

**M8 male 90° / M12 female 0° A-cod.**

PVC 4x0.25 gy UL/CSA 2m

Art.No.: 7000-88311-2110200

Weight: 0.081 kg

Country of origin: CZ

Model designation: MSBL0-I-T211\_2.0

**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:**

Male 90° – female straight

M8 – M12, 4-pole

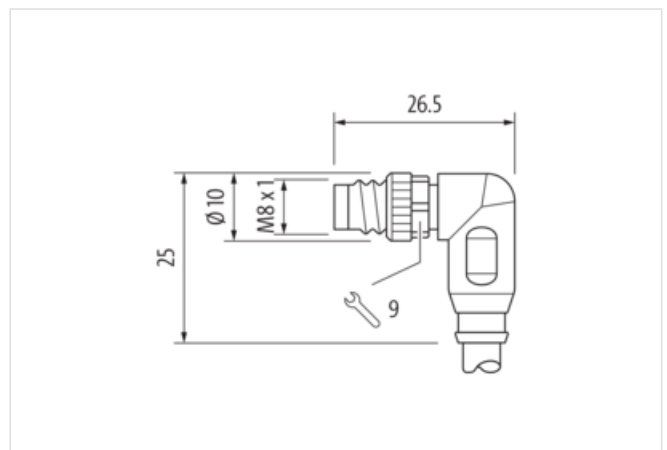
A-coded

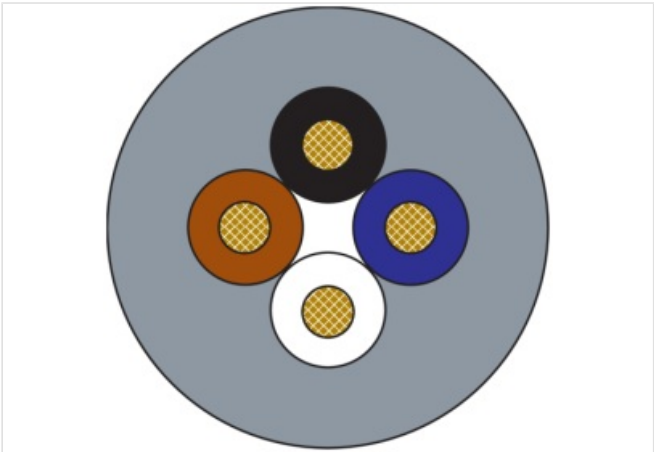
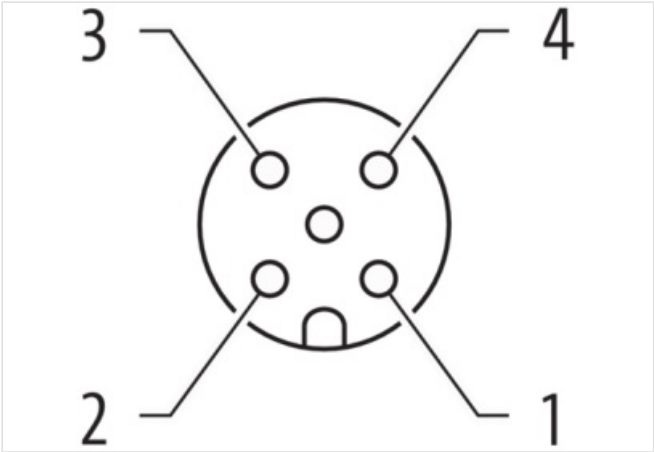
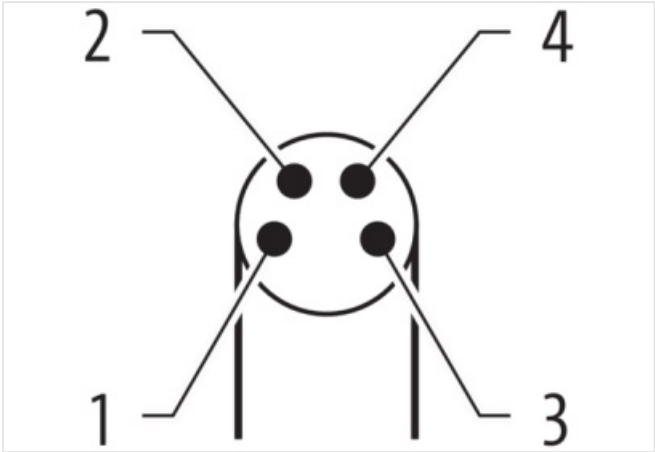
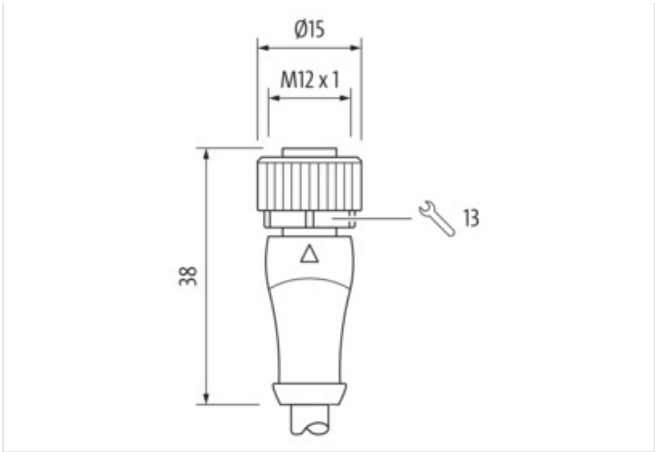
Art-No. 7005 - M12/M8 Lite - (plastic hexagonal screw) on request

