

**M12 male 0° / M12 female 90°**

PUR 4x0.34 bk UL/CSA+robot+drag chain 20m

Customized printing and packaging

Male straight – female 90°

M12 – M12, 4-pole

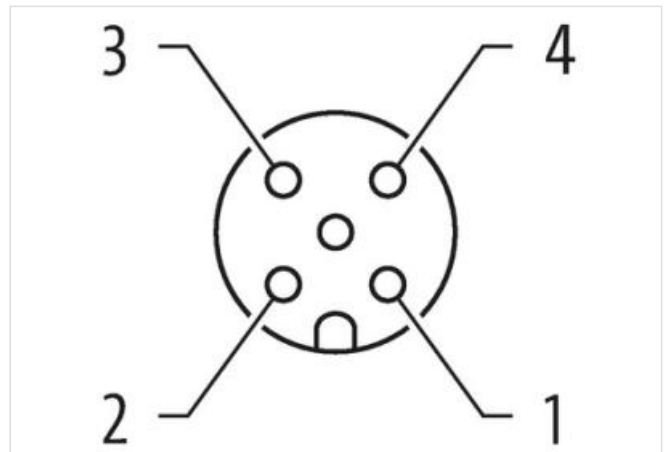
with cable sleeves

Zinc die casting, save-cover coated

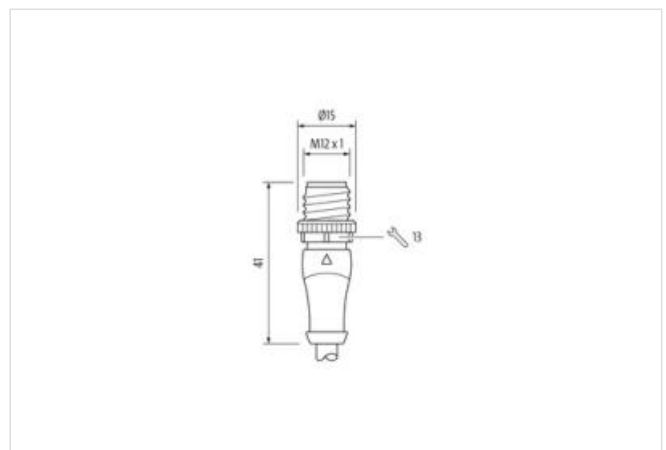
Plastic housings with good resistance against chemicals and oils.

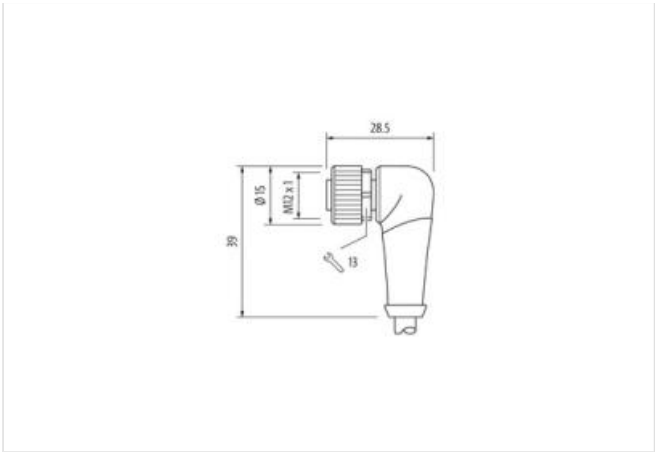
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

