SIEMENS

Data sheet 6XV1870-4RH20

product type designation	**IE TP Cord RJ45/RJ45, 4x2**
product description	Patch cable, preferred length, preassembled with two RJ45 connectors (10/100/1000/10000MB)
	Industrial Ethernet TP cord RJ45/RJ45, Cat6a, S/FTP cable 4x2 (red), pre-assembled with 2 RJ45 connectors, length 2 m.



product brand name	SIMATIC NET
Technical Product Detail Page	https://i.siemens.com/1P6XV1870-4RH20
suitability for use	Easy connection of terminal devices to the IE FC cabling system
cable designation	S/FTP, LI 02YSCH 4x2x0,15 PIMF GN FRNC
wire length	2 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	0.485 dB/m
● at 600 MHz / maximum	0.675 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	5 %
coupling loss / at 30 MHz … 100 MHz / minimum	85 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	76 %
mechanical data	
number of electrical cores	8
design of the shield	S/FTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned 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

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color	
● of the insulation of data wires	white/blue, white/orange, white/green, white/brown
● of cable sheath	red
bending radius	
● with single bend / minimum permissible	31 mm
● with multiple bends / minimum permissible	62 mm
weight per length	46 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 acc. to IEC 60332-1-2, EN 60332-3-24, smoke density acc. 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; halogen-free according to EN 60754-2
● 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, Wiring Harness
certificate of suitability	ISO/IEC 11801-1, IEC 61035
● 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
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

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● to website: Industry Online Support	https://support.industry.siemens.com

security information	
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Approvals / Certificates

General Product Approval				other
Manufacturer Declaration	CE EG-Konf.	Declaration of Conformity	CE EG-Konf.	Miscellaneous

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