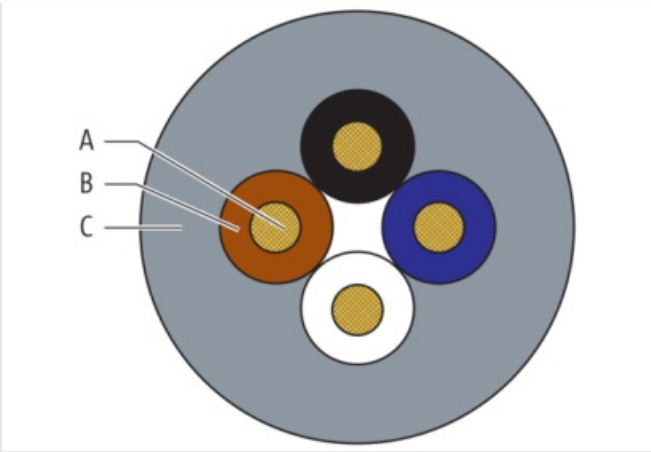
Further cable lengths on request.

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.

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





Product may differ from Image



| Header                                    |                                                                                                                     |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Material short text                       | MSBL0-I-T211_2.0                                                                                                    |
| Cable length                              | 2,00 m                                                                                                              |
| Side 1                                    |                                                                                                                     |
| Family construction form                  | M8                                                                                                                  |
| No. of poles                              | 4                                                                                                                   |
| Coding                                    | A                                                                                                                   |
| Mounting method                           | inserted, screwed                                                                                                   |
| Threaded hole                             | M8 x 1                                                                                                              |
| Tightening torque                         | 0,4 Nm                                                                                                              |
| Width across flats                        | SW9                                                                                                                 |
| suitable for corrugated tube (internal Ø) | 6,5 mm                                                                                                              |
| Material contact                          | Copper alloy                                                                                                        |
| Coating contact                           | gold plated                                                                                                         |
| Side 2                                    |                                                                                                                     |
| Family construction form                  | M12                                                                                                                 |
| No. of poles                              | 4                                                                                                                   |
| Coding                                    | A                                                                                                                   |
| Mounting method                           | inserted, screwed                                                                                                   |
| Threaded hole                             | M12 x 1                                                                                                             |
| Tightening torque                         | 0,6 Nm                                                                                                              |
| Width across flats                        | SW13                                                                                                                |
| suitable for corrugated tube (internal Ø) | 10 mm                                                                                                               |
| Material contact                          | Copper alloy                                                                                                        |
| Coating contact                           | gold plated                                                                                                         |
| Commercial data                           |                                                                                                                     |
| URL Webshop                               | <a href="https://shop.murrelektronik.com/7000-88311-2110200">https://shop.murrelektronik.com/7000-88311-2110200</a> |
| GTIN                                      | 4048879121187                                                                                                       |
| 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      |
| customs tariff number | 85444290      |
| EAN                   | 4048879121187 |
| Packaging unit        | 1             |

