



SIMATIC NET,
 PROFIBUS FC UNDERGROUND CABLE,
 UNDERGROUND LAYING CABLE 2-WIRE,
 SHIELDED,
 SOLD BY METER MAX. CONSIGNMENT: 1000M MIN.
 ORDERING QUANTITY: 20 M

Acceptability for application

Used for buried cables

Electrical data

Damping ratio per length

• at 9.6 kHz / maximum	0.0025 dB/m
• at 38.4 kHz / maximum	0.0040 dB/m
• at 4 MHz / maximum	0.022 dB/m
• at 16 MHz / maximum	0.042 dB/m

Impedance

• Nominal value	150 Ω
• at 9.6 kHz	270 Ω
• at 38.4 kHz	185 Ω
• for frequency range 3 MHz ... 20 MHz	150 Ω

Relative symmetrical tolerance

• of the surge impedance at 9.6 kHz	10 %
• of the surge impedance at 38.4 kHz	10 %
• of the surge impedance at 3 MHz ... 20 MHz	10 %

Loop resistance per length / maximum

110 Ω/km

Shield resistance per length / maximum

9.5 Ω/km

Capacity per length / at 1 kHz

28.5 pF/m

Operating voltage

• RMS value	100 V
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Mechanical data

Number of electrical wires	2
Design of shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
Design of the electrical connection / FastConnect	Yes
Outer diameter	
• of the inner conductor	0.65 mm
• of the wire insulation	2.55 mm
• of the inner sheath of the cable	5.4 mm
• of the cable sheath	10.8 mm
Symmetrical tolerance of outer diameter / of cable sheath	0.5 mm
Outer diameter / of the cable sheath / Note	The cable (diameter 8.0 mm \pm 0.4 mm) has an additional, black, outer sheath (diameter 10.8 mm \pm 0.5 mm) as protection against damage caused by routing underground. Due to outer diameter > 8 mm: Bus connectors can only be connected after the outer sheath has been stripped
Material	
• of the wire insulation	PE
• of the inner sheath of the cable	PVC
• of the cable sheath	PE/PVC
Material / of the cable sheath / Note	PVC (cable casing), PE (additional outer sheath)
Color	
• of the insulation of data wires	red / green
• of the cable sheath	Black
Bending radius	
• with single bend / minimum permissible	41 mm
• with multiple bends / minimum permissible	81 mm
Traction stress / maximum	100 N
Weight per length	117 kg/km

Permitted ambient conditions

Ambient temperature	
• during operating	-40 ... +60 °C
• during storage	-40 ... +60 °C
• during transport	-40 ... +60 °C
• during installation	-40 ... +60 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN 47250 Part 4 or DIN VDE 0472
Burning behaviour	inflammable
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 hours / 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
- silicon-free

No

Yes

Standards, specifications, approvals

UL/ETL listing / with 300 V rating

No

UL/ETL style / with 600 V rating

No

Verification of suitability

- CE mark
- RoHS conformity

Yes

Yes

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:

Aug 6, 2014