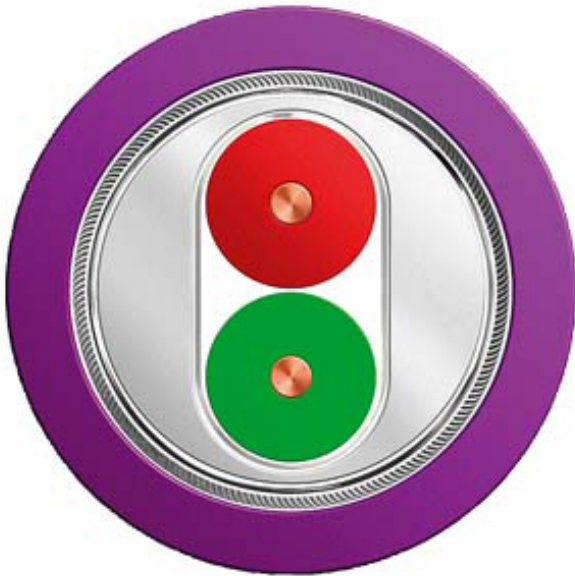


### Product type designation

Product description

### PROFIBUS FC Robust Cable

Special bus cable (2-core), sold by the meter, unassembled SIMATIC NET, PROFIBUS FC ROBUST BUS CABLE WITH PUR-SHEATH FOR APPLICATION IN CHEMICALLY AND MECHANICALLY HAZARDOUS ENVIRONMENT, SOLD BY THE METER MAX. CONSIGNMENT: 1000 M MIN. ORDERING QUANTITY: 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 $\Omega$
• at 9.6 kHz	270 $\Omega$
• at 38.4 kHz	185 $\Omega$
• at 3 MHz ... 20 MHz	150 $\Omega$

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"> <li>• of the characteristic impedance at 3 MHz ... 20 MHz</li> </ul>	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"> <li>• RMS value</li> </ul>	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"> <li>• of inner conductor</li> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	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"> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	PE PVC PUR (TPE-U)
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>	75 mm 150 mm
Tensile load / maximum	100 N
Weight per length	71 kg/km

### Permitted ambient conditions

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>	-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
Chemical resistance <ul style="list-style-type: none"> <li>• to mineral oil</li> </ul>	oil resistant according to IEC 60811-2-1 (7x24h/90°C)

<ul style="list-style-type: none"> <li>• to grease</li> <li>• to water</li> </ul>	<p>resistant</p> <p>conditional resistance</p>
Radiological resistance / to UV radiation	resistant

### Product properties, functions, components / general

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

### 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"> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	<p>Yes</p> <p>Yes</p>
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• Bureau Veritas (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>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>

### Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET 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: Image database</li> <li>• to website: CAx Download Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a></p> <p><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>

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