

**M12 male 0° / M12 female 0° A-cod. shielded**

PUR 5x0.34 shielded bk UL/CSA+drag ch. 10m

Male straight – female straight

M12 – M12, 5-pole

A-coded

shielded

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**



(\* for cable type 203, 603, 243, 643)

Male

Female



Product may differ from Image



\* only for products with UL/CSA approved cable

| Form                                      |  |
|---|--|
| Form                                      | 40521  |
| Technical Data                            |  |
| Operating voltage                         | max. 60 V AC/DC  |
| Operating voltage (only UL listed)        | 30 V AC/DC   |
| Rated surge voltage                       | 1.5 kV   |
| Operating current per contact             | max. 4 A   |
| No. of poles                              | 5  |
| Material group                            | IEC 60664-1, category I  |
| Coding                                    | A-coded  |
| LED display                               | no   |
| Locking of ports                          | Screw thread (M12×1 mm) recommended torque 0.6 Nm, self-securing |
| Compression gland                         | M12 (SW13)   |
| Protection                                | IP65 and IP67 when plugged and screwed down (EN 60529)           |
| Material                                  | PUR  |
| Locking material                          | Zinc die casting, matte nickel plated                            |
| suitable for corrugated tube (internal Ø) | without  |
| General data                              |  |
| Standards                                 | DIN EN 61076-2-101 (M12)   |
| Mounting method                           | inserted, tightened  |
| Material (contact)                        | Copper alloy   |
| Material (contact surface)                | Au   |
| Material (gasket)                         | FKM  |
| Pollution Degree                          | 3  |
| Temperature range                         | -25...+85 °C, depending on cable quality                         |
| Cables                                    |  |
| No./diameter of wires                     | 5× 0.34 mm <sup>2</sup>  |
| Wire isolation                            | PP (br, wh, bl, bk, gnye)  |
| C-track properties                        | 5 Mio.   |
| Outer Ø                                   | 5.6 mm ±5%   |
| Cable identification                      | 642  |
| Cable Type                                | 3 (PUR)  |
| Approval (cable)                          | cURus (AWM-Style 20549/10493); CE conform                        |
| Cable weight [g/m]                        | 57,2 g   |
| Material (wire)                           | Cu wire, bare  |
| Resistor (core)                           | max. 57 Ω/km (20 °C)   |
| Single wire Ø (core)                      | 0.1 mm   |
| Construction (core)                       | 42× 0.1 mm (multi-strand wire class 6)                           |
| Diameter (core)                           | 5× 0.34 mm <sup>2</sup>  |
| AWG                                       | similar to AWG 22  |
| Material (wire isolation)                 | PP   |
| Material property (wire isolation)        | CFC-, halogen-, cadmium-, silicone- and lead-free                |
| Shore hardness (wire isolation)           | 70 ±5 D  |
| Wire-Ø incl. isolation                    | 1.25 mm ±5%  |

|                                 |  |
|---------------------------------|--|
| Color/numbering of wires        | br, bk, bl, wh, gnye longitudinally striped  |
| Stranding combination           | 5 wires twisted around central filler  |
| Shield                          | yes  |
| optical shield cover            | min. 80%   |
| Material (jacket)               | PUR  |
| Material property (jacket)      | CFC-, halogen-, cadmium-, silicone- and lead-free, matt, low-adhesion, machine easy to process, abrasion-resistant, hydrolysis and microbial resistant |
| Shore hardness (jacket)         | 90 ±5 A  |
| Outer-Ø (jacket)                | 5.6 mm ±5%   |
| Color (jacket)                  | black  |
| Jacket Color                    | black  |
| chemical resistance             | good resistance to oil, gasoline and chemicals (EN 60811-404)  |
| thermal resistance              | flame retardand UL 1581 Section 1090 (H), CSA FT2 / IEC 60332-2-2  |
| Nominal voltage                 | 300 V AC   |
| Test voltage                    | 2000 V AC  |
| Current load capacity           | to DIN VDE 0298-4  |
| Temperature range (fixed)       | -40...+80 °C   |
| Temperature range (fixed)       | -40...+80 °C, (+90 °C at max. 10 000 operating hours)  |
| Temperature range (mobile)      | -25...+80 °C   |
| 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  |
| Bend radius (moving)            | 10× outer Ø  |
| No. of bending cycles (C-track) | max. 5 Mio. (25 °C)  |
| Travel speed (C-track)          | max. 3.3 m/s   |
| Acceleration (C-track)          | max. 5 m/s <sup>2</sup>  |
| Torsion stress                  | ±30°/m   |
| No. of torsion cycles           | max. 2 Mio. (25 °C)  |
| Torsion speed                   | 35 cycles/min  |
| Material (jacket)               | PUR (UL/CSA)   |

#### Commercial data

|                       |               |
|-----------------------|---------------|
| country of origin     | CZ            |
| customs tariff number | 85444290      |
| EAN                   | 4048879433242 |
| eClass                | 27279218      |
| Packaging unit        | 1.000         |