## SIEMENS

## Data sheet

## 6XV1870-3QN25

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 25 m.



cuitability for use	Easy connection of terminal devices to the IE EC colling outer			
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	25 m			
electrical data				
number of electrical connections	2			
attenuation factor per length				
<ul> <li>at 10 MHz / maximum</li> </ul>	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				
<ul> <li>of the characteristic impedance at 1 MHz 100 MHz</li> </ul>	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			
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires			
core diameter				
<ul> <li>of AWG26 insulated conductor</li> </ul>	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				
<ul> <li>of the wire insulation</li> </ul>	polyethylene (PE)			
of cable sheath	FRNC			
color				
<ul> <li>of the insulation of data wires</li> </ul>	white/blue, white/orange, white/green, white/brown			

Subject to change without notice © Copyright Siemens

<ul> <li>of cable sheath</li> </ul>	green				
bending radius	green				
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					
<ul> <li>during operation</li> </ul>	-25 +80 °C				
<ul> <li>during storage</li> </ul>	-25 +80 °C				
<ul> <li>during transport</li> </ul>	-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 / gene	əral				
product feature					
halogen-free	Yes				
• silicon-free	Yes				
test voltage					
• at AC / core-to-core	500 V				
<ul> <li>at AC / core shield</li> </ul>	1500 V				
standards, specifications, approvals					
standards, specifications, approvais					
UL/ETL listing / 300 V Rating	No				
	No Yes				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability					
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval	Yes				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Yes				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS)	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV)	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Yes Cat6A No No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV)	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Yes Cat6A No No No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL)	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Yes Cat6A No No No No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS)	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK)	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS)	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) reference code	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No No No No				
UL/ETL listing / 300 V Rating         UL/ETL style / 600 V Rating         certificate of suitability         • EAC approval         • UL approval         • RoHS conformity         standard for structured cabling         Marine classification association         • American Bureau of Shipping Europe Ltd. (ABS)         • French marine classification society (BV)         • Det Norske Veritas (DNV)         • Germanische Lloyd (GL)         • Lloyds Register of Shipping (LRS)         • Nippon Kaiji Kyokai (NK)         • Polski Rejestr Statkow (PRS)         reference code         • according to IEC 81346-2	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No No No No WG				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) reference code • according to IEC 81346-2 • according to IEC 81346-2:2019	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No No No No				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) reference code • according to IEC 81346-2 • according to IEC 81346-2:2019 further information / internet links	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No No No No WG				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) reference code • according to IEC 81346-2 • according to IEC 81346-2 • according to IEC 81346-2:2019 further information / internet links internet link	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Cat6A No No No No No No No WG WGB				
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • UL approval • RoHS conformity standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) reference code • according to IEC 81346-2 • according to IEC 81346-2 • according to IEC 81346-2 • according to IEC 81346-2 internet link • to website: Selection guide for cables and connectors	Yes         ISO/IEC 11801-1, IEC 61035         Yes         Yes         Yes         Cat6A         No         WG         WGB         https://support.industry.siemens.com/cs/ww/en/view/109766358				
UL/ETL listing / 300 V Rating         UL/ETL style / 600 V Rating         certificate of suitability         • EAC approval         • UL approval         • RoHS conformity         standard for structured cabling         Marine classification association         • American Bureau of Shipping Europe Ltd. (ABS)         • French marine classification society (BV)         • Det Norske Veritas (DNV)         • Germanische Lloyd (GL)         • Lloyds Register of Shipping (LRS)         • Nippon Kaiji Kyokai (NK)         • Polski Rejestr Statkow (PRS)         reference code         • according to IEC 81346-2         • according to IEC 81346-1         • to website: Selection guide for cables and connectors         • to website: Selection guide for cables and connectors         • to web page: selection aid TIA Selection Tool	Yes           ISO/IEC 11801-1, IEC 61035           Yes           Yes           Yes           Cat6A           No           WG           WGB           https://support.industry.siemens.com/cs/ww/en/view/109766358           https://www.siemens.com/tstcloud				
