

## M12 male 0° / M8 female 90° A-cod. LED

PUR 4x0.25 bk UL/CSA+drag ch. 1m

$$\label{eq:male_straight} \begin{split} &\text{Male straight} - \text{female } 90^{\circ} \\ &\text{M12} - \text{M8, 4-pole} \\ &2\times \text{ LED (PNP), (NPN) on request} \end{split}$$

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

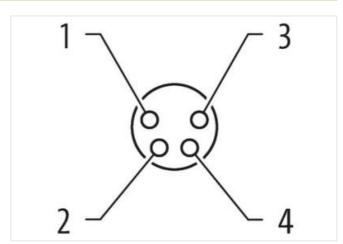
Plastic housings with good resistance against chemicals and oils.

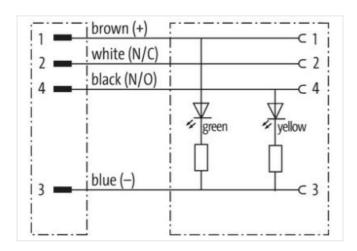
The resistance to aggressive media should be individually tested for your application. Further details on request. Further cable lengths on request.

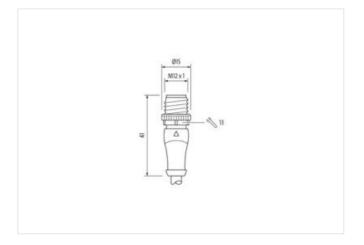
## **Link to Product**

## Illustration



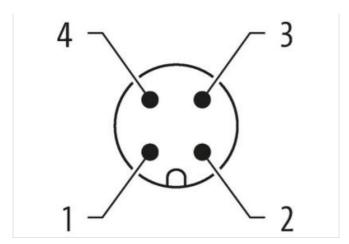


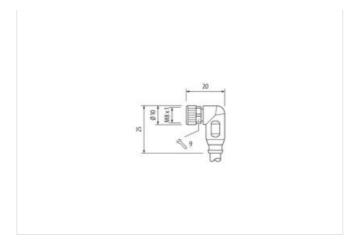






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Product may differ from Image





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
Coding	A
Material	PUR
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP66K, IP67
Side 2	
Tightening torque	0,4 Nm
Mounting method	inserted, screwed
Family construction form	M8
Thread	M8 x 1
suitable for corrugated tube (internal Ø)	6,5 mm
Coding	A
Material	PUR
Width across flats	SW9
Degree of protection (EN IEC 60529)	IP66K, IP67
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	4048879589932
Packaging unit	1

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: 2024-05-17



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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	
Status indication LED	green, yellow
Device protection   Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	
Mechanical data   Material data	
·	AP-dadad
Coating locking	Nickeled
Coating of fitting	nickel plated
Locking material	Zinc die-casting
Material screw connection	Zinc die-casting
Mechanical data   Mounting data	
Mounting method	inserted, screwed, Shaking protection
Environmental characteristics   Climatic	
Operating temperature min.	-25 °C
Operating temperature max.	80 °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), DIN EN 61076-2-114 (M8)
Installation   Cable	
Cable identification	631
Cable Type	3
Cable Type  Jacket Color	black
Jacket Color	
lacket Color Type of Certificate	black
lacket Color Type of Certificate Amount stranding	black cURus
lacket Color Type of Certificate Amount stranding Stranding	black cURus 1
Tacket Color  Type of Certificate  Amount stranding  Stranding  vire arrangement	black cURus 1 4 wires twisted
acket Color  Type of Certificate Amount stranding  Stranding  vire arrangement  Cable weigth	black cURus 1 4 wires twisted brown, black, blue, white
Jacket Color Type of Certificate Amount stranding Stranding vire arrangement Cable weigth Material jacket	black cURus 1 4 wires twisted brown, black, blue, white 33 g/m
Amount stranding Stranding vire arrangement Cable weigth Material jacket Shore hardness jacket	black cURus 1 4 wires twisted brown, black, blue, white 33 g/m PUR
acket Color Type of Certificate Amount stranding Stranding Vire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket)	black cURus  1 4 wires twisted brown, black, blue, white 33 g/m PUR 90 ± 5 Shore A
acket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket)	black cURus 1 4 wires twisted brown, black, blue, white 33 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Jacket Color Type of Certificate Amount stranding Stranding Vire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Duter-diameter (jacket) Tolerance outer diameter (sheath)	black cURus  1 4 wires twisted brown, black, blue, white 33 g/m PUR  90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,5 mm
Jacket Color Type of Certificate Amount stranding Stranding Wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Duter-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation	black cURus  1 4 wires twisted brown, black, blue, white 33 g/m PUR  90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,5 mm ± 5 %
**	black cURus  1 4 wires twisted brown, black, blue, white 33 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,5 mm ± 5 % PP
Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Duter-diameter (jacket)  Folerance outer diameter (sheath)  Material wire insulation  Amount wires	black cURus 1 4 wires twisted brown, black, blue, white 33 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,5 mm ± 5 % PP
Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Duter-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires  Duter diameter insulation	black cURus  1  4 wires twisted brown, black, blue, white  33 g/m PUR  90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,5 mm ± 5 % PP  4  1,25 mm
Jacket Color Type of Certificate Amount stranding Stranding Wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Duter-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Duter diameter insulation Duter diameter tolerance core insulation	black cURus  1 4 wires twisted brown, black, blue, white 33 g/m PUR  90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free 4,5 mm ± 5 % PP  4 1,25 mm ± 5 %



Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,25 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Traversing distance (C-track)	10 m @ 25 °C   horizontal
Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	3,6 A
Electrical resistance line constant wire	79 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
Travel speed (C-track)	10 Mio. @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min