

### M8 male 90° A-cod. with cable

PUR 4x0.25 bk UL/CSA+drag ch. 20m

Art.No.: 7000-08031-6312000

Weight: 0.609

Country of origin: CZ

Model designation: MSIL0-T631\_20.0

### 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°

M8, 4-pole

Art-No. 7005 - M8 Lite - (plastic hexagonal screw) on request with cable sleeves

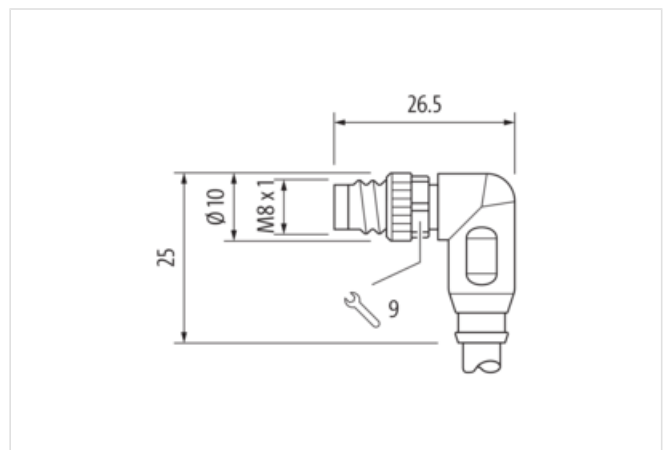
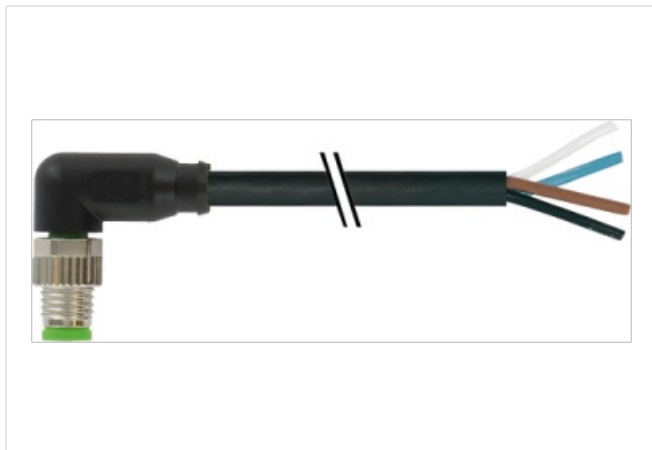
Plastic housings with good resistance against chemicals and oils.

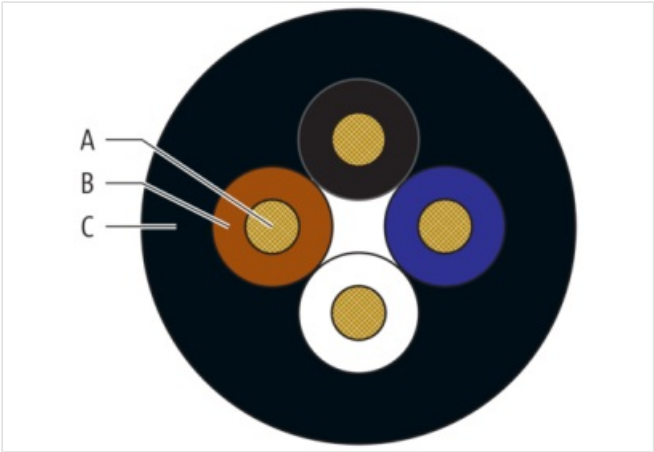
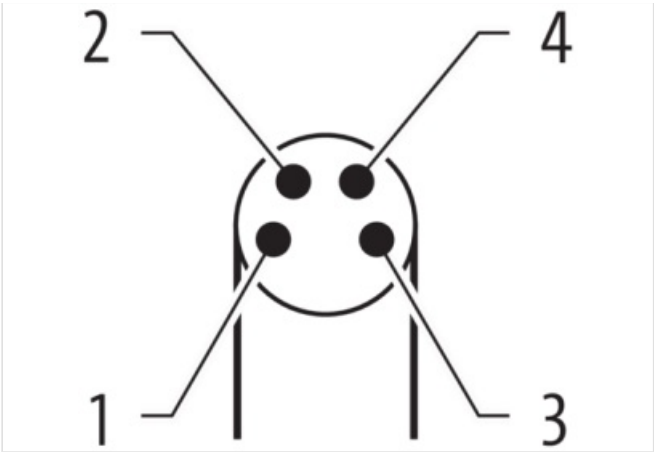
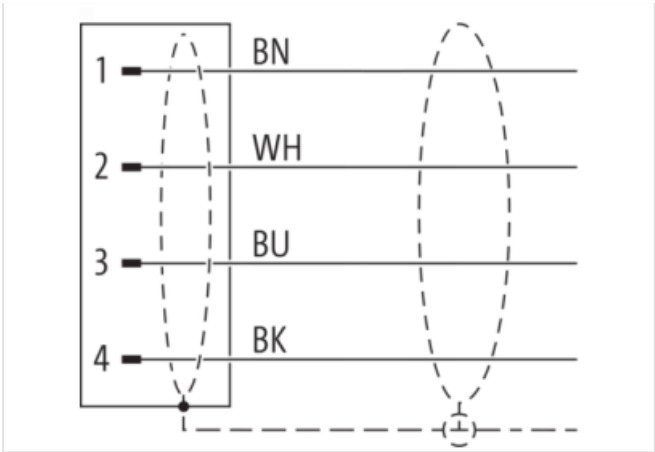
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

