

M12 male 0° A-cod. / MSUD valve plug CI-9.4mm

PUR 3x0.75 bk UL/CSA+drag ch. 5m

Art.No.: 7000-41041-6360500

Weight: 0.281 Country of origin: CZ

Model designation: MSRL3-A-W636 5.0

MSUD

Form CI (9.4 mm) - M12, male straight

24 V AC $\pm 20\%$ / DC $\pm 25\%$

LED and suppression

Further cable lengths on request.

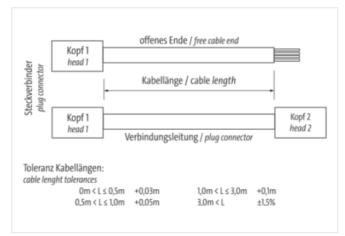
Plastic housings with good resistance against chemicals and oils.

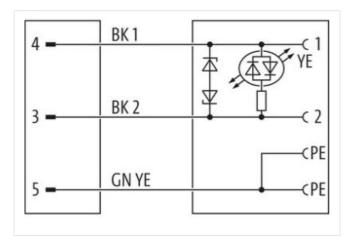
The resistance to aggressive media should be individually tested for your application. Further details on request.

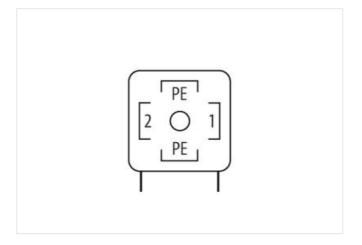
Link to Product

Illustration



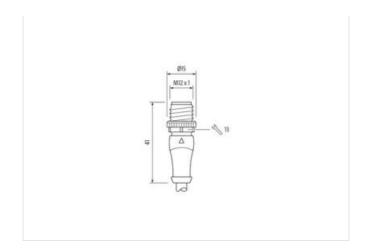


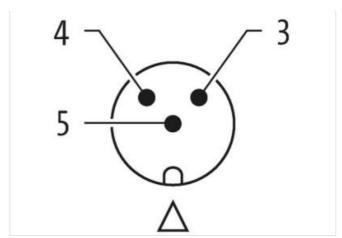


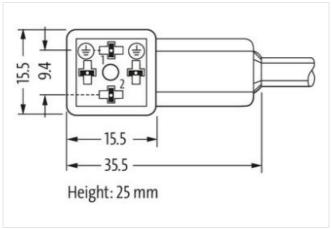




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Product may differ from Image



Cable length	5 m
Side 1	
Tightening torque	0,4 Nm
Family construction form	MSUD CI
Thread	M3
No. of poles	4
Degree of protection (EN IEC 60529)	IP67
Side 2	
Tightening torque	0,6 Nm
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
Coding	A
No. of poles	3
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP67
Commercial data	
ECLASS-6.0	27279218

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: 2025-12-05



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
customs tariff number	85444290
EAN	4048879146609
EAN	4048879146609
Packaging unit	1
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
Diagnostics	
Status indication LED	yellow
Device protection Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV
Mechanical data Material data	
Material housing	Plastic
Color housing	black
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.
Conformity	
Product standard	DIN EN 61076-2-101 (M12); DIN EN 175301-803 (Ventilstecker)
Installation Cable	
wire arrangement	black 1, black 2, green-yellow
Cable identification	636
Cable Type	3

