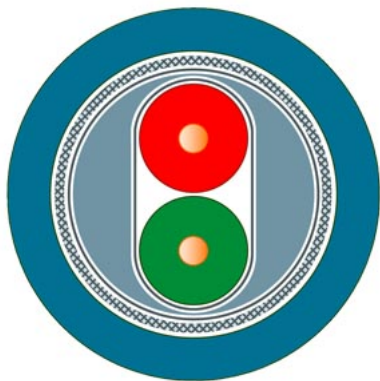


product type designation

product description



PROFIBUS FC Standard Cable IS GP

Standard bus cable for fast installation, sold by the meter, unassembled

PROFIBUS FC Standard Cable IS GP, bus cable 2-wire, shielded, special configuration for quick assembly, Delivery unit: max. 1000 m, minimum order quantity 20 m sold by the meter

Technical Product Detail Page

<https://i.siemens.com/1P6XV1831-2A>

suitability for use

Used for intrinsically safe distributed I/O systems for permanent installation

cable designation

02YSY (ST) CY 1x2x0,64/2,55 BL KF40 FR

wire length

sold by the meter

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

insulation resistance coefficient

16000 GΩ·m

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

core diameter

• of AWG22 insulated conductor	0.64 mm
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outer diameter

• of inner conductor	0.64 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 <ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	polyethylene (PE) PVC PVC
color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green blue
bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	37.5 mm 75 mm
tensile load / maximum	100 N
weight per length	80 kg/km
ambient conditions	
ambient temperature <ul style="list-style-type: none"> • 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)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • halogen-free • silicon-free 	No Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; CMG / CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes
certificate of suitability <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	Yes Yes Yes
<ul style="list-style-type: none"> • resistance to air pollution / conformity according to ANSI/ISA-71.04 	Yes; G3
Marine classification association <ul style="list-style-type: none"> • 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] <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool 	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud

- to web page: SiePortal
- to website: Image database
- to website: CAX-Download-Manager
- to website: Industry Online Support

<https://sieportal.siemens.com/>
<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](#)

[Environmental Confirmations](#)



last modified:

12/20/2025