

M12 male 90° / M12 female 0° A-cod. shielded

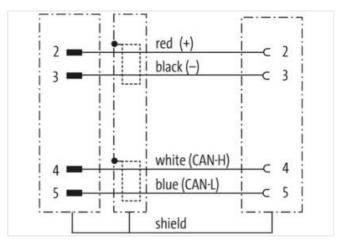
PUR AWG24+22 shielded vt UL/CSA+drag ch. 1.1m

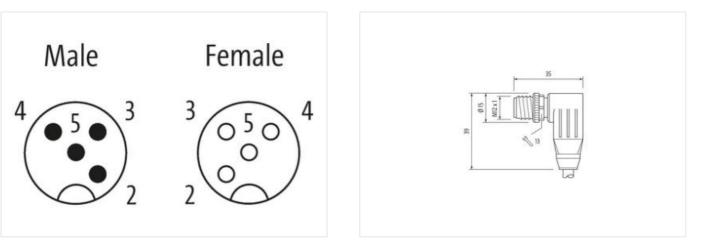
DeviceNet, CANopen Male 90° – female straight M12 – M12, 4-pole shielded Plastic housings with good resistance against chemicals and oils. The resistance to aggressive media should be individually tested for your application. Further details on request. Further cable lengths on request.

Link to Product



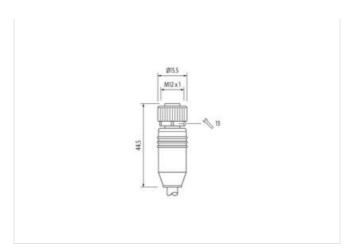






The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-05-17





Product may differ from Image



Cable length	1,1 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Coding	A
Material	PUR
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Coding	A
Material	PUR
No. of poles	4
Width across flats	SW13
Commercial data	
ECLASS-6.0	27279218
ECLASS-6.1	27060307
ECLASS-7.0	27060307
ECLASS-8.0	27060307
ECLASS-9.0	27060307
ECLASS-10.1	27060307
ECLASS-11.1	27060307
ECLASS-12.0	27060307
ETIM-5.0	EC001855
customs tariff number	85444290
GTIN	4048879602891

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: 2024-05-17



Packaging unit	1
Electrical data Supply	
Operating voltage AC max.	60 V
Operating voltage DC max.	60 V
Current operating per contact max.	4 A
Installation Connection	
	M12 x 1
Mounting set	
Device protection Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	1,5 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.	-25 °C
Operating temperature max.	-23 ℃
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)
Installation Cable	
Cable identification	803
Jacket Color	violet
Type of Certificate	cURus
Amount stranding	1
Stranding	2 wires twisted
Amount stranding (type 2)	1
Stranding (type 2)	2 Stranded joints twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	65 %
Banding	Foil
Drain wire (cross-section)	22 AWG
wire arrangement	(white, blue), (black, red)
Cable weigth	63,12 g/m
Material jacket	PUR
	90 ± 5 Shore A
Shore hardness jacket	
Shore hardness jacket Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Freedom from ingredients (jacket) Outer-diameter (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 6,9 mm
Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 6,9 mm ± 5 %

