

## M12 male 0° / M8 female 0° A-cod.

PUR 4x0.25 bk UL/CSA+drag ch. 4.5m

Male straight - female straight

M12 - M8, 4-pole

Art-No. 7005 - M12/M8 Lite - (plastic hexagonal screw) on request

with cable sleeves

Plastic housings with good resistance against chemicals and oils.

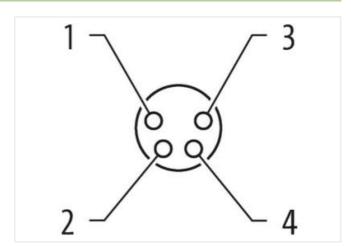
The resistance to aggressive media should be individually tested for your application. Further details on request.

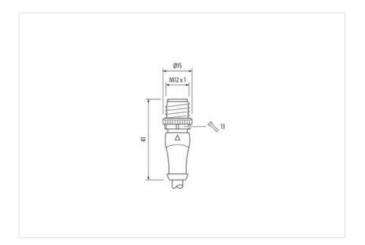
Further cable lengths on request.

## **Link to Product**

## Illustration



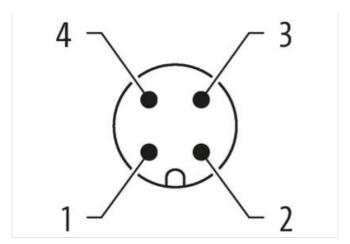


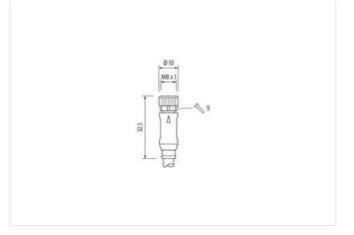






stay connected





Product may differ from Image











Cable length	4,5 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	10 mm
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	
Tightening torque	0,4 Nm
Mounting method	inserted, screwed
Family construction form	M8
Thread	M8 x 1
suitable for corrugated tube (internal $\emptyset$ )	6,5 mm
Coding	A
Material contact	Copper alloy
Material	PUR
No. of poles	4
Width across flats	SW9
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
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



