SIEMENS

Data sheet

6XV1876-2B

product type designation	IE FC TP flexible cable GP 4x2, CAT7, sold by the meter
product description	Shielded TP installation cable (8-core) with flexible cores, sold by the meter, unassembled
	IE FC TP Flexible Cable GP 4x2 FastConnect Flexible Cable GP 4x 2, TP installation CAT7 cable for connection to IE FC RJ45 plug 4x 2 and IE FC M12 plug PRO 4x2, AWG26, sold by the meter, delivery unit max. 3000 m minimum order quantity 20 m
suitability for use	Flexible cable for quick assembly, for occasionally moving machine parts
cable designation	02YSCY 4X2X0.5/1.15-100 LI PIMF GN
lectrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.088 dB/m
• at 100 MHz / maximum	0.285 dB/m
• at 300 MHz / maximum	0.513 dB/m
• at 600 MHz / maximum	0.751 dB/m
impedance	
• at 1 MHz 100 MHz	100 Ω
near-end crosstalk per length	
• at 10 MHz	0.78 dB/m
• at 100 MHz	0.724 dB/m
• at 300 MHz	0.653 dB/m
• at 600 MHz	0.608 dB/m
loop resistance per length / maximum	290 mΩ/m
operating voltage	
RMS value	100 V
• maximum	100 V
NVP value in percent	69 %
nechanical data	
number of electrical cores	8
design of the shield	overlapped aluminum-laminated foil, sheathed in a protective braided shield of tinned copper wires, central shielding wire of the line must be connected to the shield contact during plug assembly (see assembly video)
type of electrical connection / FastConnect	Yes
core diameter	
 of AWG26 insulated conductor 	0.47 mm
outer diameter	
of inner conductor	0.47 mm
of the wire insulation	1.15 mm
of cable sheath	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
of the wire insulation	polyethylene (PE)
of cable sheath	PVC
color	

of cable sheath	green
bending radius	9.001
with single bend / minimum permissible	40 mm
with surge bendy minimum permissible with multiple bends / minimum permissible	80 mm
tensile load / maximum	100 N
weight per length	65 kg/km
ambient conditions	05 kg/km
ambient temperature	20 170 %
during operation	-30 +70 °C -40 +70 °C
during storage	
during transport	-40 +70 °C
during installation	-30 +70 °C
ambient condition / for operation	temperature range for permanent installation -40 °C to +70 °C
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
 to mineral oil 	oil resistant according to EN 50290-2-22 (VDE 0819), compound type TM55 (7x24h/90 °C)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / gen	
product feature	
halogen-free	No
silicon-free	Yes
wire length / for Industrial Ethernet	
with 100BaseTX	90 m
• with 1000BaseT	90 m
• for 10GBase T	75 m
• for 2.5GBaseT	100 m
• for 5GBaseT	100 m
	100 11
standards specifications approvals	
standards, specifications, approvals	Vac. c/ETI)us 3047254 CM 75°C
UL/ETL listing / 300 V Rating	Yes; c(ETL)us 3047254 CM 75°C
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating	Yes; c(ETL)us 3047254 CM 75°C Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 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	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 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)	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 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	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 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	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Yes Cat7
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)	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Cat7
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)	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Cat7 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)	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Cat7 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)	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Cat7 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) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) reference code	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Cat7 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) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) reference code • according to IEC 81346-2	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Cat7 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 81346-2:2019	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Cat7 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 81346-2:2019 further information / internet links internet link • to website: Selection guide for cables and connectors	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Cat7 No WG WGB
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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 • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal • to website: Image database	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Yes Yes Yes Yes Cat7 No WG WGB Ittps://support.industry.siemens.com/cs/ww/en/view/109766358 https://sieportal.siemens.com/ https://suport.automation.siemens.com/bilddb
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 • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal	Yes; E502506 cRUus AWM 21695 I A/B 80°C 600V FT2 Yes Cat7 No Https://support.industry.siemens.com/cs/ww/en/view/109766358

security information

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. 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 strongly 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 Approval

Manufacturer Declaration



last modified:

8/8/2024 🖸