

### Product type designation

Product description

### IE FC TP Flexible Cable GP 4x2 (AWG 24, Type C)

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

Industrial Ethernet FastConnect TP flexible cable GP 4x 2, TP installation Cable CAT6A for connection to IE FC RJ45 plug 4x 2, AWG24, sold by the meter, delivery length max. 1000 m minimum order 20 m



Figure similar

Suitability for use	Flexible cable for quick assembly, for occasionally moving machine parts
Cable designation	LI02YSH (ST) CY 4x2x0,22/1,05- 100 GN
<b>Electrical data</b>	
Damping ratio per length	
<ul style="list-style-type: none"> <li>at 10 MHz / maximum</li> <li>at 100 MHz / maximum</li> <li>at 250 MHz / maximum</li> <li>at 300 MHz / maximum</li> <li>at 500 MHz / maximum</li> </ul>	<ul style="list-style-type: none"> <li>0.089 dB/m</li> <li>0.287 dB/m</li> <li>0.466 dB/m</li> <li>0.514 dB/m</li> <li>0.679 dB/m</li> </ul>
Impedance	
<ul style="list-style-type: none"> <li>at 1 MHz ... 100 MHz</li> </ul>	100 Ω
Near-end crosstalk per length	
<ul style="list-style-type: none"> <li>at 1 MHz ... 100 MHz</li> <li>at 1 MHz ... 250 MHz</li> </ul>	<ul style="list-style-type: none"> <li>0.453 dB/m</li> <li>0.393 dB/m</li> </ul>

<ul style="list-style-type: none"> <li>• at 1 MHz ... 300 MHz</li> </ul>	0.381 dB/m
<ul style="list-style-type: none"> <li>• at 1 MHz ... 500 MHz</li> </ul>	0.348 dB/m
Transfer impedance per length / at 10 MHz	20 mΩ/m
Loop resistance per length / maximum	180 mΩ/m
Insulation resistance coefficient	5000 GΩ·m
Operating voltage	
<ul style="list-style-type: none"> <li>• RMS value</li> </ul>	80 V
NVP value in percent	68 %

### Mechanical data

Number of electrical cores	8
Design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
Type of electrical connection / FastConnect	Yes
Core diameter	
<ul style="list-style-type: none"> <li>• of the AWG24 core</li> </ul>	0.51 mm
Outer diameter	
<ul style="list-style-type: none"> <li>• of inner conductor</li> </ul>	0.6 mm
<ul style="list-style-type: none"> <li>• of the wire insulation</li> </ul>	1.05 mm
<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> </ul>	6.4 mm
<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material	
<ul style="list-style-type: none"> <li>• of the wire insulation</li> </ul>	polyethylene (PE)
<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> </ul>	FRNC
<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	PVC
Color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> </ul>	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>	24 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	40 mm
Tensile load / maximum	100 N
Weight per length	86 kg/km

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-40 ... +80 °C
Burning behavior	flame resistant according to IEC 60332-3-24 (Category C)

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 (4 h / 70°C) Conditional resistance conditional resistance
Radiological resistance / to UV radiation	resistant

#### Product features, product functions, product components / general

Product feature <ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	No Yes
Wire length / for Industrial Ethernet <ul style="list-style-type: none"> <li>• with 100BaseTX</li> <li>• with 1000BaseT</li> <li>• for 10GBase T</li> </ul>	80 m 80 m 70 m

#### Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG
UL/ETL style / 600 V Rating	No
Certificate of suitability <ul style="list-style-type: none"> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes
Product conformity <ul style="list-style-type: none"> <li>• ANSI/TIA-EIA 568-B.2 Cat.5e</li> <li>• IEC 61784-5-2-CP 2/2 (Ethernet/IP)</li> </ul>	Yes Yes
Standard for structured cabling	Cat6A
Marine classification association <ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• Bureau Veritas (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

#### Further information / Internet-Links

Internet-Link <ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> </ul>	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
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- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

**last modified:**

01/20/2020