UL/ETL listing / 300 V Rating         UL/ETL style / 600 V Rating         certificate of suitability         • EAC approval         • UL approval         • RoHS conformity         standard for structured cabling         Marine classification association         • American Bureau of Shipping Europe Ltd. (ABS)         • French marine classification society (BV)         • Det Norske Veritas (DNV)         • Germanische Lloyd (GL)         • Lloyds Register of Shipping (LRS)         • Nippon Kaiji Kyokai (NK)         • Polski Rejestr Statkow (PRS)         reference code         • according to IEC 81346-2         • according to IEC 81346-2:2019         further information / internet links         internet link         • to website: Selection guide for cables and connectors         • to web page: selection aid TIA Selection Tool         • to web page: SiePortal	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Yes Cat6A No				
UL/ETL listing / 300 V Rating         UL/ETL style / 600 V Rating         certificate of suitability         • EAC approval         • UL approval         • RoHS conformity         standard for structured cabling         Marine classification association         • American Bureau of Shipping Europe Ltd. (ABS)         • French marine classification society (BV)         • Det Norske Veritas (DNV)         • Germanische Lloyd (GL)         • Lloyds Register of Shipping (LRS)         • Nippon Kaiji Kyokai (NK)         • Polski Rejestr Statkow (PRS)         reference code         • according to IEC 81346-2         • to website: Selection guide for cables and connectors         • to website: Selection aid TIA Selection Tool         • to web page: siePortal         • to website: Image database	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Yes Cat6A No No No No No No No No No No				
UL/ETL listing / 300 V Rating         UL/ETL style / 600 V Rating         certificate of suitability         • EAC approval         • UL approval         • RoHS conformity         standard for structured cabling         Marine classification association         • American Bureau of Shipping Europe Ltd. (ABS)         • French marine classification society (BV)         • Det Norske Veritas (DNV)         • Germanische Lloyd (GL)         • Lloyds Register of Shipping (LRS)         • Nippon Kaiji Kyokai (NK)         • Polski Rejestr Statkow (PRS)         reference code         • according to IEC 81346-2         • to website: Selection guide for cables and connectors         • to web page: selection aid TIA Selection Tool	Yes         ISO/IEC 11801-1, IEC 61035         Yes         Yes         Yes         Cat6A         No         WG         WGB         https://support.industry.siemens.com/cs/ww/en/view/109766358         https://suport.industry.siemens.com/         https://suport.automation.siemens.com/bilddb         https://www.siemens.com/cax				
UL/ETL listing / 300 V Rating         UL/ETL style / 600 V Rating         certificate of suitability         • EAC approval         • UL approval         • RoHS conformity         standard for structured cabling         Marine classification association         • American Bureau of Shipping Europe Ltd. (ABS)         • French marine classification society (BV)         • Det Norske Veritas (DNV)         • Germanische Lloyd (GL)         • Lloyds Register of Shipping (LRS)         • Nippon Kaiji Kyokai (NK)         • Polski Rejestr Statkow (PRS)         reference code         • according to IEC 81346-2         • according to IEC 81346-2:2019         further information / internet links         internet link         • to website: Selection guide for cables and connectors         • to web page: selection aid TIA Selection Tool         • to website: Image database         • to website: CAx-Download-Manager         • to website: Industry Online Support	Yes ISO/IEC 11801-1, IEC 61035 Yes Yes Yes Cat6A No No No No No No No No No No				
UL/ETL listing / 300 V Rating         UL/ETL style / 600 V Rating         certificate of suitability         • EAC approval         • UL approval         • RoHS conformity         standard for structured cabling         Marine classification association         • American Bureau of Shipping Europe Ltd. (ABS)         • French marine classification society (BV)         • Det Norske Veritas (DNV)         • Germanische Lloyd (GL)         • Lloyds Register of Shipping (LRS)         • Nippon Kaiji Kyokai (NK)         • Polski Rejestr Statkow (PRS)         reference code         • according to IEC 81346-2         • to website: Selection guide for cables and connectors         • to web page: selection aid TIA Selection Tool	Yes         ISO/IEC 11801-1, IEC 61035         Yes         Yes         Yes         Cat6A         No         WG         WGB         https://support.industry.siemens.com/cs/ww/en/view/109766358         https://suport.industry.siemens.com/         https://suport.automation.siemens.com/bilddb         https://www.siemens.com/cax				

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongl recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)								
Approvals / Certificates	;							
General Product App	roval						Test Certificates	
<u>Manufacturer Declara-</u> tion	CE EG-Konf.	<u>Declaration of (</u> formity	<u>Con-</u>	UK CA	(		Special Test Certific- ate	
Environment	Industrial Communicat	tion						
<u>Confirmation</u>	PROFINET							

last modified:

11/14/2024 🖸