## SIEMENS

## Data sheet

## 6XV1878-2B

pro	due	ct	type	C	lesig	nation

product description



## IE FC TP Flexible Cable GP 4x2 (AWG 24, Type C)

Shielded TP installation cable (8-core) with flexible cores, sold by the meter, unassembled

Flexible cable for quick assembly, for occasionally moving machine

Industrial Ethernet FastConnect TP flexible cable GP 4x 2, TP installation CAT6A cable for connection to IE FC RJ45 plug 4x 2, AWG24, sold by the meter, delivery unit max. 1000 m minimum order quantity 20 m.

	parts
cable designation	LI02YSH (ST) CY 4x2x0.6/1.05- 100 GN
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.089 dB/m
<ul> <li>at 100 MHz / maximum</li> </ul>	0.287 dB/m
<ul> <li>at 250 MHz / maximum</li> </ul>	0.466 dB/m
• at 300 MHz / maximum	0.514 dB/m
• at 500 MHz / maximum	0.679 dB/m
impedance	
• at 1 MHz 100 MHz	100 Ω
near-end crosstalk per length	
• at 1 MHz 100 MHz	0.453 dB/m
• at 1 MHz 250 MHz	0.393 dB/m
• at 1 MHz 300 MHz	0.381 dB/m
• at 1 MHz 500 MHz	0.348 dB/m
transfer impedance per length / at 10 MHz	20 mΩ/m
loop resistance per length / maximum	180 mΩ/m
insulation resistance coefficient	5000 GΩ·m
operating voltage	
RMS value	80 V
NVP value in percent	68 %
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
type of electrical connection / FastConnect	Yes
core diameter	
<ul> <li>of AWG24 insulated conductor</li> </ul>	0.6 mm
outer diameter	
<ul> <li>of inner conductor</li> </ul>	0.6 mm
<ul> <li>of the wire insulation</li> </ul>	1.05 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	6.4 mm
<ul> <li>of cable sheath</li> </ul>	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
• of the wire insulation	polyethylene (PE)

parts

<ul> <li>of the inner sheath of the cable</li> </ul>	FRNC
<ul> <li>of cable sheath</li> </ul>	PVC
color	
<ul> <li>of the insulation of data wires</li> </ul>	white-blue/blue, white-orange/orange, white-green/green, white- brown/brown
<ul> <li>of cable sheath</li> </ul>	green
bending radius	
with single bend / minimum permissible	24 mm
with multiple bends / minimum permissible	40 mm
tensile load / maximum	100 N
weight per length	86 kg/km
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +80 °C
<ul> <li>during storage</li> </ul>	-40 +80 °C
<ul> <li>during transport</li> </ul>	-40 +80 °C
during installation	-40 +80 °C
fire behavior	flame resistant according to IEC 60332-3-24 (Category C)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	200
to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components	/ general
product feature	
<ul> <li>halogen-free</li> </ul>	No
<ul> <li>silicon-free</li> </ul>	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	80 m
● with 1000BaseT	80 m
• for 10GBase T	70 m
	1011
standards specifications approvals	
standards, specifications, approvals	Very of ET I very OMO
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating	Yes; c(ETL)us, CMG No
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability	No
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval	
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking	No
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval	No Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking	No Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity	No Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e	No Yes Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity	No Yes Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) standard for structured cabling	No Yes Yes Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) standard for structured cabling Marine classification association	No Yes Yes Yes Yes
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UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) 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	No Yes Yes Yes Cat6A No No No No No No No No No
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UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) 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 • according to IEC 81346-2:2019 further information / internet-Links Internet-Link • to web page: selection aid TIA Selection Tool	No Yes Yes Yes Cat6A No No No 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 • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) 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 • according to IEC 81346-2:2019 further information / internet-Links Internet-Link • to web page: selection aid TIA Selection Tool • to website: Industrial communication	No Yes Yes Yes Cat6A No No No 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 • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) 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 Internet-Link • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall	No Yes Yes Yes Cat6A No No No No No No No No No No No No No
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UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) 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 81346-2:2019 <b>further information / internet-Links</b> Internet-Link • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center	No Yes Yes Yes Yes Cat6A No No No No No No No No No No

- to website: CAx-Download-Manager
- to website: Industry Online Support

last modified:

http://www.siemens.com/cax https://support.industry.siemens.com

2/9/2022 🖸