

M12 female 90° A-cod. with cable LED V4A

PUR 5x0.34 gy UL/CSA+drag ch. 10m

Art.No.: 7004-12441-2351000

Weight: 0.432 kg

Country of origin: DE

Model designation: MSDL2-U235_10.0-S04

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:

Female 90°

M12, 5-pole

3× LED (PNP)

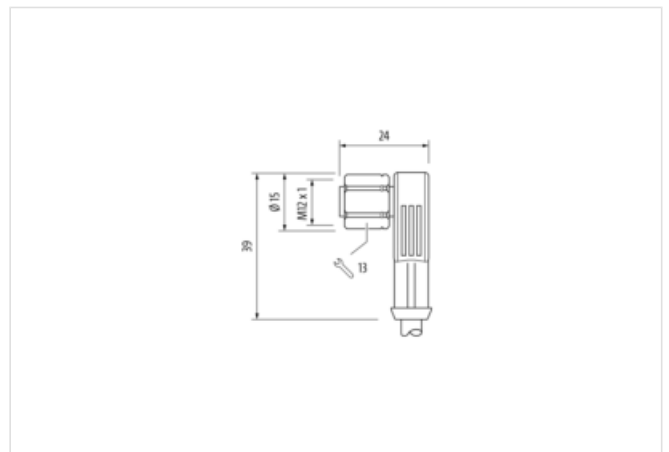
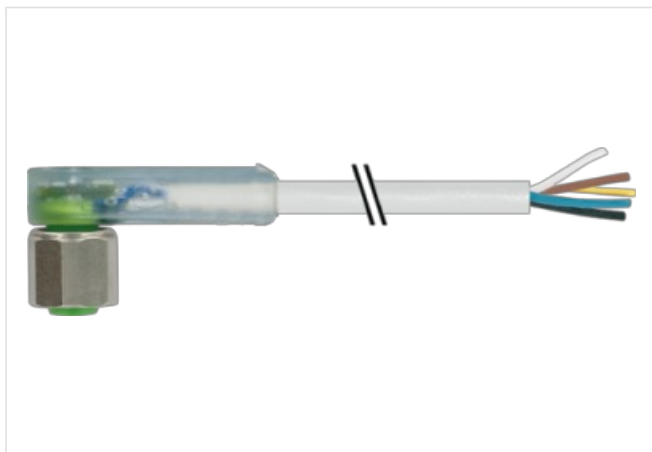
Stainless steel 1.4404 (V4A)

