

#### M12 female 90° A-cod. with cable LED

PVC 3x0.34 ye UL/CSA 3m

Art.No.: 7000-12381-0130300

Weight: 0.12

Country of origin: DE

Model designation: MSDL1-R013\_3.0

# Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available on request

If you are missing technical information? Please feel free to use our dictionary to find more technical details.

### **Product details:**

Female 90°

M12, 3-pole

2× LED (PNP)

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

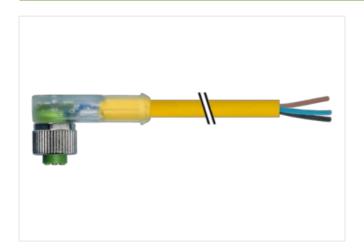
Plastic housings with good resistance against chemicals and oils.

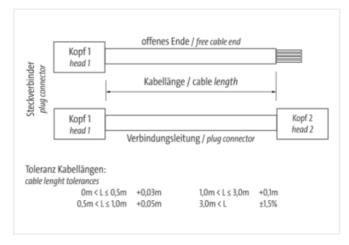
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

## **Link to Product**

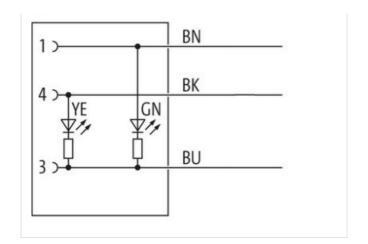
### Illustration

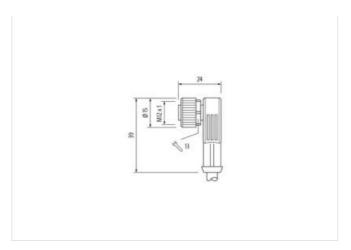


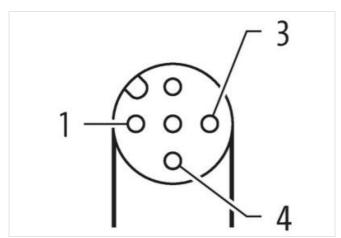




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Product may differ from Image











| Cable length                              | 3 m               |
|---|-------------------|
| Side 1                                    |                   |
| Tightening torque                         | 0,6 Nm            |
| Mounting method                           | inserted, screwed |
| Coating contact                           | gold plated       |
| Family construction form                  | M12               |
| Thread                                    | M12 x 1           |
| suitable for corrugated tube (internal Ø) | 10 mm             |
| Cable outlet                              | angled            |
| Coding                                    | A                 |
| Material contact                          | Copper alloy      |
| Material                                  | PUR               |
| No. of poles                              | 3                 |
| Width across flats                        | SW13              |
| Degree of protection (EN IEC 60529)       | IP65, IP66K, IP67 |
| Side 2                                    |                   |
| Stripping length (jacket)                 | 20 mm             |
| Family construction form                  | free cable end    |

