

## MSUD double valve B-10mm with cable

PUR 4x0.75 bk UL/CSA 5m

Form B (10 mm) 24 V AC ±20% / DC ±25% LED and suppression Connection cable L = 100 mm Further cable lengths on request.

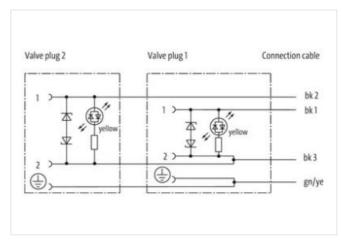
Plastic housings with good resistance against chemicals and oils.

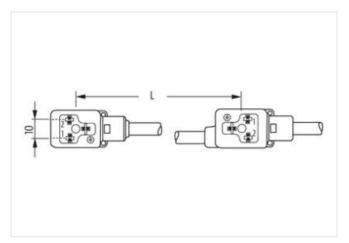
The resistance to aggressive media should be individually tested for your application. Further details on request.

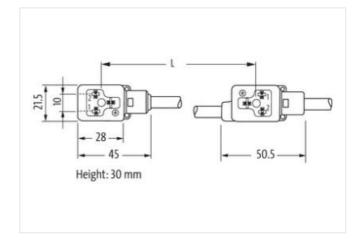
## **Link to Product**

## Illustration









Product may differ from Image



Cable length 5 m

Side 1

0,4 Nm Tightening torque

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: 2024-05-03



stay connected

| Thread                                   | M3  |
|--|---|
| Side 2                                   |   |
| Tightening torque                        | 0,4 Nm  |
| Thread                                   | M3  |
| 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                                     | 4048879517676   |
| Packaging unit                           | 1   |
| Electrical data                          |   |
| Capacity CX                              | 20 ms   |
|  |   |
| Electrical data   Supply                 |   |
| Operating voltage AC                     | 24 V  |
| Operating voltage AC min.                | 19,2 V  |
| Operating voltage AC max.                | 28,8 V  |
| Operating voltage DC                     | 24 V  |
| Operating voltage DC min.                | 18 V  |
| Operating voltage DC max.                | 30 V  |
| Cut-off peak voltage max.                | 55 V  |
| Current operating per contact max.       | 4 A   |
| Current consumption max.                 | 12 mA   |
| Diagnostics                              |   |
| Status indication LED                    | yellow  |
| Device protection   Electrical           |   |
| Degree of protection (EN IEC 60529)      | IP67  |
| Additional condition protection degree   | inserted, screwed   |
| Rated surge voltage                      | 0,8 kV  |
| Mechanical data   Material data          |   |
| Color housing                            | black   |
| Material housing                         | Plastic   |
|  |   |
| Mechanical data   Mounting data          | incerted coround  |
| Mounting method                          | inserted, screwed   |
| Environmental characteristics   Climatic | 05.00   |
| Operating temperature min.               | -25 °C  |
| Operating temperature max.               | 85 °C   |
| Additional condition temperature range   | depending on cable quality  |
| Important installation notes             |   |
| Note on strain relief                    | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.   |
| Note on bending radius                   | <b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |
| Installation   Cable                     |   |
| Cable identification                     | 627   |



