

## IndustriCore Profibus Cable

### 22AWG\*1P, AL Foil, 80% TC Braid, LSZH Sheath



### Applications

A range of single pair Profibus cables for process and field communication in cell networks. The Profibus protocol is widely used for production and process automation applications providing transmission rates up to 12Mbits/sec.

### Construction

Conductor Material	Soild bare copper
Insulation Material	Polyethylene (PE)
Core Identification	Red, Green
Tape Around Cores	Polyester
Filler	Low smoke zero halogen (LSZH)
Screen 1	AL-PET Tape
Screen 2	Tinned copper wire 80% coverage
Sheath Material	Low smoke zero halogen (LSZH)
Sheath Color	Violet

### Dimensions

Conductor Diameter	22AWG (0.64 mm)
Insulation Diameter	2.55 mm Nom.
Filler diameter	5.40 mm Nom.
Braid Wire Diameter	0.12 mm
Overall Diameter	8.00 mm Nom.

### Physical Characteristics

Bend Radius	Flexing 12 x OD Static 6 x OD
Temperature Rating	Flexing -10°C to +60°C Static -20°C to +70°C
Traction Force	100N Max.

### Electrical Characteristics

Conductor DCR	59 Ω/KM Max. @20°C
Insulation Resistance	Min. 5G Ω x km @20°C
Screen Resistance	< 9.5 mΩ/m
Operating Capacitance	30nF/km
Transfer Impedance	< 20 mΩ/m @10MHz
Voltage Rating	125V
Test Voltage	1000VDC

### Transmission Performance

Attenuation	
@ 9.6 kHz	0.0025 dB/m Max.
@ 38.4 kHz	0.004 dB/m Max.
@ 4 MHz	0.022 dB/m Max.
@ 16 MHz	0.042 dB/m Max.
Characteristic Impedance	
@ 9.6 kHz	270±24 Ω
@ 38.4 kHz	185±18.5Ω
@ 3~20 MHz	150±15Ω

### Standards

RoHS Compliant	Yes
Reach Compliant	Yes
CE Compliant	Yes
UV Resistance	ISO 4892-2, method A
Flame Retardant	IEC 60332-1-2 UL 1581 VW-1
Halogen & Corrosive Gas	IEC 60754-1/2
Smoke density	IEC 61034-2
CPR Classification	Eca EN 50575:2014+A1:2016