

### product type designation

product description



### IE FC TP Trailing Cable 2x2 (Type C)

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

Industrial Ethernet FC TP Trailing Cable, 2x2 (PROFINET type C), TP installation cable for connection to FC outlet RJ45, for cable carrier applications, 4-core, shielded, Cat5e, sold by the meter (4 million bending cycles), max. delivery unit 2000 m, minimum order quantity 20 m.

product brand name	SIMATIC NET
Technical Product Detail Page	<a href="https://l.siemens.com/1P6XV1840-3AH10">https://l.siemens.com/1P6XV1840-3AH10</a>
suitability for use	Continuous motion control in a cable carrier
cable designation	SF/UTP, 2YH (ST) C11Y 2x2x0,75/1,5-100 LI GN VZN FRNC
wire length	sold by the meter
<b>electrical data</b>	
attenuation factor per length	
• at 10 MHz / maximum	0.06 dB/m
• at 100 MHz / maximum	0.22 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	10 mΩ/m
loop resistance per length / maximum	120 mΩ/m
operating voltage	
• RMS value	80 V
NVP value in percent	69 %
<b>mechanical data</b>	
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	0.75 mm
• of the wire insulation	1.5 mm
• of the inner sheath of the cable	3.9 mm
• of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
• of the wire insulation	polyethylene (PE)
• of the inner sheath of the cable	FRNC
• of cable sheath	PUR (TPE-U)

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>	19.5 mm 49 mm 100 mm
number of bending cycles	4000000; Drag chain suitable for 4 million bending cycles at a bending radius of 100 mm, a speed of 4 m/s and an acceleration of 4 m/s <sup>2</sup>
tensile load / maximum	150 N
weight per length	63 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 ... +75 °C -50 ... +75 °C -50 ... +75 °C -20 ... +60 °C electrical properties measured at 20 °C
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 60811-2-1 (7x24h/90°C) resistant 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>	Yes Yes Yes Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>• with 100BaseTX</li> </ul>	85 m
test voltage	
<ul style="list-style-type: none"> <li>• at AC / core-to-core</li> <li>• at AC / core shield</li> </ul>	2000 V 2000 V
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; cULus / CMX
UL/ETL style / 600 V Rating	Yes; cRU AWM I A/B 80°C 600V
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes Yes
standard for structured cabling	Cat5e
<ul style="list-style-type: none"> <li>• resistance to air pollution / conformity according to ANSI/ISA-71.04</li> </ul>	Yes; G3
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	
<ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a> <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>

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

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

### security information

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### Approvals / Certificates

#### General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[China RoHS](#)

#### General Product Approval

#### Test Certificates

#### other

#### Environment

[Fire safety / Physical security](#)



[Declaration of Conformity](#)

[Special Test Certificate](#)

[Miscellaneous](#)

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#### Environment

#### Industrial Communication

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last modified:

3/10/2026