

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

TPE-S 0.5+0.25 shielded bu UL robot+drag ch. 1m

Art.No.: 7024-46041-5230100

Weight: 0.104 kg

Country of origin: DE

Model designation: MSBL0-A-6p2\_523\_1.0-ZE-S24

### Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available [on request](#)

If you are missing technical information? Please feel free to use our [dictionary](#) to find more technical details.

### Product details:

Plug Connectors for Food & Beverage

Male straight – female straight

M12 F&B Pro

6-pole

Stainless steel 1.4404 (V4A)

without cable sleeves

IP69K

Cube67

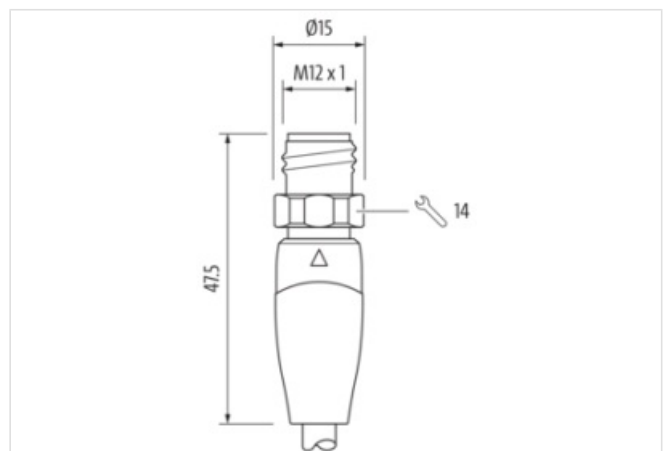
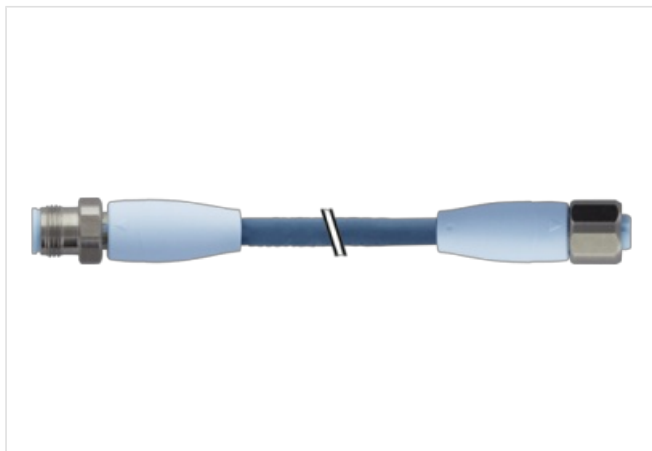
Plastic housings with good resistance against chemicals and oils.

