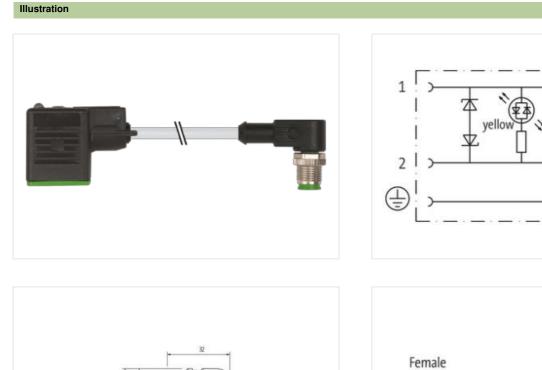


## M12 male 90° A-cod. / MSUD valve plug BI-11mm

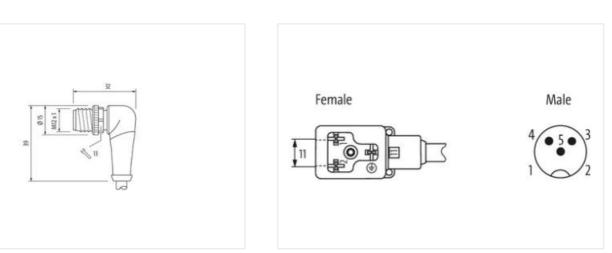
PVC 3x0.75 gy 1m

MSUD Form BI (11 mm) - M12, male 90° 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



4 3 5



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: 2024-05-22





Product may differ from Image



Cable length	1 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 $\emptyset$ )	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	4048879148382
Packaging unit	1
Electrical data	
Drop-out delay time max.	20 ms
Electrical data   Supply	

