

PUR servo cables · C-track compatible · shielded

SUPERFLEX® PLUS M (C) PUR SERVO ETHERNET combined power supply cable for Siemens and other systems For highest requirements



Application

- Connection cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Thanks to optimized cable construction designed for continuous flexing applications in C-tracks
- Very good resistance against aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexing use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	111766: UL-Style AWM 20233 80 °C 300 V 111767: UL-Style AWM 21223 80 °C 1000 V
Rated voltage	111766: 300 V 111767: 1000 V
Test voltage	111766: AC 2000 V 111767: AC 3000 V
Insulation resistance at 20 °C	≥ 500 MΩ×km
Impedance	nom. 100 Ω
Temperature range moving	-40 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	10×D
Minimum bending radius fixed	5×D
Burning behavior according to	DIN EN 60332-1-2 IEC 60332-1-2 UL VW1, FT1
Halogen free according to	IEC 60754-1
Conformity	CE RoHS
Approvals	cURus

Construction

- Conductor: Cu-Litze verzinkt, AWG-Leiter
Cat.5 Element CU-Litze blank
- Conductor category: IEC 60228, Class 6, superfine strand
- Conductor insulation: Polyolefin
- Ground conductor: G = with green/yellow ground conductor, × = without ground conductor
- Overall stranding: elements stranded together, layer pitch optimised
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: matt
- Jacket color: orange RAL 2003

Part-No.	Number of strands/cross-section/strand colors	SIEMENS designation*	Outer ∅ mm	Weight kg/100 m	Cu-Index kg/100 m
111766	S* (4GAWG22+(2×AWG22)+ (4×AWG26)) AWM 20233 4GAWG22 brown, U/L1/C/L+, black, V/L2, grey, W/L3/D/L-, yellow/green (2×AWG22) black, white (4×AWG26) yellow, blue, green, orange	1BE04	9.8	12.8	7.1
111767	S* (4GAWG19+(2×AWG21)+ (4×AWG26)) AWM 21223 4GAWG19 brown, U/L1/C/L+, black, V/L2, grey, W/L3/D/L-, yellow/green (2×AWG21) black, white (4×AWG26) yellow, blue, green, orange	1BE08	10.6	15.8	9.6

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU



* **S** Article from stock
A Available with a lead time
R Available on request

PUR servo cables · C-track compatible · shielded

SUPERFLEX® PLUS M (C) PUR SERVO ETHERNET combined power supply cable for Bosch-Rexroth and other systems For highest requirements



Application

- For Indramat* system (and similar)
- Connection cable motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Due to full PUR jacket and TPE / HGI conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexing use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 21223
Rated voltage	1000 V
Test voltage	AC 3000 V
Insulation resistance at 20 °C	≥ 500 MΩ×km
Impedance	nom. 100 Ω
Temperature range moving	-40 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×D
Minimum bending radius fixed	5×D
Burning behavior according to	DIN EN 60332-1-2 IEC 60332-1-2 UL VW1, FT1
Halogen free according to	IEC 60754-1
Conformity	CE RoHS
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, superfine strand
- Conductor insulation: Polyolefin
- Ground conductor: G = with green/yellow ground conductor, x = without ground conductor
- Overall stranding: elements stranded together, layer pitch optimised
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: matt
- Jacket color: orange RAL 2003

Part-No.	Number of strands/cross-section/strand colors	INK Description*	Outer ∅ mm	Weight kg/100 m	Cu-Index kg/100 m
111759 S*	(4G1,5+(2×0,75)+ (4×AWG24)) 4G1,5 black, with white number print, green/yellow (2×0,75) black, with white number print (4×AWG24) white, yellow, blue, orange	MS2N	13.3	25.0	15.0

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

PUR servo cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS M (C) PUR HYBRID SERVO 0,6/1 kV combined power supply cable for servo motors with Hiperface DSL® interface For the highest of standards



Application

- Combined power supply cable with motor supply, brake and digital feedback especially for SERVO drives in machine and plant construction, transport and conveyor technology
- Due to Full PUR jacket and TPE / HGI conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 21223
Rated voltage UL	1000 V
Rated voltage U_p/U	600/1000 V
Test voltage	AC 3000 V
Insulation resistance at 20 °C	$\geq 500 \text{ M}\Omega \times \text{km}$
Temperature range moving	-40 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×D
Minimum bending radius fixed	5×D
Burning behavior according to	VDE 0482 322-1-2 DIN EN 60332-1-2 IEC 60332-1-2 UL 1581 Part 1080 VW-1 UL FT1
Halogen free according to	IEC 60754-1
Conformity	CE RoHS
Approvals	cURus

