

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

TPE 5x18AWG ye UL/CSA. ITC/PLTC 1m

Art.No.: 7700-40041-1610100

Weight: 0.126 kg

Country of origin: US

Model designation: MSBL0-A-U161\_1.0

**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:**

USA

M12 – M12, 5-pole

Male straight – female straight

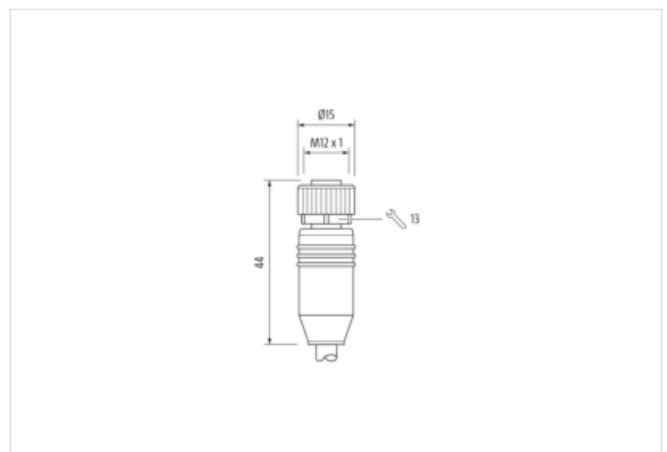
without cable sleeves

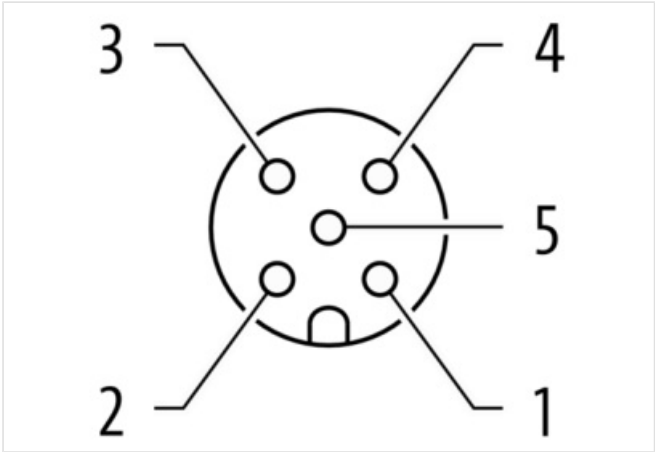
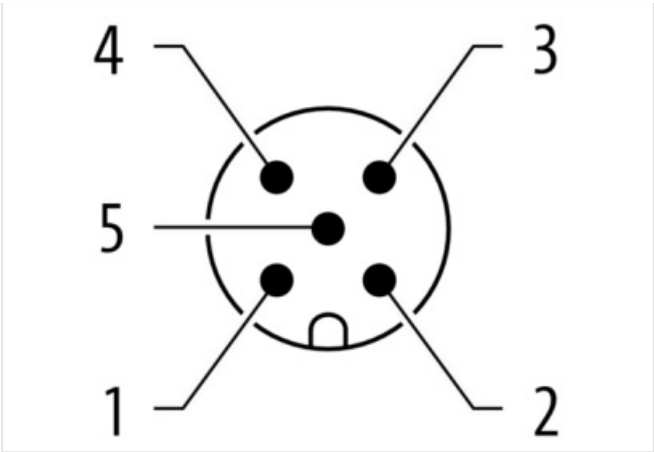
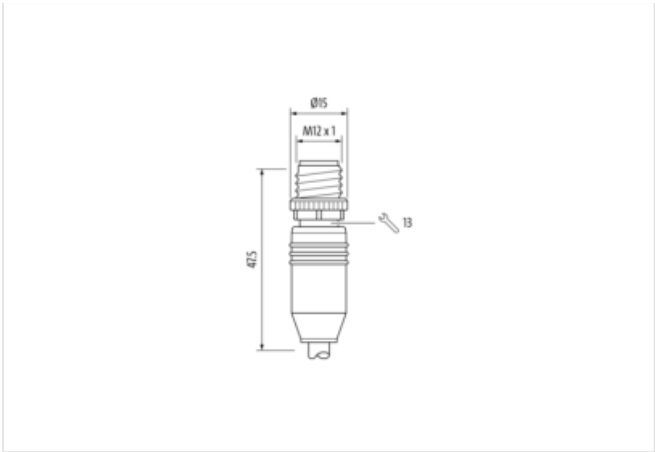
Cable is approved for 600 V

Plastic housings with good resistance against chemicals and oils.