stay connected

ETIM 5.0 EC001855  cautions brill number 8544490  GTN 49489780117  Packaging unit 1  Effectived data Suppty  Operating voltage AC max. 50 V  Operating voltage AC (U-listed) 30 V  Operating voltage AC max. 64 A  Raginostics  Stutus inclusion LED 70 70 Perating voltage AC max. 70	ECLASS-12.0	27060311
coutons tarff number         85444590           CTIN         A04827623117           Pelacticing unt         1           Electrical data (Supply         50 V           Operating voltage AC max.         60 V           Operating voltage AC (UL-listed)         30 V           Operating voltage AC (UL-listed)         30 V           Operating voltage AC (UL-listed)         30 V           Correct operation per contact max.         4 A           Dispositios         V           Status indication LED         no           Device procession   Electrical         Additional condition protection degree           Additional condition protection degree         1.5 kV           Relact say voltage         1.5 kV           Minerial group IEC 00004-1         1           Machanical data   Material data         1.5 kV           Conting closing         Nickeled           Conting closing         Nickeled           Contract of tifting         nickeled           Material graser         PKM           Mechanical data   Mounting data         Nickeled           Mechanical theoretical closing         2 nc dio casting           Mechanical data   Mounting data         1.6 casting           Mechanical data   Mounting attrice in close		
GTIN         4948879823117           Peckaging out II         1           Exclusion and I Supply         Control you Proposed on Trans.         50 V           Operating voltage AC max.         60 V           Operating voltage AC (UL-listed)         30 V           Operating voltage AC (UL-listed)         30 V           Despensive voltage per contact max.         4 A           Despensive         Very Control (Pectical Pectical Pectica		
Pacinaging unit		
Electrical data   Supply         Operating voltage AC max.         50 V           Operating voltage DC max.         60 V           Operating voltage DC max.         60 V           Operating voltage DC (UL-listed)         30 V           Current operating profitate max.         4 A           Diagnostics         Status indication LED         no           Status indication LED         no           Device protection [Electrical         Validational condition protection degree           Pollution Degree         3           Rated surge voltage         1,5 kV           Material goods (IEC 80664-1)         I           Mechanical data   Mariani data         Validational condition and protection degree           Coating olding         Nicklede           Coating olding         Nicklede           Coating olding         nickled plated           Material gasket         FGA           Lobing material         Zinc die-casting           Material gasket         FGA           Lobing material         Zinc die-casting           Material grown commodion         Zinc die-casting           Mounting method         Insertied, screwed, Shaking protection           Environmental characterisities   Climation         Coefficient           Operatin		
Operating voltage AC max.         50 V           Operating voltage DC max.         60 V           Operating voltage AC (UL isleed)         30 V           Operating voltage DC (UL-isleed)         30 V           Current operating per contact max.         4 A           Description of Culti-Isleed           Description of Culti-Isleed           Covere protection I Electrical           Additional condition protection degree           Pollution Degree         3           Rated surgery of (EC 60864-1)         1           Mechanical data I Material data		
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           Disgnostics         Interview of the Control of Con		
Operating voltage AC (UL-listed)         30 V           Operating voltage DC (UL-listed)         30 V           Current operating per contact max.         4 A           Diagnostics         Status indication LED           Status indication LED         no           Device protection   Electrical         Additional condition protection degree           Additional condition protection degree         iscerted, screwed           Pollution Degree         3           Rated surge voltage         1.5 k/V           Meterial group (EC 80664-1)         I           Mechanical data   Material data         Incident of the placed           Coating locking         nickel placed           Coating of titing         nickel placed           Material gasket         FKM           Locking material         Zinc die-casting           Mechanical data   Mounting data         Mechanical data   Mounting data           Mechanical data   Mounting data         Mechanical data   Mounting data           Environmental characteristics   Climatic         Climatic           Operating temperature mix.         2.5 °C           Operating temperature max.         85 °C           Additional condition temperature range         doepending on cable quality           Coliforation   Gable         Salack Colo		
Operating voltage DC (UL-listed)         30 V           Current operating per contact max.         4 A           Displagnostics         Status indication LED           Device protection   Electrical         Additional condition protection degree           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         1,5 kW           Material group (IEC 69064+1)         1           Mechanical data   Material data         Coating Jocking           Coating Jocking         Nickeled           Coating Jocking         nickel plated           Material gasket         FKM           Locking material         Zinc die-casting           Mechanical data   Mounting data         inserted, screwed, Shaking protection           Mechanical data   Mounting method         inserted, screwed, Shaking protection           Environmental characteristics   Climatic         Comparing temperature min.           Operating temperature min.         25 °C           Operating temperature min.         25 °C           Operating temperature min.         25 °C           Conformity         Fredational contion temperature range         dopending on cable quality           Conformity         Conformity         Sillage of the casting of the		
