

## M12 male on back A-cod. / MSUD double valve B-10mm

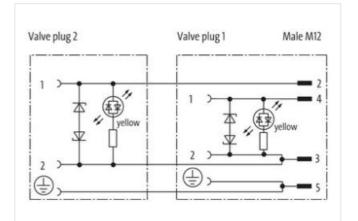
PUR 3x0.75 bk UL/CSA+drag ch. 0m

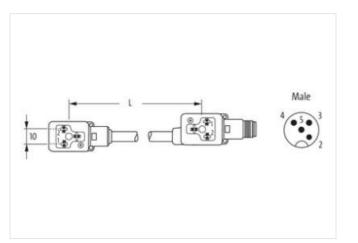
Form B (10 mm) – M12, connector at the rear 24 V AC  $\pm 20\%$  / DC  $\pm 25\%$ LED and suppression Connection cable L = 100 mm Plastic housings with good resistance against chemicals and oils. The resistance to aggressive media should be individually tested for your application. Further details on request.

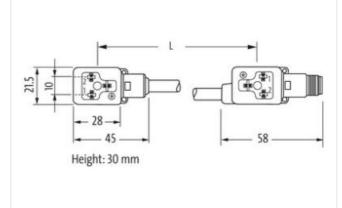
## Link to Product











Product may differ from Image

Side 1 Tightening torque	0.4 Nm	
Thread	M3	
Side 2		
mation in this Product-PDF has been co	piled with the utmost care. ality of the information is restricted to gross negligence. Version: 2024-05-21	

Murrelektronik B.V. | Takkebijsters 3 | 4817 BL Breda | Fon 085-22 20 282 | Fax 085-22 20 283 | shop@murrelektronik.nl | shop.murrelektronik.nl



Tightening torque	0,4 Nm	
Thread	M3	
Commercial data		
ECLASS-6.0	27143423	
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	4048879600309	
Packaging unit	1	
Electrical data		
Drop-out delay time max.	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	
Degree of protection (ISO 20653:2013)	IP66K	
Additional condition protection degree	inserted, screwed	
Mechanical data   Material data		
Color housing	black	
Material housing	Plastic	
5		
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		
wire arrangement	black 1, black 2, green-yellow	
Cable identification	636	
Cable Type	3	

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: 2024-05-21

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Jacket Color         black           Type of Certificate         cURus           Amount stranding         1           Stranding         wires kveised           ive arrangement         black 1. black 2. groen yellow           Gabin weight         56.1 g/m           Material jaceat         90 ± 5 Shore A           Fread-on from ingredients (jacket)         90 ± 5 Shore A           Gabin weight         5.9 mm           Toterance outer diameter (heam)         5.9 mm           Carlander outer diameter (heam)         5.9 mm           Toterance outer diameter (heam)         5.9 mm           Carlander weight         5.9 mm           Carlander weight         5.9 mm           Carlander weight installation         1.8 5 mm           Carlander weight installation         1.8 5 mm           Carlander weight installation         7.1 5 Shore D           Finerator size installation         7.1 5 Shore D           Finerator weight installation         7.1 5 Shore D           Finerator size installation         7.1 5 Shore D           Finan	Printing color of wire insulation	white (isolation black)
Type of Certificate         cURus           Amount stranding         1           Stranding         3 wires lowisated           Wire arrangement         black 1, black 2, green-yellow           Cable weigh         55.1 g/m           Material jacket         PUR           Store hardness glockel         90.5 Shore A           Freedom from inguedents (gacket)         5.9 mm           Tolerance outer diameter (glocket)         5.9 mm           Tolerance outer diameter (glocket)         5.9 mm           Tolerance outer diameter (glocket)         5.9 mm           Outer diameter insulation         PP           Amount wires         3           Outer diameter insulation         1.85 mm           Outer diameter insulation         1.9 5 %           Shore hardness wire insulation         1.0 5 % hore D           Ingredent freeness wire insulation         1.0 5 % hore D           Normal variand (wire)         4.2 %           Damoter of single wires         0.15 mm           Canductor orossection (wire)         0.75 mm?           Canductor trype (wirei)         stand cander cooper wire, bare           Consultor trype (wirei)         stand case 6           Normal variand (wirei)         1.0 IN VVDE 128-4           C	-	
Amount stranding         1           Stranding         3 wires twisted           wires arrangement         black 1, black 2, green-yellow           Cable weight         55,1 g/m           Matarial jacket         90 ± 5 Shore A           Freedom from ingredients (jacket)         black 1, black 2, green-yellow           Cable weight         50 ± 5 Shore A           Freedom from ingredients (jacket)         black 1, black 2, green-yellow           Cable advecting the strain of the strain of the strain weight         black 1, black 2, green-yellow           Cable advecting the strain of the strain of the strain weight         black 1, black 2, green-yellow           Cable advecting the strain of the st	Type of Certificate	cURus
