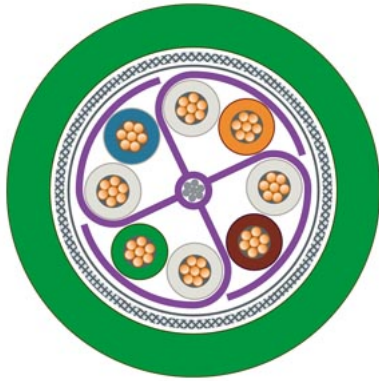


### product type designation

product description



### IE FC TP flexible cable GP 4x2, CAT7, sold by the meter

Shielded TP installation cable (8-core) with flexible cores, sold by the meter, unassembled

IE FC TP Flexible Cable GP 4x2 FastConnect Flexible Cable GP 4x 2, TP installation CAT7 cable for connection to IE FC RJ45 plug 4x 2 and IE FC M12 plug PRO 4x2, AWG26, sold by the meter, delivery unit max. 3000 m minimum order quantity 20 m

suitability for use

Flexible cable for quick assembly, for occasionally moving machine parts

cable designation

SF/FTP, 02YSCY 4X2X0.5/1.15-100 LI PIMF GN

### electrical data

attenuation factor per length

• at 10 MHz / maximum	0.088 dB/m
• at 100 MHz / maximum	0.285 dB/m
• at 300 MHz / maximum	0.513 dB/m
• at 600 MHz / maximum	0.751 dB/m

impedance

• at 1 MHz ... 100 MHz	100 Ω
------------------------	-------

near-end crosstalk per length

• at 10 MHz	0.78 dB/m
• at 100 MHz	0.724 dB/m
• at 300 MHz	0.653 dB/m
• at 600 MHz	0.608 dB/m

loop resistance per length / maximum

290 mΩ/m

operating voltage

• RMS value	100 V
• maximum	100 V

NVP value in percent

69 %

### mechanical data

number of electrical cores

8

design of the shield

SF/FTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned copper wires, central shielding wire of the line must be connected to the shield contact during plug assembly (see assembly video)

type of electrical connection / FastConnect

Yes

core diameter

• of AWG26 insulated conductor	0.47 mm
--------------------------------	---------

outer diameter

• of inner conductor	0.47 mm
• of the wire insulation	1.15 mm
• of cable sheath	8 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

• of the wire insulation	polyethylene (PE)
• of cable sheath	PVC

color

• of the insulation of data wires	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
-----------------------------------	----------------------------------------------------------------------------

<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	green
bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> </ul>	40 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	80 mm
tensile load / maximum	100 N
weight per length	65 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-30 ... +70 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-30 ... +70 °C
ambient condition / for operation	temperature range for permanent installation -40 °C to +70 °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> </ul>	oil resistant according to EN 50290-2-22 (VDE 0819), compound type TM55 (7x24h/90 °C)
<ul style="list-style-type: none"> <li>• to grease</li> </ul>	Conditional resistance
<ul style="list-style-type: none"> <li>• to water</li> </ul>	conditional resistance
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> </ul>	No
<ul style="list-style-type: none"> <li>• PoE capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• PoE+ capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• PoE++ capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• silicon-free</li> </ul>	Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>• with 100BaseTX</li> </ul>	90 m
<ul style="list-style-type: none"> <li>• with 1000BaseT</li> </ul>	90 m
<ul style="list-style-type: none"> <li>• for 10GBase T</li> </ul>	75 m
<ul style="list-style-type: none"> <li>• for 2.5GBaseT</li> </ul>	100 m
<ul style="list-style-type: none"> <li>• for 5GBaseT</li> </ul>	100 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us 3047254 CM 75°C
UL/ETL style / 600 V Rating	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• RoHS conformity</li> </ul>	Yes
product conformity	
<ul style="list-style-type: none"> <li>• ANSI/TIA-EIA 568-B.2 Cat.5e</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEC 61784-5-2-CP 2/2 (Ethernet/IP)</li> </ul>	Yes
standard for structured cabling	Cat7
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Germanische Lloyd (GL)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No
reference code	
<ul style="list-style-type: none"> <li>• according to IEC 81346-2</li> </ul>	WG
<ul style="list-style-type: none"> <li>• according to IEC 81346-2:2019</li> </ul>	WGB
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</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>
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>• to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>

- 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

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

Environment

[Manufacturer Declaration](#)



[Environmental Conformations](#)

last modified:

9/13/2025