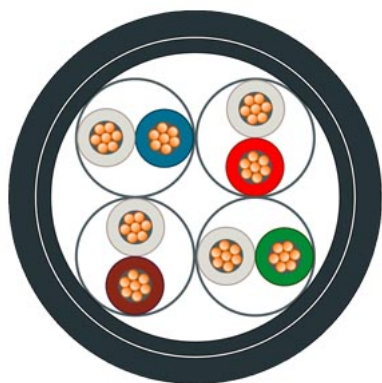


product type designation

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

cable designation

SF/FTP

wire length

sold by the meter

electrical data

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum
- at 250 MHz / maximum

0.063 dB/m
0.207 dB/m
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

SF/FTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned 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
- of cable sheath

1.45 mm
8.1 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.4 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/blue, white/green, white/brown, white/orange
Black

bending radius

- with single bend / minimum permissible
- with multiple bends / minimum permissible

53 mm
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
• PoE capability	Yes
• PoE+ capability	Yes
• PoE++ capability	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 website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAX-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry . Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available

and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

Approvals / Certificates

General Product Approval



[Declaration of Con-
formity](#)



[Manufacturer Declara-
tion](#)

[China RoHS](#)

Environment

[Environmental Con-
firmations](#)

last modified:

9/13/2025