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: 2024-05-17



Shore Increases wire insulation 44 ± 5 Shore D Ingredient fenenses wire insulation lead-free, CFC-free, halogen-free Amount stands (wire) 19 Diameter of single wires 24 AWG Considuct or consection (wire) 24 AWG Drain wire (cross-section) 22 AWG Material conductor wire coppor stranded wire, finned Exercise fiturion wire Data Cuber diameter wire insulation (Data) 15 mm Tolerance outer diameter wire insulation (data) 15 mm Tolerance outer diameter wire insulation (data) 15 mm Tolerance outer diameter wire insulation (data) 12 struct Diameter of single wires (Data) 22 AWG Canductor reassection wire (Data) 22 AWG Canductor reassection wire (Data) 22 AWG Canductor reassection wire (Data) 20 AWG Canductor reassection wire (Data) 20 AWG Canductor reassection wire (Data) 20 AWG Canductor wire (Data) 50 W	Outer diameter tolerance core insulation	±5%
Arnourt strands (wine) 19 Diameter of single wines 24 AWG Conductor crossescelion (wine) 22 AWG Material conductor wine copper stranded wine, tinned Electrical function wine Data Material conductor wine insulation (Data) PE Outer diameter wine insulation (Data) 1,5 mm Tolerance outer diameter wine insulation (Data) 1,5 mm Tolerance outer diameter wine insulation (Data) 2 Annourt wise (Data) 2 Ingredient fuences wine insulation (Data) 2 Annourt stands wine (Data) 2 Conductor crossecolion wine (Data) 22 AWG Conductor crossecolion wine (Data) 22 AWG Conductor orisosecolion wine (Data) 22 AWG Conductor wines (Data) 20 AWG Conductor wine (Data) 22 AWG Conductor wine (Data) 22 AWG Conductor wine (Data) 20 AWG Conset backspici (standard) 10 DIN VE (Data) Carvert load capacity min. Wine (Data) 20 AWG Current load capacity min. Wine (Data) 20 L MME Electrical function wine (Data) 20 L MME	Shore hardness wire insulation	64 ± 5 Shore D
Diameter of single wires 24 AWG Conductor crossection (wire) 24 AWG Drain wire (cross socilon) 22 AWG Material conductor wire Opper stranded wire, tinned Electrical function wire Data Material wire insulation (Data) PE Outer diameter wire insulation (Data) 1.5 mm Tolerance outer diameter wire insulation (Data) 1.8 de/ree, CFC-free, halogen-free Amount strands wire (Data) 2 Amount strands wire (Data) 2 Amount strands wire (Data) 2 Material wire insulation (Data) 2.2 AWG Conductor crossection wire (Data) 2.0 per ver Traversing distance (C-track) 5 m Normial voltage AC max. 300 V Current Load capacity min. wire 4.5 A Current Load capacity min. wire (Data) 6 A Electrical function wire data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz	Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free
Conductor crossection (wire) 24 AWG Drain wire (cross-section) 22 AWG Material conductor wire Data Material conductor wire insulation (Data) PE Outer dimenter wire insulation (Data) 1.5 mm Tolerance outer diameter wire insulation (Data) 1.5 mm Tolerance outer diameter wire insulation (Data) 1.6 mm Improdime Therenes wire insulation (Data) 1.8 af-free, CFC-free, halogen-free Amount wires (Data) 2 Amount strands wire (Data) 2.2 AWG Canductor crossection wire (Data) 2.2 AWG Canductor wire (Data) 2.2 AWG Canductor wire (Data) 2.2 AWG Material conductor wire (Data) Coper strandod wire, timed Electrical Incidion wire (Data) Power Traversing distance (C-track) 5 m Normand voltage AC max. 300 V Current Load capacity mix wire 4.5 A Current Load capacity mix wire 6.0 Electrical Incidion wire (data) Power Characteristic Incidion wire (data) Power Characteristic Incidion wire (data) 54.0 Vm </td <td>Amount strands (wire)</td> <td>19</td>	Amount strands (wire)	19
Drain wire (cross-section) 22 AWG Material conductor wire copper stranded wire, tinned Electrical function wire Data Material wire insulation (Data) PE Outer diameter wire insulation (Data) 1.5 mm Toderance outer diameter wine insulation (Data) 1.8 mm Ingredient freeness wire insulation (Data) 18 defree. CPC-free, halogen-free Amount strands wire (Data) 19 Diameter of single wires (Data) 22 AWG Conductor rows (Data) 22 AWG Conductor wire (Data) copper stranded wire, tinned Electrical function wire (Data) copper stranded wire, tinned Electrical function wire (Data) copper stranded wire, tinned Current tool capacity first. wire 45.5 A Current tool capacity first. wire 45.5 A Current tool capacity first. wire 78 Ω/km Electrical function wire Data Electrical function wire Data Electrical function wire Data A Electrical function wire Data A Electrical function wire Data A Electrical resistance Eline c	Diameter of single wires	24 AWG