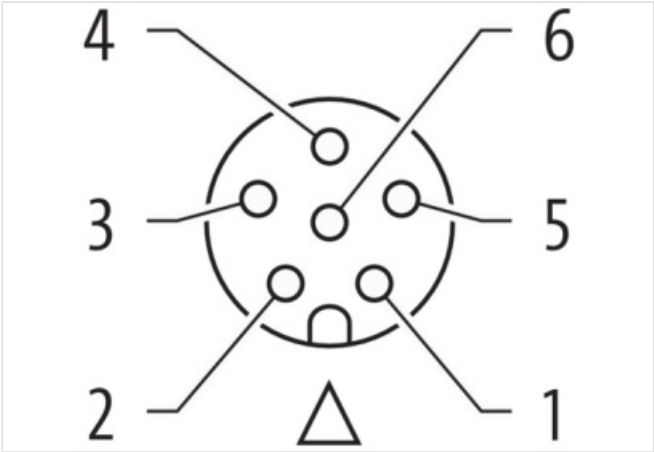
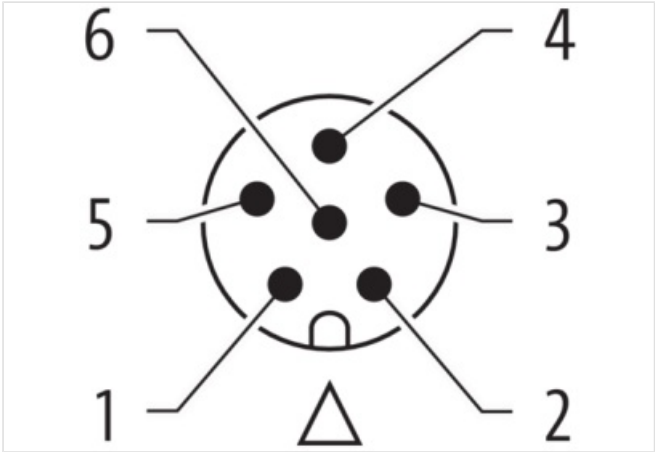
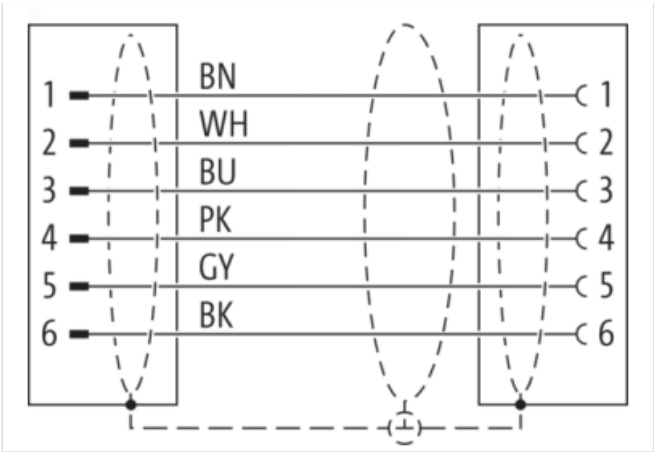
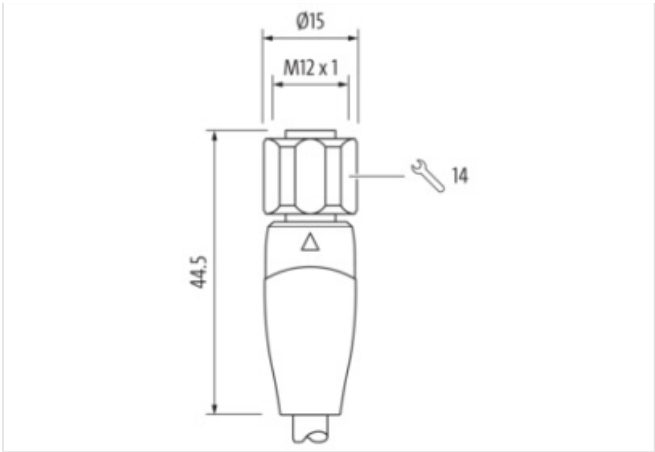
The resistance to aggressive media should be individually tested for your application. Further details on request.

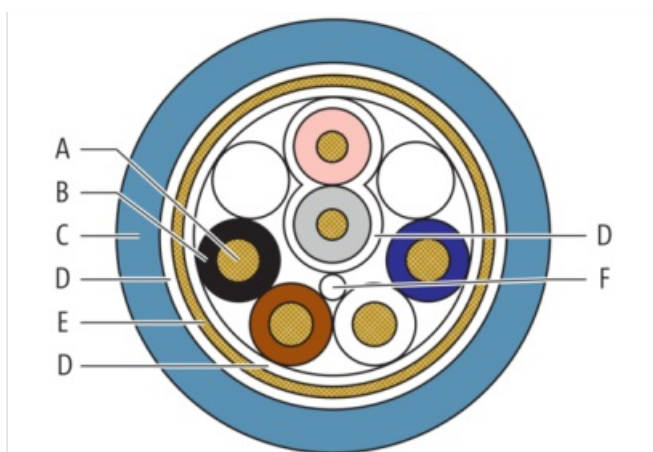
Further cable lengths on request.

