

## M12 male on top A-cod. / MSUD double valve A-18mm

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

Form A (18 mm) - M12, connector top entry 24 V AC/DC, M12 (4-pole) LED and suppression Connection cable L = 200 mm

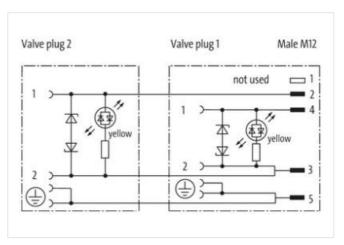
Plastic housings with good resistance against chemicals and oils.

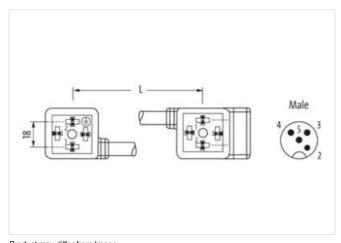
The resistance to aggressive media should be individually tested for your application. Further details on request.

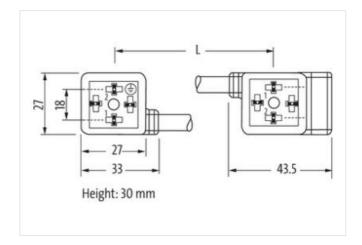
## **Link to Product**

## Illustration









Product may differ from Image



Side 1		
Tightening torque	0,4 Nm	
Thread	M3	
Side 2		



stay connected

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	4048879144322
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
Diagnostics	
Status indication LED	yellow
	yolow
Device protection   Electrical	——————————————————————————————————————
Degree of protection (EN IEC 60529)	IP67
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage  Material group (IEC 60664-1)	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	
	Destruct the annual state has a state of a s
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	636

