

M12 male 0° / M12 female 0° A-cod. F&B Pro

TPE-S 4x0.34 bu UL robot+drag ch. 5m

Art.No.: 7024-40021-3210500  
Weight: 0.167 kg  
Country of origin: DE  
Model designation: MSBL0-A-T321\_5.0-S24

Plug Connectors for Food & Beverage

Male straight – female straight

M12 F&B Pro

4-pole

Stainless steel 1.4404 (V4A)

without cable sleeves

IP69K

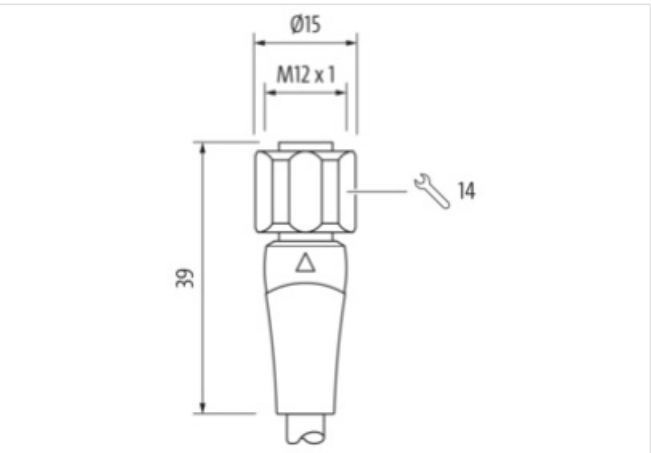
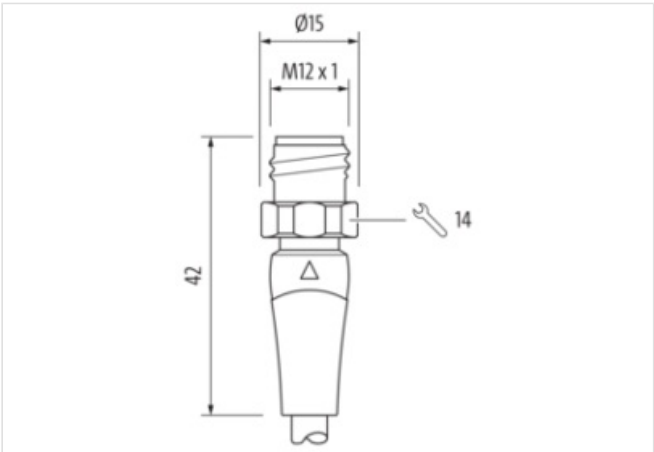
Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