wire arrangement         black 1, black 2, green-yellow           Cable weight         56, rg/m           Material jacket         PUR           Shore hardness jacket         90, 1, 5 Shore A           Freedom from ingredients (jacket)         lead-free, cadmium-tree, CFC-free, halogen-free, allicone-free           Duter -diameter (jacket)         5, 9 mm           Tolerance outer diameter (sheath)         1, 5 %           Material wire insulation         1, 85 mm           Outer diameter insulation         1, 85 mm           Ingredient freeness wire insulation         1, 86 mm           Ingredient freeness wire insulation         1, 85 mm           Constructor consecution (wire)         0, 75 mm?           Conductor consecution (wire)         0, 75 mm?           Conductor consecution (wire)         0, 75 mm?           Conductor wire insulation         1, DIN VDE 0289.4           Constructor wire         Strand elooper wire, bare           Condutor consesecution (wire)         2,5 kV @ 60 s		1
Cable weight         56,1 g/m           Material jacket         PUR           Shore hardness jacket         90.5 Shore A           Freedom from ingredients (jacket)         lead free, cadmium-free, CFC-free, halogen-free, silicone-free           Outer-diameter (jacket)         5.9 mm           Tolerance outer diamater (sheat)         1.5 %           Material insulation         PP           Amount wires         3           Outer diameter insulation         1.85 mm           Outer diameter insulation         70.5 Shore D           Ingredient freenees wire insulation         18.85 mm           Outer diameter tolerance outer diameter tolerance outer diameter wire insulation         NakeTree, cadmium-free, CFC-free, halogen-free, silicone-free           Printing oolor of wire insulation         White (isolation black)         Amount strands (wire)           Anount strands (wire)         0.75 mm <sup>2</sup> Cadductor vire (wire)           Conductor rowsection (wire)         0.75 mm <sup>2</sup> Canductor loge (wire)           Canductor loge (wire)         strand class 6         Current load capacity (standard)           Current load capacity (standard)         to DIN VDE 0298-4         Current load capacity (standard)           Current load capacity (standard)         to DIN VDE 0298-4         Curent load capacity (wire)	Stranding	3 wires twisted
Material jacket         PUR           Shore hardness jacket         90 15 Shore A           Freedom from ingredients (jacket)         lead free, cadmum free, CFC-free, halogen-free, silicone free           Outer-diameter (jacket)         5.9 mm           Tolerance outer diameter (jacket)         5.9 mm           Outer diameter insulation         PP           Amount wises         3           Outer diameter insulation         1.85 mm           Outer diameter insulation         7.5 5 Shore D           Ingredient freeness wire insulation         Value           Material wire insulation         Value           Outer diameter insulation         white (isolation black)           Armount strands (wire)         42           Diameter of single wires         0.15 mm           Conductor yor (wire)         5.7 mm²           Material conductor wire         Stranded copper wire, bare           Conductor yor (wire)         Stranded copper wire, bare           Contactor type (wire)         stranded copper vire, bare           Contactor type (wire)         Stranded copper vire, bare           Conductor type (wire)         Stranded copper vire, bare           Contactor type (wire)         Stranded copper vire, bare           Contactor type (wire)         Stramede copper vire, b	wire arrangement	black 1, black 2, green-yellow
Material jacket         PUR           Shore hardness jacket         90 15 Shore A           Freedom from ingredients (jacket)         lead free, cadmum free, CFC-free, halogen-free, silicone free           Outer-diameter (jacket)         5.9 mm           Tolerance outer diameter (jacket)         5.9 mm           Outer diameter insulation         PP           Amount wises         3           Outer diameter insulation         1.85 mm           Outer diameter insulation         7.5 5 Shore D           Ingredient freeness wire insulation         Value           Material wire insulation         Value           Outer diameter insulation         white (isolation black)           Armount strands (wire)         42           Diameter of single wires         0.15 mm           Conductor yor (wire)         5.7 mm²           Material conductor wire         Stranded copper wire, bare           Conductor yor (wire)         Stranded copper wire, bare           Contactor type (wire)         stranded copper vire, bare           Contactor type (wire)         Stranded copper vire, bare           Conductor type (wire)         Stranded copper vire, bare           Contactor type (wire)         Stranded copper vire, bare           Contactor type (wire)         Stramede copper vire, b	Cable weigth	56,1 g/m
