

**M12 male 90° A-cod. / MSUD valve plug BI-11mm**

PUR 3x0.75 bk UL/CSA+robot+drag ch. 0.6m

**MSUD**

Form BI (11 mm) – M12, male 90°

24 V AC  $\pm 20\%$  / DC  $\pm 25\%$ 

LED and suppression

Further cable lengths 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.

[Link to Product](#)**Illustration**



Product may differ from Image



Cable length	0,6 m
Side 1	
Tightening torque	0,4 Nm
Family construction form	MSUD BI
Thread	M3
No. of poles	3
Degree of protection (EN IEC 60529)	IP67
Side 2	
Tightening torque	0,6 Nm
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
Coding	A
No. of poles	3
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP67
Commercial data	
ECLASS-6.0	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218
ECLASS-9.0	27060311
ECLASS-10.1	27060312
ECLASS-11.1	27060312
ECLASS-12.0	27060312
ETIM-5.0	EC001855
customs tariff number	85444290
GTIN	4048879148139
Packaging unit	1
Electrical data	
Drop-out delay time max.	20 ms
Electrical data   Supply	
Operating voltage AC	24 V

Operating voltage AC min.	19,2 V
Operating voltage AC max.	28,8 V
Operating voltage DC	24 V
Operating voltage DC min.	18 V
Operating voltage DC max.	30 V
Cut-off peak voltage max.	55 V
Current operating per contact max.	4 A
Current consumption max.	12 mA

#### Diagnostics

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

Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV

#### Mechanical data | Material data

Color housing	black
Material housing	Plastic

#### Mechanical data | Mounting data

Mounting method	inserted, screwed
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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 175301-803 (Ventilstecker)
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#### Installation | Cable

wire arrangement	black 1, black 2, green-yellow
Cable identification	656
Cable Type	5
Jacket Color	black
Type of Certificate	cURus
Amount stranding	1
Stranding	3 wires twisted
wire arrangement	black 1, black 2, green-yellow
Cable weight	48,4 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)	5,2 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	PP
Amount wires	3
Outer diameter insulation	1,7 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)	42

Diameter of single wires	0,15 mm
Conductor crosssection (wire)	0,75 mm²
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	12 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
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	UL 1581 § 1100 FT2   UL 1581 § 1090   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)	5 m @ 25 °C   horizontal
Travel speed (C-track)	3,3 m/s @ 25 °C
No. of torsion cycles	1 Mio.
Torsion stress	± 360 °/m
Torsion speed	35 cycles/min