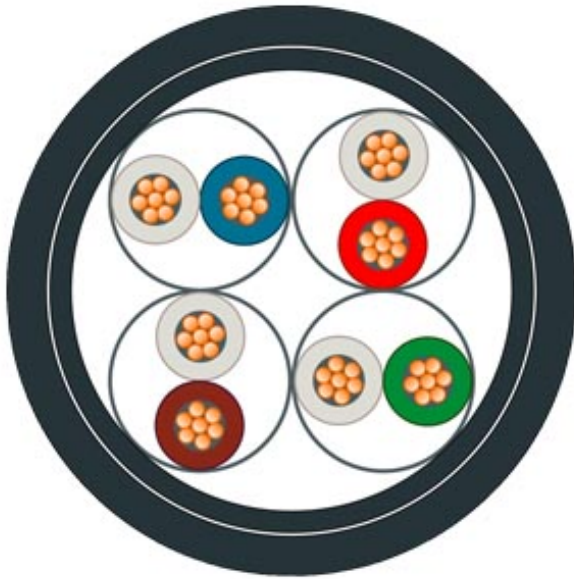


### Product type designation

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 to connection to FC M12 Plug PRO 4x 2, Railway-certified, 8-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

### Electrical data

Damping ratio 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  $\Omega$

Relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz 5 %

Transfer impedance per length / at 10 MHz

5 m $\Omega$ /m

Loop resistance per length / maximum

124 m $\Omega$ /m

Insulation resistance coefficient

5000 G $\Omega$ ·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 <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>	1.45 mm 8.1 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
Material <ul style="list-style-type: none"> <li>• of the wire insulation</li> <li>• of cable sheath</li> </ul>	polyethylene (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	60 N
Weight per length	79 kg/km

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 features, product functions, product components / general	
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

- 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
• 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/industry/infocenter">http://www.siemens.com/industry/infocenter</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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