

### product type designation

### product description



### IE FC TP Flexible Cable GP 2x2 (Type B)

Flexible bus cable (4-core), sold by the meter, unassembled

Industrial Ethernet FC TP flexible cable, GP 2x2 (PROFINET Type B), TP installation cable with flexible cores, PROFINET type B, 4-core, shielded, CAT 5e, sold by the meter, delivery unit max. 2500 m minimum order quantity 20 m.

Technical Product Detail Page

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

suitability for use

For occasionally moved machine parts

cable designation

SF/UTP, 2YY (ST) CY 2x2x0,75/1,5-100 LI GN

wire length

sold by the meter

### electrical data

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum

0.06 dB/m  
0.21 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

relative symmetrical tolerance

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

5 %

near-end crosstalk per length

- at 1 MHz ... 100 MHz

0.5 dB/m

transfer impedance per length / at 10 MHz

20 mΩ/m

loop resistance per length / maximum

120 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

0.75 mm

outer diameter

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

0.75 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

- of the insulation of data wires

white/yellow/blue/orange

• of cable sheath	green
bending radius	
• with single bend / minimum permissible	32.5 mm
• with multiple bends / minimum permissible	52 mm
tensile load / maximum	150 N
weight per length	68 kg/km
<b>ambient conditions</b>	
ambient temperature	
• during operation	-25 ... +75 °C
• during storage	-25 ... +75 °C
• during transport	-25 ... +75 °C
• during installation	-10 ... +60 °C
• note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-404 (7x24h/90°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
• PoE capability	Yes
• PoE+ capability	Yes
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	85 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / (ETL)us PLTC / Sun Res / OIL RES
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
certificate of suitability	
• EAC approval	Yes
• CE marking	Yes
• RoHS conformity	Yes
standard for structured cabling	Cat5e
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>standards, specifications, approvals / Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	0.92 kg
• during manufacturing	0.83 kg
• during operation	0.02 kg
• after end of life	0.07 kg
<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
- to website: Industry Online Support

<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

Environment

Industrial Communication

[Fire safety / Physical security](#)



[Environmental Conformations](#)

[PROFINET](#)

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