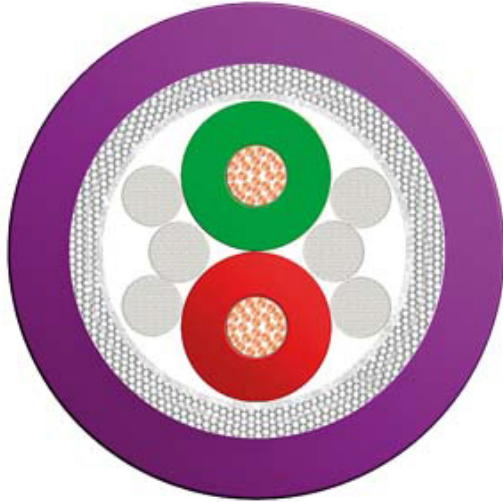


### Product type designation

Product description

### PROFIBUS Torsion Cable

Highly flexible bus cable (2-core), sold by the meter, unassembled SIMATIC NET, PROFIBUS TORSION CABLE, FOR USE IN HIGHLY FLEXIBLE APPLICATIONS(TORSION), MAX. LENGTH ORDERED: 1000M, MIN. LENGTH ORDERED: 20 M SOLD BY THE METER



Suitability for use	For use in moving machine components
Cable designation	02Y (ST) C 11Y 1x2x0,8/2,56-150 LI FR VI
<b>Electrical data</b>	
Damping ratio per length	
<ul style="list-style-type: none"> <li>• at 9.6 kHz / maximum</li> <li>• at 38.4 kHz / maximum</li> <li>• at 4 MHz / maximum</li> <li>• at 16 MHz / maximum</li> </ul>	<p>0.0025 dB/m</p> <p>0.003 dB/m</p> <p>0.025 dB/m</p> <p>0.049 dB/m</p>
Impedance	
<ul style="list-style-type: none"> <li>• Rated value</li> <li>• at 9.6 kHz</li> <li>• at 38.4 kHz</li> <li>• at 3 MHz ... 20 MHz</li> </ul>	<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"> <li>• of the characteristic impedance at 9.6 kHz</li> <li>• of the characteristic impedance at 38.4 kHz</li> <li>• of the characteristic impedance at 3 MHz ... 20 MHz</li> </ul>	<p>10 %</p> <p>10 %</p> <p>10 %</p>
Loop resistance per length / maximum	98 mΩ/m
Shield resistance per length / maximum	14 Ω/km
Insulation resistance coefficient	16000 GΩ·m
Capacity per length / at 1 kHz	29 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	No
Outer diameter	
<ul style="list-style-type: none"> <li>• of inner conductor</li> </ul>	0.8 mm
<ul style="list-style-type: none"> <li>• of the wire insulation</li> </ul>	2.56 mm
<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> </ul>	6 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>	PE
<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>	30 mm
<ul style="list-style-type: none"> <li>• with continuous bending</li> </ul>	60 mm
Number of bending cycles	not suitable for garland usage
Number of torsion cycles / with torsion by $\pm 180^\circ$ on 1 m cable length	5000000
Tensile load / maximum	100 N
Weight per length	65 kg/km

### Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +75 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-25 ... +75 °C
<ul style="list-style-type: none"> <li>• Note</li> </ul>	electrical properties measured at 20 Cel, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Burning behavior	flame resistant according to IEC 60332-1-2
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> </ul>	Resistant
<ul style="list-style-type: none"> <li>• to water</li> </ul>	Conditional resistance
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	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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