

### product type designation

### product description

### IE FC TP Standard Cable GP 4x2 (AWG 22)

Standard bus cable (8-core), sold by the meter, unassembled

Industrial Ethernet FC TP standard cable 4x 2, TP installation cable CAT6A for connection to FC RJ45 Modular outlet, AWG22, sold by the meter, delivery unit max. 1000 m minimum order quantity 20 m.



### suitability for use

Standard cable with rigid cores for fast, permanent installation

### cable designation

2YH (ST) C 4X2X0.64/1.25-100 GN 4x2xAWG22

### electrical data

#### attenuation factor per length

• at 10 MHz / maximum	0.06 dB/m
• at 100 MHz / maximum	0.19 dB/m
• at 250 MHz / maximum	0.33 dB/m

#### impedance

• at 1 MHz ... 100 MHz	100 Ω
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#### relative symmetrical tolerance

• of the characteristic impedance at 1 MHz ... 100 MHz	5 %
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#### near-end crosstalk per length

• at 1 MHz ... 250 MHz	0.383 dB/m
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#### transfer impedance per length / at 10 MHz

10 mΩ/m

#### loop resistance per length / maximum

118 mΩ/m

#### insulation resistance coefficient

5000 GΩ·m

#### operating voltage

• RMS value	80 V
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#### NVP value in percent

63 %

### 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 AWG22 insulated conductor	0.64 mm
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#### outer diameter

• of inner conductor	0.64 mm
• of the wire insulation	1.25 mm
• of the inner sheath of the cable	7.6 mm
• of cable sheath	9.6 mm

#### symmetrical tolerance of the outer diameter / of cable sheath

0.3 mm

#### material

• of the wire insulation	polyethylene (PE)
• of the inner sheath of the cable	PVC
• of cable sheath	PVC

#### color

• of the insulation of data wires	white/blue, white/orange, white/green, white/brown
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• of cable sheath	green
bending radius	
• with single bend / minimum permissible	38 mm
• with multiple bends / minimum permissible	80 mm
tensile load / maximum	180 N
weight per length	117 kg/km
<b>ambient conditions</b>	
ambient temperature	
• during operation	-40 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-40 ... +80 °C
fire behavior	flame resistant according to IEC 60332-1
class of burning behaviour / according to EN 13501-6	Eca
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
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	No
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	90 m
• with 1000BaseT	90 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; c(UL)us / CMG / cRU AWM I A/B 60°C 300V FT2 / Sun Res
UL/ETL style / 600 V Rating	No
certificate of suitability	
• EAC approval	Yes
• CE marking	Yes
• RoHS conformity	Yes
standard for structured cabling	Cat6A
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (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
reference code	
• according to IEC 81346-2	WG
• according to IEC 81346-2:2019	WGB
<b>further information / internet links</b>	
internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAX-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is

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Approvals / Certificates

General Product Approval

Environment

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[Confirmation](#)

Industrial Communication

[PROFINET](#)

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