

M12 female 90° A-cod. with cable

PUR 5x0.75 gy UL/CSA 10m

Art.No.: 7999-12361-2281000

Weight: 0.778

Country of origin: CZ

Model designation: MSDL0-U228_10.0

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:

Female 90°

M12, 5-pole

with cable sleeves

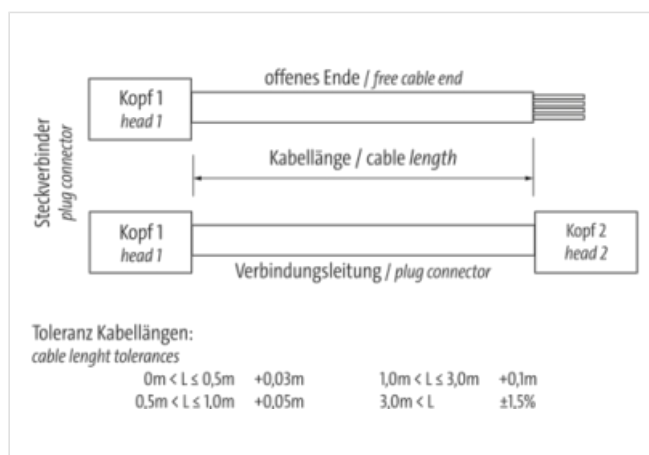
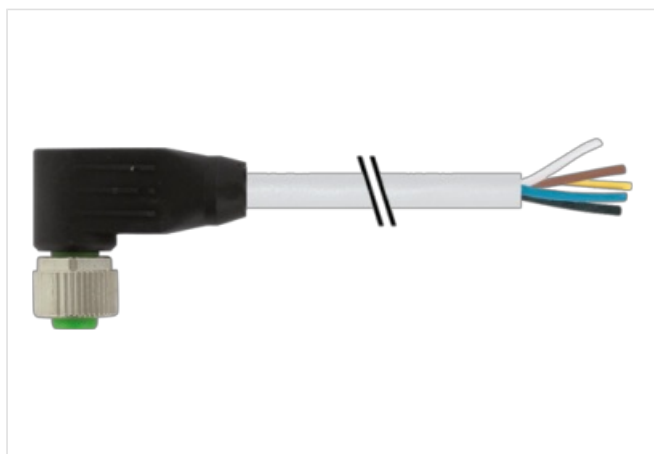
Plastic housings with good resistance against chemicals and oils.

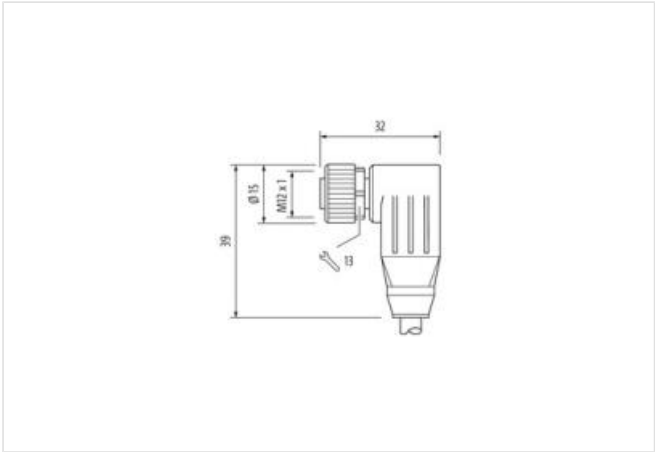
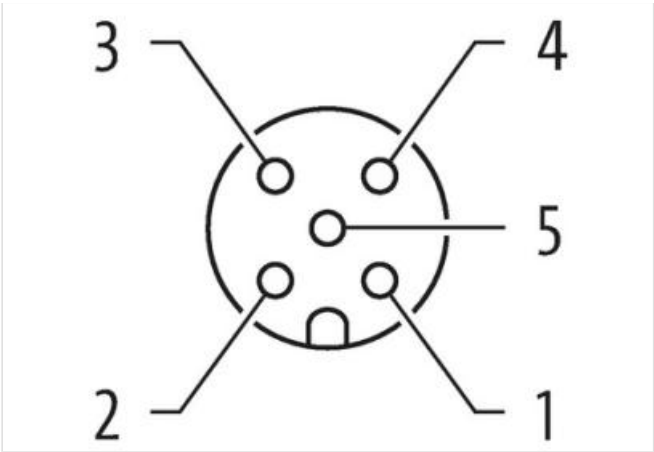
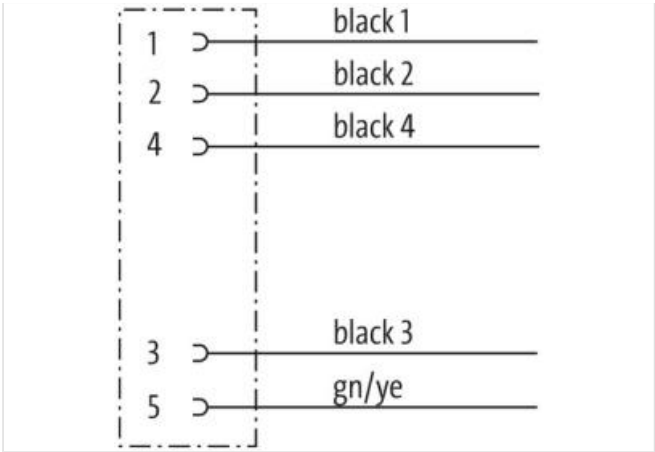
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

Link to Product

Illustration





Product may differ from Image



Cable length	10 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Coding	A
No. of poles	5
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Stripping length (jacket)	20 mm
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
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
customs tariff number	85444290
EAN	4048879084901
EAN	4048879084901
Packaging unit	1
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

Installation | Connection

Stripping length (jacket)	20 mm
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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
Coating locking	Nickel
Locking material	Zinc die-casting

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.

Conformity

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

wire arrangement	black 1, black 2, black 3, black 4, green-yellow
Cable identification	228
Cable Type	2
Printing color of wire insulation	white (isolation black)
Jacket Color	gray
Type of Certificate	cURus
Amount stranding	1
Stranding	5 wires around Core filler twisted
Filler	yes

wire arrangement	black 1, black 2, black 3, black 4, green-yellow
Cable weight	84,7 g/m
Material jacket	PUR
Shore hardness jacket	85 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, silicone-free
Outer-diameter (jacket)	7 mm
Tolerance outer diameter (sheath)	± 5 %
Material inner jacket	PVC
Color (inner jacket)	gray
Material wire insulation	PVC
Amount wires	5
Outer diameter insulation	1,8 mm
Outer diameter tolerance core insulation	± 5 %
Shore hardness wire insulation	43 ± 5 Shore D
Material properties wire insulation	good machinability
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-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 mm²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	9 A
Electrical resistance line constant wire	26 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)	-30 °C
Max. operating temperature (fixed)	80 °C
Operating temperature min. (dynamic)	-5 °C
Operating temperature max. (dynamic)	80 °C
Flame resistance	UL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	Good, application-related testing DIN EN 60811-404
Bending radius (fixed)	10 x Outer diameter
Bending radius (dynamic)	15 x Outer diameter
No. of bending cycles (C-track)	2 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	3,3 m/s @ 25 °C