## **SIEMENS**

## Data sheet

Suitability for use

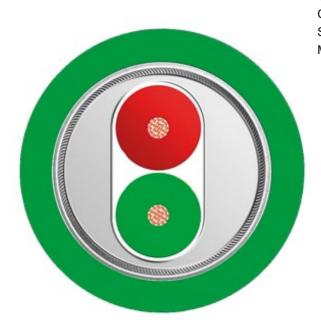
## 6XV1830-3EH10

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 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 THE METER MAX. CONSEIGNMENT: 1000 M MIN. ORDERING QUANTITY: 20 M



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	
<ul> <li>of the characteristic impedance at 9.6 kHz</li> </ul>	10 %
• of the characteristic impedance at 38.4 kHz	10 %

<ul> <li>of the characteristic impedance at 3 MHz 20 MHz</li> </ul>	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	
<ul> <li>of inner conductor</li> </ul>	0.67 mm
<ul> <li>of the wire insulation</li> </ul>	2.56 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	5.4 mm
• of cable sheath	8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
Material	
<ul> <li>of the wire insulation</li> </ul>	PE
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
<ul> <li>of cable sheath</li> </ul>	PUR (TPE-U)
Color	
<ul> <li>of the insulation of data wires</li> </ul>	red/green
• of cable sheath	petrol
Bending radius	
<ul> <li>with single bend / minimum permissible</li> </ul>	40 mm
<ul> <li>with continuous bending</li> </ul>	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 <sup>2</sup>
Tensile load / maximum	100 N
Weight per length	77 kg/km
Permitted ambient conditions	
Ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +60 °C
<ul> <li>during storage</li> </ul>	-40 +60 °C
<ul> <li>during transport</li> </ul>	-40 +60 °C
<ul> <li>during installation</li> </ul>	-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
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	I
Product feature	
<ul> <li>halogen-free</li> </ul>	No
• silicon-free	Yes
Standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMX
UL/ETL style / 600 V Rating	No
Certificate of suitability	
• CE marking	Yes
RoHS conformity	Yes
Marine classification association	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
• Bureau Veritas (BV)	No
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	No
<ul> <li>Germanische Lloyd (GL)</li> </ul>	No
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
<ul> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No
Further Information / Internet Links	
Internet-Link	
<ul> <li>to website: Selector SIMATIC NET SELECTION TOOL</li> </ul>	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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