

## M12 male 0° / M12 female 90° A-cod. LED

PUR 4x0.34 bk UL/CSA+drag ch. 5m

Male straight – female 90° M12 – M12, 4-pole 3× LED (PNP), (NPN) on request

Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request

Plastic housings with good resistance against chemicals and oils.

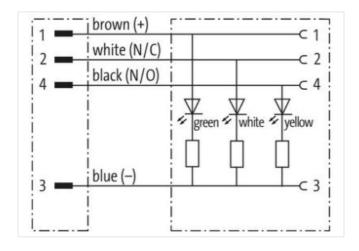
The resistance to aggressive media should be individually tested for your application. Further details on request. Further cable lengths on request.

## **Link to Product**

## Illustration





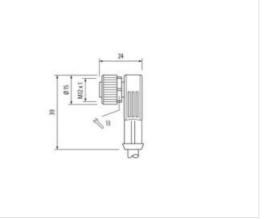






stay connected





Product may differ from Image











| Cable length                              | 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             |
| Material                                  | PUR               |
| Width across flats                        | SW13              |
| Degree of protection (EN IEC 60529)       | IP65, 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             |
| Material                                  | PUR               |
| Width across flats                        | SW13              |
| Degree of protection (EN IEC 60529)       | IP65, 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                                      | 4048879169400     |
| Packaging unit                            | 1                 |
| Electrical data   Supply                  |                   |

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| Operating voltage DC   | 24 V   |
|--|--|
|  |  |
| Operating voltage DC min.  | 18 V   |
| Operating voltage DC max.  | 30 V   |
| Operating voltage DC max. (UL-listed)  | 30 V   |
| Current operating per contact max.   | 4 A  |
| Diagnostics  |  |
| Status indication LED  | green, white, yellow   |
| Installation   Connection  |  |
| Mounting set   | M12 x 1  |
| Device protection   Electrical   |  |
| Additional condition protection degree   | inserted, screwed  |
| Pollution Degree   | 3  |
| Rated surge voltage  | 0,8 kV   |
| Material group (IEC 60664-1)   | I  |
| 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  |
|  | inseried, screwed, snaking protection  |
| Environmental characteristics   Climatic   |  |
| Operating temperature min.   | -25 °C   |
| Operating temperature max.   | 85 °C  |
| Additional condition temperature range   | depending on cable quality   |
|  |  |
| Important installation notes   |  |
|  | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  |
| Important installation notes   | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  |
| Important installation notes  Note on strain relief  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be   |
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| Important installation notes  Note on strain relief  Note on bending radius  Conformity  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.   |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)   |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.   |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable wire arrangement   | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white  634  3  black   |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate   | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding   | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1 4 wires twisted  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white  634  3  black  cURus  1  4 wires twisted  brown, black, blue, white   |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white  634  3  black  cURus  1  4 wires twisted  brown, black, blue, white  36,3 g/m   |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket   | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1 4 wires twisted brown, black, blue, white 36,3 g/m PUR   |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket  Shore hardness jacket  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1 4 wires twisted brown, black, blue, white 36,3 g/m PUR 90 ± 5 Shore A  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)   | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1 4 wires twisted brown, black, blue, white 36,3 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free                               |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1 4 wires twisted brown, black, blue, white 36,3 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,5 mm                        |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  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)   | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1 4 wires twisted brown, black, blue, white 36,3 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,5 mm ± 5 %                  |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  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               | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white  634  3  black  cURus  1  4 wires twisted  brown, black, blue, white  36,3 g/m  PUR  90 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,5 mm  ± 5 %  PP |
| Important installation notes  Note on strain relief  Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Jacket Color  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 | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  DIN EN 61076-2-101 (M12)  brown, black, blue, white 634 3 black cURus 1 4 wires twisted brown, black, blue, white 36,3 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,5 mm ± 5 % PP               |

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| 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 mm <sup>2</sup>   |
| Material conductor wire                           | Stranded copper wire, bare                                     |
| Conductor type (wire)                             | strand class 6   |
| 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          | 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                              |
| UV resistance                                     | DIN EN ISO 4892-2 A  |
| 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  |