SIEMENS

Data sheet

6XV1830-1EN50

product type designation	PROFIBUS FC Standard Cable GP
product description	Standard bus cable (2-core), spool box, unassembled
	PROFIBUS FC Standard, bus cable 2-wire, shielded, special configuration for Quick assembly 50 m in SPOOL box .
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
wire length	50 m
lectrical 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
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
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
·	
	polyethylene (PE)
material	polyethylene (PE) PVC

color	
color	****
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	80 kg/km
ambient conditions	
ambient temperature	
 during operation 	-40 +75 °C
 during storage 	-40 +75 °C
 during transport 	-40 +75 °C
 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 / gen	eral
product feature	
halogen-free	No
silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMG / CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes
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: Information and Download Center • to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
-	
• to website: Image database	http://automation.siemens.com/bilddb
	http://www.ajamana.aam/aay
 to website: CAx-Download-Manager to website: Industry Online Support 	http://www.siemens.com/cax https://support.industry.siemens.com

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