Freedom from ingredients (jacket)         lead free, cadmium-free, CFC-free, halogen-free           Outer-diameter (jacket)         5.9 mm           Otter diameter (isolati)         5.9 mm           Material wire insulation         PP           Amount wires         3           Outer diameter (isolati)         1.85 mm           Outer diameter tolerance core insulation         1.85 mm           Outer diameter tolerance core insulation         1.5 %           Shore hardness wire insulation         70.1 5.5 hore D           Ingredient freeness wire insulation         white (solation back)           Amount strands (wire)         42           Dameter of single wires         0.15 mm           Conductor ressesction (wire)         0.75 mm²           Conductor type (wire)         stranded copper wire, bare           Conductor type (wire)         stranded case 6           Nominal voltage AC max.         300 V           Current load capacity (faindrard)         to DN VDE 0298-4           Current load capacity (min, wire         12 A           Electrical resistance line constant wire         25 Nkr @ 60 s           Min. operating temperature (faitic)         -40 °C           AC wirtstand voltage (wire - wire)         2.5 *V @ 60 s           Min. operating temperature (faitic)		
Outer diameter (jacket)         5,9 mm           Tolerace outer diameter (jacket)         ± 5 %           Materia Wei resulation         PP           Amount wires         3           Outer diameter issulation         1,85 mm           Outer diameter issulation         1,85 mm           Outer diameter issulation         1,85 mm           Outer diameter issulation         70 ± 5 Shore D           Ingredient treeness wire insulation         70 ± 5 Shore D           Ingredient treeness wire insulation         wile (solation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor rorsection         0,75 mm <sup>9</sup> Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         stranded copper wire, bare           Conductor type (wire)         stranded copper wire, bare           Conductor wire         Stranded copper wire, bare           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity (standard)         to DIN VDE 0	-	90 ± 5 Shore A
Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         PP           Anount wires         3           Outer diameter insulation         1,85 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardmess wire insulation         12 \$ Shore D           Ingredient freeness wire insulation         wile (solation black)           Amount wires         0,15 mm           Conductor cossesection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strande class 6           Nominal voltage AC max.         300 V           Current load capacity (strander)         12 A           Electrical resistance line constant wire         26 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2,5 kV @ 60 s           Power trogenymy withstand voltage (wire - (sted))         40 °C           Max. operating temperature (stalk)         80 °C / 90 °C @ 10000 h Operation           U'r veistance         Good, application-related testing           Operating temperature max. (dynamic)         -25 °C           Operating temperature (ked)         80 °C / 90 °C @ 10000 h Operation           U'r veistance         Good, application-related testing	Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material wire insulation         PP           Amount wires         3           Outer diameter insulation         1.85 mm           Outer diameter biolarance core insulation         1.5 %           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         kea 4-ree, cadmium-free, CFC-ree, halogen-free, silicone-free           Prining color of wire insulation         kead-free, cadmium-free, CFC-ree, halogen-free, silicone-free           Prining color of wire insulation         kead-free, cadmium-free, CFC-ree, halogen-free, silicone-free           Conductor wire wire insulation         kead-free, cadmium-free, CFC-ree, halogen-free, silicone-free           Diameter of single wires         0.15 mm           Conductor wire         Stranded copper wire, bare           Conductor twire         Stranded copper wire, bare           Conductor two equacity (stadard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         26 G/km @ 20 °C           AC withstand voltage (wire - reie)         2.5 kV @ 60 s           Min. operating temperature (static)         40 °C           Min. operating temperature (static)         40 °C           Min. operating temperature (fixed)         80 °C / 90 °C @ 10000 h Operation <td< td=""><td>Outer-diameter (jacket)</td><td>5,9 mm</td></td<>	Outer-diameter (jacket)	5,9 mm
