SIEMENS

Data sheet 6XV1878-2A

product type designation

product description



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

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

Industrial Ethernet FastConnect TP standard 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. 2000 m minimum order quantity 20 m.

suitability for use	Standard cable with rigid cores for fast, permanent installation
cable designation	2YH (ST) CY 4x2x0,5/1,0 GN
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.058 dB/m
• at 100 MHz / maximum	0.191 dB/m
• at 250 MHz / maximum	0.311 dB/m
• at 300 MHz / maximum	0.343 dB/m
• at 500 MHz / maximum	0.453 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
coupling loss / at 30 MHz 100 MHz / minimum	80 dB
transfer impedance per length / at 10 MHz	20 mΩ/m
loop resistance per length / maximum	190 mΩ/m
insulation resistance coefficient	5000 GΩ·m
operating voltage	
RMS value	80 V
• maximum	80 V
NVP value in percent	67 %
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	
 of AWG24 insulated conductor 	0.51 mm
outer diameter	
 of inner conductor 	0.51 mm
 of the wire insulation 	1 mm
 of the inner sheath of the cable 	6.1 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 the inner sheath of the cable 	FRNC
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	24 mm
 with multiple bends / minimum permissible 	40 mm
tensile load / maximum	100 N
weight per length	74.5 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +85 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
during transport during installation	-40 +80 °C
ambient condition / for operation	Temperature range for permanent installation -40 °C to +85 °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	ail registant according to IEO 00044 0.4 (4 5 / 7000)
• 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 / gen	eral .
product feature	
halogen-free	No
• silicon-free	Yes
wire length / for Industrial Ethernet	
with 100BaseTX	100 m
with 1000BaseT	100 m
• for 10GBase T	90 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMG, AWM-Style 21500, cRU AWM I A/B 60°C 300V FT2
UL/ETL style / 600 V Rating	No
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
,	Cat6A
standard for structured cabling Marine classification association	Calon
	No
American Bureau of Shipping Europe Ltd. (ABS) French marine place if setting positive (P) ()	No No
French marine classification society (BV) A November 1 (BN)	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	
further information / internet links	https://support.industry.siemens.com/cs/ww/en/view/109766358
further information / internet links internet link	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud
further information / internet links internet link • to website: Selection guide for cables and connectors	

• to website: Image database

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

https://www.automation.siemens.com/bilddb

https://www.siemens.com/cax

https://support.industry.siemens.com

security information

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Approvals / Certificates

General Product Approval

Test Certificates

Manufacturer Declara-<u>tion</u>



Declaration of Conformity





Special Test Certific-<u>ate</u>

Environment Industrial Communication

Confirmation **PROFINET**

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