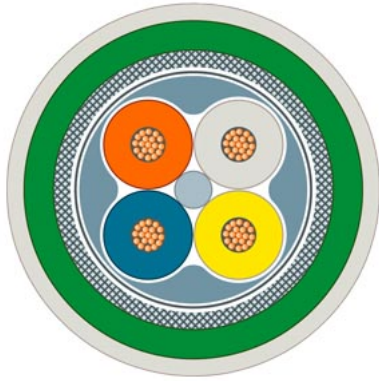


### product type designation

product description



### IE FC TP Robust Food Cable GP 2X2 (Type C)

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

Industrial Ethernet FastConnect TP robust food cable GP 2x2 (PROFINET type C), TP installation cable for use in the food and luxury food industry, 4-core shielded Cat5e, sold by the meter delivery unit max. 1000 m, minimum order quantity: 20 m.

Technical Product Detail Page

<https://l.siemens.com/1P6XV1881-2A>

suitability for use

Cable with FEP jacket (fluorinated plastic, perfluoroethylene propylene) for use in the food, beverages and tobacco industries (IP65/67/69 resistant, EHEDG approval). Line is water-repellent, weather-proof, resistant to microbes, and extremely resistant to many cleaning agents and disinfectants (such as hypochlorite, chlorine dioxide, peroxyacetic acid, and quaternary ammonium cations).

cable designation

SF/UTP, 2YY(ST)CY6Y 2X2X0.75/1.55 LI VZN

wire length

sold by the meter

### electrical data

attenuation factor per length

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

0.095 dB/m  
0.32 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

0.353 dB/m

transfer impedance per length / at 10 MHz

80 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  
1.56 mm  
4 mm  
6.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

- of the wire insulation

polyethylene (PE)

<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	PVC PVC/FEP; FEP transparent
color <ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	white/yellow/blue/orange green
bending radius <ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> <li>• with continuous bending</li> </ul>	26 mm 52 mm 100 mm
number of bending cycles	500000; Acceleration 4 m/s <sup>2</sup>
number of torsion cycles / with torsion by ± 180° on 1 m cable length	1000000
tensile load / maximum	150 N
weight per length	72 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> <li>• note</li> </ul>	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1-2
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>	oil resistant according to IEC 60811-404 (7x24h/90°C) Conditional resistance resistant
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>• PoE capability</li> <li>• PoE+ capability</li> <li>• silicon-free</li> </ul>	No Yes Yes Yes
wire length / for Industrial Ethernet <ul style="list-style-type: none"> <li>• with 100BaseTX</li> </ul>	85 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us 3047254, CMG FT4 75°C, (ETL)us PLTC-ER, SUN RES, OIL RES I or E130266 AWM 22162 AWM I A/B 80°C 600V
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> <li>• for hygienic design</li> </ul>	Yes Yes Yes EHEDG, Installation and layout of the cables must fulfil the requirements of EHEDG published in the Guidelines Doc. 13 'Hygienic Design of open equipment for processing food' and Doc. 44 'Hygienic Design Principles for food factories' to be accessible for cleaning. Also connections must be easily cleanable by using EHEDG certified cable glands or connectors.
standard for structured cabling	Cat5e
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>	No No No No No No No
<b>further information / internet links</b>	
internet link	

- to website: Selection guide for cables and connectors
- to web page: selection aid TIA Selection Tool
- to web page: SiePortal
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

- <https://support.industry.siemens.com/cs/ww/en/view/109766358>
- <https://www.siemens.com/tstcloud>
- <https://sieportal.siemens.com/>
- <https://www.automation.siemens.com/bilddb>
- <https://www.siemens.com/cax>
- <https://support.industry.siemens.com>

**security information**

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 necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit [www.siemens.com/cybersecurity-industry](http://www.siemens.com/cybersecurity-industry). Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

**Approvals / Certificates**

**General Product Approval**

[Manufacturer Declaration](#)



[Declaration of Conformity](#)

[Fire safety / Physical security](#)

General Product Approval	Food, Pharmaceutical, Medical	Environment	Industrial Communication
--------------------------	-------------------------------	-------------	--------------------------

[China RoHS](#)

[EHEDG](#)

[Environmental Conformations](#)

[PROFINET](#)

last modified:

10/28/2025