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: 2025-08-07



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| ECLASS-6.0         27279218           ECLASS-6.1         27279218           ECLASS-7.0         27279218           ECLASS-8.0         2729218           ECLASS-9.0         27090311           ECLASS-1.1         27090311           ECLASS-1.1.1         27090311           ECLASS-1.2.0         27090311           ECLASS-1.3.0         EC001855           ETIM-5.0         EC001855           ETIM-6.0         EC001855           ETIM-7.0         EC001855           ETIM-7.0         EC001855           ETIM-7.0         EC001855           ETIM-7.0         EC001855           ETIM-8.0         EC001855           ETIM-9.0         EC001855           ETIM-9.0         EC001855           ETIM-1.0         EC001855           EAN         408897920245           EAN  | Commercial data                          |   |
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| ECLASS-6.1         27279218           ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         27060311           ECLASS-9.1         27060311           ECLASS-1.1         27060311           ECLASS-1.2.0         27060311           ETIM-5.0         ECO01835           ETIM-6.0         ECO01835           ETIM-7.7         ECO01855           ETIM-7.0         ECO01855           ETIM-8.0         ECO01855           ETIM-9.0   | FCLASS-6 0                               | 27279218  |
| ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         27069311           ECLASS-10.1         27069311           ECLASS-11.2         27069311           ECLASS-12.0         27069311           ECLASS-12.0         EC01855           ETIM-5.0         EC01855           ETIM-7.0         EC01855           ETIM-8.0         EC01855           ETIM-8.0         EC01855           Customs tariff number         8544290           customs tariff number         8544290           EAN         4048879205245           EAN         4048879205245           Packaging unit         1           Telectrical data Supply         1           Operating voltage DC min.         18 V           Operating voltage DC min.         30 V           Operating voltage DC max.         30 V           Status inclusion LED         green, yellow           Installation Connection         Stripping length (jacket)           Stripping length (jacket)         20 mm   |  |   |
| ECLASS-8.0         27780311           ECLASS-0.1         27060311           ECLASS-11.1         27060311           ECLASS-12.0         27060311           ECLASS-12.0         27060311           ETIM-5.0         EC091855           ETIM-7.0         EC001855           ETIM-7.0         EC001855           ETIM-8.0         EC001855           ETIM-8.0.0         EC001855           Customs tariff number         8544290           customs tariff number         1           EAN         404887205245           Packaging unit         1           Electrical data Supply         Operating voltage DC max.           Operating voltage DC max.         30 V           Operating voltage DC max.         4 A           Diagnostics         Status Indication LED           Stripping length (gacket)         30 v           Operating voltage DC max.         4 A           Diagnostics         Stripping length (gacket)           Stripping length (gacket)         20 mm <td></td> <td></td>  |  |   |
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| ECLASS-10.1         27060311           ECLASS-11.0         27060311           ECLASS-12.0         27060311           ETIM-5.0         EC001855           ETIM-6.0         EC001855           ETIM-7.0         EC001855           CUISTON Early Immediated a processor of the processor of t  |  |   |
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| ECLASS-12.0         27080311           ETIM-5.0         EC007835           ETIM-6.0         EC007835           ETIM-7.0         EC007835           ETIM-6.0         EC007835           ETIM-6.0         EC007835           Customs tariff number         85444290           customs tariff number         85444290           customs tariff number         85444290           EAN         4048873205245           Packaging unit         1           Electrical data   Supply         Packaging unit           Operating voltage DC         24 V           Operating voltage DC max.         30 V           Operating voltage DC max.         30 V           Operating voltage DC max.         30 V           Operating voltage DC max.         4 A           Diagnostics         Status indication LED           Status indication LED         green, yellow           Installation   Connection         Stripping length (jacket)           Stripping length (jacket)         20 mm           Mounting set         M12 x 1           Degree of protection (EN IEC 60529)         1 P68, IP67, IP66K           Additional condition protection degree         1           Rated surge voltage         0, 8 kV   |  |   |
| ETIM-5.0         EC001855           ETIM-7.0         EC001855           ETIM-7.0         EC001855           ETIM-8.0         EC001855           Customs tartif number         85444290           customs tartif number         85444290           Customs tartif number         85444290           EAN         4048879208245           EAN         4048879208245           Packaging unit         1           Electrical data   Supply         1           Operating voltage DC mix.         1           Operating voltage DC mix.         30 V           Operating voltage DC mix.         4 A           Diagnostics         Status indication LED           Status indication   Econocetion         Status indication   Econocetion           Structure operating thi (acket)         20 mm           Mounting set         M12 x 1           Gender         [emale           Degree of protection (EN IEC 60529)         PA New Processed           Poilution Degree         3           Rated surge voltage         0,8 kV           M   |  |   |
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| ETIM-7.0         EC001885           ETIM-8.0         EC001885           customs tariff number         85444290           customs tariff number         85444290           EAN         4048879205245           EAN         4048879205245           Packaging unit         1           Electrical data   Supply         Peckaging unit           Operating voltage DC         24 V           Operating voltage DC max.         30 V           Operating voltage DC max.         30 V           Operating voltage DC max.         30 V           Current operating per context max.         4 A           Use paralized (Connection         30 V           Use tall substantiation (Connection         Witchick (Connection)           Installation   Connection         20 mm           Mounting set         M12 x 1           Gender         female           Device protection   Electrical           Degree of protection (EN IEC 60529)         IP65, IP67, IP66K           Additional condition protection degree         inserted, screwed           Politution Degree         3           Rated surge voltage         0,8 kV           Material group (EC 60664-1)         I           Mechanical data   Material data <td></td> <td></td>  |  |   |
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| Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Mechanical data   Material data  Coating locking Nickeled  Coating of fitting nickel plated  Material gasket FKM  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 min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes   |  | <u>`</u>  |
| Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Nickeled  Coating of fitting  nickel plated  Material gasket  FKM  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.  -30 °C  Operating temperature max.  85 °C  Additional condition temperature range  Important installation notes   |  | 0,8 kV  |
| Mechanical data   Material data  Coating locking Nickeled  Coating of fitting nickel plated  Material gasket FKM  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 min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes   |  |   |
| Coating of fitting nickel plated  Material gasket FKM  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 min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes  |  |   |
| Coating of fitting nickel plated  Material gasket FKM  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 min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes  | Coating locking                          | Nickeled  |
| Material gasket FKM  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 min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes  |  |   |
| Locking material  Material screw connection  Zinc die-casting  Mechanical data   Mounting data  Mounting method  Environmental characteristics   Climatic  Operating temperature min.  Operating temperature max.  85 °C  Additional condition temperature range  Important installation notes   |  |   |
| Material screw connection  Mechanical data   Mounting data  Mounting method inserted, screwed, Shaking protection  Environmental characteristics   Climatic  Operating temperature min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes   |  |   |
| Mounting method inserted, screwed, Shaking protection  Environmental characteristics   Climatic  Operating temperature min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes   |  | Zinc die-casting  |
| Environmental characteristics   Climatic  Operating temperature min30 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Important installation notes  | Mechanical data   Mounting data          |   |
| Operating temperature min.  Operating temperature max.  85 °C  Additional condition temperature range depending on cable quality  Important installation notes   | Mounting method                          | inserted, screwed, Shaking protection   |
| Operating temperature max. 85 °C Additional condition temperature range depending on cable quality  Important installation notes   | Environmental characteristics   Climatic |   |
| Additional condition temperature range depending on cable quality  Important installation notes  | Operating temperature min.               | -30 °C  |
| Important installation notes   | 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. |