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Operating voltage AC max.         28.8 V           Operating voltage DC min.         18.V           Operating voltage DC mix.         30.V           Confer data voltage max.         55.V           Current consumption max.         12 mA           Diagnostice         Status indication LED           Porice protection frame.         12 mA           Diagnostice         Status indication LED           Porice protection flectrical         Porice protection flectrical           Redisting Condition protection degree         inserted, sorewed           Poliation Degree         3           Radis surge voltage DC         StV           Mechanical data [Material data         Color housing           Material housing         Platsic           Material housing         Platsic           Mechanical data [Material data         Color housing           Material housing         Platsic	Operating voltage AC	24 V
Operating voltage DC         24 V           Operating voltage DC max.         30 V           Operating voltage DC max.         30 V           Current operating voltage nox.         4 A           Current operating voltage nox.         12 mA           Degenositie         Voltage nox.           Stals indection LED         yellow           Device protection I electrical         Additional concilion protection degree           Additional concilion protection degree         0.8 kV           Mechanical data J Material data         Mechanical data J Material data           Color housing         black           Material colarity         Pasto           Mechanical data J Mouning data         Pasto           Mechanical data J Mouning data         S7 G           Operating voltage Concilion temperature range         depending voltage Concilion Conception temperature range           Operating temperature max.         85 G           Operating voltage Addition temperature range         temperating temperature max.           Operating voltage Addition temperature range         te	Operating voltage AC min.	19,2 V
Operating voltage DC min.18 VOperating voltage DC max.30 VCurrent operating per contact max.4 ACurrent operating per contact max.12 mDespositoryellowDevice protection flectricalyellowDevice protection flectricalyellowBalas intication LEDyellowBardioni protection degree3Radia all conting operating per contact max.8 AVMedia localito protection degree3Radia sure voltage0.8 VVMethanization LEDPlasticColuringblackMaterial floatingPlasticMethanization to the period	Operating voltage AC max.	28,8 V
Operating voltage DC max.         30 V           Care of paraling per containt max.         55 V           Diagnostice         4 A           Current operating per containt max.         12 mA           Diagnostice         Velow           Diverse perclosed max.         12 mA           Diagnostice         Velow           Diverse protection I Electrical         Velow           Diverse protection I Electrical         Velow           Additional condition protection degree         inserted, screwed           Politicon Organo         0.8 kV           Machanical data [ Material data         Velow           Color housing         Plastic           Machanical data [ Material data         Velow           Doparating temperature and         Velow           Deparating temperature max.         85 °C           Operating temperature max.         85 °C           Operating temperature max.         85 °C           Doparating temperature max.         85 °C           Notion temperature range         depending on cable quality           Important Installation note:         Protect the connectors by suitable measures from mechanical loads, eg, by the usage of cable lose.           Notion tanding tandu         Protect the connectors by suitable measures from mechanical loads, eg, by th	Operating voltage DC	24 V
Out-off peak voltage max.         55 V           Current operating per contact max.         4 A           Current operating per contact max.         12 mA           Disposition         12 mA           Disposition         Status indication LED           Disposition         perice protection [lectrical           Additional condition protection dispres         inserted, screwed           Pollution Dagres         3           Rand surge voltage         0.8 kV           Machanical data [Metrial data         Color housing           Matchanical data [Metrial data         Environmental characteristics [Climatic           Color housing         black           Matchanic characteristics [Climatic         Color characteristics [Climatic           Operating temperature mix.         -25 °C           Oparating temperature max.         85 °C           Additional condition temperature mage         depending on cable quality           Intervision matchinal brance         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ites.           Note on brank relified         Potect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ites.           Water and regres         DIN EN 61076-2-101 (M12); DIN EN 17500-803 (Ventilisecker)           Instant condition (Papee)         1 <td>Operating voltage DC min.</td> <td>18 V</td>	Operating voltage DC min.	18 V
Current consumption max.         12 mA           Device protection   Electrical         Status indication LED           Valuation protection protection of gene         3           Ratio and condition protection degree         3           Ration at condition protection degree         3           Recharical data         Beta/s           Macharia housing         Plastic           Macharia housing         Plastic           Macharia housing         Plastic           Mounting method         inserted, screwed           Environmental characteristics   Gimatic         Operating tomparature max.           Operating tomparature max.         85 °C           Device standard         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable tes.	Operating voltage DC max.	30 V
Durrent consumption max.         12 mA           Disposition         Status indication LED         yellow           Device protection [Electrical         inserted, screwed           Pollution Degree         3           Rated surge voltage         0.8 kV           Mechanical data [Material data]         User voltage           Color housing         black           Material incusing         Paisito           Mechanical data [Mounting data         Inserted, screwed           Mechanical data [Mounting data         Inserted, screwed           Color housing         black           Material incusing         Paisito           Mechanical data [Mounting data         Inserted, screwed           Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature range         deparding to cable quality           Important Installation notes         Protect the connections by suitable measures from mechanical loads, e.g. by the usage of cable ises.           Note on bending radius         Material robust be meding radii when laying cables, as the IP protection class can be and angered by excessive bending forces.           Color withy         Usack 1, black 2, green yellow           Cable tempficant (Sate)         Material robust (Sate)	Cut-off peak voltage max.	55 V