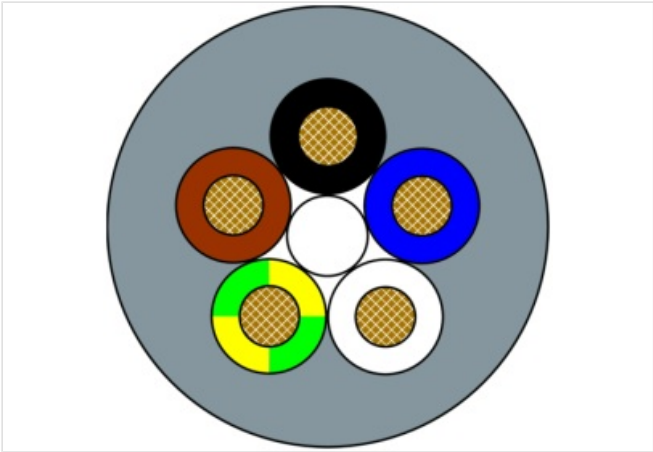
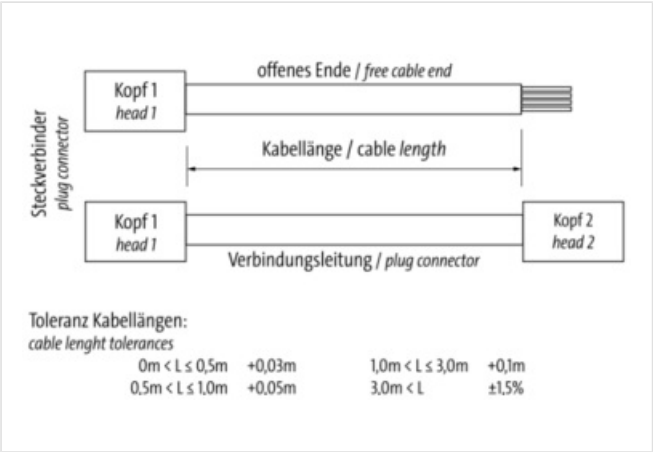
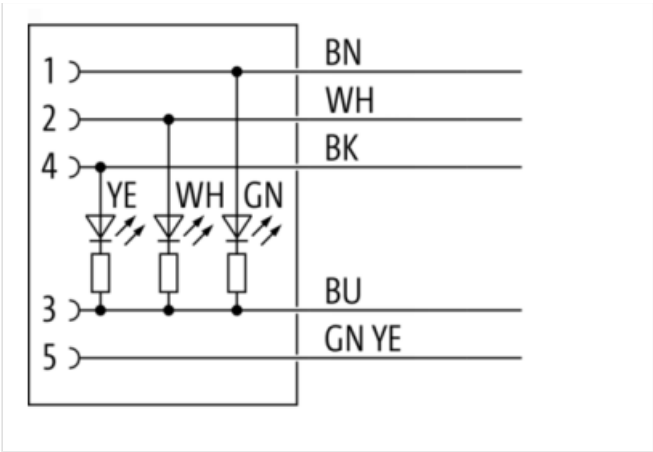
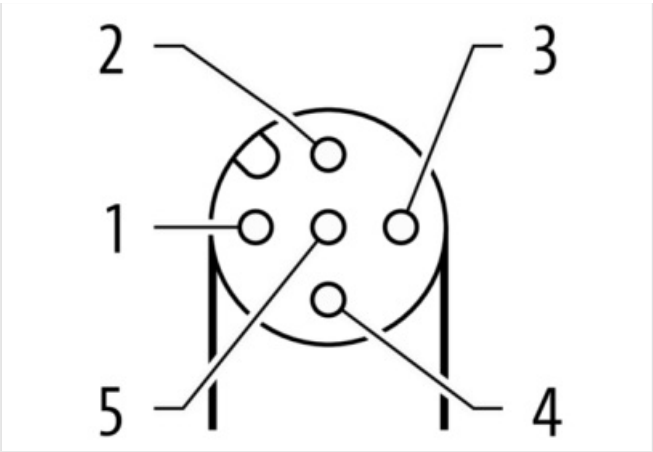
Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request

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 10,00 m

Side 1	
Family construction form	M12
No. of poles	5
Coding	A
Gender	female
Mounting method	inserted, screwed
Threaded hole	M12 x 1
Tightening torque	0,6 Nm
Width across flats	SW13
Cable outlet	angled
suitable for corrugated tube (internal Ø)	10 mm
Material contact	Copper alloy
Coating contact	gold plated
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65
Side 2	
Family construction form	free cable end
Stripping length (jacket)	20 mm

Commercial data

URL Webshop	https://shop.murrelektronik.com/7004-12441-2351000
GTIN	4048879883733
EU-Customs tariff number	85444290
US-Customs tariff number	8544429090
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	4048879883733
Packaging unit	1

Electrical data | Supply

Operating voltage DC	24 V
Operating voltage DC min.	18 V
Operating voltage DC max.	30 V
Current operating per contact max.	4 A

Diagnostics

Status indication LED	green, yellow, white
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Device protection | Electrical

Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	I

Mechanical data | Material data

housing	PUR
Screw connection	Stainless steel 1.4404 (V4A)

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	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	
Stranding	1 × 5 wires around core filler twisted
Filler	Yes
Wire arrangement	BN, BK, BU, WH, GNYE
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	1.25 mm ± 0.05 mm
Conductor crosssection (wire)	0,34 mm²
Material conductor wire	Stranded copper wire, bare
Core construction (wire)	42 × 0.1 mm
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material jacket	PUR
Outer-diameter (jacket)	4.8 mm ± 5 %
Jacket Color	gray / RAL 7040
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 max. (wire)	4,5 A
Current load capacity (standard)	to DIN VDE 0298-4
Operating temperature (static)	-40 °C ... 80 °C / 90 °C @ 10000 h Operation
Operating temperature (dynamic)	-25 °C ... 80 °C / 90 °C @ 10000 h Operation
Operating temperature (drag chain)	-25 °C ... 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
Notes	application-related testing
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/s² @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min