Construction

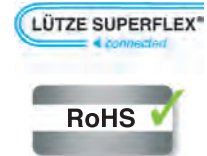
- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded DIN VDE 0295, class 6
- Conductor insulation: Special Polyolefin
- Conductor marking: black, with white print, U/L1/C/L+, V/L2, W/L3/D/L-, green/yellow
- Ground conductor: G = with green/yellow ground conductor, × = without ground conductor
- Inner jacket: TPE
- Overall stranding: elements stranded together
- Overall wrapping: Fleece taping
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Jacket color: orange RAL 2003

Part-No.	Number of conductors/cross-section	Outer \varnothing mm	Weight kg/100 m	Cu-Index kg/100 m
with control pair (black, white) and BUS pair (white, blue)				
111728	S* (4G0.75+(2×0.34)+(2×AWG22))	11.7	19.8	11.4
111630	S* (4G1.0+(2×0.75)+(2×AWG22))	12.4	19.0	13.5
111631	S* (4G1.5+(2×1.0)+(2×AWG22))	13.2	25.1	16.3
111632	S* (4G2.5+(2×1.0)+(2×AWG22))	14.5	31.4	21.7
111633	S* (4G4+(2×1.0)+(2×AWG22))	16.2	40.8	28.9
111634	R* (4G6+(2×1.0)+(2×AWG22))	18.0	51.2	37.3
111635	R* (4G10+(2×1.5)+(2×AWG22))	21.0	77.9	78.3
111636	R* (4G16+(2×1.5)+(2×AWG22))	26.0	119.8	119.8

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

PUR servo cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS M (C) PUR SERVO 0.6/1 kV High Flexing Motor Cable for Siemens and other systems For highest requirements



Application

- Connection cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Due to optimized cable construction optimally suited for continuous flexing applications in C-tracks
- Very good resistance against aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 21223
Rated voltage UL	1000 V
Rated voltage U ₀ /U	600/1000 V
Test voltage	AC 4000 V
Insulation resistance at 20 °C	≥ 500 MΩ×km
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×D ≤ 16 mm ² 10×D ≥ 25 mm ²
Minimum bending radius fixed	5×D

Burning behavior according to IEC 60332-1
DIN EN 60332-1-2
VDE 0482 322-1-2
UL 1581 Part 1080 VW-1
UL FT1

Halogen free according to DIN EN 60754-1
IEC 60754-1

Conformity CE
RoHS
REACH

Approvals cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded
DIN VDE 0295, class 6
- Conductor insulation: Special TPE
- Conductor marking: black, with white print, U/L1/C/L+, V/L2, W/L3/D/L-, green/yellow
- Ground conductor: G = with green/yellow ground conductor, x = without ground conductor
- Overall stranding: conductors twisted without mechanical stress, layer pitch optimised, conductors twisted without mechanical stress
- Overall wrapping: Fleece taping
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: orange RAL 2003

Part-No.	Number of conductors/cross-section	SIEMENS designation*	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
Construction without signal pair					
111879	S* (4G1.0)		7.4	10.8	6.5
111460	S* (4G1.5)	1BB11	8.6	11.7	8.3
111461	S* (4G2.5)	1BB21	10.8	17.3	13.0
111462	S* (4G4)	1BB31	12.2	24.5	19.3
111463	S* (4G6)	1BB41	14.0	36.5	27.5
111464	S* (4G10)	1BB51	17.6	54.9	45.0
111465	S* (4G16)	1BB61	21.2	84.9	72.0
111466	S* (4G25)	1BB25	25.0	129.9	108.0
111467	S* (4G35)	1BB35	28.8	169.2	152.4
111468	S* (4G50)	1BB50	33.9	244.2	216.8
Construction with one signal pair (white, black)					
111420	S* (4G1.5+(2×1.5))	1BA11	11.6	21.0	14.9
111421	S* (4G2.5+(2×1.5))	1BA21	12.9	23.5	19.3
111422	S* (4G4+(2×1.5))	1BA31	14.5	32.0	25.5
111423	S* (4G6+(2×1.5))	1BA41	16.1	43.0	33.9
111424	S* (4G10+(2×1.5))	1BA51	19.5	68.0	52.6
111425	S* (4G16+(2×1.5))	1BA61	23.6	95.6	77.3
111426	S* (4G25+(2×1.5))	1BA25	28.5	136.5	113.0
111427	R* (4G35+(2×1.5))	1BA35	31.0	274.6	159.0
111428	R* (4G50+(2×1.5))	1BA50	34.5	373.7	224.0

