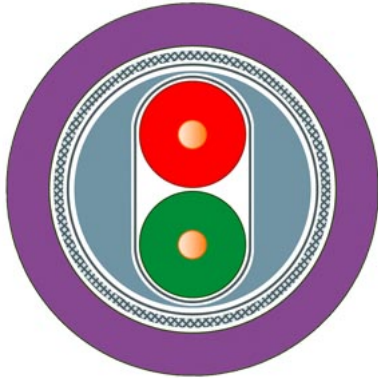


product type designation

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 500 m.

Technical Product Detail Page

<https://l.siemens.com/1P6XV1830-0ET50>

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

500 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
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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)
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• of the inner sheath of the cable • of cable sheath	PVC PVC
color • of the insulation of data wires • of cable sheath	red/green Violet
bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	37.5 mm 75 mm
tensile load / maximum	100 N
weight per length	78 kg/km
ambient conditions	
ambient temperature • during operation • during storage • during transport • during installation	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -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 • to grease • to water	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature • halogen-free • silicon-free	No 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 • CE marking • UL approval • RoHS conformity	Yes Yes Yes Yes
• resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS)	No No No No No No No
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq] • total • during manufacturing • during operation • after end of life	0.92 kg 0.8 kg 0.02 kg 0.1 kg
further information / internet links	
internet link • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud 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

Environment

[Fire safety / Physical security](#)



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1/12/2026