



SIMATIC NET,
PB FC STANDARD CABLE IS GP,
BUS CABLE 2-WIRE, SHIELDED,
SPECIAL- MOUNT F. FAST MOUNTING,
MAXIMAL LENGTH: 1000 M,
MINIMAL LENGTH: 20 M SOLD BY THE METER

Acceptability for application

Used for intrinsically safe distributed I/O systems for permanent installation

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

Insulation resistance coefficient

16000 G Ω ·m

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 tin-plated copper wires
Design of the electrical connection / FastConnect	Yes
Core diameter	
• of the AWG22 core	0.64 mm
Outer diameter	
• of the inner conductor	0.64 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	Blue
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
Permitted ambient conditions	
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)
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	Yes: CMG / CL3 / Sun Res
UL/ETL style / with 600 V rating	yes
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
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