Current operating per contact max.         4 A           Diagnostics         Status indication LED         no           Device protection [Electrical]         Additional condition protection degree         Inserted, screwed           Pollution Dagree         3         Rated surge voltage         1,5 kV           Material group (IEC 60684-1)         1         Websteen Coloring on Inserted Coloring (IEC)         Coating of Illing         nickel plated           Methanical data [Material data         Zinc die-casting           Material sorew connection         Zinc die-casting           Mechanical data [Mounting data         Websteen Coloring inserted, screwed, Shaking protection           Environmental characteristics   Climatic         Coperating temperature max         25 °C           Operating temperature max         25 °C         Coperating temperature max         depending on cable quality           Controntly         Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation [Cable Vipes]         3           Cable Type         3           Cable Type         3           Cable Good         Use of certificate		
Diagnostics           Status indication LED         no           Device protection [Electrical]           Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         1,5 kV           Material group (IEC 06064-1)         1           Mechanical data   Material data         Incident of the plated           Coating of fitting         nickle plated           Material group commercion         Zinc die-casting           Material surge connection         Zinc die-casting           Mounting method         Inserted, screwed, Shaking protection           Environmental characteristics   Climatic           Environmental characteristics   Climatic           Coperating temperature min.         -25 °C           Operating temperature max.         -85 °C           Additional condition temperature range         depending on cable quality           Product standard         DIN EN 61076 2-101 (M12), DIN EN 61076 2-114 (M8)           Installation   Cable         3           Cable infertionion         631           Cable infertionion         631           Cable Type         3           Jacket Color         black           Type of Certificate         URUS		
Status indication LED no  Device protection   Electrical  Additional condition protection degree insented, screwed  Pollution Degree 3  Rated surge voltage 1,5 kV  Material group (IEC 60684-1)    Mechanical data   Material data  Coating focking Nickeled  Coating fotking nickel plated  Material graket FKM  Locking material Zinc die-casting  Material screw connection Zinc die-casting  Mounting method insented, screwed, Shaking protection  Environmental characteristics [Climatic  Poperating temperature min. 25 °C  Operating temperature min. 35 °C  Additional condition temperature range depending on cable quality  Conformity  Product standard DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  Institution   Cable  Cable (Institution)   Stack  Additional condition temperature and place of casting and cable quality  Cable (Institution)   Cable  Cable (Institution)   Stack  Additional condition temperature and place of casting and cable quality  Cable (Institution)   Cable  Cable		4 A
Device protection   Electrical   Additional condition protection degree   inserted, screwed	Diagnostics	
Additional condition protection degree         inserted, screwed           Pollution Degree         3           Rated surge voltage         1,5 kV           Material group (IEC 60664-1)         1           Rechanical data   Material data           Coating of litting         Nickeled           Coating of litting         nickel plated           Material gasket         FKM           Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting data         Michanical data   Mounting data           Mounting method         inserted, screwed. Shaking protection           Environmental characteristics   Climatic           Congraing temperature min.         -25 °C           Operating temperature man.         85 °C           Additional condition temperature range         depending on cable quality           Contromity           Product standard         Dix En 61076-2-101 (M12), DIN En 61076-2-114 (M8)           Installation   Cable           Cable identification         631           Cable identification         631           Cable identification         641           Cable identification         641 <t< td=""><td>Status indication LED</td><td>no</td></t<>	Status indication LED	no
Pollution Degree         3           Rated sury o voltage         1,5 kV           Material group (Ec 60684-1)         1           Material data (Material data)	Device protection   Electrical	
Rated surge voltage         1,5 kV           Machair group (IEC 60664-1)         I           Mechanical data   Material data         I Nickeled           Coating locking         Nickeled           Coating locking         Nickel plated           Material gasket         FKM           Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting data         Mounting method           Environmental characteristics   Climatic         FW           Operating temperature min.         25 °C           Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Conformity         Froduct standard           Installation   Cable         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable         Salacket Color           Cable identification         631           Cable identification         631           Cable of Certificate         cuRus           Amount stranding         1           Fyranding         4 wires wisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C	Additional condition protection degree	inserted, screwed
Material group (IEC 60664-1)         I           Mechanical data   Material data         Mockeled           Coating locking         Nickeled           Coating of fitting         nickel plated           Material gasket         FKM           Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting data         Mounting method           Mechanical data   Mounting data         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           Conformity         Todal characteristics   Climatic         Inserted (Alice) (Alice)         Inserted (Alice)           Cable fidentification         631         Cable (Inserted (Alice))         Cable (Alice)           Cable furgitional (Alice)         631         Cable (Alice)         Cable (Alice)           Type of Certificate         CURus         Amount stranding         1           Amount stranding         1         1           Stranding         4 wires twisted         Wire arrangement         brown, black, blue, white           No. of bending cycles	Pollution Degree	3