DisponeticsStates indication LEDyellowDeverpotention   ElectricalAdditional condition protection degreeinserted, screwedPollution Degree3Rated surge voltage0.8 kVMechanical data   Maerial datablackMichanical data   Mouning datablackMustrian DousingblackMustrian Dousinginserted, screwedProtectional data   Mouning datainserted, screwedMustrian Dousinginserted, screwedEnvironmental characteristics   Glimatic25 °COperating temperature max.25 °CNote on strain reliefNote the connectors by suitable measures from mechanical loade, e.g. by the usage of cable ies.Note on strain reliefNote the teorneetone by suitable measures from mechanical loade, e.g. by the usage of cable ies.Rote on strain reliefDiverative the source on suitable measures from mechanical loade, e.g. by the usage of cable ies.Rote on strain reliefDiverative the source on suitable measures from mechanical loade, e.g. by the usage of cable ies.Rote on strain reliefDiverative the source on suitable measures from mechanical loade, e.g. by the usage of cable ies.	Current operating per contact max.	4 A
Status indication LED         yellow           Device totop Electrial         inserted, screwed           Additional condition prolection degree         3           Rated surge voltage         0.8 kV           Mechanical data Material data         inserted, screwed           Otor housing         Back           Material housing         Pastic           Montanical data Montal data         inserted, screwed           Montanical data Montal data         inserted, screwed           Montanical data Montal data         scred, screwed           Additional condition temperature main         25 °C           Operating temperature imax.         86 °C           Additional condition temperature and         depending on cable quality           Internation temperature max.         86 °C           Additional condition temperature max.         86 °C           Additional condition temperature max.         86 °C           Addition and condition temperature max.         86 °C           Note an banding radius         Prolect the connectors by suitable measures from machanical loads, e.g. by the usage of cable iters.           Note an banding radius         Din KD 61076-2-011 (M12); DIN EN 15030-803 (Vontilateckor)           Instretion Cober         Una KD 61076-2-011 (M12); DIN EN 15030-803 (Vontitateckor)           Cable d	Current consumption max.	12 mA
Divice oprefection   Electrical         Inserted. screwed           Additional condition protection degree         isserted. screwed           Polluton Degree         3           Rated surge voltage         0.8 kV           Machanical data   Material data         Electrical data   Material data           Material housing         black           Material housing         black           Material housing         Plastic           Material housing         black           Mouning method         inserted. screwed           Environmental characteristics   Climatic         Climatic           Operating temperature main.         25 °C           Additional nontics         25 °C           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on strain relief         Note 610°6-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Inserted screwed         Stenon:<	Diagnostics	
Additional condition protection degree         inserted, sorewed         Sorewed         Sole Sorewed         Sor	Status indication LED	yellow
Pollution Degree         3           Rated surge voltage         0.8 kV           Mechanical data   Material data         Color housing         black           Material housing         Plastic         Plastic           Mechanical data   Mounting data         Inserted, screwed         Plastic           Mechanical data   Mounting data         Inserted, screwed         Plastic           Mechanical data   Mounting data         Inserted, screwed         Plastic           Operating temperature max.         68 °C         Additional condition temperature range         depending on cable quality           Important Installation notes         Additional condition temperature range         depending on cable quality           Mole on strain relief         Protect the connectors by subable measures from mechanical loads, e.g. by the usage of cable ties.           Note on bending radius         Advangered by excessive bending forces.         endangered by excessive bending forces.           Contronting         UNE N 61076-21.01 (M12); DIN EN 175301-803 (Vendistacker)         Installation Cable defentilication           Cable Tope         1         Protect for connectors by subable measures from mechanical loads, e.g. by the usage of cable ties.           Metandard         DIN EN 61076-21.01 (M12); DIN EN 175301-803 (Vendistacker)         Installation otes           Cable defentification         216	Device protection   Electrical	
Rated aurge voltage         0.8 kV           Mechanical data   Material data         Jack           Color housing         black           Material housing         Plastic           Mechanical data   Mounting data         inserted, screwed           Environmental characteristics   Climatic         Operating temperature min.           Operating temperature main.         25 °C           Operating temperature man.         85 °C           Additional condition temperature range         depending on cable quality           Important installation notes         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable lies.           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable lies.           Note on strain relief         Dist No 1076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation   Cable         use are nongement           Valek 1, black 2, green-yellow         Cable Installation           Cable Type         1           Printing color of wire insulation         wite (solation black)           Lacket Color         gray           Amount strainding         1           Strainding         3 wires twisted           wire arrangement         black 1, black 2, green-yellow <td< td=""><td>Additional condition protection degree</td><td>inserted, screwed</td></td<>	Additional condition protection degree	inserted, screwed
