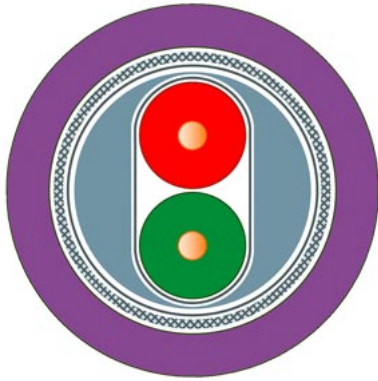


product type designation

product description



PROFIBUS FC FRNC Cable GP

flame-retardant and halogen-free bus cable acc. to IEC 60754-1/2 (2-core), sold by the meter, unassembled

PROFIBUS FC FRNC Cable GP, flame-retardant bus cable and halogen-free bus cable with copolymer sheath, FRNC sold by the meter, delivery unit max. 1000 m, minimum order quantity 20 m .

suitability for use

Halogen-free cable, suitable for use in buildings

cable designation

02YSH (ST) CH 1x2x0,64/2,55-150 VI KF 25 FRNC FC

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)
• of the inner sheath of the cable	FRNC
• of cable sheath	FRNC

color

<ul style="list-style-type: none"> of the insulation of data wires of cable sheath 	<p>red/green</p> <p>Violet</p>
bending radius	
<ul style="list-style-type: none"> with single bend / minimum permissible with multiple bends / minimum permissible 	<p>60 mm</p> <p>80 mm</p>
tensile load / maximum	100 N
weight per length	72 kg/km

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> during operation during storage during transport during installation note 	<p>-25 ... +80 °C</p> <p>-25 ... +80 °C</p> <p>-25 ... +80 °C</p> <p>-25 ... +80 °C</p> <p>Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472</p>
fire behavior	flame resistant according to IEC 60332-3-24 (Category C), IEC 60332-3-22 (Category A), EN 50267-2-1/2, IEC 61034
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 	<p>oil-resistant according to IEC 60811-401</p> <p>Conditional resistance</p> <p>conditional resistance</p>
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 low-emission according to IEC 61034-2 	<p>Yes; halogen-free according to EN 60754-1-2</p> <p>Yes</p> <p>Yes</p>

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)us, CM / 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 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
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) 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
reference code	
<ul style="list-style-type: none"> according to IEC 81346-2 according to IEC 81346-2:2019 	<p>WG</p> <p>WGB</p>

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 to website: Industrial communication to web page: SiePortal to website: Image database to website: CAx-Download-Manager to website: Industry Online Support 	<p>https://support.industry.siemens.com/cs/ww/en/view/109766358</p> <p>https://www.siemens.com/tstcloud</p> <p>https://www.siemens.com/simatic-net</p> <p>https://sieportal.siemens.com/</p> <p>https://www.automation.siemens.com/bilddb</p> <p>https://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>

security information

security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and
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networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert.> (V4.7)

Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



Environment

[Confirmation](#)

last modified:

8/8/2024 