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: 2024-05-19



stay connected

Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 12 A  Electrical resistance line constant wire 26 \( \Omega / \text{km} \end{aligned} \) 20 °C  AC withstand voltage (wire - wire) 2,5 kV @ 60 s  Power frequency withstand voltage (wire - jacket) 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   DIN EN 60811-404  Bending radius (fixed) 5 x Outer diameter  Travel speed (C-track) 10 Mio. @ 25 °C	Printing color of wire insulation	white (isolation black)
Amount stranding         1           Stranding         3 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable weight         56.1 g/m           Meterial jacket         PUR           Shore hardness jacket         90 ± 5 Shore A           Freadom from ingredients (jacket)         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free           Outer diameter (jacket)         5.9 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         1,85 mm           Outer diameter insulation         1,85 mm           Outer diameter insulation         1,85 mm           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         42           Diameter of single wires         0,15 mm           Conductor research (wire)         42           Diameter of single wires         0,15 mm           Conductor type (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         10 mg @ 25 °C   horizontal           Nominal voltage AC max         300 V           Current load capacity mi	Jacket Color	black
Amount stranding         1           Stranding         3 wires twisted           wire arrangement         black 1, black 2, green-yellow           Cable weight         56.1 g/m           Meterial jacket         PUR           Shore hardness jacket         90 ± 5 Shore A           Freadom from ingredients (jacket)         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free           Outer diameter (jacket)         5.9 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         1,85 mm           Outer diameter insulation         1,85 mm           Outer diameter insulation         1,85 mm           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         42           Diameter of single wires         0,15 mm           Conductor research (wire)         42           Diameter of single wires         0,15 mm           Conductor type (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         10 mg @ 25 °C   horizontal           Nominal voltage AC max         300 V           Current load capacity mi	Type of Certificate	cURus
wire arrangement black 1, black 2, green-yellow Cable weigh 56,1 g/m Material jacket PUR Shore hardness jacket 90 ± 5 Shore A Freedom from ingredients (jacket) 5,9 mm Collected ameter (jacket) 5,9 mm Tolerance outer diameter (sheath) ± 5 % Material live insulation PP Material wire insulation PP Amount wires 3 Outer diameter insulation 1,85 mm Outer diameter rolerance core insulation 1,85 mm Outer diameter rolerance over insulation 1,85 mm Outer of single wives 0,15 mm Onductor of single wives 0,15 mm Onductor of single wives 0,75 mm² Material conductor wire 0,75 mm² Material condu		1
wire arrangement black 1, black 2, green-yellow Cable weigh 56,1 g/m Material jacket PUR Shore hardness jacket 90 ± 5 Shore A Freedom from ingredients (jacket) 5,9 mm Collected ameter (jacket) 5,9 mm Tolerance outer diameter (sheath) ± 5 % Material live insulation PP Material wire insulation PP Amount wires 3 Outer diameter insulation 1,85 mm Outer diameter rolerance core insulation 1,85 mm Outer diameter rolerance over insulation 1,85 mm Outer of single wives 0,15 mm Onductor of single wives 0,15 mm Onductor of single wives 0,75 mm² Material conductor wire 0,75 mm² Material condu	Stranding	3 wires twisted
Cable weigth         56.1 g/m           Material jacket         PUR           Shore hardness jacket         90.4 5 Shore A           Freedom from injeretients (jacket)         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free           Outer-diameter (jacket)         5.9 mm           Toferance outer dameter (sheath)         1.5 %           Material wire insulation         PP           Amount wires         3           Outer diameter insulation         1.85 mm           Outer diameter insulation         7.0 ± 5 Shore D           Shore hardness wire insulation         7.0 ± 5 Shore D           Injuration freeness wire insulation         Value free, cadmium-free, CFC-free, halogen-free, silicone-free           Printing obor of liver insulation         value free, cadmium-free, CFC-free, halogen-free, silicone-free           Printing obor of liver insulation         value free, cadmium-free, CFC-free, halogen-free, silicone-free           Printing obor of liver insulation         value free, cadmium-free, CFC-free, halogen-free, silicone-free           Printing obor of liver insulation         value free, cadmium-free, CFC-free, halogen-free, silicone-free           Printing obor of liver insulation         value free, cadmium-free, CFC-free, halogen-free, silicone-free           Printing obor of liver insulation         value free, CFC-free, halogen-free, silicone-free		black 1, black 2, green-yellow
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 diameter (sheath)         ± 5 %           Material wire insulation         PP           Amount wires         3           Outer diameter tolerance core insulation         1,85 mm           Outer diameter tolerance core insulation         1,85 mm           Ingredient freeness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         164 5 %           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor rosseedion (wire)         0,75 mm²           Material conductor vive         Stranded copper wire, bare           Conductor type (wire)         10 me 25 °C) Inotzontal           Nominal vollage AC max         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Electrical resistance line constant vire         26 Skm @ 20 °C           AC withstand vollage (wire - wire)         2,5 kV @ 60 s           Power frequency withstand vollage (wire - wire)         2,5 kV @ 60 s           Power freq		
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           Tolorance outer diameter (sheath)         ± 5 %           Material wire insulation         PP           Amount wires         3           Outer diameter tolerance core insulation         1,85 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         beat-free, cadmium-free, CFC-free, halogen-free, silicone-free           Printing color of wire insulation         white (solation 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           Traversing distance (C track)         10 m@ 25 °C   horizontal           Nominal vollage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity (wire)         2,5 kW @ 60 s           Power frequency withstand voltage (wire - siacket) <td></td> <td></td>		
Outer-diameter (jacket)         5,9 mm           Tolerance outer diameter (sheath)         2.5 %           Material wire insulation         PP           Amount wires         3           Outer diameter insulation         1.85 mm           Outer diameter insulation         2.5 %           Shore hardness wire insulation         70 ± 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           Traversing distance (C-track)         10 m @ 25 °C   horizontal           Nominal voltage AC max.         300 Y           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 - wire)         2.5 kV @ 60 s           Win. operating temperature (fixed)		90 ± 5 Shore A
