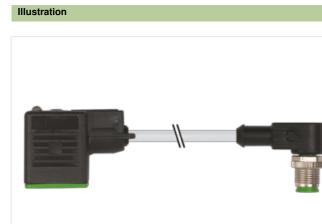


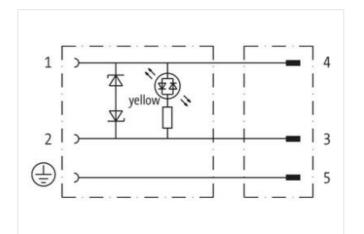
## M12 male 90° A-cod. / MSUD valve plug B-10mm

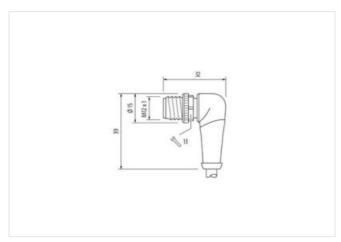
PUR 3x0.75 gy UL/CSA+robot+drag ch. 1.5m

Form B (10 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







Product may differ from Image



Cable length	1,5 m
Side 1	
Tightening torque	0,4 Nm

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: 2024-05-12

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Thread	M3
Degree of protection (EN IEC 60529)	IP66K, IP67
Side 2	
Tightening torque	0.6 Nm
Thread	M12 x 1
Degree of protection (EN IEC 60529)	IP66K, 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	4048879610162
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	
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	
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	
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.
Installation   Cable	

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Printing color of wire insulation     white (isolation black)       Lacket Color     gray       Type of Cartificatio     CURus       Arrount stranding     1       Stranding     Sirves hvisted       Wire arrangement     black 1, black 2, groen yellow       Traversing distance (Ctrack)     5 m @ 25 °C   torcortal       Cable weigh     48,4 g/m       Material glachet     PUR       Strandines jacket     58 ± 3 Shore D       Freedom from ingredients (glockel)     5,2 mm       Traversing indirects (glockel)     5,2 mm       Traversing wire insulation     PP       Arrount wrise     3       Outer diamotior insulation     1,5 %       Shore hardness wire insulation     1,4 ± 3 Shore D       Arrount wrise     0,15 mm       Cardidation travel (slockel)     0,75 mm       Diameter of aingle wires     0,15 mm       Cardidation travel (slockel)     0,75 mm       Carduator travel (slockel)	Cable identification	256
Jacket Color gray Type of Certificate cURus Amount stranding 1 Stranding 3 Wires twisted wire arrangement black 1, black 2, green yellow Traversing distance (C-track) 5 m @ 25 °C [ horizontal Cable weigh 44 e g/m Material jacket PUR Shore hardness jacket 58 ± 3 Shore D Entered morn ingredients (jacket) lead-free, cadmum-free, CFC-free, halogen-free, silicone-free Outer-dameter (jacket) 5 m @ 25 °C [ horizontal Cable weigh 44 e g/m Material jacket 58 ± 3 Shore D Entered morn ingredients (jacket) lead-free, cadmum-free, CFC-free, halogen-free, silicone-free Outer-dameter (jacket) 5 m @ 25 °C [ horizontal Cable weigh 45 m @ 25 °C ] horizontal Cable weigh 75 m @ 25 °C [ horizontal Cable weigh 75 m @ 25 °C ] Material wei insulation 75 ± 5 % Cabler dameter insulation 74 ± 3 Shore D Dater dameter insulation 74 ± 3 Shore D Cabler dameter insulation 84 °C (C-free, halogen-free, silicone-free Printing Outer of weight insulation 174 ± 3 Shore D Cabler dameter insulation 174 ± 5 % Cabler dameter insulation 174 ± 5 % Cab	Cable Type	5
Type of Certificate     oUFus       Anount stranding     1       Stranding     9 vires kviskad       wire arrangement     9 block 1, block 2, green-yvillow       Traversing distance (C-track)     5 m @ 25 °C   horizontal       Adle weigh     48,4 g /m       Material glockt     FUR       Shore hardness jackt     FUR       Shore hardness jackt     FUR       Torearce outer disense (sket)     5,2 mm       Older-dimeter (sket)     5,8 mm       Older-dimeter (sket)     5,7 %       Material wire insulation     PP       Anount wires     3       Outer dimeter (sket)     1,5 %       Shore hardness wire insulation     1,4 5 %       Nature distribution     1,4 5 %       Shore hardness wire insulation     1,4 5 %       Shore hardness wire insulation     1,4 5 %       Shore hardness wire insulation     1,4 5 %	Printing color of wire insulation	white (isolation black)
