

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

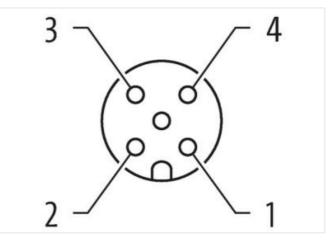
PUR 4x0.75 gy UL/CSA 2m

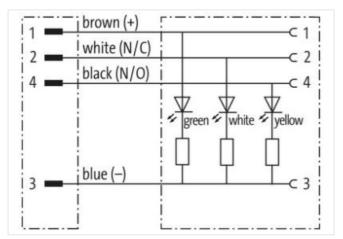
Male straight – female 90° M12 – M12, 4-pole 3× LED (PNP), (NPN) on request Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request Plastic housings with good resistance against chemicals and oils. The resistance to aggressive media should be individually tested for your application. Further details on request. Further cable lengths on request.

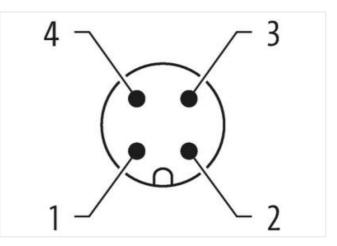
## Link to Product

Illustration



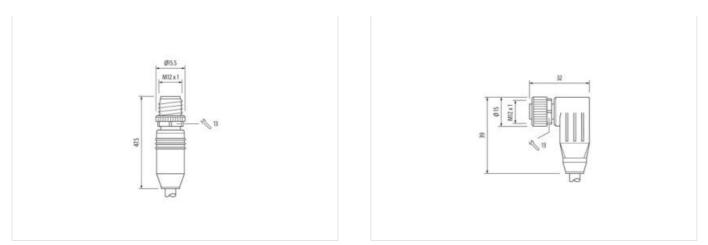






The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-06-23





Product may differ from Image



Cable length	2 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 $\emptyset$ )	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 $\emptyset$ )	10 mm
Material	PUR
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
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
GTIN	4048879289177
Packaging unit	1
Electrical data   Supply	

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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	
Status indication LED	green, white, yellow
Installation   Connection	
Mounting set	M12 x 1
Device protection   Electrical	
Additional condition protection degree	inserted, screwed
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	
Mechanical data   Material data	·
•	
Coating locking	Nickeled
Coating of fitting	nickel plated
Locking material 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	Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be
Note on behang radius	endangered by excessive bending forces.
Conformity	endangered by excessive bending forces.
Conformity	endangered by excessive bending forces. DIN EN 61076-2-101 (M12)
Conformity Product standard	
Conformity Product standard Installation   Cable	DIN EN 61076-2-101 (M12)
Conformity Product standard Installation   Cable wire arrangement	DIN EN 61076-2-101 (M12) brown, black, blue, white
Conformity Product standard Installation   Cable wire arrangement Cable identification	DIN EN 61076-2-101 (M12) brown, black, blue, white 862
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type	DIN EN 61076-2-101 (M12) brown, black, blue, white 862 3
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color	DIN EN 61076-2-101 (M12) brown, black, blue, white 862
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type	DIN EN 61076-2-101 (M12) brown, black, blue, white 862 3 gray
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color Type of Certificate	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color Type of Certificate Amount stranding	DIN EN 61076-2-101 (M12) brown, black, blue, white 862 3 gray cURus 1
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color Type of Certificate Amount stranding Stranding	DIN EN 61076-2-101 (M12) brown, black, blue, white 862 3 gray cURus 1 4 wires twisted
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement	DIN EN 61076-2-101 (M12) brown, black, blue, white 862 3 gray cURus 1 4 wires twisted brown, black, blue, white
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth	DIN EN 61076-2-101 (M12) brown, black, blue, white 862 3 gray cURus 1 4 wires twisted brown, black, blue, white 67,1 g/m
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket	DIN EN 61076-2-101 (M12) brown, black, blue, white 862 3 gray cURus 1 4 wires twisted brown, black, blue, white 67,1 g/m PUR
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus         1         4 wires twisted         brown, black, blue, white         67,1 g/m         PUR         90 ± 5 Shore A
Conformity Product standard Installation   Cable wire arrangement 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)	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus         1         4 wires twisted         brown, black, blue, white         67,1 g/m         PUR         90 ± 5 Shore A         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Conformity Product standard Installation   Cable wire arrangement 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)	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus         1         4 wires twisted         brown, black, blue, white         67,1 g/m         PUR         90 ± 5 Shore A         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         6,5 mm
Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         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)	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus         1         4 wires twisted         brown, black, blue, white         67,1 g/m         PUR         90 ± 5 Shore A         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         6,5 mm         ± 5 %
Conformity         Product standard         Installation   Cable         wire arrangement         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	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus         1         4 wires twisted         brown, black, blue, white         67,1 g/m         PUR         90 ± 5 Shore A         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         6,5 mm         ± 5 %         PP
Conformity         Product standard         Installation   Cable         wire arrangement         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	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus         1         4 wires twisted         brown, black, blue, white         67,1 g/m         PUR         90 ± 5 Shore A         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         6,5 mm         ± 5 %         PP         4
Conformity         Product standard         Installation   Cable         wire arrangement         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	DIN EN 61076-2-101 (M12)         brown, black, blue, white         862         3         gray         cURus         1         4 wires twisted         brown, black, blue, white         67,1 g/m         PUR         90 ± 5 Shore A         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         6,5 mm         ± 5 %         PP         4         1,85 mm



Amount strands (wire)	42
Diameter of single wires	0,15 mm
Conductor crosssection (wire)	0,75 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	9,6 A
Electrical resistance line constant wire	26 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
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)	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