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	
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	
 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	
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		
 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		
EAC approval	Yes	
• UL approval	Yes	
RoHS conformity	Yes	
standard for structured cabling	Cat6A	
Marine classification association		
 American Bureau of Shipping Europe Ltd. (ABS) 	No	
French marine classification society (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	
reference code		
 according to IEC 81346-2 	WG	
• according to IEC 81346-2:2019	WGB	
further information / internet-Links		
Internet-Link		
 to web page: selection aid TIA Selection Tool 	http://www.siemens.com/tia-selection-tool	
• 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: Selection guide for cables and connectors 	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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