

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.



product brand name

SIMATIC NET

Technical Product Detail Page

<https://i.siemens.com/1P6XV1870-2E>

suitability for use

Standard cable with rigid cores for fast, permanent installation

cable designation

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

wire length

sold by the meter

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)
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• of the inner sheath of the cable • of cable sheath	PVC PVC
color • of the insulation of data wires • of cable sheath	white/blue, white/orange, white/green, white/brown green
bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	38 mm 80 mm
tensile load / maximum	180 N
weight per length	117 kg/km
ambient conditions	
ambient temperature • during operation • during storage • during transport • during installation	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -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 • 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 • halogen-free • PoE capability • PoE+ capability • silicon-free	No Yes Yes Yes
wire length / for Industrial Ethernet • with 100BaseTX • with 1000BaseT	90 m 90 m
test voltage • at AC / core-to-core • at AC / core shield	2000 V 2000 V
standards, specifications, approvals	
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 • CE marking • RoHS conformity	Yes Yes Yes
standard for structured cabling	Cat6A
• resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
Marine classification association • 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
further information / internet links	
internet link • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://sieportal.siemens.com/

- to website: Image database
- to website: CAX-Download-Manager
- to website: Industry Online Support

<https://www.automation.siemens.com/bilddb>
<https://www.siemens.com/cax>
<https://support.industry.siemens.com>

security information

security information

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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[China RoHS](#)

General Product Approval

other

Environment

[Fire safety / Physical security](#)



[Declaration of Conformity](#)

[Miscellaneous](#)

[Environmental Conformations](#)

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Industrial Communication

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