

## M12 male 90° A-cod. with cable shielded

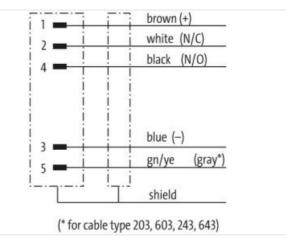
PUR 5x0.34 shielded bk UL/CSA+drag ch. 1m

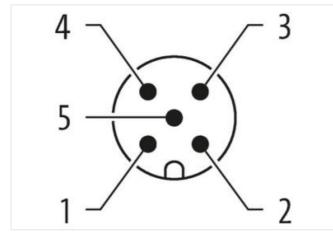
Male 90° M12, 5-pole shielded A-coded Plastic housings with good resistance against chemicals and oils. The resistance to aggressive media should be individually tested for your application. Further details on request. Further cable lengths on request.

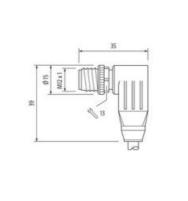
## Link to Product











Product may differ from Image



Cable length

Side 1

Tightening torque

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: 2024-05-06

1 m

0,6 Nm



Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
Coding	A
Material contact	Copper alloy
Material	PUR
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Coating contact	gold plated
Commercial data	
ECLASS-6.0	27279218
ECLASS-6.1	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
GTIN	4048879778237
Packaging unit	1
Electrical data   Supply	
Operating voltage AC max.	60 V
Operating voltage DC max.	60 V
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V
Current operating per contact max.	4 A
Installation   Connection	
Mounting set	M12 x 1
Device protection   Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	1,5 kV
Material group (IEC 60664-1)	I
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.	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.

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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.

