

Product type designation	IE FC TP Standard Cable GP 2 x 2 (Type A)
Product description	Standard bus cable (4-core), sold by the meter, unassembled IE FC TP STANDARD CABLE GP 2X2 (PROFINET TYPE A), CAT5E, BUS CABLE 4-WIRE, SHIELDED, SPEC. DESIGN FOR RAPID INSTALL. TO IE FC RJ45 PLUG 2X2, 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
Wire length	20 m

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	0.052 dB/m 0.195 dB/m
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	
<ul style="list-style-type: none"> of AWG22 core 	0.64 mm
Outer diameter	
<ul style="list-style-type: none"> of inner conductor of the wire insulation of the inner sheath of the cable of cable sheath 	0.64 mm 1.5 mm 3.9 mm 6.5 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material	

<ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	PE PVC PVC
Color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white/yellow/blue/orange green
Bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	19.5 mm 49 mm
Tensile load / maximum	150 N
Weight per length	67 kg/km

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -20 ... +60 °C 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	
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product feature	
<ul style="list-style-type: none"> • halogen-free • silicon-free 	No Yes
Wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	100 m

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; cULus / CMG / PLTC/ ITC(UL) / Sun Res
UL/ETL style / 600 V Rating	Yes
Certificate of suitability	
<ul style="list-style-type: none"> • CE marking • RoHS conformity 	Yes Yes
Standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No

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|-------------------------------------|----|
| • 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

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|---|---|
| • 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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