

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

PUR 3x0.34 bk UL/CSA+drag ch. 10m

Art.No.: 7000-12381-6331000

Weight: 0.318 Country of origin: DE

Model designation: MSDL1-R633 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, 3-pole

2× LED (PNP)

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

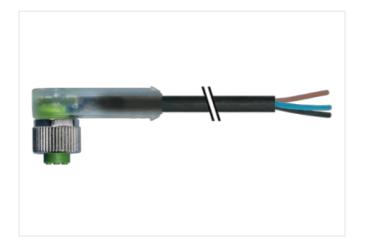
Plastic housings with good resistance against chemicals and oils.

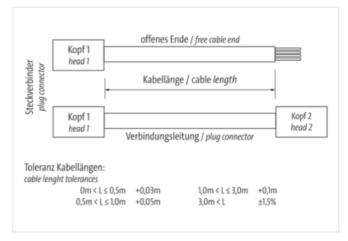
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

#### **Link to Product**

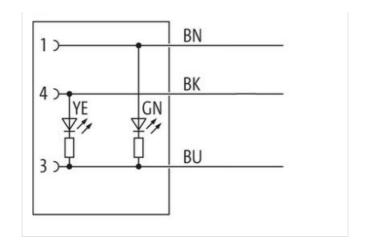
## Illustration

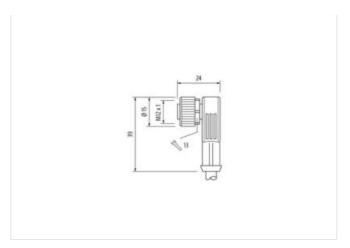


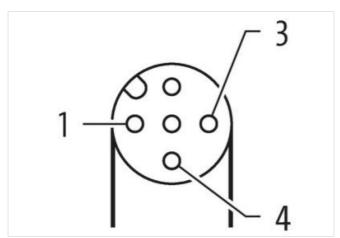




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Product may differ from Image











Cable length	10 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
Cable outlet	angled
Coding	A
Material contact	Copper alloy
Material	PUR
No. of poles	3
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Stripping length (jacket)	20 mm
Family construction form	free cable end

The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2025-08-04



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Commercial data	
	07070040
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	4048879204361
EAN	4048879204361
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
Operating voltage DC max. (UL-listed)	30 V
Current operating per contact max.	4 A
Diagnostics	
	ween velleur
Status indication LED	green, yellow
Installation   Connection	
Stripping length (jacket)	20 mm
Mounting set	M12 x 1
Gender	female
Device protection   Electrical	
Degree of protection (EN IEC 60529)	IP65, IP67, IP66K
Additional condition protection degree	inserted, screwed
Pollution Degree	
	3
Rated surge voltage	3 0,8 kV
Rated surge voltage Material group (IEC 60664-1)	
Material group (IEC 60664-1)	0,8 kV
Material group (IEC 60664-1)  Mechanical data   Material data	0,8 kV I
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking	0,8 kV I Nickeled
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting	0,8 kV I Nickeled nickel plated
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket	0,8 kV I Nickeled nickel plated FKM
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket  Locking material	0,8 kV I Nickeled nickel plated FKM Zinc die-casting
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket  Locking material  Material screw connection	0,8 kV I Nickeled nickel plated FKM
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Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket  Locking material  Material screw connection  Mechanical data   Mounting data  Mounting method	0,8 kV I Nickeled nickel plated FKM Zinc die-casting Zinc die-casting
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket  Locking material  Material screw connection  Mechanical data   Mounting data  Mounting method  Environmental characteristics   Climatic	0,8 kV I Nickeled nickel plated FKM Zinc die-casting Zinc die-casting inserted, screwed, Shaking protection
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket  Locking material  Material screw connection  Mechanical data   Mounting data  Mounting method  Environmental characteristics   Climatic  Operating temperature min.	0,8 kV  I  Nickeled nickel plated FKM  Zinc die-casting  Zinc die-casting  inserted, screwed, Shaking protection  -30 °C
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket  Locking material  Material screw connection  Mechanical data   Mounting data  Mounting method  Environmental characteristics   Climatic  Operating temperature min.  Operating temperature max.	0,8 kV  I  Nickeled nickel plated FKM  Zinc die-casting  Zinc die-casting  inserted, screwed, Shaking protection  -30 °C  85 °C
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Coating of fitting  Material gasket  Locking material  Material screw connection  Mechanical data   Mounting data  Mounting method  Environmental characteristics   Climatic  Operating temperature min.  Operating temperature max.  Additional condition temperature range	0,8 kV  I  Nickeled nickel plated FKM  Zinc die-casting  Zinc die-casting  inserted, screwed, Shaking protection  -30 °C  85 °C



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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.

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Conformity	
Product standard	DIN EN 61076-2-101 (M12)
Installation   Cable	
	hyayya blask blys
wire arrangement  Cable identification	brown, black, blue
	633
Cable Type	3
Jacket Color	black
Type of Certificate	cURus
Amount stranding	1
Stranding	3 wires twisted
wire arrangement	brown, black, blue
Cable weigth	29,7 g/m
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	4,1 mm
Tolerance outer diameter (sheath)	±5%
Material wire insulation	PP
Amount wires	3
Outer diameter insulation	1,25 mm
Outer diameter tolerance core insulation	±5%
Shore hardness wire insulation	70 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Amount strands (wire)	42
Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,34 mm <sup>2</sup>
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	6 A
Electrical resistance line constant wire	57 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	2,5 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	2,5 kV @ 60 s
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	UL 1581 § 1090   UL 1581 § 1100 FT2   IEC 60332-2-2
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)	5 x Outer diameter
Bending radius (dynamic)	10 x 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
No. of torsion cycles	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min
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Product-PDF for Article 7000-12381-6331000