Conduct       Second Handback         Installation   Cable       Cable indentification       64.3         Cable indentification       64.3         Cable indentification       64.3         Cable Color       Discler         Page of Conflicatie       cUPlus         Amount standing       1         Standing       Stress around Core filter Instated         Cable sheeting (coverage)       80 %         Bandring       Core Filter Instate         Cable sheeting (type)       Core Filter Instate         Cable sheeting (type)       Stress Filter Instate         Filter       yees         Wire arrang distatom (C-track)       Stress Filter Instate         Cable sheeting (coverage)       80 %         Stress heeting (coverage)       80 %         Stress heeting (coverage)       80 %         Stress heeting (coverage)       50 mm         Cable discover insulation       92 % %         Stress heeting (coverage)       50 mm         Cadecon term ingredent (coverase)       50 % <th></th> <th></th>		
Institution (Cable         Cable inferiore       643         Cable Type       3         Jacket Color       black         Type of Certificate       UBaue         Annont standing       1         Stranding       Swies around Core filler (winted         Cable shielding (type)       cooper braid, timed         Cable shielding (type)       type         Cable shielding (type)       type         Cable shielding (type)       type         Shiron thorthess (schat       PUP         Shore hardness (schat       PUF         Shore hardness (schat)       5.5 Shore A         Cabler-diameter (schath)       5.5 Shore A         Cabler diameter tolerance care insulation       12.5 Trm         Cabler diameter tolerance care insulation <td< td=""><td>Conformity</td><td></td></td<>	Conformity	
Cable identification       643         Cable Type       3         Scale Color       black         Type of Certificate       UUrus         Anount strunding       1         Stranding       Swites around Core filler twisted         Cable abelding (type)       copper braid, inned         Cable around (track)       Sm (type)         Cable abelding (type)       copper braid, inned         Cable around (track)       Sm (type)         Cable around (track)       Sm (type)         Cable abelding (type)       Copper trans.         Cable abelding (type)       Soft Control         Cable abelding (type)       Soft Contro         Cable abeldine (type)	Product standard	DIN EN 61076-2-101 (M12)
Cable Type       3         Jacket Color       Black         Type of Certificate       CUlus         Arrount stranding       1         Stranding       Swess anzurd Core filter twisted         Cable shelding (type)       copper braid, finned         Cable shelding (type)       copper braid, finned         Cable shelding (type)       opper braid, finned         Cable weight       57.2 pm         Material jacket       PUR         Shore hardness jacket       90.5 Shore A         Freedom from ingredients (jacket)       5.6 m         Colar diameter (stacket)       5.5 %         Anrout weis       5         Outer diameter (stacket)       1.5 %         Shore hardness wire insulation       1.25 %         Diameter diameter relation       1.25 %         Shore hardness wire insulation       1.25 %         Diameter of single wires       0	Installation   Cable	
Gubia Type       3         Jacket Color       black         Type of Carfitabe       CUlus         Amount stranding       1         Stranding       Swiss around Coro Illior Invisted         Cable shelding (coverage)       80 %         Banding       Peece, Foll         Filer       yos         wire arrangement       brown, black, blue, white, gray         Traversing distance (C+mack)       57.2 g/m         Material jacket       PUR         Shore hardness jacket       92.5 Shore A         Freedom from ingredients (jacker)       180.5 %         Card-fameet (geleft)       5.6 m         Tolerance outer diameter (scalameter fees)       5.6 m         Card-fameet (gickeft)       1.5 %         Mareal view invisuation       PP         Amount views       5         Coller diameter insulation       1.25 mm         Outer diameter insulation       1.25 mm         Cardual views       4.2 mm         Conductor views       5.8 Shore D         Improdent free, Red. Tway       4.3 Mm         Conductor views       0.3 4 mm <sup>2</sup> Marend viewin sulation       1.2 5 mm <td>Cable identification</td> <td>643</td>	Cable identification	643
Jacket Color       black         Type of Carlicule       CURus         Amount stranding       1         Stranding       5 wires around Core filter wisted         Cable shiveling (type)       copper tund, timed         Cable shiveling (type)       copper tund, timed         Cable shiveling (type)       80 %         Banding       Fleeco, Foll         Filter       yes         Tarvarsing distance (C4-rack)       5 m Ø 25 °C   broizontal         Cable weigh       5 7.2 g/m         Material [acket       PUR         Store hardiness [acket       90 ± 5 Shore A         Freedom from ingradismit (sucka)       8.6 m         Cable weigh       5.7 g/m         Cabler duameter (abanth)       5 form A         Freedom from ingradismit (sucka)       8.6 m         Cabler duameter (abanth)       2 form         Cabler duameter insulation       70 ± 5 Shore D         Cabler duameter insulation       70 ± 5 Shore D         Strue hardines wire insulation       70 ± 5 Shore D         Strue hardines wire insulation       70 ± 5 Shore D         Strue hardines wire insulation       70 ± 5 Shore D         Canduet duameter insulation		