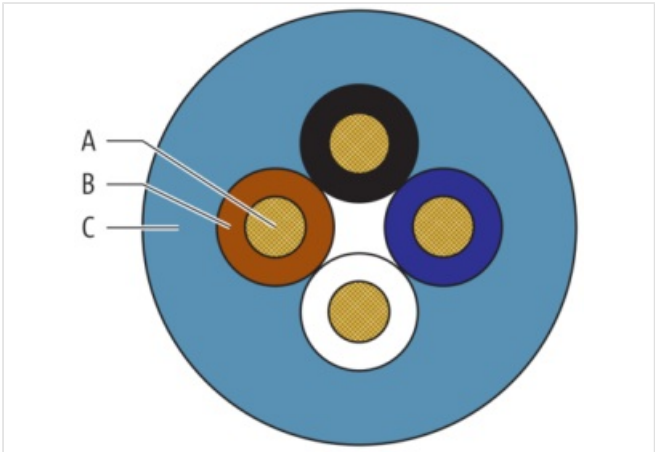
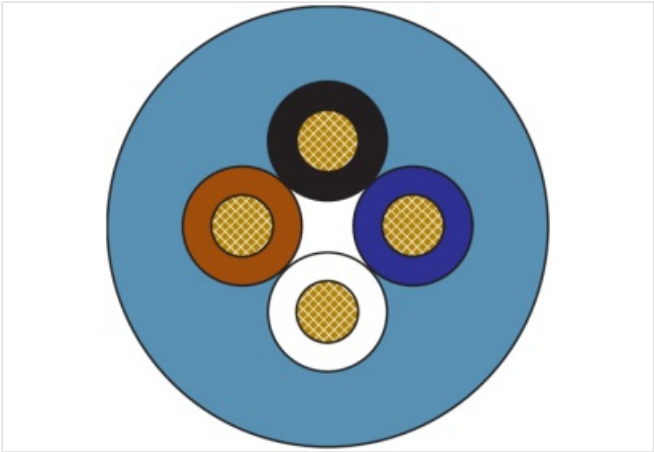
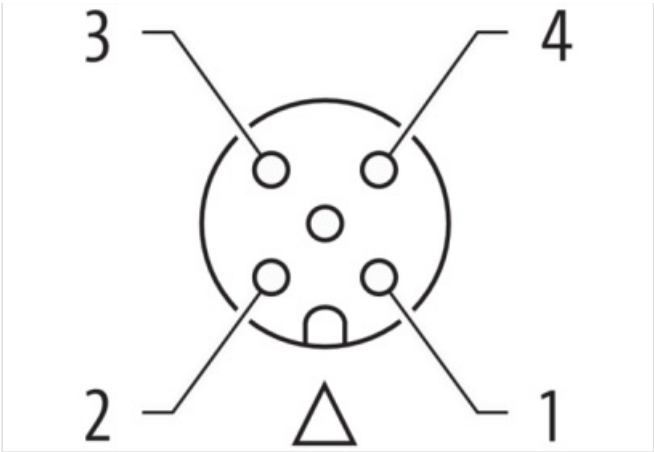
Further cable lengths on request.

Link to Product

Illustration



|   |    |   |
|---|----|---|
| 1 | BN | 1 |
| 2 | WH | 2 |
| 3 | BU | 3 |
| 4 | BK | 4 |



Product may differ from Image



Header

Cable length 5,00 m

Side 1

|                                     |                   |
|-------------------------------------|-------------------|
| Family construction form            | M12               |
| No. of poles                        | 4                 |
| Coding                              | A                 |
| Gender                              | male              |
| Mounting method                     | inserted, screwed |
| Threaded hole                       | M12 x 1           |
| Tightening torque                   | 0,6 Nm            |
| Width across flats                  | SW14              |
| Cable outlet                        | straight          |
| Material                            | PP                |
| Material contact                    | Copper alloy      |
| Coating contact                     | gold plated       |
| Degree of protection (EN IEC 60529) | IP69K, IP68, IP65 |

**Side 2**

|                                     |                   |
|-------------------------------------|-------------------|
| Family construction form            | M12               |
| No. of poles                        | 4                 |
| Coding                              | A                 |
| Gender                              | female            |
| Mounting method                     | inserted, screwed |
| Threaded hole                       | M12 x 1           |
| Tightening torque                   | 0,6 Nm            |
| Width across flats                  | SW14              |
| Cable outlet                        | straight          |
| Material                            | PP                |
| Material contact                    | Copper alloy      |
| Coating contact                     | gold plated       |
| Degree of protection (EN IEC 60529) | IP69K, IP68, IP65 |

**Commercial data**

|                       |   |
|-----------------------|---|
| URL Webshop           | <a href="https://shop.murrelektronik.com/7024-40021-3210500">https://shop.murrelektronik.com/7024-40021-3210500</a> |
| customs tariff number | 85444290  |
| EAN                   | 4048879774642   |
| Packaging unit        | 1   |

**Electrical data | Supply**

|                                    |       |
|------------------------------------|-------|
| Operating voltage AC max.          | 250 V |
| Operating voltage DC max.          | 250 V |
| Current operating per contact max. | 4 A   |

**Diagnostics**

|                       |    |
|-----------------------|----|
| Status indication LED | No |
|-----------------------|----|

