

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

PUR 3x0.34 bk UL/CSA+drag ch. 20m

Art.No.: 7000-40001-6332000

Weight: 0.626 kg

Country of origin: DE

Model designation: MSBL0-A-R633\_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 straight – female straight

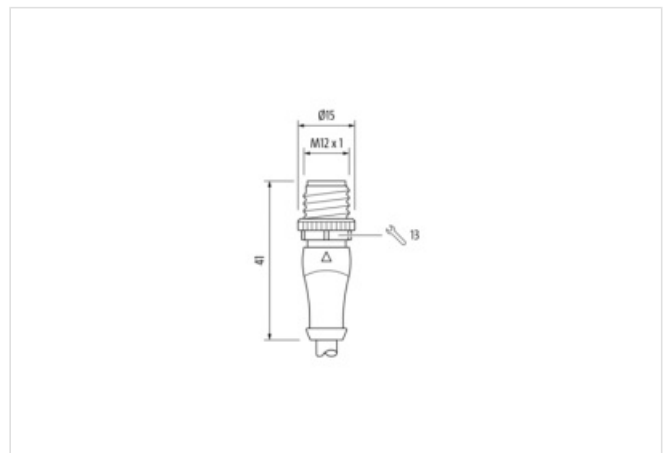
M12 – M12, 3-pole

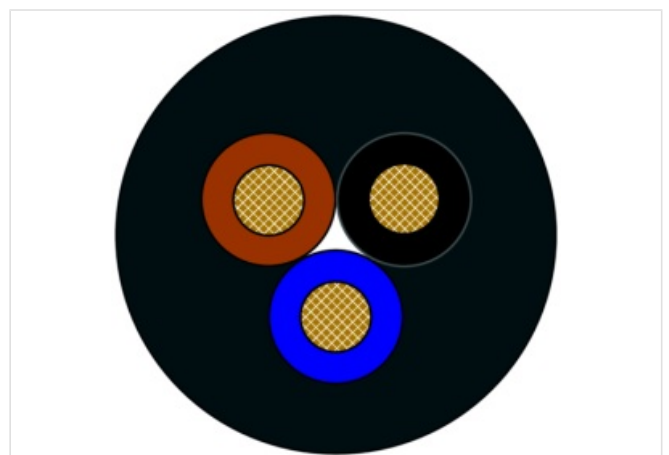
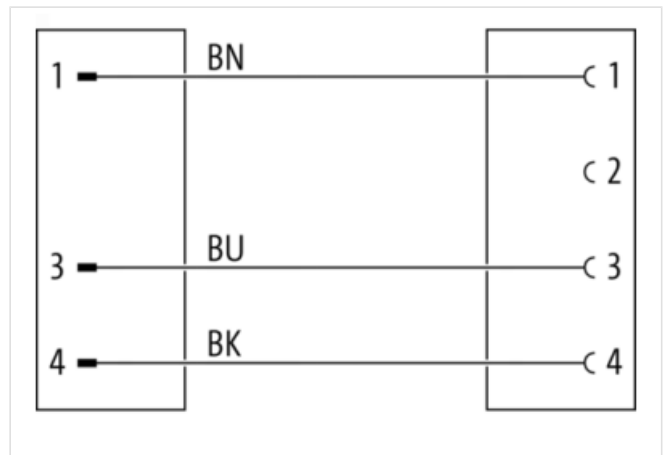
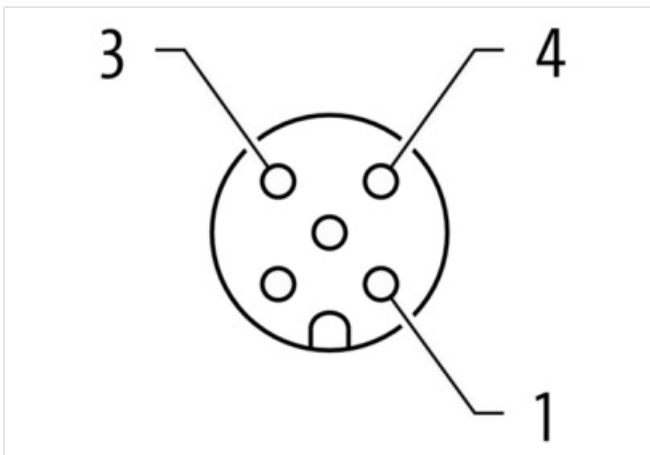
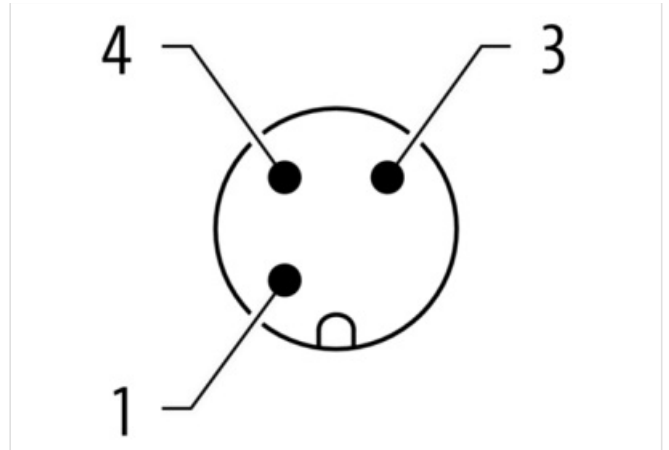
Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request

