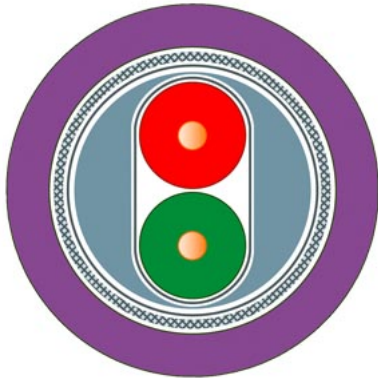


### product type designation

product description



### PROFIBUS FC FRNC Cable GP

Flame retardant, halogen-free bus cable (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

<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	FRNC
color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	red/green Violet
bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	60 mm 80 mm
tensile load / maximum	100 N
weight per length	72 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> <li>• note</li> </ul>	-25 ... +80 °C -25 ... +80 °C -25 ... +80 °C -25 ... +80 °C 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), 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"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> <li>• low-emission according to IEC 61034-2</li> </ul>	Yes; halogen-free according to EN 50267-2-1/2 Yes Yes
<b>standards, specifications, approvals</b>	
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"> <li>• EAC approval</li> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes Yes
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No No No No No No No
reference code	
<ul style="list-style-type: none"> <li>• according to IEC 81346-2</li> <li>• according to IEC 81346-2:2019</li> </ul>	WG WGB
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Selection guide for cables and connectors</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a>  <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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