

Product type designation

Product description

PROFIBUS FC Robust Cable

Special bus cable (2-core), sold by the meter, unassembled PROFIBUS FC robust bus cable with PUR outer sheath for use in environments exposed to chemicals and mechanical loads, 2-core shielded, Sold by the meter Delivery length max. 1000 m Minimum order 20 m



Suitability for use

For use in chemically and mechanically demanding environments

Cable designation

02YSY (ST) C11Y 1x2x0,64/2,55-150 VI KF 40 FR

Electrical data

Damping ratio 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 % |

<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 • of the wire insulation • of the inner sheath of the cable • of cable sheath 	0.65 mm 2.55 mm 5.4 mm 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 • of the inner sheath of the cable • of cable sheath 	polyethylene (PE) PVC PUR (TPE-U)
Color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green Violet
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	75 mm 150 mm
Tensile load / maximum	100 N
Weight per length	71 kg/km

Ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-40 ... +60 °C -40 ... +60 °C -40 ... +60 °C -40 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Burning behavior	flame resistant according to IEC 60332-1
Class of burning behaviour / according to EN 13501-6	Fca

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 features, product functions, product components / general

Product feature		
<ul style="list-style-type: none"> • halogen-free • silicon-free 	No	Yes

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMX
UL/ETL style / 600 V Rating	No
Certificate of suitability	
<ul style="list-style-type: none"> • 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 No No No No No

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • 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 	<p>http://www.siemens.com/snst</p> <p>http://www.siemens.com/simatic-net</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p> <p>http://automation.siemens.com/bilddb</p> <p>http://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>

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