

### product type designation

product description

### IE TP Cord RJ45/RJ45, 4x2

Patch cable, preferred length, preassembled with two RJ45 connectors (10/100/1000/10000MB)

Industrial Ethernet TP cord RJ45/RJ45, Cat6a, S/FTP cable 4x2 (yellow), pre-assembled with 2 x RJ45 plugs, length 10 m.



Technical Product Detail Page

<https://i.siemens.com/1P6XV1870-4GN10>

suitability for use

Easy connection of terminal devices to the IE FC cabling system

cable designation

S/FTP, LI 02YSCH 4x2x0,15 PIMF YL FRNC

wire length

10 m

### electrical data

number of electrical connections

2

attenuation factor per length

- at 10 MHz / maximum 0.086 dB/m
- at 100 MHz / maximum 0.28 dB/m
- at 300 MHz / maximum 0.485 dB/m
- at 600 MHz / maximum 0.675 dB/m

impedance

- at 1 MHz ... 100 MHz 100 Ω
- at 10 MHz ... 600 MHz 100 Ω

relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz 5 %

coupling loss / at 30 MHz ... 100 MHz / minimum

85 dB

transfer impedance per length / at 10 MHz

10 mΩ/m

loop resistance per length / maximum

290 mΩ/m

operating voltage

- RMS value 80 V

NVP value in percent

76 %

### mechanical data

number of electrical cores

8

design of the shield

S/FTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned copper wires

core diameter

- of AWG26 insulated conductor 0.5 mm

outer diameter

- of inner conductor 0.5 mm
- of the wire insulation 1 mm
- of cable sheath 6.2 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.3 mm

material

- of the wire insulation polyethylene (PE)
- of cable sheath FRNC

color

<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> </ul>	white/blue, white/orange, white/green, white/brown
<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	yellow
bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> </ul>	31 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	62 mm
weight per length	46 kg/km
<b>plug</b>	
connector type	RJ45
type of plug interlock	latched
design of plug-in connection	RJ45-180
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +80 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-25 ... +80 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-25 ... +80 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-25 ... +80 °C
<ul style="list-style-type: none"> <li>• note</li> </ul>	In fixed installation -40 °C to 80 °C
fire behavior	flame resistant acc. to IEC 60332-1-2, EN 60332-3-24, smoke density acc. to IEC 61034
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 IEC 60811-2-1 (4 h / 70°C)
<ul style="list-style-type: none"> <li>• to grease</li> </ul>	Conditional resistance
radiological resistance / to UV radiation	not resistant
protection class IP	IP20
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> </ul>	Yes; halogen-free according to EN 60754-2
<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
test voltage	
<ul style="list-style-type: none"> <li>• at AC / core-to-core</li> </ul>	500 V
<ul style="list-style-type: none"> <li>• at AC / core shield</li> </ul>	1500 V
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	Yes; E502506 AWM STYLE 21279, Wiring Harness
certificate of suitability	ISO/IEC 11801-1, IEC 61035
<ul style="list-style-type: none"> <li>• EAC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• UL approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• RoHS conformity</li> </ul>	Yes
standard for structured cabling	Cat6A
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
<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>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>• to website: CAx-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

## security information

### security information

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## Approvals / Certificates

### General Product Approval



[Manufacturer Declaration](#)

[Declaration of Conformity](#)

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