SIEMENS

Data sheet 6XV1878-2G

product type designation

product description



IE TP Ground Cable 4x2 (AWG 24, Type C)

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

IE TP ground cable 4x2 underground cable, CAT6A, 8-core, shielded, cable for Connection to IE FC RJ45 plug 4x2, AWG24, Sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.

suitability for use	Standard cable with rigid cores for fast, permanent installation outdoors and in the ground
cable designation	2YH(ST)CY2Y 4X2X0.5/1.0 BK
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
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
NVP value in percent	66 %
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	10.5 mm
of cable sheath / note	IE FC standard cable GP 4x2 (diameter 8 mm) with additional PE outer cover (diameter 10.5 mm)
symmetrical tolerance of the outer diameter / of cable	0.5 mm

sheath	
material	
of the wire insulation	nelvethylene (DE)
	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/black
bending radius	
 with single bend / minimum permissible 	42 mm
with multiple bends / minimum permissible	84 mm
tensile load / maximum	100 N
weight per length	107 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
-	In fixed installation -40 °C to 85 °C
• note	
class of burning behaviour / according to EN 13501-6	Fca
chemical resistance	5
• to water	Resistant
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	90 m
• with 1000BaseT	90 m
• for 10GBase T	70 m
	70111
standards, specifications, approvals	Al-
UL/ETL listing / 300 V Rating	No
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) Palaki Pairatt Staticau (RRS)	No
Polski Rejestr Statkow (PRS)	No
reference code	wo
• according to IEC 81346-2	WG
	WGB
• according to IEC 81346-2:2019	
further information / internet-Links Internet-Link	http://www.siemens.com/tia-selection-tool
further information / internet-Links	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net
Internet-Link • to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com

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:

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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