



SIMATIC NET, IE FC TP FRNC CABLE GP,
TP-INSTALLATION CABLE FOR CONNECT. TO FC
OUTLET RJ45,
FOUR-CORE, SHIELDED, CAT 5,
SOLD BY THE METER,
MAX. CONSIGNMENT: 1000 M MIN. ORDERING
QUANTITY: 20 M

Acceptability for application

For occasionally moved machine parts

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 m Ω /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	PP
• of the inner sheath of the cable	FRNC
• of the cable sheath	FRNC
Color	
• of the insulation of data wires	white / yellow / blue / orange
• of the cable sheath	green
Bending radius	
• with single bend / minimum permissible	39 mm
• with multiple bends / minimum permissible	97.5 mm
Traction stress / maximum	150 N
Weight per length	68 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operating	-25 ... +70 °C
• during storage	-40 ... +75 °C
• during transport	-40 ... +75 °C
• during installation	0 ... 50 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN VDE 0472
Burning behaviour	flame resistant according to IEC 60332-3-22 (Category A/F), IEC 61034
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• 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

85 m

Standards, specifications, approvals

UL/ETL listing / with 300 V rating

Yes: c(UL)us, CMG / PLTC / Sun Res / OIL RES

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:

Aug 6, 2014