**Device protection | Electrical**

|  |                   |
|--|-------------------|
| Additional condition protection degree | inserted, screwed |
| Pollution Degree                       | 3                 |
| Rated surge voltage                    | 2,5 kV            |
| Material group (IEC 60664-1)           | I                 |

**Mechanical data**

|                             |         |
|-----------------------------|---------|
| Contour for corrugated hose | without |
|-----------------------------|---------|

**Mechanical data | Material data**

|                          |                              |
|--------------------------|------------------------------|
| Material housing         | PP                           |
| Material contact carrier | PP                           |
| Color contact carrier    | ice blue                     |
| Locking material         | Stainless steel 1.4404 (V4A) |
| Material gasket          | EPDM                         |

| Mechanical data   Mounting data          |   |
|--|---|
| Mounting method                          | inserted, screwed, Shaking protection   |
| Environmental characteristics   Climatic |   |
| Operating temperature min.               | -30 °C  |
| Operating temperature max.               | 105 °C  |
| Additional condition temperature range   | depending on cable quality  |
| Important installation notes             |   |
| 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. |
| Note on strain relief                    | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.   |
| Conformity                               |   |
| Product standard                         | EN IEC 61076-2-101 (M12), FDA conform   |
| Installation   Cable                     |   |
| Cable identification                     | 321   |
| Amount stranding                         | 1   |
| Stranding                                | Wires   |
| Wire arrangement                         | brown, black, blue, white   |
| Cable weight                             | 27 g/m  |
| Material wire insulation                 | PP  |
| Amount wires                             | 4   |
| Outer diameter insulation                | 1,27 mm   |
| Outer diameter tolerance core insulation | ± 0,02 mm   |
| Shore hardness wire insulation           | 64 ± 3 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 mm²  |
| Material conductor wire                  | Stranded copper wire, bare  |
| Conductor type (wire)                    | strand class 6  |
| Outer-diameter (jacket)                  | 4,7 mm  |
| Tolerance outer diameter (sheath)        | ± 5 %   |
| Material jacket                          | TPE-S   |
| Shore hardness jacket                    | 47 ± 5 Shore D  |
| Freedom from ingredients (jacket)        | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  |
| Material property (jacket)               | abrasion-resistant, low adhesion, good machinability, matte   |
| Conductor resistance (wire)              | 58 Ω/km @ 20 °C   |
| Nominal voltage max.                     | 300 V   |
| Withstand voltage (wire - wire)          | 3 kV @ 60 s   |
| Current load capacity (standard)         | to DIN VDE 0298-4   |
| Current load capacity max. (wire)        | 4,8 A   |
| Operating temperature min. (static)      | -40 °C  |
| Operating temperature max. (static)      | 105 °C  |
| Operating temperature min. (dynamic)     | -25 °C  |
| Operating temperature max. (dynamic)     | 105 °C  |
| Operating temperature min. (drag chain)  | -25 °C  |
| Operating temperature max. (drag chain)  | 105 °C  |
| Other resistances                        | resistant to hydrolysis, resistant to microbes  |
| Bending radius (fixed)                   | 5 × Outer diameter  |
| Bending radius (dynamic)                 | 10 × Outer diameter   |
| No. of bending cycles (C-track)          | 4 Mio. @ 25 °C  |
| Traversing distance (C-track)            | 10 m @ 25 °C   horizontal   |
| Travel speed (C-track)                   | 3 m/s @ 25 °C   |
| Acceleration (C-track)                   | 10 m/s² @ 25 °C   |

The information in this Product-PDF has been compiled with the utmost care.

Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2026-01-13

Murrelektronik Inc. | 1327 Northbrook Parkway, Suite 460 | Suwanee, GA 30024 | Fon +1 770 497-9292 | Fax +1 770 497-9391 | shop@murrinc.com | shop.murrinc.com

|                       |               |
|-----------------------|---------------|
| No. of torsion cycles | 2 Mio.        |
| Torsion stress        | $\pm 180$ °/m |
| Torsion speed         | 35 cycles/min |