

## M12 male 90° / M8 female 90° A-cod.

PUR 3x0.25 bk UL/CSA+robot+drag ch. 1.5m

Male 90° - female 90°

M12 - M8, 3-pole

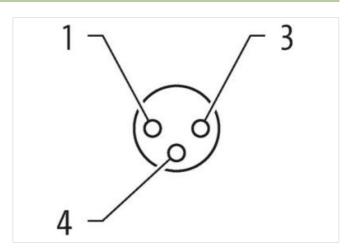
Plastic housings with good resistance against chemicals and oils.

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

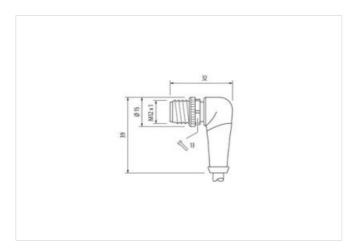
## **Link to Product**

## Illustration





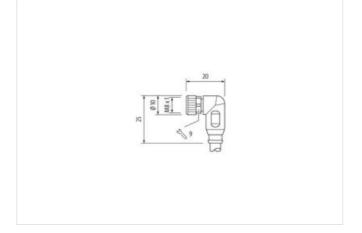






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Product may differ from Image











| Cable length   | 1,5 m             |
|--|-------------------|
| Side 1   |                   |
| Tightening torque                                    | 0,6 Nm            |
| Mounting method                                      | inserted, screwed |
| Family construction form                             | M12               |
| Thread   | M12 x 1           |
| suitable for corrugated tube (internal $\emptyset$ ) | 10 mm             |
| Material   | PUR               |
| Width across flats                                   | SW13              |
| Degree of protection (EN IEC 60529)                  | IP66K, IP67       |
| Side 2   |                   |
| Tightening torque                                    | 0,4 Nm            |
| Mounting method                                      | inserted, screwed |
| Family construction form                             | M8                |
| Thread   | M8 x 1            |
| suitable for corrugated tube (internal Ø)            | 6,5 mm            |
| Material   | PUR               |
| Width across flats                                   | SW9               |
| Degree of protection (EN IEC 60529)                  | IP66K, IP67       |
| 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   | 4048879417549     |
| Packaging unit                                       | 1                 |
| Electrical data   Supply                             |                   |



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| Operating voltage AC max.   | 50 V   |
|---|--|
| Operating voltage DC max.   | 60 V   |
| Operating voltage AC (UL-listed)  | 30 V   |
| Operating voltage DC (UL-listed)  | 30 V   |
| Current operating per contact max.  | 4 A  |
| Device protection   Electrical  |  |
| Additional condition protection degree  | inserted, screwed  |
| Pollution Degree  | 3  |
| Rated surge voltage   | 1,5 kV   |
| Material group (IEC 60664-1)  | <u> </u>   |
| Mechanical data   Material data   |  |
| Coating locking   | safe-cover coated  |
| Coating of fitting  | nickel plated  |
| Locking material  | Zinc die-casting   |
| Material screw connection   | Zinc die-casting   |
| Mechanical data   Mounting data   |  |
|   | Constant arrowed Obelian and other   |
| Mounting method   | inserted, screwed, Shaking protection  |
| Environmental characteristics   Climatic  |  |
| Operating temperature min.  | -25 °C   |
| Operating temperature max.  | 85 °C  |
| Additional condition temperature range  | depending on cable quality   |
| Conformity  |  |
| Product standard  | DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  |
| Installation   Cable  |  |
| Cable identification  | 650  |
| Cable Type  | 5  |
| Jacket Color  | black  |
| Type of Certificate   | cURus  |
| Amount stranding  | 1  |
| Stranding   | 3 wires twisted  |
| wire arrangement  | brown, black, blue   |
| No. of bending cycles (C-track)   | 10 Mio. @ 25 °C  |
| Cable weigth  | 26,4 g/m   |
| Material jacket   | PUR  |
|   | 1011   |
| Shore hardness jacket   | 58 ± 3 Shore D   |
| Shore hardness jacket Freedom from ingredients (jacket)   |  |
|   | 58 ± 3 Shore D   |
| Freedom from ingredients (jacket)   | 58 ± 3 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  |
| Freedom from ingredients (jacket)  Outer-diameter (jacket)  | 58 ± 3 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,3 mm   |
| Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)   | 58 ± 3 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,3 mm ± 5 %   |
| Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation   | 58 ± 3 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,3 mm ± 5 % PP  |
| Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires   | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,3 mm ± 5 %  PP 3  |
| Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation   | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,3 mm  ± 5 %  PP  3  1,25 mm  ± 5 %  74 ± 3 Shore D   |
| Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation  | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,3 mm  ± 5 %  PP  3  1,25 mm  ± 5 %   |
| Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Amount strands (wire)   | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,3 mm  ± 5 %  PP  3  1,25 mm  ± 5 %  74 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  32   |
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| Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,3 mm  ± 5 %  PP  3  1,25 mm  ± 5 %  74 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  32  0,1 mm  0,25 mm²  Stranded copper wire, bare   |
| Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)                 | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,3 mm  ± 5 %  PP  3  1,25 mm  ± 5 %  74 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  32  0,1 mm  0,25 mm²  Stranded copper wire, bare  strand class 6                           |
| Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track) | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,3 mm  ± 5 %  PP  3  1,25 mm  ± 5 %  74 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  32  0,1 mm  0,25 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal |
| Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)                 | 58 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,3 mm  ± 5 %  PP  3  1,25 mm  ± 5 %  74 ± 3 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  32  0,1 mm  0,25 mm²  Stranded copper wire, bare  strand class 6                           |

The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-04-19



| Electrical resistance line constant wire                | 79 Ω/km @ 20 °C                                      |
|---|--|
| Nominal voltage power AC max.                           | 300 V  |
| Power frequency withstand voltage power (wire - jacket) | 2,5 kV @ 60 s  |
| AC withstand voltage power (wire - wire)                | 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  | IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090  |
| chemical resistance                                     | Good, application-related testing                    |
| Gasoline resistance                                     | Good, application-related testing                    |
| Oil resistance  | DIN EN 60811-404   Good, application-related testing |
| Bending radius (fixed)                                  | 5 x Outer diameter                                   |
| Bending radius (dynamic)                                | 10 x Outer diameter                                  |
| No. of torsion cycles                                   | 1 Mio.   |
| Torsion speed   | 35 cycles/min  |
| Torsion stress  | ± 360 °/m  |