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.

Further cable lengths on request.

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



Product may differ from Image



Cable length 20,00 m

Side 1

Family construction form M12

No. of poles	3
Coding	A
Gender	male
Mounting method	inserted, screwed
Threaded hole	M12 x 1
Tightening torque	0,6 Nm
Width across flats	SW13
Cable outlet	straight
suitable for corrugated tube (internal Ø)	10 mm
Material	PUR
Material contact	Copper alloy
Coating contact	gold plated
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65

**Side 2**

Family construction form	M12
No. of poles	3
Coding	A
Gender	female
Mounting method	inserted, screwed
Threaded hole	M12 x 1
Tightening torque	0,6 Nm
Width across flats	SW13
Cable outlet	straight
suitable for corrugated tube (internal Ø)	10 mm
Material	PUR
Material contact	Copper alloy
Coating contact	gold plated
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65

**Commercial data**

URL Webshop	<a href="https://shop.murrelektronik.com/7000-40001-6332000">https://shop.murrelektronik.com/7000-40001-6332000</a>
Customs tariff number	85444290
customs tariff number	85444290
EAN	4048879185370
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

**Diagnostics**

Status indication LED	No
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**Installation | Connection**

Mounting set	M12 x 1
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**Device protection | Electrical**

Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	2,5 kV
Material group (IEC 60664-1)	I

**Mechanical data | Material data**

Material screw connection	Zinc die-casting
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. -30 °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 633

Cable Type 3

Stranding 1 × 3 wires stranded

Wire arrangement brown, black, blue

Cable weight 27 g/m

Material wire insulation PP

Amount wires 3

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 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free

Amount strands (wire) 42

Diameter of single wires 0,1 mm

Conductor crosssection (wire) 0,34 mm<sup>2</sup>

Material conductor wire Stranded copper wire, bare

Conductor type (wire) strand class 6

Outer-diameter (jacket) 4,1 mm

Tolerance outer diameter (sheath) ± 5 %

Material jacket PUR

Shore hardness jacket 90 ± 5 Shore A

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

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

Conductor resistance (wire) 57 Ω/km @ 20 °C

Nominal voltage 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 max. (wire) 6 A

Operating temperature min. (static) -40 °C

Operating temperature max. (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/s <sup>2</sup> @ 25 °C
No. of torsion cycles	5 Mio.
Torsion stress	± 360 °/m
Torsion speed	35 cycles/min