

# Technical data sheet · LÜTZE SUPERFLEX<sup>®</sup> PLUS (C) PUR FEEDBACK

## Encoder cables for Siemens and other systems

### For highest requirements in drive technology



PUR feedback cables · C-track compatible

<b>Identification</b>	Type	SU+(C)P SE(4×0,5+4×2×0,38)UL 30V GN
	Part-No.	111456
SIEMENS designation*	1BD21	
<b>Use/Application/Characteristics</b>		
Application	<ul style="list-style-type: none"><li>• Incremental encoder cable, connection cable for tachometer sensor, brake sensor, speed sensor</li><li>• Due to Full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions and 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>	
<b>Construction</b>		

28.04.2017 – Subject to technical modification

Part-No. 111456

USA: LUTZE INC.

13330 South Ridge Drive • Charlotte, NC 28273, USA

Tel. +1 (704) 504-0222 • Fax +1 (704) 504-0223

www.lutze.com • info@lutze.com

United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park

Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU

Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2

www.lutze.com • sales.gb@lutze.co.uk

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

## Encoder cables for Siemens and other systems

### For highest requirements in drive technology

---

Description	SUPERFLEX (C) PUR FEEDBACK SIEMENS
Number of conductors/cross-section	(4×0.5+4×2×0.38)
Jacket material	PUR
Jacket color	green RAL 6018
Outer Ø	9.4 mm
Outer Ø	0.37 inches
Surface	adhesion-free matt
Weight	13.2 kg/100 m
Weight	89 Lbs/Mft
Cu-Index	8.6 kg/100 m
Cu-Index	58 Lbs/Mft

#### Element 1

Element construction	4×0.5
Conductor	CU-wire bare
Conductor category	IEC 60228, Class 6 Superfinely stranded DIN VDE 0295 class 6
Conductor marking	white/blue white/black white/red white/yellow
Conductor insulation	Polyolefin
Stranding	Conductors twisted without mechanical stress layer pitch optimised

#### Element 2

Element construction	4×2×0.38
Conductor	CU-wire bare
Conductor category	IEC 60228, Class 6 Superfinely stranded DIN VDE 0295 class 6
Conductor marking	black brown violet blue yellow green red orange

28.04.2017 – Subject to technical modification

Part-No. 111456

USA: LUTZE INC.

13330 South Ridge Drive • Charlotte, NC 28273, USA

Tel. +1 (704) 504-0222 • Fax +1 (704) 504-0223

www.lutze.com • info@lutze.com

United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park

Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU

Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2

www.lutze.com • sales.gb@lutze.co.uk



SYSTEMATIC TECHNOLOGY

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

## Encoder cables for Siemens and other systems

### For highest requirements in drive technology

Conductor insulation	Polyolefin
Stranding	Conductors stranded in pairs Conductors twisted without mechanical stress layer pitch optimised

#### overall construction

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 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 <sup>2</sup>

#### Element 1

Element construction	4×0.5
Insulation resistance at 20°C	200 MΩ×km

#### Element 2

Element construction	4×2×0.38
----------------------	----------

#### Approvals/Standards

Approvals	cURus AWM II A/B
UL style	AWM 20236

28.04.2017 – Subject to technical modification

Part-No. 111456

USA: LUTZE INC.

13330 South Ridge Drive • Charlotte, NC 28273, USA  
Tel. +1 (704) 504-0222 • Fax +1 (704) 504-0223  
www.lutze.com • info@lutze.com

United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park  
Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU  
Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2  
www.lutze.com • sales.gb@lutze.co.uk

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

## Encoder cables for Siemens and other systems

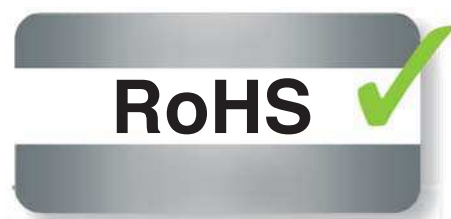
### For highest requirements in drive technology

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



28.04.2017 – Subject to technical modification

Part-No. 111456

USA: LÜTZE INC.

13330 South Ridge Drive • Charlotte, NC 28273, USA

Tel. +1 (704) 504-0222 • Fax +1 (704) 504-0223

www.lutze.com • info@lutze.com

United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park

Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU

Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2

www.lutze.com • sales.gb@lutze.co.uk



SYSTEMATIC TECHNOLOGY