SIEMENS

Data sheet 6XV1870-3QN10

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 10 m.



suitability for use	Easy connection of terminal devices to the IE FC cabling system
wire length	10 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 %
coupling loss / at 30 MHz 100 MHz / minimum	70 dB
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
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
plug	
connector type	RJ45
type of plug interlock	latched
design of plug-in connection	RJ45-180
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 / gen	eral
product feature	
• halogen-free	Yes
 PoE capability 	Yes
 PoE+ capability 	Yes
PoE++ capability	Yes
• silicon-free	Yes
test voltage	
at AC / core-to-core	500 V
a at AC / care abject	1500 V
 at AC / core shield 	1500 V
at AC7 core shield standards, specifications, approvals	1500 V
	No No
standards, specifications, approvals	
standards, specifications, approvals UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating	No Yes; E502506 AWM STYLE 21279
standards, specifications, approvals UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability	No
standards, specifications, approvals UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval	No Yes; E502506 AWM STYLE 21279 ISO/IEC 11801-1, IEC 61035
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Approvals / Certificates

General Product Approval

Manufacturer Declaration



Declaration of Conformity





Fire safety / Physical security

General Product Approval

Test Certificates

Industrial Communication

China RoHS

Special Test Certificate

PROFINET

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6/27/2025