Material conductor wire copper strandad wire, tinned Electrical function wire Data Outer diameter wire insulation (Data) 1.5 mm Tolerance outer diameter wire insulation (Data) 1.5 mm Torance outer diameter wire insulation (Data) 1.5 mm Ingredient freemess wire insulation (Data) 2 Amount wires (Data) 2 Amount strands wire (Data) 22 AWG Conductor crosssection wire (Data) 22 AWG Conductor wire (Data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity (standard) to DN VbE 0298-4 Current load capacity (standard) to	Conductor crosssection (wire)	24 AWG
Electrical function wire Data Material wire insulation (Data) PE Outer diameter wire insulation (data) 1.5 mm Tolarance outer diameter wire insulation (data) ± 53 % Ingredient freeness wire insulation (data) ± 53 % Amount wise (Data) 2 Amount wise (Data) 2 Amount wise (Data) 2 Conductor crossection wire (Data) 22 AWG Conductor vire (Opan) copper stranded wire, tinned Electrical function wire (data) Power Tavaersing distance (C-track) 5 m Nomian voltage AC max. 300 V Current load capacity min, wire 4.5 A Current load capacity min, wire 4.5 A Current load capacity min, Wire (Data) 6 A Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical resistance line constant wire 78 C/km Electrical resistance line constant wire 70 K/m Constance memorature (statc) -40 °C Max. operating temperature (max. (dynamic)) 20 °C	Drain wire (cross-section)	22 AWG
Material wire insulation (Data) PE Outer diameter wire insulation (Data) 1.5 mm Ingredient freeness wire insulation (Data) 1.6 st 3% Ingredient freeness wire insulation (Data) 1.6 st 3% Amount strand wire (Data) 2 Amount strand wire (Data) 2 Diameter of single wires (Data) 22 AWG Conductor crossection wire (Data) 22 AWG Material conductor wire (Data) 20 per stranded wire, linned Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity (standerd) to DIN VDE 6298-4 Current load capacity (standerd) to DIN VDE 6298-4 Current load capacity min. Wire 4 S A Current load capacity min. Wire (Data) 6 A Electrical function wire (data) Power Charadertelis inpedance 120 2 ± 10 % @ 1 MHz Electrical resistance contain wire 78 Ω/km Electrical resistance on onstant wire 78 Ω/km Electrical resistance contain wire (Data) 54 Ω/km AC withstand voltage	Material conductor wire	copper stranded wire, tinned
Outer diameter wire insulation (Data) 1,5 mm Tolerance outer diameter wire insulation (Data) 1.5 3 % Ingredient freeness wire insulation (Data) 1.8 d + fee, CFC-free, halogen-free Amount wires (Data) 2 Amount strands wire (Data) 1.9 Diameter of single wires (Data) 22 AWG Conductor crosssection wire (Oata) 22 AWG Conductor or crosssection wire (Oata) 22 AWG Material conductor wire (Oata) copper stranded wire, tinned Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity (standerd) to DIN VDE 0288-4 Current load capacity min. Wire (Data) 6 A Electrical function wire Data Electrical function wire Data Electrical resistance coating wire (Data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical resistance fue constant wire (Data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical resistance fue constant wire (Data) 8 0 % C <tr< td=""><td>Electrical function wire</td><td>Data</td></tr<>	Electrical function wire	Data
Tolerance outer diameter wire insulation (data) ± 53 % Ingredient freeness wire insulation (data) tead-free, CFC-free, halogen-free Amount wires (Data) 2 Amount wires (Data) 19 Diameter of single wires (Data) 22 AWG Conductor crossection wire (Data) copper stranded wire, inned Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AG max. 300 V Current load capacity (standard) to DIN VDE 0288-4 Current load capacity (standard) to DIN VDE 0288-4 Current load capacity (min. wire (Data) 6 A Electrical function wire (data) Power Obtaracteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical function wire (Data) 54 Ωkm AC withstand voltage (wire - shield) 24 V @ 60 s Min. operating temperature (stand) 54 Q/km AC withstand voltage (wire - shield) 24 V @ 60 s Min. operating temperature (stand) 30 °C Operating te	Material wire insulation (Data)	PE
Ingradient freeness wire insulation (Data) lead-free, CFC-free, halogen-free Amount strands wire (Data) 2 Amount strands wire (Data) 19 Diameter of single wires (Data) 22 AWG Conductor crossection wire (Data) 22 AWG Material conductor wire (Data) 22 AWG Material conductor wire (Data) copper stranded wire, tinnad Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity min. wire 4.5 A Current load capacity min. wire 4.5 A Current load capacity min. Wire (Data) 6 A Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical science oxing wire (Data) 6 A Okm Capacity min. Wire (Data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical crossitance into constant wire 78 Ωkm Electrical constant wire 78 Ωkm Electrical capacitance 40000 pF/km AC withstand voltage (wire - wire) <td< td=""><td>Outer diameter wire insulation (Data)</td><td>1,5 mm</td></td<>	Outer diameter wire insulation (Data)	1,5 mm
