

**M12 X-treme male 90° / MSUD dbl. valve plug form A**

PUR 4x0.75 bk UL/CSA+drag chain 0,6m

Form A (18 mm)

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

LED and suppression

Connection cable L = 200 mm

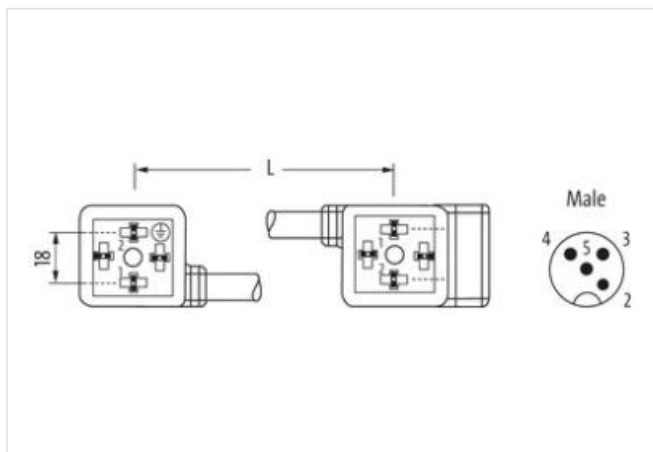
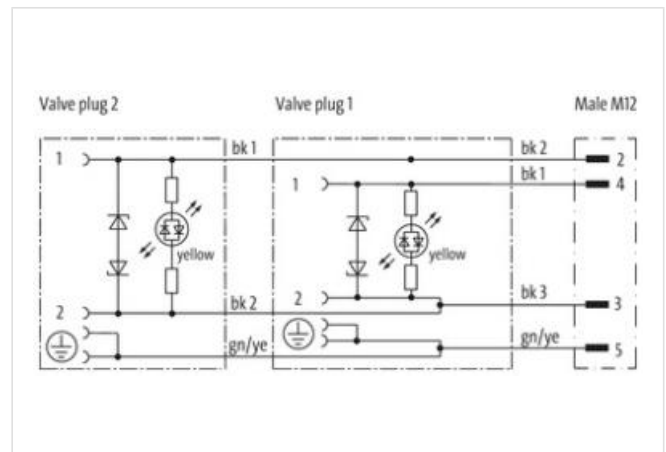
M12 (4-pole)

Stainless steel

Bridged PE

Plastic housings with good resistance against chemicals and oils.

Further cable lengths on request.

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



Product may differ from Image



Cable length	0,6 m
Side 1	
Tightening torque	0,4 Nm
Mounting method	inserted, screwed
Family construction form	MSUD A
No. of poles	4
Side 2	
Tightening torque	0,4 Nm
Mounting method	inserted, screwed
Family construction form	MSUD A
Material	PBT
No. of poles	4
Side 3	
Mounting method	inserted, screwed
Family construction form	M12
Coding	A
No. of poles	4
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	4048879636216
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.	15 mA

#### Diagnostics

Status indication LED	yellow
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#### Installation | Connection

Width across flats	SW 14
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#### Device protection | Electrical

Degree of protection (EN IEC 60529)	IP67
Pollution Degree	3
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	I
Additional suppressor	Z-Diode

#### Mechanical data | Material data

Color housing	black
Material gasket	Silicon
Material housing	Plastic
Locking material	Stainless steel 1.4404 (V4A)

#### Mechanical data | Mounting data

Mounting method	M3
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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.

#### Installation | Cable

wire arrangement	black 1, black 2, black 3, green-yellow
Cable identification	637
Cable Type	3
Printing color of wire insulation	white (isolation black)
Jacket Color	black
Type of Certificate	cURus
Amount stranding	1
Stranding	4 wires twisted
wire arrangement	black 1, black 2, black 3, green-yellow
Cable weight	69,3 g/m
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	6,5 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	PP

Amount wires	4
Outer diameter insulation	1,85 mm
Outer diameter tolerance core insulation	± 5 %
Shore hardness wire insulation	70 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Printing color of wire insulation	white (isolation black)
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
UV resistance	DIN EN ISO 4892-2 A
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	DIN EN 60811-404   Good, application-related testing
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