

M12 male 90° / M12 female 90° A-cod. LED

PUR 3x0.34 bk UL/CSA+drag ch. 7m

Male 90° – female 90° M12 – M12, 3-pole 2× LED (PNP), (NPN) on request

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

Plastic housings with good resistance against chemicals and oils.

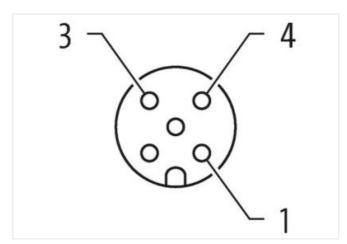
The resistance to aggressive media should be individually tested for your application. Further details on request.

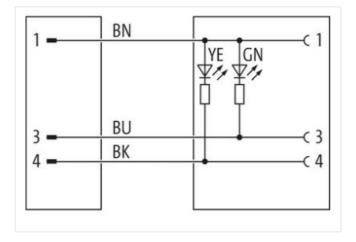
Further cable lengths on request.

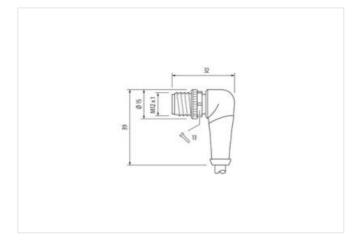
Link to Product

Illustration



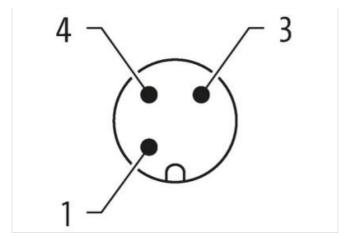


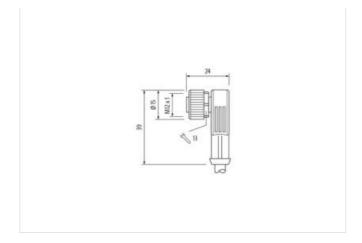






stay connected





Product may differ from Image





Cable length	7 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
Coding	A
Material	PUR
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP66K, IP67
Side 2	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
Coding	A
Material	PUR
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP66K, IP67
Commercial data	
ECLASS-6.0	27061801
customs tariff number	85444290
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
Installation Connection	



Mounting set M12 x 1

Device protection Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Material group (IEC 60664-1)	T
Mechanical data Material data	
Coating locking	Nickeled
Coating footing	nickel plated
Locking material	Zinc die-casting
Material screw connection	Zinc die-casting
Mechanical data Mounting data	Zino dio odoling
	inserted assessed Obelian authorities
Mounting method	inserted, screwed, Shaking protection
Environmental characteristics Climatic	
Operating temperature min.	-25 °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)
Installation Cable	
wire arrangement	brown, black, blue
Cable identification	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	
Material jacket	29,7 g/m
Shore hardness jacket	29,7 g/m PUR
Freedom from ingredients (jacket)	PUR
<u> </u>	PUR 90 ± 5 Shore A
Freedom from ingredients (jacket)	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Freedom from ingredients (jacket) Outer-diameter (jacket)	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath)	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 %
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3 1,25 mm
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 %
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Amount strands (wire)	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter insulation Shore hardness wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 42 0,1 mm
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire)	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 42 0,1 mm 0,34 mm²
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter insulation Shore hardness wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 42 0,1 mm 0,34 mm² Stranded copper wire, bare
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter insulation Shore hardness wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire)	PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,1 mm ± 5 % PP 3 1,25 mm ± 5 % 70 ± 5 Shore D lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 42 0,1 mm 0,34 mm² Stranded copper wire, bare strand class 6



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