

Technical data sheet

PUR servo cables · continuous flexing · shielded

LUTZE SUPERFLEX® PLUS M (C) PUR SERVO 0,6/1 kV
High Flexing Motor Cable for Siemens and other systems
For highest requirements



Identification

Type	SU+ M (C) PUR SE (4G10+(2×1,5)) 90°C
Part No.	111424.1000
SIEMENS designation*	1BA51

Product version

Datasheet version	00
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Use/Application/Properties

Application	<ul style="list-style-type: none">• Termination cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology• Through 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	<ul style="list-style-type: none">• High protection against electromagnetic interferences (EMI)• Braided shield optimised for continuous flexing use• Very good alternating bending strength• Low adhesion, abrasion-resistant, nick-resistant, tear-resistant• Hydrolysis-resistant, microbe-resistant, and rot-resistant• Weathering, ozone and UV resistant (normal lighting conditions)• Excellent coolant and lubricant resistance• Largely resistant to oils, greases, alcohol-free benzines and kerosene• Silicone free

Construction

Description	SUPERFLEX® PLUS M (C) PUR SERVO 0,6/1 kV
Number of conductors/cross-section	(4G10+(2×1,5))
Number of conductors	6
Cross-section, metric	10 mm ²
Jacket material	Special PUR
Jacket color	orange similar to RAL 2003
Outer Ø	19.7 mm
Surface	adhesion-free

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20.03.2025 • Subject to technical modification
Part No. [111424.1000](#) • Datasheet version: 00

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Weight	69.21 kg/100 m
Weight	463.69 Lbs/Mft
Cu Index	52.6 kg/100 m
Cable construction	Construction with one signal pair (white, black)

Construction Element 1

Element construction	(4G10)
Conductor	CU-wire bare
Conductor category	Superfinely stranded DIN VDE 0295 DIN EN 60228, Class 6
Conductor marking	According to system manufacturer
Conductor insulation	PP
Cabling	Conductors twisted without mechanical stress Layer pitch optimised

Construction Element 2

Element construction	(2×1,5)
Conductor	CU-wire bare
Conductor marking	According to system manufacturer
Conductor insulation	PP
Cabling	Conductors twisted in pairs
Element shielding	Braid shield tinned copper wires

Overall construction

Overall stranding	Elements stranded together Conductors twisted without mechanical stress Layer pitch optimised
Overall shield	Braid shield Optical cover approx. 85 %

Technical data

Rated voltage U_0/U	1000
Test voltage type	AC 4000 V
Temperature range moving	-25 °C ... +90 °C
Temperature range fixed	-40 °C ... +90 °C
Minimum bending radius moving	7.5×cable OD
Minimum bending radius fixed	5×cable OD
Bending cycles	≥10 Mio
Speed	5 m/s
Acceleration	50 m/s ²
Torsion	± 30°/m

Technical Data Element 1

Element construction	(4G10)
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Insulation resistance at 20 °C	≥1000 MΩ×km
Operating capacitance wire-wire	140 pF/m
Operating capacitance wire-shield	245 pF/m

Technical Data Element 2

Element construction	(2×1,5)
Operating capacitance wire-wire	140 pF/m
Operating capacitance wire-shield	210 pF/m

Approvals/Standards

Approvals	cURus
UL style	AWM 21209
Conformity	CE RoHS REACH TSCA
Burning behavior according to	IEC 60332-1-1 to 1-3 UL 1581 VW-1 UL FT1
Oil resistant according to	UL 4d100C DIN EN 60811-404
Halogen free according to	IEC 60754-1 DIN EN 60754-1

General

Note	CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU * Cables for MOTION-CONNECT 800PLUS. Siemens, MOTION-CONNECT 800PLUS and Siemens article designations are registered trademarks of Siemens AG.
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