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Data sheet 6XV1878-2G

product type designation	**IE TP Ground Cable 4x2 (AWG 24, Type C)**
product description	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
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
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	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 sheath	0.5 mm

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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/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 installation	-40 ... +80 °C
● note	In fixed installation -40 °C to 85 °C
class of burning behaviour / according to EN 13501-6	Fca
chemical resistance	
● 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
standards, specifications, approvals	
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)	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	
internet link	
● to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
● to website: Industrial communication	http://www.siemens.com/simatic-net
● to website: Industry Mall	https://mall.industry.siemens.com
● to website: Information and Download Center	http://www.siemens.com/industry/infocenter
● to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP

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● to website: Image database	http://automation.siemens.com/bilddb
● to website: CAx-Download-Manager	http://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com

last modified: 9/12/2023

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