

**M12 male 0° / M12 female 0°**

PUR 5x0.75 bk UL/CSA+drag ch. 0.5m

Art.No.: 7999-40041-6380050

Weight: 0.059 kg

Country of origin: CZ

Model designation: MSBL0-A-U638\_0.5

**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

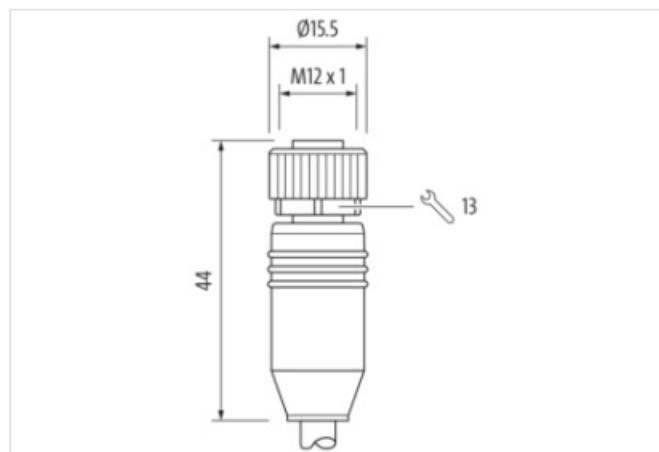
M12 – M12, 5-pole

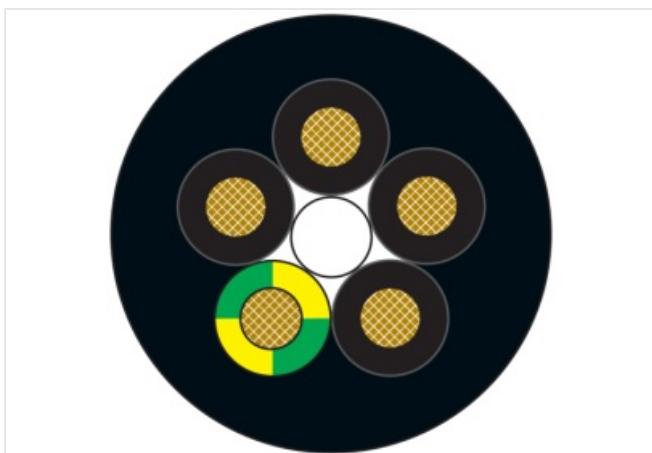
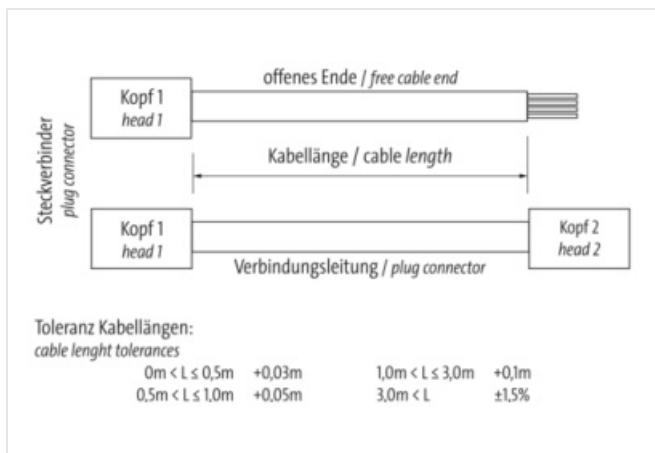
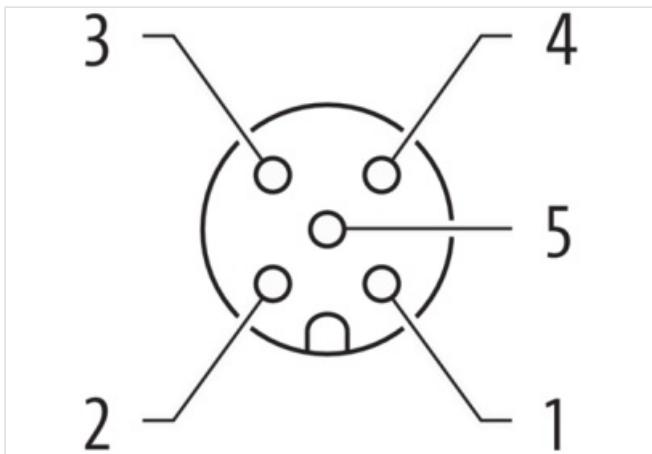
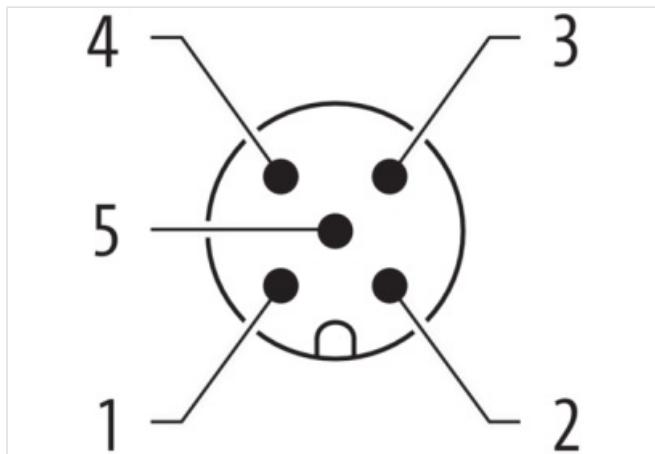
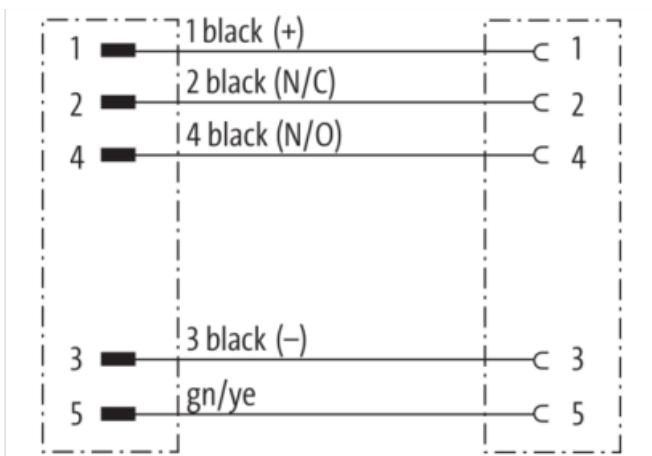
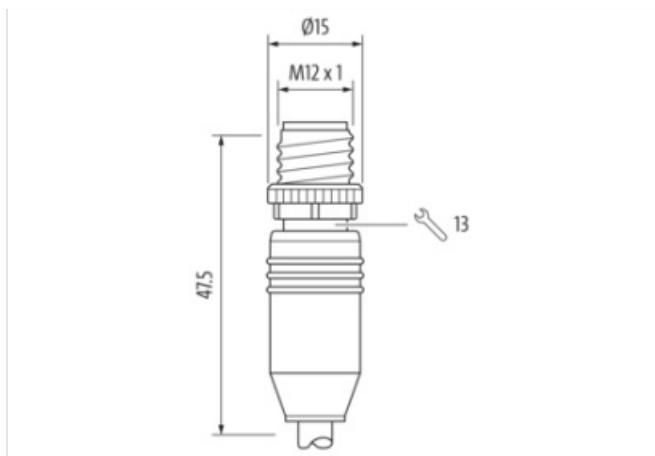
with cable sleeves