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Jacket Color	Printing color of wire insulation	white (isolation black)
Annount stranding	Jacket Color	· ,
Stranding 1	Type of Certificate	cURus
wire arrangement black 1, black 2, green-yellow Cable weight 55,1 g/m Malarian jacket PUR Shore hardness jacket PUR Shore hardness jacket 99.5 Shore A Freedom from ingredients (jacket) 5.9 mm Tolerance outer diameter (jacket) 7.9 mm Amount wires 3 Outer diameter insulation PP Amount wires 3 Outer diameter freeness wire insulation 70.1 S Shore D Shore hardness wire insulation 70.1 S Shore D Shore hardness wire insulation 70.1 S Shore D Shore hardness wire insulation white (jacket) 42 Diameter of a ling wire insulation white (jacket) 42 Diameter of a ling wire insulation white (jacket) 42 Diameter of a ling wire wire on the control of the provided of the prov	Amount stranding	
wire arrangement black 1, black 2, green-yellow Cable weight 55,1 g/m Malariania Jacket PUR Shore hardness jacket 90 ± 5 Shore A Freedom from ingredients (jacket) 5.9 mm Outer diameter (jacket) 5.9 mm Tolerance outer diameter (jacket) 5.9 mm Amount wires 3 Outer diameter (jacket) ± 5 % Amount wires 3 Outer diameter (jacket) ± 5 % Shore hardness wire insulation 70 ± 5 Shore D Ingredient freeness wire insulation 70 ± 5 Shore D Ingredient freeness wire insulation 70 ± 5 Shore D Ingredient freeness wire insulation white (solation black) Ingredient freeness wire insulation vivia (solation black) Ingredient freeness wire insulation white (solation black) Ingredient freeness wire insulation vivia (solation black) Ingredient freeness wire insulation white (solation black) Ingredient freeness wire insulation vivia (solation black) Ingredient freeness wire insulation vivia (solation black) Ingredient freene	Stranding	3 wires twisted
Cable weight 56,1 g/m Material picket PUR Shore hardness jacket 90 ± 5 Shore A Freedom from ingredients (jacket) least-free, cadmium-free, CFC-free, halogen-free, silicone-free Outer diameter (jacket) 5,9 mm Tofferance outer diameter (sheath) ± 5 % Material wire insulation PP Amount wires 3 Outer diameter insulation 1,85 mm Outer diameter insulation 1,85 mm Outer diameter insulation 70 ± 5 Shore D Ingredient freeness wire insulation 42 Shore D Printing policy of wire insulation 42 Shore D Printing policy of wire insulation 42 E Printing policy of wire insulation 42 E Diameter of single wires 0,15 mm Conductor or sessection (wire) 0,75 mm² Markerial conductor wire Strand class 6 Conductor type (wire) strand class 6 Nominal voltage AC max. 300 V Current load capacity (sandard) 10 DIN VDE 0298-4 Current load capacity (sandard) 10 DIN VDE 0298-4 Cur	wire arrangement	
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Shore hardness jacket 90 ± 5 Shore A Freedom from ingredients (jacket) lead free, cadmum free, CFC-free, halogen-free, silicone-free Outer-diameter (jacket) 5,9 mm Toterance outer diameter (sheath) ± 5 % Material wire insulation PP Amount wires 3 Outer diameter insulation 1,85 mm Outer diameter insulation 1,85 mm Outer diameter insulation 70 ± 5 Shore D Ingredient freeness wire insulation 70 ± 5 Shore D Ingredient freeness wire insulation lead-free, cadmim-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 Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0299-4 Current load capacity (standard) to DIN VDE 0299-4 Current load capacity (wire - wire) 2,5 kV @ 60 s	Material jacket	PUR
Outer diameter (jacket) 5,9 mm Tolerance outer diameter (sheath) ± 5 % Material wire insulation PP Amount wires 3 Outer diameter tolerance core insulation ± 5 % Shore hardness wire insulation 1,85 mm Unter diameter tolerance core insulation ± 5 % Shore hardness wire insulation lead-free, cadmum-free, CFC-free, halogen-free, silicone-free Injection of vire insulation white (solation 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 diass 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 Power frequency withstand voltage (wire - wire) 2,5 kV @ 60 s Power frequency withstand voltage (wire - wire) 2,5 kV @ 60 s Mire. operating temperature (ixed) 80 °C / 90 °C @ 100000 h O	Shore hardness jacket	90 ± 5 Shore A
Outer diameter (jacket) 5,9 mm Tolerance outer diameter (sheath) ± 5 % Material wire insulation PP Amount wires 3 Outer diameter tolerance core insulation ± 5 % Shore hardness wire insulation 1,85 mm Unter diameter tolerance core insulation ± 5 % Shore hardness wire insulation lead-free, cadmum-free, CFC-free, halogen-free, silicone-free Injection of vire insulation white (solation 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 diass 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 Power frequency withstand voltage (wire - wire) 2,5 kV @ 60 s Power frequency withstand voltage (wire - wire) 2,5 kV @ 60 s Mire. operating temperature (ixed) 80 °C / 90 °C @ 100000 h O	Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Tolerance outer diameter (sheath)		5,9 mm