Mechanical data   Material data           Color housing         black           Material housing         Plastic           Mechanical data   Mounting data         Mounting method           Mounting method         insented, screwed           Environmental characteristics   Climatic         Operating temperature min.           25 °C         Operating temperature max.           Additional condition temperature may.         85 °C           Additional condition temperature may.         Adepending on cable quality           Important intailation notes         Meteritor: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.           Conomity         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Product standard         Din EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation [Cable         Yes           Product standard         Din EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation [Cable         Yes           Installation [Cable         Din EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation [Cable dentification         216           Cable identification         1           Standard         Diack 1, black 2, green -yellow <td< td=""><td>Pollution Degree</td><td>3</td></td<>	Pollution Degree	3
Color housing         black           Material housing         Plastc           Mechaical data   Mounting data         isserted, screwed           Mounting method         isserted, screwed           Caporating temperature main.         25 °C           Operating temperature max.         45 °C           Additional condition temperature may.         45 °C           Additional condition temperature may.         45 °C           Important Installation notes         Important Installation notes           Visco strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Departing radius         Ratemigered by excessive bending forces.           Cator type         Important instal ties.           Departing ties.         Important installo force.           Cator type         Important i	Rated surge voltage	0,8 kV
Material housing         Plastic           Mechanical data   Mounting data           Mounting method         inserted, screwed           Environmental characteristics   Climatic           Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature may.         depending on cable quality           Important installation notes         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.           Contomity         Environmental black 1, black 2, green-yellow           Cable distilication         216           Cable distilication         216           Cable of or wire insulation         white (solation black)           Jacket Color         gray           Amount stranding         1           Perinting color of wire insulation         white (solation black)           Jacket Color         gray           Amount stranding         1           Stranding         3 wires twisted           Wire arrangement         black 1, black 2, green yellow           Cable distification         216           Cable distification         216           Cable weight         63.8 g/m           Material alsoket Spacet </td <td>Mechanical data   Material data</td> <td></td>	Mechanical data   Material data	
Material housing         Plastic           Mechanical data   Mounting data           Mounting method         inserted, screwed           Environmental characteristics   Climatic           Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature may.         depending on cable quality           Important installation notes         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.           Contomity         Environmental black 1, black 2, green-yellow           Cable distilication         216           Cable distilication         216           Cable of or wire insulation         white (solation black)           Jacket Color         gray           Amount stranding         1           Perinting color of wire insulation         white (solation black)           Jacket Color         gray           Amount stranding         1           Stranding         3 wires twisted           Wire arrangement         black 1, black 2, green yellow           Cable distification         216           Cable distification         216           Cable weight         63.8 g/m           Material alsoket Spacet </td <td>Color housing</td> <td>black</td>	Color housing	black
Mounting method         inserted, screwed           Environmental characteristics   Climatic           Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Important installation notes         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Operating radius         Attention:: Observe the permissible bending radii when laying cables, as the IP protection class can be ending forces.           Conformity         Installation Cost           Product standard         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation [ Cable         Vent (solation black 2, green-yellow           Cable identification         216           Cable identification         216           Color         gray           Anount stranding         1           Stranding         3 wires twisted           wire arangement         black 1, black 2, green-yellow           Cable weight         63,8 g/m           Material jackt         PVC           Stranding         3 wires twisted           w	Material housing	
Mounting method         inserted, screwed           Environmental characteristics   Climatic           Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Important installation notes         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on strain relief         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Operating radius         Attention:: Observe the permissible bending radii when laying cables, as the IP protection class can be ending forces.           Conformity         Installation Cost           Product standard         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation [ Cable         Vent (solation black 2, green-yellow           Cable identification         216           Cable identification         216           Color         gray           Anount stranding         1           Stranding         3 wires twisted           wire arangement         black 1, black 2, green-yellow           Cable weight         63,8 g/m           Material jackt         PVC           Stranding         3 wires twisted           w	Mechanical data   Mounting data	
