

**M8 male 90° A-cod./ MSUD valve plug CI-9.4mm small**

PUR 3x0.34 bk UL/CSA+drag ch. 1m

Art.No.: 7000-88491-6330100

Weight: 0.053

Country of origin: CZ

Model designation: MSRL3-I-L633\_1.0

**MSUD**

Plastic housings with good resistance against chemicals and oils.

Form CI (9.4 mm)

Male M8

90°

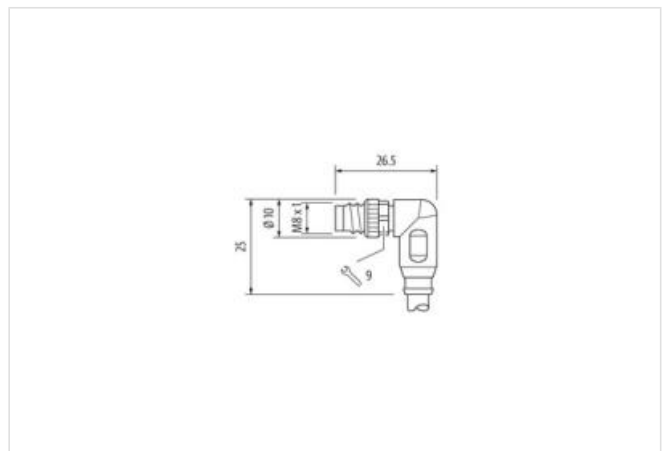
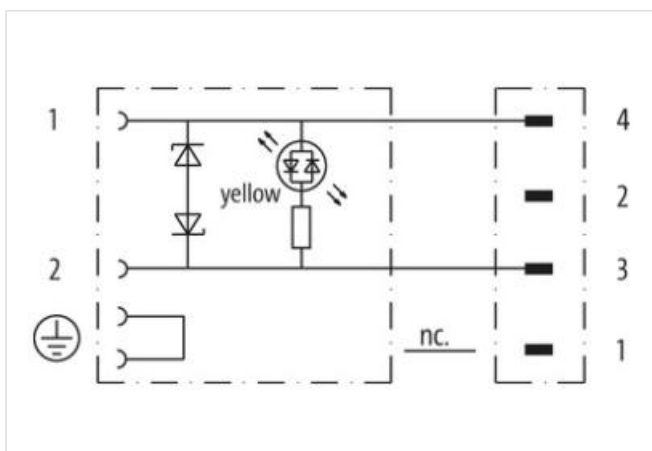
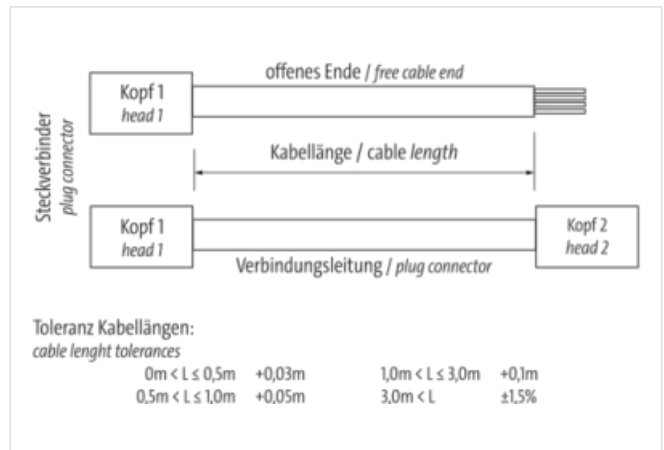
24 V AC  $\pm 20\%$  / DC  $\pm 25\%$ 

