

M12 male 0° / M12 female 90° A-cod. 3LED V2A

FEP 5xAWG22 bk 10m

Art.No.: 7003-40348-8281000

Weight: 0.525

Country of origin: DE

Model designation: MSDL2-A-T828_10.0-S03

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 90°

M12 – M12, 4-pole

3× LED (PNP), (NPN) on request

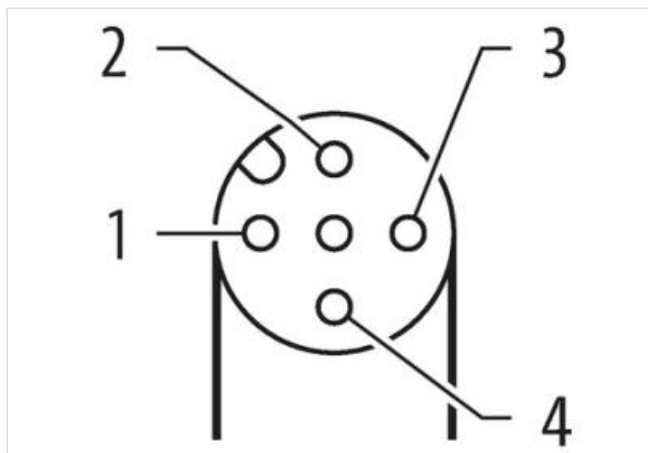
Stainless steel 1.4305 (V2A) PTFE coated

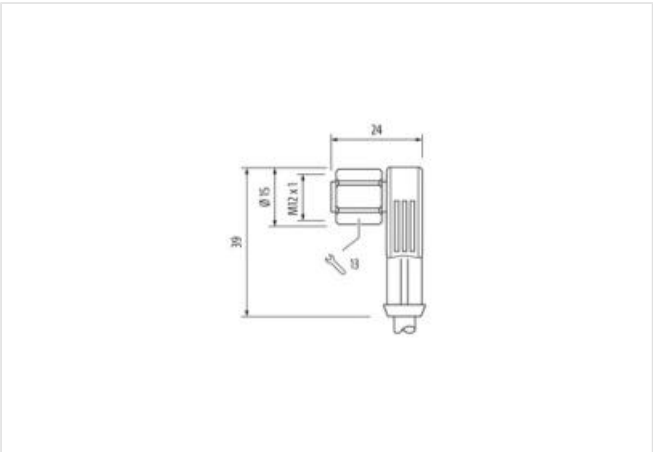
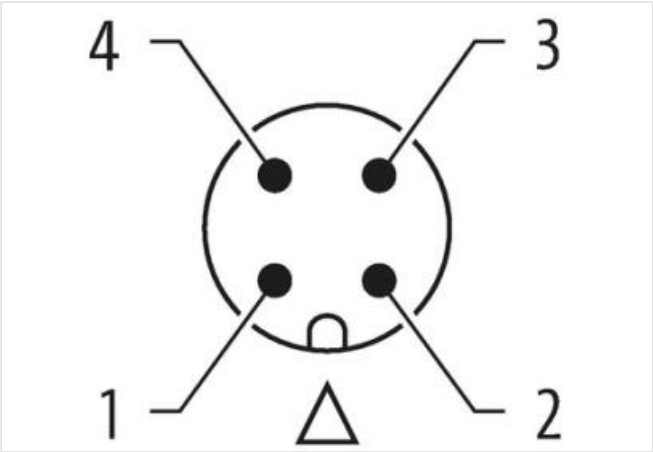
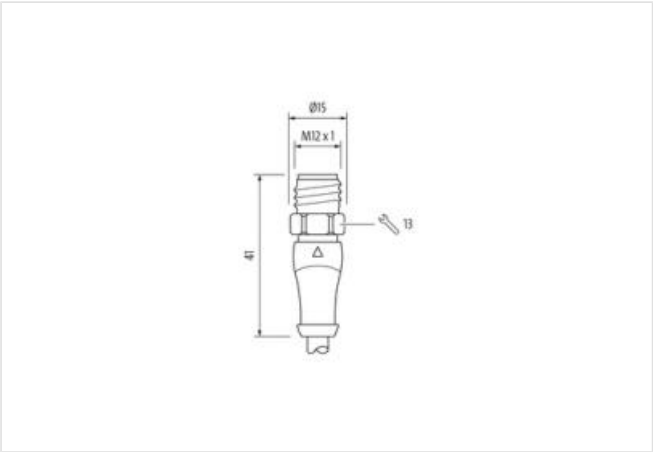
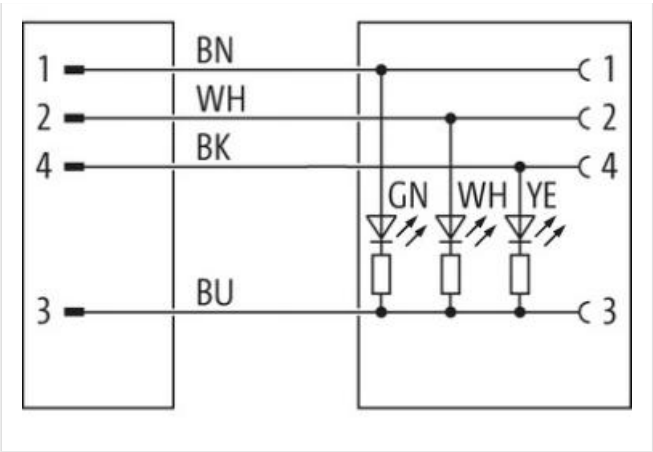
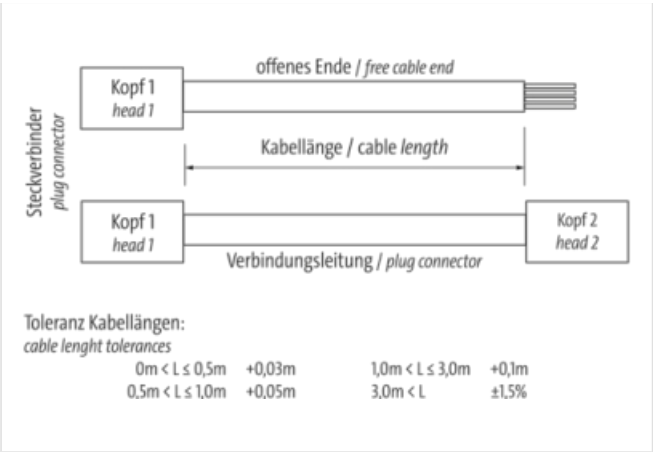
Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request