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

PVC servo cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS M (C) PUR SERVO 0.6/1 kV Supply line for Bosch Rexroth and other systems For highest requirements



Application

- For Indramat* system (and similar)
- Connection cable motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Due to Full PUR jacket and TPE / HGI conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 21223
Rated voltage UL	1000 V
Rated voltage U_0/U	600/1000 V
Test voltage	AC 4000 V
Insulation resistance at 20 °C	$\geq 0.0 \text{ M}\Omega \cdot \text{km}$
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	10×D
Minimum bending radius fixed	6×D
Burning behavior according to	IEC 60332-1-2 DIN EN 60332-1-2 UL 1581 UL C22.2 No. 210.2 Flame Rating FT1
Halogen free according to	DIN EN 60754-1
Conformity	CE RoHS REACH
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded DIN VDE 0295, class 6
- Conductor insulation: Polyolefin
- Conductor marking: black, with white number print, green/yellow
- Ground conductor: G = with green/yellow ground conductor, × = without ground conductor
- Overall stranding: elements stranded together, layer pitch optimised, conductors twisted without mechanical stress
- Overall wrapping: Fleece taping
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: orange RAL 2003

Part-No.	Number of conductors/ cross-section	INK Description*	Outer \varnothing mm	Weight kg/100 m	Cu-Index kg/100 m
Construction with two control pairs (digit print 5, 6 and 7, 8)					
111719	R* (4G0.75+2×(2×0.34))		11.2	17.7	9.5
111270	S* (4G1.0+2×(2×0.75))	INK 0653	12.5	23.2	13.8
111271	S* (4G1.5+2×(2×0.75))	INK 0650	12.9	25.5	16.2
111279	S* (4G2.5+2×(2×1.0))	INK 0602	14.2	33.0	22.6
111388	S* (4G4+(2×1.0)+(2×1.5))	INK 0603	16.3	38.0	32.9
111998	S* (4G6+(2×1.0)+(2×1.5))	INK 0604	18.4	53.0	38.5
111762	S* (4G10+(2×1.0)+(2×1.5))	INK 0605	22.3	76.5	57.0
111276	S* (4G16+2×(2×1.5))	INK 0606	26.8	106.4	89.1
111277	R* (4G25+2×(2×1.5))	INK 0607	29.3	171.4	126.0
111278	R* (4G35+2×(2×1.5))	INK 0667	32.5	217.6	164.0

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

* Indramat article designations are registered trademarks

Servo cables • C-track compatible • shielded



LÜTZE SUPERFLEX® PLUS M (C) PUR SERVO 0,6/1 kV

for Lenze and other systems, for highest requirements

Part-No.	Number of conductors/ cross-section	UL approval	Outer diameter mm	Weight kg/100 m	Cu-Index kg/100 m
For Lenze System (and similar) with control pair (brown, white)					
111439 S*	(4G1,0+(2x0,5))	cURus, AWM Style 21223	9,6	13,4	8,0
111536 S*	(4G1,5+(2x0,5))	cURus, AWM Style 21223	11,0	19,2	10,6
111997 S*	(4G2,5+(2x0,5))	cURus, AWM Style 21223	12,8	27,1	15,3
111763 R*	(4G4+(2x1,0))	cURus, AWM Style 21223	14,8	37,3	23,5
111764 R*	(4G6+(2x1,0))	cURus, AWM Style 21223	16,9	47,7	31,6
111765 R*	(4G10+(2x1,0))	cURus, AWM Style 21223	20,3	71,0	51,3

Construction

Conductor: CU-wire bare
 Conductor insulation: Special TPE
 Overall shield: Braid shield, Tinned copper wires,
 optical cover approx. 85 %
 Jacket material: PUR
 Color: orange RAL 2003

Properties

Rated voltage: 600 / 1000 V
 Test voltage: 4000 V
 Temperature range: moving: -25°C bis +80°C
 fixed: -40°C bis +80°C
 Bending radius: moving: 10xD
 fixed: 6xD
 Burning behavior: IEC 60332-1, DIN EN 60332-1-2, UL FT1,
 VDE 0482 332-1-2, UL 1581 Teil 1080 VW-1



