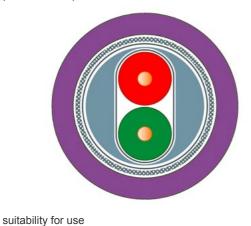
## **SIEMENS**

Data sheet 6XV1830-0JH10

## product type designation

product description



## **PROFIBUS FC Robust Cable**

Special bus cable (2-core), sold by the meter, unassembled

PROFIBUS FC robust bus cable with PUR outer sheath for use in environments exposed to chemicals and mechanical loads, 2-core shielded, Sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.

For use in chemically and mechanically demanding environments

Suitability for use	Tor use in chemically and mechanically demanding environments
cable designation	02YSY (ST) C11Y 1x2x0,64/2,55-150 VI KF 40 FR
electrical data	
attenuation factor per length	
• at 9.6 kHz / maximum	0.0025 dB/m
• at 38.4 kHz / maximum	0.004 dB/m
• at 4 MHz / maximum	0.022 dB/m
• at 16 MHz / maximum	0.042 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	110 mΩ/m
shield resistance per length / maximum	9.5 Ω/km
capacity per length / at 1 kHz	28.5 pF/m
operating voltage	
<ul> <li>RMS value</li> </ul>	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>	0.65 mm
<ul> <li>of the wire insulation</li> </ul>	2.55 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>	polyethylene (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	Violet
bending radius	
<ul><li>with single bend / minimum permissible</li></ul>	75 mm
with multiple bends / minimum permissible	150 mm
tensile load / maximum	100 N
weight per length	71 kg/km
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
during installation	-40 +60 °C
• note	Electrical properties measured at 20 °C, tests according to DIN 47250
	part 4 respectively DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1
class of burning behaviour / according to EN 13501-6	Fca
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	No
certificate of suitability	
EAC approval	Yes
• CE marking	Yes
RoHS conformity	Yes
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	No
French marine classification society (BV)	No
Det Norske Veritas (DNV)	No
Germanische Lloyd (GL)	No
Lloyds Register of Shipping (LRS)	No
<ul> <li>Lioyds Register of Shipping (LRS)</li> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
Polski Rejestr Statkow (PRS)	No
reference code	110
according to IEC 81346-2	WG
<ul> <li>according to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	WGB
	WOD
further information / internet-Links	
Internet-Link	LH-11-11-11-11-11-11-11-11-11-11-11-11-11
to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-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
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
to website: Image database	http://automation.siemens.com/bilddb
<ul><li>to website: CAx-Download-Manager</li></ul>	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com
last modified:	10/30/2021 🗗