

product type designation

product description



IE FC TP Standard Cable GP 4x2 (AWG 24, Type C)

Shielded TP installation cable (8-wire), preferred length, unassembled

IE FastConnect TP standard GP cable 4x 2 (Type C); TP Installation cable CAT6A for connection to IE FC RJ45 Plug 4x 2; AWG24; delivery unit 1000 m.

suitability for use

Standard cable with rigid cores for fast, permanent installation

cable designation

2YH (ST) CY 4x2x0,5/1,0 GN

wire length

1000 m

electrical data

attenuation factor 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
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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

coupling loss / at 30 MHz ... 100 MHz / minimum

80 dB

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	80 V
• maximum	80 V

NVP value in percent

67 %

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 AWG24 insulated conductor	0.51 mm
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outer diameter

• of inner conductor	0.51 mm
• of the wire insulation	1 mm
• of the inner sheath of the cable	6.1 mm
• of cable sheath	8 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 	polyethylene (PE) FRNC PVC
color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green
bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	24 mm 40 mm
tensile load / maximum	100 N
weight per length	76 kg/km
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • 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
fire behavior	flame resistant according to IEC 60332-3-24 (Category C)
class of burning behaviour / according to EN 13501-6	Eca
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 features, product functions, product 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 • with 1000BaseT • for 10GBase T 	100 m 100 m 90 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMG, AWM-Style 21500, cRU AWM I A/B 60°C 300V FT2
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	Yes Yes Yes
product conformity	
<ul style="list-style-type: none"> • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) 	Yes Yes
standard for structured cabling	Cat6A
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	No No No No No No No
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	WG WGB
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool • to website: Industrial communication 	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net

- to website: Industry Mall
- to website: Information and Download Center
- to website: Selection guide for cables and connectors
- to website: Image database
- to website: CAX-Download-Manager
- to website: Industry Online Support

<https://mall.industry.siemens.com>
<http://www.siemens.com/industry/infocenter>
<https://sie.ag/2QdlxcP>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<https://support.industry.siemens.com>

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