## 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	
	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		
attenuation factor 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 %	
<ul> <li>of the characteristic impedance at 38.4 kHz</li> </ul>	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	
<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		
of the wire insulation	polyethylene (PE)	
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC	
• of cable sheath	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
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 <sup>2</sup>
tensile load / maximum	100 N
weight per length	77 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +60 °C
<ul> <li>during storage</li> </ul>	-40 +60 °C
during transport	-40 +60 °C
during installation	-40 +60 °C
• note	Electrical properties measured at 20 $^\circ \text{C},$ tests according to DIN 47250 part 4 respectively DIN VDE 0472
ambient condition / for operation	Limited segment length (see manual for PROFIBUS networks)
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	
chemical resistance	
to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	resistant
• to grease	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / gen	
product feature	Ne
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	
EAC approval	Yes
• CE marking	Yes
RoHS conformity	Yes
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	No
<ul> <li>French marine classification society (BV)</li> </ul>	No
Det Norske Veritas (DNV)	No
Germanische Lloyd (GL)	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
reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	WG
• according to IEC 81346-2:2019	WGB
further information / internet links	
internet link	
<ul> <li>internet link</li> <li>to web page: selection aid TIA Selection Tool</li> </ul>	http://www.siemens.com/tia-selection-tool
	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net
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10/30/2021 🖸