| Jackel Color Type of Certificate  URUS  Amount stranding  1  | Cable Type  | 2   |
|--|---|---|
| Type of Certificate         CURus           Amount stranding         1           Stranding         4 wes twisted           wire arrangement         black 1, black 2, black 3, green-yellow           Traversing distance (C-track)         5 m @ 25°C1 horizontal           Gable weigh         74.8 gm           Malaterial jacket         PUR           Shore hardness jackett         85.1 Shore A           Freedom from ingredients (jacket)         65.5 mm           Outer diameter (seket)         5.5 mm           Tolorance outer diameter (sheath)         5.5 %           Material inner jacket         PVC           Color (inner jacket)         black           Material wire insulation         PVC           Amount wires         4           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         ± 5 %           Shore hardness wire insulation         ± 5 %           Annount strandies wire insulation         ± 5 %           Shore hardness wire insulation         ± 5 %           Printing color of wire insulation         ± 5 %           Shore hardness wire insulation         ± 5 %           Amount strandies wire insulation         ± 5 %           White (jost of the ins   | Printing color of wire insulation                 | white (isolation black)                             |
| Amount stranding         1           Stranding         4 wires twisted           wire arrangement         black 1, black 2, black 3, green-yellow           Traversing distance (C-track)         5 m @ 25 °C   horizontal           Cable weighh         74.8 g/m           Material jacket         PUR           Shore hardness jacket         85 ± 5 Shore A           Freedom from ingredents (acket)         6.5 mm           Outer diameter (jacket)         6.5 mm           Tolerance outer diameter (jacket)         1.5 %           Material inner jacket         PVC           Color (inner jacket)         black           Material wire insulation         PVC           Color (inner jacket)         black           Material wire insulation         1,8 mm           Outer diameter insulation         1,8 mm           Outer diameter insulation         43 ± 5 Shore D           Important freeness wire insulation         43 ± 5 Shore D           Important freeness wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor or saccostorin (wire)         0,75 mm²           Material wire insulation         0,15 mm           C  | Jacket Color                                      | black   |
| Stranding  | Type of Certificate                               | cURus   |
| wire arrangement black 1, black 2, black 3, green-yellow Traversing distance (C-track) 5 m @ 25 °C   horizontal Cable weight 74,8 g/m Material jacket PUR Shore hardness jackot 85 ± 5 Shore A Freedom from ingredients (gacket) lead-free, cadmium-free, CFC-free, silicone-free Outer-diameter (jacket) 5.5 mm Toterance outer diameter (sheath) ± 5 % Material inner jackot PVC Color (inner jacket) black Material inner jackot PVC Outer dimerter insulation PVC Outer diameter insulation PVC Arnount wires 4 Arnount strands (wire) 43 ± 5 Shore D Ingredient freeness wire insulation 43 ± 5 Shore D Ingredient freeness wire insulation 43 ± 5 Shore D Ingredient freeness wire insulation with (solation black) Arnount strands (wire) 42 Diameter of single wires 0,15 mm Material conductor wire Conductor rowsealcolin (wire) 3.7 mm² Material conductor wire Strands despens wire, bare Conductor type (wire) strand class 6 Material conductor wire 2 Stranded copper wire, bare Conductor type (wire) strand class 6 Material conductor wire 2 Scranded copper wire, bare Conductor type (wire) strand class 6 Material conductor wire 2 Scranded copper wire, bare Current load capacity (standard) to D IN VDE 0298-4 Current load capacity (standard) to D IN VDE 0298-4 Current load capacity (standard) to D IN VDE 0298-4 Current load capacity (standard) 2 KV @ 60 s Min. operating temperature (static) Max. operating temperature (static) Max. operating temperature max. (dynamic) 50 °C Operating temperature max. (dynamic) 50 °C Operating temperature max. (dynamic) 50 °C Operating temperature max. (dynamic) 60 °C Operating temperature max. (dynamic) 70 °C cuter diameter 60 °C od. application-related testing 1 DIN EN 6081-404 Bending radius (föved) 10 × Outer diameter 60 °C od. application-related testing 1 DIN EN 6081-404 Bending radius (föved) 10 × Outer diameter 60 °C od. application-related testing 1 DIN EN 6081-404  | Amount stranding                                  | 1   |
| Traversing distance (C-track)         5 m @ 25 °C   horizontal           Cable weight         74,8 g/m           Material jacket         PUR           Shore hardness jacket         85 ± 5 Shore A           Freedom from ingredients (jacket)         lead-free, cadmium-free, CFC-free, silicone-free           Outer-diameter (jacket)         6.5 m           Tolerance outer diameter (sheath)         ± 5 %           Material inner jacket         PVC           Color (inner jacket)         black           Material wire insulation         PVC           Amount wires         4           User diameter insulation         1,8 mm           Outer diameter insulation         1,8 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         ± 5 %           Normand strands (wire)         43 ± 5 Shore D           Ingredient freeness wire insulation         white (solation black)           Amount strands (wire)         42           Biameter of singe wires         0,15 mm           Conductor by exity of wire insulation         white (solation black)           Amount strands (wire)         0,75 mm²           Conductor by exity of wire insulation         white (solation black)           Amount strands (   | Stranding   | 4 wires twisted                                     |