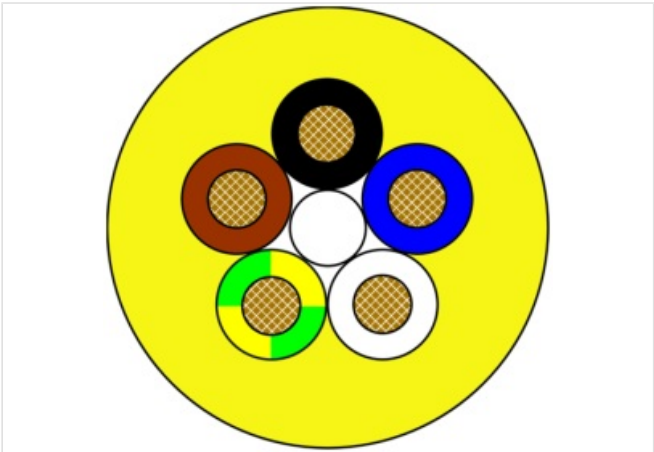
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

**[Link to Product](#)****Illustration**



|   |       |   |
|---|-------|---|
| 1 | BN    | 1 |
| 2 | WH    | 2 |
| 3 | BU    | 3 |
| 4 | BK    | 4 |
| 5 | GN YE | 5 |



Product may differ from Image



Cable length 1,00 m

Side 1

Family construction form M12

|                                     |                   |
|-------------------------------------|-------------------|
| No. of poles                        | 5                 |
| Coding                              | A                 |
| Mounting method                     | inserted, screwed |
| Threaded hole                       | M12 x 1           |
| Tightening torque                   | 0,6 Nm            |
| Width across flats                  | SW13              |
| Degree of protection (EN IEC 60529) | IP67, IP66K, IP65 |

**Side 2**

|                          |                   |
|--------------------------|-------------------|
| Family construction form | M12               |
| No. of poles             | 5                 |
| Coding                   | A                 |
| Mounting method          | inserted, screwed |
| Threaded hole            | M12 x 1           |
| Tightening torque        | 0,6 Nm            |
| Width across flats       | SW13              |

**Commercial data**

|                          |                                                                                                                     |
|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| URL Webshop              | <a href="https://shop.murrelektronik.com/7700-40041-1610100">https://shop.murrelektronik.com/7700-40041-1610100</a> |
| GTIN                     | 4048879531405                                                                                                       |
| EU-Customs tariff number | 85444290                                                                                                            |
| US-Customs tariff number | 8544429090                                                                                                          |
| ECLASS-6.0               | 27279218                                                                                                            |
| ECLASS-6.1               | 27279218                                                                                                            |
| ECLASS-7.0               | 27279218                                                                                                            |
| ECLASS-7.1               | 27279218                                                                                                            |
| ECLASS-8.0               | 27279218                                                                                                            |
| ECLASS-8.1               | 27279218                                                                                                            |
| ECLASS-9.0               | 27060311                                                                                                            |
| ECLASS-9.1               | 27060311                                                                                                            |
| ECLASS-10.0.1            | 27060311                                                                                                            |
| ECLASS-10.1              | 27060311                                                                                                            |
| ECLASS-11.0              | 27060311                                                                                                            |
| ECLASS-11.1              | 27060311                                                                                                            |
| ECLASS-12.0              | 27060311                                                                                                            |
| ECLASS-13.0              | 27060311                                                                                                            |
| ECLASS-14.0              | 27060311                                                                                                            |
| ETIM-5.0                 | EC001855                                                                                                            |
| ETIM-6.0                 | EC001855                                                                                                            |
| ETIM-7.0                 | EC001855                                                                                                            |
| ETIM-8.0                 | EC001855                                                                                                            |
| ETIM-9.0                 | EC001855                                                                                                            |
| ETIM-10.0                | EC001855                                                                                                            |
| customs tariff number    | 85444290                                                                                                            |
| EAN                      | 4048879531405                                                                                                       |
| Packaging unit           | 1                                                                                                                   |

**Electrical data | Supply**

|                                    |       |
|------------------------------------|-------|
| Operating voltage AC max.          | 125 V |
| Operating voltage DC max.          | 125 V |
| Current operating per contact max. | 4 A   |
| Operating voltage AC (UL-listed)   | 30 V  |
| Operating voltage DC (UL-listed)   | 30 V  |

