

Profibus Connector

EasyConn PB



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

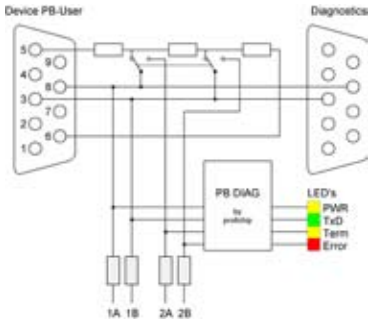
Standard bus line for fixed and flexible wiring Features:

- 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)

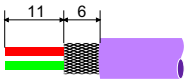


Profibus-DP – EasyConn PB

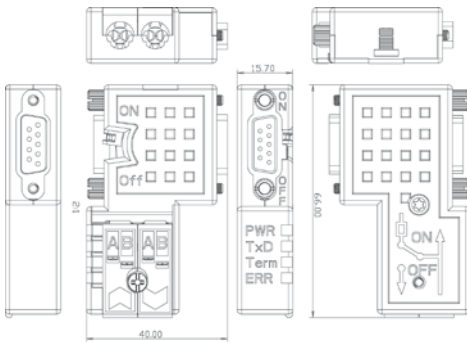
Wiring diagramm - Plug 90°



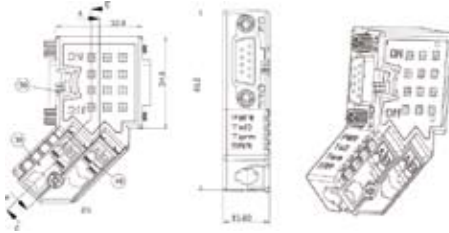
Insulation Stripping



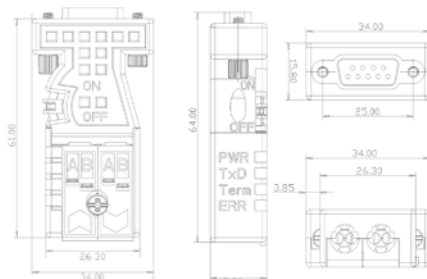
PA003105 - 90°



PA003111 - 45°



PA003112 - 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	
degree of				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				incomming bus line outgoing bus line	
Outer sheath				17mm 17mm	
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	red	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°				PA003105 PA003115 (without integrated diagnosis)	
EasyConn PB 45°				PA003111	
EasyConn PB 0°				PA003112	
Bus line (25m to 1000m)				PA00315x	
EasyStrip (Stripping tool)				PA003160	

* at EasyConn PB 90°, 45°