Material group (IEC 60664-1)         I           Mechanical data   Material data         Mockeled           Coating locking         Nickeled           Coating of fitting         nickel plated           Material gasket         FKM           Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting data         Mounting method           Mechanical data   Mounting data         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           Conformity         Todal characteristics   Climatic         Inserted (Alice) (Alice)         Inserted (Alice)           Cable fidentification         631         Cable (Inserted (Alice))         Cable (Alice)           Cable furgitional (Alice)         631         Cable (Alice)         Cable (Alice)           Type of Certificate         CURus         Amount stranding         1           Amount stranding         1         1           Stranding         4 wires twisted         Wire arrangement         brown, black, blue, white           No. of bending cycles	Rated surge voltage	1,5 kV
Mechanical data   Material data           Coating locking         Nickeled           Coating of fitting         nickel plated           Material gasket         FKM           Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting data         Mounting methy           Mounting methy         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           Conformity         Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable         Cable dentification         631           Cable dentification         631		I
Coating locking         Nickeled           Coating of fitting         nickel plated           Material gasket         FKM           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 many.         85 °C           Additional condition temperature range         depending on cable quality           Controlity         Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable         Cable dentification         631           Cable (dentification         631         Cable (dentification           Cable (dentification         631         Cable (dentification           Cable (dentification         black         URUS           Amount standing         1         Instanction           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C           Cable weight         33 g/m		
Coaling of fitting         nickel plated           Material gasket         FKM           Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting data         Mechanical data   Mounting method           Environmental characteristics   Climatic           Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Conformity         Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable         Cable identification         631           Cable identification         631         Cable identification           Cable Color         black         DIN SAMPLAN (MISSA)           Type of Certificate         cURus           Amount stranding         1           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. 25 °C           Cable weigh         33 g/m           Material jacket         PUR           Shore Andreass jacket         90 ± 5 Shore A           Freedom from ingredients (jacket)		Nickeled
Material gasket         FKM           Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting date         Mounting method           Mounting method         inserted, screwed, Shaking protection           Environmental characteristics   Climatic           Operating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature range         despending on cable quality           Conformity           Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable           Cable identification         631           Cable type         3           Jacket Color         black           Type of Certificate         cURus           Amount stranding         1           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C           Cable weigth         33 g/m           Material jacket         PUR           Shore hardness jacket         PUR           Shore hardness jacket         90 ± 5 Shore A		
Locking material         Zinc die-casting           Material screw connection         Zinc die-casting           Mechanical data   Mounting data           Mounting method         inserted, screwed, Shaking protection           Environmental characteristics   Climatic         Coperating temperature min.         -25 °C           Operating temperature max.         85 °C           Additional condition temperature range         depending on cable quality           Conformity         Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable         S3         S4           Cable identification         631         S4           Cable Type         3         3           Jacket Color         black         S4           Type of Certificate         cURus           Amount stranding         1         S4           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C           Cable weight         33 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-fr		<u>·</u>
Material screw connection         Zinc die-casting           Mechanical data   Mounting data         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           Conformity         Value           Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable         Statistic (Lentification)         631           Cable Type         3         3           Jacket Color         black         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Type of Certificate         CURUS         CURUS           Amount stranding         1         1           Stranding         4 wires twisted         4 wires twisted           wire arrangement         brown, black, blue, white         No. of bending cycles (C-track)         10 Min. @ 25 °C           Cable weigth         33 g/m         Material jacket         PUR           Shore hardness jacket         PUR         4 mm           Freedom from ingredients (jacket)         lead-free, cadmium-free, CFC-free, halogen-free, silicone-free           Outer-diameter (jacket) <th< td=""><td></td><td></td></th<>		
