## **SIEMENS**

Data sheet 6XV1870-3RE50

## product type designation

product description

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

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

Industrial Ethernet TP XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, pre-assembled with 2 RJ45 plugs, length 0.5 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	0.5 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 %
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	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
outer diameter	
<ul> <li>of inner conductor</li> </ul>	0.5 mm
<ul> <li>of the wire insulation</li> </ul>	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> <li>of the insulation of data wires</li> </ul>	white/blue, white/orange, white/green, white/brown
of cable sheath	green

h and the area dive	
bending radius	24
with single bend / minimum permissible	31 mm
with multiple bends / minimum permissible	43.5 mm
weight per length	50 kg/km
plug	245
connector type	RJ45
type of plug interlock	latched
design of plug-in connection	RJ45-180
ambient conditions	
ambient temperature	
<ul><li>during operation</li></ul>	-25 +80 °C
<ul> <li>during storage</li> </ul>	-25 +80 °C
during transport	-25 +80 °C
<ul> <li>during installation</li> </ul>	-25 +80 °C
• note	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	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
radiological resistance / to UV radiation	not resistant
protection class IP	IP20
product features, product functions, product components / general	
product feature	
<ul><li>halogen-free</li></ul>	Yes
• silicon-free	Yes
test voltage	
• at AC / core-to-core	500 V
• at AC / core shield	1500 V
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	Yes; E130266 AWM STYLE 21279
certificate of suitability	ISO/IEC 11801-1, IEC 61035
EAC approval	Yes
UL approval	Yes
RoHS conformity	Yes
standard for structured cabling	Cat6A
Marine classification association	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul> <li>French marine classification society (BV)</li> </ul>	No
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	No
Germanische Lloyd (GL)	No
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
Polski Rejestr Statkow (PRS)	No
reference code	
• according to IEC 81346-2	WG
• according to IEC 81346-2:2019	WGB
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: SiePortal	https://sieportal.siemens.com/
to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax
to website: Industry Online Support	https://support.industry.siemens.com
security information	
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** 

**Test Certificates** 







**Declaration of Con**formity

Manufacturer Declaration

Special Test Certificate

**Environment** 

**Industrial Communication** 

Confirmation

**PROFINET** 

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