SIEMENS

Data sheet

product type designation

product description

6XV1830-3FH10

PROFIBUS FC	Ground Cable
11(01100010	

Special bus cable (2-core) with additional protective jacket, sold by the meter, unassembled

PROFIBUS FC UNDERGROUND Cable, Underground cable 2-core shielded, sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.

suitability for use	Used for buried cables
cable designation	02YSY (ST) CY2Y 1x2x0,64/2,55-150 SW KF 40
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 outer diameter	Yes
 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 	10.8 mm
of cable sheath / note	The cable (diameter 8.0 mm +-0.4 mm) has an additional black outer cover (diameter 10.8 mm +-0.5 mm) as protection against damage if laid in the ground. because of outer diameter > 8 mm: Bus connectors can only be connected after removing the outer cover.
symmetrical tolerance of the outer diameter / of cable sheath	0.5 mm
material	
sheath	0.0 mm

 of the wire insulation 	polyethylene (PE)
 of the inner sheath of the cable 	PVC
 of cable sheath 	PE/PVC; PVC (sheath of the cable), PE (additional outer sheath)
color	
 of the insulation of data wires 	red/green
 of cable sheath 	Black
bending radius	
 with single bend / minimum permissible 	41 mm
 with multiple bends / minimum permissible 	81 mm
tensile load / maximum	100 N
weight per length	117 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	inflammable
class of burning behaviour / according to EN 13501-6	Fca
chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant / Sunlight resistant acc. to UL 444 Sec. 7.12
product features, product functions, product components	/ general
product feature	
halogen-free	No
silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	CE, FCC, IC, cULus
certificate of suitabilityEAC approval	CE, FCC, IC, cULus Yes
certificate of suitability • EAC approval • CE marking	CE, FCC, IC, cULus Yes Yes
certificate of suitability • EAC approval • CE marking • RoHS conformity	CE, FCC, IC, cULus Yes
certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association	CE, FCC, IC, cULus Yes Yes Yes
certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS)	CE, FCC, IC, cULus Yes Yes Yes
certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV)	CE, FCC, IC, cULus Yes Yes Yes No No
certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV)	CE, FCC, IC, cULus Yes Yes Yes
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