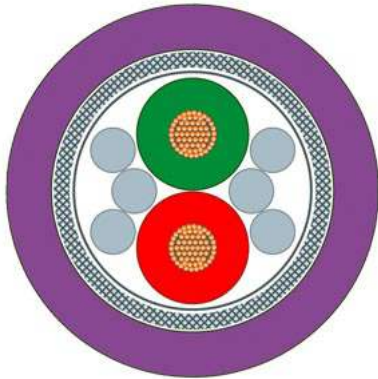


### product type designation

product description



### PROFIBUS Torsion Cable

Highly flexible bus cable (2-core), sold by the meter, unassembled

PROFIBUS torsion cable, for use in highly flexible applications (torsion)  
Delivery unit: max. 1000 m, minimum order quantity 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

### electrical data

attenuation factor per length

• at 9.6 kHz / maximum	0.0025 dB/m
• at 38.4 kHz / maximum	0.003 dB/m
• at 4 MHz / maximum	0.025 dB/m
• at 16 MHz / maximum	0.049 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 %
• of the characteristic impedance at 3 MHz ... 20 MHz	10 %

loop resistance per length / maximum

98 m $\Omega$ /m

shield resistance per length / maximum

14  $\Omega$ /km

insulation resistance coefficient

16000 G $\Omega$ ·m

capacity per length / at 1 kHz

29 pF/m

operating voltage

• RMS value	80 V
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### mechanical data

number of electrical cores

2

design of the shield

Overlapped aluminum-clad foil, sheathed in a braided screen of tinned copper wires

type of electrical connection / FastConnect

No

outer diameter

• of inner conductor	0.8 mm
• of the wire insulation	2.56 mm
• of the inner sheath of the cable	6 mm
• of cable sheath	8 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.4 mm

material

• of the wire insulation	polyethylene (PE)
• of cable sheath	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 continuous bending</li> </ul>	30 mm 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
<b>ambient conditions</b>	
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>	-25 ... +75 °C -40 ... +80 °C -40 ... +80 °C -25 ... +75 °C Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
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
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>halogen-free</li> <li>silicon-free</li> </ul>	Yes Yes
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; CMX
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul style="list-style-type: none"> <li>EAC approval</li> <li>CE marking</li> <li>RoHS conformity</li> </ul>	Yes Yes Yes
Marine classification association	
<ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>French marine classification society (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>	No No No No No No No
reference code	
<ul style="list-style-type: none"> <li>according to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	WG WGB
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>to web page: selection aid TIA 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: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a>  <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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