Amount wires (Data) 2 Amount strands wire (Data) 19 Diameter of single wires (Data) 22 AWG Conductor crossection wire (Data) 22 AWG Material conductor wire (Data) copper stranded wire, tinned Electrical function wire (Data) copper stranded wire, tinned Electrical function wire (Data) 5 m Nominal voltage AC max. 300 V Current load capacity (strandard) to DIN VDE 0298-4 Current load capacity (strandard) to DIN VDE 0298-4 Current load capacity min. wire 4.5 A Current load capacity min. wire (Data) 6 A Electrical function wire (data) Power Characteristic impedance 120 £ ± 10 % @ 1 MHz Electrical resistance line constant wire 78 Ω/km AC withstand voltage (wire - wire) 2 kV @ 60 s Electrical resistance 40000 pF/km AC withstand voltage (wire - shield) 2 kV @ 60 s Mas. operating temperature (statc) 40 °C Operating temperature (statc) 40 °C Operating temperature (statc) 60 °C Operating temperature (statc) 80 °C Operating temperature	Tolerance outer diameter wire insulation (data)	± 53 %
Amount strands wire (Data) 19 Diameter of single wires (Data) 22 AWG Conductor crossection wire (Data) 22 AWG Baterial conductor wire (Data) copper stranded wire, tinned Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 4.5 A Current load capacity min. wire 4.5 A Current load capacity min. wire Data Electrical function wire (data) Power Characteristic impedance 120 Q ± 10 % @ 1 MHz Electrical straitsmace ina constant wire 78 Q/km Electrical resistance inac constant wire 78 Q/km Electrical resistance 40000 pF/km AC withstand voltage (wire - shield) 2 kV @ 60 s Min: operature min (wand) 80 °C Operating temperature (inked) 80 °C Operating temperature	Ingredient freeness wire insulation (Data)	lead-free, CFC-free, halogen-free
Diameter of single wires (Data) 22 AWG Conductor crosssection wire (Data) copper stranded wire, tinned Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 4.5 A Current load capacity min. wire 4.5 A Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical resistance inconstant wire 78 Ω/km Electrical resistance inconstant wire 78 Ω/km Electrical resistance inconstant wire 2 KV @ 60 s Electric agresitance 40000 pF/km AC withstand voltage (wire - sineld) 2 KV @ 60 s Mat. operating temperature (static) -40 °C Max. operating temperature (static) 70 °C Operating temperature max. (dynamic) 70 °C Operating temperature (static) -30 °C Operating temperatu	Amount wires (Data)	2
Conductor crosssection wire (Data) 22 AWG Material conductor wire (Data) copper stranded wire, tinned Electrical function wire (Data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. Wire (Data) 6 A Electrical function wire Data Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical stance ince constant wire 78 Ω km Electrical resistance line constant wire 78 Ω km Electrical resistance line constant wire 78 Ω km AC withstand voltage (wire - wire) 2 kV @ 60 s Electric aresistance (static) -40 °C Max. operating temperature (static) -40 °C Max. operating temperature (static) -30 °C Operating temperatu	Amount strands wire (Data)	19
Material conductor wire (Data) copper stranded wire, tinned Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 4.5 A Current load capacity min. Wire (Data) 6 A Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical runction wire (Data) 54 Ω/km Electrical runction wire (Data) 54 Ω/km AC withstand voltage (wire - site) 2 kV @ 60 s Electric capacitance 40000 pF/km AC withstand voltage (wire - site) 2 kV @ 60 s Min. operating temperature (statc) -40 °C Max. operating temperature (statc) -40 °C Max. operating temperature min. (dynamic) -30 °C Opinerat	Diameter of single wires (Data)	22 AWG
Electrical function wire (data) Power Traversing distance (C-track) 5 m Nominal voltage AG max. 300 V Current load capacity (standard) to DIN VDE 0298-4 Current load capacity (standard) to DIN VDE 0298-4 Current load capacity min. wire 4.5 A Current load capacity min. wire Data Electrical function wire Data Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical resistance line constant wire 78 Ω/km Electrical resistance coating wire (Data) 54 Ω/km AC withstand voltage (wire - shield) 2 kV @ 60 s Min: operating temperature (static) -40 °C Max. operating temperature (static) -40 °C Operating temperature (static) -30 °C Operating temperature (static) 70 °C Flame resistance Good, application-related testing Gasoline resistance Good, application-related testing Gasoline resistance Din NEN 60811-404 [Good, application-related testing Gasoline resistance Din NEN 60811-404 [Good, application-relate	Conductor crosssection wire (Data)	22 AWG
