

M12 male 0° A-cod. with cable

TPE 4x22AWG ye UL/CSA. ITC/PLTC 5m

Art.No.: 7700-12021-U040500

Weight: 0.259 kg

Country of origin: US

Model designation: MSAL0-TU04_5.0

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 straight

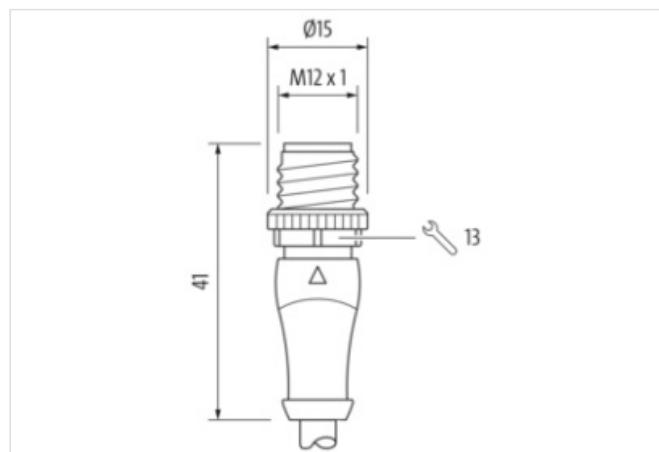
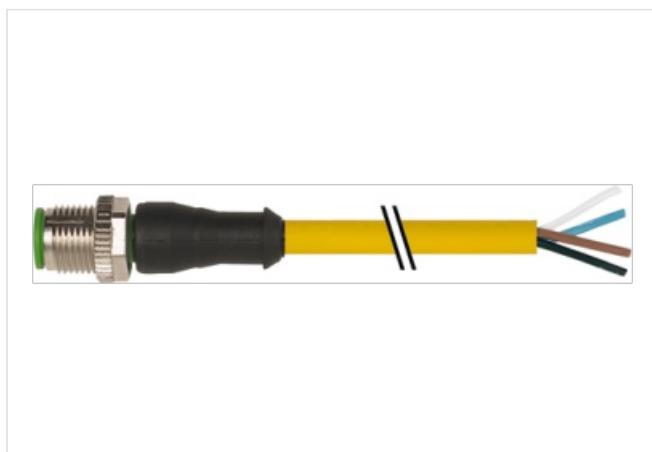
M12, 4-pole

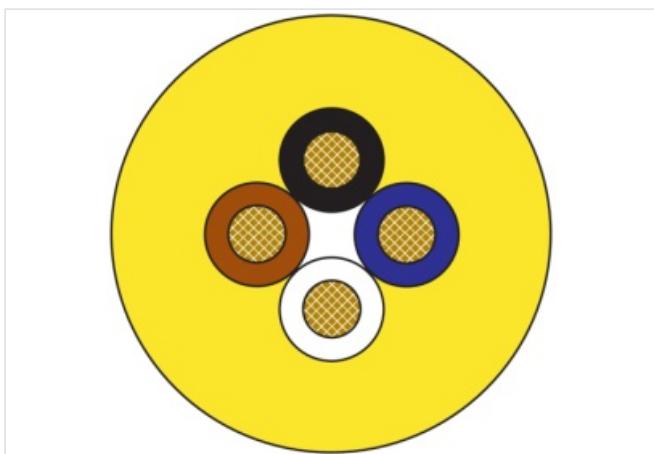
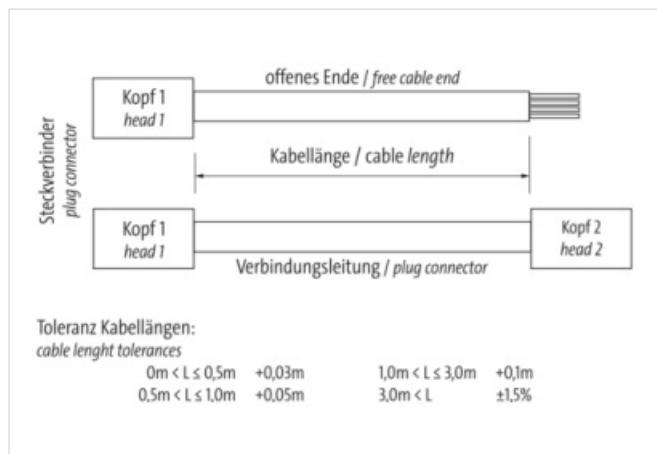
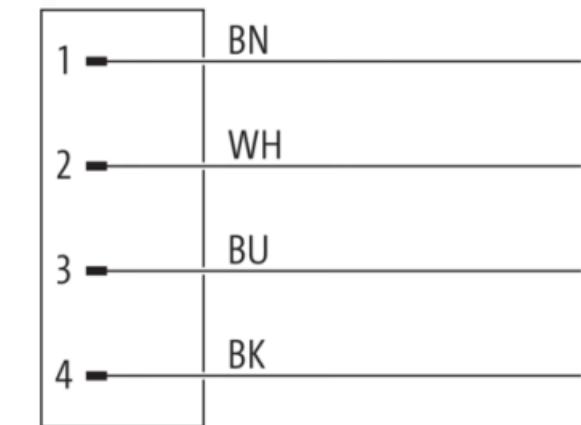
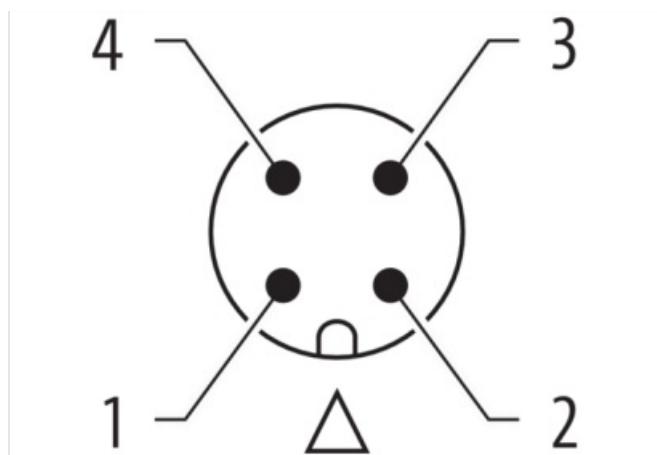
USA

