

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
<b>electrical data</b>	
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
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 %
<b>mechanical data</b>	
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
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"> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	<p>polyethylene (PE) FRNC PVC</p>
color	<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	<p>white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green</p>
bending radius	<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	<p>24 mm 40 mm</p>
tensile load / maximum		100 N
weight per length		76 kg/km
<b>ambient conditions</b>		
ambient temperature	<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul>	<p>-40 ... +85 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C</p>
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"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	<p>oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance</p>
radiological resistance / to UV radiation		resistant
<b>product features, product functions, product components / general</b>		
product feature	<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	<p>No Yes</p>
wire length / for Industrial Ethernet	<ul style="list-style-type: none"> <li>• with 100BaseTX</li> <li>• with 1000BaseT</li> <li>• for 10GBase T</li> </ul>	<p>100 m 100 m 90 m</p>
<b>standards, specifications, approvals</b>		
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"> <li>• EAC approval</li> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	<p>Yes Yes Yes</p>
product conformity	<ul style="list-style-type: none"> <li>• ANSI/TIA-EIA 568-B.2 Cat.5e</li> <li>• IEC 61784-5-2-CP 2/2 (Ethernet/IP)</li> </ul>	<p>Yes Yes</p>
standard for structured cabling		Cat6A
Marine classification association	<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	<p>No No No No No No No</p>
reference code	<ul style="list-style-type: none"> <li>• according to IEC 81346-2</li> <li>• according to IEC 81346-2:2019</li> </ul>	<p>WG WGB</p>
<b>further information / internet links</b>		
internet link	<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> </ul>	<p><a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p>

- 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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**last modified:**

2/14/2023 