

# Profibus PA LSZH Shielded Paired Cable

pro-POWER



RoHS  
Compliant

## Application:

A Low Smoke Zero Halogen (LSZH) Fieldbus cable for fixed applications. Designed for data transmission in intrinsically safe systems with Profibus PA (Process Automation) technology.

## Cable Standards:

Made in accordance with the following:

BS EN/IEC 61158, BS EN 50170, BS EN/IEC 60332-1-2,  
BS EN/IEC 61034-2, BS EN/IEC 60754-1

## Construction:

Conductor	: Class 1 solid copper conductor
Insulation	: Solid PE (Polyethylene)
Separation	: PET (Polyester Tape)
Filler	: Halogen free compound
Shield 1	: AL/PET (Aluminium/Polyester Tape)
Shield 2	: TCWB (Tinned Copper Wire Braid)
Sheath	: FRNC-LSZH (Flame Retardant Non Corrosive - Low Smoke Zero Halogen)

## Characteristics:

Voltage Rating	: 300V (not for power purposes)
Temperature Rating	: -30°C to +80°C
Min. Bending Radius	: 10 × overall diameter
Core Identification	: Green and Red
Sheath Colour	: Blue

## Electrical Characteristics:

Electrical and Transmission Properties at 20°C

Max. DC Resistance of Conductor	: 22Ω/km
Capacitance at 800Hz	: 60nF/km
Impedance at 1MHz	: 80Ω (±15%)
Impedance at 31.25kHz	: 100Ω (±15%)
Impedance at 39kHz	: 100Ω (±15%)
Impedance (3/20MHz)	: 150Ω (±10%)
Inductance at 31.25kHz	: 0.7mH/km
Nominal Attenuation at 1MHz	: 15dB/km
Nominal Attenuation at 100kHz	: 4.0dB/km
Max. Attenuation at 39kHz	: 3.0dB/km
Max. Propagation Delay Change (7.9/39kHz)	: 1.7µsec/km
Dielectric Strength (Conductor/Conductor)	: 2.5kV AC / 1min
Dielectric Strength (Conductor/Shield)	: 2.5kV AC / 1min
Min. Insulation Resistance	: 5.0GΩ/km
Transfer Impedance at 100kHz	: 15mΩ/m

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## Dimensions:

No. of Pairs	Conductor Cross Section	Nominal Overall Diameter	Nominal Weight kg/km
1	0.85mm	7.6mm	89

## Part Number Table

Description	Reel Length (m)	Part Number
Profibus PA LSZH Shielded Paired Cable	100	PP000901

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