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
wire length	sold by the meter
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 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	
• 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	
	erar
product feature	Al-
• halogen-free	No
• silicon-free	Yes
wire length / for Industrial Ethernet	400
• 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
standard for structured cabling	Cat6A
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 No
Polski Rejestr Statkow (PRS) reference code	
reference code	No
reference code • according to IEC 81346-2	No WG
reference code	No
reference code	No WG
reference code	WG WGB
reference code	No WG

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security information

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