

# Technical data sheet · LÜTZE 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 · C-track compatible · shielded

<b>Identification</b>	Type	SU+M(C)P SE(4G4+(2×1,5))UL 1KV OR
	Part-No.	111422
SIEMENS designation*	1BA31	

## Use/Application/Characteristics

Application	<ul style="list-style-type: none"> <li>• Connection cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology</li> <li>• Due to optimized cable construction optimally suited for continuous flexing applications in C-tracks</li> <li>• Very good resistance against aggressive coolants and lubricants</li> <li>• Especially for industrial environments in mechanical and system engineering</li> </ul>
Characteristics	<ul style="list-style-type: none"> <li>• High active and passive interference resistance (EMC)</li> <li>• Braided shield optimised for continuous flexible use</li> <li>• Very good alternating bending strength</li> <li>• Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant</li> <li>• Hydrolysis-resistant, microbe-resistant, and rot-resistant</li> <li>• Weatherproof, ozone and UV resistant (normal lighting conditions)</li> <li>• Good ruggedness and salt water resistance</li> <li>• Excellent coolant and lubricant resistance</li> <li>• Resistant to most oils, greases, alcohol-free benzines and kerosene</li> <li>• Silicone free</li> <li>• RoHS compliant</li> </ul>

28.04.2017 – Subject to technical modification

Part-No. 111422

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## Construction

Description	SUPERFLEX+ M (C) PUR SERVO SIEMENS
Number of conductors/cross-section	(4G4+(2×1.5))
Jacket material	PUR
Jacket color	orange RAL 2003
Outer Ø	14.5 mm
Outer Ø	0.571 inches
Surface	adhesion-free matt
Weight	32 kg/100 m
Weight	214 Lbs/Mft
Cu-Index	25.5 kg/100 m
Cu-Index	171 Lbs/Mft

## Element 1

Element construction	4G4
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 marking standard	DIN EN 50334
Conductor insulation	Special TPE

## Element 2

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

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SYSTEMATIC TECHNOLOGY

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Element shielding	Braid shield
<b>overall construction</b>	
Overall stranding	Elements stranded together
Overall wrapping	Non-woven material
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	$7.5 \times D \leq 16 \text{ mm}^2$
Minimum bending radius fixed	$5 \times D$
Bending cycles	$\geq 5 \text{ Mio}$
Travel distance	$\leq 50 \text{ m}$
Speed	50 m/s
Acceleration	$50 \text{ m/s}^2$

### Element 1

Element construction	4G4
Insulation resistance at 20 °C	500 M $\Omega$ ·km
Operating capacitance Ader-Ader	115 pF/m
Operating capacitance wire-shield	200 pF/m

### Element 2

Element construction	(2×1.5)
Insulation resistance at 20 °C	500 M $\Omega$ ·km
Operating capacitance Ader-Ader	120 pF/m
Operating capacitance wire-shield	210 pF/m

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## Approvals/Standards

Approvals	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
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## Symbols



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