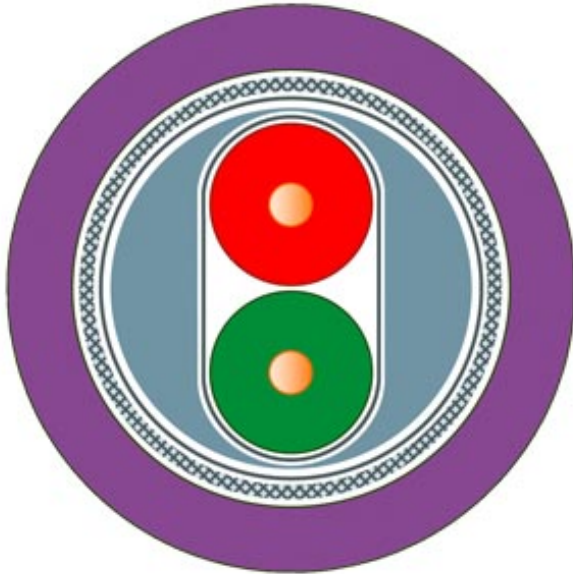


### product type designation

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

### ambient conditions

ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>during installation</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>note</li> </ul>	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"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	oil resistant according to IEC 60811-2-1 (7x24h/90°C) resistant conditional resistance
radiological resistance / to UV radiation	resistant

### product features, product functions, product components / general

product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> </ul>	No
<ul style="list-style-type: none"> <li>• silicon-free</li> </ul>	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"> <li>• EAC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• RoHS conformity</li> </ul>	Yes
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Bureau Veritas (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Germanische Lloyd (GL)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No

### further information / internet-Links

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

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