Amount stranding     1       Stranding     3 wites twisted       Weie arrangement     black 1, black 2, green-yellow       Traversing distance (C-track)     5 m @ 25 °C   horizontal       Cable weight     48,4 g/m       Material jackst     PUR       Shore hardness jackat     58 a 3 Shore D       Freedom from ingredients (jacket)     52 a.m       Outer-dismeter (jacket)     5.2 mm       Tolerance outer dismeter (jacket)     5.5 %       Material weis insulation     PP       Amount wires     3       Outer dismeter insulation     1,7 mm       Outer dismeter insulation     74 ± 3 Shore D       Normating in environme core insulation     74 ± 3 Shore D       Normating outer divisional black)     Amount wires       Arrount strands (wire)     42       Diameter of single wire insulation     1,15 mm       Conductor tropsection (wire)     0,75 mm <sup>3</sup> Outer dimeter insulation     1,16 mm       Conductor tropsection (wire)     0,76 mm <sup>3</sup> Conductor tropsection (wire)     0,75 mm <sup>3</sup> Conductor true docapacaly (standard)     to D IN VDE 028-44	Jacket Color	gray
Stranding     3 wires twisted       wire arrangement     black 1, black 2, green-yellow       Travesing distance (C-track)     5 m @ 25 °C, Invizontal       Cable weigth     48.4 g/m       Material jacket     PUR       Shore hardness jackal     54.3 Shore D       Foredom from ingredients (jacket)     lead-free, cadmium-free, CFC-free, halogen-free, silicone-free       Dater diameter (jacket)     5.2 mm       Tolerance outer diameter (sheath)     1.5 %       Malerial wire insulation     PP       Anount wires     3       Outer diameter translation     1.7 mm       Outer diameter insulation     4.5 %       Shore hardness wire insulation     4.5 %       Shore hardness wire insulation     4.5 %       Shore hardness wire insulation     1.7 mm       Outer diameter insulation     4.5 %       Shore hardness wire insulation     4.5 %       Shore hardness wire insulation     1.6 fm       Conductor vire insulation     1.6 fm       Conductor vire insulation     1.7 mm       Conductor vire insulation     0.7 fm       Manourt itrands (wire)     2.2	Type of Certificate	cURus
wire arrangement     black 1, black 2, green-yellow       Traversing distance (C-track)     5 m @ 25 °C   Invirontal       Cable weigh     44, dym       Material jacket     9LR       Shore hardness jacket     58 ± 3 Shore D       Toferance outer diameter (jacket)     5.2 rm       Toferance outer diameter (jacket)     5.2 rm       Material vice ingendents (jacket)     5.2 rm       Toferance outer diameter (sheath)     5 %       Marcal vice ingendents (jacket)     5 %       Outer diameter insulation     PP       Annount vices     3       Outer diameter insulation     1.7 rm       Outer diameter insulation     4 5 %       Unard diameter vice relaxation     74 1 3 Shore D       Ingerdent Treeness were insulation     white (solation black)       Armount strands (wire)     42       Diameter of single wires     0.15 mm       Conductor type (wire)     0.75 mm <sup>4</sup> Conductor vice     Stranded copper wire, bare       Conductor type (wire)     stranded copper wire, bare       Conductor type (wire)     stranded copper wire, bare       Conductor type (wire)	Amount stranding	1
Traversing distance (C-track)     5 m @ 25 °C   horizontal       Cable weight     48.4 g/m       Material jackat     PUR       Shore hardness jackat     58 ± 3 Shore D       Created more from ingredients (jacket)     lead-tree, cadmium-free, CFC-free, halogen-free, silicone-free       Outer diameter (jacket)     ± 5 %       Material jackat     PP       Amount wices     3       Outer diameter (insulation     1,7 mm       Duter diameter insulation     1,4 ± 3 Shore D       Shore hardness wire insulation     1,4 ± 3 Shore D       Ingredient freeness wire insulation     1,4 ± 3 Shore D       Ingredient freeness wire insulation     1,4 ± 3 Shore D       Normal strand (jwire)     42       Diameter of single wires     0,15 mm       Conductor rossection (wire)     0,75 mm²       Moral advalage (wire)     42 Advalage       Diameter of single wires     0,15 mm²       Conductor type (wire)     strand class 6       Norminal voltage AC max.     300 V       Current load capacity (standard)     to DIN VDE 0298 4       Current load capacity (standard)     to DIN VDE 0298 4       <	Stranding	3 wires twisted
Cable weigth 48,4 g/m   Material jacket PUR   Material jacket 52 ± 3 Shore D   Freedom from ingredients (jacket) lead-free, cadmium-free, OFC-free, halogen-free, silicone-free   Duter diameter (jacket) 5,2 mm   Toerance outer diameter (heath) ± 5 %   Material wire insulation PP   Arnount wires 3   Outer diameter forleance core insulation ± 5 %   Shore hardness wire insulation 74 ± 3 Shore D   Duter diameter insulation 74 ± 3 Shore D   Frinting color of wire insulation 74 ± 3 Shore D   Arnount wires 0,15 mm   Conductor orisection wire insulation white (isolation black)   Arnount strands (vire) 42   Diameter of single wires 0,15 mm   Conductor vires Stranded copper wire, bare   Conductor vires Straded copper wire, bare   Conductor	wire arrangement	black 1, black 2, green-yellow
