



**RoHS
Compliant**

Application

This single pair Profibus PA cable for industrial fieldbus systems particularly developed for process automation and instrumentation applications including connecting sensors and actuators.

Characteristics

Max. Operating Voltage	: 300V
Temperature Rating	: Fixed: -30°C to +80°C
Minimum Bending Radius	: Fixed 10 × overall diameter

Cable Standards

BS EN 50267-2-1, BS EN 50267-2-2, IEC 61158
Flame Retardant according to IEC 60332-1-2



UK Laboratory Tested

This product is subject to the Quality Assurance protocols of The Cable Lab®, a UKAS accredited ISO 17025 cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



Regulatory Compliance

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.



Construction

Conductor

Solid Bare Copper Wire (18 AWG)

Insulation

Solid PE (Polyethylene)

Separator

PET (Polyester Tape)

Filler

PET (Polyethylene Terephthalate) fibres

Profibus PA PVC Single Pair Cable



Shield

AL/PET (Aluminium/Polyester Tape)

Braid

TCWB (Tinned Copper Wire Braid) 60% Coverage

Sheath

PVC (Polyvinyl Chloride)

Core Identification

Green and Red

Sheath Colour

Blue

Dimensions

No. of Pairs	Nominal Cross Sectional Area mm ²	Nominal Diameter of Conductor mm	Nominal Diameter of Insulation mm	Nominal Outer Diameter of Filler Sheath mm	Nominal Diameter of Outer Sheath mm	Nominal Weight kg/km
1	0.85	1.04	2.5	5.5	7.6	89

Electrical Characteristics at 20°C

Max. DC Conductor Resistance Ω/km	Capacitance at 800 Hz nF/km	Impedance (3±20 MHz) Ω (±10%)	Impedance Ω			Attenuation dB/km		
			31.25kHz	39kHz	1MHz	Max. at 39kHz	Nominal at 100kHz	Nominal at 1MHz
22	60	150	100	100	80	3	4	15

Inductance at 31.25 kHz mH/km	Dielectric Strength kV AC / 1 min		Minimum Insulation Resistance GΩ × km	Transfer Impedance mΩ/M		Maximum Installation Pulling N
	Cond/Cond	Cond/Shield		100kHz	1MHz	
0.7	2.5	2.5	5	15	10	120

Part Number Table

Description	Reel Length	Part Number
Profibus PA PVC Single Pair Cable	100m	PP001543

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