LÜTZE SUPERFLEX® PLUS M (C) PUR SERVO 0,6/1 kV

for SEW and other systems, for highest requirements

Part-No.	Number of conductors/ cross-section	UL approval	Outer diameter mm	Weight kg/100 m	Cu-Index kg/100 m
For system SEW, with sub jacket and three elements (digit print 1,2,3)					
111560 R*	(4G1,5+(3x1,0))	cURus, AWM Style 21223	11,8	24,4	13,9
111561 R*	(4G2,5+(3x1,0))	cURus, AWM Style 21223	13,7	30,6	18,3
111562 R*	(4G4+(3x1,0))	cURus, AWM Style 21223	14,7	39,6	25,6
111563 R*	(4G6+(3x1,5))	cURus, AWM Style 21223	17,0	52,9	34,4
111564 R*	(4G+10(3x1,5))	cURus, AWM Style 21223	20,5	73,0	52,2

Construction

Conductor: CU-wire bare
 Conductor insulation: Special TPE
 Overall shield: Braid shield, Tinned copper wires,
 optical cover approx. 85 %
 Jacket material: PUR
 Color: orange RAL 2003

Properties

Rated voltage: 600 / 1000 V
 Test voltage: 4000 V
 Temperature range: moving: -25°C bis +80°C
 fixed: -40°C bis +80°C
 Bending radius: moving: 10xD
 fixed: 6xD
 Burning behavior: IEC 60332-1, DIN EN 60332-1-2, UL FT1,
 VDE 0482 332-1-2, UL 1581 Teil 1080 VW-1

PUR feedback cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS (C) PUR FEEDBACK Encoder cables for Siemens and other systems For highest requirements in drive technology



Application

- Incremental encoder cable, connection cable for tacho sensor, brake sensor, speed sensor
- Due to Full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 20236
Rated voltage	30 V
Test voltage	AC 500 V
Insulation resistance at 20 °C	≥ 200 MΩ×km
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	12×D
Minimum bending radius fixed	6×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2 UL 1581 Part 1080 VW-1 UL FT1
Halogen free according to	DIN EN 60754-1 IEC 60754-1
Conformity	CE RoHS REACH
Approvals	cURus AWM II A/B

Construction

- Conductor: CU-wire tin-plated
- Conductor category: IEC 60228, Class 6, Superfinely stranded DIN VDE 0295, class 6
- Conductor insulation: Polyolefin
- Conductor marking: Color coded
- Overall stranding: layered construction
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: green RAL 6018

Part-No.	Number of strands/cross-section/ strand colors	SIEMENS designation*	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
For Siemens 6FX8000* standard system (and similar)					
111412	R* (8×2×0.18) (8×2×0.18) white/green, white/yellow, white/red, white/orange, white/black, white/ brown, white, grey, violet, blue, green , yellow, red, orange, brown, black	1BD11	8.2	13.1	7.3
111456	S* (4×0.5+4×2×0.38) 4×0.5 white/blue, white/black, white/red, white/yellow 4×2×0.38 black, brown, violet, blue, yellow, green , red, orange	1BD21	9.4	13.2	8.6
111459	S* (2×(0.5)+3×(2×0.14)) 2×(0.5) red, black 3×(2×0.14) yellow, green , red, orange, brown, black	1BD31	8.7	12.8	6.9
111458	S* (2×0.5+3×(2×0.14)+4×0.14) 2×0.5 brown/blue, brown/red 3×(2×0.14) green , yellow, black, brown, red, orange 4×0.14 blue, grey, white/yellow, white/black	1BD41	8.6	12.2	6.1
111457	S* (2×0.5+4×0.23+3×(2×0.14)+4×0.14) 2×0.5 brown/blue, brown/red 4×0.23 green/red, green/black, brown/yellow, brown/grey 3×(2×0.14) yellow, green , black, brown, red, orange 4×0.14 blue, grey, white/yellow, white/black	1BD51	9.8	15.3	9.3
111453	R* (4×2×0.18) (4×2×0.18) violet, blue, green , yellow, red, oran- ge, brown, black	1BD61	6.6	7.6	3.2
111452	R* (2×2×0.18) (2×2×0.18) brown, red, black, orange	1BD71	5.1	4.2	2.2
111454	R* (12×0.23) (12×0.23) black, brown, red, orange, yellow, green , blue, violet, grey, white, white/ black, white/brown	1BD81	7.4	8.5	4.7
For Siemens-System DRIVE-CLiQ standard system (and similar)					
104310	S* (2×2×AWG26+1×2×AWG22) 2×2×AWG26 pink, blue, yellow, green 1×2×AWG22 red, black	2DC00	6.8	7.3	3.4

