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## MSUD valve plug BI-11mm with cable

PVC 3x0.75 bk 4m

MSUD Form BI (11 mm) 24 V AC ±20% / DC ±25% LED and suppression

Further cable lengths on request.

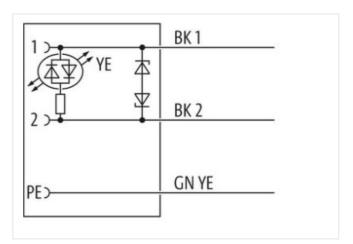
Plastic housings with good resistance against chemicals and oils.

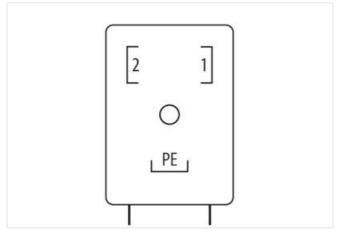
The resistance to aggressive media should be individually tested for your application. Further details on request.

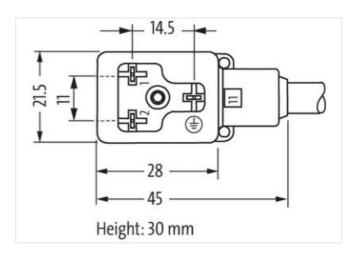
## **Link to Product**

## Illustration









Product may differ from Image









Cable length

4 m

Side 1

Tightening torque 0,4 Nm

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Degree of protection (EN IEC 60529)         IP67           Commercial data         ECLASS-6.0         27279218           ECLASS-7.0         27279218         ECLASS-8.0         ECLASS-8.0         27279218           ECLASS-9.0         27060311         ECLASS-9.0	Mounting method	inserted, screwed
Tread		•
Metroid   PBT		
Commercial data	Material	PBT
Commercial data	Degree of protection (EN IEC 60529)	IP67
ECLASS-6.0         27279218           ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         2700311           ECLASS-11         2700312           ECLASS-11.1         2700312           ECLASS-12.0         2700312           ECLASS-17.0         2700312           ECLASS-17.0         2700312           ECLASS-17.0         4048872           ECLASS-17.0         4048872           TIMS-6         E001855           customs sairf number         8544220           GTIN         404887221528           Packaging unit         1           Electrical data         1           Dop out dissig branch         2           Opperating vollage AC         24 V           Operating vollage AC max         28 B V           Operating vollage AC max         28 B V           Operating vollage DC min.         18 V           Operating vollage DC min.         18 V           Operating vollage DC max.         30 V           Cut of pack vollage DC max.         30 V           Cut of pack vollage DC max.         55 V           Ourset operating per contact max.         4 A           Value of pack volla		
ECLASS-7.0         27279218           ECLASS-8.0         2779818           ECLASS-9.0         27060311           ECLASS-10.1         27060312           ECLASS-12.0         27060312           ECLASS-12.0         27060312           ETM-5.0         ECO01895           Causions farfil mumber         8544290           GTIN         4048878221528           Peckaging unit         1           Electrical data         20 ms           Electrical data   Supply           Operating voltage AC         24 V           Operating voltage AC max         28,9 V           Operating voltage AC max         28,9 V           Operating voltage AC max         28,9 V           Operating voltage DC max         30 V           Cut of loss voltage max         55 V           Cut of loss voltage max         55 V           Cut of loss voltage max         15 mA           Diagnostics         8           Status indication LED         yellow           Installation Connection         Max           Mounting set         M3           Device protection I Electrical           Additional suppressor         Dodde, 2 Dode           Mechanical data   Material data<		07070040
ECLASS-8.0         27279218           ECLASS-9.0         27060311           ECLASS-9.1.1         27060312           ECLASS-11.1         27060312           ECLASS-12.0         27060312           ETIM-5.0         ECOM 885           customs staff number         85444290           GTIN         404878221528           Packaging unit         1           Electrical data         ************************************		
ECLASS 9.0         27060311           ECLASS-10.1         27060312           ECLASS-11.1         27060312           ECLASS-12.0         27060312           ECLASS-12.0         ECO0355           customs tariff number         85444290           GTIN         4048878221528           Packaging unit         1           Electrical data         UNIVERSAL SERVICE SE		
ECLASS-1.1.1         27060312           ECLASS-12.0         27060312           ETIMS-0.1         ECO01855           Oattoon Staff fumber         6544280           GTIN         4048079221528           Packaging unit         1           Electrical data         Electrical data           Drop-out delay time max.         20 ms           Electrical data [Supply         Percentage voltage AC           Operating voltage AC         24 V           Operating voltage AC mm.         19.2 V           Operating voltage AC mm.         28.8 V           Operating voltage DC mm.         18 V           Operating voltage DC mm.         18 V           Operating voltage DC mm.         15 mA           Current operating per contact max.         4 A           United pask voltage max.         55 V           Status indication LED         yallow           Institution of Connection         Monthly and the contract max.           Mounting set         Ms           Device procetton   Electrical         A           Mounting suppre		
ECLASS-1.11         27060312           ECLASS-12.0         27060312           ETIM 5.0         EC001805           customs tariff number         85444290           GTIN         404887921528           Packaging unit         1           Electrical data           Uropout delay time max.           Electrical data   Supply           Classing voltage AC           24 V           Operating voltage AC min.         19.2 V           Operating voltage AC min.         19.2 V           Operating voltage DC min.         18.4 V           Operating voltage DC min.         18.4 V           Operating voltage DC min.         18.4 V           Operating voltage DC min.         15 mA           Out-off peak voltage max.         55 V           Current onesumption max.         15 mA           Diagnostics           Status indication LED         yellow           Installation   Connection           Mounting set         M3           Device protection   Electrical           Additional condition protection degree         inserted, screwed           Pollution Degree         0.8 kV           Material group (IEC 80664-1)		