Traversing distance (C-track)5 mNominal voltage AC max.300 VCurrent load capacity (standard)to DIN VDE 0298-4Current load capacity min. Wire4,5 ACurrent load capacity min. Wire (Data)6 AElectrical function wireDataElectrical function wire (data)PowerCharacteristic impedance120 ½ 10 % @ 1 MHzElectrical resistance line constant wire78 Ω/kmAC withstand voltage (wire - wire)2 kV @ 60 sElectric apositing temperature (statc)-40 °CMax. operating temperature (statc)-40 °CMax. operating temperature (statc)-40 °CMax. operating temperature (statc)-70 °CFlame resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDin NE 60811-404 [Good, application-related testingOil resistanceDin NE N60811-404 [Good, application-related testingOil resistanceDin NE N60811-404 [Good, application-related testingOil resistanceDin NE N 60811-404 [Good, application-related testingOil resistanceDin NE N 60811-404 [Good, application-related testingOil resistanceDin NE N Couter diameterBending radius (fixed)6 × Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m <td>Material conductor wire (Data)</td> <td>copper stranded wire, tinned</td>	Material conductor wire (Data)	copper stranded wire, tinned
Nominal voltage AC max.300 VCurrent load capacity (standard)to DIN VDE 0298-4Current load capacity min. wire4.5 ACurrent load capacity min. wire6 AElectrical function wireDataElectrical function wire (data)PowerCharacteristic impedance120 $\Omega \pm 10 \% @ 1$ MHzElectrical resistance coating wire (Data)54 Ω/km AC withstand voltage (wire - wire)2 kV @ 60 sElectric capacitance40000 pF/kmAC withstand voltage (wire - shield)2 kV @ 60 sElectric generature (fixed)30 °COperating temperature (fixed)80 °COperating temperature max. (dynamic)70 °CFlame resistanceGood, application-related testingGasoline resistanceGood, application-related testingGasoline resistanceDIN K 60811-404 (Good, application-related testingOir resistanceDIN K 60811-404 (Good, application-related testingGasoline resistanceDIN K 60811-404 (Good, application-related testingBending radius (installation)x Outer diameterBending radius (installation)6 x Outer diameterBending radius (installation)10 x Outer diameterBending radius (installation)10 x Outer diameterBending radius (installation)6 x Outer diameterBending radius (installation)10 x Outer diameterBending	Electrical function wire (data)	Power
Current load capacity (standard)to DIN VDE 0298-4Current load capacity min. wire4,5 ACurrent load capacity min. Wire (Data)6 AElectrical function wireDataElectrical function wire (data)PowerCharacteristic impedance120 $\Omega \pm 10 \% @ 1$ MHzElectrical resistance line constant wire78 Ω/km Electrical resistance coating wire (Data)54 Ω/km Electrical resistance coating wire (Data)54 Ω/km AC withstand voltage (wire - wire)2 kV @ 60 sElectric capacitance40000 pF/kmAC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (static)-40 °CMax. operating temperature (static)-30 °COperating temperature max. (dynamic)-30 °COperating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090Chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (installation)K Outer diameterBending radius (installation)10 x Outer	Traversing distance (C-track)	5 m
Current load capacity min. wire 4,5 A Current load capacity min. Wire (Data) 6 A Electrical function wire Data Electrical function wire (data) Power Characteristic impedance 120 Ω ± 10 % @ 1 MHz Electrical resistance line constant wire 78 Ω/km Electrical resistance coating wire (Data) 54 Ω/km Ac withstand voltage (wire - wire) 2 kV @ 60 s Electric capacitance 40000 pF/km AC withstand voltage (wire - shield) 2 kV @ 60 s Min. operating temperature (static) -40 °C Max. operating temperature (static) -40 °C Operating temperature (mixed) 80 °C Operating temperature (static) -30 °C Operating temperature max. (dynamic) 70 °C Flame resistance UL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090 chemical resistance Good, application-related testing Oil resistance Good, application-related testing Oil resistance DIN EN 60811-404 Good, application-related testing Oil resistance DIN EN 60811-404 Good, application-related testing Bending radius (installation	Nominal voltage AC max.	300 V
