

M12 male 0° A-cod. with cable

TPE 4x22AWG ye UL/CSA. ITC/PLTC 3m

Art.No.: 7700-12021-U040300

Weight: 0.160 kg

Country of origin: US

Model designation: MSAL0-TU04_3.0

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

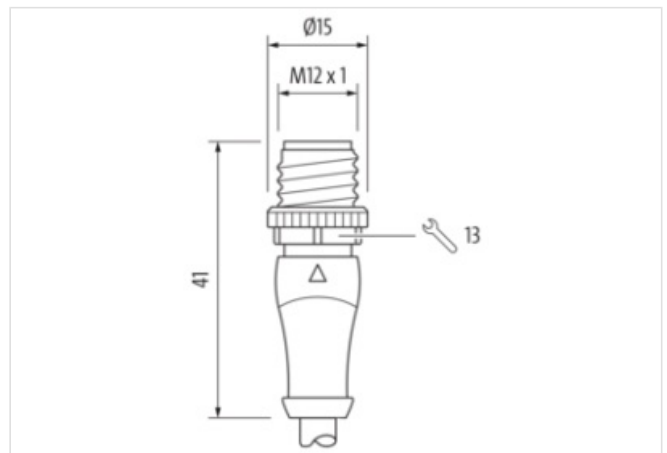
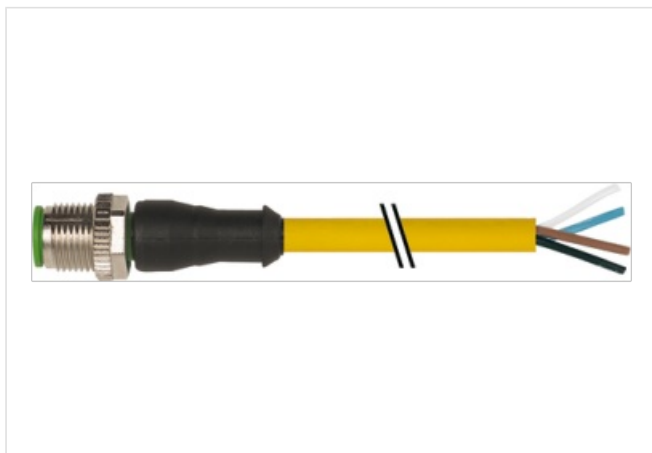
M12, 4-pole

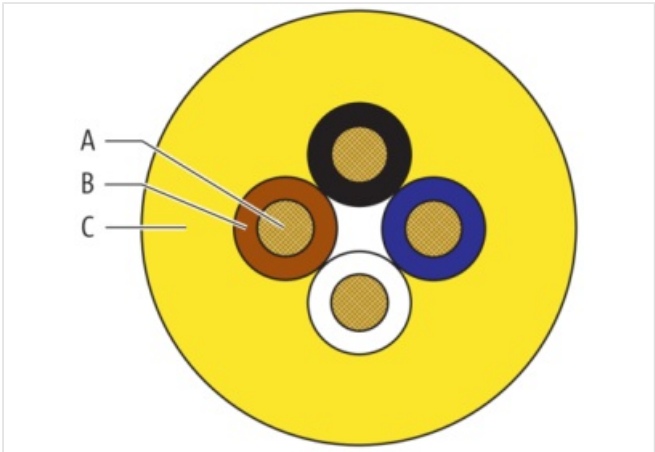
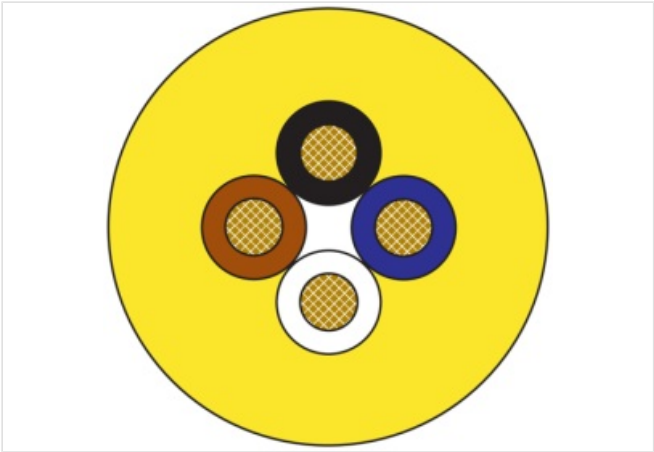
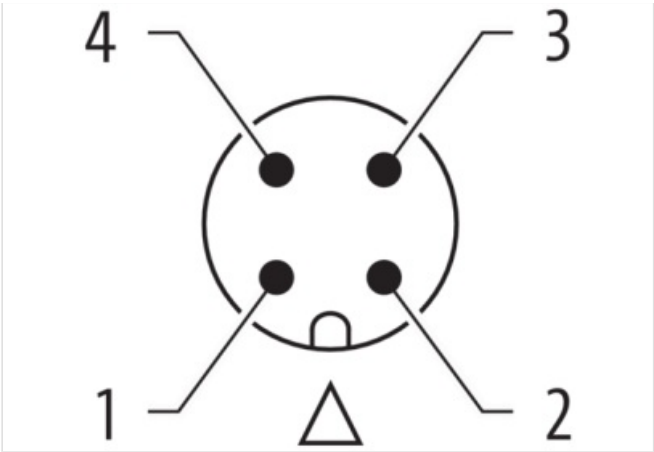
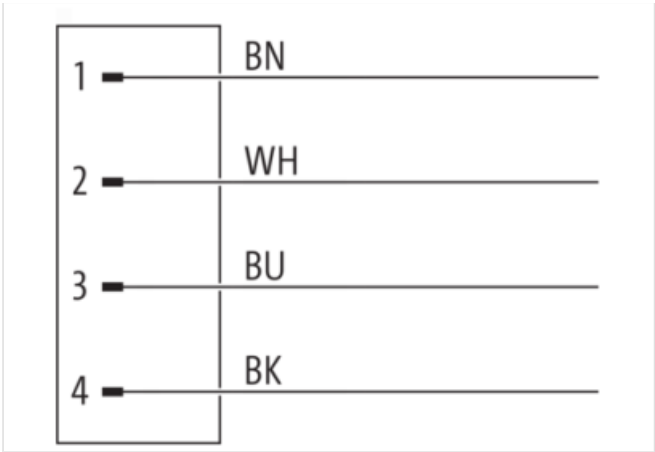
USA

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_3.0

Cable length 3,00 m

Side 1

Family construction form	M12
No. of poles	4
Coding	A
Mounting method	inserted, screwed
Tightening torque	0,6 Nm
Width across flats	SW13
suitable for corrugated tube (internal Ø)	10 mm

Side 2

Stripping length (jacket)	20 mm
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Commercial data

URL Webshop	https://shop.murrelektronik.com/7700-12021-U040300
GTIN	4048879740678
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	4048879740678
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
Amount stranding	1
Stranding	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	CFC-free, lead-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)	CFC-free, halogen-free, lead-free
Conductor resistance (wire)	46.9 Ω/km @ 20 °C
Nominal voltage AC 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 min. 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