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 m
Side 1	
Tightening torque	0,6 Nm
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
Coding	A
Width across flats	SW13

Degree of protection (EN IEC 60529) IP67

Side 2

Tightening torque	0,6 Nm
Family construction form	M12
Thread	M12 x 1
Coding	A

Commercial data

ECLASS-6.0	27279218
ECLASS-6.1	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218
ECLASS-9.0	27060311
ECLASS-10.1	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060311
ETIM-5.0	EC001855
customs tariff number	85444290
customs tariff number	85444290
EAN	4048879483667
EAN	4048879483667
Packaging unit	1
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, white, yellow
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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

Material housing	PUR
Coating locking nut	PTFE beschichtet
Material gasket	FKM
Locking material	Stainless steel 1.4305 (V2A)

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 strain relief	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
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.

Installation | Cable

wire arrangement	brown, black, blue, white, green-yellow
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Cable identification	828
Jacket Color	black
Amount stranding	1
Stranding	5 wires around Filler twisted
Banding	PTFE-foil
Filler	yes
wire arrangement	brown, black, blue, white, green-yellow
Cable weight	44,88 g/m
Material jacket	FEP
Shore hardness jacket	57 ± 5 Shore D
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free
Outer-diameter (jacket)	4,3 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	FEP
Amount wires	5
Outer diameter insulation	1,3 mm
Outer diameter tolerance core insulation	± 5 %
Shore hardness wire insulation	55 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free
Amount strands (wire)	19
Diameter of single wires	22 AWG
Conductor crosssection (wire)	22 AWG
Material conductor wire	copper stranded wire, tinned
Nominal voltage AC max.	600 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	4,5 A
Electrical resistance line constant wire	52,2 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	2 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	2 kV @ 60 s
Min. operating temperature (static)	-100 °C
Max. operating temperature (fixed)	180 °C
Operating temperature min. (dynamic)	-100 °C
Operating temperature max. (dynamic)	180 °C
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	UL 1581 § 1100 FT2 UL 1581 § 1090 IEC 60332-2-2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	DIN EN 60811-404 Good, application-related testing
Bending radius (fixed)	7,5 x Outer diameter
Bending radius (dynamic)	15 x Outer diameter