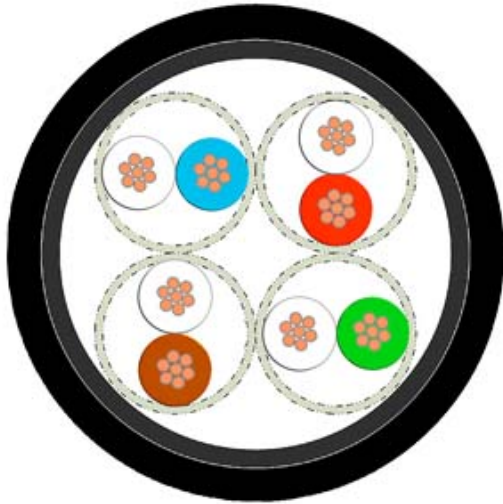


### Product type designation

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 4X2; CAT7 TP INSTALLATION CABLE F. TRAIN APPLICATIONS, FOR CONNECTION TO FC M12 PLUG PRO 4X2, TRAIN CERTIFIED, 8 WIRE, SHIELDED, BY THE METER, MAX. CONSIGNMENT 1000 M, MIN. ORDER QUANTITY 20 M



Suitability for use

For laying in rail vehicles and buses

### Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> <li>at 10 MHz / maximum</li> <li>at 100 MHz / maximum</li> <li>at 250 MHz / maximum</li> </ul>	0.063 dB/m 0.207 dB/m 0.343 dB/m
Impedance	
<ul style="list-style-type: none"> <li>at 1 MHz ... 100 MHz</li> </ul>	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> <li>of the characteristic impedance at 1 MHz ... 100 MHz</li> </ul>	5 %
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	
<ul style="list-style-type: none"> <li>RMS value</li> </ul>	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	
<ul style="list-style-type: none"> <li>of the AWG24 core</li> </ul>	0.51 mm

Outer diameter	
<ul style="list-style-type: none"> <li>• of the wire insulation</li> <li>• of cable sheath</li> </ul>	1.5 mm 8.8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material	
<ul style="list-style-type: none"> <li>• of the wire insulation</li> <li>• of cable sheath</li> </ul>	PE Elastomer meshed electron beam
Color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	white/blue, white/green, white/brown, white/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>	53 mm 53 mm
Tensile load / maximum	100 N
Weight per length	79 kg/km

#### Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul>	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -20 ... +60 °C
Burning 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	
<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

#### Product properties, functions, components / general

Product property	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	Yes Yes
Cable length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>• with 100BaseTX</li> <li>• with 1000BaseT</li> </ul>	100 m 100 m

#### Standards, specifications, approvals

Certificate of suitability	
<ul style="list-style-type: none"> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes
Standard for structured cabling	Cat7

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	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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