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

* SIEMENS and DRIVE-CLiQ are registered trademarks

PUR feedback cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS (C) PUR FEEDBACK Feedback cables for Siemens Drive Cliq and other systems For highest requirements in drive technology



Application

- Incremental encoder cable, connection cable for tacho sensor, brake sensor, speed sensor
- Due to optimized cable construction optimally suited for continuous flexing applications in C-tracks
- Very good resistance against aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 20549
Rated voltage	300 V
Test voltage	AC 2000 V
Insulation resistance at 20 °C	≥ 1000 MΩ×km
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	12×D
Minimum bending radius fixed	5×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 UL VW1, FT1
Conformity	CE RoHS REACH
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, superfine strand
- Conductor insulation: Special Polyolefin
- Overall stranding: elements stranded together
- Overall wrapping: double fleece taping
- Overall shield: aluminium-laminated film shield, optical cover approx. 100%, Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Jacket color: green RAL 6018

Part-No.	Number of strands/cross-section/strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
104402	S* (2x2xAWG24+1x2AWG22) 2x2xAWG24 pink, blue, yellow, green 1x2xAWG22 red, black	6.7	7.3	3.5

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

PUR feedback cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS (C) PUR FEEDBACK Feedback cables for Bosch-Rexroth and other systems For highest requirements in drive technology



Application

- Incremental encoder cable, connection cable for tacho sensor, brake sensor, speed sensor
- Due to Full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Excellent alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 20233
Rated voltage	300 V
Test voltage	AC 2000 V
Insulation resistance at 20 °C	≥ 200 MΩ×km
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×D
Minimum bending radius fixed	5×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2 UL 1581 Part 1080 VW-1 UL FT1
Halogen free according to	DIN EN 60754-1 IEC 60754-1
Conformity	CE RoHS REACH
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded DIN VDE 0295, class 6
- Conductor insulation: Special TPE
- Conductor marking: Color coded
- Overall stranding: layered construction, layer pitch optimised, conductors twisted without mechanical stress
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: orange RAL 2003

Part-No.	Number of strands/cross-section/strand colors	INK Description*	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
For Bosch-Rexroth system (and similar)					
110941	S* (2×1.0+4×2×0.25) 2×1.0 white, brown 4×2×0.25 brown, green, grey, pink, red, black, blue, violet	INK-0209*	8.9	12.0	6.4
111780	S* (2×0.5+4×2×0.25) 2×0.5 white, brown 4×2×0.25 brown, green, grey, pink, red, black, blue, violet	INK-0448*	8.5	10.0	5.9
110940	S* (9×0.5) (9×0.5) DIN 47100	INK-0208*	8.8	12.5	7.5
111495	S* (4×1.0+4×2×0.14+(4×0.14)) 4×1.0 blue, white, white/green, brown/black 4×2×0.14 red, black, green, brown, grey, pink, yellow, violet (4×0.14) black/green, black/yellow, black/blue, black/red	INK-0532*	9.5	13.7	9.6
111781	S* (2×2×0.25+2×0.5) 2×2×0.25 grey, pink, red, black 2×0.5 white, brown	INK-0750*	7.6	9.0	4.2

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PUR feedback cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS (C) PUR FEEDBACK Feedback cables for Allen-Bradley and other systems For highest requirements in drive technology



Application

- Incremental encoder cable, connection cable for tacho sensor, brake sensor, speed sensor
- Due to optimized cable construction optimally suited for continuous flexing applications in C-tracks
- Very good resistance against aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 21223
Rated voltage	1000 V
Test voltage	AC 2000 V
Insulation resistance at 20 °C	≥ 200 MΩ×km
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	10×D
Minimum bending radius fixed	6×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2 UL 1581 Part 1080 VW-1 UL FT1
Halogen free according to	DIN EN 60754-1 IEC 60754-1
Conformity	CE RoHS REACH
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded DIN VDE 0295, class 6
- Conductor insulation: Special TPE
- Overall stranding: elements stranded together, layer pitch optimized, conductors twisted without mechanical stress
- Overall wrapping: Fleece taping
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Jacket color: green RAL 6018