Type of Certificate       cURus         Amount stranding       1         Stranding       Swiee around Core filer twisted         Cable shielding (type)       copper braid, finned         Cable shielding (coverage)       80 %         Banding       Filer         wise arrangement       brow, black, blue, white, gray         Trawering detance (C-track)       5 m @ 25 °C   horizontal         Cable weight       57,2 g/m         Material jacket       PUE         Shore hardness jacket       90 15 Shore A         Freecom tom inguidantin (tacket)       15 %         Material jacket       PUE         Outer-diameter (jacket)       5.6 mm         Outer-diameter (jacket)       5.6 mm         Outer-diameter (jacket)       15 %         Matoria Wrei mustalion       PP         Amount wires       5         Outer diameter instalion       125 mm         Outer diameter instalion       125 mm         Outer diameter instalion       125 mm         Outer diameter instalion       13 %         Shore Interdess wire instalion       13 %         Diameter oblange wires       11 mm         Conduct vires<		
Amount stranding       1         Stranding       5 wires around Core filler twisted         Cable shielding (type)       copper braid, linned         Cable shielding (coverage)       80 %         Banding       Fileoco, Foll         Filer       yes         wire arrangement       brown, black, black, while, gray         Traversing distance (C-track)       5 m & Ø2 % C) horizontal         Cable weight       57.2 g/m         Material jacket       PUR         Shore hardness jacket       90 1 5 Shore A         Freedom from ingredients (jackel)       lead-trae, cadmium-tree, CFC-tree, halogen-free, silicone-free         Outer-diameter (iscent)       1 5 %         Material jacket       91 5 Shore A         Freedom from ingredients (jackel)       lead-tree, cadmium-tree, CFC-tree, halogen-free, silicone-free         Outer diameter (iscent)       1 5 %         Material Wire insulation       1 2 5 %         Shore hardness wire insulation       1 2 5 %         Shore hardness wire insulation       1 4 5 %         Gameter of single wires       0.1 mm         Conductor wire sockeeton (wire)       0.34 mm²         Gameter of single wires       0.1 mm         Cond		
Stranding       5 wires around Core filler twisted         Cable shelding (poorage)       80 %         Banding       Filesco, Foll         Filer       yse         wire arrangement       brown, black, blue, white, gray         Traversing distance (C track)       5 m @ 25 % [Inductual         Cable weigh       57.2 g/m         Material jacket       PUF         Strom Andrees jacket       90 ± 5 Shore A         Freedom from ingredients (jacket)       160 ± 5 %         Outer-climater (jacket)       5.8 mm         Toleanoe outer dimeter (slacket)       5.8 mm         Outer-climater insulation       PP         Amount wires       5         Outer dimeter insulation       1.25 mm         Conductor orsesservier insulation       1.25 mm         Outer dimeter insulation       1.25 mm         Conductor weights       9.1 mm         Conductor weights       9.1 mm    <		
Cable shielding (type)       copper braid, linned         Cable shielding (coverage)       80 %         Banding       Fileece, Foll         Filer       yes         wire arrangement       brown, black, blue, while, gray         Traversing distance (C-track)       5 m (2 25 °C) horizontal         Cable weigh       5.2 g/m         Material jackat       PUR         Store hardness jackat       0 ± 5 Shore A         Freedom from ingrodients (jackat)       lead free, cadmium, free, CFC-free, halogen-free, silicone-free         Outer-diameter (gacket)       ± 5 %         Material jackat       9 ± 5 %         Material wrie insulation       PP         Amount wries       5         Outer diameter (sheath)       ± 5 %         Store hardness wire insulation       1.25 mm         Outer diameter (wire)       4.2         Damateer of sing wires       0.1 mm         Conductor wei insulation       Isaa free, cadmium-free, CFC free, halogen-free, silicone-free         Armount strands (wire)       4.2		
