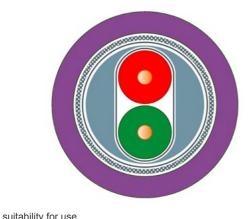
# **SIEMENS**

Data sheet 6XV1830-0ET20

## product type designation

product description



### PROFIBUS FC Standard Cable GP

Standard bus cable (2 wires), preferred length, not assembled

PROFIBUS FC Standard, bus cable 2-wire, shielded, special configuration for Quick assembly 200 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	200 m
lectrical data	
attenuation factor per length	
<ul><li>at 9.6 kHz / maximum</li></ul>	0.0025 dB/m
<ul><li>at 38.4 kHz / maximum</li></ul>	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	
<ul> <li>of the characteristic impedance at 9.6 kHz</li> </ul>	10 %
<ul> <li>of the characteristic impedance at 38.4 kHz</li> </ul>	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	
<ul> <li>of inner conductor</li> </ul>	0.65 mm
<ul> <li>of the wire insulation</li> </ul>	2.55 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	5.4 mm
of cable sheath	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
material	
<ul> <li>of the wire insulation</li> </ul>	polyethylene (PE)
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
of cable sheath	PVC

color	
of the insulation of data wires	red/green
of cable sheath	Violet
bending radius	
<ul><li>with single bend / minimum permissible</li></ul>	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	
<ul> <li>during operation</li> </ul>	-40 +75 °C
during storage	-40 +75 °C
<ul> <li>during transport</li> </ul>	-40 +75 °C
<ul> <li>during installation</li> </ul>	-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	
• 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	130, 51.0307.11.11.21.02.03.03.11.2
EAC approval	Yes
CE marking	Yes
UL approval	Yes
RoHS conformity	Yes
Marine classification association	100
American Bureau of Shipping Europe Ltd. (ABS)	No
French marine classification society (BV)	No
Det Norske Veritas (DNV)	
• • •	No No
<ul><li>Germanische Lloyd (GL)</li><li>Lloyds Register of Shipping (LRS)</li></ul>	No No
, ,	
Nippon Kaiji Kyokai (NK)     Poloki Rejects Statkov (RRS)	No No
Polski Rejestr Statkow (PRS)  reference code.	No
reference code	WC
• according to IEC 81346-2	WG
according to IEC 81346-2:2019	WGB
standards, specifications, approvals / Environmental Product I	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	0.92 kg
<ul> <li>during manufacturing</li> </ul>	0.8 kg
during operation	0.02 kg
after end of life	0.1 kg
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
<ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>	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

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#### Approvals / Certificates

**General Product Approval** 



Manufacturer Declaration



Declaration of Conformity



China RoHS

**General Product Approval** 

Environment

Fire safety / Physical security





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6/27/2025

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