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
For Allen-Bradley system (and similar)				
111489 S*	(2×AWG16+2×AWG22+6×2×AWG26) 2×AWG16 grey, white/grey 2×AWG22 orange, white/orange 6×2×AWG26 black/white, black, red/white, red, green/ white, green, blue/white, blue, brown/ white, brown, yellow/white, yellow	10.8	18.0	12.0
111488 S*	(5×2×AWG22) (5×2×AWG22) black/white, black, red/white, red, green/ white, green, grey/white, grey, orange/ white, orange	9.2	10.7	5.4

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

Feedback cables • C-track compatible • shielded



LÜTZE SUPERFLEX® PLUS (C) PUR FEEDBACK

for Heidenhain and other systems, for highest requirements

Part-No.	Number of strands/cross-section/strand color	UL approval	Outer diameter mm	Weight kg/100 m	Cu-Index kg/100 m
For Heidenhain system (and similar)					
111418 S*	(4x0,5+4x2x0,14+(4x0,14)) 4x0,5: white, blue, brown/green, white/green 4x2x0,14: yellow, violet, grey, pink, brown, green, red, black (4x0,14): green/black, blue/black, yellow/black, red/black	cURus, AWM Style 20233	8,7	12,3	6,0
111777 S*	(4x0,5+4x2x0,14) 4x0,5: white, blue, brown/green, white/green 4x2x0,14: yellow, violet, grey, pink, brown, green, red, black	cURus, AWM Style 20233	8,6	9,2	4,8

Construction

Conductor: CU-wire bare
 Conductor insulation: Special TPE
 Overall shield: Braid shield, Tinned copper wire, optical cover approx. 85 %
 Jacket material: PUR
 Color: black RAL 9005

Properties

Rated voltage: 300 V
 Test voltage: 2000 V
 Temperature range: moving: -25°C bis +80°C
 fixed: -40°C bis +80°C
 Bending radius: moving: 12xD
 fixed: 6xD
 Burning behavior: IEC 60332-1, DIN EN 60332-1-2, UL FT1, VDE 0482 332-1-2, UL 1581 Teil 1080 VW-1



LÜTZE SUPERFLEX® PLUS (C) PUR FEEDBACK

for various systems, for highest requirements

Part-No.	Number of strands/cross-section/strand color	UL approval	Outer diameter mm	Weight kg/100 m	Cu-Index kg/100 m
For System Fanuc (with drain wire)					
111491 S*	(5x0,5+2x2x0,18) 5x0,5: green, yellow, grey, pink, blue 2x2x0,18: white, brown, black, violet	cURus, AWM Style 20233	7,8	9,3	6,3
Für NUM system					
111416 R*	4x(2xAWG22) black, white, black, green, black, blue, black, red	cURus, AWM Style 20233	10,3	14,9	6,6
For B+R system					
111437 S*	(3x2xAWG24/19) white,brown,green,yellow,grey,pink	cURus, AWM Style 20233	6,6	6,9	2,7

Construction

Conductor: CU-wire tin-plated
 Conductor insulation: Special TPE
 Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85 %
 Jacket material: PUR
 Color: green RAL 6018

Properties

Rated voltage: 300 V
 Test voltage: 2000 V
 Temperature range: moving: -25°C bis +80°C
 fixed: -40°C bis +80°C
 Bending radius: moving: 12xD
 fixed: 6xD
 Burning behavior: IEC 60332-1, DIN EN 60332-1-2, UL FT1, VDE 0482 332-1-2, UL 1581 Teil 1080 VW-1

PUR motor cables · C-track compatible · unshielded

LÜTZE SUPERFLEX® PLUS PUR 0.6/1 kV Motor/energy supply cable For highest requirements



Application

- Performance conductor, specifically for machine and device engineering, transport and conveyor technology
- As motor supply or grounding cable
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties

- Halogen-free, no corrosive gases
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 10587
Rated voltage	1000 V
Test voltage	AC 3000 V
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×D
Minimum bending radius fixed	4×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2 UL 1581 UL FT1
Halogen free according to	DIN EN 60754-1 IEC 60754-1
Conformity	CE RoHS REACH
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded
DIN VDE 0295, class 6
- Conductor insulation: Special TPE
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: black RAL 9005