Cable shielding (coverage)       80 %         Banding       Fleece, Foll         Filler       yea         wire arrangement       brown, black, blue, white, gray         Traversing distance (C-track)       5 m @ 25 °C [horizontal         Cable weigh       57 2 grin         Material jacketi       PUR         Shore hardness jacket       90 ± 5 Shore A         Freedom from ingredients (jacket)       18 daf-tree, cadmium-free, CFC-free, halogen-free, silicone-free         Outer-diameter (gacket)       5 5 mm         Tolerance outer diameter (saket)       5 %         Material wire insulation       PP         Amount wires       5         Outer diameter insulation       1.25 mm         Outer diameter insulation       1.25 mm         Under diameter insulation       1.25 mm         Ingredient freeness wire insulation       1.25 mm         Ingredient freeness wire insulation       1.25 mm         Carbudre or sussection (wire)       42         Diameter of single wires       0.1 mm         Canduct or crossaction (wire)       3.4 mm²         Material conductor wire       Straced copper wire, bare         Canductor type (wire)       strand class 6 <td></td> <td></td>		
Banding       Fleece. Foll         Filer       yes         wire arrangemet       brown, black, blue, while, gray         Traversing distance (C-track)       5 m @ 25 *C   horizontal         Cable weigh       57.2 gim         Material jacket       PUR         Shore hardness jackat       90.1 5 Shore A         Freedom from ingredients (jacket)       lead-free. cadmium-free, CFC-free, halogen-free, silicone-free         Outer -diameter (jacket)       5.6 mm         Tolerance outer diameter (sheath)       1.5 %         Amount wires       5         Outer diameter (sheath)       1.5 %         Shore hardness wire insulation       1.25 mm         Outer diameter tolerance core insulation       1.25 mm         Outer diameter tolerance core insulation       1.25 mm         Outer diameter tolerance core insulation       1.25 mm         Dameter disinge wires       0.1 mm         Conductor type (wire)       94.4 C         Dameter disinge wires       0.1 mm         Conductor type (wire)       94.4 C         Dameter disinge wires       0.1 mm         Conductor type (wire)       94.7 Mm 2         Material conductor wire       5 tranded copper wire, bare		
Filler       yes         wire arrangement       brown, black, white, gray         Traversing distance (C-track)       5 m @ 25 °C   horizontal         Cable weigth       57.2 g/m         Material jackat       PUR         Shore hardness jackat       90.5 Shore A         Freedom from ingredients (jacket)       lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         Outer-diameter (jacket)       5.5 mm         Orderance outer diameter (sleadet)       5.5 %         Material wire insulation       PP         Amount wires       5         Outer diameter insulation       1.25 mm         Outer diameter insulation       1.25 mm         Outer diameter insulation       1.25 mm         Outer diameter losination       1.25 mm         Outer diameter insulation       1.25 mm         Outer diameter losination       1.25 mm         Outer diameter losination       1.25 mm         Outer diameter losination       1.25 mm         Conductor crosssection (wire)       42         Diameter of single wires       0,1 mm         Conductor wires       Stranded copper wire, bare         Conductor tressesction (wire)       10.44		
wire arrangement       brown, black, blue, white, gray         Traversing distance (Ctrack)       5 m @ 25 °C   horizontal         Cable weight       57.2 g/m         Material jacket       PUR         Shore hardness jacket       90.5 5 Shore A         Freadom from ingredients (jacket)       lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         Outer diameter (jacket)       5.6 mm         Tolerance outer diameter (jacket)       5.8 mm         Tolerance outer diameter (jacket)       5.8 mm         Outer diameter (jacket)       5.8 mm         Outer diameter (jacket)       5.8 fm         Outer diameter (jacket)       1.2 mm         Outer diameter tolerance core insulation       1.2 mm         Outer diameter tolerance core insulation       1.2 mm         Outer diameter insulation       1.2 mm         Conductor crossociation (wire)       0.3 4 mm <sup>2</sup> Conductor vise       0.1 mm         Conductor vise       Stranded copper wire, bare         Conductor vise       Stranded copper wire, bare         Conductor wire)       Stranded copper wire, bare         Conductor type (wire)       stranded copper wire, bare         Conductor type (wire)       Stranded copper		
Traversing distance (C-track)       \$ m @ 25 °C   horizontal         Cable weigh       57.2 g/m         Matarial 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 (sheath)       ± 5 %         Material jacket       PP         Amount wires       5         Outer diameter (sheath)       ± 5 %         Material review insulation       1.25 mm         Outer diameter loterance core insulation       ± 5 %         Shore hardness wire insulation       1.25 mm         Outer diameter loterance core insulation       ± 5 %         Shore hardness wire insulation       lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         Amount strands (wire)       42         Diameter of single wires       0,1 mm         Conductor wire       Stranded copper wire, bare         Conductor type (wire)       strand class 6         Nominal voitage Amax       300 V         Current load capacity (standard)       to DIN VDE 0298-4         Current load capacity (standard)       to DIN VDE 0298-4         Curent load capacity (min, wire       4.5 A		
