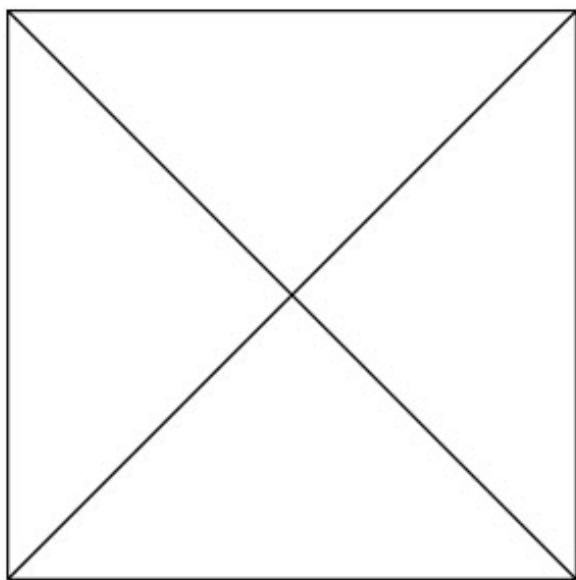


Product type designation

Product description

IE TP Train Cable 2x2 (Type C, AWG22/7)

Flexible bus cable with tinned copper leads (4-core) for rail applications, sold by the meter, unassembled
IE TP TRAIN Cable 2x2; CAT5 TP installation cable for Rail applications to Connection to FC RJ45 plug 2x2, FC M12 plug pro 2x2; railway-certified, 4-core, shielded sold by the meter, Max. delivery length 1000 m, Minimum order 20 m



Suitability for use	For laying in rail vehicles and buses
Cable designation	SF/UTP
Electrical data	
Damping ratio per length	
• at 10 MHz / maximum	0.053 dB/m
• at 100 MHz / maximum	0.188 dB/m
Impedance	
• at 1 MHz ... 100 MHz	100 Ω
Relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	5 %
Near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.5 dB/m
Transfer impedance per length / at 10 MHz	8 m Ω /m
Loop resistance per length / maximum	124 m Ω /m
Operating voltage	
• RMS value	125 V

Mechanical data	
Number of electrical cores	4
Design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
Type of electrical connection / FastConnect	No
Core diameter	
• of AWG22 core	0.75 mm
Outer diameter	
• of inner conductor	0.75 mm
• of the wire insulation	1.5 mm
• of cable sheath	6.6 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material	
• of the wire insulation	polyethylene (PE)
• of cable sheath	Elastomer meshed electron beam
Color	
• of the insulation of data wires	white/yellow/blue/orange
• of cable sheath	Black
Bending radius	
• with single bend / minimum permissible	40 mm
• with multiple bends / minimum permissible	40 mm
Tensile load / maximum	150 N
Weight per length	71 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
• Note	160 °C temporarily under short-circuit conditions
Ambient condition / for operation	Electrical characteristics measured at 20 °C, tests according to EN 50288-2-1
Burning behavior	BS6853, DIN5510-2 Brandschutzstufe 1-4, prEN45545-2 Hazard Level HL1-HL3, EN50306-4, 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

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	Cat5
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (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

Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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: 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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