Mechanical 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           Conformity         Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable         Salack (Color         53           Cable Identification         631           Cable Type         3           Jacket Color         black           Type of Certificate         cURus           Amount stranding         1           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C           Cable weigth         33 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)         4,5 mm           Tolerance outer diameter (sheath)         ± 5 %           Amount wires         4 <th< td=""><td></td><td></td></th<>		
Mounting method inserted, screwed, Shaking protection  Environmental characteristics   Climatic  Operating temperature min25 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Conformity  Product standard DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  Installation   Cable  Cable identification 631  Cable Type 3  Jacket Color black  Type of Certificate cURus  Amount stranding 1  Stranding 1  Stranding 4 wires twisted  wire arrangement brown, black, blue, white  No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable weigth 33 g/m  Material jacket PUR  Freedom from ingredients (jacket) ead-free, cadmium-free, CFC-free, halogen-free, silicone-free  Outer-diameter (jacket) 4,5 mm  Tolerance outer diameter (sheath) ± 5 %  Material wire insulation 1,25 mm  Outer diameter insulation 1,25 mm		Zino die casting
Environmental characteristics   Climatic  Operating temperature min25 °C  Operating temperature max. 85 °C  Additional condition temperature range depending on cable quality  Conformity  Product standard DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  Installation   Cable  Cable identification 631  Cable Type 3  Jacket Color black  Type of Certificate cURus  Amount stranding 1  Stranding 4 wires twisted wire arrangement brown, black, blue, white  No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable wight 33 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		inserted ecrewed Shaking protection
Operating temperature min. Operating temperature max. 85 °C Additional condition temperature range depending on cable quality  Conformity Product standard DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  Installation   Cable Cable identification 631 Cable Type 3 Jacket Color black Type of Certificate cURus Amount stranding 1 Stranding 4 wires twisted wire arrangement brown, black, blue, white No. of bending cycles (C-track) 10 Mio. @ 25 °C Cable wighth 33 g/m Material jacket PUR Shore hardness jacket 90 ± 5 Shore A Freedom from ingredients (jacket) 1ead-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	-	inserted, sciewed, criaking protection
Operating temperature max.  Additional condition temperature range depending on cable quality  Conformity  Product standard DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  Installation   Cable  Cable identification 631  Cable Type 3  Jacket Color black  Type of Certificate cURus  Amount stranding 1  Stranding 4 wires twisted  wire arrangement brown, black, blue, white  No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable weigth 33 g/m  Material jacket PUR  Shore hardness jacket 90 ± 5 Shore A  Freedom from ingredients (jacket) 1ead-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	·	
Additional condition temperature range depending on cable quality    Conformity		0.7.0
Conformity           Product standard         DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)           Installation   Cable           Cable identification         631           Cable Type         3           Jacket Color         black           Type of Certificate         cURus           Amount stranding         1           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C           Cable weight         33 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)         4,5 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         PP           Amount wires         4           Outer diameter insulation         1,25 mm		
Product standard DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  Installation   Cable  Cable identification 631  Cable Type 3  Jacket Color black Type of Certificate cURus  Amount stranding 1  Stranding 4 wires twisted wire arrangement brown, black, blue, white No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable weigth 33 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) 4,5 mm  Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 4  Outer diameter insulation 1,25 mm	Operating temperature max.	85 °C
Installation   Cable       Cable identification     631       Cable Type     3       Jacket Color     black       Type of Certificate     cURus       Amount stranding     1       Stranding     4 wires twisted       wire arrangement     brown, black, blue, white       No. of bending cycles (C-track)     10 Mio. @ 25 °C       Cable weigth     33 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)     4,5 mm       Tolerance outer diameter (sheath)     ± 5 %       Material wire insulation     PP       Amount wires     4       Outer diameter insulation     1,25 mm	Operating temperature max.  Additional condition temperature range	85 °C
Cable identification         631           Cable Type         3           Jacket Color         black           Type of Certificate         cURus           Amount stranding         1           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C           Cable weigth         33 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)         4,5 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         PP           Amount wires         4           Outer diameter insulation         1,25 mm	Operating temperature max.  Additional condition temperature range	85 °C
Cable Type         3           Jacket Color         black           Type of Certificate         cURus           Amount stranding         1           Stranding         4 wires twisted           wire arrangement         brown, black, blue, white           No. of bending cycles (C-track)         10 Mio. @ 25 °C           Cable weigth         33 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)         4,5 mm           Tolerance outer diameter (sheath)         ± 5 %           Material wire insulation         PP           Amount wires         4           Outer diameter insulation         1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity	85 °C depending on cable quality