Amount wires 3 Outer diameter insulation 1.85 mm Outer diameter insulation 2.5 mm Outer diameter insulation 70 ± 5 Shore D Ingredient freeness wire insulation 70 ± 5 Shore D Ingredient freeness wire insulation 1 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 Strande dosper wire, bare Conductor type (wire) strand class 6 Nominal voltage AC max. 300 V Current load capacity (standard) 10 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 - 25 °C Operating temperature (fixed) 80 °C / 90 °C @ 10000 h Operation Operating temperature (fixed) 80 °C / 90 °C @ 10000 h Operation UV resistance Good, application-related testing Casalone resistance Good, application-related testing DIN EN ISO 4892-2 A Elementer actions (Kixed) 5 x Quiter diameter Bending radius (fixed) 5 x Quiter diameter No. of bending cycles (C-track) 10 Mio. @ 25 °C Traversing distance (C-track) 10 Mio. @ 25 °C Torsion stress ± ±180 °/m	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 white (isolation black) Amount strands (wire) 42 Diameter of Isnje wires 0,15 mm Conductor crosssection (wire) 0,75 mm² Material conductor wire Stranded copper wire, bare Conductor type (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 G/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 (fixed) -40 °C Operating temperature (istatic) -40 °C Operating temperature min. (dynamic) 25 °C Operating temperature max. (dynamic) 80 °C / 90 °C @ 10000 h Operation UV resistance Inc 60332-2.2 U. I. 1581 § 1100 FT2 U. I. 1581 § 1090 Otherwistance	Material wire insulation	PP
Outer diameter tolerance core insulation	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) 42	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 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 kW @ 60 s Electrical resistance line constant wire 2.5 kW @ 60 s Power frequency withstand voltage (wire - yiecket) 80 °C / 90 °C @ 10000 h Operation 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 Ur resistance DIE C60332-2-2 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 Bending radius (fixed) 5 x Outer diameter Bending radius (fixed) 10 m @ 25 °C Inorizontal Travel speed (C-track) 10 m @ 25 °C Inorizontal Travel speed (C-track) 3 m/s @ 25 °C Traversing distance (C-track) 10 m @ 25 °C Inorizontal Torsion stress ± 180 °/m	Outer diameter tolerance core insulation	± 5 %
Printing color of wire insulation white (isolation black) Amount strands (wire) 42 Diameter of single wires 0,15 mm Conductor crosssection (wire) 0,75 mm² Material conductor wire Stranded copper wire, bare Conductor type (wire) strand class 6 Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 12 A Electrical resistance line constant wire 26 Ω/km @ 20 °C AC withstand voltage (wire - wire) 2,5 kV @ 60 s Power frequency withstand voltage (wire - wire) 4,0 °C Max. operating temperature (static) 40 °C Max. operating temperature (fixed) 80 °C / 90 °C @ 10000 h Operation Operating temperature max. (dynamic) 80 °C / 90 °C @ 10000 h Operation UV resistance DIN EN ISO 4892-2 A Flame resistance Flame resistance Good, application-related testing Gasoline resistance Good, application-related testing Bending radius (fixed) 5 x Outer diameter Bending radius (dynamic) 10 x Outer diameter 10 x Outer diamete	Shore hardness wire insulation	70 ± 5 Shore D
Amount strands (wire) 42 Diameter of single wires 0,15 mm Conductor crosssection (wire) 0,75 mm² Material conductor wire Stranded copper wire, bare Conductor type (wire) strand class 6 Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 12 A Electrical resistance line constant wire 26 Ω/km @ 20 °C AC withstand voltage (wire - wire) 2,5 kV @ 60 s Power frequency withstand voltage (wire - sizekt) 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 UV resistance DIN EN ISO 4892-2 A Flame resistance IEC 60332-22 Jul. 1581 § 1100 FT2 UL. 1581 § 1090 chemical resistance Good. application-related testing Oil resistance	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 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 Q/km @ 20 °C AC withstand voltage (wire - wire) 2,5 kV @ 60 s Power frequency withstand voltage (wire - igacket) 2,5 kV @ 60 s Power frequency withstand voltage (wire - igacket) 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 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 Bending radius (fixed) 5 x Outer diameter	Printing color of wire insulation	white (isolation black)
