

Profibus DP







Technical data

• Characteristic impedance: 150 Ohm

• Nominal voltage: 100 V

Temperature range: -40 °C to +70 °C
 Capacitance at 1 kHz: 28.5 nF/km
 Velocity of propagation: 78%

Cable structure

• Conductor: copper, bare (AWG 22), 1 x 2 x 0.64 mm

Insulation: foam-skin-PECore color: red, green

• Mylar spiral: coverage >125%

Inner sheath: PVC/LSZH, dia. 5.50 mm
Al-PET shield: coverage >125%

Braiding: tinned copper; coverage 60%
Outer sheath: PVC/LSZH, dia. 8.00 mm

Electrical data

• Attenuation:

9.6 kHz 2.5 dB/km4 MHz 22.0 dB/km16 MHz 42.0 dB/km

Standard:

• Profibus acc. to IEC 61158 and EN50170

Application

The single pair bus cable is mainly used for process and field communication in cell networks. It is widely adopted for process automation applications and production with transmission rates up to 12 Mbit/s.