



IE FC TP FLEXIBLE CABLE GP 4X2,
 TP-INSTALLATIONS CABLE CAT6 FOR CONNECTING TO
 IE FC RJ45 PLUG 4X2,
 AWG24, SOLD BY THE METER,
 MAX. CONSIGNMENT: 1000 M,
 MIN. LENGTH ORDERED: 20 M

Acceptability for application

Flexible cable for quick assembly, for occasionally moving machine parts

Electrical data

Damping ratio per length	
• at 10 MHz / maximum	0.09 dB/m
• at 100 MHz / maximum	0.299 dB/m
• at 250 MHz / maximum	0.495 dB/m
Impedance	
• for frequency range 1 MHz ... 100 MHz	100 Ω
Near-end crosstalk per length	
• at 1 MHz ... 250 MHz	0.383 dB/m
Transfer impedance / at 10 MHz	20 mΩ/m
Loop resistance per length / maximum	180 Ω/km
Insulation resistance coefficient	5000 GΩ·m
Operating voltage	
• RMS value	100 V
percentage NVP value	70 %

Mechanical data

Number of electrical wires	8
Design of shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tinned copper wires

Design of the electrical connection / FastConnect	Yes
Core diameter	
• of the AWG24 core	0.51 mm
Outer diameter	
• of the inner conductor	0.6 mm
• of the wire insulation	1.1 mm
• of the inner sheath of the cable	6.1 mm
• of the cable sheath	8 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	PVC
Color	
• of the insulation of data wires	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
• of the cable sheath	green
Bending radius	
• with single bend / minimum permissible	24 mm
• with multiple bends / minimum permissible	40 mm
Traction stress / maximum	100 N
Weight per length	72 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operating	-40 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-40 ... +80 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN VDE 0472
Ambient condition / for (standard) operation mode	Temperature range for permanent installation -40 °C to +85 °C
Burning behaviour	flame resistant according to IEC 60332-3-24 (Category C)
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	No

• silicon-free	Yes
Cable length	
• with 100BaseTX / for Industrial Ethernet	80 m
• with 1000BaseT / for Industrial Ethernet	80 m
Standards, specifications, approvals	
UL/ETL listing / with 300 V rating	Yes: c(ETL)us, CMG
UL/ETL style / with 600 V rating	No
Verification of suitability	
• CE mark	Yes
• RoHS conformity	Yes
Standard for structured cabling	Cat6
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
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