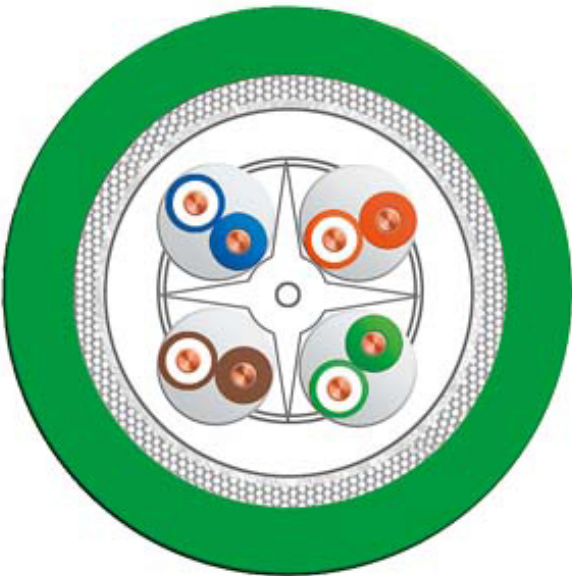


Product type designation
Product description

IE FC TP Standard Cable GP 4x2 (AWG 24, Type C)
Shielded TP installation cable (8-core), sold by the meter,
unassembled
IE FC TP STANDARD CABLE GP 4X2, TP-INSTALLATIONS
CABLE CAT6A FOR CONNECTING TO IE FC RJ45 PLUG 4X2,
AWG24, SOLD BY THE METER, MAX. CONSIGNMENT: 1000 M,
MIN. LENGTH ORDERED: 20 M



Suitability for use	Standard cable with rigid cores for fast, permanent installation
Cable designation	2YH (ST) CY 4x2x0,5/1,0 GN
Electrical data	
Damping ratio per length	
• at 10 MHz / maximum	0.058 dB/m
• at 100 MHz / maximum	0.191 dB/m
• at 250 MHz / maximum	0.311 dB/m
• at 300 MHz / maximum	0.343 dB/m
• at 500 MHz / maximum	0.453 dB/m
Impedance	
• at 1 MHz ... 100 MHz	100 Ω
Near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.453 dB/m
• at 1 MHz ... 250 MHz	0.393 dB/m
• at 1 MHz ... 300 MHz	0.381 dB/m
• at 1 MHz ... 500 MHz	0.348 dB/m

Transfer impedance per length / at 10 MHz	20 mΩ/m
Loop resistance per length / maximum	190 mΩ/m
Insulation resistance coefficient	5000 GΩ·m
Operating voltage • RMS value	100 V
NVP value in percent	66 %

Mechanical data	
Number of electrical cores	8
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 the AWG24 core	0.51 mm
Outer diameter • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath	0.51 mm 1 mm 6.1 mm 8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material • of the wire insulation • of the inner sheath of the cable • of cable sheath	PE FRNC PVC
Color • of the insulation of data wires • of cable sheath	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green
Bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	24 mm 40 mm
Tensile load / maximum	100 N
Weight per length	80 kg/km

Permitted ambient conditions	
Ambient temperature • during operation • during storage • during transport • during installation	-40 ... +85 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C
Ambient condition / for operation	Temperature range for permanent installation -40 °C to +85 °C
Burning behavior	flame resistant according to IEC 60332-3-24 (Category C)
Chemical resistance	

• 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	
• halogen-free	No
• silicon-free	Yes
Wire length / for Industrial Ethernet	
• with 100BaseTX	100 m
• with 1000BaseT	100 m
• for 10GBase T	90 m

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG
UL/ETL style / 600 V Rating	No
Certificate of suitability	
• CE marking	Yes
• RoHS conformity	Yes
product conformity	
• ANSI/TIA-EIA 568-B.2 Cat.5e	Yes
• IEC 61784-5-2-CP 2/2 (Ethernet/IP)	Yes
Standard for structured cabling	Cat6A
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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