SIEMENS

Data sheet

6XV1830-3FH10

product type designation	PROFIBUS FC Ground Cable		
product description	Special bus cable (2-core) with additional protective jacket, sold by the meter,		
	unassembled PROFIBUS FC UNDERGROUND Cable, Underground cable 2-core shielded, so 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	470.0		
• 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	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			

 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 / ger	neral
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
 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 website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax
to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible

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General Product App	roval			
Manufacturer Declara- tion	CE EG-Konf.	Declaration of Con- formity	UK CA	RCM
other	Environment			
Confirmation	Confirmation			
<u>Confirmation</u>	<u>Confirmation</u>			

last modified:

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