### Link to Product

#### Illustration





Product may differ from Image



Header

Material short text MSIL0-T631\_20.0

Cable length 20,00 m

Side 1

|                                           |                   |
|-------------------------------------------|-------------------|
| Family construction form                  | M8                |
| No. of poles                              | 4                 |
| Coding                                    | A                 |
| Gender                                    | male              |
| Mounting method                           | inserted, screwed |
| Thread                                    | M8 x 1            |
| Tightening torque                         | 0.4 Nm            |
| Width across flats                        | SW9               |
| Cable outlet                              | angled            |
| suitable for corrugated tube (internal Ø) | 6.5 mm            |
| Material                                  | PUR               |
| Material contact                          | Copper alloy      |
| Coating contact                           | nickel plated     |
| Degree of protection (EN IEC 60529)       | IP67, IP66K, IP65 |

#### Side 2

|                           |                |
|---------------------------|----------------|
| Family construction form  | free cable end |
| Stripping length (jacket) | 20 mm          |

#### Commercial data

|                       |                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| URL Webshop           | <a href="https://shop.murrelektronik.com/7000-08031-6312000">https://shop.murrelektronik.com/7000-08031-6312000</a> |
| GTIN                  | 4048879567725                                                                                                       |
| 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                   | 4048879567725                                                                                                       |
| Packaging unit        | 1                                                                                                                   |

#### Electrical data | Supply

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

#### Diagnostics

|                       |    |
|-----------------------|----|
| Status indication LED | no |
|-----------------------|----|

#### Installation | Connection

|              |        |
|--------------|--------|
| Mounting set | M8 x 1 |
|--------------|--------|

#### Device protection | Electrical

|                                        |                   |
|----------------------------------------|-------------------|
| 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 screw connection | Brass |
|---------------------------|-------|

|                    |               |
|--------------------|---------------|
| Coating of fitting | nickel plated |
|--------------------|---------------|

|                  |                  |
|------------------|------------------|
| Locking material | Zinc die-casting |
|------------------|------------------|

|                 |          |
|-----------------|----------|
| Coating locking | Nickeled |
|-----------------|----------|

#### Mechanical data | Mounting data

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

#### Environmental characteristics | Climatic

|                            |        |
|----------------------------|--------|
| Operating temperature min. | -25 °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. |
|-----------------------|-----------------------------------------------------------------------------------------------------|

#### Conformity

|                  |                         |
|------------------|-------------------------|
| Product standard | EN/IEC 61076-2-104 (M8) |
|------------------|-------------------------|

#### Installation | Cable

|                      |     |
|----------------------|-----|
| Cable identification | 631 |
|----------------------|-----|

|            |   |
|------------|---|
| Cable Type | 3 |
|------------|---|

|                  |   |
|------------------|---|
| Amount stranding | 1 |
|------------------|---|

|           |       |
|-----------|-------|
| Stranding | Wires |
|-----------|-------|

|              |          |
|--------------|----------|
| Cable weight | 25.3 g/m |
|--------------|----------|

|                          |    |
|--------------------------|----|
| Material wire insulation | PP |
|--------------------------|----|

|              |   |
|--------------|---|
| Amount wires | 4 |
|--------------|---|

|                           |         |
|---------------------------|---------|
| Outer diameter insulation | 1.25 mm |
|---------------------------|---------|

