Technical data sheet

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

Identification

Type	SU+ M (C) PUR SE ET (4G2,5+(2×1,5)+(4×0,2))
Part No.	111792
SIEMENS designation*	1BE21

Product version

Datasheet version	01

Use/Application/Properties

Application	• 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 resitance against aggressive coolants and lubricants • Especially for industrial environments in mechanical and system engineering
Properties	• 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) • Industrial and salt water resistant • 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 ETHERNET
Number of conductors/cross-section	(4G2,5+(2×1,5)+(4×0,2))
Number of conductors	10

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Jacket material	PUR
Jacket color	orange similar to RAL 2003
Outer Ø	13.7 mm
Weight	30.4 kg/100 m
Cu-Index	21.5 kg/100 m

Construction Element 1

Element construction	4G2,5
Conductor	CU-wire tin-plated
Conductor category	IEC 60228, Class 6 Superfine strand
Conductor marking	According to system manufacturer
Conductor insulation	PP
Stranding	Conductors twisted without mechanical stress Layer pitch optimised

Construction Element 2

Element construction	(2×1,5)
Conductor	CU-wire tin-plated
Conductor category	DIN EN 60228, Class 6 Superfine strand
Conductor marking	According to system manufacturer
Conductor insulation	PP
Stranding	Conductors stranded in pairs Conductors twisted without mechanical stress Layer pitch optimised
Wrapping	Foil taping
Element shielding	tinned copper wires Braid shield optical cover approx. 85%

Construction Element 3

Element construction	(4×0,2)
Conductor construction	AWG 24
Conductor	CU-wire bare AWG conductor
Conductor marking	According to system manufacturer
Conductor insulation	PP
Stranding	Star quad stranding Conductors twisted without mechanical stress Layer pitch optimised
Wrapping	Foil taping
Element shielding	Aluminium laminate Foil shield tinned copper wires Braid shield optical cover approx. 85%

Overall construction

Overall stranding	Elements stranded together Layer pitch optimised
Overall wrapping	Non-woven material
Inner jacket	Special TPE
Overall shield	Braid shield Tinned copper wires Optical cover approx. 85 %
Jacket characteristics	Flame-retardant Oil resistant Low-adhesion Abrasion resistant Tough Tear resistant Hydrolysis-resistant Microbe resistant Rot resistant Weather resistant Ozone-resistant UV resistant (normal lighting conditions) Service water-resistant Salt water-resistant Coolant-resistant Lubricant-resistant Grease-resistant Petrol-resistant (alcohol-free) Kerosene-resistant Halogen free Silicone free

Technical data

Rated voltage	1000 V
Test voltage type	AC 3000 V
Temperature range moving	-40 °C … +90 °C
Temperature range fixed	-40 °C … +90 °C
Minimum bending radius moving	7.5×D
Minimum bending radius fixed	5×D
Category	Cat.5e
Bending cycles	≥10 Mio
Speed	≤5 m/s
Acceleration	≤50 m/s²
Torsion	± 30°/m

Technical Data Element 1

Element construction	4G2,5
Insulation resistance at 20 °C	≥1000 MΩ×km
Conductor resistance	≤8.21 Ω/km

Technical Data Element 2

Element construction	(2×1,5)
Insulation resistance at 20 °C	1000 MΩ×km
Conductor resistance	≤13.7 Ω/km

Technical Data Element 3

Element construction	(4×0,2)
Insulation resistance 20 °C	1000 MΩ×km
Conductor resistance	≤98 Ω/km
Operating capacitance wire-shield	approx.50 pF/m
Impedance	nom.100 Ω

Certifications/Standards

Certifications	cURus
UL style	AWM 21209
Conformity	CE RoHS REACH
Burning behavior according to	DIN EN 60332-1-2 IEC 60332-1-2 UL VW-1 UL FT1
Oil resistant according to	UL 1581 DIN EN 60811-404 VDE 0472 part 803 A/B HD 22.10
Halogen free according to	IEC 60754-1

General

Note	CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU * SIEMENS article designations are registered trademarks of SIEMENS AG