

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

PUR 3x0.34 bk UL/CSA+drag ch. 1m

Male straight – 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.

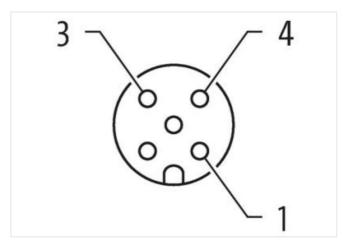
The resistance to aggressive media should be individually tested for your application. Further details on request.

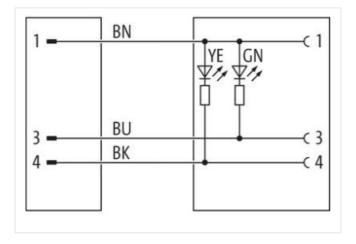
Further cable lengths on request.

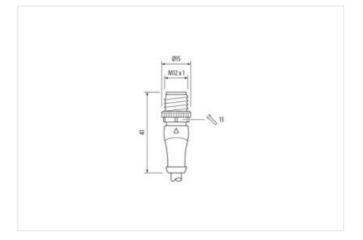
## **Link to Product**

## Illustration





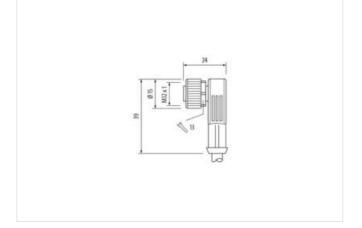






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Product may differ from Image











Cable length	1 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
Material	PUR
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, 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
Material	PUR
Width across flats	SW13
Commercial data	
ECLASS-6.0	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
GTIN	4048879631396
Packaging unit	1
Electrical data   Supply	
Operating voltage DC	24 V

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: 2024-05-21



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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	
	groop vallou
Status indication LED	green, yellow
Installation   Connection	
Mounting set	M12 x 1
Device protection   Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	1
Mechanical data   Material data	
Coating locking	Nickeled
Coating locking  Coating of fitting	nickel plated
Locking material	Zinc die-casting
Material screw connection	Zinc die-casting  Zinc die-casting
Mechanical data   Mounting data	
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	<b>Attention:</b> 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	
·	harring blank blice
wire arrangement	brown, black, blue
	646
Cable Type	646 3
Cable Type Jacket Color	646 3 black
Cable Type Jacket Color Type of Certificate	646 3 black cURus
Cable Type Jacket Color Type of Certificate Amount stranding	646 3 black cURus 1
Cable Type Jacket Color Type of Certificate Amount stranding Stranding	646 3 black cURus 1 3 wires twisted
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement	646 3 black cURus 1 3 wires twisted brown, black, blue
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket)	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket)	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,8 mm
Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,8 mm ± 5 %
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,8 mm ± 5 % PP
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,8 mm ± 5 % PP
Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires  Outer diameter insulation	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,8 mm ± 5 % PP 3 1,45 mm
Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires	646 3 black cURus 1 3 wires twisted brown, black, blue 31,35 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,8 mm ± 5 % PP



Amount strands (wire)	42
Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,34 mm²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Nominal voltage AC max.	600 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	6 A
Electrical resistance line constant wire	60 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	6 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	6 kV @ 60 s
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	90 °C
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	90 °C
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2
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)	5 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C   horizontal
Travel speed (C-track)	3,3 m/s @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min