

**M12 male 90° A-cod. / MSUD valve plug BI-11mm**

PUR 3x0.75 gy UL/CSA+drag ch. 4m

**MSUD**

Form BI (11 mm) – M12, male 90°

24 V AC  $\pm 20\%$  / DC  $\pm 25\%$ 

LED and suppression

Further cable lengths 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.

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



Product may differ from Image



|                                     |               |
|-------------------------------------|---------------|
| Cable length                        | 4 m           |
| Side 1                              |               |
| Tightening torque                   | 0,4 Nm        |
| Thread                              | M3            |
| Degree of protection (EN IEC 60529) | IP66K, IP67   |
| Side 2                              |               |
| Tightening torque                   | 0,6 Nm        |
| Thread                              | M12 x 1       |
| Degree of protection (EN IEC 60529) | IP66K, IP67   |
| Commercial data                     |               |
| ECLASS-6.0                          | 27279218      |
| ECLASS-6.1                          | 27279218      |
| ECLASS-7.0                          | 27279218      |
| ECLASS-8.0                          | 27279218      |
| ECLASS-9.0                          | 27060312      |
| ECLASS-10.1                         | 27060312      |
| ECLASS-11.1                         | 27060312      |
| ECLASS-12.0                         | 27060312      |
| ETIM-5.0                            | EC001855      |
| customs tariff number               | 85444290      |
| GTIN                                | 4048879148269 |
| Packaging unit                      | 1             |
| Electrical data                     |               |
| Capacity CX                         | 20 ms         |
| Electrical data   Supply            |               |
| Operating voltage AC                | 24 V          |
| Operating voltage AC min.           | 19,2 V        |
| Operating voltage AC max.           | 28,8 V        |
| Operating voltage DC                | 24 V          |
| Operating voltage DC min.           | 18 V          |
| Operating voltage DC max.           | 30 V          |
| Cut-off peak voltage max.           | 55 V          |

|                                                         |                                                                |
|---------------------------------------------------------|----------------------------------------------------------------|
| Current operating per contact max.                      | 4 A                                                            |
| Current consumption max.                                | 12 mA                                                          |
| <b>Diagnostics</b>                                      |                                                                |
| Status indication LED                                   | yellow                                                         |
| <b>Device protection   Electrical</b>                   |                                                                |
| Additional condition protection degree                  | inserted, screwed                                              |
| Rated surge voltage                                     | 0,8 kV                                                         |
| <b>Mechanical data   Material data</b>                  |                                                                |
| Color housing                                           | black                                                          |
| Material housing                                        | Plastic                                                        |
| <b>Mechanical data   Mounting data</b>                  |                                                                |
| Mounting method                                         | inserted, screwed                                              |
| <b>Environmental characteristics   Climatic</b>         |                                                                |
| Operating temperature min.                              | -25 °C                                                         |
| Operating temperature max.                              | 85 °C                                                          |
| Additional condition temperature range                  | depending on cable quality                                     |
| <b>Installation   Cable</b>                             |                                                                |
| Cable identification                                    | 236                                                            |
| Cable Type                                              | 3                                                              |
| Printing color of wire insulation                       | white (isolation black)                                        |
| Jacket Color                                            | gray                                                           |
| Type of Certificate                                     | cURus                                                          |
| Amount stranding                                        | 1                                                              |
| Stranding                                               | 3 wires twisted                                                |
| wire arrangement                                        | black 1, black 2, green-yellow                                 |
| No. of bending cycles (C-track)                         | 10 Mio. @ 25 °C                                                |
| Cable weight                                            | 56,1 g/m                                                       |
| Material jacket                                         | PUR                                                            |
| Shore hardness jacket                                   | 90 ± 5 Shore A                                                 |
| Freedom from ingredients (jacket)                       | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Outer-diameter (jacket)                                 | 5,9 mm                                                         |
| Tolerance outer diameter (sheath)                       | ± 5 %                                                          |
| Material wire insulation                                | PP                                                             |
| Amount wires                                            | 3                                                              |
| Outer diameter insulation                               | 1,85 mm                                                        |
| Outer diameter tolerance core insulation                | ± 5 %                                                          |
| Shore hardness wire insulation                          | 70 ± 5 Shore D                                                 |
| Ingredient freeness wire insulation                     | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Printing color of wire insulation                       | white (isolation black)                                        |
| Amount strands (wire)                                   | 42                                                             |
| Diameter of single wires                                | 0,15 mm                                                        |
| Conductor crosssection (wire)                           | 0,75 mm²                                                       |
| Material conductor wire                                 | Stranded copper wire, bare                                     |
| Conductor type (wire)                                   | strand class 6                                                 |
| Traversing distance (C-track)                           | 10 m @ 25 °C   horizontal                                      |
| Current load capacity (standard)                        | to DIN VDE 0298-4                                              |
| Current load capacity min. wire                         | 12 A                                                           |
| Electrical resistance line constant wire                | 26 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                    |
| 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                       | 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                | 2 Mio.                                               |
| Torsion speed                        | 35 cycles/min                                        |
| Torsion stress                       | ± 180 °/m                                            |