

Product type designation

Product description

IE FC TP Standard Cable GP 2 x 2 (Type A)

Standard bus cable (4-core), sold by the meter, unassembled Industrial Ethernet FC TP Standard cable, GP 2x2 (PROFINET Type A), TP installation cable for connection to IE FC RJ45 2x2, for universal use, 4-core, shielded CAT 5E, sold by the meter, delivery length max. 4500 m minimum order 20 m



Suitability for use

Standard cable with rigid cores for fast installation

Cable designation

2YY (ST) CY 2x2x0,64/1,5-100 GN SF/UTP

Electrical data

Damping ratio per length

• at 10 MHz / maximum	0.052 dB/m
• at 100 MHz / maximum	0.195 dB/m

Impedance

• at 1 MHz ... 100 MHz	100 Ω
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Relative symmetrical tolerance

• of the characteristic impedance at 1 MHz ... 100 MHz	15 %
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Near-end crosstalk per length

• at 1 MHz ... 100 MHz	0.5 dB/m
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Transfer impedance per length / at 10 MHz

10 mΩ/m

Loop resistance per length / maximum

115 mΩ/m

Operating voltage

• RMS value	80 V
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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	0.64 mm
Outer diameter	
• of inner conductor	0.64 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	polyethylene (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	19.5 mm
• with multiple bends / minimum permissible	49 mm
Tensile load / maximum	150 N
Weight per length	61 kg/km

Permitted ambient conditions

Ambient temperature	
• during operation	-40 ... +75 °C
• during storage	-40 ... +75 °C
• during transport	-40 ... +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)
Class of burning behaviour / according to EN 13501-6	Eca
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70 °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	100 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
last modified:	02/13/2019