ECLASS-12.0         27060312           ETIMS-0         EC001885           usbotns farff number         8544290           GTIN         4048879221528           Packaging unit         1           Electrical data         Electrical data           Drop-out delay ime max.         20 ms           Electrical data   Supply         Poperating voltage AC           Operating voltage AC         24 V           Operating voltage AC max.         28.8 V           Operating voltage AC max.         28.8 V           Operating voltage DC max.         30 V           Operating voltage DC max.         30 V           Cut-off peak voltage max.         55 V           Cut-off peak voltage max.         15 mA           Diagnostics         Velow           Installation   Connection         Yellow           Mounting set         M3           Device protection   Electrical         Additional condition protection degree           Additional condition protection degree         3           Reted singe voltage         0,8 kV           Material group (IEC 80684-1)         1           Additional protection degree         3           Reted singe voltage max         bick, Z-Diode           Mechanical data		
ETIM-5.0         EC001855           customs tariff number         85444290           GTIN         404887921528           Packaging unit         1           Electrical data           Electrical data   Suppty           Operating voltage AC         24 v           Operating voltage AC min.         19.2 v           Operating voltage AC min.         19.2 v           Operating voltage DC         24 v           Operating voltage DC min.         18 v           Operating voltage DC min.         18 v           Operating voltage DC max.         30 v           Cut-off peak voltage max.         55 v           Current consumption max.         15 mA           Diagnostics           Status inclusion I, Edonection           Mounting set         M3           Diagnostical protection   Electrical           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Reted surge voltage         0.8 kV           Material group (IEC 69664-1)         I           Additional suppressor         Diode, 2-Diode           Mechanical data   Material data         Steel           Cacting plocking <t< td=""><td></td><td></td></t<>		
customs tariff number         85444280           GTIN         4048879221528           Packaging unit         1           Electrical data         Drop-out delay time max.         20 ms           Electrical data   Suppty         V           Operating voltage AC         24 V           Operating voltage AC max.         28.8 V           Operating voltage AC max.         28.8 V           Operating voltage DC max.         30 V           Operating voltage DC max.         30 V           Cut-off peak voltage max.         35 V           Cut-off peak voltage max.         4 A           Cut-off peak voltage max.         55 V           Cut-off peak voltage max.         4 A           Diagnostics         Status indication tar.           Installation   Connection         Ma           Device protection   Electrical         Add           Additional condition protection degree         inserted, screwed           Pollution Degree         3		
GTN         4048879221528           Packaging unit         1           Electrical data         V           Drop-out delay time max.         20 ms           Electrical data   Supply         V           Operating voltage AC         24 V           Operating voltage AC min.         19.2 V           Operating voltage DC min.         18 V           Operating voltage DC min.         18 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 operating per contact max.         4 A           Diagnostics         Validomal call on LED         yellow           Installation   Connection         Ma           Mounting set         Ma         Ma           Device protection   Electrical         Additional condition protection degree         inserted, screwed           Pollution Degree         3         A           Additional suppressor         Diode, 2-Otode           Mechanical data   Material data         Coating locking         verzinkt           Coating locking         verzinkt         Coating locking overzing and screw connection         Steel <td></td> <td></td>		
Packaging unit         1           Electrical data         20 ms           Drop-out delay time max.         20 ms           Electrical data   Supply         V           Operating voltage AC min.         19.2 V           Operating voltage AC min.         19.2 V           Operating voltage DC min.         18 V           Operating voltage DC min.         18 V           Operating voltage DC min.         18 V           Operating voltage pC max.         55 V           Current operating per contact max.         4 A           Current operating per contact max.         4 A           United peak voltage max.         55 V           Current operating per contact max.         4 A           United policy portion         15 mA           Diagnostics         V           Status indication LED         yellow           Installation   Connection           Mounting set         Ma           Device protection   Electrical           Additional condition protection degree         3           Rated surge voltage         0.8 kV           Material group (Ecoses+1)         1           Additional suppressor         Diode, Z-Diode           Mechanical data   Material data		
Electrical data         20 ms           Electrical data   Supply         Veraling voltage AC         24 V           Operating voltage AC min.         19,2 V         Perating voltage AC max.         28,8 V           Operating voltage AC max.         28,8 V         Perating voltage DC max.         20,000 more more voltage max.         20,000 more voltage max.         20,000 more voltage max.         30 V           Operating voltage DC max.         30 V         4 A         Current operating per contact max.         4 A         Current operating per contact max.         4 A         Current operating per contact max.         15 mA         Perating voltage more voltage more voltage.         Max.         Perating voltage more voltage.         10 max.         Perating voltage more voltage.         10 more voltage.		