Jacket Color black Type of Certificate cURus  Amount stranding 1  Stranding 4 wires twisted wire arrangement brown, black, blue, white No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable weigth 33 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) 4,5 mm  Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 4  Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard	85 °C depending on cable quality
Type of Certificate cURus  Amount stranding 1  Stranding 4 wires twisted  wire arrangement brown, black, blue, white  No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable weigth 33 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) 4,5 mm  Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 4  Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)
Amount stranding 1 Stranding 4 wires twisted wire arrangement brown, black, blue, white No. of bending cycles (C-track) 10 Mio. @ 25 °C Cable weigth 33 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) 4,5 mm Tolerance outer diameter (sheath) ± 5 % Material wire insulation PP Amount wires 4 Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification	85 °C  depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631
Stranding 4 wires twisted  wire arrangement brown, black, blue, white  No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable weigth 33 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) 4,5 mm  Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 4  Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3
wire arrangement brown, black, blue, white  No. of bending cycles (C-track) 10 Mio. @ 25 °C  Cable weigth 33 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) 4,5 mm  Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 4  Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black
No. of bending cycles (C-track)  10 Mio. @ 25 °C  Cable weigth  33 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)  4,5 mm  Tolerance outer diameter (sheath)  ± 5 %  Material wire insulation  PP  Amount wires  4  Outer diameter insulation  1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus
Cable weigth 33 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) 4,5 mm  Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 4  Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding	85 °C  depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631  3  black  cURus  1
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)       4,5 mm         Tolerance outer diameter (sheath)       ± 5 %         Material wire insulation       PP         Amount wires       4         Outer diameter insulation       1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted
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  Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white
Freedom from ingredients (jacket)  Outer-diameter (jacket)  A,5 mm  Tolerance outer diameter (sheath)  Amount wires  4  Outer diameter insulation  PP  Amount wires  4  Outer diameter insulation  1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white 10 Mio. @ 25 °C
Outer-diameter (jacket)     4,5 mm       Tolerance outer diameter (sheath)     ± 5 %       Material wire insulation     PP       Amount wires     4       Outer diameter insulation     1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white 10 Mio. @ 25 °C 33 g/m
Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 4  Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth  Material jacket	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white 10 Mio. @ 25 °C 33 g/m PUR
Material wire insulation PP Amount wires 4 Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth  Material jacket  Shore hardness jacket	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white 10 Mio. @ 25 °C 33 g/m PUR 90 ± 5 Shore A
Amount wires 4 Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)	depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631  3  black  cURus  1  4 wires twisted  brown, black, blue, white  10 Mio. @ 25 °C  33 g/m  PUR  90 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer diameter insulation 1,25 mm	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)	depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631  3  black  cURus  1  4 wires twisted  brown, black, blue, white  10 Mio. @ 25 °C  33 g/m  PUR  90 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  4,5 mm
	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)	depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white 10 Mio. @ 25 °C 33 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,5 mm ± 5 %
Outer diameter tolerance core insulation ± 5 %	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white 10 Mio. @ 25 °C 33 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,5 mm ± 5 % PP
	Operating temperature max.  Additional condition temperature range  Conformity  Product standard  Installation   Cable  Cable identification  Cable Type  Jacket Color  Type of Certificate  Amount stranding  Stranding  wire arrangement  No. of bending cycles (C-track)  Cable weigth  Material jacket  Shore hardness jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)  Material wire insulation  Amount wires	85 °C depending on cable quality  DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)  631 3 black cURus 1 4 wires twisted brown, black, blue, white 10 Mio. @ 25 °C 33 g/m PUR 90 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free 4,5 mm ± 5 % PP



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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)	32
Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,25 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Traversing distance (C-track)	10 m @ 25 °C   horizontal
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	3,6 A
Electrical resistance line constant wire	79 Ω/km @ 20 °C
Nominal voltage power AC max.	300 V
Power frequency withstand voltage power (wire - jacket)	2,5 kV @ 60 s
AC withstand voltage power (wire - wire)	2,5 kV @ 60 s
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	UL 1581 § 1090   UL 1581 § 1100 FT2   IEC 60332-2-2
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 torsion cycles	2 Mio.
Torsion speed	35 cycles/min
Torsion stress	± 180 °/m