Cable weight $57.2 \text{ g/m}$ Material jacketPURMaterial jacket90 ± 5 Shore AFreedom from ingredients (jacket)lead-free, cadmium-free, CFC-free, halogen-free, silicone-freeOuter-diameter (jacket)5.6 mmTolerance outer diameter (jacket)5.6 mmTolerance outer diameter (jacket)5.5 %Material wire insulationPPAmount wires5Outer diameter insulation1,25 mmOuter diameter tolerance core insulation $15\%$ Shore hardness wire insulation70 ± 5 Shore DIngredient freeness wire insulation10 ± 5 %Shore hardness wire insulation10 ± 5 Shore DIngredient freeness wire insulation10 ± 5 Shore AConductor type (wire)0,34 mm <sup>2</sup> Conductor type (wire)5 and class 6Nominal voltage AC max.300 VCurrent load capacity fiskundard)to DIN VDE 0298-4Current load capacity min. wire4,5 AElectrical resistance line constant wire57 Ω/km @ 20 °CAC withstand voltage (wire - wire)2 kV @ 60 sMin. operating temperature fisce)-40 °CMax. operating temperature fisce)-40 °CMax. operating temperature fisce)-26 °COperating temperature fisce)-26 °COperating temperature fisce)-26 °COperating temperature fisce)-		
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)       5.6 mm         Tolerance outer diameter (sheath)       ± 5 %         Material wire insulation       PP         Amount wires       5         Outer diameter following       ± 5 %         Shore hardness wire insulation       1,25 mm         Outer diameter following       ± 5 %         Shore hardness wire insulation       70 ± 5 Shore D         Ingredient freeness wire insulation       70 ± 5 Shore D         Ingredient freeness wire insulation       42         Diameter of single wires       0,1 mm         Conductor crossection (wire)       0,34 mm²         Material conductor wire       Stranded copper wire, bare         Conductor trossection (wire)       5.0 km @ 20 °C         Carded agazity (standard)       to DIN VDE 028-4         Current load capazity (standard)       <		
Shore hardness jacket       90 ± 5 Shore A         Freedom from ingredients (jacket)       lead-free, cadmium-free, CFC-free, halogen-free         Outer-diameter (jacket)       ± 5 %         Material wire insulation       PP         Amount wires       5         Outer diameter insulation       1.25 mm         Mount sturks (wire)       42         Diameter of single wires       0,1 mm         Conductor or species (wire)       0.34 mm <sup>9</sup> Material orothocor wire)       0.34 mm <sup>9</sup> Conductor wire)       0.34 mm <sup>9</sup> Conductor wire)       strandclass 6         Nominal voltage AC max.       300 V         Current load capacity min. wire       4.5 A         Electrical resistance line constant wire       57 Ωkm @20 °C         AC withstand voltage (wire - wire)       2 kV @ 60 s         Power frequency withstand voltage (wire - wire)       2 kV @ 60 s         Min. operating temperature (istaci)       40 °C         Min. operating temperature (istaci)       2 % 0 °C         AC withstand voltage (wir		
Freedom from ingredients (jacket)       lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         Outer-diameter (jacket)       5.6 mm         Tolerance outer diameter (sheath)       ± 5 %         Material wire insulation       PP         Armount wires       5         Outer diameter insulation       1.25 mm         Outer diameter foreance core insulation       5 %         Shore hardness wire insulation       70 ± 5 Shore D         Ingredient freeness wire insulation       lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         Amount strands (wire)       42         Diameter of single wires       0,1 mm         Conductor or sossection (wire)       0,34 mm²         Material conductor wire       Strand dospe free, bare         Conductor type (wire)       strand dospe free, bare         Conductor type (wire)       strand dospe free, bare         Current load capacity (standard)       to DIN VDE 0298-4         Current load capacity (standard) <td></td> <td></td>		
Outer-diameter (jacket)       5,6 mm         Tolerance outer (diameter (sheath)       ± 5 %         Material wire insulation       PP         Amount wires       5         Outer diameter tolerance core insulation       1,25 mm         Outer diameter tolerance core insulation       70 ± 5 Shore D         Ingredient freeness wire insulation       70 ± 5 Shore D         Ingredient freeness wire insulation       1ead-free, cadmium-free, CFC-free, halogen-free, silicone-free         Amount strands (wire)       42         Diameter of single wires       0,1 mm         Conductor type (wire)       Stranded copper wire, bare         Conductor type (wire)       Strande	Shore hardness jacket	90 ± 5 Shore A