Outer diameter (jacket)         5,9 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         1,85 mm           Outer diameter insulation         ± 5 %           Shore hardness wire 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         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           Traversing distance (C-track)         10 m @ 25 °C) horizontal           Nominal voltage AC max.         300 Y           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. wire         12 A           Electrical resistance line constant wire         28 CMm @ 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 (fised)         80 °C / 90	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 tolerance core insulation         ± 5 %           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm           Conductor or sosseaction (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Traversing distance (C-track)         10 m@ 25 °C   horizontal           Nominal voitage AC max.         300 V           Current load capacity (standard)         10 DIN VDE 0298-4           Current load capacity (standard)         10 DIN VDE 0298-4           Current load capacity (wire wire)         2.5 kV @ 60 s           AC withstand voltage (wire - wire)         2.5 kV @ 60 s           Power frequency withstand voltage (wire - wire)         2.5 kV @ 60 s           Min. operating temperature (static)         40 °C           Min. operating temperature (mixed)         80 °C / 90 °C @ 10000 h Operation           UV resistance         IEC 60332 × 22 ILU 1581 § 1100 FT2   UL 1581 § 1090	Outer-diameter (jacket)	·
Amount wires         3           Outer diameter insulation         1.85 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         white (solation black)           Printing color of wire insulation         white (solation 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           Traversing distance (C-track)         10 m @ 25 °C   horizontal           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298 ·4           Current load capacity wini. wire         12 A           Electrical resistance line constant wire         26 Ωkm @ 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)         80 °C / 90 °C @ 10000 h Operation           Operating temperature mix. (dynamic)         -25 °C           Operating temperature mix. (dynamic)         80 °C / 9	Tolerance outer diameter (sheath)	± 5 %
Outer diameter insulation         1,85 mm           Outer diameter tolorance core insulation         ± 5 %           Shore hardness wire insulation         10 ± 5 % For 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 or sessection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Traversing distance (C-track)         10 m @ 25 °C   horizontal           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 Nrm @ 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 (static)         -40 °C           Max. operating temperature (static)         -40 °C           Max. operating temperature (min. (dynamic)         -25 °C           Operating tempe	Material wire insulation	PP
Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         white (isolation black)           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           Traversing distance (C-track)         10 m @ 25 °C   horizontal           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 D/km @ 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 (static)         40 °C           Max. operating temperature (ixed)         80 °C / 90 °C @ 10000 h Operation           Operating temperature min. (dynamic)         -25 °C           Operating temperature min. (dynamic)         -25 °C           Ur resistance	Amount wires	3
Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadminum-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 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Traversing distance (C-track)         10 m @ 25 °C   horizontal           Nominal voltage AC max.         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity (standard)         to DIN VDE 0298-4 <td>Outer diameter insulation</td> <td>1,85 mm</td>	Outer diameter insulation	1,85 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           Dameter 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           Traversing distance (C-track)         10 m @ 25 °C   horizontal           Nominal voltage AC max.         300 V           Current load capacity (standard)         to Din NDE 0298-4           Current load capacity (standard)         to Din NDE 0298-4           Current load capacity win- wire         12 A           Electrical resistance line constant wire         2.5 kV @ 60 s           AC withstand voltage (wire - 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           Max. operating temperature min. (dynamic)         -25 °C           Operating temperature min. (dynamic)         -25 °C           Operating temperature max. (dynamic)         -20 °C @ 10000 h Operation	Outer diameter tolerance core insulation	± 5 %
Printing cotor of wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm²           Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Traversing distance (C-track)         10 m @ 25 °C   horizontal           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)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - size)         2,5 kV @ 60 s           Min. operating temperature (static)         40 °C           Max. operating temperature (static)         40 °C           Operating temperature (mixed)         80 °C / 90 °C @ 10000 h Operation           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 <t< td=""><td>Shore hardness wire insulation</td><td>70 ± 5 Shore D</td></t<>	Shore hardness wire insulation	70 ± 5 Shore D
Printing cotor of wire insulation         white (isolation black)           Amount strands (wire)         42           Diameter of single wires         0,15 mm²           Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Traversing distance (C-track)         10 m @ 25 °C   horizontal           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)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - size)         2,5 kV @ 60 s           Min. operating temperature (static)         40 °C           Max. operating temperature (static)         40 °C           Operating temperature (mixed)         80 °C / 90 °C @ 10000 h Operation           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 <t< td=""><td>Ingredient freeness wire insulation</td><td>lead-free, cadmium-free, CFC-free, halogen-free, silicone-free</td></t<>	Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
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           Traversing distance (C-track)         10 m @ 25 °C   horizontal           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)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - iacket)         80 °C / 90 °C @ 10000 h Operation           Min. operating temperature (tisted)         80 °C / 90 °C @ 10000 h Operation           Operating temperature (tisted)         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           Gil resistance         Good, application-related testing   DIN EN 60811-404           Bending radiu		white (isolation black)
Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Traversing distance (C-track)         10 m @ 25 °C   horizontal           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 - wire)         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         Good, application-related testing   DIN EN 60811-404           Bending radius (dynamic) <th< td=""><td>Amount strands (wire)</td><td>42</td></th<>	Amount strands (wire)	42
Conductor crosssection (wire)         0,75 mm²           Material conductor wire         Stranded copper wire, bare           Conductor type (wire)         strand class 6           Traversing distance (C-track)         10 m @ 25 °C   horizontal           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 - wire)         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         Good, application-related testing   DIN EN 60811-404           Bending radius (dynamic) <th< td=""><td>Diameter of single wires</td><td>0,15 mm</td></th<>	Diameter of single wires	0,15 mm
Conductor type (wire)       strand class 6         Traversing distance (C-track)       10 m @ 25 °C   horizontal         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 - 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       Good, application-related testing   DIN EN 60811-404         Bending radius (fixed)       5 × Outer diameter         Bending radius (fixed)       5 × Outer diameter         Bending radius (dynamic)       10 × Outer diameter         Travel speed (C-tr		0,75 mm <sup>2</sup>
Traversing distance (C-track)  Nominal voltage AC max.  300 V  Current load capacity (standard)  Current load capacity (standard)  Current load capacity min. wire  12 A  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  2,5 kV @ 60 s  Power frequency withstand voltage (wire - 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)  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  Oil resistance  Good, application-related testing  Oil resistance  Bending radius (fixed)  5 x Outer diameter  Travel speed (C-track)  10 Mio. @ 25 °C  No. of torsion cycles  ± 180 °/m	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)         2,5 kV @ 60 s           Power frequency withstand voltage (wire - izacket)         -40 °C           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   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         2 Mio.           Torsion stress         ± 180 °/m	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 - izacket)         -40 °C           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   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         2 Mio.           Torsion stress         ± 180 °/m	Traversing distance (C-track)	10 m @ 25 °C   horizontal
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 - 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       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       2 Mio.         Torsion stress       ± 180 °/m	Nominal voltage AC max.	
Electrical resistance line constant wire 26 \( \text{D}/\text{km} \end{Q} 20 \cdot \text{C} \)  AC withstand voltage (wire - wire) 2,5 kV \( \end{Q} 60 \text{ s} \)  Power frequency withstand voltage (wire - jacket) 40 \cdot \text{C}  Min. operating temperature (static) 40 \cdot \text{C}  Max. operating temperature (fixed) 80 \cdot \text{C} / 90 \cdot \text{C} \)  Operating temperature min. (dynamic) -25 \cdot \text{C}  Operating temperature max. (dynamic) 80 \cdot \text{C} / 90 \cdot \text{C} \)  Operating temperature max. (dynamic) 80 \cdot \text{C} / 90 \cdot \text{C} \)  Operating temperature max. (dynamic) 80 \cdot \text{C} / 90 \cdot \text{C} \)  Flame resistance DIN EN ISO 4892-2 A  Flame resistance IEC 60332-2-2   UL 1581 \stracently 1100 FT2   UL 1581 \stracently 1090 \text{chemical resistance} \text{Good, application-related testing} \text{Gaooline resistance} \text{Good, application-related testing} \text{Oil resistance} \text{Good, application-related testing} \text{Oil resistance} \text{Good, application-related testing} \text{DIN EN 60811-404} \text{Bending radius (fixed)} 5 \times \text{Outer diameter} \text{Tavel speed (C-track)} 10 \text{Nio. @ 25 \cdot C} \text{Nio. of torsion cycles} 2 \text{Mio.} \text{Torsion stress} \text{2 Mio.}	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)  Min. operating temperature (static)  AC withstand voltage (wire - wire)  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  Good, application-related testing  Oil resistance  Good, application-related testing   DIN EN 60811-404  Bending radius (fixed)  5 x Outer diameter  Travel speed (C-track)  10 Mio. @ 25 °C  No. of torsion cycles  ± 180 °/m	Current load capacity min. wire	12 A
Power frequency withstand voltage (wire - jacket)  Min. operating temperature (static)  Au °C  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  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   DIN EN 60811-404  Bending radius (fixed)  5 x Outer diameter  Travel speed (C-track)  10 Mio. @ 25 °C  No. of torsion cycles  ± 180 °/m		26 Ω/km @ 20 °C
Jacket)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Operating temperature max. (dynamic)  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   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  ± 180 °/m	AC withstand voltage (wire - wire)	2,5 kV @ 60 s
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   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       2 Mio.         Torsion stress       ± 180 °/m		2,5 kV @ 60 s
Operating temperature min. (dynamic) 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   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 ± 180 °/m	Min. operating temperature (static)	-40 °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   DIN EN 60811-404  Bending radius (fixed)  5 x Outer diameter  Bending radius (dynamic)  10 x Outer diameter  Travel speed (C-track)  No. of torsion cycles  2 Mio.  Torsion stress  ± 180 °/m	Max. operating temperature (fixed)	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 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 10 Mio. @ 25 °C  No. of torsion cycles 2 Mio.  Torsion stress ± 180 °/m	Operating temperature min. (dynamic)	-25 °C
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   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 2 Mio.  Torsion stress ± 180 °/m	Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
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 Travel speed (C-track) 10 Mio. @ 25 °C No. of torsion cycles 2 Mio. Torsion stress ± 180 °/m	UV resistance	DIN EN ISO 4892-2 A
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  Travel speed (C-track) 10 Mio. @ 25 °C  No. of torsion cycles 2 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  Travel speed (C-track) 10 Mio. @ 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  Travel speed (C-track) 10 Mio. @ 25 °C  No. of torsion cycles 2 Mio.  Torsion stress ± 180 °/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 2 Mio.  Torsion stress ± 180 °/m	Oil resistance	Good, application-related testing   DIN EN 60811-404
Travel speed (C-track)  10 Mio. @ 25 °C  No. of torsion cycles  2 Mio.  Torsion stress  ± 180 °/m	Bending radius (fixed)	5 x Outer diameter
No. of torsion cycles 2 Mio.  Torsion stress ± 180 °/m	Bending radius (dynamic)	10 x Outer diameter
No. of torsion cycles 2 Mio.  Torsion stress ± 180 °/m	Travel speed (C-track)	10 Mio. @ 25 °C
Torsion stress ± 180 °/m	No. of torsion cycles	
		± 180 °/m