SIEMENS

Data sheet

Suitability for use

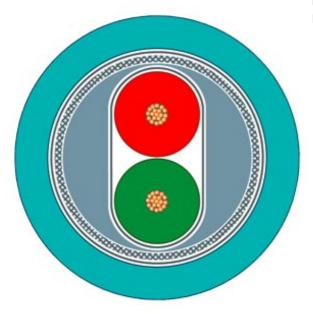
6XV1830-3EH10

Product type designation Product description

PROFIBUS FC Trailing Cable

Continuous motion control in a cable carrier

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



0.003 dB/m 0.004 dB/m
0.004 dB/m
0.025 dB/m
0.049 dB/m
50 Ω
70 Ω
85 Ω
50 Ω
0 %
0 %
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 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
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- 6	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 features, product functions, product components / general		
Product feature		
halogen-free	No	
• silicon-free	Yes	
Standards, specifications, approvals		
UL/ETL listing / 300 V Rating	Yes; c(UL)us / CMX	
UL/ETL style / 600 V Rating	Yes; cRU AWM I A/B 80°C 600V FT2	
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	
• 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	
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