Tolerance outer diameter (sheath)     ± 5 %       Material wire insulation     PP       Amount wires     5       Outer diameter insulation     1.25 mm       Outer diameter tolerance core insulation     ± 5 %       Shore hardness wire insulation     70 ± 5 Shore D       Ingredient freeness wire insulation     1ead-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     Strande 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 (wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - sheld)     2 kV @ 60 s       Ac withstand voltage (wire - sheld)     2 kV @ 60 s       Min. operating temperature (fixed)     40 °C 90 °C @ 10000 h Operation       Operating temperature (fixed) <t< td=""><td>Freedom from ingredients (jacket)</td><td>lead-free, cadmium-free, CFC-free, halogen-free, silicone-free</td></t<>	Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material wire insulation       PP         Amount wires       5         Outer diameter insulation       1,25 mm         Cuter diameter tolerance core insulation       1,5 %         Shore hardness wire insulation       12 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)       stranded copper wire, bare         Conductor type (wire)       stranded copper wire, bare         Conductor type (wire)       strand class 6         Nominal voltage AC max.       300 V         Current load capacity rin: wire       4,5 A         Electrical resistance line constant wire       57 Ω/km @ 20 °C         AC withstand voltage (wire - wire)       2 kV @ 60 s         Power frequency withstand voltage (wire - 2 kV @ 60 s         Max. operating temperature (static)       -40 °C         Max. operating temperature (static)       -40 °C         Max. operating temperature (static)       -40 °C         Max. operating temperatu	Outer-diameter (jacket)	5,6 mm
Amount wires     5       Outer diameter insulation     1.25 mm       Outer diameter tolerance core insulation     ± 5 %       Shore hardness wire insulation     70 ± 5 Shore D       Ingredient freeness wire insulation     lead-free, cadmium-free, CFC-free, halogen-free, silicone-free       Amount strands (wire)     42       Diameter of single wires     0,1 mm       Conductor crosssection (wire)     0,34 mm <sup>2</sup> Material conductor wire     Strand class 6       Nominal voltage AC max.     300 V       Current load capacity (standard)     to DIN VDE 0298-4       Current load capacity min. wire     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - shield)     2 kV @ 60 s       Power frequency withstand voltage (wire - shield)     2 kV @ 60 s       Min. operating temperature (static)     -40 °C       Max: operating temperature (static)     -40 °C       Max: operating temperature min. (dynamic)     -25 °C       Operating teresistance     DIN EN ISO 4892-	Tolerance outer diameter (sheath)	±5%
Outer diameter insulation       1,25 mm         Outer diameter tolerance core insulation       ± 5 %         Shore hardness wire insulation       70 ± 5 Shore D         Ingredient freeness wire insulation       lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         Amount strands (wire)       42         Diameter of single wires       0,1 mm         Conductor crosssection (wire)       0,34 mm <sup>2</sup> 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 kV @ 60 s         Power frequency withstand voltage (wire - 4,5 A         Electrical resistance line constant wire       57 Ω/km @ 20 °C         AC withstand voltage (wire - wire)       2 kV @ 60 s         Power frequency withstand voltage (wire - alked)       2 kV @ 60 s         Min. operating temperature (stato)       40 °C         Max. operating temperature (stato)       40 °C / 90 °C @ 10000 h Operation         Operating temperature max. (dynamic)       -25 °C         Operating temperature max. (	Material wire insulation	PP
Outer diameter tolerance core insulation       ± 5 %         Shore hardness wire insulation       70 ± 5 Shore D         Ingredient freeness wire insulation       lead-free, cadmium-free, CFC-free, halogen-free, silicone-free         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 IN VDE 0298-4         Current load capacity (standard)       to IN VDE 0298-4         Current load capacity win. wire       4,5 A         Electrical resistance line constant wire       57 Ω/km @ 20 °C         AC withstand voltage (wire - wire)       2 kV @ 60 s         Power frequency withstand voltage (wire - shield)       2 kV @ 60 s         Min. operating temperature (fixed)       80 °C / 90 °C @ 10000 h Operation         Operating temperature (fixed)       80 °C / 90 °C @ 10000 h Operation         Operating temperature max. (dynamic)       -28 °C         Operating temperature (fixed)       80 °C / 90 °C @ 10000 h Operation         UV resistance       DIN EN ISO 4892-2 A	Amount wires	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)       strand class 6         Nominal voltage AC max.       300 V         Current load capacity (standard)       to DIN VDE 0298-4         Current load capacity (standard)       to DIN VDE 