

#### M12 male 90° A-cod. with cable

PUR 4x0.34 bk UL/CSA+drag ch. 3m

Art.No.: 7000-12101-6340300

Weight: 0.133 Country of origin: US

Model designation: MSCL0-T634\_3.0

# Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available on request

If you are missing technical information? Please feel free to use our dictionary to find more technical details.

### **Product details:**

Male 90°

M12, 4-pole

with cable sleeves

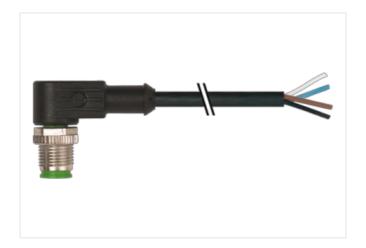
Plastic housings with good resistance against chemicals and oils.

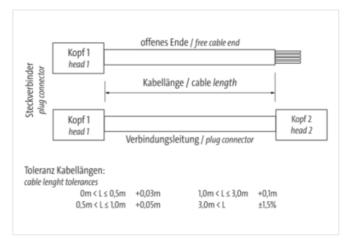
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

## **Link to Product**

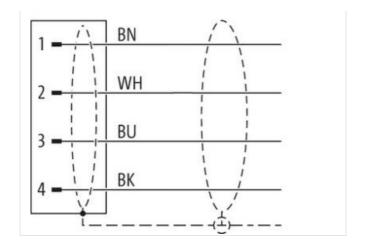
# Illustration

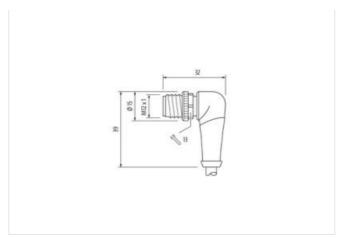


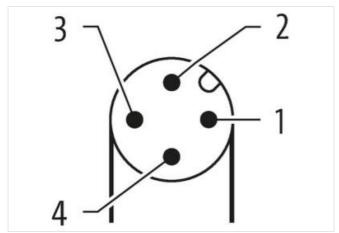




stay connected







Product may differ from Image













Cable length	3 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
Cable outlet	angled
Coding	A
Material contact	Copper alloy
Material	PUR
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Stripping length (jacket)	20 mm
Family construction form	free cable end

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: 2025-08-07



Commercial data	
ECLASS-6.0	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218
ECLASS-9.0	27060311
ECLASS-10.1	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060311
ETIM-5.0	EC001855
customs tariff number	85444290
customs tariff number	85444290
EAN	4048879215503
EAN	4048879215503
Packaging unit	1
Packaging unit	1
Electrical data   Supply	
Operating voltage AC max.	250 V
Operating voltage DC max.	250 V
Current operating per contact max.	4 A
Diagnostics	
Status indication LED	no
Installation   Connection	···
·	00
Stripping length (jacket)	20 mm
Mounting set Gender	M12 x 1
	male
Device protection   Electrical	
Degree of protection (EN IEC 60529)	IP65, IP67, IP66K
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	2,5 kV
Material group (IEC 60664-1)	
Mechanical data   Material data	
Coating locking	Nickeled
Coating of fitting	nickel plated
Locking material	Zinc die-casting
Material screw connection	Zinc die-casting
Mechanical data   Mounting data	
Mounting method	inserted, screwed, Shaking protection
Environmental characteristics   Climatic	
Operating temperature min.	-30 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
Important installation notes	
	Drotoet the connectors by suitable messures from machenical leads a 4 by the years of achieving
Note on strain relief  Note on bending radius	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  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)
Installation   Cable	
·	hrown black blue white
wire arrangement	brown, black, blue, white



