

### 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 1 m.



suitability for use

Easy connection of terminal devices to the IE FC cabling system

cable designation

LI 02YSCH 4x2x0,15 PIMF GN FRNC

wire length

1 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 %
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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
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NVP value in percent

76 %

### 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

core diameter

• of AWG26 insulated conductor	0.5 mm
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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

• of the insulation of data wires	white/blue, white/orange, white/green, white/brown
• of cable sheath	red

bending radius	
<ul style="list-style-type: none"> <li>with single bend / minimum permissible</li> <li>with multiple bends / minimum permissible</li> </ul>	<p>31 mm</p> <p>62 mm</p>
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>	<p>-25 ... +80 °C</p> <p>-25 ... +80 °C</p> <p>-25 ... +80 °C</p> <p>-25 ... +80 °C</p> <p>In fixed installation -40 °C to 80 °C</p>
fire behavior	flame resistant according to IEC 60332-1-2, smoke density according 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> <li>to grease</li> </ul>	<p>oil resistant according to IEC 60811-2-1 (4 h / 70°C)</p> <p>Conditional resistance</p>
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>silicon-free</li> </ul>	<p>Yes</p> <p>Yes</p>
test voltage	
<ul style="list-style-type: none"> <li>at AC / core-to-core</li> <li>at AC / core shield</li> </ul>	<p>500 V</p> <p>1500 V</p>
<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>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
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>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
reference code	
<ul style="list-style-type: none"> <li>according to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	<p>WG</p> <p>WGB</p>
<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>	<p><a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a></p> <p><a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a></p> <p><a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a></p> <p><a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a></p> <p><a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>
<b>security information</b>	
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,

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## Approvals / Certificates

### General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)

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