SIEMENS

Data sheet   **6XV1876-2A**

product type designation	**IE FC TP standard cable GP 4x2, CAT7, sold by the meter**
product description	shielded TP installation cable (8-wire) with rigid cores, sold by the meter, unassembled
	IE FC TP Standard Cable GP 4x2; FastConnect Standard Cable GP 4x 2, TP installation CAT7 cable for connection to IE FC RJ45 plug 4x 2 and IE FC M12 plug PRO 4x2, AWG25, sold by the meter, package item max. 2000 m minimum order quantity 20 m

suitability for use	Standard cable with rigid cores for fast, permanent installation
cable designation	2YCY 4X2X0.45/1.15-100LI PIMF GN
electrical data	
attenuation factor per length	
● at 10 MHz / maximum	0.059 dB/m
● at 100 MHz / maximum	0.19 dB/m
● at 300 MHz / maximum	0.342 dB/m
● at 600 MHz / maximum	0.501 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	0.652 dB/m
● at 600 MHz	0.607 dB/m
loop resistance per length / maximum	290 mΩ/m
operating voltage	
● RMS value	100 V
● maximum	100 V
NVP value in percent	69 %
mechanical 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
outer diameter	
● of inner conductor	0.45 mm
● of dielectric	3.8 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 the insulation of data wires	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
● of cable sheath	green

bending radius	
● with single bend / minimum permissible	40 mm
● with multiple bends / minimum permissible	80 mm
tensile load / maximum	100 N
weight per length	69 kg/km
ambient conditions	
ambient temperature	
● during operation	-40 ... +70 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
● during installation	-30 ... +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 / general	
product feature	
● halogen-free	No
● silicon-free	Yes
wire length / for Industrial Ethernet	
● with 100BaseTX	100 m
● with 1000BaseT	100 m
● for 10GBase T	70 m
● for 2.5GBaseT	100 m
● for 5GBaseT	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	Yes
certificate of suitability	
● EAC approval	Yes
● CE marking	Yes
● RoHS conformity	Yes
product conformity	
● ANSI/TIA-EIA 568-B.2 Cat.5e	Yes
● IEC 61784-5-2-CP 2/2 (Ethernet/IP)	Yes
standard for structured cabling	Cat7
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
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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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)

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