

### 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, pre-assembled with 2 RJ45 connectors, length 10 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

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	0.501 dB/m
• at 600 MHz / maximum	0.735 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	15 %
• of the characteristic impedance at 10 MHz ... 600 MHz	10 %

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

70 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

80 %

### 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
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<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>	31 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	43.5 mm
weight per length	50 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 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> </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
<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
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
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>
<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>
<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.

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**Approvals / Certificates**

<b>General Product Approval</b>	<b>Test Certificates</b>
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[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[Special Test Certificate](#)

<b>Environment</b>	<b>Industrial Communication</b>
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[Confirmation](#)

[PROFINET](#)

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