



SIMATIC NET, PB FC PROCESS CABLE BUS CABLE FOR IEC 61158-2 BLACK SHEATH FOR NON-EX APPL. 2-WIRE, SHIELDED, SOLD BY METER MAX. CONSIGNMENT: 1000 M MIN. ORDERING QUANTITY: 20 M

Acceptability for application

For use in fieldbus systems according to IEC 61158-2 (e.g. PROFIBUS PA), suitable for non-Ex applications

Electrical data

Damping ratio per length	
• at 38.4 kHz / maximum	0.0030 dB/m
Impedance	
• Nominal value	100 Ω
• at 31.25 kHz	100 Ω
Relative symmetrical tolerance	
• of surge impedance at 31.25 kHz	20 %
Loop resistance per length / maximum	44 Ω/km
Shield resistance per length / maximum	6.5 Ω/km
Capacity per length / at 1 kHz	92 pF/m
Inductance per length	0.65 μH/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	1.05 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	Black
Bending radius	
• with single bend / minimum permissible	40 mm
• with multiple bends / minimum permissible	80 mm
Traction stress / maximum	150 N
Weight per length	103 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operating	-40 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-20 ... +80 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN 47250 Part 4 or DIN VDE 0472
Ambient condition / for (standard) operation mode	Transfer rate of cable: 31.25 Kbit/s
Burning behaviour	flame resistant according to IEC 60332-3-24 (Category C)
Chemical resistance	
• to mineral oil	Conditional resistance
• 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: c(UL)us, 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

letzte Änderung:

Aug 6, 2014