

VIPA 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 rates of up to 12MBit/s.

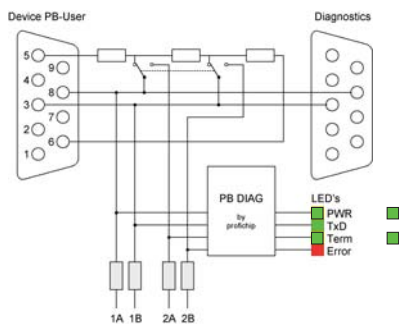
Features:

- 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

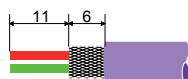
Standard bus line for fixed and flexible wiring:

- 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)
- 972-ODP01 and 972-ODP10 also for use of stranded wire (Lapp Cable Art. No. 2170222, 2170822, 2170322)

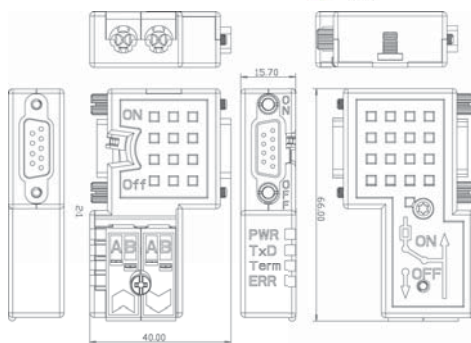
Wiring diagramm - Plug 90°



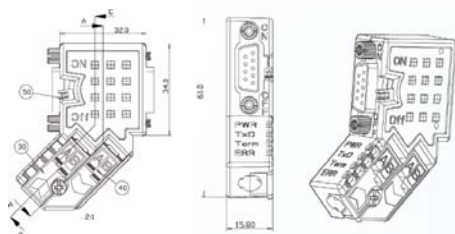
Insulation Stripping



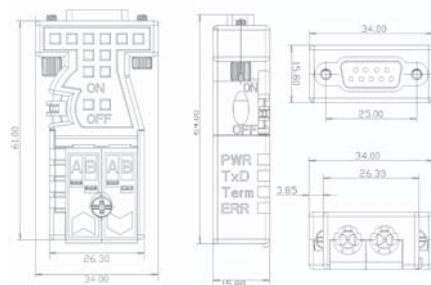
VIPA972-0DP10 - 90°





VIPA972-0DP20 - 45°



VIPA972-0DP30 - 0°



Technical Data		EasyConn PB		
Connections				
Profibus	9pole SubD pin headers			
PU/diagnostics	9pole SubD socket*			
Insertion (withdraw.) cycle	min. 200			
Cable diameter	8mm			
Fixing screws/max. tightening torque	4-40 UNC/0.4Nm			
Enclosure				
Material	die-cast zinc			
Industrial protection	IP 20			
Voltage supply				
DC 4.75 up to 5.25 V (Supply from the terminal max. 30mA)				
Power input	max. 30mA			
Temperature range				
-20°C up to +75°C				
Insulation stripping lengths				
		incoming 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)				
972-0DP01 / 972-0DP10 also for stranded wire (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, Part 804		
Test procedure		B (IEC332.1)		
Pair number/wire diameter		1x2x0.64mm		
External diameter		7.8mm		
Copper number		26kg/km		
Weight about.		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		
Min. bend radius		75mm		
Temperature range		-40°C up to +70°C		
Ordering information				
EasyConn PB 90°		VIPA 972-0DP10 VIPA972-0DP01 (without integrated diagnosis)		
EasyConn PB 45°		VIPA 972-0DP20		
EasyConn PB 0°		VIPA 972-0DP30		
Bus line (25m to 1000m)		VIPA 830-0Lx00		
EasyStrip (Stripping tool)		VIPA 905-6AA00		



* at EasyConn PB 90°, 45°