



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

Acceptability for application

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	
• for frequency range 1 MHz ... 100 MHz	100 Ω
Relative symmetrical tolerance	
• of the surge impedance at 1 MHz ... 100 MHz	5 %
Transfer impedance / at 10 MHz	5 mΩ/m
Loop resistance per length / maximum	124 Ω/km
Insulation resistance coefficient	5000 GΩ·m
Operating voltage	
• RMS value	125 V

Mechanical data

Number of electrical wires	8
Design of shield	Overlapped aluminum-clad foil, sheathed in a protective braided shield of tin-plated copper wires with additional pair shielding
Design of the electrical connection / FastConnect	No
Core diameter	

• of the AWG24 core	0.51 mm
Outer diameter	
• of the wire insulation	1.5 mm
• of the cable sheath	8.8 mm
Symmetrical tolerance of outer diameter / of cable sheath	0.2 mm
Material	
• of the wire insulation	PE
• of the cable sheath	Elastomer meshed electron beam
Color	
• of the insulation of data wires	white/blue, white/green, white/brown, white/orange
• of the cable sheath	Black
Bending radius	
• with single bend / minimum permissible	53 mm
• with multiple bends / minimum permissible	53 mm
Traction stress / maximum	100 N
Weight per length	79 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operating	-40 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-20 ... +60 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to EN50288-2-1
Burning behaviour	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 properties, functions, components / general	
Product feature	
• halogen-free	Yes
• silicon-free	Yes
Cable length	
• with 100BaseTX / for Industrial Ethernet	100 m
• with 1000BaseT / for Industrial Ethernet	100 m
Standards, specifications, approvals	
UL/ETL listing / with 300 V rating	No

UL/ETL style / with 600 V rating

No

Verification of suitability

Yes

- CE mark

Yes

- RoHS conformity

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

letzte Änderung:

Jul 25, 2014