Cable Type   3	Cable identification	634
Type of Certificate	Cable Type	3
Amount strending 1 Stranding 4 wires twisted wire arrangement brown, black, blue, white Cable weigth 36.3 g/m Material jacket PUR Shore hardness jacket 90.5 8 Shore A Freedom from ingredients (jacket) lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Outer-dismeter (jacket) 4.5 mm Tolerance outer diameter (sheath) 2.5 % Material wire insulation PP Material wire insulation PP Material wire insulation PP Outer diameter insulation PP Material wire insulation 70.5 8 Shore D Outer diameter insulation 70.5 8 Shore D Ingredient freeness wire insulation 1 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material wire insulation 1 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 1 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 1 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 1 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 2 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 3 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 2 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 3 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 3 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 3 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 3 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 3 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 4 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 4 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material conductor wire 4 lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Material	Jacket Color	black
Stranding	Type of Certificate	cURus
wire arrangement brown, black, blue, white Cable weight 36,3 g/m Material jocket 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) 4,5 mm Tolerance outer diameter (sheath) ± 5 % Material wire insulation PP Amount wires 4 Courter diameter insulation 1,25 mm Outer diameter insulation 70 ± 5 Shore D Ingredient freeness wire insulation 70 ± 5 Shore D Ingredient freeness wire insulation 1,25 mm Outer diameter folerance core insulation 70 ± 5 Shore D Ingredient freeness wire insulation 1,25 mm Outer diameter folerance core insulation 1,25 mm Outer diameter folerance swire insulation 1,25 mm Outer diameter of single wires 0,1 mm Outer diameter 0,2 mm Outer diameter 0,	Amount stranding	1
Cable weight         36,3 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 %           Material wire insulation         PP           Amount wires         4           Outer diameter insulation         1,25 mm           Outer diameter insulation         1,25 mm           Outer diameter tolerance core insulation         ± 5 %           Shore hardness wire insulation         # 4           Ingredient freeness wire insulation         ± 5 %           Shore hardness wire insulation         # 4           Ingredient freeness wire insulation         # 5 %           Bige wires         0,1 mm           Conductor vice         \$ Shore D           Ingredient freeness wire insulation         # 42           Diameter of single wires         0,1 mm           Conductor type (wire)         # 2           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 2098-4     <	Stranding	4 wires twisted
Material jacket   PUR   Shore hardness jacket   90 ± 5 Shore A	wire arrangement	brown, black, blue, white
Shore hardness jacket	Cable weigth	36,3 g/m
Freedom from Ingredients (jacket) Outer-diameter (jacket) 4,5 mm Tolerance outer diameter (sheath) 1	Material jacket	PUR
Outer-diameter (jacket)	Shore hardness jacket	90 ± 5 Shore A
Tolerance outer diameter (sheath)   \$ 5 %	Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material wire insulation         PP           Amount wires         4           Outer diameter insulation         1,25 mm           Outer diameter tolerance core insulation         15 %           Shore hardness wire insulation         70 ± 5 Shore D           Ingredient freeness wire insulation         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free           Amount strands (wire)         42           Diameter of single wires         0,1 mm           Conductor crossection (wire)         0,34 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         4,8 A           Electrical resistance line constant wire         4,8 A           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 (fixed)         80 °C / 90 °C @ 10000 h Operation           Operating temperature min. (dynamic)         25 °C	Outer-diameter (jacket)	4,5 mm
Amount wires 4 Outer diameter insulation 1,25 mm Outer diameter tolerance core insulation 2.5 % Shore hardness wire insulation 70 ± 5 Shore D Ingredient freeness wire insulation lead-free, cadmium-free, CFC-free, halogen-free, silicone-free Amount strands (wire) 42 Diameter of single wires 0,1 mm Conductor crosssection (wire) 0,34 mm² Material conductor wire Stranded copper wire, bare Conductor type (wire) strande class 6 Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 4,8 A Electrical resistance line constant 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 (static) 40 °C (90 °C ⊕ 10000 h Operation UV resistance DIN EN ISO 4892-2 A Flame resistance Good, application-related testing Oil resistance Good, application-related testing Din Ending radius (fixed) 5 x Outer diameter No. of bending cycles (C-track) 10 m ⊕ 25 °C Traversing distance (C-track) 3 m ≈ ⊕ 25 °C No. of torsion cycles (2 Min.	Tolerance outer diameter (sheath)	±5%