Material jacket     PUR       Shore hardness jacket     58 ± 3 Shore D       Freedom from ingredients (jacket)     Isad Yee, adminum-free, CFC-free, halogen-free, silicone-free       Outer-diameter (jacket)     5.2 mm       Tolerance outer diameter (sheath)     ± 5 %       Material wire insulation     PP       Amount wires     3       Outer diameter insulation     1.7 mm       Outer diameter insulation     1.4 mm       Ingredient freeness wire insulation     1.4 ± 3 Shore D       Ingredient freeness wire insulation     Hate's candinium-free, CFC-free, halogen-free, silicone-free       Amount strands (wire)     42       Diameter of single wires     0.15 mm       Conductor or ressuection (wire)     0.75 mm <sup>2</sup> Outer diameter insulation     1.9 fm       Conductor type (wire)     strande dosper wire, bare       Conductor type (wire)     strande dosper wire, bare       Conductor type (wire)     strandedosper wire, bare </td <td>Traversing distance (C-track)</td> <td>5 m @ 25 °C   horizontal</td>	Traversing distance (C-track)	5 m @ 25 °C   horizontal
Shore hardness jacket58 ± 3 Shore DFreedom from ingredients (lacket)lead-free, cadmium-free, CFC-free, halogen-free, silicone-freeOuter diameter (lacket)5.2 mmTolerance outer diameter (sheath)1.5 %Material wire insulationPPAmount wires3Outer diameter siluation1.7 mmOuter diameter core insulation1.6 %Shore hardness wire insulation74 ± 3 Shore DIngredient freess wire insulation74 ± 3 Shore DIngredient freess wire insulationwhite (isolation black)Amount wires0.15 mmConductor rossection (wire)0.75 mm²Conductor viresStraned class 6Onductor wire insulationb NN VDE 2094 4Conductor vire (wire)15 mm²Conductor vire (wire)Straned class 6Conductor vire)0.75 mm²Conductor vire)5.2 KV @ 60 sNominal voltage AC max.300 VCurrent load capacity (standard)10 NIV DE 2094 4Current load capacity (standard)10 NIV DE 2094 4Current load capacity (standard)2.5 KV @ 60 sMin. operating temperature (static)40 °CAG Orkin @ 20 °C2.5 KV @ 60 sMin. operating temperature (static)40 °CMin. operating temperature (static)40 °CAga opplication-related testingOperating temperature (static)40 °CAga opplication-related testingOperating temperature (static)40 °CAga opplication-related testingOperating temperature (sta	Cable weigth	48,4 g/m
Freedom from ingredients (jacket) lead-free, cadmium-free, QFC-free, halogen-free, silicone-free   Duter-diameter (jacket) 5.2 mm   Tolerance outer diameter (scheath) ± 5 %   Material wrie insulation PP   Amount wries 3   Outer diameter insulation 1,7 mm   Outer diameter insulation 1,7 mm   Outer diameter insulation 1,7 mm   Outer diameter insulation 1,4 5 %   Shore hardness wire insulation ke3 5%   Ingredient freeness wire insulation ke3 4%   Printing color of wire insulation ke3 4%   Amount strands (wire) 42   Diameter of single wires 0,15 mm   Canductor crosssection (wire) 0,75 mm²   Material conductor wire Stranded copper wire, bare   Conductor vipe (wire) strand class 6   Norninal voltage AC max. 300 V   Current load capacity min. wire 12 A   Electrical resistance line constant wire 26 Mrm @ 20 °C   AC withstand voltage (wire - wire) 2,5 kV @ 60 s   Min. operating temperature (tite) 40 °C   Min. operating temperature (tite) 40 °C   Min. operating temperature (tite) 80 °C / 90 °C @ 10000 h Operation   Pater soutery withstand voltage (wire - wire) 2,5 kV @ 60 s	Material jacket	PUR
Outer-diameter (jacket)     5.2 mm       Tolerance outer diameter (sheath)     ± 5 %       Material wire insulation     PP       Amount wires     3       Outer diameter insulation     1.7 mm       Outer diameter insulation     ± 5 %       Shore hardness wire insulation     ± 5 %       Shore hardness wire insulation     H± 3 Shore D       Ingredient freeness wire insulation     Head-free, cadmium-free, CFC-free, halogen-free, silicone-free       Printing color of wire insulation     white (isolation black)       Anount strands (wire)     42       Diameter of single wires     0.15 mm       Conductor crosssection (wire)     0.75 mm <sup>3</sup> Material conductor wire     Stranded copper wire, bare       Conductor type (wire)     strand class 6       Norminal voltage AC max.     300 V       Current toad capacity (standard)     to DIN VDE 028-4       Current toad capacity min. wire     12 A       Electrical resistance line constant wire     26 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2.5 kV @ 60 s       Power frequency withstand voltage (wire - wire)     2.5 kV @ 60 s       Questreguency withst	Shore hardness jacket	58 ± 3 Shore D
