## **SIEMENS**

Data sheet 6XV1870-3QN20

## 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, preassembled with 2 RJ45 connectors, Length 20 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	20 m
electrical data	
attenuation factor per length	
<ul><li>at 10 MHz / maximum</li></ul>	0.086 dB/m
<ul><li>at 100 MHz / maximum</li></ul>	0.28 dB/m
<ul><li>at 300 MHz / maximum</li></ul>	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	
<ul> <li>of the characteristic impedance at 1 MHz 100 MHz</li> </ul>	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	
<ul> <li>of the wire insulation</li> </ul>	polyethylene (PE)
<ul> <li>of cable sheath</li> </ul>	FRNC

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color	
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	31 mm
with multiple bends / minimum permissible	43.5 mm
weight per length	50 kg/km
ambient conditions	
ambient temperature	05 100 90
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 component	s / 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
<ul> <li>Germanische Lloyd (GL)</li> </ul>	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	
• acc. to IEC 81346-2	WG
<ul> <li>according to IEC 81346-2:2019</li> </ul>	WGB
further information / internet-Links	
Internet-Link	
<ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>	http://www.siemens.com/tia-selection-tool
<ul> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
• to website: Image database	http://automation.siemens.com/bilddb
to website: CAx-Download-Manager	http://www.siemens.com/cax
to website: Industry Online Support	https://support.industry.siemens.com
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