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 SIMATIC NET, PB FC TRAILING CABLE, PROFIBUS TRAILING CABLE MAX. ACCELERATION:4M/QS MIN. OF 3 MILL. BENDING CYCLES MIN. BENDING RADIUS: APPROX.120 MM 2-WIRE, SHIELDED, SOLD BY METER MAX. CONSEIGNMENT: 1000 M MIN. ORDERING QUANTITY: 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	10 %
MHz	
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	100 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	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 Cel, 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
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 / genera	l .	
Product property		
• halogen-free	No	
• silicon-free	Yes	
Standards, specifications, approvals		
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 	http://www.siemens.com/snst	
• to website: Industrial communication	http://www.siemens.com/simatic-net	

last modified: 12.03.2015

• to website: Information and Download Center

• to website: Industry Mall

• to website: Image database

• to website: CAx Download Manager

• to website: Industry Online Support

https://mall.industry.siemens.com

http://www.siemens.com/cax

http://automation.siemens.com/bilddb

https://support.industry.siemens.com

http://www.siemens.com/automation/net/catalog