Tolerance outer diameter (sheath)   ± 5 %     Material wire insulation   PP     Amount wires   3     Outer diameter insulation   1.7 mm     Outer diameter insulation   ± 5 %     Shore hardness wire insulation   ± 5 %     Shore hardness wire insulation   # 5 %     Shore hardness wire insulation   # 4 3 Shore D     Ingredient (resenses wire insulation   white (isolation black)     Amount strands (wire)   42     Diameter of single wires   0.15 mm     Conductor orsessection (wire)   0.75 mm <sup>2</sup> Conductor vires escienting (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 0296 s     Min. operating temperature (static)   -40 °C     Max.operating temperature (stat	Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material wire insulation     PP       Amount wires     3       Outer diameter insulation     1.7 mm       Outer diameter insulation     25 %       Shore hardness wire insulation     74 ± 3 Shore D       Ingredient treeness wire insulation     Iead-free, cadmium-free, CFC-free, halogen-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 mm <sup>2</sup> Conductor rops (wire)     strande class 6       Nominal voltage AG max.     300 V       Current load capacity (strandar Cass 6     Strande Cass 6       Nominal voltage (wire)     strande Cass 6       Current load capacity (strandarci)     to DIN VDE 0296-4       Current load capacity (strandarci)     2.5 kV @ 60 s       Power frequency withstand voltage (wire - wire)     2.5 kV @ 60 s       Min. operating temperature (static)     40 °C <td>Outer-diameter (jacket)</td> <td>5,2 mm</td>	Outer-diameter (jacket)	5,2 mm
Amount wires 3   Outer diameter insulation 1.7 mm   Outer diameter tolerance core insulation ± 5 %   Shore hardness wire insulation 74 ± 3 Shore D   Ingredient freeness wire insulation lead-free, cadmium-free, CFC-free, halogen-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 mm <sup>2</sup> Conductor vire Stranded copper wire, bare Conductor vire (wire)   Stranded copper wire, bare Conductor vire (wire)   Conductor vires Stranded copper wire, bare   Conductor vires Stranded copper vire, bare   Contract load capacity min, wire 12 A   Electrical resistance Storkm @ 20 °C   Ac withstand voltage (wire - 2,5 kV @ 60 s Storm @ 20 °C @ 10000 h Operation   Operating temperature (static)	Tolerance outer diameter (sheath)	± 5 %
Duter diameter insulation     1,7 mm       Duter diameter tolerance core insulation     5 %       Shore hardness wire insulation     74 ± 3 Shore D       ingredient freeness wire insulation     lead-free, cadmium-free, CFC-free, halogen-free, silicone-free       Printing color of wire insulation     white (isolation black)       Annount 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 min. wire     12 A       Electrical resistance line constant wire     26 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2,5 KV @ 60 s       Power frequency withstand voltage (wire - ackel)     40 °C       Operating temperature (fixed)     80 °C / 90 °C @ 10000 h Operation       Operating temperature (fixed)     80 °C / 90 °C @ 10000 h Operation       Operating temperature (fixed)     80 °C / 90 °C @ 10000 h Operation       Operating temperature (fixed)     80 °C / 90 °C @ 10000 h Operation       Operating temperature max. (dynamic)     28 °C	Material wire insulation	PP
Duter diameter tolerance core insulation     ± 5 %       Shore hardness wire insulation     74 ± 3 Shore D       Ingredient freeness wire insulation     lead-free, cadmium-free, CFC-free, halogen-free, silicone-free       Printing color of wire insulation     white (isolation black)       Amount strands (wire)     42       Diameter of single wires     0.15 nm       Conductor crossection (wire)     0.75 nm²       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 (wint- wire)     2,5 kV @ 60 s       Power frequency withstand voltage (wire - wire)     2,5 kV @ 60 s       Min. operating temperature (static)     -40 °C       Max. operating temperature (static)     -40 °C       Doparating temperature (static)     -25 °C       Operatin	Amount wires	3