Current load capacity min. Wire (Data)6 AElectrical function wireDataElectrical function wire (data)PowerCharacteristic impedance120 Q ± 10 % @ 1 MHzElectrical resistance line constant wire78 Q/kmAc withstand voltage (wire - wire)2 kV @ 60 sElectric capacitance40000 pF/kmAC withstand voltage (wire - shield)2 kV @ 60 sElectric capacitance40000 pF/kmAC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (static)-40 °COperating temperature (static)-30 °COperating temperature (isted)80 °COperating temperature (static)-70 °CFlame resistanceGood, application-related testingGasoline resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (fixed)10 x Outer diameterBending radius (dynamic)10 x Outer diameterNo. of torsion cycles2 Mio.Torsion stress± 30 °/m	Current load capacity (standard)	to DIN VDE 0298-4
Electrical function wireDataElectrical function wire (data)PowerCharacteristic impedance $120 \Omega \pm 10 \% @ 1 MHz$ Electrical resistance line constant wire $78 \Omega/km$ Electrical resistance coating wire (Data) $54 \Omega/km$ AC withstand voltage (wire - wire) $2 KV @ 60 s$ Electric apacitance $40000 \rho F/km$ AC withstand voltage (wire - shield) $2 kV @ 60 s$ Min. operating temperature (static) $-40 \ ^{\circ}C$ Max. operating temperature (static) $-40 \ ^{\circ}C$ Max. operating temperature (fixed) $80 \ ^{\circ}C$ Operating temperature min. (dynamic) $-30 \ ^{\circ}C$ Operating temperature max. (dynamic) $70 \ ^{\circ}C$ Flame resistanceUL 1581 \\$ 1100 FT2 IEC 60332-2-2 UL 1581 \\$ 1090chemical resistanceGood, application-related testingGasoline resistanceDIN El N60811-404 Good, application-related testingGoli resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (dynamic)10 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Min.No. of torsion cycles2 Mio.Torsion stress $\pm 30 \ ^{\circ}m$	Current load capacity min. wire	4,5 A
Electrical function wire (data)PowerCharacteristic impedance $120 \Omega \pm 10 \% @ 1 MHz$ Electrical resistance line constant wire $78 \Omega/km$ Electrical resistance coating wire (Data) $54 \Omega/km$ AC withstand voltage (wire - wire) $2 kV @ 60 s$ Electric capacitance $40000 pF/km$ AC withstand voltage (wire - shield) $2 kV @ 60 s$ Max. operating temperature (static) $-40 °C$ Max. operating temperature (static) $-40 °C$ Operating temperature (fixed) $80 °C$ Operating temperature min. (dynamic) $-30 °C$ Operating temperature min. (dynamic) $-30 °C$ Operating temperature min. (dynamic) $70 °C$ Flame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingGasoline resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed) $6 x Outer diameter$ Bending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress $\pm 30 °/m$	Current load capacity min. Wire (Data)	6 A
Characteristic impedance $120 \Omega \pm 10 \% @ 1 MHz$ Electrical resistance line constant wire $78 \Omega / km$ Electrical resistance coating wire (Data) $54 \Omega / km$ AC withstand voltage (wire - wire) $2 kV @ 60 s$ Electric capacitance $40000 pF / km$ AC withstand voltage (wire - shield) $2 kV @ 60 s$ Min. operating temperature (static) $-40 \ ^{\circ}C$ Max. operating temperature (static) $-40 \ ^{\circ}C$ Max. operating temperature (fixed) $80 \ ^{\circ}C$ Operating temperature min. (dynamic) $-30 \ ^{\circ}C$ Operating temperature max. (dynamic) $70 \ ^{\circ}C$ Flame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceDIN EN 60811-404 Good, application-related testingGoil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (dynamic) $10 \times Outer diameter$ Travel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress $\pm 30 \ ^{\prime}m$	Electrical function wire	Data
Electrical resistance line constant wire 78 Ω/km Electrical resistance coating wire (Data) 54 Ω/km AC withstand voltage (wire - wire) 2 kV @ 60 s Electric capacitance 40000 pF/km AC withstand voltage (wire - shield) 2 kV @ 60 s Min. operating temperature (static) -40 °C Max. operating temperature (fixed) 80 °C Operating temperature min. (dynamic) -30 °C Operating temperature max. (dynamic) 70 °C Flame resistance UL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090 chemical resistance Good, application-related testing Gasoline resistance Good, application-related testing Gasoline resistance DIN EN 60811-404 Good, application-related testing Bending radius (installation) x Outer diameter Bending radius (dynamic) 10 x Outer diameter Travel speed (C-track) 1 Mio. No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	Electrical function wire (data)	Power
Electrical resistance coating wire (Data)54 Ω/kmAC withstand voltage (wire - wire)2 kV @ 60 sElectric capacitance40000 pF/kmAC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °COperating temperature min. (dynamic)-30 °COperating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceDIN EN 60811-404 Good, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Characteristic impedance	120 Ω ± 10 % @ 1 MHz