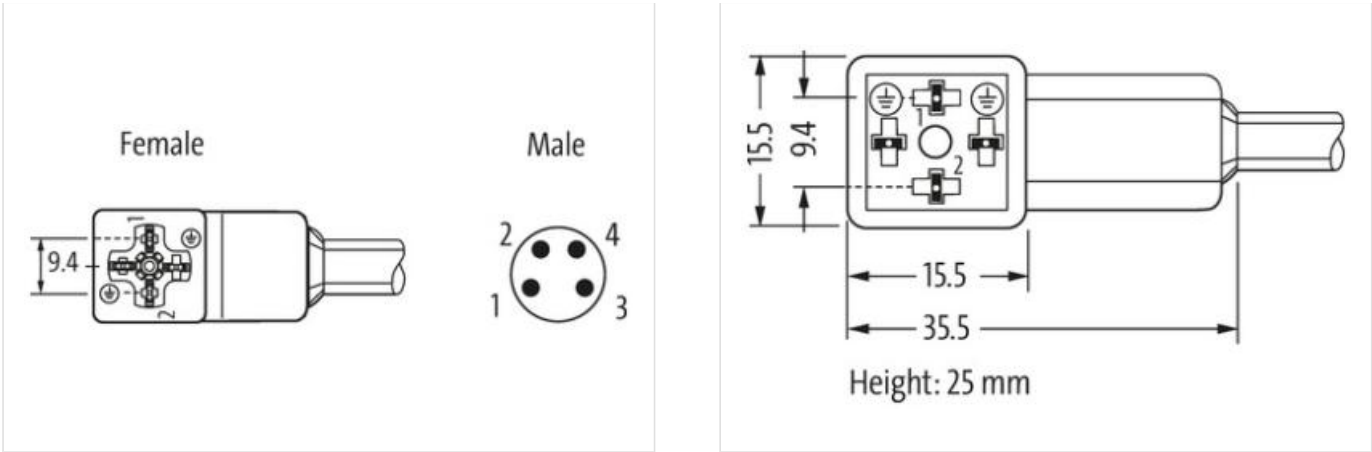
4-pole

Z-Diode + LED

Art-No. 7005 - M8 Lite - (plastic hexagonal screw) on request

Further cable lengths on request.

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



Product may differ from Image

|                                           |                   |
|-------------------------------------------|-------------------|
| Cable length                              | 1 m               |
| Side 1                                    |                   |
| Tightening torque                         | 0,4 Nm            |
| Mounting method                           | inserted, screwed |
| Coating contact                           | silver-plated     |
| Family construction form                  | MSUD              |
| Thread                                    | M3                |
| suitable for corrugated tube (internal Ø) | 6,5 mm            |
| Material contact                          | Copper alloy      |
| Material                                  | PUR               |
| No. of poles                              | 4                 |
| Side 2                                    |                   |
| Tightening torque                         | 0,4 Nm            |
| Mounting method                           | inserted, screwed |
| Coating contact                           | gold plated       |
| Family construction form                  | M8                |
| Thread                                    | M8 x 1            |
| Material contact                          | Copper alloy      |
| Material                                  | PBT               |
| No. of poles                              | 4                 |
| Width across flats                        | SW9               |
| Commercial data                           |                   |
| ECLASS-6.0                                | 27279218          |
| ECLASS-7.0                                | 27279218          |
| ECLASS-8.0                                | 27279218          |
| ECLASS-9.0                                | 27060311          |
| ECLASS-10.1                               | 27060312          |
| ECLASS-11.1                               | 27060312          |
| ECLASS-12.0                               | 27060312          |
| ETIM-5.0                                  | EC001855          |
| customs tariff number                     | 85444290          |
| customs tariff number                     | 85444290          |
| EAN                                       | 4048879118576     |
| EAN                                       | 4048879118576     |
| Packaging unit                            | 1                 |
| Packaging unit                            | 1                 |
| 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.           | 15 mA  |

#### Diagnostics

|                       |        |
|-----------------------|--------|
| Status indication LED | yellow |
|-----------------------|--------|

#### Device protection | Electrical

|                                        |                   |
|----------------------------------------|-------------------|
| Degree of protection (EN IEC 60529)    | IP65, IP67        |
| Additional condition protection degree | inserted, screwed |
| Pollution Degree                       | 3                 |
| Rated surge voltage                    | 0,8 kV            |
| Material group (IEC 60664-1)           | I                 |
| Additional suppressor                  | Diode, Z-Diode    |

#### Mechanical data | Material data

|                  |                  |
|------------------|------------------|
| Material housing | Plastic          |
| Color housing    | black            |
| Coating locking  | Nickel           |
| Material gasket  | PUR              |
| Locking material | Zinc die-casting |

#### Mechanical data | Mounting data

|                 |                   |
|-----------------|-------------------|
| Mounting method | inserted, screwed |
|-----------------|-------------------|

#### Environmental characteristics | Climatic

|                                        |                            |
|----------------------------------------|----------------------------|
| Operating temperature min.             | -25 °C                     |
| Operating temperature max.             | 85 °C                      |
| Additional condition temperature range | 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 | <b>Attention:</b> 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 61076-2-114 (M8) |
|------------------|-------------------------|

#### Installation | Cable

|                                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| wire arrangement                  | brown, black, blue                                             |
| Cable identification              | 633                                                            |
| Cable Type                        | 3                                                              |
| Jacket Color                      | black                                                          |
| Type of Certificate               | cURus                                                          |
| Amount stranding                  | 1                                                              |
| Stranding                         | 3 wires twisted                                                |
| wire arrangement                  | brown, black, blue                                             |
| Cable weight                      | 29,7 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)           | 4,1 mm                                                         |
| Tolerance outer diameter (sheath) | ± 5 %                                                          |

|                                                   |                                                                |
|---------------------------------------------------|----------------------------------------------------------------|
| Material wire insulation                          | PP                                                             |
| Amount wires                                      | 3                                                              |
| Outer diameter insulation                         | 1,25 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 |
| 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                   | 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                              |
| UV resistance                                     | DIN EN ISO 4892-2 A                                            |
| Flame resistance                                  | UL 1581 § 1090   UL 1581 § 1100 FT2   IEC 60332-2-2            |
| 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                                                  |