

M12 male 0° / M8 female 0° A-cod.

PUR 3x0.25 bk UL/CSA+robot+drag ch. 2m

Art.No.: 7000-40561-6500200

Weight: 0.062 kg

Country of origin: DE

Model designation: MSFL0-A-R650_2.0-DS

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:

Zinc die casting, save-cover coated

Male straight – female straight

M12 – M8, 3-pole

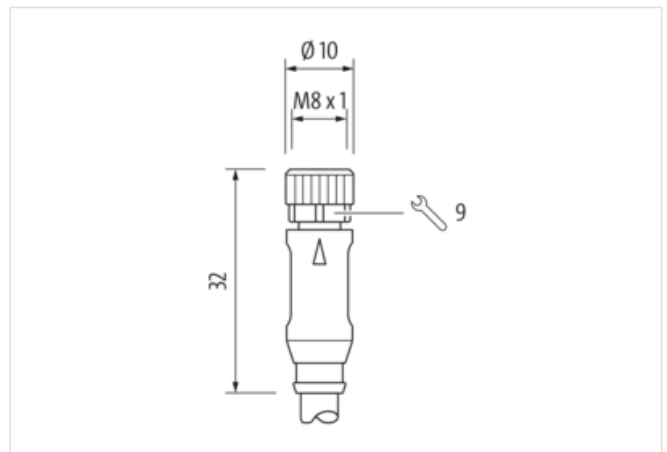
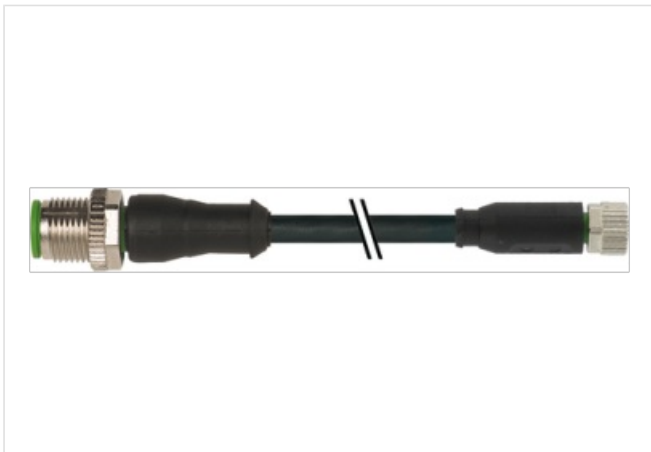
Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request

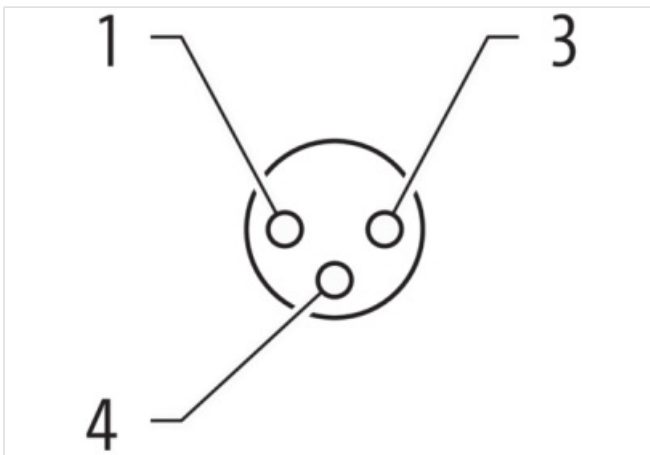
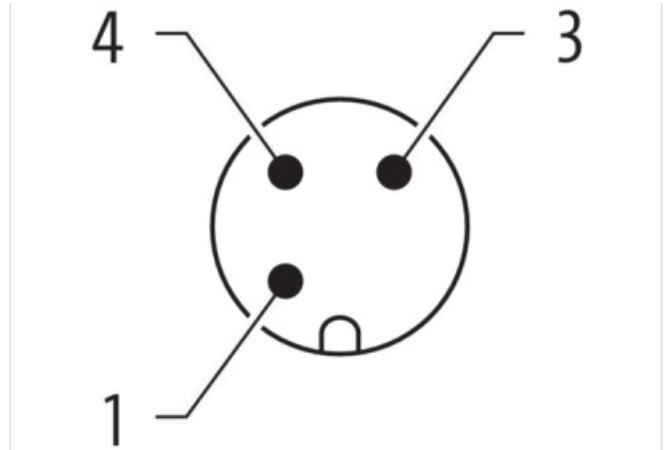
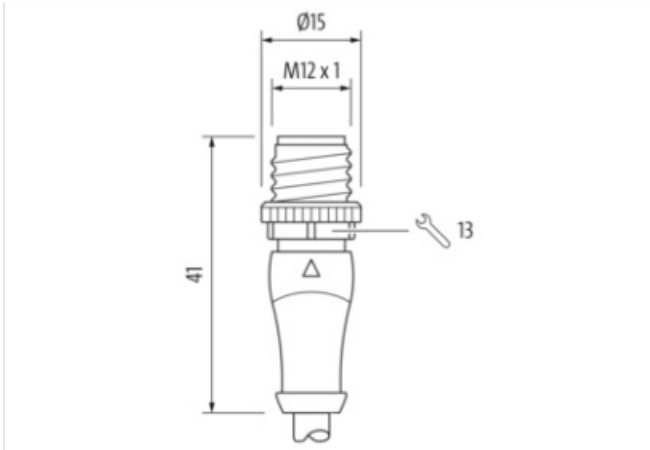
Art-No. 7005 - M8 Lite - (plastic hexagonal screw) on request

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**



1	BN	C 1
		C 2
3	BU	C 3
4	BK	C 4



Product may differ from Image



Commercial data

Material short text	MSFL0-A-R650_2.0-DS
URL Webshop	https://shop.murrelektronik.com/7000-40561-6500200
GTIN	4048879162883

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	4048879162883
Packaging unit	1

Cable length	2,00 m
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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
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65

Side 2

Family construction form	M8
No. of poles	3
Coding	A
Gender	female
Mounting method	inserted, screwed
Threaded hole	M8 x 1
Tightening torque	0,4 Nm
Width across flats	SW9
Cable outlet	straight
suitable for corrugated tube (internal Ø)	6,5 mm
Material	PUR

Electrical data | Supply

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

Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V
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	
Screw connection	Zinc die-casting
Coating of fitting	nickel plated
Locking material	Zinc die-casting
Coating locking	safe-cover coated
Gasket	FKM
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), EN IEC 61076-2-114 (M8)
Installation Cable	
Cable identification	650
Cable Type	5
Stranding	1 × 3 wires stranded
Wire arrangement	brown, black, blue
Cable weight	24 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	74 ± 3 Shore D
Conductor crosssection (wire)	0,25 mm ²
Material conductor wire	Stranded copper wire, bare
Amount strands (wire)	32
Diameter of single wires	0,1 mm
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Conductor type (wire)	strand class 6
Outer-diameter (jacket)	4,3 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	58 ± 3 Shore D
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)	79 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)	4,5 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, resistant to welding sparks
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)	5 m @ 25 °C horizontal
Travel speed (C-track)	3.3 m/s @ 25 °C
Acceleration (C-track)	5 m/s ² @ 25 °C
No. of torsion cycles	1 Mio.
Torsion stress	± 360 °/m
Torsion speed	35 cycles/min