

Technical data sheet · LÜTZE SUPERFLEX[®] PLUS (C) PUR FEEDBACK

Encoder cables for Siemens and other systems

For highest requirements in drive technology



PUR feedback cables · C-track compatible

Identification	Type	SU+(C)P SE(2×(0,5)+3×(2×0,14))UL 300V GN
	Part-No.	111459
SIEMENS designation*	1BD31	

Use/Application/Characteristics

Application	<ul style="list-style-type: none"> • Incremental encoder cable, connection cable for tachometer 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
Characteristics	<ul style="list-style-type: none"> • 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

28.04.2017 – Subject to technical modification

Part-No. 111459

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Construction

Description	SUPERFLEX (C) PUR FEEDBACK SIEMENS
Number of conductors/cross-section	(2×(0.5)+3×(2×0.14))
Jacket material	PUR
Jacket color	green RAL 6018
Outer Ø	8.7 mm
Outer Ø	0.343 inches
Surface	adhesion-free matt
Weight	12.8 kg/100 m
Weight	86 Lbs/Mft
Cu-Index	6.9 kg/100 m
Cu-Index	46 Lbs/Mft

Element 1

Element construction	2×(0.5)
Conductor	CU-wire bare
Conductor category	IEC 60228, Class 6 Superfinely stranded DIN VDE 0295 class 6
Conductor marking	red black
Conductor insulation	TPE-E
Stranding	Conductors twisted without mechanical stress layer pitch optimised
Element shielding	Spiral shield optical cover approx. 90% Tinned copper wires

Element 2

Element construction	3×(2×0.14)
Conductor	CU-wire bare
Conductor category	IEC 60228, Class 6 Superfinely stranded DIN VDE 0295 class 6
Conductor marking	yellow green red orange brown black

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SYSTEMATIC TECHNOLOGY

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Conductor insulation	TPE-E
Stranding	Conductors stranded in pairs Conductors twisted without mechanical stress layer pitch optimised
Element shielding	Spiral shield optical cover approx. 90% Tinned copper wires

overall construction

Overall stranding	Elements stranded together
Overall wrapping	Non-woven material
Inner jacket	Polyolefin
Overall shield	Braid shield Tinned copper wires optical cover approx. 85%
Jacket characteristics	Flame-retardant Oil resistant grease-resistant petrol-resistant (alcohol-free) kerosene-resistant Silicone-free Halogen free

Technical data

Test voltage type	AC 1000 V
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
Travel distance	≤15 m
Speed	5 m/s
Acceleration	50 m/s ²

Element 1

Element construction	2×(0.5)
Insulation resistance at 20°C	200 MΩ×km

Element 2

Element construction	3×(2×0.14)
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Approvals/Standards

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Approvals	cURus AWM II A/B
UL style	AWM 20236
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
Oil resistant according to	UL 1581 HD 22.10
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



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