

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

PUR 3x0.25 bk UL/CSA+robot+drag ch. 3m

Male straight – female 90°

Zinc die casting, save-cover coated

M12 – M8, 3-pole

LED (yellow/green)

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**



Product may differ from Image



Cable length	3 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
Material contact	Copper alloy
Material	PUR
No. of poles	3
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP66K, IP67
Side 2	
Tightening torque	0,4 Nm
Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M8
Thread	M8 x 1
suitable for corrugated tube (internal Ø)	6,5 mm
Material contact	Copper alloy
Material	PUR
No. of poles	3
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	4048879307611
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
Current consumption max.	5 mA

#### Diagnostics

Status indication LED	green, yellow
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#### Device protection | Electrical

Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	I

#### Mechanical data | Material data

Coating locking	safe-cover coated
Coating of fitting	nickel plated
Material gasket	FKM
Locking material	Zinc die-casting
Material screw connection	Zinc die-casting

#### Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
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#### 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), DIN EN 61076-2-114 (M8)
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#### Installation | Cable

Cable identification	650
Cable Type	5
Jacket Color	black
Type of Certificate	cURus
Amount stranding	1
Stranding	3 wires twisted
wire arrangement	brown, black, blue
Cable weight	26,4 g/m
Material jacket	PUR
Shore hardness jacket	58 ± 3 Shore D
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	4,3 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	74 ± 3 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Amount strands (wire)	32
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)	5 m @ 25 °C   horizontal
Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	4,5 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	IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	DIN EN 60811-404   Good, application-related testing
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	1 Mio.
Torsion stress	± 360 °/m
Torsion speed	35 cycles/min