SIEMENS

Data sheet 6XV1870-2D

Product type designation

Product description



IE FC TP Trailing Cable GP 2 x 2 (Type C)

Highly flexible bus cable (4-core), sold by the meter, unassembled Industrial Ethernet FC TP Trailing cable GP 2x2 (PROFINET Type C), TP installation cable for Festooning, 4-core, CAT. 5, Sold by the meter (3 million bending cycles), delivery unit max. 1000 m, Minimum order 20 m

Suitability for use	Continuous motion control in a cable carrier
Cable designation	2YY (ST) CY 2x2x0,75/1,5-100 LI GN SF/UTP
Electrical data	
Damping ratio per length	
• at 10 MHz / maximum	0.063 dB/m
• at 100 MHz / maximum	0.213 dB/m
Impedance	
● at 1 MHz 100 MHz	100 Ω
Relative symmetrical tolerance	
of the characteristic impedance at 1 MHz	5 %
100 MHz	
Near-end crosstalk per length	
● at 1 MHz 100 MHz	0.5 dB/m
Transfer impedance per length / at 10 MHz	20 mΩ/m
Loop resistance per length / maximum	120 mΩ/m
Operating voltage	
RMS value	80 V

NVP value in percent	66 %
Mechanical data	
Number of electrical cores	4
Design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
Type of electrical connection / FastConnect	Yes
Core diameter	
• of AWG22 core	0.75 mm
Outer diameter	
• of inner conductor	0.75 mm
of the wire insulation	1.5 mm
 of the inner sheath of the cable 	3.9 mm
of cable sheath	6.5 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material	
 of the wire insulation 	PE
 of the inner sheath of the cable 	PVC
 of cable sheath 	PVC
Color	
 of the insulation of data wires 	white/yellow/blue/orange
of cable sheath	green
Bending radius	
with single bend / minimum permissible	32.5 mm
 with multiple bends / minimum permissible 	49 mm
with continuous bending	100 mm
Number of bending cycles	3000000; Drag chain suitable for 3 million bending cycles at a bending radius of 100 mm, a speed of 4 m/s and an acceleration of 4 m/s ²
Tensile load / maximum	150 N
Weight per length	68 kg/km
Permitted ambient conditions	
Ambient temperature	
during operation	-25 +75 °C
during storage	-25 +75 °C
during transport	-25 +75 °C
during installation	-10 +60 °C
• Note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
Burning behavior	flame resistant according to UL 1685 (CSA FT 4)
Class of burning behaviour / according to EN 13501-	Fca

Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-404 (7x24h/90°C)
• to grease	Conditional resistance
• to water	conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general	
Product feature	
• halogen-free	No
• silicon-free	Yes
Wire length / for Industrial Ethernet	
● with 100BaseTX	85 m

Standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	Yes
Certificate of suitability	
CE marking	Yes
 RoHS conformity 	Yes
Standard for structured cabling	Cat5e
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	http://www.siemens.com/snst
 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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