Drop-out delay time max.   20 ms		·
Potenting voltage AC		
Operating voltage AC         24 V           Operating voltage AC min.         19,2 V           Operating voltage AC max.         23,8 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           Cut-off peak voltage max.         4 A           Current consumption max.         15 mA           Diagnostics           Status indication LED         yellow           Installation   Connection           Mounting set         M3           Device protection   Electrical           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         0,8 kV           Material group (IEC 60684-1)         I           Additional suppressor         Diode, Z-Diode           Mechanical data   Material data         Verzinkt           Coating locking         verzinkt           Coating of fitting         verzinkt           Coder housing         black           Material gasket         PUR           Locking material         Steel <t< td=""><td>Drop-out delay time max.</td><td>20 ms</td></t<>	Drop-out delay time max.	20 ms
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           Installation   Connection           Mounting set         M3           Device protection   Electrical         M3           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         0,8 kV           Material group (IEC 60664-1)         1           Additional suppressor         Diode, Z-Diode           Mechanical data   Material data         Verzinkt           Coating of fitting         verzinkt           Coating of fitting         verzinkt           Coating of material         Steel           Material screw connection         Steel           Mechanical data   Mounting data           Mounting method         inserted, screw	Electrical data   Supply	
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           Installation   Connection           Mounting set         M3           Device protection   Electrical         M3           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         0,8 kV           Material group (IEC 60664-1)         1           Additional suppressor         Diode, Z-Diode           Mechanical data   Material data         Verzinkt           Coating of fitting         verzinkt           Coating of fitting         verzinkt           Coating of material         Steel           Material screw connection         Steel           Mechanical data   Mounting data           Mounting method         inserted, screw	Operating voltage AC	24 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           Installation   Connection           Mounting set         M3           Device protection   Electrical           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         0,8 kV           Material group (IEC 80664-1)         I           Additional suppressor         Diode, Z-Diode           Mechanical data   Material data         Verzinkt           Coating of fitting         verzinkt           Coating of fitting         verzinkt           Color housing         black           Material screw connection         Steel           Mechanical data   Mounting data           Mounting method         inserted, screwed           Environmental characteristics   Climatic      <		19,2 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           Installation   Connection           Mounting set         M3           Device protection   Electrical           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         0,8 kV           Material group (IEC 60664-1)         1           Additional suppressor         Diode, 2-Diode           Mechanical data   Material data         Verzinkt           Coating offiting         verzinkt           Coating offiting         verzinkt           Color housing         black           Material gasket         PUR           Locking material         Steel           Material screw connection         Steel           Mechanical data   Mounting data           Mounting method         inserted, screwed           Environmental characteristics   Climatic           Oper		28,8 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 Installation   Connection Mounting set M3 Device protection   Electrical Additional condition protection degree inserted, screwed Pollution Degree 3 Rated surge voltage 0,8 kV Material group (IEC 60664-1) I Additional suppressor Diode, Z-Diode  Mechanical data   Material data Coating of fitting verzinkt Color housing black Material gasket PUR Mechanical data   Mounting data Mounting method inserted, screwed  Mechanical data   Mounting data Mounting method inserted, screwed  Environmental characteristics   Climatic Coperating temperature min25 °C	Operating voltage DC	24 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           Installation   Connection           Mounting set         M3           Device protection   Electrical           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         0,8 kV           Material group (IEC 60664-1)         I           Additional suppressor         Diode, Z-Diode           Mechanical data   Material data         Werzinkt           Coating locking         verzinkt           Coating of fitting         verzinkt           Color housing         black           Material gasket         PUR           Locking material         Steel           Material screw connection         Steel           Mechanical data   Mounting data           Mounting method         inserted, screwed           Environmental characteristics   Climatic           Operating temperature min.         -25 °C	Operating voltage DC min.	18 V
Current operating per contact max. 15 mA  Diagnostics  Status indication LED yellow  Installation   Connection  Mounting set M3  Device protection   Electrical  Additional condition protection degree inserted, screwed  Pollution Degree 3  Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Environmental characteristics   Climatic  Departing temperature min25 °C	Operating voltage DC max.	30 V
