



SIMATIC NET,
 PROFIBUS FC FOOD BUS CABLE WITH PE-SHEATH
 FOR APPLICATION IN FOOD AND BEVERAGE
 INDUSTRY,
 2-WIRE, SHIELDED, SOLD BY THE METER,
 MAX. CONSIGNMENT: 1000M,
 MIN. ORDERING QUANTITY: 20 M

Acceptability for application

For use in the food, beverages and tobacco industries

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

Mechanical data	
Number of electrical wires	2
Design of shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tinned 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	8 mm
Symmetrical tolerance of outer diameter / of cable sheath	0.4 mm
Material	
• of the wire insulation	PE
• of the inner sheath of the cable	PVC
• of the cable sheath	PE
Material / of the cable sheath / Note	Outer PE sheath particularly suitable for the food sector
Color	
• of the insulation of data wires	red / green
• of the cable sheath	Black
Bending radius	
• with single bend / minimum permissible	30 mm
• with multiple bends / minimum permissible	60 mm
Traction stress / maximum	100 N
Weight per length	67 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	flammable
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

Standards, specifications, approvals

UL/ETL listing / with 300 V rating

No

UL/ETL style / with 600 V rating

No

Verification of suitability

• CE mark

Yes

• RoHS conformity

Yes

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 4, 2014