0298-4         Current load capacity (wire - wire)       2 kV @ 60 s         AC withstand voltage (wire - wire)       2 kV @ 60 s         AC withstand voltage (wire - shield)       2 kV @ 60 s         Min. operating temperature (static)       -40 °C         Max. operating temperature (tixed)       80 °C / 90 °C @ 10000 h Operation         Operating temperature min. (dynamic)       -25 °C         Operating temperature max. (dynamic)       -26 °C         Flame resistance       UL 1581 § 1100 FT2   IEC 60332-22   UL 1581 § 1090         Chemical resistance       Good, application-related testing         Gil resistance       Good, application-related testing <tr< td=""><td>Outer diameter insulation</td><td>1,25 mm</td></tr<>	Outer diameter insulation	1,25 mm
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)     strand class 6       Nominal voltage AC max.     300 V       Current load capacity (standard)     to DIN VDE 0298-4       Current load capacity (standard)     to DN VE 60 s       AC withstand voltage (wire - wire)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       Min. operating temperature (static)     -40 °C </td <td>Outer diameter tolerance core insulation</td> <td>±5%</td>	Outer diameter tolerance core insulation	±5%
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)     to DIN VDE 0298-4       Current load capacity (wine - 4,5 A     Electrical resistance       Power frequency withstand voltage (wire - 4,5 A     Electrical resistance 1/2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       Min. operating temperature (static)     -40 °C       Max. operating temperature (static)     -40 °C       Operating temperature (dynamic)     80 °C / 90 °C @ 10000 h Operation       UV resistance     DIN EN ISO 4892-2 A       Flame resistance     UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090 <td>Shore hardness wire insulation</td> <td>70 ± 5 Shore D</td>	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     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       Min. operating temperature (static)     -40 °C       Max. operating temperature (static)     -40 °C       Max. operating temperature (static)     -40 °C       Max. operating temperature max. (dynamic)     -25 °C       Operating temperature max. (dynamic)     -25 °C       Operating temperature max. (dynamic)     -25 °C       Operating temperature max. (dynamic)     80 °C / 90 °C @ 10000 h Operation       UV resistance     DIN EN ISO 4892-2 A       Flame resistance     UL 1581 § 1100 FT2   IEC 6032-2-2   UL 1581 § 1090       chemical resistance     Good, application-related testing       Gair resistance     DIN EN K0811-404   Good, application-related testing	Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Conductor crosssection (wire)0,34 mm²Material conductor wireStranded copper wire, bareConductor type (wire)strand class 6Nominal voltage AC max.300 VCurrent load capacity (standard)to DIN VDE 0298-4Current load capacity (standard)2 kV @ 60 sAC withstand voltage (wire - shield)2 kV @ 60 sMax. operating temperature (static)-40 °CMax. operating temperature (static)-40 °CMax. operating temperature (static)-40 °CMax. operating temperature (static)-25 °COperating temperature max. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090Chemical resistanceGood, app	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     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       Max. operating temperature (static)     -40 °C       Max. operating temperature (fixed)     80 °C / 90 °C @ 10000 h Operation       Operating temperature min. (dynamic)     -25 °C       Operating temperature min. (dynamic)     -25 °C       Operating temperature max. (dynamic)     80 °C / 90 °C @ 10000 h Operation       UV resistance     DIN EN ISO 4892-2 A       Flame resistance     UL 1581 § 1100 FT2   EC 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       Oil resistance     DIN EN 60811-404   Good, application-related testing	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     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       Min. operating temperature (static)     -40 °C       Max. operating temperature (fixed)     80 °C / 90 °C @ 10000 h Operation       Operating temperature (fixed)     80 °C / 90 °C @ 10000 h Operation       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     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       Oil resistance     DIN EN 60811-404   Good, application-related testing </td <td>Conductor crosssection (wire)</td> <td>0,34 mm²</td>	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     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 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 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 § 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       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter	Material conductor wire	Stranded copper wire, bare
