SIEMENS

Data sheet

6XV1878-2T

product type designation product description



IE TP Train Cable 4x2 (AWG24/7)

Flexible, shielded bus cable with tinned copper leads (8-core) for rail applications, sold by the meter, unassembled

IE TP TRAIN Cable 4x 2; CAT7 TP installation cable for Rail applications for connection to FC M12 Plug PRO 4x 2, Railway-certified, 8-core, shielded, sold by the meter, max. delivery unit 1000 m, minimum order quantity 20 m.

suitability for use	For laying in rail vehicles and buses
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.063 dB/m
• at 100 MHz / maximum	0.207 dB/m
• at 250 MHz / maximum	0.343 dB/m
impedance	
• at 1 MHz 100 MHz	100 Ω
coupling loss / at 30 MHz 100 MHz / minimum	60 dB
transfer impedance per length / at 10 MHz	5 mΩ/m
loop resistance per length / maximum	124 mΩ/m
insulation resistance coefficient	5000 GΩ·m
operating voltage	
RMS value	125 V
mechanical data	
number of electrical cores	8
design of the shield	Overlapped aluminum-clad foil, sheathed in a protective braided shield of tin- plated copper wires with additional pair shielding
type of electrical connection / FastConnect	No
core diameter	
 of AWG24 insulated conductor 	0.51 mm
outer diameter	
of the wire insulation	1.45 mm
of cable sheath	8.1 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
material	
of the wire insulation	polyethylene (PE)
of cable sheath	Elastomer meshed electron beam
color	
 of the insulation of data wires 	white/blue, white/green, white/brown, white/orange
of cable sheath	Black
bending radius	
 with single bend / minimum permissible 	53 mm
 with multiple bends / minimum permissible 	53 mm
tensile load / maximum	60 N
weight per length	79 kg/km
ambient conditions	
ambient temperature	

during operation	-40 +80 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
 during installation 	-20 +60 °C
fire behavior	BS 6853, DIN5510-2 Brandschutzstufe 1-4, prEN 45545-2 Hazard Level HL 1- HL 3, EN 50306-4, NF F 16-101, NFPA130
chemical resistance	
• to mineral oil	EN 50306-4 (72h/100 °C, IRM 902, 168h/70 °C, IRM 903)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
halogen-free	Yes
• silicon-free	Yes
wire length / for Industrial Ethernet	
● with 100BaseTX	100 m
● with 1000BaseT	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
CE marking	Yes
RoHS conformity	Yes
standard for structured cabling	Cat7
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
• 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
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