

product type designation

product description



IE FC TP Standard Cable GP 2x2 (Type A)

Standard bus cable (4 wires), preferred length, not assembled

IE FC TP Standard Cable GP 2x2 (PROFINET Type A), CAT5E bus cable 4-wire, shielded, special configuration for quick assembly to IE FC RJ45 plug 2x2, 500 m.

Technical Product Detail Page

<https://l.siemens.com/1P6XV1840-2AT50>

suitability for use

Standard cable with rigid cores for fast installation

cable designation

SF/UTP, 2YY (ST) CY 2x2x0,64/1,5-100 GN

wire length

500 m

electrical data

attenuation factor per length

- at 10 MHz / maximum

0.052 dB/m

- at 100 MHz / maximum

0.195 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz

15 %

near-end crosstalk per length

- at 1 MHz ... 100 MHz

0.5 dB/m

transfer impedance per length / at 10 MHz

10 mΩ/m

loop resistance per length / maximum

115 mΩ/m

operating voltage

- RMS value

80 V

NVP value in percent

69 %

mechanical data

number of electrical cores

4

design of the shield

SF/UTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned copper wires

type of electrical connection / FastConnect

Yes

core diameter

- of AWG22 insulated conductor

0.64 mm

outer diameter

- of inner conductor
- of the wire insulation
- of the inner sheath of the cable
- of cable sheath

0.64 mm

1.5 mm

3.9 mm

6.5 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

polyethylene (PE)

PVC

PVC

color

<ul style="list-style-type: none"> • of the insulation of data wires 	white/yellow/blue/orange
<ul style="list-style-type: none"> • of cable sheath 	green
bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible 	19.5 mm
<ul style="list-style-type: none"> • with multiple bends / minimum permissible 	49 mm
tensile load / maximum	150 N
weight per length	61 kg/km

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> • during operation 	-40 ... +75 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +75 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +75 °C
<ul style="list-style-type: none"> • during installation 	-40 ... +60 °C
fire behavior	flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> • to mineral oil 	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
<ul style="list-style-type: none"> • to grease 	Conditional resistance
<ul style="list-style-type: none"> • to water 	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 	No
<ul style="list-style-type: none"> • PoE capability 	Yes
<ul style="list-style-type: none"> • PoE+ capability 	Yes
<ul style="list-style-type: none"> • silicon-free 	Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	100 m

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us / CMG / (ETL)us PLTC/ ITC / Sun Res
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval 	Yes
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • RoHS conformity 	Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No

standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	0.9 kg
<ul style="list-style-type: none"> • during manufacturing 	0.81 kg
<ul style="list-style-type: none"> • during operation 	0.02 kg
<ul style="list-style-type: none"> • after end of life 	0.07 kg

further information / internet links

internet link	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors 	https://support.industry.siemens.com/cs/ww/en/view/109766358
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud
<ul style="list-style-type: none"> • to web page: SiePortal 	https://sieportal.siemens.com/
<ul style="list-style-type: none"> • to website: Image database 	https://www.automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx-Download-Manager 	https://www.siemens.com/cax

security information

security information

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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)

[Fire safety / Physical security](#)

other

Environment

Industrial Communication

[Miscellaneous](#)



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last modified:

10/28/2025