SIEMENS

Data sheet

product type designation

product description

6XV1830-0PH10

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	
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 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 cable sheath	0.4 mm
material	
 of the wire insulation 	polyethylene (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 single bend / minimum permissible 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 m	5000000
cable length	500000
tensile load / maximum	100 N
weight per length	65 kg/km
ambient conditions	
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
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
	ail registerst according to IEC (00011.0.1.(7:/04//00°C)
• 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 features, product functions, product components	; / general
product feature	
 halogen-free 	Yes
silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; CMX
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating	Yes; CMX No
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability	No
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval	No Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking	No Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity	No Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association	No Yes Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS)	No Yes Yes No
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV)	No Yes Yes No No
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