#### Electrical data | Supply

|                                    |      |
|------------------------------------|------|
| Operating voltage AC               | 50 V |
| Operating voltage DC               | 60 V |
| Current operating per contact max. | 4 A  |

#### Diagnostics

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

#### Device protection | Electrical

|                                        |                         |
|----------------------------------------|-------------------------|
| Degree of protection (EN IEC 60529)    | IP67, IP68, IP66K, IP65 |
| Additional condition protection degree | inserted, screwed       |
| Pollution Degree                       | 3                       |
| Rated surge voltage                    | 1,5 kV                  |
| Material group (IEC 60664-1)           | I                       |

#### Mechanical data | Material data

|                  |                  |
|------------------|------------------|
| Material housing | PUR              |
| Locking material | Zinc die-casting |
| Coating locking  | Nickeled         |
| Material gasket  | FKM              |

#### Mechanical data | Mounting data

|                 |                                       |
|-----------------|---------------------------------------|
| Mounting method | inserted, screwed, Shaking protection |
|-----------------|---------------------------------------|

#### Environmental characteristics | Climatic

|                                        |                            |
|----------------------------------------|----------------------------|
| Operating temperature min.             | -30 °C                     |
| Operating temperature max.             | 85 °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.                                                   |

#### Installation | Cable

|                      |                           |
|----------------------|---------------------------|
| Cable identification | 211                       |
| Cable Type           | 1                         |
| Amount stranding     | 1                         |
| Stranding            | 4 wires stranded          |
| Wire arrangement     | brown, black, blue, white |
| Cable weight         | 31,6 g/m                  |

|                                          |                                                  |
|------------------------------------------|--------------------------------------------------|
| Material wire insulation                 | PVC                                              |
| Amount wires                             | 4                                                |
| Outer diameter insulation                | 1,25 mm                                          |
| Outer diameter tolerance core insulation | ± 0,05 mm                                        |
| Shore hardness wire insulation           | 45 ± 5 Shore D                                   |
| Material properties wire insulation      | good machinability                               |
| Ingredient freeness wire insulation      | lead-free, cadmium-free, CFC-free, silicone-free |
| Amount strands (wire)                    | 14                                               |
| Diameter of single wires                 | 0,15 mm                                          |
| Conductor crosssection (wire)            | 0,25 mm <sup>2</sup>                             |
| Material conductor wire                  | Stranded copper wire, bare                       |
| Conductor type (wire)                    | Strand class 5                                   |
| Outer-diameter (jacket)                  | 4,8 mm                                           |
| Tolerance outer diameter (sheath)        | ± 5 %                                            |
| Material jacket                          | PVC                                              |
| Shore hardness jacket                    | 85 ± 5 Shore A                                   |
| Freedom from ingredients (jacket)        | lead-free, cadmium-free, CFC-free, silicone-free |
| Material property (jacket)               | good machinability                               |
| Conductor resistance (wire)              | 79 Ω/km @ 20 °C                                  |
| Nominal voltage max.                     | 300 V                                            |
| Withstand voltage (wire - wire)          | 2 kV @ 60 s                                      |
| Withstand voltage (wire - jacket)        | 2 kV @ 60 s                                      |
| Current load capacity (standard)         | to DIN VDE 0298-4                                |
| Current load capacity max. (wire)        | 3,6 A                                            |
| Operating temperature min. (static)      | -30 °C                                           |
| Operating temperature max. (static)      | 80 °C                                            |
| Operating temperature min. (dynamic)     | -5 °C                                            |
| Operating temperature max. (dynamic)     | 80 °C                                            |
| Flame resistance                         | UL 1581 § 1080, CSA FT1, IEC 60332-1-2           |
| Oil resistance                           | good                                             |
| Chemical resistance                      | good                                             |
| Other resistances                        | good resistance to gasoline                      |
| Bending radius (fixed)                   | 5 × Outer diameter                               |
| Bending radius (dynamic)                 | 10 × Outer diameter                              |