

**M12 male 0° / M8 female 90° A-cod. LED**

PUR 3x0.25 bk UL/CSA+robot+drag ch. 6m

Male straight – female 90°

Zinc die casting, save-cover coated

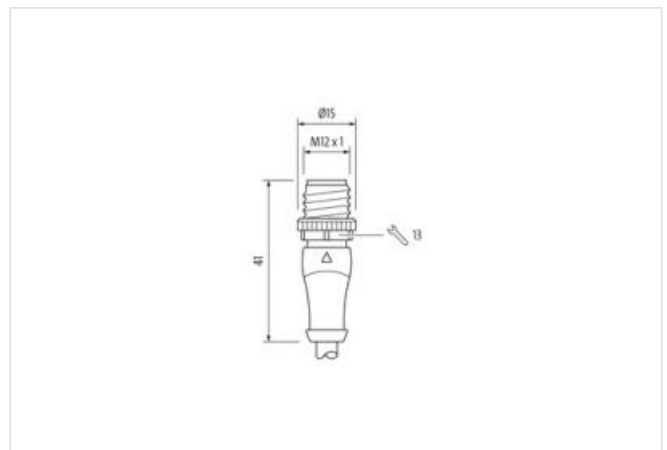
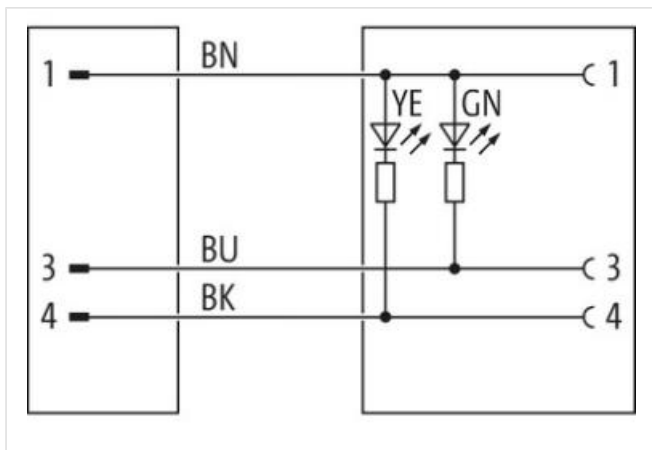
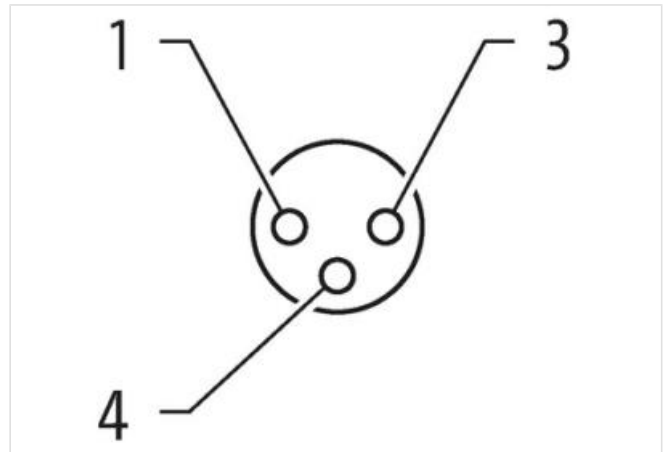
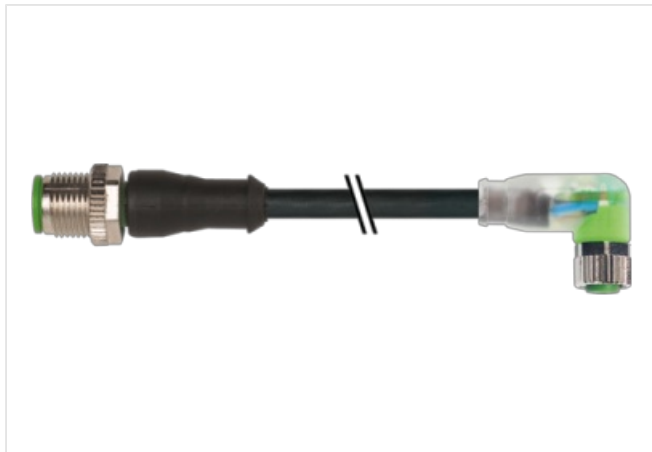
M12 – M8, 3-pole

LED (yellow/green)

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**



Product may differ from Image



|                                           |                   |
|-------------------------------------------|-------------------|
| Cable length                              | 6 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             |
| Material contact                          | Copper alloy      |
| Material                                  | PUR               |
| No. of poles                              | 3                 |
| Width across flats                        | SW13              |
| Degree of protection (EN IEC 60529)       | IP66K, IP67       |
| Side 2                                    |                   |
| Tightening torque                         | 0,4 Nm            |
| Mounting method                           | inserted, screwed |
| Coating contact                           | gold plated       |
| Family construction form                  | M8                |
| Thread                                    | M8 x 1            |
| suitable for corrugated tube (internal Ø) | 6,5 mm            |
| Material contact                          | Copper alloy      |
| Material                                  | PUR               |
| No. of poles                              | 3                 |
| Width across flats                        | SW9               |
| Degree of protection (EN IEC 60529)       | 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                  | 4048879159128 |
| Packaging unit        | 1             |

#### Electrical data | Supply

|                                       |      |
|---------------------------------------|------|
| 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  |
| Current consumption max.              | 5 mA |

#### Diagnostics

|                       |               |
|-----------------------|---------------|
| Status indication LED | green, yellow |
|-----------------------|---------------|

#### 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           | safe-cover coated |
| 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.             | -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 61076-2-101 (M12), DIN EN 61076-2-114 (M8) |
|------------------|---------------------------------------------------|

#### Installation | Cable

|                                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| Cable identification              | 650                                                            |
| Cable Type                        | 5                                                              |
| Jacket Color                      | black                                                          |
| Type of Certificate               | cURus                                                          |
| Amount stranding                  | 1                                                              |
| Stranding                         | 3 wires twisted                                                |
| wire arrangement                  | brown, black, blue                                             |
| Cable weight                      | 26,4 g/m                                                       |
| Material jacket                   | PUR                                                            |
| Shore hardness jacket             | 58 ± 3 Shore D                                                 |
| Freedom from ingredients (jacket) | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Outer-diameter (jacket)           | 4,3 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                    | 74 ± 3 Shore D                                                 |
| Ingredient freeness wire insulation               | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Amount strands (wire)                             | 32                                                             |
| Diameter of single wires                          | 0,1 mm                                                         |
| Conductor crosssection (wire)                     | 0,25 mm²                                                       |
| Material conductor wire                           | Stranded copper wire, bare                                     |
| Conductor type (wire)                             | strand class 6                                                 |
| Traversing distance (C-track)                     | 5 m @ 25 °C   horizontal                                       |
| Nominal voltage AC max.                           | 300 V                                                          |
| Current load capacity (standard)                  | to DIN VDE 0298-4                                              |
| Current load capacity min. wire                   | 4,5 A                                                          |
| Electrical resistance line constant wire          | 79 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                                  | IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090            |
| 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                                            |
| Travel speed (C-track)                            | 10 Mio. @ 25 °C                                                |
| No. of torsion cycles                             | 1 Mio.                                                         |
| Torsion stress                                    | ± 360 °/m                                                      |
| Torsion speed                                     | 35 cycles/min                                                  |