

PB DP FC 1x2xAWG22/1 PE

PROFIBUS DP FC PE Sheathed Cable, 150 Ohm

Construction

Conductor	bare copper wire, \emptyset 0.64 mm, (cross-section 0.32 mm ²)
Insulation	foam-skin-PE, \emptyset 2.5 mm
Stranding	two cores gn / rd to the Pair
Bedding	halogen free, flame retardant thermoplastic sheathing compound acc. to EN 50290-2-27, filling the interstices \emptyset 5.4 mm
Static screen	PET-Al-Foil longitudinally applied
Braid	tinned copper braid, coverage approx. 70%
Sheath	halogen free, flame retardant thermoplastic sheathing compound acc. to EN 50290-2-27, violet, RAL 4005 \emptyset 8.0 mm
Outer sheath	PE, \emptyset 11.0 mm
Colour	black, RAL 9005
Outer Diameter	Nom. 11.0 mm
Weight	Nom. 113 kg/km
Tensile force N	120

Mechanical Properties

Bending radius	
single bending	≥ 60 mm
repeated bending	≥ 120 mm
Temperature range	- 30°C to + 70°C
Transport and storage	- 30°C to + 70°C
Installation	- 5°C to + 50°C

Electrical Properties at 20°C

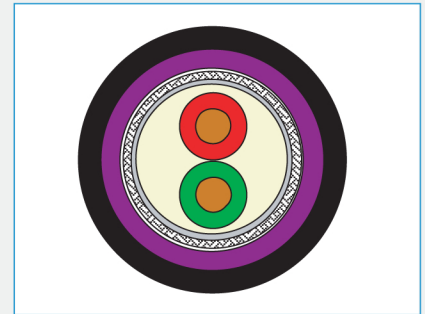
Loop resistance	$\leq 110 \Omega/\text{km}$
Screen resistance nominal	12 Ω/km
Characteristic impedance (nominal)	150 Ω
Mutual capacitance (at 1 kHz)	approx. 28.5 nF/km
Capacitance unbalance to earth max.	1.5 nF/km
Insulation resistance	$\geq 5 \text{ G}\Omega\text{km}$
Test Voltage (DC, 1 min) Core/Core and Core/Screen	1 kV
Operating voltage (RMS)	≤ 100 V
Inductance (nominal)	0.90 mH/km

Electrical Data at 20°C

Frequency (kHz)	Impedance (Ohm)	Attenuation (dB/100m)
9.6 kHz	270 \pm 27	≤ 0.25
38.4 kHz	185 \pm 18.5	≤ 0.4
1 MHz	-	-
3 MHz	150 \pm 15	-
4 MHz	150 \pm 15	≤ 2.2
16 MHz	150 \pm 15	≤ 4.2
20 MHz	150 \pm 15	-

Ordering Information

P/N	Product Description	P.U
1025046	PROFIBUS DP FC PE Sheathed Cable, PB DP FC 1x2xAWG22/1 PE	1000m/drum



Application

Outdoor installation cable, also for direct burial :

- Limited segment length (according to PROFIBUS-Net Manual)
- FastConnect-assembly
- UV-resistant
- Silicon free
- Limited oil and grease resistance

Standards

- EN 50170 part 8-2 Cable type A, IEC 61158 and IEC 61784
- IEC 60754-1/2; IEC 61034