Current consumption max.       15 mA         Diagnostics         Status indication LED       yellow         Installation   Connection         Mounting set       M3         Device protection   Electrical         Additional condition protection degree       inserted, screwed         Pollution Degree       3         Rated surge voltage       0,8 kV         Material group (IEC 60664-1)       I         Additional suppressor       Diode, Z-Diode         Mechanical data   Material data         Coating locking       verzinkt         Coating of fitting       verzinkt         Coating of fitting       verzinkt         Coating of fitting       verzinkt         Coating agaket       PUR         Locking material       Steel         Mechanical data   Mounting data         Mechanical data   Mounting data         Mounting method       inserted, screwed         Environmental characteristics   Cl	Cut-off peak voltage max.	55 V
Diagnostics       Status indication LED     yellow       Installation   Connection       Mounting set     M3       Device protection   Electrical       Additional condition protection degree     inserted, screwed       Pollution Degree     3       Rated surge voltage     0,8 kV       Material group (IEC 60664-1)     1       Additional suppressor     Diode, Z-Diode       Mechanical data   Material data       Coating locking     verzinkt       Coating of fitting     verzinkt       Coolr housing     black       Material gasket     PUR       Locking material     Steel       Mechanical data   Mounting data       Mechanical data   Mounting data       Mounting method     inserted, screwed       Environmental characteristics   Climatic       Operating temperature min.     -25 °C	Current operating per contact max.	4 A
Status indication LED yellow  Installation   Connection  Mounting set M3  Device protection   Electrical  Additional condition protection degree inserted, screwed  Pollution Degree 3  Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Current consumption max.	15 mA
Status indication LED yellow  Installation   Connection  Mounting set M3  Device protection   Electrical  Additional condition protection degree inserted, screwed  Pollution Degree 3  Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Diagnostics	
Installation   Connection  Mounting set M3  Device protection   Electrical  Additional condition protection degree inserted, screwed  Pollution Degree 3  Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		vellow
Mounting set M3  Device protection   Electrical  Additional condition protection degree inserted, screwed  Pollution Degree 3  Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material  Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		youou
Device protection   Electrical  Additional condition protection degree inserted, screwed  Pollution Degree 3 Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		
Additional condition protection degree inserted, screwed  Pollution Degree 3 Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Mounting set	M3
Pollution Degree 3 Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Cperating temperature min25 °C	Device protection   Electrical	
Rated surge voltage 0,8 kV  Material group (IEC 60664-1) I  Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Additional condition protection degree	inserted, screwed
Material group (IEC 60664-1)  Additional suppressor  Diode, Z-Diode  Mechanical data   Material data  Coating locking  verzinkt  Color housing  black  Material gasket  PUR  Locking material  Steel  Material screw connection  Steel  Mechanical data   Mounting data  Mounting method  inserted, screwed  Environmental characteristics   Climatic  Operating temperature min.  Jiode (2.5 °C	Pollution Degree	3
Additional suppressor Diode, Z-Diode  Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Rated surge voltage	0,8 kV
Mechanical data   Material data  Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Material group (IEC 60664-1)	
Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Additional suppressor	Diode, Z-Diode
Coating locking verzinkt  Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C	Mechanical data   Material data	
Coating of fitting verzinkt  Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		verzinkt
Color housing black  Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		
Material gasket PUR  Locking material Steel  Material screw connection Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		
Locking material  Material screw connection  Steel  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min.  -25 °C		
Material screw connection  Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min.  -25 °C		
Mechanical data   Mounting data  Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		
Mounting method inserted, screwed  Environmental characteristics   Climatic  Operating temperature min25 °C		
Environmental characteristics   Climatic  Operating temperature min25 °C		innerted serviced
Operating temperature min25 °C		
	Environmental characteristics   Climatic	
Operating temperature max. 85 °C		
	Operating temperature max.	85 °C

The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-06-21



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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, green-yellow
Cable identification	616
Cable Type	1
Printing color of wire insulation	white (isolation black)
Jacket Color	black
Amount stranding	1
Stranding	3 wires twisted
wire arrangement	black 1, black 2, green-yellow
Cable weigth	61,6 g/m
Material jacket	PVC
Shore hardness jacket	80 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, silicone-free
Outer-diameter (jacket)	5,9 mm
Tolerance outer diameter (sheath)	±5%
Material wire insulation	PVC
Amount wires	3
Outer diameter insulation	1,8 mm
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 (standard)  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 (incer)	-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
Donaing radius (dynamic)	TO A Guidi diameter