



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	
<ul style="list-style-type: none"> <li>• of the AWG22 core</li> </ul>	0.75 mm
Outer diameter	
<ul style="list-style-type: none"> <li>• of the inner conductor</li> </ul>	0.75 mm
<ul style="list-style-type: none"> <li>• of the wire insulation</li> </ul>	1.5 mm
<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> </ul>	3.9 mm
<ul style="list-style-type: none"> <li>• of the cable sheath</li> </ul>	6.5 mm
Symmetrical tolerance of outer diameter / of cable sheath	0.2 mm
Material	
<ul style="list-style-type: none"> <li>• of the wire insulation</li> </ul>	PE
<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> </ul>	FRNC
Color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> </ul>	white / yellow / blue / orange
<ul style="list-style-type: none"> <li>• of the cable sheath</li> </ul>	green
Bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> </ul>	19.5 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	49 mm
<ul style="list-style-type: none"> <li>• with continuous bending</li> </ul>	100 mm
Number of bending cycles	4000000
Traction stress / maximum	150 N
Weight per length	63 kg/km
<b>Permitted ambient conditions</b>	
Ambient temperature	
<ul style="list-style-type: none"> <li>• during operating</li> </ul>	-40 ... +75 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-50 ... +75 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-50 ... +75 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-20 ... +60 °C
<ul style="list-style-type: none"> <li>• Comment</li> </ul>	Electrical characteristics measured at 20 °C, tests according to DIN VDE 0472
Burning behaviour	flame resistant according to IEC 60332-1-2
Chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> </ul>	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
<ul style="list-style-type: none"> <li>• to grease</li> </ul>	Resistant
<ul style="list-style-type: none"> <li>• to water</li> </ul>	resistant
Radiological resistance / to UV radiation	Resistant
<b>Product properties, functions, components / general</b>	
Product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• silicon-free</li> </ul>	Yes
Cable length	

- with 100BaseTX / for Industrial Ethernet

85 m

### Standards, specifications, approvals

UL/ETL listing / with 300 V rating

Yes: cULus / CMX

Verification of suitability

- CE mark
- RoHS conformity

Yes

Yes

Standard for structured cabling

Cat5e

Marine classification association

- American Bureau of Shipping Europe Ltd. (ABS)
- Bureau Veritas (BV)
- Det Norske Veritas (DNV)
- Germanische Lloyd (GL)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (NK)
- Polski Rejestr Statkow (PRS)

No

No

No

No

No

No

No

**letzte Änderung:**

Jan 16, 2014