Conductor crosssection (wire) 0,75 mm² Material conductor wire Stranded copper wire, bare Conductor type (wire) strand class 6 Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 12 A Electrical resistance line constant wire 26 Ω/km @ 20 °C AC withstand voltage (wire - wire) 2,5 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 min. (dynamic) 25 °C Operating temperature max. (dynamic) 80 °C / 90 °C @ 10000 h Operation UV resistance IEC 60332-22 UL 1581 § 1100 FT2 UL 1581 § 1090 Chemical resistance Good, application-related testing Gasoline resistance Good, application-related testing Oil resistance Good, application-relat	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 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 - ack with a voltage (wire - wire) 2,5 kV @ 60 s Min. 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 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 bendin	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 - igacket) 2,5 kV @ 60 s Power frequency withstand voltage (wire - igacket) 40 °C Min. operating temperature (static) -40 °C Max. operating temperature (static) 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 DIN EN 60811-404 Bending radius (fixed) 5 x Outer diameter Bending radius (fixed) 5 x Outer diameter No. of bending cycles (C-track) 10 Mio. @ 25 °C Traversing distance (C-track)	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 - 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 Bending radius (fixed) 5 × Outer diameter Bending radius (dynamic) 10 × Outer diameter Bending radius (dynamic) 10 Mio. @ 25 °C Traversing distance (C-track) 10 Mio. @ 25 °C horizontal Traver sing distance (C-track) 3 m/	Material conductor wire	Stranded copper wire, bare
Current load capacity (standard) 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 - aick) Alicket) Min. operating temperature (static) 40 °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 × Outer diameter No. of bending cycles (C-track) 10 m @ 25 °C Traversing distance (C-track) 10 m @ 25 °C No. of torsion cycles ± 180 °/m	Conductor type (wire)	strand class 6
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 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.	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 - 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 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 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	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) 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 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 ± 180 °/m	Current load capacity min. wire	12 A
Power frequency withstand voltage (wire - jacket) Min. operating temperature (static) A0 °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 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 m @ 25 °C Traversing distance (C-track) 10 m @ 25 °C No. of torsion cycles ± 180 °/m	Electrical resistance line constant wire	26 Ω/km @ 20 °C
All Comparing temperature (static) A0 °C	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 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	Power frequency withstand voltage (wire - jacket)	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 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	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 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 ± 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 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	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 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	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 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	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 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	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 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	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 horizontal Travel speed (C-track) 3 m/s @ 25 °C No. of torsion cycles 2 Mio. Torsion stress ± 180 °/m	Bending radius (dynamic)	10 x Outer diameter
Travel speed (C-track) 3 m/s @ 25 °C No. of torsion cycles 2 Mio. Torsion stress ± 180 °/m	No. of bending cycles (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
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