SIEMENS

Data sheet

6XV1830-0EH10

product type designation	PROFIBUS FC Standard Cable GP	
product description	Standard bus cable (2-core), sold by the meter, unassembled	
	PROFIBUS FC Standard Cable GP, bus cable 2-wire, shielded, special configuration for quick assembly, Delivery unit: max. 1000 m, minimum order quantity 20 m sold by the meter	
suitability for use	Standard cable specially designed for fast, permanent installation	
cable designation	02YSY (ST) CY 1x2x0,64/2,55-150 VI KF 40 FR	
ectrical 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	100 V	
echanical 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	
puter 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	
	PVC	



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of the insulation of data wires	red/green
of cable sheath	Violet
bending radius	07.5
with single bend / minimum permissible	37.5 mm
with multiple bends / minimum permissible	75 mm
tensile load / maximum	100 N
weight per length	78 kg/km
ambient conditions	
ambient temperature	40 175 °C
during operation	-40 +75 °C
during storage	-40 +75 °C -40 +75 °C
during transport	
during installation	-40 +75 °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 60332-3-24 (Category C) and UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
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
product features, product functions, product components / get	neral
product feature	
halogen-free	No
• silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / (ETL)us CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
certificate of suitability	
EAC approval	Yes
CE marking	Yes
UL approval	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.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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