Environmental characteristics   Climatte           Operating temperature min.         25 °C           Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Important installation notes         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         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.           Conformity         Important Table           Product standard         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation (Cable         UNE N6 1076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation (Cable Table)         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation (Cable)         UNE N6 1076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation (Cable)         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Cable tige         Dia K1, black 2, green-yellow           Cable tige         Maint in (isolation black)           Jacket Color         gray           Anoant stranding         1           Stranding         Si wies twisted	· · ·	incerted screwed
Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Important installation notes         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         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.           Conformity         Product standard           Product standard         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation   Cable         Vere arrangement           View arrangement         black 1, black 2, green-yellow           Cable identification         216           Cable rope         1           Printing color of wire insulation         white (isolation black)           Jacket Color         gray           Amount stranding         1           Stranding         3 wires twisted           Material jacket         PVC           Shore A         Stranding           Freedom from ingredients (jacket)         5.9 mm           Cable weight         5.9 mm           Totelacce user (isolatin)	-	
Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Important installation notes         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           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         Attention: 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)           Installation   Cable         wire arrangement         black 1, black 2, green-yellow           Cable identification         216         Cable Type           Printing color of wire insulation         white (isolation black)           Jacket Color         gray           Amount stranding         1           Stranding         3 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable weigth         63,8 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 (gkeeth)		
Additional condition temperature range         depending on cable quality           Important installation notes         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Note on bending radius         Attention: 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)           Installation   Cable         uite arrangement         black 1, black 2, green-yellow           Cable identification         216         Cable Color         gray           Amount stranding         1         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Amount stranding         11         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Jack Load Color         gray         1         Protect the connectors by suitable measures from mechanical loads and the protection class can be endangered by excessive bending forces.           Cable for point         jack 1, black 2, green-yellow         2           Cable of of wire insulation         white (isolation black).         3           Jacket Color         gray         3         3           Cable weight         63,8 g/m         4         5 Shore A <td></td> <td></td>		
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         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.           Conformity         Endangered by excessive bending forces.           Product standard         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation I Cable         urie arrangement           black 1, black 2, green-yellow         Cable identification           Cable Identification         216           Cable Identification         gray           Amount stranding         1           Stranding         3 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable dentification         9 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable weigth         63.8 g/m           Material jacket         PVC           Shore hardness jacket         80 ± 5 Shore A           Freedom from ingredients (jacket)         ± 5 %           Material jacket         PVC           Amount stranding         1           Tolerance outer diameter (sheath)         ± 5 % <td></td> <td></td>		
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         Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.           Conformity         Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.           Installation ( Cable         UNE N 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation ( Cable         Une N 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation ( Cable         Une N 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation ( Cable         Une N 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation ( Cable         Une N 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation ( Cable         Une N 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation ( Cable         Une N 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Use arrangement         Diack 1, black 2, green-yellow           Cable veltification         3 wires twisted           wire arrangement         Diack 1, black 2, green-yellow           Cable veligh         63.8 g/m           Material jacket         PVC           Shore hardness jacket         So Sore A           Freedom fro		depending on cable quality
Attention: 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)           Installation   Cable           wire arrangement         black 1, black 2, green-yellow           Cable identification         216           Cable 700 or divire insulation         white (isolation black)           Jacket Color         gray           Amount stranding         1           Stranding         9 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable vegith         63.8 g/m           Amount stranding         1           Stranding         9 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable weight         63.8 g/m           Material jacket         PVC           Shore hardness jacket         80 ± 5 Shore A           Freedom from ingredients (jacket)         1 ead-free, cadmium-free, CFC-free, silicone-free           Outer-diameter (jacket)         5,9 mm           Tolerance outer diameter (shealth)         1,5 %           Material wire insulation         PVC           Amount wires         3	Important installation notes	