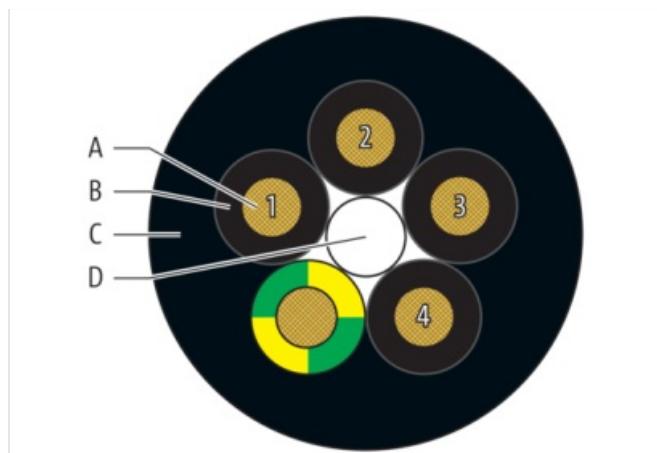
Plastic housings with good resistance against chemicals and oils.

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	MSBL0-A-U638_0.5
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Cable length	0,50 m
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#### Side 1

Family construction form	M12
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No. of poles	5
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Coding	A
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Threaded hole	M12 x 1
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Tightening torque	0,6 Nm
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Width across flats	SW13
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Degree of protection (EN IEC 60529)	IP67
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#### Side 2

Family construction form	M12
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No. of poles	5
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Coding	A
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Threaded hole	M12 x 1
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Tightening torque	0,6 Nm
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#### Commercial data

URL Webshop	<a href="https://shop.murrelektronik.com/7999-40041-6380050">https://shop.murrelektronik.com/7999-40041-6380050</a>
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GTIN	4048879291651
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ECLASS-6.0	27279218
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ECLASS-6.1	27279218
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ECLASS-7.0	27279218
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ECLASS-7.1	27279218
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ECLASS-8.0	27279218
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ECLASS-8.1	27279218
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ECLASS-9.0	27060311
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ECLASS-9.1	27060311
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ECLASS-10.0.1	27060311
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ECLASS-10.1	27060311
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ECLASS-11.0	27060311
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ECLASS-11.1	27060311
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ECLASS-12.0	27060311
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ECCLASS-13.0	27060311
ECCLASS-14.0	27060311
ETIM-5.0	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
EAN	4048879291651
Packaging unit	1

#### Electrical data | Supply

Operating voltage AC max.	125 V
Operating voltage DC max.	125 V
Current operating per contact max.	4 A
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V

#### Diagnostics

Status indication LED	No
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#### 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 housing	PUR
Locking material	Zinc die-casting
Coating locking	Nickelated

#### Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
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#### 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.

#### Conformity

Product standard	EN IEC 61076-2-101 (M12)
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#### Installation | Cable

Cable identification	638
Cable Type	3
Amount stranding	1
Stranding	5 wires around core filler twisted
Filler	Yes
Cable weight	74 g/m
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	1,85 mm
Outer diameter tolerance core insulation	± 0,1 mm
Shore hardness wire insulation	70 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free

Printing color of wire insulation	white (isolation black)
Amount strands (wire)	42
Diameter of single wires	0,15 mm
Conductor crosssection (wire)	0,75 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Outer-diameter (jacket)	7 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)	26 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)	8,4 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	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min