| Cable weight         74,8 g/m           Material jacket         PUR           Freedom from imgredients (jacket)         lead-free, cadmium-free, CFC-free, silicone-free           Outer-diameter (jacket)         6.5 mm           Toterance outer diameter (sheath)         ± 5 %           Material inner jacket         PVC           Color (mer jacket)         black           Material wire insulation         PVC           Amount wires         4           Outer diameter insulation         1.8 mm           Outer diameter rolerance core insulation         4.3 mm           Outer diameter insulation         4.5 %           Shore hardness wire insulation         4.5 %           Ingredient freeness wire insulation         4.5 %           Manual strands (wire)         4.2 ± 5 Shore D           Diameter of single wires         0.15 mm           Conductor rossesction (wire)         0.75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 Ω/km @ 20 °C           AC withstand voltage (wire - wire)   | wire arrangement                                  | black 1, black 2, black 3, green-yellow             |
| Material jacket         PUR           Shore hardness jacket         85 ± 5 Shore A           Freedom from ingredients (jacket)         6.5 mm           Tolerance outer diameter (jacket)         6.5 mm           Tolerance outer diameter (sheath)         ± 5 %           Material inner jacket)         black           Material wire insulation         PVC           Color (inner jacket)         black           Material wire insulation         PVC           Amount wires         4           Outer diameter tolerance core insulation         1.8 mm           Outer diameter tolerance core insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadmium-free, CFC-free, silicone-free           Printing color of wire insulation         white (solation black)           Amount strands (wire)         42           Diameter of single wires         0.15 mm           Conductor rossection (wire)         0,75 mm²           Material conductor wire         Svanded copper wire, bare           Conductor type (wire)         strand dass 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Elec  | Traversing distance (C-track)                     | 5 m @ 25 °C   horizontal                            |
| Shore hardness jacket         85 ± 5 Shore A           Freedom from ingredients (jacket)         lead-free, cadmium-free, CFC-free, silicone-free           Outer-diameter (jacket)         5, mm           Tolerance outer diameter (sheath)         ± 5 %           Material inner jacket         PVC           Color (mer jacket)         black           Material wire insulation         PVC           Amount wires         4           Outer diameter insulation         1,8 mm           Outer diameter lolerance core insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadmium-free, CFC-free, silicone-free           Printing color of wire insulation         lead-free, cadmium-free, CFC-free, silicone-free           Printing color of wire insulation         whet (solation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor reseasestion (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 v           Current load capacity (standard)         to DIN VDE 0298-4   | Cable weigth                                      | 74,8 g/m  |
| Freedom from ingradients (jacket)   lead-free, cadmium-free, CFC-free, silicone-free   | Material jacket                                   | PUR   |
| Outer-diameter (jacket)         6,5 mm           Tolerance outer diameter (sheath)         ± 5 %           Material inner jacket)         black           Material wire insulation         PVC           Amount wires         4           Outer diameter lorisulation         1,8 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor rossection (wire)         0,75 mm²           Material conductor vive         Stranded copper wire, bare           Conductor type (wire)         stranded copper wire, bare           Connounced type (wire)         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 O/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - wire)         2 kV @ 60 s           Min. operating temperature (static) <t< td=""><td>Shore hardness jacket</td><td>85 ± 5 Shore A</td></t<>  | Shore hardness jacket                             | 85 ± 5 Shore A                                      |
| Tolerance outer diameter (sheath) ± 5 %  Material inner jacket PVC  Color (inner jacket) black  Material wire insulation PVC  Amount wires 4  Outer diameter insulation ± 5 %  Shore hardness wire insulation ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 5 %  Shore hardness wire insulation   ± 2 %  Emitting color of wire insulation   ± 2 %  Diameter of single wires   0,15 mm  Conductor vire   0,75 mm²  Material conductor wire   0,75 mm²  Material conductor wire   0,75 mm²  Conductor vire wire   0,75 mm²  Conductor vire (wire)   5 tranded copper wire, bare   1   | Freedom from ingredients (jacket)                 | lead-free, cadmium-free, CFC-free, silicone-free    |
