

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.

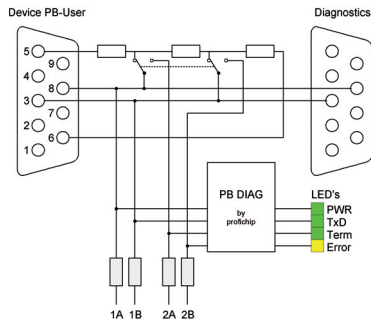
Features:

- 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

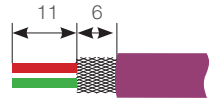
Standard bus line for fixed and flexible wiring:

- 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 are also for use of stranded wire (Lapp Cable Art. No. 2170222, 2170822, 2170322)

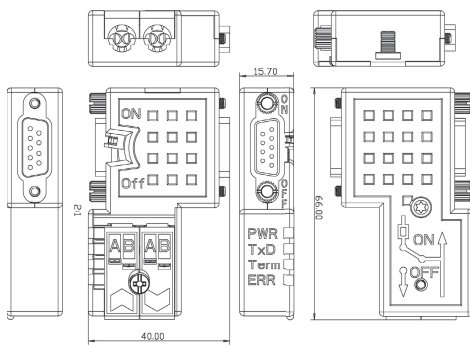
Wiring diagramm - Plug 90°



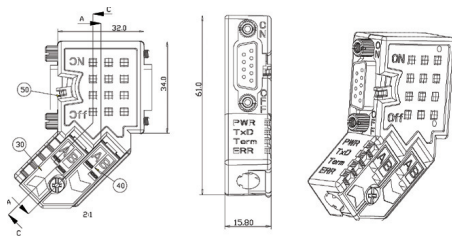
Insulation Stripping



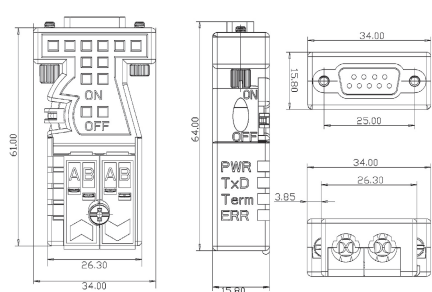
VIPA972-ODP10 - 90°






VIPA972-ODP20 - 45°



VIPA972-ODP30 - 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				
Power input	DC 4.75 up to 5.25 V (Supply from the terminal max. 30mA)			
Temperature range				
Temperature range	-20°C up to +75°C			
Insulation stripping lengths				
Outer sheath	incoming bus line	outgoing bus line		
Shield	17mm	17mm		
Connection technology				
IDC technology				
Bus line				
fixed wire Type A (EN 50 170)				
972-ODP01 / 972-ODP10				
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 supply (<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, 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° (w/o LEDs)		VIPA 972-ODP01		
EasyConn PB 90°		VIPA 972-ODP10		
EasyConn PB 45°		VIPA 972-ODP20		
EasyConn PB 0°		VIPA 972-ODP30		
Bus line (100m to 500m)		VIPA 830-0Lx00		
EasyStrip (Stripping tool)		VIPA 905-6AA00		



Date of issue: 02.2013

* at EasyConn PB 90°, 45°