### Link to Product

#### Illustration







Product may differ from Image

**Header**

Cable length 1,00 m

**Side 1**

|                                     |                   |
|-------------------------------------|-------------------|
| Family construction form            | M12               |
| No. of poles                        | 6                 |
| 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 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                        | 6                 |
| 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 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/7024-46041-5230100">https://shop.murrelektronik.com/7024-46041-5230100</a> |
| customs tariff number | 85444290  |
| EAN                   | 4048879791892   |

|                |   |
|----------------|---|
| Packaging unit | 1 |
|----------------|---|

**Electrical data | Supply**

|                                    |      |
|------------------------------------|------|
| Operating voltage AC max.          | 30 V |
| Operating voltage DC max.          | 30 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                    | 0,8 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                     | 523                                     |
| Function cable                           | Hybrid, Signal, Data                    |
| Amount stranding                         | 1                                       |
| Stranding                                | Wires                                   |
| Stranding (type 2)                       | Wires                                   |
| Cable shielding (type)                   | copper braid, tinned                    |
| Cable shielding (coverage)               | 80 %                                    |
| Banding                                  | Fleece                                  |
| Filler                                   | Yes                                     |
| Wire arrangement                         | gray, pink, (blue, white, brown, black) |
| Cable weight                             | 75 g/m                                  |
| Material wire insulation                 | PP                                      |
| Amount wires                             | 4                                       |
| Outer diameter insulation                | 1,5 mm                                  |
| Outer diameter tolerance core insulation | ± 0,05 mm                               |
| Shore hardness wire insulation           | 62 ± 1 Shore D                          |
| Ingredient freeness wire insulation      | lead-free, CFC-free, halogen-free       |
| Amount strands (wire)                    | 28                                      |

|   |                                   |
|---|-----------------------------------|
| Diameter of single wires                          | 0,15 mm                           |
| Conductor crosssection (wire)                     | 0,5 mm <sup>2</sup>               |
| Material conductor wire                           | Stranded copper wire, bare        |
| Conductor type (wire)                             | strand class 6                    |
| Material wire insulation (type 2)                 | PP                                |
| Outer diameter wire insulation (type 2)           | 1,35 mm                           |
| Tolerance outer diameter wire insulation (type 2) | ± 0,05 mm                         |
| Shore hardness wire insulation (type 2)           | 62 ± 1 Shore D                    |
| Ingredient freeness wire insulation (type 2)      | lead-free, CFC-free, halogen-free |
| Amount wires (type 2)                             | 2                                 |
| Amount strands wire (type 2)                      | 32                                |
| Diameter of single wires (type 2)                 | 0,1 mm                            |
| Conductor crosssection wire (type 2)              | 0,25 mm <sup>2</sup>              |
| Material conductor wire (type 2)                  | Stranded copper wire, bare        |
| Wire conductor type (type 2)                      | strand class 6                    |
| Outer-diameter (jacket)                           | 7,9 mm                            |
| Tolerance outer diameter (sheath)                 | ± 5 %                             |
| Material jacket                                   | TPE-S                             |
| Shore hardness jacket                             | 47 ± 5 Shore D                    |
| Freedom from ingredients (jacket)                 | lead-free, CFC-free, halogen-free |
| Conductor resistance (wire)                       | 39 Ω/km @ 20 °C                   |
| Conductor resistance (wire type 2)                | 78 Ω/km @ 20 °C                   |
| Electric inductivity line constant                | 0,58 pF/km                        |
| Electrical capacity line constant (wire - wire)   | 55 pF/km                          |
| Electrical capacity line constant (wire - shield) | 105 pF/km                         |
| Nominal voltage max.                              | 300 V                             |
| Withstand voltage (wire - wire)                   | 3 kV @ 60 s                       |
| Withstand voltage (wire - jacket)                 | 3 kV @ 60 s                       |
| Withstand voltage (wire - shield)                 | 3 kV @ 60 s                       |
| Current load capacity (standard)                  | to DIN VDE 0298-4                 |
| Current load capacity max. (wire)                 | 7,2 A                             |
| Current load capacity max. Wire (type 2)          | 4,5 A                             |
| Characteristic impedance                          | 102 Ω                             |
| 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                            |
| Bending radius (fixed)                            | 5 × Outer diameter                |
| Bending radius (dynamic)                          | 10 × Outer diameter               |
| No. of bending cycles (C-track)                   | 4 Mio. @ 20 °C                    |
| Traversing distance (C-track)                     | 10 m @ 20 °C                      |
| Travel speed (C-track)                            | 3 m/s @ 20 °C                     |
| Acceleration (C-track)                            | 10 m/s <sup>2</sup> @ 20 °C       |
| No. of torsion cycles                             | 2 Mio.                            |
| Torsion stress                                    | ± 180 °/m                         |