## SIEMENS

## Data sheet

## 6XV1830-0EN20

product type designation	PROFIBUS FC Standard Cable GP
product description	Standard bus cable (2 wires), preferred length, not assembled
	PROFIBUS FC Standard, bus cable 2-wire, shielded, special configuration for Quick assembly 20 m.
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	20 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 %
<ul> <li>of the characteristic impedance at 38.4 kHz</li> </ul>	10 %
<ul> <li>of the characteristic impedance at 3 MHz 20 MHz</li> </ul>	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
	20.5 pr/m
operating voltage	400.1/
RMS value nechanical data	100 V
number of electrical cores	2
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated
have affected energy in 15, 10, 11	copper wires
type of electrical connection / FastConnect	Yes
outer diameter	0.05
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)
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
<ul> <li>of cable sheath</li> </ul>	PVC

color	
of the insulation of data wires	red/green
<ul> <li>of the institution of data wires</li> <li>of cable sheath</li> </ul>	Violet
	Vibiet
bending radius	07.5 mm
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	
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 / ger	neral
product feature	
<ul> <li>halogen-free</li> </ul>	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	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul> <li>French marine classification society (BV)</li> </ul>	No
Det Norske Veritas (DNV)	No
Germanische Lloyd (GL)	No
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	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	
<ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>	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
······································	

last modified:

10/30/2021 🖸