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
cable designation	LI02YSH (ST) CY 4x2x0,22/1,05- 100 GN
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 	0.51 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

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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	86 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +80 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
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	s / general
product feature	
halogen-free	No
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	80 m
with 1000BaseT	80 m
• for 10GBase T	70 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG
UL/ETL style / 600 V Rating	No
certificate of suitability	140
EAC approval	Yes
CE marking	Yes
RoHS conformity	Yes
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product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e	Yes
 ANSI/TIA-EIA 300-B.2 Cat.3e IEC 61784-5-2-CP 2/2 (Ethernet/IP) 	Yes
standard for structured cabling	Cat6A
Marine classification association	Outo, i
American Bureau of Shipping Europe Ltd. (ABS)	No
French marine classification society (BV)	No
Det Norske Veritas (DNV)	No
Germanische Lloyd (GL)	No
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Lloyds Register of Shipping (LRS) Nippen Kajii Kvakai (NK)	No No
Nippon Kaiji Kyokai (NK) Poloki Pojostr Statkov (PRS)	No No
Polski Rejestr Statkow (PRS)	No
further information / internet-Links	
Internet-Link	
 to web page: selection aid TIA Selection Tool 	http://www.siemens.com/tia-selection-tool

• to website: Industrial communication

• to website: Industry Mall

• to website: Information and Download Center

• to website: Image database

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

last modified:

http://www.siemens.com/simatic-net https://mall.industry.siemens.com

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

http://automation.siemens.com/bilddb

http://www.siemens.com/cax

https://support.industry.siemens.com

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