Outer diameter insulation 1,25 mm Outer diameter tolerance core insulation 70 ± 5 % Shore hardness wire insulation 70 ± 5 Nore D Ingredient freeness wire insulation 18 dead-free, cadmium-free, CFC-free, halogen-free, silicone-free 18 dead-free, cadmium-free, CFC-free, halogen-free, silicone-free 19 dead-free, silicone-free, si	Material wire insulation	PP
Outer diameter tolerance core insulation	Amount wires	4
Shore hardness wire insulation Ingredient freeness wire insulation Iead-free, cadmium-free, CFC-free, halogen-free, silicone-free Amount strands (wire) 42 Diameter of single wires 0,1 mm Conductor crosssection (wire) 0,34 mm² Material conductor wire Stranded copper wire, bare Conductor type (wire) strand class 6 Nominal voltage AC max. 300 V Current load capacity (standard) Current load capacity (standard) Current load capacity min. wire 4,8 A Electrical resistance line constant wire AC withstand voltage (wire - wire) Jacket) Min. operating temperature (fixed) Operating temperature (fixed) Operating temperature (fixed) Operating temperature max. (dynamic) UV resistance Din En Iso 369-22 A Elam resistance Codd, application-related testing Gasoline resistance Good, application-related testing Oil resistance Good, application-related testing Din En Iso 489-25 °C Traversing distance (C-track) Traversing distance (C-track) 10 m Ge 25 °C	Outer diameter insulation	1,25 mm
Ingredient freeness wire insulation   lead-free, cadmium-free, CFC-free, halogen-free, silicone-free	Outer diameter tolerance core insulation	±5%
Amount strands (wire)  Diameter of single wires  O,1 mm  Conductor crosssection (wire)  Stranded copper wire, bare  Conductor type (wire)  Stranded capser wire, bare  Conductor type (wire)  Strand class 6  Nominal voltage AC max.  300 V  Current load capacity (standard)  Current load capacity min. wire  A,8 A  Electrical resistance line constant wire  FO Ω/Km @ 20 °C  AC withstand voltage (wire - wire)  2,5 kV @ 60 s  Power frequency withstand voltage (wire - ack wire)  AC withstand voltage (wire - wire)  2,5 kV @ 60 s  Power frequency withstand voltage (wire - ack wire)  AB °C / 90 °C @ 10000 h Operation  Operating temperature (fixed)  Operating temperature max. (dynamic)  Operating temperature max. (dynamic)  AB °C / 90 °C @ 10000 h Operation  UV resistance  DIN EN ISO 4892-2 A  Flame resistance  UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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  No. of torsion stress  ± 180 °/m  Torsion stress  ± 180 °/m	Shore hardness wire insulation	70 ± 5 Shore D
Diameter of single wires 0,1 mm  Conductor crosssection (wire) 0,34 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 4,8 A  Electrical resistance line constant wire 57 Ω/km @ 20 °C  AC withstand voltage (wire - wire) 2,5 kV @ 60 s  Power frequency withstand voltage (wire - 2,5 kV @ 60 s  Max. operating temperature (static) 40 °C  Max. operating temperature (fixed) 80 °C / 90 °C @ 10000 h Operation  Operating temperature max. (dynamic) 48 °C / 90 °C @ 10000 h Operation  UV resistance DIN EN ISO 4892-2 A  Flame resistance UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  chemical resistance Good, application-related testing  Gasoline 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  Traversing distance (C-track) 10 Mio. @ 25 °C  No. of torsion cycles 2 Mio.  Torsion stress ± 180 °/m	Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Conductor crosssection (wire)  Material conductor wire  Stranded copper wire, bare  Strand class 6  Nominal voltage AC max.  300 V  Current load capacity (standard)  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  Power frequency withstand voltage (wire - wire)  Power frequency withstand voltage (wire - 2,5 kV @ 60 s  Power frequency withstand voltage (wire - 2,5 kV @ 60 s  Min. operating temperature (static)  Max. operating temperature (fixed)  Bo °C / 90 °C @ 10000 h Operation  Operating temperature max. (dynamic)  Operating temperature max. (dynamic)  UV resistance  DIN EN ISO 4892-2 A  Flame resistance  UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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  No. of torsion stress  ± 180 °/m  Torsion stress  ± 180 °/m	Amount strands (wire)	42
