SIEMENS

Data sheet 6XV1870-3QE50

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 0.5 m.



suitability for use	Easy connection of terminal devices to the IE FC cabling system
wire length	0.5 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 band (24
with single bend / minimum permissible with multiple bende / minimum permissible	31 mm
with multiple bends / minimum permissible	43.5 mm
weight per length	50 kg/km
plug	DIA
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
at AC / core shield	1500 V
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	Yes; E502506 AWM STYLE 21279
certificate of suitability	ISO/IEC 11801-1, IEC 61035
•	Yes
EAC approvalUL approval	Yes
	Yes
RoHS conformity ctandard for structured cabling	
standard for structured cabling	Cat6A
Marine classification association	Na
American Bureau of Shipping Europe Ltd. (ABS) For all proving a localifaction positive (DV)	No
French marine classification society (BV) But Marine (BNN) Comparison of the	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 website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
to web page: SiePortal	https://sieportal.siemens.com/
to website: Image database	https://www.automation.siemens.com/bilddb
to website: CAx-Download-Manager	https://www.siemens.com/cax
to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions
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General Product Approval

Manufacturer Declaration



Declaration of Conformity





Fire safety / Physical security

General Product Approval

Test Certificates

Industrial Communication

China RoHS

Special Test Certificate

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