Shore hardness wire insulation   74 ± 3 Shore D     Ingredient freeness wire insulation   lead-free, cadmium-free, CFC-free, halogen-free, silicone-free     Printing color of wire insulation   while (isolation black)     Amount strands (wire)   42     Diametor 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)   2,5 kV @ 60 s     Power frequency withstand voltage (wire - lacket)   2,5 kV @ 60 s     Power frequency withstand voltage (wire - lacket)   2,5 kV @ 60 s     Operating temperature (static)   -40 °C     Max. operating temperature (static)   -25 °C     Operating temperature (static)   80 °C / 90 °C @ 10000 h Operation     Operating temperature (static)   -25 °C     Operating temperature (static)   80 °C / 90 °C @ 10000 h Operation     Operating temperature (static)   80 °C / 90 °C @ 10000 h Operation     Charity temperature (static)   60 °C / 90 °C @ 10000 h Operation     Operating	Outer diameter insulation	1,7 mm
Ingredient freeness wire insulation     lead-free, cadmium-free, CFC-free, halogen-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 mm <sup>3</sup> Material conductor wire     Stranded copper wire, bare       Conductor type (wire)     strand class 6       Nominal voltage AC max.     300 V       Current load capacity (standard)     to DI NDE 0298-4       Current load capacity (standard)     to DI NDE 0298-4       Current load capacity (standard)     25 KV @ 60 s       Power frequency withstand voltage (wire - iacket)     2,5 kV @ 60 s       Power frequency withstand voltage (wire - iacket)     2,5 kV @ 60 s       Min. operating temperature (static)     -40 °C       Max. operating temperature fixed)     80 °C / 90 °C @ 10000 h Operation       Operating temperature max. (dynamic)     -25 °C       Operating temperature max. (dynamic)     -25 °C       Operating temperature max. (dynamic)     80 °C / 90 °C @ 10000 h Operation       Flame resistance     UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090       Chemical resistance	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 mm <sup>2</sup> 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 (standard)   0.01N VDE 0298-4     Maxing temperature (static)   42 K     Electrical resistance   2.5 kV @ 60 s     Min. operating temperature (static)   -40 °C     Max. operating temperature (static)   -40 °C     Max. operating temperature max. (dynamic)   25 °C     Operating temperature max. (dynamic)   25	Shore hardness wire insulation	74 ± 3 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 (standard)   to DIN VDE 0298-4     Current load capacity (wire)   2,5 kV @ 60 s     Power frequency withstand voltage (wire -   2,5 kV @ 60 s     Power frequency withstand voltage (wire -   2,5 kV @ 60 s     Actext   80 °C / 90 °C @ 10000 h Operation     Operating temperature (fixed)   80 °C / 90 °C @ 10000 h Operation     Operating temperature (fixed)   80 °C / 90 °C @ 10000 h Operation     Flame resistance   Good, application-related testing     Gasoline resistance   UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1190     Charlen resistance   Good, application-related testing     Gasoline resistance   Good, application-related testing     Gasoline resistance   Good, application-related testing     Gasoline resistance   Good, application-related testing     Dill resistance   Good, application-relate	Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Diameter of single wires0,15 mmConductor crosssection (wire)0,75 mm²Material conductor wireStranded copper wire, bareConductor type (wire)strand class 6Nominal voltage AC max.300 VCurrent load capacity (standard)to DIN VDE 0298.4Current load capacity (standard)to DIN VDE 0298.4Current load capacity (standard)to ZAElectrical resistance line constant wire26 Ω/km @ 20 °CAC withstand voltage (wire - wire)2,5 kV @ 60 sPower frequency withstand voltage (wire - acket)2,5 kV @ 60 sWin. operating temperature (static)-40 °CMax. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationPlane resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testing   DIN EN 60811-404Bending radius (fixed)5 × Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Printing color of wire insulation	white (isolation black)
