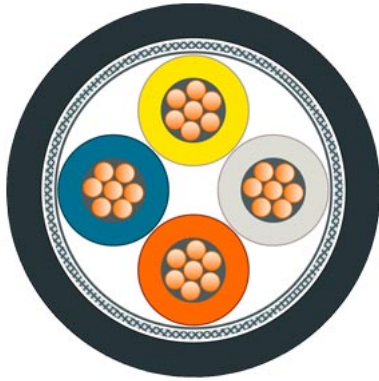


### product type designation

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 for connection to FC RJ45 plug 2x2, FC M12 plug pro 2x2; railway-certified, 4-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

cable designation

SF/UTP

### electrical data

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum

0.053 dB/m  
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 mΩ/m

loop resistance per length / maximum

124 mΩ/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 tinned copper wires

type of electrical connection / FastConnect

No

core diameter

- of AWG22 insulated conductor

0.75 mm

outer diameter

- of inner conductor
- of the wire insulation
- of cable sheath

0.75 mm  
1.5 mm  
6.6 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

- of the wire insulation
- of cable sheath

polyethylene (PE)  
Elastomer meshed electron beam

color

- of the insulation of data wires
- of cable sheath

white/yellow/blue/orange  
Black

bending radius

<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	40 mm 40 mm
tensile load / maximum	150 N
weight per length	71 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> <li>• note</li> </ul>	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -20 ... +60 °C 160 °C temporarily under short-circuit conditions
ambient condition / for operation	Electrical characteristics measured at 20 °C, tests according to EN 50288-2-1
fire behavior	BS6853, DIN5510-2 Brandschutzstufe 1-4, prEN45545-2 Hazard Level HL1-HL3, EN50306-4, NF F 16-101, NFPA130
chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	EN 50306-4 (72h/100 °C, IRM 902, 168h/70 °C, IRM 903) Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	Yes Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>• with 100BaseTX</li> </ul>	100 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes Yes
standard for structured cabling	Cat5
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No No No No No No No
reference code	
<ul style="list-style-type: none"> <li>• according to IEC 81346-2</li> <li>• according to IEC 81346-2:2019</li> </ul>	WG WGB
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Selection guide for cables and connectors</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a>  <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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