

## M12 male 0° A-cod. / MSUD valve plug B-10mm

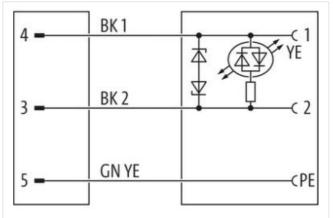
PVC 3x0.75 bk 1.5m

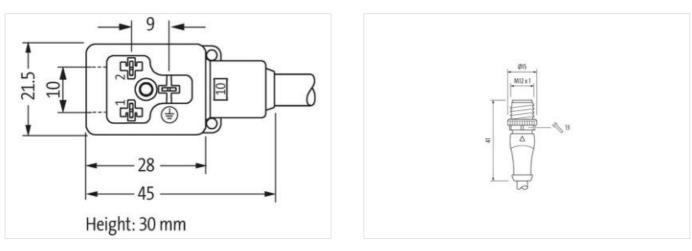
Form B (10 mm) – M12, male straight 24 V AC ±20% / DC ±25% LED and suppression Further cable lengths on request. Plastic housings with good resistance against chemicals and oils. The resistance to aggressive media should be individually tested for your application. Further details on request.

## Link to Product



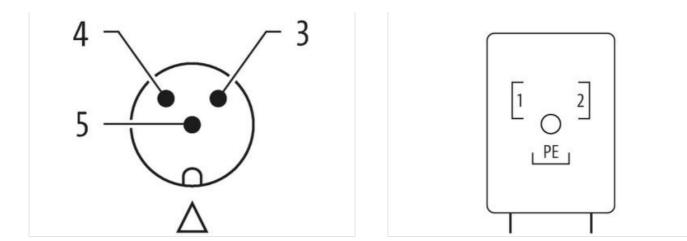






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Product may differ from Image



Cable length	1,5 m
Side 1	
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
Side 2	
Tightening torque	0,4 Nm
Family construction form	MSUD B
Thread	M3
No. of poles	3
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	4048879147675
Packaging unit	1
Electrical data	
Drop-out delay time max.	20 ms
1 ,	

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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
Diagnostics	
Status indication LED	yellow
Device protection   Electrical	
Additional condition protection degree	inserted, screwed
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	
Additional suppressor	Z-Diode
Mechanical data   Material data	
Coating locking	Nickeled
Locking screw coating	verzinkt
Color housing	black
Material housing	Plastic
Locking material	Zinc die-casting
Mechanical data   Mounting data	
Mounting method	inserted, screwed
Environmental characteristics   Climatic	
Operating temperature min.	-25 °C
	85 °C
Operating temperature max.	85 °C depending on cable quality
Operating temperature max. Additional condition temperature range	85 °C depending on cable quality
Operating temperature max. Additional condition temperature range Important installation notes	depending on cable quality
Operating temperature max. Additional condition temperature range Important installation notes Note on strain relief	depending on cable quality Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
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Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement	depending on cable quality Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties. Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD) black 1, black 2, green-yellow
Operating temperature max. Additional condition temperature range Important installation notes Note on strain relief Note on bending radius Conformity Product standard Installation   Cable wire arrangement Cable identification	depending on cable quality Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties. Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD) black 1, black 2, green-yellow 616
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type	depending on cable quality Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties. Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD) black 1, black 2, green-yellow 616 1
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         Amount stranding	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black
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Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         Amount stranding         Stranding         wire arrangement	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black 1         black 2         1         3 wires twisted         black 1, black 2, green-yellow
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         Amount stranding         Stranding         wire arrangement         Cable weigth	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black         1         3 wires twisted         black 1, black 2, green-yellow
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Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         Amount stranding         Stranding         wire arrangement         Cable weigth         Material jacket         Shore hardness jacket	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black 1         Jaw is twisted         black 1, black 2, green-yellow         61,6 g/m         PVC         80 ± 5 Shore A
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         Amount stranding         Stranding         wire arrangement         Cable weigth         Material jacket         Shore hardness jacket         Freedom from ingredients (jacket)	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black 1         Jawires twisted         black 1, black 2, green-yellow         61, 6         1         3 wires twisted         black 1, black 2, green-yellow         61, 6 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         Amount stranding         Stranding         wire arrangement         Cable weigth         Material jacket         Shore hardness jacket         Freedom from ingredients (jacket)         Outer-diameter (jacket)	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black 1         1         3 wires twisted         black 1, black 2, green-yellow         61,6 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free         5,9 mm
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         Amount stranding         Stranding         wire arrangement         Cable weigth         Material jacket         Shore hardness jacket         Freedom from ingredients (jacket)         Outer-diameter (jacket)         Tolerance outer diameter (sheath)	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black 1         1         3 wires twisted         black 1, black 2, green-yellow         61,6 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free         5,9 mm         ± 5 %
Operating temperature max.         Additional condition temperature range         Important installation notes         Note on strain relief         Note on bending radius         Conformity         Product standard         Installation   Cable         wire arrangement         Cable identification         Cable Type         Printing color of wire insulation         Jacket Color         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	depending on cable quality         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.         DIN EN 61076-2-101 (M12), DIN EN 175301-803 (MSUD)         black 1, black 2, green-yellow         616         1         white (isolation black)         black 1, black 2, green-yellow         616         1         white (isolation black)         black 1, black 2, green-yellow         616         1         Swires twisted         black 1, black 2, green-yellow         61,6 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free         5,9 mm         ± 5 %         PVC

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Outer diameter tolerance core insulation	±5%
Shore hardness wire insulation	43 ± 5 Shore D
Material properties wire insulation	good machinability
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, silicone-free
Printing color of wire insulation	white (isolation black)
Amount strands (wire)	24
Diameter of single wires	0,2 mm
Conductor crosssection (wire)	0,75 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	Strand class 5
Max. rated voltage (conductor - conductor)	500 V
Max. rated voltage (conductor - ground)	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)	3 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	3 kV @ 60 s
Min. operating temperature (static)	-30 °C
Max. operating temperature (fixed)	70 °C
Operating temperature min. (dynamic)	-5 °C
Operating temperature max. (dynamic)	70 °C
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	Good, application-related testing   DIN EN 60811-404
Bending radius (fixed)	5 x Outer diameter
Bending radius (dynamic)	10 x Outer diameter