Amount wires     3       Outer diameter insulation     1,85 mm       Outer diameter tolerance core insulation     ± 5 %       Shore hardness wire insulation     T0 ± 5 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       Dameter of single wires     0,15 mm       Conductor crosssection (wire)     0,75 mm <sup>3</sup> Material conductor wire     Stranded copper wire, bare       Conductor drype (wire)     strand class 5       Nominal voltage AC max.     300 V       Current load capacity min. wire     12 A       Electrical resistance line constant wire     26 Dkm @ 20 °C       AC withstand voltage (wire - wire)     2,5 kV @ 60 s       Power frequency withstand voltage (wire - wire)     2,5 kV @ 60 s       Min. operating temperature (fixed)     40 °C       Max. operating temperature (fixed)     40 °C       Max. operating temperature (fixed)     40 °C       Min. operating temperature (fixed)     40 °C       Miscance     Did K NIS 04382-2 A       Flame resistance     Electrical testing       Oliv resistance     Good, application-related testing       Oliv resistance     Good, application-related testing	Tolerance outer diameter (sheath)	±5%
Outer diameter insulation         1.85 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         ked:/rec, cadmium-free, CFC-free, halogen-free, silicone-free           Printing color of wire insulation         while (isolation black)           Amount strands (wire)         42           Diameter of single wires         0.15 mm           Conductor cossesction (wire)         0.75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         000 V           Current load capacity (standard)         to DIN VDE 0298-4           Miteris	Material wire insulation	PP
Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         70 ± 5 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           Diameter of single wires         0,15 mm           Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor tropssection (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 - wire)         2,5 kV @ 60 s           AC withstand voltage (wire - wire)         2,5 kV @ 60 s           Min: operating temperature (static)         -40 °C           Max. operating temperature (static)         -40 °C           Max. operating temperature (fixed)         80 °C / 90 °C @ 10000 h Operation           Operating temperature (fixed)         80 °C / 90 °C @ 10000 h Operation           UV resistance         EC 60332-22 U Li 1581 \$ 110 FT2   UL 1581 \$ 1090           chemical resistance         Good, application-relat	Amount wires	3
Shore hardness wire insulation         70 ± 5 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 wire (wire)         9,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Nominal voltage AC max.         300 V           Current load capacity (strandard)         to DIN VDE 0298-4           Current load capacity (wire - wire)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - 2,5 kV @ 60 s            Power frequency withstand voltage (wire - 40 °C            Max. operating temperature (fixed)         80 °C / 90 °C @ 10000 h Operation           Operating temperature (fixed)         80 °C / 90 °C @ 100000	Outer diameter insulation	1,85 mm
Ingredient freeness wire insulation         lead-free, cadmium-free, CFC-free, halogen-free           Printing color of wire insulation         while (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor cossection (wire)         0,75 mm <sup>9</sup> Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         stranded copper wire, bare           Conductor type (wire)         stranded copper wire, bare           Conductor type (wire)         stranded copper wire, bare           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity (wire - wire)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - vire)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - 2,5 kV @ 60 s         2,5 kV @ 60 s           Max. operating temperature (static)         -40 °C           Max. operating temperature (static)         -25 °C           Operating temperature (static)         -25 °C           Operating temperature max. (dynamic)         80 °C / 90 °C @ 10000 h Operation           UV resistance         EIC 60332-22 A           Flame resistance         GE 60332-22 A           Flame resistance         Good, application-related testing <tr< td=""><td>Outer diameter tolerance core insulation</td><td>±5%</td></tr<>	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 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 (standard)       to DIN VDE 0298-4         Current load capacity (standard)       26 Ω/km @ 20 °C         AC withstance line constant wire       12 A         Electrical resistance line constant wire       2,5 kV @ 60 s         Power frequency withstand voltage (wire - size AV @ 60 s       stand class 6         Min. operating temperature (static)       -40 °C         Max. operating temperature (keet)       80 °C / 90 °C @ 10000 h Operation         Operating temperature min. (dynamic)       -25 °C         Operating temperature min. (dynamic)       -25 °C         Operating temperature min. (dynamic)       80 °C / 90 °C @ 10000 h Operation         UV resistance       Good. application-related testing         Gasoline resistance       Good. application-related testing         Gasoline resistance       Good. application-related testing	Shore hardness wire insulation	70 ± 5 Shore D