Part-No.	Number of conductors/ cross-section	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
Without shield, black				
111136	S* 1×6	7.1	9.0	5.6
111126	S* 1×10	8.4	13.8	9.3
111127	S* 1×16	9.8	20.5	14.8
111128	S* 1×25	11.4	30.6	23.3
111129	S* 1×35	13.4	43.1	32.6
111130	S* 1×50	15.2	57.2	47.8
111131	S* 1×70	16.6	78.3	64.5
111132	S* 1×95	19.2	104.3	88.8
111133	R* 1×120	22.6	130.2	120.0
Without screen, insulation and jacket greenyellow				
111241	S* 1G6	7.1	9.0	5.6
111243	S* 1G10	8.4	13.8	9.3
111197	S* 1G16	9.8	20.5	14.8
111337	R* 1G25	11.4	30.6	23.3
111285	S* 1G35	13.4	43.1	32.6

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

PUR motor cables · C-track compatible

LÜTZE SUPERFLEX® PLUS (C) PUR 0.6/1 kV Motor/energy supply cable, for highest requirements



Application

- Performance conductor, specifically for machine and device engineering, transport and conveyor technology
- As motor supply or grounding cable
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties

- Halogen-free, no corrosive gases
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 10587
Rated voltage	1000 V
Test voltage	AC 3000 V
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×D
Minimum bending radius fixed	4×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2 UL FT1 UL 1581 cable flame
Halogen free according to	DIN EN 60754-1 IEC 60754-1
Conformity	CE RoHS REACH
Approvals	cURus

Construction

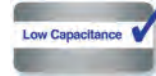
- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded DIN VDE 0295, class 6
- Conductor insulation: Special TPE
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: black RAL 9005

Part-No.	Number of conductors/ cross-section	Outer ∅ mm	Weight kg/100 m	Cu-Index kg/100 m
With CU shield, black				
111288	S* (1×6)	7.7	11.5	7.7
111289	S* (1×10)	9.0	17.1	12.1
111290	S* (1×16)	10.4	24.1	18.1
111291	S* (1×25)	12.0	35.3	27.3
111292	S* (1×35)	14.0	48.1	37.3
111293	S* (1×50)	15.8	63.1	53.1
111294	R* (1×70)	17.4	85.3	70.6
111295	R* (1×95)	20.2	114.6	98.0
111296	R* (1×120)	23.6	143.1	132.0

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PUR motor cables · C-track compatible · unshielded

LÜTZE SUPERFLEX® PLUS M PUR 0.6/1 kV Motor/energy supply cable For highest requirements



Application

- Motor connection cable, specifically for machine and device construction, transport and conveyor technology
- Due to full PUR jacket and TPE / HGI conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties

- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 21223
Rated voltage UL	1000 V
Rated voltage U_0/U	600/1000 V
Test voltage	AC 4000 V
Insulation resistance at 20 °C	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×D
Minimum bending radius fixed	4×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2 UL 1581 Part 1080 VW-1 UL FT1
Halogen free according to	DIN EN 60754-1 IEC 60754-1
Conformity	CE RoHS REACH
Approvals	cURus

Construction

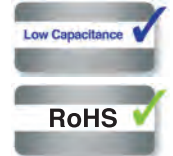
- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 6, Superfinely stranded DIN VDE 0295, class 6
- Conductor insulation: Special TPE
- Conductor marking: black, with white number print, green/yellow
- Ground conductor: G = with green/yellow ground conductor, x = without ground conductor
- Overall stranding: layered construction, layer pitch optimised, conductors twisted without mechanical stress
- Overall wrapping: Fleece taping
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: black RAL 9005

Part-No.	Number of conductors/ cross-section	Outer \varnothing mm	Weight kg/100 m	Cu-Index kg/100 m
111370	S* 4G1.5	8.2	10.5	5.8
111371	S* 4G2.5	10.0	15.2	9.7
111372	S* 4G4	11.6	22.2	15.5
111545	S* 5G4	13.0	26.8	19.4
111373	S* 4G6	13.6	33.8	23.3
111430	S* 5G6	14.4	37.8	29.2
111374	S* 4G10	16.8	55.5	39.1
111429	R* 5G10	18.8	69.5	48.8
111375	S* 4G16	20.4	78.8	62.2
111548	R* 5G16	24.2	112.6	77.5
111376	S* 4G25	24.2	120.8	96.0
111377	S* 4G35	30.5	172.5	136.5
111378	R* 4G50	36.5	265.1	200.1

