

M12 male 90° / M12 female 90° A-cod. LED

PUR 3x0.34 gy UL/ CSA+drag ch. 4.5 m

Male 90° – female 90° M12 – M12, 3-pole

2× LED (PNP), (NPN) on request

Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request Plastic housings with good resistance against chemicals and oils.

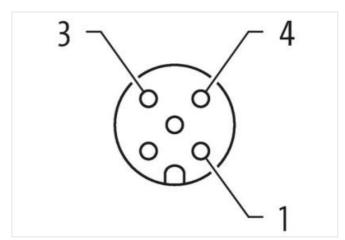
The resistance to aggressive media should be individually tested for your application. Further details on request.

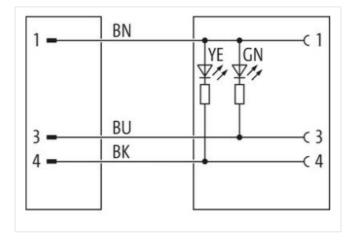
Further cable lengths on request.

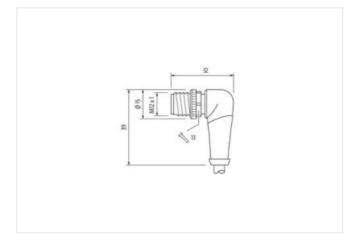
Link to Product

Illustration





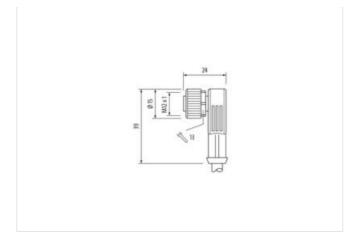






stay connected





Product may differ from Image





| Cable length | 4,5 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 Ø) | 10 mm |
| Coding | A |
| Material | PUR |
| Width across flats | SW13 |
| Degree of protection (EN IEC 60529) | IP66K, IP67 |
| Side 2 | |
| Tightening torque | 0,6 Nm |
| Mounting method | inserted, screwed |
| Family construction form | M12 |
| Thread | M12 x 1 |
| suitable for corrugated tube (internal Ø) | 10 mm |
| Coding | A |
| Material | PUR |
| Width across flats | SW13 |
| Degree of protection (EN IEC 60529) | IP66K, IP67 |
| Commercial data | |
| ECLASS-10.1 | 27060311 |
| ECLASS-11.1 | 27060311 |
| ECLASS-12.0 | 27060311 |
| customs tariff number | 85444290 |
| GTIN | 4065909017883 |
| Packaging unit | 1 |
| Electrical data Supply | |
| Operating voltage DC | 24 V |
| Operating voltage DC min. | 18 V |
| Operating voltage DC max. | 30 V |



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| Operating voltage DC max. (UL-listed) | 30 V |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Current operating per contact max. | 4 A |
| Installation Connection | |
| Mounting set | M12 x 1 |
| Device protection Electrical | |
| | Secretar consent |
| Additional condition protection degree | inserted, screwed |
| Pollution Degree Material group (IEC 60664-1) | 3 |
| , | <u>'</u> |
| Mechanical data Material data | |
| Coating locking | Nickeled |
| Coating of fitting | nickel plated |
| Locking material | Zinc die-casting |
| Material screw connection | Zinc die-casting |
| Mechanical data Mounting data | |
| Mounting method | inserted, screwed, Shaking protection |
| Environmental characteristics Climatic | - · · · · · · · · · · · · · · · · · · · |
| Operating temperature min. | -25 °C |
| Operating temperature min. Operating temperature max. | 85 °C |
| Additional condition temperature range | depending on cable quality |
| | 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 | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |
| Conformity | |
| Product standard | DIN EN 61076-2-101 (M12) |
| Installation Cable | |
| wire arrangement | brown, black, blue |
| Cable identification | 233 |
| Cable Type | 3 |
| | |
| Jacket Color | grav |
| Jacket Color Type of Certificate | gray cURus |
| Type of Certificate | cURus |
| Type of Certificate Amount stranding | cURus 1 |
| Type of Certificate Amount stranding Stranding | cURus 1 3 wires twisted |
| Type of Certificate Amount stranding Stranding wire arrangement | cURus 1 3 wires twisted brown, black, blue |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth | cURus 1 3 wires twisted |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket | cURus 1 3 wires twisted brown, black, blue 29,7 g/m |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3 |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3 1,25 mm |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket 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 | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket 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) | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket 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 | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket 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) | cURus 1 3 wires twisted brown, black, blue 29,7 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 42 0,1 mm |



| Nominal voltage AC max. | 300 V |
|---------------------------------------------------|------------------------------------------------------|
| Current load capacity (standard) | to DIN VDE 0298-4 |
| Current load capacity min. wire | 6 A |
| Electrical resistance line constant wire | 57 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 |
| Flame resistance | UL 1581 § 1090 IEC 60332-2-2 UL 1581 § 1100 FT2 |
| 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 |
| No. of bending cycles (C-track) | 10 Mio. @ 25 °C |
| Traversing distance (C-track) | 10 m @ 25 °C horizontal |
| Travel speed (C-track) | 3 m/s @ 25 °C |
| No. of torsion cycles | 2 Mio. |
| Torsion stress | ± 180 °/m |
| Torsion speed | 35 cycles/min |