

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 SIMATIC NET, IE FC TP STANDARD CABLE, GP 2X2 (PROFINET TYP A), TP INSTALLATION CABLE FOR CONNECTION TO FC OUTLET RJ45, FOR UNIVERSAL APPLICATION, 4-WIRE, SHIELDED, CAT. 5E, SOLD BY THE METER MAX. CONSIGNMENT: 2000 M, MINIMAL ORDER QUANTITY: 20 M



Suitability for use

Standard cable with rigid cores for fast installation

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	<p>0.052 dB/m</p> <p>0.195 dB/m</p>
Impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 1 MHz ... 100 MHz 	15 %
Near-end crosstalk per length	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	0.5 dB/m
Transfer impedance per length / at 10 MHz	10 mΩ/m
Loop resistance per length / maximum	115 mΩ/m
Operating voltage	
<ul style="list-style-type: none"> RMS value 	100 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	0.64 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	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	67 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 Cel, tests according to DIN VDE 0472
Burning behavior	flame resistant according to UL 1685 (CSA FT4)
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 property	
• halogen-free	No
• silicon-free	Yes
Cable 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/automation/net/catalog
• 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: 13.05.2015