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PVC servo cables · shielded

LÜTZE SILFLEX® M (C) PVC SERVO 0.6/1 kV Motor/energy supply cable for Siemens and other systems



Application

- For Siemens 6FX5008* standard system (and similar)
- Connection cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Flexible construction for easy installation
- Suitable for static laying and slight movement of machine components (not C-track)
- Low capacitance for high dielectric strength for long cable guide from inverter to motor
- In dry and damp rooms
- Especially for industrial environments in mechanical and system engineering

Properties

- Low capacitance for high dielectric strength
- High active and passive interference resistance (EMC)
- PVC, flame-retardant and self-extinguishing
- Orange RAL 2003 per DESINA
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 2570
Rated voltage UL	1000 V
Rated voltage U_0/U	600/1000 V
Test voltage	AC 4000 V
Insulation resistance at 20 °C	$\geq 500 \text{ M}\Omega \times \text{km}$
Temperature range moving	-5 °C ... +80 °C
Temperature range fixed	-25 °C ... +80 °C
Minimum bending radius moving	10×D
Minimum bending radius fixed	6×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2 UL 1581 Part 1080 VW-1 UL FT1
Conformity	CE RoHS
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 5, Finely stranded DIN VDE 0295, Class 5
- Conductor insulation: TPM/PP
- Conductor marking: black, with white print, U/L1/C/L+, V/L2, W/L3/D/L-, green/yellow
- Ground conductor: G = with green/yellow ground conductor, × = without ground conductor
- Overall stranding: layered construction
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: Special PVC
- Surface: adhesion-free, matt
- Jacket color: orange RAL 2003

Part-No.	Number of conductors/ cross-section	SIEMENS designation*	Outer \varnothing mm	Weight kg/100 m	Cu-Index kg/100 m
Construction without signal strands					
116401	S* (4G1.5)	1BB11	8.4	13.1	8.0
116402	S* (4G2.5)	1BB21	10.6	21.9	13.0
116403	R* (4G4)	1BB31	11.5	31.2	19.4
116404	S* (4G6)	1BB41	13.2	38.0	28.0
Construction with 1 signal pair (white, black)					
116415	S* (4G1.5+(2×1.5))	1BA11	11.6	24.8	15.0
116416	S* (4G2.5+(2×1.5))	1BA21	13.0	31.0	19.5

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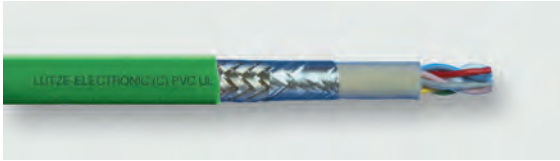
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* S Article from stock
A Available with a lead time
R Available on request

PVC feedback cables · shielded

LÜTZE SILFLEX® (C) PVC FEEDBACK Feedback cable for Siemens DRIVE-CLIQ 6FX5008 standard system



Application

- Digital feedback cable compatible with Siemens DRIVE-CLIQ standard system
- In dry and damp rooms
- For flexible applications without continuous flexing

Properties

- High active and passive interference resistance (EMC)
- PVC Flame-retardant, self-extinguishing
- Resistant to most oils, greases, acids and bases
- Silicone free
- RoHS compliant

Technical data

UL style	AWM 2502
Rated voltage	30 V
Test voltage	AC 500 V
Insulation resistance at 20 °C	≥ 200 MΩ×km
Temperature range moving	-5 °C ... +80 °C
Temperature range fixed	-25 °C ... +80 °C
Minimum bending radius moving	15×D
Minimum bending radius fixed	7.5×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2
Conformity	CE RoHS
Approvals	cURus

Construction

- Conductor: CU-wire bare
- Conductor category: IEC 60228, Class 5, Finely stranded DIN VDE 0295, Class 5
- Conductor insulation: Polyolefin
- Overall shield: plastic-laminated aluminum foil, Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: Special PVC
- Surface: adhesion-free, matt
- Jacket color: green RAL 6018

Part-No.	Number of strands/cross-section/strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
For Siemens system DRIVE-CLIQ 2DC00				
104341 R*	(2×2×AWG26+1×2×AWG22) 2×2×AWG26 green , yellow, blue, pink 1×2×AWG22 red, black	6.8	8.5	4.2

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