Amount strands (wire)42Diameter of single wires0,15 mmConductor vireStranded copper wire, bareConductor vireStrande dass 6Nominal voltage AC max.300 VCurrent load capacity (standard)to DIN VDE 0298-4Current load capacity (standard)to DIN VDE 0298-4Current load capacity wire26 Ωkm @ 20 °CAC withstand voltage (wire - wire)2.5 kV @ 60 sPower frequency withstand voltage (wire - jacket)2.5 kV @ 60 sNin. operating temperature (static)-40 °CMax. operating temperature (static)-40 °CMax. operating temperature (static)-40 °CVI resistanceDIN EN ISO 4892-2 AFlame resistanceIEC 60332-2 i UL 1581 § 1100 FT2 I UL 1581 § 1090Chernical resistanceGood, application-related testingGasoline resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testing	Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
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 ty (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)       26 Ωkm @ 20 °C         AC withstance line constant wire       26 Ωkm @ 20 °C         AC withstand voltage (wire - wire)       2,5 kV @ 60 s         Power frequency withstand voltage (wire - glacket)       -40 °C         Max. operating temperature (static)       -40 °C         Max. operating temperature (static)       -40 °C         Ver resistance       B0 °C / 90 °C @ 10000 h Operation         Operating temperature min. (dynamic)       -25 °C         Operating temperature min. (dynamic)       -25 °C         Order esistance       IEC 60332-22 IUL 1581 § 1100 FT2 IUL 1581 § 1090         cheme resistance       Good. application-related testing         Gasoline resistance       Good. application-related testing         Oil resistance       Good. application-related testing         Oil resistance	-	
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 (standard)       to DIN VDE 0298-4         Current Load capacity (standard)       2.5 kV @ 60 s         Power frequency withstand voltage (wire - wire)       2.5 kV @ 60 s         Power frequency withstand voltage (wire - standard)       2.5 kV @ 60 s         Max. operating temperature (static)       -40 °C         Max. operating temperature (static)       -25 °C         Operating temperature (static)       80 °C / 90 °C @ 10000 h Operation         UV re	Amount strands (wire)	42
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 (standard)       to DIN VDE 0298-4         Current Load capacity (standard)       2.5 kV @ 60 s         Power frequency withstand voltage (wire - wire)       2.5 kV @ 60 s         Power frequency withstand voltage (wire - standard)       2.5 kV @ 60 s         Max. operating temperature (static)       -40 °C         Max. operating temperature (static)       -25 °C         Operating temperature (static)       80 °C / 90 °C @ 10000 h Operation         UV re	Diameter of single wires	0,15 mm
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)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - iacket)         -40 °C           Min. operating temperature (static)         -40 °C           Max. operating temperature (static)         -40 °C           Operating temperature min. (dynamic)         -25 °C           Operating temperature min. (dynamic)         -25 °C           Operating temperature max. (dynamic)         80 °C / 90 °C @ 10000 h Operation           UV resistance         DIN EN ISO 4892-2 A           Flame resistance         IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090           chemical 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)         5 × Outer diameter           No. of bending cycles (C-track)         10 Mio. @ 25 °C		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)       2.5 kV @ 60 s         Power frequency withstand voltage (wire - iacket)       40 °C         Min. operating temperature (static)       -40 °C         Max. operating temperature (static)       -40 °C         Operating temperature (invertion)       80 °C / 90 °C @ 10000 h Operation         Operating temperature (invertion)       80 °C / 90 °C @ 10000 h Operation         UV resistance       DIN EN ISO 4892-2 A         Flame resistance       IEC 60332-2 2   UL 1581 § 1100 FT2   UL 1581 § 1090         chemical resistance       Good, application-related