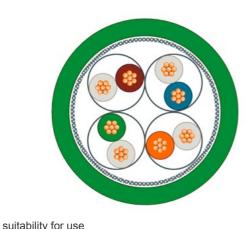
## **SIEMENS**

Data sheet 6XV1870-3RH20

## 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 connectors, length 2 m  $\,$ 

cable designation LI 02YSCH   wire length 2 m   electrical data 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 15 %   MHz of the characteristic impedance at 10 MHz 600 10 %   MHz 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	4x2x0,15 PIMF GN FRNC
electrical data         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       100 Ω         • at 1 MHz 100 MHz       100 Ω         relative symmetrical tolerance       100 Ω         • of the characteristic impedance at 1 MHz 100 MHz       15 % MHz         • of the characteristic impedance at 10 MHz 600 MHz       10 % MHz         transfer impedance per length / at 10 MHz       10 mΩ/m         loop resistance per length / maximum       290 mΩ/m         operating voltage       80 V         NVP value in percent       80 %	
attenuation factor per length  • at 10 MHz / maximum  • at 100 MHz / maximum  • at 300 MHz / maximum  • at 600 MHz / maximum  • at 600 MHz / maximum  • at 1 MHz 100 MHz  • at 1 MHz 100 MHz  • at 10 MHz 600 MHz  relative symmetrical tolerance  • of the characteristic impedance at 1 MHz 100 MHz  • of the characteristic impedance at 10 MHz 600 MHz  transfer impedance per length / at 10 MHz  loop resistance per length / maximum  operating voltage  • RMS value  NVP value in percent  0.086 dB/m  0.086 dB/m  0.28 dB/m  0.735 dB/m  100 Ω  100 Ω  100 Ω  100 Ω  100 Ω  100 Ω  100 MHz  100	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	
relative symmetrical tolerance  • of the characteristic impedance at 1 MHz 100 MHz  • of the characteristic impedance at 10 MHz 600 MHz  transfer impedance per length / at 10 MHz  loop resistance per length / maximum operating voltage • RMS value  NVP value in percent  15 %  10 mΩ/m 290 mΩ/m 80 V	
MHz  • of the characteristic impedance at 10 MHz 600 MHz  transfer impedance per length / at 10 MHz  loop resistance per length / maximum  operating voltage  • RMS value  NVP value in percent  10 %  MHz  10 mΩ/m  290 mΩ/m  80 V	
loop resistance per length / maximum       290 mΩ/m         operating voltage       80 V         NVP value in percent       80 %	
operating voltage  ● RMS value 80 V  NVP value in percent 80 %	
● RMS value 80 V  NVP value in percent 80 %	
NVP value in percent 80 %	
Part Part Part Part Part Part Part Part	
mechanical data	
number of electrical cores 8	
design of the shield Overlapped plated copp	aluminum-clad foil, sheathed in a braided screen of tiner 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 polyethylen	
• of cable sheath FRNC	e (PE)

color	19.71
of the insulation of data wires	white/blue, white/orange, white/green, white/brown
of cable sheath	green
bending radius	04
with single bend / minimum permissible     with resulting boards / resistance permissible	31 mm
with multiple bends / minimum permissible	43.5 mm
weight per length	50 kg/km
ambient conditions	
ambient temperature	05
during operation	-25 +80 °C
during storage	-25 +80 °C
during transport	-25 +80 °C
during installation	-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
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	Yes; E130266 AWM STYLE 21279
certificate of suitability	
<ul> <li>EAC approval</li> </ul>	Yes
UL approval	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
Nippon Kaiji Kyokai (NK)	No
Polski Rejestr Statkow (PRS)	No
reference code	
• acc. to IEC 81346-2	WG
<ul> <li>according to IEC 81346-2:2019</li> </ul>	WGB
further information / internet-Links	
Internet-Link	
• to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
· <del>-</del>	
<ul> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/simatic-net
<ul><li>to website: Industrial communication</li><li>to website: Industry Mall</li></ul>	
	http://www.siemens.com/simatic-net https://mall.industry.siemens.com
<ul> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and</li> </ul>	http://www.siemens.com/simatic-net
<ul> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> </ul>	http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP
<ul> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> </ul>	http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb
<ul> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> </ul>	http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb http://www.siemens.com/cax
<ul> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> </ul>	http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb