SIEMENS

Data sheet 6XV1878-2B

product type designation

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

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

suitability for use

Flexible cable for quick assembly, for occasionally moving machine parts

	parto
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.089 dB/m
• at 100 MHz / maximum	0.287 dB/m
• at 250 MHz / maximum	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	
of AWG24 insulated conductor	0.6 mm
outer diameter	
 of inner conductor 	0.6 mm
 of the wire insulation 	1.05 mm
 of the inner sheath of the cable 	6.4 mm
of cable sheath	8 mm
symmetrical tolerance of the outer diameter / of cable	0.2 mm

sheath	
material	
of the wire insulation	polyethylene (PE)
of the inner sheath of the cable	FRNC
of cable sheath	PVC
color	FVG
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	86 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +80 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
during transport 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	
• 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	
product feature	7 general
·	No
halogen-free silicon-free	Yes
wire length / for Industrial Ethernet	165
with 100BaseTX	80 m
with 1000BaseT with 1000BaseT	80 m
• for 10GBase T	70 m
standards, specifications, approvals	70111
	Vest e/ETI via CMC
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG
UL/ETL style / 600 V Rating	No
certificate of suitability	Voc
EAC approval CE monthing	Yes
CE marking PoHS conformity	Yes
RoHS conformity	Yes
product conformity	Ven
• ANSI/TIA-EIA 568-B.2 Cat.5e	Yes
IEC 61784-5-2-CP 2/2 (Ethernet/IP) standard for structured publing.	Yes
standard for structured cabling Marina classification association	Cat6A
Marine classification association	No
American Bureau of Shipping Europe Ltd. (ABS) French marine elegation assists (DV)	No No
French marine classification society (BV) Det Narska Varitae (DNV)	No No
 Det Norske Veritas (DNV) 	No
Germanische Lloyd (GL)	No
Germanische Lloyd (GL)Lloyds Register of Shipping (LRS)	No No
Germanische Lloyd (GL)Lloyds Register of Shipping (LRS)Nippon Kaiji Kyokai (NK)	No No No
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Germanische Lloyd (GL) Lloyds Register of Shipping (LRS) Nippon Kaiji Kyokai (NK) Polski Rejestr Statkow (PRS) further information / internet-Links	No No No
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• to website: Industry Mall

to website: Information and Download Centerto website: Selection guide for cables and

connectors

• to website: Image database

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

last modified:

https://mall.industry.siemens.com

http://www.siemens.com/industry/infocenter

https://sie.ag/2QdlxcP

http://automation.siemens.com/bilddb

http://www.siemens.com/cax

https://support.industry.siemens.com

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