| Material inner jacket         PVC           Color (inner jacket)         black           Material wire insulation         PVC           Amount wires         4           Outer diameter insulation         1,8 mm           Outer diameter blearance core insulation         ± 5 %           Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor of single wires         0,15 mm           Conductor orsessection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 O/km @ 20 °C           AC withstand voltage (wire - wire)         2 k V @ 60 s           Power frequency withstand voltage (wire - wire)         2 k V @ 60 s           Min. operating temperature (fixed)         80 °C           Operating temperature (min. (dynamic)         45 °C <tr< td=""><td>Outer-diameter (jacket)</td><td>6,5 mm</td></tr<>  | Outer-diameter (jacket)                           | 6,5 mm  |
| Color (inner jacket)         black           Material wire insulation         PVC           Amount wires         4           Outer diameter insulation         1,8 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 Ω/m @ 20 °C           AC withstand voltage (wire - wire)         2 k V @ 60 s           Power frequency withstand voltage (wire - siacket)         2 k V @ 60 s           Min. operating temperature (static)         30 °C           Max. operating temperature (static)         30 °C           Max. operating temperature (static)   | Tolerance outer diameter (sheath)                 | ± 5 %   |
| Material wire insulation         PVC           Amount wires         4           Outer diameter insulation         1,8 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadminum-free, CFC-free, silicone-free           Printing color of wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - yiacket)         2 kV @ 60 s           Min. operating temperature (static)         30 °C           Max. operating temperature min. (dynamic)         5 °C           Operating temperature min. (dynamic)         5 °C   | Material inner jacket                             | PVC   |
| Material wire insulation         PVC           Amount wires         4           Outer diameter insulation         1,8 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadminum-free, CFC-free, silicone-free           Printing color of wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - yiacket)         2 kV @ 60 s           Min. operating temperature (static)         30 °C           Max. operating temperature min. (dynamic)         5 °C           Operating temperature min. (dynamic)         5 °C   | Color (inner jacket)                              | black   |
| Outer diameter insulation         1,8 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadmium-free, CFC-free, silicone-free           Printing color of wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor crossection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - sire)         2 kV @ 60 s           Min. operating temperature (static)         -30 °C           Max. operating temperature (fixed)         80 °C           Operating temperature min. (dynamic)         -5 °C           UV resistance         DIN EN ISO 4892-2 A           Flame resistance         DIN EN ISO 4892-2 LUL 1581 § 10   | Material wire insulation                          | PVC   |
| Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadmium-free, CFC-free, silicone-free           Printing color of wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0.15 mm           Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 Okm @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - wire)         2 kV @ 60 s           Min. operating temperature (static)         -30 °C           Max. operating temperature (static)         80 °C           Operating temperature min. (dynamic)         5 °C           UV resistance         DIN EN ISO 4892-2 A           Flame resistance         UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090           chemical resistance  | Amount wires                                      | 4   |
| Shore hardness wire insulation         43 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadmium-free, CFC-free, silicone-free           Printing color of wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0.15 mm           Conductor crosssection (wire)         0.75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity (wire wire)         12 A           Electrical resistance line constant wire         26 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - wire)         2 kV @ 60 s           Min. operating temperature (static)         -30 °C           Max. operating temperature (fixed)         80 °C           Operating temperature min. (dynamic)         -5 °C           Operating temperature min. (dynamic)         -5 °C           Operating temperature min. (dynamic)         -6 °C           UV resistance         DIN EN ISO 4892-2 A           Flame resistance         Good, application-relat  | Outer diameter insulation                         | 1,8 mm  |
| Ingredient freeness wire insulation lead-free, cadmium-free, CFC-free, silicone-free  Printing color of wire insulation white (isolation black)  Amount strands (wire) 42  Diameter of single wires 0.15 mm  Conductor crosssection (wire) 0.75 mm²  Material conductor wire Stranded copper wire, bare  Conductor type (wire) strand class 6  Nominal voltage AC max. 300 V  Current load capacity (standard) to DIN VDE 0298-4  Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 12 A  Electrical resistance line constant wire 26 Ω/km @ 20 °C  AC withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - 2 kV @ 60 s  Power frequency withstand voltage (wire - 30 °C  Min. operating temperature (static) -30 °C  Max. operating temperature (static) -5 °C  Operating temperature max. (dynamic) -5 °C  Operatin  | Outer diameter tolerance core insulation          | ±5%   |
