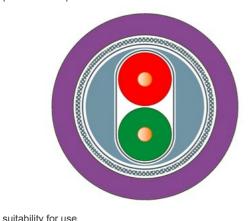
SIEMENS

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.

suitability for use	For use in chemically and mechanically demanding environments
cable designation	02YSY (ST) C11Y 1x2x0,64/2,55-150 VI KF 40 FR
lectrical 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	
 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 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	
RMS value	80 V
nechanical 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	0.65 mm
 of the wire insulation 	2.55 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)

 of the insulation of data wires 	red/green	
of cable sheath	Violet	
bending radius		
 with single bend / minimum permissible 	75 mm	
with multiple bends / minimum permissible	150 mm	
tensile load / maximum	100 N	
weight per length	71 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	
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	
Nippon Kaiji Kyokai (NK)	No	
Polski Rejestr Statkow (PRS)	No	
reference code		
according to IEC 81346-2	WG	
• according to IEC 81346-2:2019	WGB	
further information / internet links		
internet link		
• 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	
to website: Selection guide for cables and connectors	https://sie.aq/2QdlxcP	
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	

last modified: 10/30/2021 🖸