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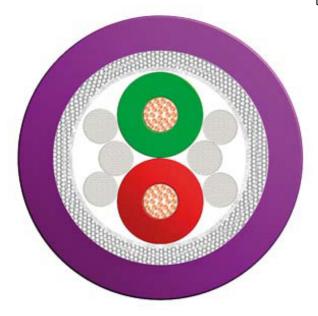
Data sheet

6XV1830-0PH10

Product type designation Product description

PROFIBUS Torsion Cable

Highly flexible bus cable (2-core), sold by the meter, unassembled PROFIBUS torsion cable, to use in highly flexible applications (torsion) Delivery unit: max. 1000 m, minimum order 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	
Damping ratio per length	

Damping ratio 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 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 %

• of the characteristic impedance at 3 MHz 20 MHz	10 %
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 	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	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	0.4 mm
cable sheath	
Material	
 of the wire insulation 	PE
 of cable sheath 	PUR (TPE-U)
Color	
 of the insulation of data wires 	red/green
• of cable sheath	Violet
Bending radius	
 with single bend / minimum permissible 	30 mm
 with continuous bending 	60 mm
Number of bending cycles	Not suitable for garland usage
Number of torsion cycles / with torsion by \pm 180° on 1	500000
m cable length	
Tensile load / maximum	100 N
Weight per length	65 kg/km
Permitted ambient conditions	
Ambient temperature	

Ambient temperature	
• during operation	-25 +75 °C
• during storage	-40 +80 °C
• during transport	-40 +80 °C
 during installation 	-25 +75 °C
Note	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472

Burning behavior	flame resistant according to IEC 60332-1-2
Class of burning behaviour / according to EN 13501- 6	Fca
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	resistant
• to water	conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general	
Product feature	
 halogen-free 	Yes
• silicon-free	Yes

Standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; CMX
UL/ETL style / 600 V Rating	No
Certificate of suitability	
• CE marking	Yes
RoHS conformity	Yes
Marine classification association	
 American Bureau of Shipping Europe Ltd. 	No
(ABS)	
 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

 to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
SELECTION TOOL	
 to website: Industrial communication 	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
 to website: Image database 	http://automation.siemens.com/bilddb
 to website: CAx Download Manager 	http://www.siemens.com/cax
 to website: Industry Online Support 	https://support.industry.siemens.com
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