

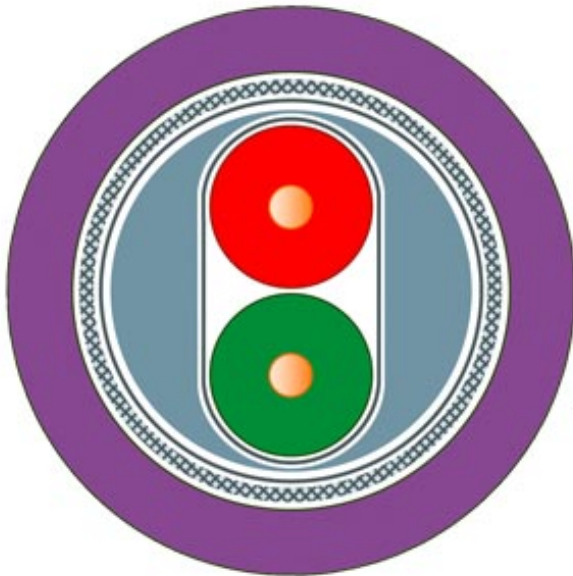
product type designation

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 length max. 1000 m, Minimum order 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

damping ratio per length	
<ul style="list-style-type: none"> at 9.6 kHz / maximum at 38.4 kHz / maximum at 4 MHz / maximum at 16 MHz / maximum 	<p>0.0025 dB/m</p> <p>0.004 dB/m</p> <p>0.022 dB/m</p> <p>0.042 dB/m</p>
impedance	
<ul style="list-style-type: none"> rated value at 9.6 kHz at 38.4 kHz at 3 MHz ... 20 MHz 	<p>150 Ω</p> <p>270 Ω</p> <p>185 Ω</p> <p>150 Ω</p>
relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 9.6 kHz of the characteristic impedance at 38.4 kHz 	<p>10 %</p> <p>10 %</p>

<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • of inner conductor 	0.65 mm
<ul style="list-style-type: none"> • of the wire insulation 	2.55 mm
<ul style="list-style-type: none"> • of the inner sheath of the cable 	5.4 mm
<ul style="list-style-type: none"> • 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 	polyethylene (PE)
<ul style="list-style-type: none"> • of the inner sheath of the cable 	FRNC
<ul style="list-style-type: none"> • of cable sheath 	FRNC
color	
<ul style="list-style-type: none"> • of the insulation of data wires 	red/green
<ul style="list-style-type: none"> • of cable sheath 	Violet
bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible 	60 mm
<ul style="list-style-type: none"> • with multiple bends / minimum permissible 	80 mm
tensile load / maximum	100 N
weight per length	72 kg/km

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +80 °C
<ul style="list-style-type: none"> • during storage 	-25 ... +80 °C
<ul style="list-style-type: none"> • during transport 	-25 ... +80 °C
<ul style="list-style-type: none"> • during installation 	-25 ... +80 °C
<ul style="list-style-type: none"> • note 	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
burning 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 	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 	Yes	Yes

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 	Yes	Yes
Marine classification association		
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	No	No

further information / internet-Links

Internet-Link		
<ul style="list-style-type: none"> • to website: Selector TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx Download Manager • to website: Industry Online Support 	http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com	

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