Nominal voltage AC max.     300 V       Current load capacity (standard)     to DIN VDE 0298-4       Current load capacity min. wire     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 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 § 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       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter <td>Conductor type (wire)</td> <td></td>	Conductor type (wire)	
Current load capacity (standard)     to DIN VDE 0298-4       Current load capacity min. wire     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 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 § 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       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter		
Current load capacity min. wire     4,5 A       Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       Max. 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 § 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       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter	-	
Electrical resistance line constant wire     57 Ω/km @ 20 °C       AC withstand voltage (wire - wire)     2 kV @ 60 s       Power frequency withstand voltage (wire - jacket)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 kV @ 60 s       AC withstand voltage (wire - shield)     2 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 § 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       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter		
AC withstand voltage (wire - wire)2 kV @ 60 sPower frequency withstand voltage (wire - jacket)2 kV @ 60 sAC withstand voltage (wire - shield)2 kV @ 60 sAC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceDIN EN ISO 4892-2 AFlame 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 (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameter		
Power frequency withstand voltage (wire - jacket)2 kV @ 60 sAC withstand voltage (wire - shield)2 kV @ 60 sAC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceDIN EN ISO 4892-2 AFlame 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 (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameter		
AC withstand voltage (wire - shield)2 kV @ 60 sMin. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceDIN EN ISO 4892-2 AFlame 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 (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameter	Power frequency withstand voltage (wire -	-
Min. operating temperature (static)-40 °CMax. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceDIN EN ISO 4892-2 AFlame 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 (fixed)5 x Outer diameterBending radius (dynamic)10 x Outer diameter		2 1/1 @ 60 c
Max. operating temperature (fixed)80 °C / 90 °C @ 10000 h OperationOperating temperature min. (dynamic)-25 °COperating temperature max. (dynamic)80 °C / 90 °C @ 10000 h OperationUV resistanceDIN EN ISO 4892-2 AFlame resistanceUL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090chemical resistanceGood, application-related testingGasoline resistanceOod, application-related testingOil resistanceDIN EN 60811-404   Good, application-related testingOil resistance10 x Outer diameterBending radius (fixed)5 x Outer diameter	<b>.</b>	
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 § 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       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter		
Operating temperature max. (dynamic)     80 °C / 90 °C @ 10000 h Operation       UV resistance     DIN EN ISO 4892-2 A       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       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter		
UV resistance   DIN EN ISO 4892-2 A     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 (fixed)   5 x Outer diameter     Bending radius (dynamic)   10 x Outer diameter		
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 (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter		
chemical resistance     Good, application-related testing       Gasoline resistance     Good, application-related testing       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter		
Gasoline resistance     Good, application-related testing       Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter		
Oil resistance     DIN EN 60811-404   Good, application-related testing       Bending radius (fixed)     5 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter	chemical resistance	
Bending radius (fixed)   5 x Outer diameter     Bending radius (dynamic)   10 x Outer diameter	Gasoline resistance	Good, application-related testing
Bending radius (dynamic)   10 x Outer diameter	Oil resistance	DIN EN 60811-404   Good, application-related testing
	Bending radius (fixed)	5 x Outer diameter
Travel speed (C-track) 5 Mio @ 25 °C	Bending radius (dynamic)	10 x Outer diameter
	Travel speed (C-track)	5 Mio. @ 25 °C

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: 2024-05-06



No. of torsion cycles

2 Mio.

Torsion stress Torsion speed ± 30 °/m 35 cycles/min

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