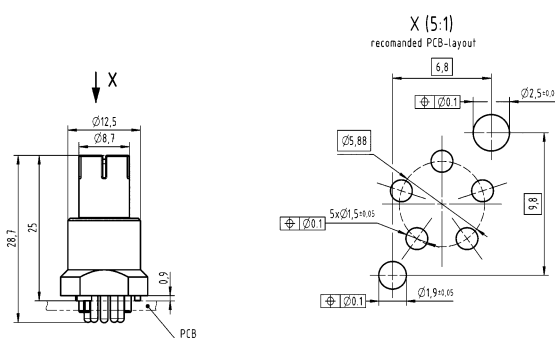
M12 Power PCB adapter incl. housing

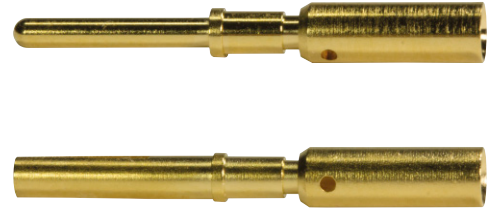


**Packaging: 1 piece incl. housing**


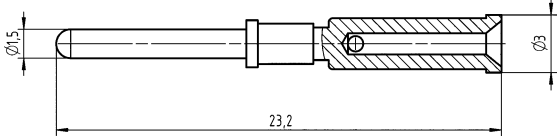

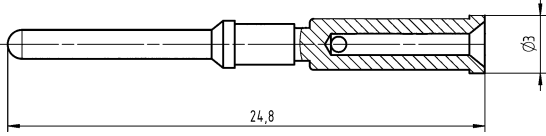

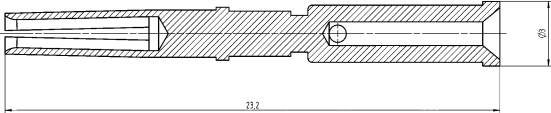
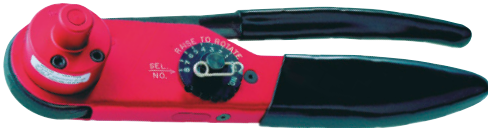
Female      5 poles, L-coding  
for rear mounting  
for front mounting

21 03 396 2530  
21 03 396 2531





## M12 Power crimp contacts

| Identification   | Part number  | Drawing  | Dimensions in mm |
|--|--|--|------------------|
| <b>M12 Power individual contacts</b>   |  |  |                  |
| <br>Turned male contacts<br>23.2 mm length<br><br>AWG 21 / 0.5 mm <sup>2</sup><br>AWG 20 / 0.75 mm <sup>2</sup><br>AWG 16 / 1.5 mm <sup>2</sup><br>AWG 14 / 2.5 mm <sup>2</sup>       | 21 01 100 9923<br>21 01 100 9924<br>21 01 100 9925<br>21 01 100 9926 |    |                  |
| <br>Turned FE* male contacts<br>24.8 mm length<br><br>AWG 21 / 0.5 mm <sup>2</sup><br>AWG 20 / 0.75 mm <sup>2</sup><br>AWG 16 / 1.5 mm <sup>2</sup><br>AWG 14 / 2.5 mm <sup>2</sup> | 21 01 100 9927<br>21 01 100 9928<br>21 01 100 9929<br>21 01 100 9930 |  |                  |
| <br>Turned female contacts<br>23.2 mm length<br><br>AWG 21 / 0.5 mm <sup>2</sup><br>AWG 20 / 0.75 mm <sup>2</sup><br>AWG 16 / 1.5 mm <sup>2</sup><br>AWG 14 / 2.5 mm <sup>2</sup>   | 21 01 100 9931<br>21 01 100 9932<br>21 01 100 9933<br>21 01 100 9934 |  |                  |
| Hand crimp tool  | 09 99 000 0509   |  |                  |
| Positioner<br>(To be ordered separately)   | 09 99 000 0638   |  |                  |

\*FE: function grounding