

## M12 male 0° A-cod. / MSUD valve plug BI-11mm

PUR 3x0.75 bk UL/CSA 2m

**MSUD** 

Form BI (11 mm) - M12, male straight 24 V AC  $\pm 20\%$  / DC  $\pm 25\%$ 

LED and suppression

Further cable lengths on request.

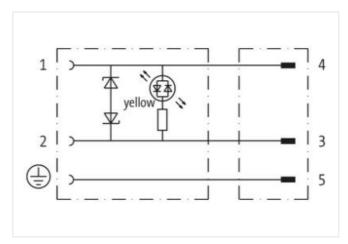
Plastic housings with good resistance against chemicals and oils.

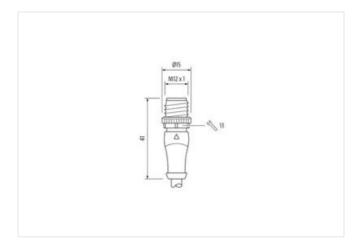
The resistance to aggressive media should be individually tested for your application. Further details on request.

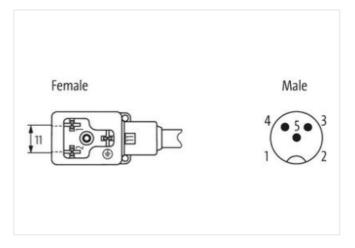
## **Link to Product**

## Illustration



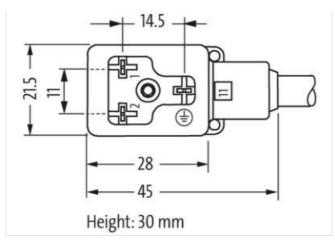








stay connected



Product may differ from Image



Cable length	2 m
Side 1	
Tightening torque	0,4 Nm
Family construction form	MSUD
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-6.1	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218
ECLASS-9.0	27060312
ECLASS-10.1	27060312
ECLASS-11.1	27060312
ECLASS-12.0	27060312
ETIM-5.0	EC001855
customs tariff number	85444290
GTIN	4048879148832
Packaging unit	1
Electrical data	
Drop-out delay time max.	20 ms
Electrical data   Supply	



stay connected

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
	TA
Diagnostics	
Status indication LED	yellow
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
Environmental characteristics   Climatic	11001100, 00101100
·	05.00
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.
Note on bending radius	
Note on bending radius  Conformity	endangered by excessive bending forces.
Note on bending radius  Conformity  Product standard  Installation   Cable	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)
Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow
Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)
Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2
Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626
Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Printing color of wire insulation  Jacket Color	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow  626 2 white (isolation black)
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black
Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Printing color of wire insulation  Jacket Color  Type of Certificate	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus
Note on bending radius  Conformity  Product standard  Installation   Cable  wire arrangement  Cable identification  Cable Type  Printing color of wire insulation  Jacket Color  Type of Certificate  Amount stranding	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Type of Certificate Amount stranding Stranding	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow  626 2 white (isolation black) black cURus 1 3 wires twisted
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Type of Certificate Amount stranding Stranding wire arrangement	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 2, green-yellow
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 2, green-yellow 55,33 g/m PUR
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket)	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Type of Certificate Amount stranding Stranding wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket)	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free 5,9 mm
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation 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)	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free 5,9 mm ± 5 %
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation 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 inner jacket	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free 5,9 mm ± 5 % PVC
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation 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 inner jacket Material wire insulation	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free 5,9 mm ± 5 % PVC PVC
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation 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	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free 5,9 mm ± 5 % PVC PVC
Conformity Product standard Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation 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	endangered by excessive bending forces.  DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)  black 1, black 2, green-yellow 626 2 white (isolation black) black cURus 1 3 wires twisted black 1, black 2, green-yellow 55,33 g/m PUR 85 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free 5,9 mm ± 5 % PVC PVC 9VC 3 1,8 mm



Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-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 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 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	2 kV @ 60 s
Min. operating temperature (static)	-30 °C
Max. operating temperature (fixed)	80 °C
Operating temperature min. (dynamic)	-5 °C
Operating temperature max. (dynamic)	80 °C
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	DIN EN 60811-404
Bending radius (fixed)	10 x Outer diameter
Bending radius (dynamic)	15 x Outer diameter
No. of bending cycles (C-track)	2 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C   horizontal
Travel speed (C-track)	3,3 m/s @ 25 °C