[Link to Product](#)**Illustration**

|   |    |   |
|---|----|---|
| 1 | BN | 1 |
| 2 | WH | 2 |
| 3 | BU | 3 |
| 4 | BK | 4 |





Product may differ from Image



|                                |                   |
|--------------------------------|-------------------|
| Cable length                   | 20 m              |
| Side 1                         |                   |
| Mounting method                | inserted, screwed |
| Coating contact                | gold plated       |
| Family construction form       | M12               |
| Material contact               | Copper alloy      |
| No. of poles                   | 4                 |
| Side 2                         |                   |
| Mounting method                | inserted, screwed |
| Coating contact                | gold plated       |
| Family construction form       | M12               |
| Material contact               | Copper alloy      |
| No. of poles                   | 4                 |
| Commercial data                |                   |
| ECLASS-6.0                     | 27279218          |
| ECLASS-7.0                     | 27279218          |
| ECLASS-8.0                     | 27279218          |
| ECLASS-9.0                     | 27060311          |
| ECLASS-10.1                    | 27060311          |
| ECLASS-11.1                    | 27060311          |
| ECLASS-12.0                    | 27060311          |
| ETIM-5.0                       | EC001855          |
| customs tariff number          | 85444290          |
| GTIN                           | 4048879834063     |
| Packaging unit                 | 1                 |
| Electrical data   Supply       |                   |
| Operating voltage AC max.      | 250 V             |
| Operating voltage DC max.      | 250 V             |
| Device protection   Electrical |                   |
| Pollution Degree               | 3                 |
| Rated surge voltage            | 2,5 kV            |
| Material group (IEC 60664-1)   | I                 |

**Environmental characteristics | Climatic**

|  |                            |
|--|----------------------------|
| Operating temperature min.             | -25 °C                     |
| Operating temperature max.             | 85 °C                      |
| Additional condition temperature range | depending on cable quality |

**Important installation notes**

|                        |   |
|------------------------|---|
| Note on strain relief  | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.   |
| Note on bending radius | <b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |

**Installation | Cable**

|   |  |
|---|--|
| Cable identification                              | 654  |
| Cable Type  | 5  |
| Jacket Color                                      | black  |
| Type of Certificate                               | cURus  |
| Amount stranding                                  | 1  |
| Stranding   | 4 wires twisted  |
| wire arrangement                                  | brown, black, blue, white                                      |
| Cable weight                                      | 36,3 g/m   |
| Material jacket                                   | PUR  |
| Shore hardness jacket                             | 58 ± 3 Shore D   |
| Freedom from ingredients (jacket)                 | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Outer-diameter (jacket)                           | 4,7 mm   |
| Tolerance outer diameter (sheath)                 | ± 5 %  |
| Material wire insulation                          | PP   |
| Amount wires                                      | 4  |
| Outer diameter insulation                         | 1,25 mm  |
| Outer diameter tolerance core insulation          | ± 5 %  |
| Shore hardness wire insulation                    | 74 ± 3 Shore D   |
| Ingredient freeness wire insulation               | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Amount strands (wire)                             | 42   |
| Diameter of single wires                          | 0,1 mm   |
| Conductor crosssection (wire)                     | 0,34 mm²   |
| Material conductor wire                           | Stranded copper wire, bare                                     |
| Conductor type (wire)                             | strand class 6   |
| Traversing distance (C-track)                     | 5 m @ 25 °C   horizontal                                       |
| Nominal voltage AC max.                           | 300 V  |
| Current load capacity (standard)                  | to DIN VDE 0298-4  |
| Current load capacity min. wire                   | 4,8 A  |
| Electrical resistance line constant wire          | 60 Ω/km @ 20 °C  |
| AC withstand voltage (wire - wire)                | 2,5 kV @ 60 s  |
| Power frequency withstand voltage (wire - jacket) | 2,5 kV @ 60 s  |
| Min. operating temperature (static)               | -40 °C   |
| Max. operating temperature (fixed)                | 80 °C / 90 °C @ 10000 h Operation                              |
| Operating temperature min. (dynamic)              | -25 °C   |
| Operating temperature max. (dynamic)              | 80 °C / 90 °C @ 10000 h Operation                              |
| UV resistance                                     | DIN EN ISO 4892-2 A  |
| Flame resistance                                  | UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090            |
| chemical resistance                               | Good, application-related testing                              |
| Gasoline resistance                               | Good, application-related testing                              |
| Oil resistance                                    | Good, application-related testing   DIN EN 60811-404           |
| Bending radius (fixed)                            | 5 x Outer diameter   |
| Bending radius (dynamic)                          | 10 x Outer diameter  |
| Travel speed (C-track)                            | 10 Mio. @ 25 °C  |
| No. of torsion cycles                             | 1 Mio.   |

|                |               |
|----------------|---------------|
| Torsion stress | ± 360 °/m     |
| Torsion speed  | 35 cycles/min |