Note on behaning radius         endangered by excessive bending forces.           Conformity           Product standard         DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)           Installation   Cable           wire arrangement         black 1, black 2, green-yellow           Cable identification         216           Cable Joor of wire insulation         white (isolation black)           Jacket Color         gray           Amount stranding         1           Stranding         3 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable weigth         63,8 g/m           Material jacket         PVC           Shore hardness jacket         80 ± 5 Shore A           Freedom from ingredients (jacket)         jead-free, cadmium-free, CFC-free, silicone-free           Outer diameter (jacket)         5,9 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         NP           Outer diameter (scheath)         5,9 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         NP           Outer diameter (scheath)         5 %           Material wire insulation         1,8 mm           Outer	Note on strain relief	
Product standardDIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)Installation   Cablewire arrangementblack 1, black 2, green-yellowCable identification216Cable Type1Printing color of wire insulationwhite (isolation black)Jacket ColorgrayAmount stranding1Stranding3 wires twistedwire arrangementblack 1, black 2, green-yellowCable type63,8 g/mMaterial jacketPVCShore hardness jacket80 ± 5 Shore AFreedom from ingredients (jacket)5,9 mmTolerance outer diameter (sheath)± 5 %Material wire insulationPVCAmount wires3Outer diameter insulation± 5 %Material wire insulation1,8 mmOuter diameter insulation± 5 %Shore hardness wire insulation43 ± 5 Shore D	Note on bending radius	
Installation   Cable           wire arrangement         black 1, black 2, green-yellow           Cable identification         216           Cable Type         1           Printing color of wire insulation         white (isolation black)           Jacket Color         gray           Amount stranding         1           Stranding         3 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable weigth         63.8 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	Conformity	
wire arrangementblack 1, black 2, green-yellowCable identification216Cable Type1Printing color of wire insulationwhite (isolation black)Jacket ColorgrayAmount stranding1Stranding3 wires twistedwire arrangementblack 1, black 2, green-yellowCable weigth63,8 g/mMaterial jacketPVCShore hardness jacket80 ± 5 Shore AFreedom from ingredients (jacket)iead-free, cadmium-free, CFC-free, silicone-freeOuter-diameter (sheath)± 5 %Material wire insulationPVCAmount wires3Outer diameter (sheath)± 5 %Material wire insulation1,8 mmOuter diameter tolerance core insulation± 5 %Shore hardness wire insulation43 ± 5 Shore D		
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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	Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Amount stranding	black 1, black 2, green-yellow 216 1 white (isolation black) gray 1 3 wires twisted
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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	Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Amount stranding Stranding wire arrangement Cable weigth	black 1, black 2, green-yellow 216 1 white (isolation black) gray 1 3 wires twisted black 1, black 2, green-yellow 63,8 g/m PVC
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	Installation   Cable wire arrangement Cable identification Cable Type Printing color of wire insulation Jacket Color Amount stranding Stranding wire arrangement Cable weigth Material jacket	black 1, black 2, green-yellow 216 1 white (isolation black) gray 1 3 wires twisted black 1, black 2, green-yellow 63,8 g/m PVC 80 ± 5 Shore A
Amount wires3Outer diameter insulation1,8 mmOuter diameter tolerance core insulation± 5 %Shore hardness wire insulation43 ± 5 Shore D	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	black 1, black 2, green-yellow         216         1         white (isolation black)         gray         1         3 wires twisted         black 1, black 2, green-yellow         63,8 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free
Outer diameter insulation1,8 mmOuter diameter tolerance core insulation± 5 %Shore hardness wire insulation43 ± 5 Shore D	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)	black 1, black 2, green-yellow         216         1         white (isolation black)         gray         1         3 wires twisted         black 1, black 2, green-yellow         63,8 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free         5,9 mm
Outer diameter tolerance core insulation     ± 5 %       Shore hardness wire insulation     43 ± 5 Shore D	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)	black 1, black 2, green-yellow 216 1 white (isolation black) gray 1 3 wires twisted black 1, black 2, green-yellow 63,8 g/m PVC 80 ± 5 Shore A lead-free, cadmium-free, CFC-free, silicone-free 5,9 mm ± 5 %
Shore hardness wire insulation     43 ± 5 Shore D	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)	black 1, black 2, green-yellow         216         1         white (isolation black)         gray         1         3 wires twisted         black 1, black 2, green-yellow         63,8 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free         5,9 mm         ± 5 %         PVC
	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	black 1, black 2, green-yellow         216         1         white (isolation black)         gray         1         3 wires twisted         black 1, black 2, green-yellow         63,8 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free         5,9 mm         ± 5 %         PVC         3
Material properties wire insulation good machinability	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 Amount wires	black 1, black 2, green-yellow         216         1         white (isolation black)         gray         1         3 wires twisted         black 1, black 2, green-yellow         63,8 g/m         PVC         80 ± 5 Shore A         lead-free, cadmium-free, CFC-free, silicone-free         5,9 mm         ± 5 %         PVC         3         1,8 mm
	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 Amount wires Outer diameter insulation	black 1, black 2, green-yellow2161white (isolation black)gray13 wires twistedblack 1, black 2, green-yellow $63,8 g/m$ PVC80 ± 5 Shore Alead-free, cadmium-free, CFC-free, silicone-free $5,9 mm$ $\pm 5 \%$ PVC31,8 mm $\pm 5 \%$

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: 2024-05-22



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
Flame resistance	UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2
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

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