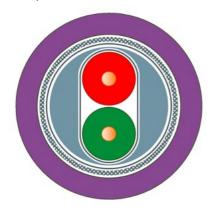
SIEMENS

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 length max. 1000 m Minimum order 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
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	
 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
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 	0.65 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)

color	
 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	140
EAC approval	Yes
CE marking	Yes
RoHS conformity	Yes
Marine classification association	165
	No
American Bureau of Shipping Europe Ltd. (ABS) Franch marine elegation accepts (PV)	
French marine classification society (BV) Det Narska Varitae (DNV)	No No
Det Norske Veritas (DNV) Cormonicato Lloyd (CL)	No No
Germanische Lloyd (GL) Lloyde Register of Shinning (LDS)	No No
Lloyds Register of Shipping (LRS) Ninnen Kojii Kurksi (NK)	No No
Nippon Kaiji Kyokai (NK) Poloki Poisote Statlanu (PPS)	No
Polski Rejestr Statkow (PRS)	No
reference code	luo.
• acc. 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.ag/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
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