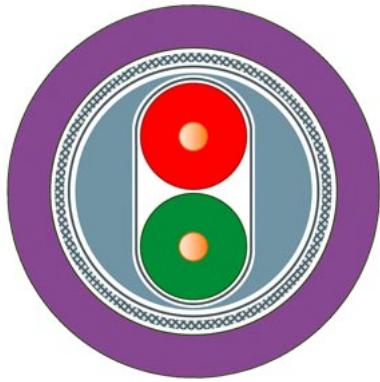


Data sheet

6XV1830-0EN20

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 20 m.

Technical Product Detail Page

<https://i.siemens.com/1P6XV1830-0EN20>

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

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

- 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

mechanical 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

material

- of the wire insulation polyethylene (PE)

• of the inner sheath of the cable	PVC
• of cable sheath	PVC
color	
• of the insulation of data wires	red/green
• of cable sheath	Violet
bending radius	
• 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
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 / general	
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; cRUs 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
• resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
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 Statków (PRS)	No
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	0.92 kg
• during manufacturing	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
• 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
- to website: CAx-Download-Manager
- to website: Industry Online Support

<https://www.automation.siemens.com/bilddb>
<https://www.siemens.com/cax>
<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

other

Environment

[Fire safety / Physical security](#)



[Miscellaneous](#)



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