

EasyConn PB

Profibus Connector



EasyConn PB:

The bus connector EasyConn PB is used for the connection of Profibus participants to the bus line. The fully visible diagnostic LEDs facilitate the installation considerably. Users can immediately check the status of bus activity, termination resistors, power supply and bus status. The integrated controller supports transmission rate of up to 12MBit/s.

Features:

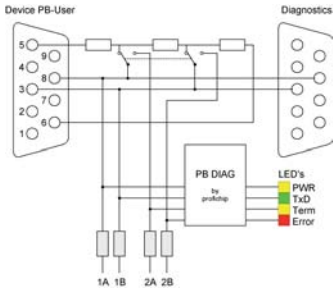
- Cable slots with transparent covers for high visibility (wiring, position of screen and cable)
- Full metal construction for noise immunity and harsh environment
- State monitoring via integrated LEDs for bus diagnosis
- Comfortable IDC technology for fast and reliable wire connection
- Captive single-screw-mounting system - no loose parts
- Integrated switchable termination resistor
- Integrated programming / diagnostic port
- Supporting stranded wire types:
LAPP Art. No. 2170222, 2170822, 2170322

Standard bus line for fixed and flexible wiring Features:

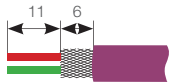
- Bus line according to DIN 19245 and EN 50170
- Two wires stranded (Red/Green)
- Sheathing PVC mixture (violet, RAL4001)
- Flame-retardant according to VDE 0472, part 804, Test procedure B (IEC 332.1)
- Use of stranded wire
(Lapp Cable Art. No. 2170222, 2170822, 2170322)



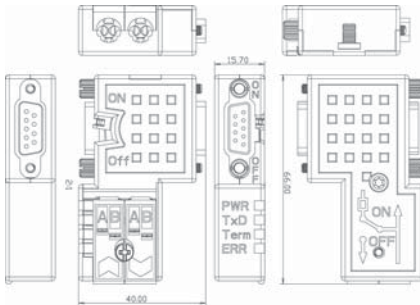
Wiring diagramm - Connector 90°



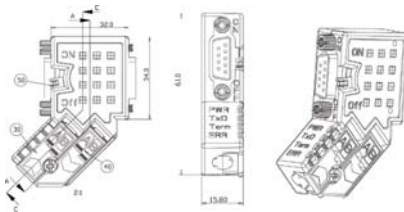
Insulation Stripping



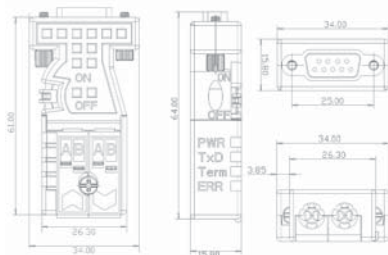
PA003135 - 90°






PA003121 - 45°



PA003122 - 0°



Technical Data		EasyConn PB		
Connections				
Profibus	9pole SubD pin headers			
PG/diagnostics	9pole SubD socket*			
Insertion (withdraw.) cycle	mind. 200			
Cable diameter	8mm			
Fixing screws/max. tightening torque	4-40 UNC/0.4Nm			
Enclosure				
Material	die-cast zinc			
Protection	IP 20			
Voltage supply				
DC 4.75 bis 5.25 V (Supply comes from the terminal max. 30mA)				
Power input	max. 30mA			
Temperature range				
-20°C bis +75°C				
Insulation stripping lengths				
Outer sheath	17mm	incoming bus line outgoing bus line		
Shield	11mm	11mm		
Connection technology				
IDC technology				
Bus line				
fixed wire Type A (EN 50 170)				
stranded wire (f. Lapp) Type A (EN 50 170)				
Linear expansion				
Transmission speed in kBit/s		max. segment lengths in m		
9,6/19,2/45,45/93,75		1200		
187,5		1000		
500		400		
1500		200		
3000/6000/12000		100		
Name	Color	LED off	LED on	LED blinking (5Hz)
PWR	green	No Power (<4V)	Self-test finished, Power OK (4...5,5V)	Short-circuit of bus wire possible. Blinks simultaneously with ERR LED.
TxD	green	No bus activity	-	Data transfer active
Term	green	No termination	Termination active	Internal terminating resistor faulty. Blinks simultaneously with ERR LED.
ERR	yellow	No errors detected	Signal levels out of defined range, possibly termination failure in bus line.	Short-circuit of bus wire possible respectively internal resistor faulty.
The LED flashes sporadically/asymmetrically: The Profibus device is near the reference level, which is defined in the Profibus connector. Appearing differences were compensated by the protocol.				
Standard bus line				
Flame retardant	VDE 0472, Teil 804			
Test procedure	B (IEC332.1)			
Pair number/wire diameter	1x2x0.64mm			
External diameter	7.8mm			
Copper number	26kg/km			
Weight ca.	57kg/km			
Surge impedance	150 ±15Ω			
Op. capacitance (800 Hz)	max.30nF/km			
Operating peak voltage	250V (not for heavy current usage)			
Test voltage core/core U _{eff}	1500V			
Wire resistance (loop)	max.110Ω/km			
Mind. bend radius	75mm			
Temperature range	-40°C bis +70°C			
Ordering information				
EasyConn PB 90°		PA003135 PA003125 (without integrated diagnosis)		
EasyConn PB 45°		PA003121		
EasyConn PB 0°		PA003122		
Bus line (25m to 1000m)	PA00315x			
EasyStrip (Stripping tool)	PA003160			