

Product type designation

Product description

PROFIBUS FC Flexible Cable

Flexible bus cable (2-core), sold by the meter, unassembled SIMATIC NET, PB FC FLEXIBLE CABLE GP, 2-WIRE, SHIELDED, SPEC. DESIGN FOR RAPID INSTALL. MAXIMAL LENGTH: 1000 M MIN. ORDERING QUANTITY: 20 M SOLD BY THE METER



Suitability for use	For occasionally moved machine parts
Cable designation	02YH (ST) C11Y 1x2x0,65/2,56-150 LI KF40 FRNC FC VI
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>0.003 dB/m</p> <p>0.004 dB/m</p> <p>0.025 dB/m</p> <p>0.049 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 • of the characteristic impedance at 3 MHz ... 20 MHz 	<p>10 %</p> <p>10 %</p> <p>10 %</p>
Loop resistance per length / maximum	133 mΩ/m
Shield resistance per length / maximum	15 Ω/km
Insulation resistance coefficient	16000 GΩ·m
Capacity per length / at 1 kHz	28 pF/m
Operating voltage	

- RMS value

100 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 • of the wire insulation • of the inner sheath of the cable • of cable sheath 	<p>0.67 mm</p> <p>2.56 mm</p> <p>5.4 mm</p> <p>8 mm</p>
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 	<p>PE</p> <p>FRNC</p> <p>PUR (TPE-U)</p>
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>40 mm</p> <p>120 mm</p>
Tensile load / maximum	100 N
Weight per length	70 kg/km

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	<p>-20 ... +60 °C</p> <p>-40 ... +60 °C</p> <p>-40 ... +60 °C</p> <p>-40 ... +60 °C</p> <p>electrical properties measured at 20 Cel, tests according to DIN 47250 part 4 respectively DIN VDE 0472</p>
Ambient condition / for operation	Limited segment length (see manual for PROFIBUS networks)
Burning behavior	flame resistant according to IEC 60332-1-2
Chemical resistance	
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	<p>oil resistant according to IEC 60811-2-1 (7x24h/90°C)</p> <p>Resistant</p> <p>Conditional resistance</p>
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property	
• halogen-free	Yes
• silicon-free	Yes

Standards, specifications, approvals

Certificate of suitability	
• CE marking	Yes
• RoHS conformity	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No

Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/automation/net/catalog
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

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