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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, pre-assembled 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	
Damping ratio 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 %

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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 core	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	polyethylene (PE)
• of cable sheath	FRNC
Color	
• of the insulation of data wires	white/blue, white/orange, white/green, white/brown
• of cable sheath	green
Bending radius	
• 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	
• 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
Burning behavior	flame resistant according to IEC 60332-1
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
Protection class IP	IP20

Product features, product functions, product components / general	
Product feature	

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• halogen-free	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 approval	Yes
Standard for structured cabling	Cat6A
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No

Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• 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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