

Product type designation

Product description

IE FC TP Festoon Cable GP 2 x 2 (Type B)

Flexible bus cable (4-core), sold by the meter, unassembled
SIMATIC NET, IE FC TP FESTOON CABLE 2X2 (PROFINET TYPE
B), TP-INSTALLATION CABLE FOR FESTOON SUSPENSION, 4-
WIRE CAT5E, SOLD BY THE M, MIN. 5 MIO BENDING CYCLES,
CONSEIGNMENT MAX. 1000 M, MIN. ORDER QUANTITY 20 M



Suitability for use	For continuous motion in a trailing cable, festoon mounting
Cable designation	2YY (ST) CY 2x2x0,75/1,5 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 ... 100 MHz	5 %
Near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.5 dB/m
Transfer impedance per length / at 10 MHz	100 mΩ/m
Loop resistance per length / maximum	120 mΩ/m
Operating voltage	
• RMS value	100 V

NVP value in percent	66 %
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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	30 mm
• with multiple bends / minimum permissible	70 mm
• with continuous bending	70 mm
Number of bending cycles	5000000; 5 million bending cycles at a bending radius of 70 mm 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	-40 ... +75 °C
• during storage	-50 ... +75 °C
• during transport	-50 ... +75 °C
• during installation	-20 ... +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)
Chemical resistance	
• to mineral oil	conditional resistance
• 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; c(UL)us, CMG / PLTC / Sun Res / OIL RES
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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