**Device protection | Electrical**

|                                        |                   |
|----------------------------------------|-------------------|
| Additional condition protection degree | inserted, screwed |
| Pollution Degree                       | 3                 |

|                                                 |                                                                                                                                                       |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated surge voltage                             | 1,5 kV                                                                                                                                                |
| Material group (IEC 60664-1)                    | I                                                                                                                                                     |
| <b>Mechanical data</b>                          |                                                                                                                                                       |
| Contour for corrugated hose                     | without                                                                                                                                               |
| <b>Mechanical data   Material data</b>          |                                                                                                                                                       |
| housing                                         | PUR                                                                                                                                                   |
| Locking material                                | Zinc die-casting                                                                                                                                      |
| Coating locking                                 | Nickeled                                                                                                                                              |
| <b>Mechanical data   Mounting data</b>          |                                                                                                                                                       |
| Mounting method                                 | inserted, screwed, Shaking protection                                                                                                                 |
| <b>Environmental characteristics   Climatic</b> |                                                                                                                                                       |
| Operating temperature min.                      | -30 °C                                                                                                                                                |
| Operating temperature max.                      | 85 °C                                                                                                                                                 |
| Additional condition temperature range          | depending on cable quality                                                                                                                            |
| <b>Important installation notes</b>             |                                                                                                                                                       |
| 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.                                                   |
| <b>Conformity</b>                               |                                                                                                                                                       |
| Product standard                                | EN IEC 61076-2-101 (M12)                                                                                                                              |
| <b>Installation   Cable</b>                     |                                                                                                                                                       |
| Cable identification                            | 161                                                                                                                                                   |
| Cable weight                                    | 94 g/m                                                                                                                                                |
| UL AWM Style                                    | 20626 / 10708                                                                                                                                         |
| Stranding                                       | 1 × 5 wires around core filler twisted                                                                                                                |
| Banding                                         | Fleece optional                                                                                                                                       |
| Filler                                          | Yes                                                                                                                                                   |
| Wire arrangement                                | BN, BK, BU, WH, GNYE                                                                                                                                  |
| Material wire insulation                        | PVC                                                                                                                                                   |
| Amount wires                                    | 5                                                                                                                                                     |
| Outer diameter insulation                       | 1.93 mm ± 0.05 mm                                                                                                                                     |
| Conductor crosssection (wire)                   | 18 AWG                                                                                                                                                |
| Material conductor wire                         | Stranded copper wire, bare                                                                                                                            |
| Core construction (wire)                        | 19 x 30 AWG                                                                                                                                           |
| Ingredient freeness wire insulation             | lead-free, CFC-free                                                                                                                                   |
| Material jacket                                 | TPE                                                                                                                                                   |
| Outer-diameter (jacket)                         | 7.75 mm ± 5 %                                                                                                                                         |
| Jacket Color                                    | yellow / RAL 1021                                                                                                                                     |
| Freedom from ingredients (jacket)               | lead-free, CFC-free, halogen-free                                                                                                                     |
| Conductor resistance (wire)                     | 22.5 Ω/km @ 20 °C                                                                                                                                     |
| Nominal voltage max.                            | 600 V                                                                                                                                                 |
| Withstand voltage (wire - wire)                 | 4 kV @ 60 s                                                                                                                                           |
| Withstand voltage (wire - jacket)               | 4 kV @ 60 s                                                                                                                                           |
| Current load capacity max. (wire)               | 9 A                                                                                                                                                   |
| Current load capacity (standard)                | to DIN VDE 0298-4                                                                                                                                     |
| Operating temperature (static)                  | -40 °C ... 105 °C                                                                                                                                     |
| Operating temperature (dynamic)                 | -20 °C ... 90 °C                                                                                                                                      |
| Flame resistance                                | CSA FT4                                                                                                                                               |
| Oil resistance                                  | UL 1277 (Oil Res II)                                                                                                                                  |
| UV resistance                                   | UL 444 § 7.22                                                                                                                                         |
| Other resistances                               | resistant to welding sparks                                                                                                                           |

|                                 |                             |
|---------------------------------|-----------------------------|
| Notes                           | application-related testing |
| Bending radius (fixed)          | 10 × Outer diameter         |
| Bending radius (dynamic)        | 15 × Outer diameter         |
| No. of bending cycles (C-track) | 10 Mio. @ 25 °C             |
| No. of torsion cycles           | 3 Mio.                      |
| Torsion stress                  | ± 180 °/m                   |