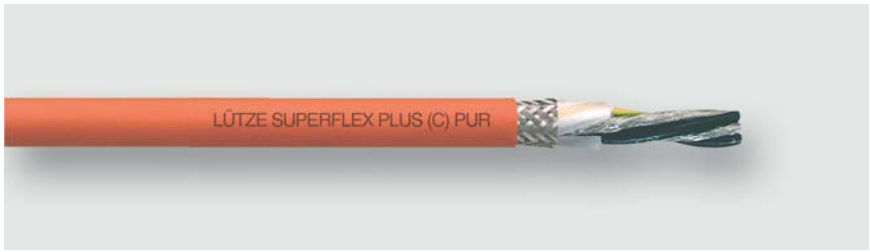
Technical data sheet · LUTZE SUPERFLEX® PLUS M (C) PUR SERVO 0.6/1 kV
High Flexing Motor Cable for Siemens and other systems
For highest requirements



PUR servo cables · continuous flexing · shielded

Identification	Type	SU+ M (C) PUR SE (4G1,5+(2×1,5)) UL 1kV
	Part-No.	111420
SIEMENS designation*	1BA11	

Use/Application/Characteristics

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 resitance against aggressive coolants and lubricants • Especially for industrial environments in mechanical and system engineering

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Characteristics	• 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

Construction	
Description	SUPERFLEX® PLUS M (C) PUR SERVO 0.6/1 kV
Number of conductors/cross-section	(4G1.5+(2×1.5))
Cross-section AWG	AWG 16
Cross-section, metric	1.5 mm²
Jacket material	PUR
Jacket color	orange RAL 2003
Outer ∅	11.6 mm
Outer ∅	0.456 inch
Surface	adhesion-free matt
Weight	21 kg/100 m
Weight	141 Lbs/Mft
Cu-Index	14.9 kg/100 m
Cu-Index	100 Lbs/Mft
Element 1	
Element construction	4G1.5
Conductor	CU-wire bare
Conductor category	IEC 60228, Class 6 Superfinely stranded DIN VDE 0295
Conductor marking	black with white print U/L1/C/L+ V/L2 W/L3/D/L- green/yellow
Conductor insulation	Special TPE
Element 2	

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Element construction	(2×1.5)
Conductor	CU-wire bare
Conductor category	IEC 60228, Class 6 Superfinely stranded DIN VDE 0295 class 6
Conductor marking	black white
Conductor insulation	Special TPE
Stranding	conductors stranded in pairs
Wrapping	Foil taping
Element shielding	Braid shield

overall construction	
Overall stranding	elements stranded together
Overall wrapping	Fleece taping
Overall shield	braid shield tinned copper wires optical cover approx. 85%
Jacket characteristics	Flame-retardant grease-resistant petrol-resistant (alcohol-free) kerosene-resistant Silicone-free Halogen free

Technical data	
Rated voltage U_0/U	600/1000 V
Rated voltage UL	1000 V
Test voltage type	AC 4000 V
Temperature range moving	-25 °C … +80 °C
Temperature range fixed	-40 °C … +80 °C
Minimum bending radius moving	7.5×D ≤16 mm^2
Minimum bending radius fixed	5×D
Bending cycles	≥10 Mio
Travel distance	≤2,5 m
Speed	5 m/s
Acceleration	50 m/s²
Torsion	± 30°

Element 1

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Element construction	4G1.5
Insulation resistance at 20 °C	500 MΩ×km
Operating capacitance wire-wire	80 pF/m
Operating capacitance wire-shield	120 pF/m

Element 2	
Element construction	(2×1.5)
Insulation resistance at 20 °C	500 MΩ×km
Operating capacitance wire-wire	140 pF/m
Operating capacitance wire-shield	210 pF/m

Certifications/Standards	
Certifications	cURus
UL style	AWM 21223
Conformity	CE RoHS REACH
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

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

Symbols

15.02.2020 – Subject to technical modification

Part-No. 111420

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