stay connected

| 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                              | 013  |
| Cable Type  | 1  |
| Jacket Color                                      | yellow   |
| Type of Certificate                               | cURus  |
| Amount stranding                                  | 1  |
| Stranding   | 3 wires twisted                                      |
| wire arrangement                                  | brown, black, blue                                   |
| Cable weigth                                      | 34,1 g/m   |
| Material jacket                                   | PVC  |
| Shore hardness jacket                             | 85 ± 5 Shore A                                       |
| Freedom from ingredients (jacket)                 | lead-free, cadmium-free, CFC-free, silicone-free     |
| Outer-diameter (jacket)                           | 4,6 mm   |
| Tolerance outer diameter (sheath)                 | ±5%  |
| Material wire insulation                          | PVC  |
| Amount wires                                      | 3  |
| Outer diameter insulation                         | 1,25 mm  |
| Outer diameter tolerance core insulation          | ±5%  |
| Shore hardness wire insulation                    | 45 ± 5 Shore D                                       |
| Material properties wire insulation               | good machinability                                   |
| Ingredient freeness wire insulation               | lead-free, cadmium-free, CFC-free, silicone-free     |
| Amount strands (wire)                             | 19   |
| Diameter of single wires                          | 0,15 mm  |
| Conductor crosssection (wire)                     | 0,34 mm <sup>2</sup>                                 |
| Material conductor wire                           | Stranded copper wire, bare                           |
| Conductor type (wire)                             | Strand class 5                                       |
| 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 kV @ 60 s  |
| Power frequency withstand voltage (wire - jacket) | 2 kV @ 60 s  |
| Min. operating temperature (static)               | -30 °C   |
| Max. operating temperature (fixed)                | 80 °C  |
| Operating temperature min. (dynamic)              | -5 °C  |
| Operating temperature max. (dynamic)              | 80 °C  |
| 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                                  |