

### 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, CAT 6A, TP cable 4x2 (red), pre-assembled with 2 RJ45 connectors, length 25 m.



Technical Product Detail Page

<https://i.siemens.com/1P6XV1870-4RN25>

suitability for use

Easy connection of terminal devices to the IE FC cabling system

cable designation

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

wire length

25 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> <li>• of cable sheath</li> </ul>  | white/blue, white/orange, white/green, white/brown<br>red  |
| bending radius  |  |
| <ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>   | 31 mm<br>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> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> <li>• note</li> </ul>   | -25 ... +80 °C<br>-25 ... +80 °C<br>-25 ... +80 °C<br>-25 ... +80 °C<br>In fixed installation -40 °C to 80 °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> </ul>   | oil resistant according to IEC 60811-2-1 (4 h / 70°C)<br>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> <li>• PoE capability</li> <li>• PoE+ capability</li> <li>• PoE++ capability</li> <li>• silicon-free</li> </ul>   | Yes<br>Yes<br>Yes<br>Yes<br>Yes  |
| test voltage  |  |
| <ul style="list-style-type: none"> <li>• at AC / core-to-core</li> <li>• at AC / core shield</li> </ul>   | 500 V<br>1500 V  |
| <b>standards, specifications, approvals</b>   |  |
| UL/ETL listing / 300 V Rating   | No   |
| UL/ETL style / 600 V Rating   | Yes  |
| certificate of suitability  | ISO/IEC 11801-1, IEC 61035   |
| <ul style="list-style-type: none"> <li>• EAC approval</li> <li>• UL approval</li> <li>• RoHS conformity</li> </ul>  | Yes<br>Yes<br>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>• 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<br>No<br>No<br>No<br>No<br>No<br>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> <li>• to web page: SiePortal</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</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><br><a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a><br><a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a><br><a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a><br><a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a><br><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a> |
| <b>security information</b>   |  |
| security information  | Siemens provides products and solutions with industrial cybersecurity functions  |

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## Approvals / Certificates

### General Product Approval



[Manufacturer Declaration](#)

[Declaration of Conformity](#)

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