



SIMATIC NET, PB FC STANDARD,  
BUS CABLE 2-WIRE, SHIELDED,  
SPEC. DESIGN FOR RAPID INSTALL. 100 M IN SPOOL  
BOX

Acceptability for application

Standard cable specially designed for fast, permanent installation

Cable length

100 m

## 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
<b>Mechanical data</b>	
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	PVC
Color	
• of the insulation of data wires	red / green
• of the cable sheath	Violet
Bending radius	
• with single bend / minimum permissible	37.5 mm
• with multiple bends / minimum permissible	75 mm
Traction stress / maximum	100 N
Weight per length	80 kg/km
<b>Permitted ambient conditions</b>	
Ambient temperature	
• during operating	-40 ... +75 °C
• during storage	-40 ... +75 °C
• during transport	-40 ... +75 °C
• during installation	-40 ... +75 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN 47250 Part 4 or DIN VDE 0472
Burning behaviour	flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4)
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
<b>Product properties, functions, components / general</b>	
Product feature	

• halogen-free

No

• silicon-free

Yes

### Standards, specifications, approvals

UL/ETL listing / with 300 V rating

Yes: c(UL)us, CMG / CL3 / Sun Res

UL/ETL style / with 600 V rating

yes

Verification of suitability

• CE mark

Yes

• UL-registration

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:**

Jun 28, 2014