



SIMATIC NET, IE FC TP TRAILING CABLE,
2X2 (PROFINET TYP C),
TP INSTALLATION CABLE FOR CONNECTION TO FC
OUTLET RJ 45,
F. FESTOONING, 4-WIRE, SHIELDED, CAT. 5,
SOLD BY THE METER (4 MIO. BENDING CYCLES),
MAX. CONSIGNMENT: 2000 M,
MIN. ORDERING QUANTITY: 20 M

Acceptability for application

Continuous motion control in a cable carrier

Electrical data

Damping ratio per length

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

0.06 dB/m

0.22 dB/m

Impedance

- for frequency range 1 MHz ... 100 MHz

100 Ω

Relative symmetrical tolerance

- of the surge impedance at 1 MHz ... 100 MHz

15 %

Near-end crosstalk per length

- at 1 MHz ... 100 MHz

0.5 dB/m

Transfer impedance / at 10 MHz

10 mΩ/m

Loop resistance per length / maximum

120 Ω/km

Operating voltage

- RMS value

100 V

percentage NVP value

66 %

Mechanical data

Number of electrical wires

4

Design of shield

Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires

Design of the electrical connection / FastConnect

Yes

Core diameter	
• of the AWG22 core	0.75 mm
Outer diameter	
• of the inner conductor	0.75 mm
• of the wire insulation	1.5 mm
• of the inner sheath of the cable	3.9 mm
• of the cable sheath	6.5 mm
Symmetrical tolerance of outer diameter / of cable sheath	0.2 mm
Material	
• of the wire insulation	PE
• of the inner sheath of the cable	FRNC
• of the cable sheath	PUR (TPE-U)
Color	
• of the insulation of data wires	white / yellow / blue / orange
• of the cable sheath	green
Bending radius	
• with single bend / minimum permissible	19.5 mm
• with multiple bends / minimum permissible	49 mm
• with continuous bending	100 mm
Number of bending cycles	4000000
Traction stress / maximum	150 N
Weight per length	63 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operating	-40 ... +75 °C
• during storage	-50 ... +75 °C
• during transport	-50 ... +75 °C
• during installation	-20 ... +60 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN VDE 0472
Burning behaviour	flame resistant according to IEC 60332-1-2
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	Resistant
• to water	resistant
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	85 m
Standards, specifications, approvals	
UL/ETL listing / with 300 V rating	Yes: cULus / CMX
UL/ETL style / with 600 V rating	No
Verification of suitability	
• CE mark	Yes
• RoHS conformity	Yes
Standard for structured cabling	Cat5e
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:	Jun 28, 2014