

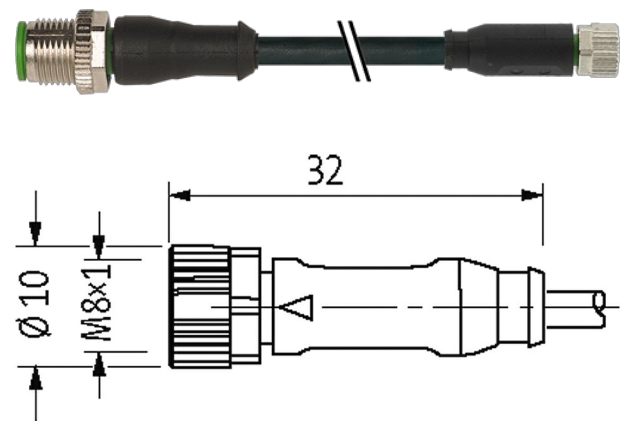
**M12 MALE 0° / M8 FEMALE 0°**

651 PUR 4x0.25 bk UL/CSA+robot 9.5

Male straight – female straight  
M12 – M8, 4-pole  
Art-No. 7005 - M12/M8 Lite - (plastic hexagonal screw) on request  
with cable sleeves  
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.  
Zinc die casting, save-cover coated

[Link to Product](#)

Illustration



Product may differ from Image

Approvals





\* only for products with UL/CSA approved cable

Form

Form 40581

General data

|                    |                                                   |
|--------------------|---------------------------------------------------|
| Standards          | DIN EN 61076-2-101 (M12), DIN EN 61076-2-104 (M8) |
| Mounting method    | inserted, tightened                               |
| Material (contact) | Copper alloy                                      |
| Material (gasket)  | FKM                                               |
| Pollution Degree   | 3                                                 |
| Temperature range  | -25...+85 °C, depending on cable quality          |

Cables

|                       |                             |
|-----------------------|-----------------------------|
| No./diameter of wires | 4 x 0.25 mm²                |
| Wire isolation        | PP (br, wh, bl, bk)         |
| C-track properties    | 10 Mio.                     |
| Material (jacket)     | PUR (UL/CSA), welding spark |