Conductor crossection (wire)0,75 mm²Material conductor wireStranded copper wire, bareConductor type (wire)strand class 6Nominal voltage AC max.300 VCurrent load capacity (standard)to DIN VDE 0298-4Current load capacity (standard)to DIN VDE 0298-4Current load capacity min. wire12 AElectrical resistance line constant wire26 Ω/km @ 20 °CAC withstand voltage (wire - wire)2.5 kV @ 60 sPower frequency withstand voltage (wire - acket).40 °CMax. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationOperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationOperating temperature max. (dynamic)60 °C / 90 °C @ 10000 h OperationChemical resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090Chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingDil resistanceGood, application-related testingBending radius (fixed)5 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Amount strands (wire)	42
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)   2,5 kV @ 60 s     Power frequency withstand voltage (wire - acket)   -40 °C     Max. operating temperature (static)   -40 °C     Max. operating temperature (fixed)   80 °C / 90 °C @ 10000 h Operation     Operating temperature min. (dynamic)   -25 °C     Operating temperature max. (dynamic)   80 °C / 90 °C @ 10000 h Operation     Flame resistance   Good, application-related testing     Gasoline resistance   Good, application-related testing     Gasoline resistance   Good, application-related testing   DIN EN 60811-404     Bending radius (fixed)   5 x Outer diameter     Bending radius (dynamic)   10 x Outer diameter     Travel speed (C-track)   10 Mio. @ 25 °C     No. of torsion cycles   1 Mio.     Torsion stress   ± 380 °/m	Diameter of single wires	0,15 mm
Conductor type (wire)strand class 6Nominal voltage AC max.300 VCurrent load capacity (standard)to DIN VDE 0298-4Current load capacity min. wire12 AElectrical resistance line constant wire26 Ω/km @ 20 °CAC withstand voltage (wire - wire)2,5 kV @ 60 sPower frequency withstand voltage (wire - acket)-40 °CMin. operating temperature (static)-40 °CMax. operating temperature (static)-40 °COperating temperature (static)-25 °COperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationCharlen tesistanceUL 1581 § 1100 FT2   EC 60332-2-2   UL 1581 § 1090Charlen tesistanceGood, application-related testingGasoline resistanceGood, application-related testingOll resistanceGood, application-related testing   DIN EN 60811-404Bending radius (fixed)5 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Conductor crosssection (wire)	0,75 mm²
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)   2,5 kV @ 60 s     Power frequency withstand voltage (wire - acket)   2,5 kV @ 60 s     Min. operating temperature (static)   -40 °C     Max. operating temperature (fixed)   80 °C / 90 °C @ 10000 h Operation     Operating temperature min. (dynamic)   -25 °C     Operating temperature max. (dynamic)   80 °C / 90 °C @ 10000 h Operation     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     O	Material conductor wire	Stranded copper wire, bare
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)   2,5 kV @ 60 s     Power frequency withstand voltage (wire - acket)   2,5 kV @ 60 s     Power frequency withstand voltage (wire - acket)   -40 °C     Max. operating temperature (static)   -40 °C     Max. operating temperature (fixed)   80 °C / 90 °C @ 10000 h Operation     Operating temperature min. (dynamic)   -25 °C     Operating temperature max. (dynamic)   0 °C / 90 °C @ 10000 h Operation     Flame 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     Travel speed (C-	Conductor type (wire)	strand class 6
Current load capacity min. wire12 AElectrical resistance line constant wire26 Ω/km @ 20 °CAC withstand voltage (wire - wire)2,5 kV @ 60 sPower frequency withstand voltage (wire - jacket)2,5 kV @ 60 sPower frequency withstand voltage (wire - jacket)2,5 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationFlame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090Chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistance10 x Outer diameterBending radius (fixed)5 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Nominal voltage AC max.	300 V