testing         Gasoline resistance       Good, application-related testing         Oil resistance       Good, application-related testing         No. of bending cycles (C-track)       10 Nio. @ 25 °C         Traversing distance (C-track	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 - action residence)       2,5 kV @ 60 s         Min. operating temperature (static)       -40 °C         Max. operating temperature (static)       -40 °C         Operating temperature (ixed)       80 °C / 90 °C @ 10000 h Operation         Operating temperature max. (dynamic)       -25 °C         Operating temperature max. (dynamic)       80 °C / 90 °C @ 10000 h Operation         UV resistance       DIN EN ISO 4892-2 A         Flame resistance       IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090         chemical resistance       Good, application-related testing         Gasoline resistance       Good, application-related testing         Oil resistance       Good, application-related testing         Oil resistance       Good, application-related testing   DIN EN 60811-404         Bending radius (fixed)       5 × Outer diameter         Bending radius (dynamic)       10 x Outer diameter         Bending radius (dynamic)       10 Mio. @ 25 °C         Traversing distance (C-track)       10 Mio. @ 25 °C	Conductor type (wire)	strand class 6
Current load capacity min. wire12 AElectrical resistance line constant wire $26 \Omega/km @ 20 °C$ AC withstand voltage (wire - wire) $2,5 kV @ 60 s$ Power frequency withstand voltage (wire - jacket) $2,5 kV @ 60 s$ 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) $80 °C / 90 °C @ 10000 h Operation$ UV resistanceDIN EN ISO 4892-2 AFlame resistanceIEC 60332-2-2 [ UL 1581 § 1100 FT2 ] UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingDi vouter diameterNo. of bending radius (fixed)Bending radius (dynamic)10 Kio @ 25 °CTraversing distance (C-track)10 m @ 25 °C I horizontalTraversing distance (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress $\pm 180 °/m$	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 - jacket)       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         UV resistance       DIN EN ISO 4892-2 A         Flame resistance       IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090         chemical resistance       Good, application-related testing         Gasoline resistance       Good, application-related testing         Oil resistance       IO x Outer diameter         Bending radius (dynamic)       10 x Outer diameter         No. of bending cycles (C-track)       10 m @ 25 °C         Traversing distance (C-track)       10 m @ 25 °C         No. of torsion cycles       2 Mio.         Torsion stress       ± 1	Current load capacity (standard)	to DIN VDE 0298-4
AC withstand voltage (wire - wire)       2,5 kV @ 60 s         Power frequency withstand voltage (wire - jacket)       2,5 kV @ 60 s         Min. operating temperature (static)       -40 °C         Max. operating temperature (ised)       80 °C / 90 °C @ 10000 h Operation         Operating temperature min. (dynamic)       -25 °C         Operating temperature max. (dynamic)       -25 °C         Operating temperature max. (dynamic)       -25 °C         Operating temperature max. (dynamic)       80 °C / 90 °C @ 10000 h Operation         UV resistance       DIN EN ISO 4892-2 A         Flame resistance       BEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090         chemical resistance       Good, application-related testing         Gasoline resistance       Good, application-related testing         Oil resistance       Good, application-related testing   DIN EN 60811-404         Bending radius (fixed)       5 x Outer diameter         Bending radius (dynamic)       10 x Outer diameter         No. of bending cycles (C-track)       10 Mio. @ 25 °C         Traversing distance (C-track)       10 m @ 25 °C         No. of torsion cycles       2 Mio.         Torsion stress       ± 180 °/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 OperationUV resistanceDIN EN ISO 4892-2 AFlame resistanceIEC 60332-2-2   UL 1581 § 1100 FT2   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 testingNo. of bending radius (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameterNo. of bending cycles (C-track)10 m @ 25 °CTraversing distance (C-track)10 m @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m		26 Ω/km @ 20 °C