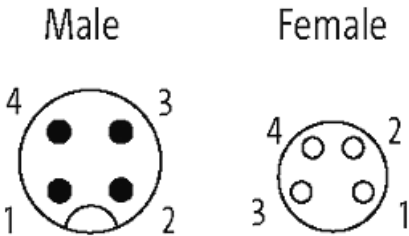
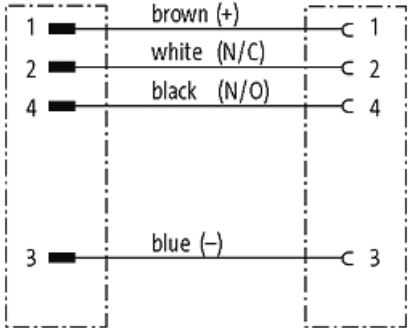
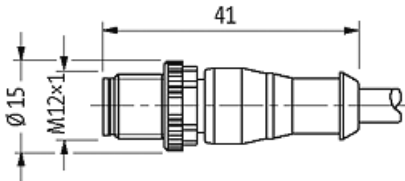
|                                    |                                                                                                                                                                         |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outer Ø                            | 4.7 mm ±5%                                                                                                                                                              |
| Bend radius (moving)               | 10× outer Ø                                                                                                                                                             |
| Temperature range (fixed)          | -40...+80 °C                                                                                                                                                            |
| Temperature range (mobile)         | -25...+80 °C                                                                                                                                                            |
| Cable identification               | 651                                                                                                                                                                     |
| Cable Type                         | 5 (PUR schweißfunkenbeständig)                                                                                                                                          |
| Approval (cable)                   | cURus (AWM-Style 20549/10493); CE conform                                                                                                                               |
| Cable weight [g/m]                 | 31,90                                                                                                                                                                   |
| Material (wire)                    | Cu wire, bare                                                                                                                                                           |
| Resistor (core)                    | max. 79 Ω/km (20 °C)                                                                                                                                                    |
| Single wire Ø (core)               | 0.1 mm                                                                                                                                                                  |
| Construction (core)                | 32× 0.1 mm (multi-strand wire class 6)                                                                                                                                  |
| Diameter (core)                    | 4× 0.25 mm <sup>2</sup>                                                                                                                                                 |
| AWG                                | similar to AWG 24                                                                                                                                                       |
| Material (wire isolation)          | PP                                                                                                                                                                      |
| Material property (wire isolation) | CFC-, halogen-, cadmium-, silicone- and lead-free                                                                                                                       |
| Shore hardness (wire isolation)    | 74 ±3 D                                                                                                                                                                 |
| Wire-Ø incl. isolation             | 1.25 mm ±5%                                                                                                                                                             |
| Color/numbering of wires           | br, bk, bl, wh                                                                                                                                                          |
| Stranding combination              | 4 wires twisted                                                                                                                                                         |
| Shield                             | no                                                                                                                                                                      |
| Material (jacket)                  | PUR                                                                                                                                                                     |
| Material property (jacket)         | CFC-, halogen-, cadmium-, silicone- and lead-free, matt, low-adhesion, machine easy to process, abrasion-resistant, hydrolysis-, microbial- and welding spark resistant |
| Shore hardness (jacket)            | 58 ±3 D                                                                                                                                                                 |
| Outer-Ø (jacket)                   | 4.7 mm ±5%                                                                                                                                                              |
| Color (jacket)                     | black                                                                                                                                                                   |
| chemical resistance                | good resistance to oil, gasoline and chemicals (EN 60811-404)                                                                                                           |
| thermal resistance                 | flame retardant UL, FT2, IEC 60332-1, IEC 60332-2-2, welding spark resistant                                                                                            |
| Nominal voltage                    | 300 V AC                                                                                                                                                                |
| Test voltage                       | 2500 V AC                                                                                                                                                               |
| Current load capacity              | to DIN VDE 0298-4                                                                                                                                                       |
| Temperature range (fixed)          | -40...+80 °C, (+90 °C at max. 10 000 operating hours)                                                                                                                   |
| Temperature range (mobile)         | -25...+80 °C, (+90 °C at max. 10 000 operating hours)                                                                                                                   |
| Bend radius (fixed)                | 5× outer Ø                                                                                                                                                              |
| Bend radius (moving)               | 10× outer Ø                                                                                                                                                             |
| No. of bending cycles (C-track)    | max. 10 Mio. (25 °C)                                                                                                                                                    |
| Traversing distance (C-track)      | max. 5 m (horizontal)                                                                                                                                                   |
| Travel speed (C-track)             | max. 3.3 m/s                                                                                                                                                            |
| Acceleration (C-track)             | max. 5 m/s <sup>2</sup>                                                                                                                                                 |
| Torsion stress                     | ±360°/m                                                                                                                                                                 |
| No. of torsion cycles              | max. 1 Mio. (25 °C)                                                                                                                                                     |
| Torsion speed                      | 35 cycles/min                                                                                                                                                           |
| Jacket Color                       | black                                                                                                                                                                   |
| <b>Technical Data</b>              |                                                                                                                                                                         |
| Operating voltage                  | max. 50 V AC/60 V DC                                                                                                                                                    |
| Operating voltage (only UL listed) | max. 30 V AC/DC                                                                                                                                                         |
| Rated surge voltage                | 1.5 kV                                                                                                                                                                  |
| Operating current per contact      | max. 4 A                                                                                                                                                                |

|                                           |                                                                         |
|-------------------------------------------|-------------------------------------------------------------------------|
| Material group                            | IEC 60664-1, category I                                                 |
| No. of poles                              | 4                                                                       |
| Coding                                    | A-coded                                                                 |
| LED display                               | no                                                                      |
| Locking of ports                          | Screw thread (M8/M12×1 mm) recommended torque 0.4/0.6 Nm, self-securing |
| Compression gland                         | M8 (SW9), M12 (SW13)                                                    |
| Material                                  | PUR                                                                     |
| suitable for corrugated tube (internal Ø) | M12 (10 mm); M8 (6.5 mm)                                                |
| Protection                                | IP67 inserted and tightened (EN 60529)                                  |
| Locking material                          | Zinc die casting, save-cover coated                                     |

Commercial data

|                       |               |
|-----------------------|---------------|
| country of origin     | DE            |
| customs tariff number | 85444290      |
| EAN                   | 4048879741507 |
| eClass                | 27279218      |
| Packaging unit        | 1             |

Sketch



Product may differ from Image