Electrical resistance line constant wire   26 Ω/km @ 20 °C     AC withstand voltage (wire - wire)   2,5 kV @ 60 s     Power frequency withstand voltage (wire - acket)   2,5 kV @ 60 s     Pine requency withstand voltage (wire - acket)   -40 °C     Max. operating temperature (static)   -40 °C     Max. operating temperature (fixed)   80 °C / 90 °C @ 10000 h Operation     Operating temperature min. (dynamic)   -25 °C     Operating temperature max. (dynamic)   80 °C / 90 °C @ 10000 h Operation     Flame resistance   UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090     Chemical 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     In xo vuter diameter   10 x	Current load capacity (standard)	to DIN VDE 0298-4
AC withstand voltage (wire - wire)2,5 kV @ 60 sPower frequency withstand voltage (wire - jacket)2,5 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationFlame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090Chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingDi v Outer diameterTo x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Current load capacity min. wire	12 A
Power frequency withstand voltage (wire - jacket)2,5 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationFlame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090Chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingIn related (stering radius (fixed))5 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Electrical resistance line constant wire	26 Ω/km @ 20 °C
jacket)2,5 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationFlame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090Chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceIn x Outer diameterBending radius (fixed)5 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	AC withstand voltage (wire - wire)	2,5 kV @ 60 s
Max. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationFlame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingIn related testing5 × Outer diameterBending radius (fixed)5 × Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Power frequency withstand voltage (wire - jacket)	2,5 kV @ 60 s
Operating temperature min. (dynamic)   -25 °C     Operating temperature max. (dynamic)   80 °C / 90 °C @ 10000 h Operation     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     Di vouter diameter   To x Outer diameter     Travel speed (C-track)   10 Mio. @ 25 °C     No. of torsion cycles   1 Mio.     Torsion stress   ± 360 °/m	Min. operating temperature (static)	-40 °C
Operating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationFlame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingDi vouter diameter10 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
Flame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testing   DIN EN 60811-404Bending radius (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Operating temperature min. (dynamic)	-25 °C
chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testing   DIN EN 60811-404Bending radius (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Operating temperature max. (dynamic)	
Gasoline resistanceGood, application-related testingOil resistanceGood, application-related testing   DIN EN 60811-404Bending radius (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	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)   5 × Outer diameter     Bending radius (dynamic)   10 × Outer diameter     Travel speed (C-track)   10 Mio. @ 25 °C     No. of torsion cycles   1 Mio.     Torsion stress   ± 360 °/m	chemical resistance	
Bending radius (fixed)   5 x Outer diameter     Bending radius (dynamic)   10 x Outer diameter     Travel speed (C-track)   10 Mio. @ 25 °C     No. of torsion cycles   1 Mio.     Torsion stress   ± 360 °/m	Gasoline resistance	Good, application-related testing
Bending radius (dynamic)   10 x Outer diameter     Travel speed (C-track)   10 Mio. @ 25 °C     No. of torsion cycles   1 Mio.     Torsion stress   ± 360 °/m	Oil resistance	Good, application-related testing   DIN EN 60811-404
Travel speed (C-track)10 Mio. @ 25 °CNo. of torsion cycles1 Mio.Torsion stress± 360 °/m	Bending radius (fixed)	5 x Outer diameter
No. of torsion cycles 1 Mio.   Torsion stress ± 360 °/m	Bending radius (dynamic)	10 x Outer diameter
Torsion stress ± 360 °/m	Travel speed (C-track)	10 Mio. @ 25 °C
	No. of torsion cycles	1 Mio.
Torsion speed 35 cycles/min	Torsion stress	± 360 °/m
	Torsion speed	35 cycles/min

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: 2024-05-12

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