

UNITRONIC® BUS PB

For PROFIBUS-DP/FMS/FIP bus systems; stationary applications; 150 Ω



UNITRONIC® BUS PB cables are designed for automation networks requiring fast and reliable data exchange between controllers and field devices. Additional styles are available upon request (e.g., armored, high temperature, direct burial for outdoor, PROFIBUS PA for intrinsic safety).

Recommended applications

Automation devices like sensors, actuators, PLCs, and PCs in dry or damp environments; PROFIBUS-DP/FMS/FIP bus systems

Max. cable length by bit rate for one bus segment

Communication rate	Length of cable segment	
	ft	m
93.75 Kbps	3936	1200
187.5 Kbps	3280	1000
500 Kbps	1312	400
1.5 Mbps	656	200
12.0 Mbps	328	100

Construction

Conductors: solid and stranded bare copper

Insulation: polyethylene

Shielding: specially designed foil/tinned copper braid

Jacket: PVC, PUR, or halogen-free; violet • reinforced jacket: PVC; black

Application advantage

- Maximum EMI protection
- Fast connect style for quick installation
- Communication rate up to 12.0 Mbit/s
- LAPP is a member of the PROFIBUS User Organization (PNO)
- Call your sales representative for additional styles

Approvals




Cable attributes page 648

See attribute list by part number on page 166

Complete the installation




SKINTOP® MS-SC
page 522



EPIC® DATA connectors
page 179

ÖLFLEX® CONNECT solution



PROFIBUS cordsets
page 626

Technical data

<p>Minimum bend radius: - for installation: 10 x cable diameter</p> <p>Temperature range: - PVC & PUR: -40°C to +80°C - halogen-free: -30°C to +80°C</p> <p>Characteristic impedance: 150 Ω ± 15 Ω</p>	<p>Nominal capacitance: 9 pF/ft</p> <p>Color code: red & green pair</p> <p>Approvals: UL: CMG (see table below) CMX (see table below) CL3 (2170824, 2170820) Canada: c(UL) CMG (see table below) c(UL) CMX (see table below)</p>
---	---

Part number	Jacket material	Conductor description	Approvals	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
				in	mm			
2170220	PVC	22 AWG/1pr	—	0.315	8	20	50	53112220
2170219	PVC	22 AWG/1pr	UL/CSA CMX	0.315	8	20	38	53112220
2170824*	PVC	24 AWG/1pr, 7 wire	UL/CSA CMG	0.315	8	20	37	53112220
Fast connect								
2170820	PVC	22 AWG/1pr	UL/CSA CMG	0.315	8	17	56	53112220
2170853	halogen-free	22 AWG/1pr	UL/CSA CMG	0.315	8	20	50	53112220
2170326	halogen-free	22 AWG/1pr	—	0.315	8	20	50	53112220
2170330	PUR	22 AWG/1pr	UL/CSA CMX	0.315	8	20	50	53112220
2170826	PVC	24 AWG/1pr, 7 wire	UL/CSA CMG	0.315	8	20	45	53112220
Reinforced black jacket								
2170223	PVC	22 AWG/1pr	—	0.370	9.4	20	74	53112220
2170236	PVC/PE	22 AWG/1pr	—	0.374	9.5	20	59	53112220

*For applications where vibrations occur

PROFIBUS is a registered trademark of PROFIBUS & PROFINET International (PI). Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section. If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.