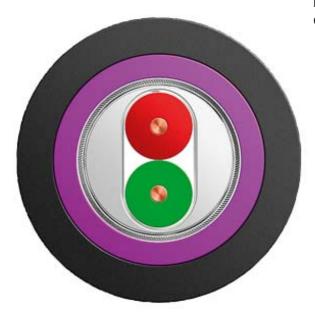
SIEMENS

Data sheet 6XV1830-3FH10

Product type designation

Product description



PROFIBUS FC Ground Cable

Special bus cable (2-core) with additional protective jacket, sold by the meter, unassembled SIMATIC NET, PROFIBUS FC UNDERGROUND CABLE, UNDERGROUND LAYING CABLE 2-WIRE, SHIELDED, SOLD BY METER MAX. CONSIGNMENT: 1000M MIN. ORDERING 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	
Damping ratio 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	100 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	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	
 of the wire insulation 	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

Permitted 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
Burning behavior	inflammable
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 hours / 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 properties, functions, 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, Ex approval only together with 6GT2801-4AB10
CE marking	Yes
 RoHS conformity 	Yes
Marine classification association	
 American Bureau of Shipping Europe Ltd. (ABS) 	No
Bureau Veritas (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

Further Information / Internet Links

Internet-	l ink
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to website: Selector SIMATIC NET
 SELECTION TOOL
 to website: Industrial communication
 to website: Industry Mall
 to website: Information and Download Center
 to website: Image database
 to website: CAx Download Manager
 to website: Industry Online Support
 http://www.siemens.com/simatic-net
 https://mall.industry.siemens.com
 http://www.siemens.com/industry/infocenter
 http://automation.siemens.com/bilddb
 http://www.siemens.com/cax
 https://support.industry.siemens.com

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