

Product type designation

Product description

PROFIBUS FC Standard Cable GP

Standard bus cable (2-core), spool box, unassembled
SIMATIC NET, PB FC STANDARD, BUS CABLE 2-WIRE,
SHIELDED, SPEC. DESIGN FOR RAPID INSTALL. 100 M IN
SPOOL BOX



Suitability for use	Standard cable specially designed for fast, permanent installation
Cable designation	02YSY (ST) CY 1x2x0,64/2,55-150 VI KF 40 FR
Cable length	100 m

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 	0.0025 dB/m 0.004 dB/m 0.022 dB/m 0.042 dB/m
Impedance	
<ul style="list-style-type: none"> • Rated value • at 9.6 kHz • at 38.4 kHz • at 3 MHz ... 20 MHz 	150 Ω 270 Ω 185 Ω 150 Ω
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 	10 % 10 % 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

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>0.65 mm</p> <p>2.55 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>PVC</p> <p>PVC</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>37.5 mm</p> <p>75 mm</p>
Tensile load / maximum	100 N
Weight per length	80 kg/km

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	<p>-40 ... +75 °C</p> <p>-40 ... +75 °C</p> <p>-40 ... +75 °C</p> <p>-40 ... +75 °C</p> <p>electrical properties measured at 20 Cel, tests according to DIN 47250 part 4 respectively DIN VDE 0472</p>
Burning behavior	flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4)
Chemical resistance	
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	<p>oil resistant according to IEC 60811-2-1 (4 hours / 70°C)</p> <p>Conditional resistance</p> <p>Conditional resistance</p>
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property	
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- halogen-free
- silicon-free

No
Yes

Standards, specifications, approvals

Certificate of suitability

- CE marking
- UL approval
- RoHS conformity

Yes
Yes
Yes

Marine classification association

- 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
No
No
No
No
No

Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET 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/automation/net/catalog>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<https://support.industry.siemens.com>

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