jacket)       2.5 W @ b0 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         UV resistance       DIN EN ISO 4892-2 A         Flame resistance       IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090         chemical resistance       Good, application-related testing         Gasoline resistance       Good, application-related testing         Oil resistance       Good, application-related testing         No. of bending radius (fixed)       5 x Outer diameter         Bending radius (dynamic)       10 x Outer diameter         No. of bending cycles (C-track)       10 Mio. @ 25 °C         Traversing distance (C-track)       10 m @ 25 °C   horizontal         Travel speed (C-track)       3 m/s @ 25 °C         No. of torsion cycles       2 Mio.         Torsion stress       ± 180 °/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 OperationUV resistanceDIN EN ISO 4892-2 AFlame resistanceIEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingNo. of bending cycles (C-track)10 Nio. @ 25 °CTraversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m		2,5 kV @ 60 s
Operating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceDIN EN ISO 4892-2 AFlame resistanceIEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingDin @ 25 °C10 x Outer diameterBending radius (dynamic)10 Mio. @ 25 °CTraversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	Min. operating temperature (static)	-40 °C
Operating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceDIN EN ISO 4892-2 AFlame resistanceIEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testing   DIN EN 60811-404Bending radius (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameterNo. of bending cycles (C-track)10 Mio. @ 25 °CTraversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
UV resistanceDIN EN ISO 4892-2 AFlame resistanceIEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingOil resistanceGood, application-related testingDin resistanceGood, application-related testingOil resistanceGood, application-related testingDin x Outer diameterBending radius (dynamic)10 x Outer diameterNo. of bending cycles (C-track)10 m@ 25 °CTraversing distance (C-track)10 m@ 25 °C   horizontalTravel speed (C-track)3 m/s@ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	Operating temperature min. (dynamic)	-25 °C
Flame resistanceIEC 60332-2-2   UL 1581 § 1100 FT2   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 diameterNo. of bending cycles (C-track)10 Mio. @ 25 °CTraversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
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 diameterNo. of bending cycles (C-track)10 Mio. @ 25 °CTraversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	UV resistance	DIN EN ISO 4892-2 A
Gasoline resistanceGood, application-related testingOil resistanceGood, application-related testing   DIN EN 60811-404Bending radius (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameterNo. of bending cycles (C-track)10 Mio. @ 25 °CTraversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	Flame resistance	IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090
Oil resistance       Good, application-related testing   DIN EN 60811-404         Bending radius (fixed)       5 x Outer diameter         Bending radius (dynamic)       10 x Outer diameter         No. of bending cycles (C-track)       10 Mio. @ 25 °C         Traversing distance (C-track)       10 m @ 25 °C   horizontal         Travel speed (C-track)       3 m/s @ 25 °C         No. of torsion cycles       2 Mio.         Torsion stress       ± 180 °/m	chemical resistance	Good, application-related testing
Bending radius (fixed)       5 x Outer diameter         Bending radius (dynamic)       10 x Outer diameter         No. of bending cycles (C-track)       10 Mio. @ 25 °C         Traversing distance (C-track)       10 m @ 25 °C   horizontal         Travel speed (C-track)       3 m/s @ 25 °C         No. of torsion cycles       2 Mio.         Torsion stress       ± 180 °/m	Gasoline resistance	Good, application-related testing
Bending radius (dynamic)10 x Outer diameterNo. of bending cycles (C-track)10 Mio. @ 25 °CTraversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	Oil resistance	Good, application-related testing   DIN EN 60811-404
No. of bending cycles (C-track)     10 Mio. @ 25 °C       Traversing distance (C-track)     10 m @ 25 °C   horizontal       Travel speed (C-track)     3 m/s @ 25 °C       No. of torsion cycles     2 Mio.       Torsion stress     ± 180 °/m	Bending radius (fixed)	5 x Outer diameter
Traversing distance (C-track)10 m @ 25 °C   horizontalTravel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m	Bending radius (dynamic)	10 x Outer diameter
Travel speed (C-track)3 m/s @ 25 °CNo. of torsion cycles2 Mio.Torsion stress± 180 °/m		10 Mio. @ 25 °C
No. of torsion cycles     2 Mio.       Torsion stress     ± 180 °/m	Traversing distance (C-track)	10 m @ 25 °C   horizontal
Torsion stress ± 180 °/m	Travel speed (C-track)	3 m/s @ 25 °C
	No. of torsion cycles	2 Mio.
Torsion speed 35 cycles/min	Torsion stress	± 180 °/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: 2024-05-21

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