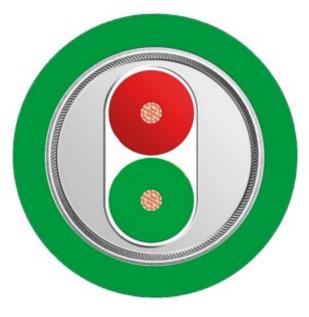
SIEMENS

Data sheet 6XV1830-3EH10

Product type designation

Product description



PROFIBUS FC Trailing Cable

Highly flexible bus cable (2-core), sold by the meter, unassembled PROFIBUS FC Trailing Cable, PROFIBUS trailing cable, max. Acceleration 4 m/QS min. 3 million bending cycles min. Bending radius approx. 120 mm 2-wire shielded Sold by the meter Delivery length max. 1000 m Minimum order 20 m

Suitability for use	Continuous motion control in a cable carrier
Cable designation	02YY (ST) C11Y 1x2x0,65/2,56-150 LI KF 40 FR petrol
Electrical data	
Damping ratio per length	
• at 9.6 kHz / maximum	0.003 dB/m
• at 38.4 kHz / maximum	0.004 dB/m
• at 4 MHz / maximum	0.025 dB/m
• at 16 MHz / maximum	0.049 dB/m
Impedance	
Rated value	150 Ω
● at 9.6 kHz	270 Ω
● at 38.4 kHz	185 Ω
● at 3 MHz 20 MHz	150 Ω
Relative symmetrical tolerance	
 of the characteristic impedance at 9.6 kHz 	10 %
• of the characteristic impedance at 38.4 kHz	10 %

• of the characteristic impedance at 3 MHz 20 MHz	10 %
Loop resistance per length / maximum	133 mΩ/m
Shield resistance per length / maximum	14 Ω/km
Capacity per length / at 1 kHz	28 pF/m
Operating voltage	
● RMS value	80 V

Mechanical data		
Number of electrical cores	2	
Design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires	
Type of electrical connection / FastConnect	Yes	
Outer diameter		
of inner conductor	0.67 mm	
• of the wire insulation	2.56 mm	
• of the inner sheath of the cable	5.4 mm	
• of cable sheath	8 mm	
Symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm	
Material		
• of the wire insulation	polyethylene (PE)	
• of the inner sheath of the cable	PVC	
• of cable sheath	PUR (TPE-U)	
Color		
of the insulation of data wires	red/green	
• of cable sheath	petrol	
Bending radius		
• with single bend / minimum permissible	40 mm	
 with continuous bending 	120 mm	
Number of bending cycles	3000000; Drag chain suitable for 3 million bending cycles at a bending radius of 120 mm (15x D), a speed of 4 m/s and an acceleration of 4 m/s ²	
Tensile load / maximum	100 N	
Weight per length	77 kg/km	

Permitted ambient conditions

Ambient temperature	
 during operation 	-40 +60 °C
during storage	-40 +60 °C
during transport	-40 +60 °C
during installation	-40 +60 °C
• Note	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472

Ambient condition / for operation	Limited segment length (see manual for PROFIBUS networks)
Burning behavior	flame resistant according to IEC 60332-1-2
Class of burning behaviour / according to EN 13501-	Eca
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	resistant
● to water	conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product feature	Pr	od	uct	featu	ire
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• halogen-free

No

• silicon-free

Yes

Standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	Yes
Certificate of suitability	
CE marking	Yes
 RoHS conformity 	Yes
Marine classification association	
 American Bureau of Shipping Europe Ltd. (ABS) 	No
Bureau Veritas (BV)	No
Det Norske Veritas (DNV)	No
 Germanische Lloyd (GL) 	No
 Lloyds Register of Shipping (LRS) 	No
 Nippon Kaiji Kyokai (NK) 	No
 Polski Rejestr Statkow (PRS) 	No

Further Information / Internet Links

Internet-Link

to website: Selector SIMATIC NET
 SELECTION TOOL

SELECTION TOOL

■ to website: Industrial communication

http://www.siemens.com/simatic-net

• to website: Industry Mall https://mall.industry.siemens.com

• to website: Information and Download Center http://www.siemens.com/industry/infocenter

• to website: Image database http://automation.siemens.com/bilddb

• to website: CAx Download Manager http://www.siemens.com/cax

• to website: Industry Online Support

https://support.industry.siemens.com

last modified: 01/09/2019

http://www.siemens.com/snst