| Printing color of wire insulation white (isolation black)  Amount strands (wire) 42  Diameter of single wires 0,15 mm  Conductor crosssection (wire) 0,75 mm²  Material conductor wire Stranded copper wire, bare  Conductor type (wire) strand class 6  Nominal voltage AC max. 300 V  Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min, wire 12 A  Electrical resistance line constant wire 26 kV @ 60 s  Power frequency withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - acceptable) 30 °C  Operating temperature (fixed) 80 °C  Operating temperature (fixed) 80 °C  Operating temperature max. (dynamic) 45 °C  Operating temperature max. (dynamic) 50 °C  UV resistance DIN EN ISO 4892-2 A  Flame resistance Good, application-related testing  Gasoline resistance Good, application-related testing  Gasoline resistance Good, application-related testing  Oli resistance Good, application-related testing  Bending radius (dynamic) 15 x Outer diameter   | Shore hardness wire insulation                    | 43 ± 5 Shore D                                      |
| Amount strands (wire) 42  Diameter of single wires 0,15 mm  Conductor crosssection (wire) 0,75 mm²  Material conductor wire Stranded copper wire, bare  Conductor type (wire) strand class 6  Nominal voltage AC max. 300 V  Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 12 A  Electrical resistance line constant wire 26 Ω/km @ 20 °C  AC withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - ack wire) 2 kV @ 60 s  Min. operating temperature (static) -30 °C  Max. operating temperature (fixed) 80 °C  Operating temperature min. (dynamic) -5 °C  Operating temperature max. (dynamic) 80 °C  UV resistance DIN EN ISO 4892-2 A  Flame resistance Good, application-related testing  Gasoline resistance Good, application-related testing  Oil resistance Good, application-related testing  Oil resistance Good, application-related testing  Bending radius (fixed) 10 x Outer diameter   | Ingredient freeness wire insulation               | lead-free, cadmium-free, CFC-free, silicone-free    |
| Amount strands (wire) 42  Diameter of single wires 0,15 mm  Conductor crosssection (wire) 0,75 mm²  Material conductor wire Stranded copper wire, bare  Conductor type (wire) strand class 6  Nominal voltage AC max. 300 V  Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 12 A  Electrical resistance line constant wire 26 Ω/km @ 20 °C  AC withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - ack wire) 2 kV @ 60 s  Min. operating temperature (static) -30 °C  Max. operating temperature (fixed) 80 °C  Operating temperature min. (dynamic) -5 °C  Operating temperature max. (dynamic) 80 °C  UV resistance DIN EN ISO 4892-2 A  Flame resistance Good, application-related testing  Gasoline resistance Good, application-related testing  Oil resistance Good, application-related testing  Oil resistance Good, application-related testing  Bending radius (fixed) 10 x Outer diameter   | Printing color of wire insulation                 | white (isolation black)                             |
| Diameter of single wires 0,15 mm  Conductor crosssection (wire) 0,75 mm²  Material conductor wire Stranded copper wire, bare  Conductor type (wire) strand class 6  Nominal voltage AC max. 300 V  Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 12 A  Electrical resistance line constant wire 26 Ω/km @ 20 °C  AC withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - jacket) 30 °C  Max. operating temperature (static) 30 °C  Max. operating temperature (fixed) 80 °C  Operating temperature min. (dynamic) 5 °C  Operating temperature max. (dynamic) 80 °C  Flame 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) 10 x Outer diameter  |   |   |
| Conductor crosssection (wire)     0,75 mm²       Material conductor wire     Stranded copper wire, bare       Conductor type (wire)     strand class 6       Nominal voltage AC max.     300 V       Current load capacity (standard)     to DIN VDE 0298-4       Current load capacity min. wire     12 A       Electrical resistance line constant wire     26 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       Min. operating temperature (static)     -30 °C       Max. operating temperature (fixed)     80 °C       Operating temperature min. (dynamic)     -5 °C       Operating temperature max. (dynamic)     80 °C       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)     10 x Outer diameter       Bending radius (dynamic)     15 x Outer diameter  | . , ,   | 0,15 mm   |
| Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - jacket)         2 kV @ 60 s           Min. operating temperature (static)         -30 °C           Max. operating temperature (fixed)         80 °C           Operating temperature min. (dynamic)         -5 °C           Operating temperature max. (dynamic)         80 °C           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)         10 x Outer diameter           Bending radius (dynamic)         15 x Outer diameter   |   | 0,75 mm <sup>2</sup>                                |
| Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 12 A Electrical resistance line constant wire 26 Ω/km @ 20 °C AC withstand voltage (wire - wire) 2 kV @ 60 s Power frequency withstand voltage (wire - jacket) 30 °C Min. operating temperature (static) -30 °C Max. operating temperature (fixed) 80 °C Operating temperature min. (dynamic) -5 °C Operating temperature max. (dynamic) 80 °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   Bending radius (fixed) 10 x Outer diameter   | Material conductor wire                           | Stranded copper wire, bare                          |
| Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 12 A Electrical resistance line constant wire 26 Ω/km @ 20 °C AC withstand voltage (wire - wire) 2 kV @ 60 s Power frequency withstand voltage (wire - jacket) 30 °C Min. operating temperature (static) -30 °C Max. operating temperature (fixed) 80 °C Operating temperature min. (dynamic) -5 °C Operating temperature max. (dynamic) 80 °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   Bending radius (fixed) 10 x Outer diameter   | Conductor type (wire)                             | strand class 6                                      |
| Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 12 A  Electrical resistance line constant wire 26 Ω/km @ 20 °C  AC withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - jacket) 30 °C  Min. operating temperature (static) -30 °C  Max. operating temperature (fixed) 80 °C  Operating temperature min. (dynamic) -5 °C  Operating temperature max. (dynamic) 80 °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) 10 x Outer diameter  |   | 300 V   |
| Current load capacity min. wire       12 A         Electrical resistance line constant wire       26 Ω/km @ 20 °C         AC withstand voltage (wire - wire)       2 kV @ 60 s         Power frequency withstand voltage (wire - jacket)       2 kV @ 60 s         Min. operating temperature (static)       -30 °C         Max. operating temperature (fixed)       80 °C         Operating temperature min. (dynamic)       -5 °C         Operating temperature max. (dynamic)       80 °C         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)       10 x Outer diameter         Bending radius (dynamic)       15 x Outer diameter  |   |   |
| Electrical resistance line constant wire 26 Ω/km @ 20 °C  AC withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - jacket) 2 kV @ 60 s  Min. operating temperature (static) -30 °C  Max. operating temperature (fixed) 80 °C  Operating temperature min. (dynamic) -5 °C  Operating temperature max. (dynamic) 80 °C  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) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter  |   | 12 A  |
| Power frequency withstand voltage (wire - jacket)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Operating temperature max. (dynamic)  OPERATING THE STATE OF THE S | Electrical resistance line constant wire          | 26 Ω/km @ 20 °C                                     |
| Power frequency withstand voltage (wire - jacket)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Operating temperature max. (dynamic)  OPERATING THE STATE OF THE S | AC withstand voltage (wire - wire)                | 2 kV @ 60 s   |
| Max. operating temperature (fixed) 80 °C  Operating temperature min. (dynamic) -5 °C  Operating temperature max. (dynamic) 80 °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) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter   | Power frequency withstand voltage (wire - jacket) | 2 kV @ 60 s   |
| Max. operating temperature (fixed) 80 °C  Operating temperature min. (dynamic) -5 °C  Operating temperature max. (dynamic) 80 °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) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter   | Min. operating temperature (static)               | -30 °C  |
| Operating temperature min. (dynamic) Operating temperature max. (dynamic) 80 °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) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter   | Max. operating temperature (fixed)                |   |
| Operating temperature max. (dynamic) 80 °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) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter   | Operating temperature min. (dynamic)              |   |
| 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) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter  | Operating temperature max. (dynamic)              |   |
| 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) 10 x Outer diameter Bending radius (dynamic) 15 x Outer diameter  | UV resistance                                     |   |
| 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) 10 x Outer diameter Bending radius (dynamic) 15 x Outer diameter  | Flame resistance                                  | UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090 |
| Oil resistance Good, application-related testing   DIN EN 60811-404  Bending radius (fixed) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter  | chemical resistance                               |   |
| Oil resistance Good, application-related testing   DIN EN 60811-404  Bending radius (fixed) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter  | Gasoline resistance                               | Good, application-related testing                   |
| Bending radius (fixed) 10 x Outer diameter  Bending radius (dynamic) 15 x Outer diameter   | Oil resistance                                    |   |
| Bending radius (dynamic) 15 x Outer diameter   | Bending radius (fixed)                            |   |
|  | Bending radius (dynamic)                          |   |
|  | Travel speed (C-track)                            |   |