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 | MSAL0-TU04_5.0 |
|---------------------|----------------|

| | |
|--------------|--------|
| Cable length | 5,00 m |
|--------------|--------|

Side 1

| | |
|--------------------------|-----|
| Family construction form | M12 |
|--------------------------|-----|

| | |
|--------------|---|
| No. of poles | 4 |
|--------------|---|

| | |
|--------|---|
| Coding | A |
|--------|---|

| | |
|-----------------|-------------------|
| Mounting method | inserted, screwed |
|-----------------|-------------------|

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|-------------------|--------|
| Tightening torque | 0,6 Nm |
|-------------------|--------|

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|--------------------|------|
| Width across flats | SW13 |
|--------------------|------|

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|---|-------|
| suitable for corrugated tube (internal Ø) | 10 mm |
|---|-------|

| | |
|------------------|--------------|
| Material contact | Copper alloy |
|------------------|--------------|

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|-----------------|-------------|
| Coating contact | gold plated |
|-----------------|-------------|

Side 2

| | |
|--------------------------|----------------|
| Family construction form | free cable end |
|--------------------------|----------------|

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|---------------------------|-------|
| Stripping length (jacket) | 20 mm |
|---------------------------|-------|

Commercial data

| | |
|-------------|---|
| URL Webshop | https://shop.murrelektronik.com/7700-12021-U040500 |
|-------------|---|

| | |
|-----------------------|---------------|
| GTIN | 4048879740685 |
| 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 | 4048879740685 |
| 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 |

Device protection | Electrical

| | |
|-------------------------------------|-------------------|
| Degree of protection (EN IEC 60529) | IP67, IP66K, IP65 |
| Pollution Degree | 3 |
| Rated surge voltage | 2,5 kV |
| Material group (IEC 60664-1) | I |

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 | Attention: 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) |
|------------------|--------------------------|

Installation | Cable

| | |
|--|---------------------------|
| Cable identification | U04 |
| Stranding | 1 x 4 wires stranded |
| Wire arrangement | brown, black, blue, white |
| Cable weight | 45 g/m |
| Material wire insulation | PVC |
| Amount wires | 4 |
| Outer diameter insulation | 1,27 mm |
| Outer diameter tolerance core insulation | ± 0,05 mm |
| Ingredient freeness wire insulation | lead-free, CFC-free |

| | |
|--------------------------------------|-----------------------------------|
| Amount strands (wire) | 19 |
| Diameter of single wires | 34 AWG |
| Conductor crosssection (wire) | 22 AWG |
| Material conductor wire | Stranded copper wire, bare |
| Outer-diameter (jacket) | 5,36 mm |
| Tolerance outer diameter (sheath) | ± 5 % |
| Material jacket | TPE |
| Freedom from ingredients (jacket) | lead-free, CFC-free, halogen-free |
| Conductor resistance (wire) | 46.9 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) | 4,8 A |
| Operating temperature min. (static) | -40 °C |
| Operating temperature max. (static) | 105 °C |
| Operating temperature min. (dynamic) | -20 °C |
| Operating temperature max. (dynamic) | 90 °C |
| Flame resistance | CSA FT4 |
| Oil resistance | good |
| Bending radius (fixed) | 5 × Outer diameter |
| Bending radius (dynamic) | 10 × Outer diameter |
| No. of bending cycles (C-track) | 10 Mio. @ 25 °C |
| No. of torsion cycles | 3 Mio. |
| Torsion stress | ± 180 °/m |