AC withstand voltage (wire - wire) 2 kV @ 60 s Electric capacitance 40000 pF/km AC withstand voltage (wire - shield) 2 kV @ 60 s Min. operating temperature (static) -40 °C Max. operating temperature (ixed) 80 °C Operating temperature min. (dynamic) -30 °C Operating temperature max. (dynamic) 70 °C Flame resistance UL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090 chemical resistance Good, application-related testing Gasoline resistance Good, application-related testing Oil resistance DIN EN 60811-404 Good, application-related testing Bending radius (installation) x Outer diameter Bending radius (dynamic) 10 x Outer diameter Bending radius (dynamic) 10 x Outer diameter Travel speed (C-track) 1 Mio. No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	Electrical resistance line constant wire	78 Ω/km
Electric capacitance40000 pF/kmAC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °COperating temperature min. (dynamic)-30 °COperating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceOIN EN 60811-404 Good, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (cfurack)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Electrical resistance coating wire (Data)	54 Ω/km
AC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °COperating temperature min. (dynamic)-30 °COperating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	AC withstand voltage (wire - wire)	2 kV @ 60 s
Min. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °COperating temperature min. (dynamic)-30 °COperating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Electric capacitance	40000 pF/km
Max. operating temperature (fixed)80 °COperating temperature min. (dynamic)-30 °COperating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	AC withstand voltage (wire - shield)	2 kV @ 60 s
Operating temperature min. (dynamic)-30 °COperating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Min. operating temperature (static)	-40 °C
Operating temperature max. (dynamic)70 °CFlame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Max. operating temperature (fixed)	2° 08
Flame resistanceUL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Operating temperature min. (dynamic)	-30 °C
chemical resistanceGood, application-related testingGasoline resistanceGood, application-related testingOil resistanceDIN EN 60811-404 Good, application-related testingBending radius (installation)x Outer diameterBending radius (fixed)6 x Outer diameterBending radius (dynamic)10 x Outer diameterTravel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Operating temperature max. (dynamic)	70 °C
Gasoline resistance Good, application-related testing Oil resistance DIN EN 60811-404 Good, application-related testing Bending radius (installation) x Outer diameter Bending radius (fixed) 6 x Outer diameter Bending radius (dynamic) 10 x Outer diameter Travel speed (C-track) 1 Mio. No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	Flame resistance	UL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090
Oil resistance DIN EN 60811-404 Good, application-related testing Bending radius (installation) x Outer diameter Bending radius (fixed) 6 x Outer diameter Bending radius (dynamic) 10 x Outer diameter Travel speed (C-track) 1 Mio. No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	chemical resistance	Good, application-related testing
Bending radius (installation) x Outer diameter Bending radius (fixed) 6 x Outer diameter Bending radius (dynamic) 10 x Outer diameter Travel speed (C-track) 1 Mio. No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	Gasoline resistance	Good, application-related testing
Bending radius (fixed) 6 x Outer diameter Bending radius (dynamic) 10 x Outer diameter Travel speed (C-track) 1 Mio. No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	Oil resistance	DIN EN 60811-404 Good, application-related testing
Bending radius (dynamic) 10 x Outer diameter Travel speed (C-track) 1 Mio. No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	Bending radius (installation)	x Outer diameter
Travel speed (C-track)1 Mio.No. of torsion cycles2 Mio.Torsion stress± 30 °/m	Bending radius (fixed)	6 x Outer diameter
No. of torsion cycles 2 Mio. Torsion stress ± 30 °/m	Bending radius (dynamic)	10 x Outer diameter
Torsion stress ± 30 °/m	Travel speed (C-track)	1 Mio.
	No. of torsion cycles	2 Mio.
Torsion speed 35 cycles/min	Torsion stress	± 30 °/m
	Torsion speed	35 cycles/min

The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-05-17