Material conductor wire       Stranded copper wire, bare         Conductor type (wire)       strand class 6         Nominal voltage AC max.       300 V         Current load capacity (standard)       to DIN VDE 0298-4         Current load capacity min. wire       4,8 A         Electrical resistance line constant wire       57 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       UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2         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)       5 x Outer diameter         Bending radius (dynamic)       10 x Outer diameter         Bending radius (dynamic)       10 m @ 25 °C   horizontal         Traversing	Diameter of single wires	0,1 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 4,8 A  Electrical resistance line constant wire 5,2 kV @ 60 s  Power frequency withstand voltage (wire - vire) 2,5 kV @ 60 s  Power frequency withstand voltage (wire - jacket) 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 UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  chemical 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 (gynamic) 10 x Outer diameter  Bending radius (gynamic) 10 x Outer diameter  No. of bending cycles (C-track) 10 m @ 25 °C  Traversing distance (C-track) 10 m @ 25 °C   horizontal  Travel speed (C-track) 3 m/s @ 25 °C  No. of forsion cycles 2 Mio.  Torsion stress ± 180 °/m	Conductor crosssection (wire)	0,34 mm²
Nominal voltage AC max. 300 V  Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 4,8 A  Electrical resistance line constant wire 57 Ω/km @ 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 UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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) 3 m/s @ 25 °C  No. of forsion cycles 2 Mio.  Torsion stress ± 180 °/m	Material conductor wire	Stranded copper wire, bare
Current load capacity (standard) to DIN VDE 0298-4  Current load capacity min. wire 4,8 A  Electrical resistance line constant wire 57 \( \Omega \text{DVKm} \end{Q} 20 \circ C\)  AC withstand voltage (wire - wire) 2,5 kV \( \omega \text{D} 60 \text{ s}\)  Power frequency withstand voltage (wire - loaket) 2,5 kV \( \omega \text{D} 60 \text{ s}\)  Min. operating temperature (static) -40 \circ C  Max. operating temperature (fixed) 80 \circ C / 90 \circ C \( \omega \text{10000 h Operation}\)  Operating temperature min. (dynamic) -25 \circ C  Operating temperature max. (dynamic) 80 \circ C / 90 \circ C \( \omega \text{10000 h Operation}\)  UV resistance DIN EN ISO 4892-2 A  Flame resistance UL 1581 \( \omega \text{1090   IEC 60332-2-2   UL 1581 \( \omega \text{1100 FT2}\)  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  Bending radius (dynamic) 10 x Outer diameter  No. of bending cycles (C-track) 10 mio 25 \( \circ C \)  Traversing distance (C-track) 10 mio 25 \( \circ C \)  Traversing distance (C-track) 3 mis \( \omega \text{25 °C} \)  No. of torsion cycles 2 Mio.  Torsion stress \( \pm \text{180 \circ} \circ mio	Conductor type (wire)	strand class 6
Current load capacity min. wire       4,8 A         Electrical resistance line constant wire       57 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       UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2         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	Nominal voltage AC max.	300 V
Electrical resistance line constant wire 57 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 UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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)  Power frequency withstand voltage (wire - jacket)  Min. operating temperature (static)  Max. operating temperature (fixed)  More operating temperature min. (dynamic)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Operating temperature max. (dynamic)  UV resistance  DIN EN ISO 4892-2 A  Flame resistance  Gaodine resistance  Gaodine resistance  Good, application-related testing  Oil resistance  Good, application-related testing  Oil resistance  Good, application-related testing   DIN EN 60811-404  Bending radius (fixed)  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  ± 180 °/m	Current load capacity min. wire	4,8 A
Power frequency withstand voltage (wire jacket)  Min. operating temperature (static)  Max. operating temperature (fixed)  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  UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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  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	Electrical resistance line constant wire	57 Ω/km @ 20 °C
Min. operating 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)  2-5 °C  Operating temperature max. (dynamic)  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  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  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		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  UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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  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 UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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	Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
UV resistance  DIN EN ISO 4892-2 A  Flame resistance  UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  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  UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  chemical 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  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	UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2
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)  Traversing distance (C-track)  Travel speed (C-track)  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