|                                          |           |
|------------------------------------------|-----------|
| Outer diameter tolerance core insulation | ± 0.05 mm |
|------------------------------------------|-----------|

|                                |                |
|--------------------------------|----------------|
| Shore hardness wire insulation | 70 ± 5 Shore D |
|--------------------------------|----------------|

|                                     |                                                                |
|-------------------------------------|----------------------------------------------------------------|
| Ingredient freeness wire insulation | CFC-free, cadmium-free, silicone-free, halogen-free, lead-free |
|-------------------------------------|----------------------------------------------------------------|

|                       |    |
|-----------------------|----|
| Amount strands (wire) | 32 |
|-----------------------|----|

|                          |        |
|--------------------------|--------|
| Diameter of single wires | 0.1 mm |
|--------------------------|--------|

|                               |          |
|-------------------------------|----------|
| Conductor crosssection (wire) | 0.25 mm² |
|-------------------------------|----------|

|                         |                            |
|-------------------------|----------------------------|
| Material conductor wire | Stranded copper wire, bare |
|-------------------------|----------------------------|

|                       |                |
|-----------------------|----------------|
| Conductor type (wire) | strand class 6 |
|-----------------------|----------------|

|                         |        |
|-------------------------|--------|
| Outer-diameter (jacket) | 4.5 mm |
|-------------------------|--------|

|                                   |       |
|-----------------------------------|-------|
| Tolerance outer diameter (sheath) | ± 5 % |
|-----------------------------------|-------|

|                 |     |
|-----------------|-----|
| Material jacket | PUR |
|-----------------|-----|

|                       |                |
|-----------------------|----------------|
| Shore hardness jacket | 90 ± 5 Shore A |
|-----------------------|----------------|

|                                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| Freedom from ingredients (jacket) | CFC-free, cadmium-free, silicone-free, halogen-free, lead-free |
|-----------------------------------|----------------------------------------------------------------|

|                            |                                                             |
|----------------------------|-------------------------------------------------------------|
| Material property (jacket) | matte, good machinability, abrasion-resistant, low adhesion |
|----------------------------|-------------------------------------------------------------|

|                             |                 |
|-----------------------------|-----------------|
| Conductor resistance (wire) | 79 Ω/km @ 20 °C |
|-----------------------------|-----------------|

|                         |       |
|-------------------------|-------|
| Nominal voltage AC max. | 300 V |
|-------------------------|-------|

|                                 |               |
|---------------------------------|---------------|
| Withstand voltage (wire - wire) | 2.5 kV @ 60 s |
|---------------------------------|---------------|

|                                   |               |
|-----------------------------------|---------------|
| Withstand voltage (wire - jacket) | 2.5 kV @ 60 s |
|-----------------------------------|---------------|

|                                  |                   |
|----------------------------------|-------------------|
| Current load capacity (standard) | to DIN VDE 0298-4 |
|----------------------------------|-------------------|

|                                 |       |
|---------------------------------|-------|
| Current load capacity min. wire | 3.6 A |
|---------------------------------|-------|

|                                     |        |
|-------------------------------------|--------|
| Min. operating temperature (static) | -40 °C |
|-------------------------------------|--------|

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| Max. operating temperature (static) | 80 °C / 90 °C @ 10000 h Operation |
|-------------------------------------|-----------------------------------|

|                                         |                                                                             |
|-----------------------------------------|-----------------------------------------------------------------------------|
| Operating temperature min. (dynamic)    | -25 °C                                                                      |
| Operating temperature max. (dynamic)    | 80 °C / 90 °C @ 10000 h Operation                                           |
| Operating temperature min. (drag chain) | -25 °C                                                                      |
| Operating temperature max. (drag chain) | 80 °C / 90 °C @ 10000 h Operation                                           |
| Flame resistance                        | UL 1581 § 1090, CSA FT2, IEC 60332-2-2                                      |
| Oil resistance                          | IEC 60811-404                                                               |
| Chemical resistance                     | good                                                                        |
| Other resistances                       | good resistance to gasoline, resistant to hydrolysis, resistant to microbes |
| Bending radius (fixed)                  | 5 × Outer diameter                                                          |
| Bending radius (dynamic)                | 10 × Outer diameter                                                         |
| No. of bending cycles (C-track)         | 10 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                                                             |
| No. of torsion cycles                   | 2 Mio.                                                                      |
| Torsion stress                          | 180 °C                                                                      |
| Torsion speed                           | 35 cycles/min                                                               |