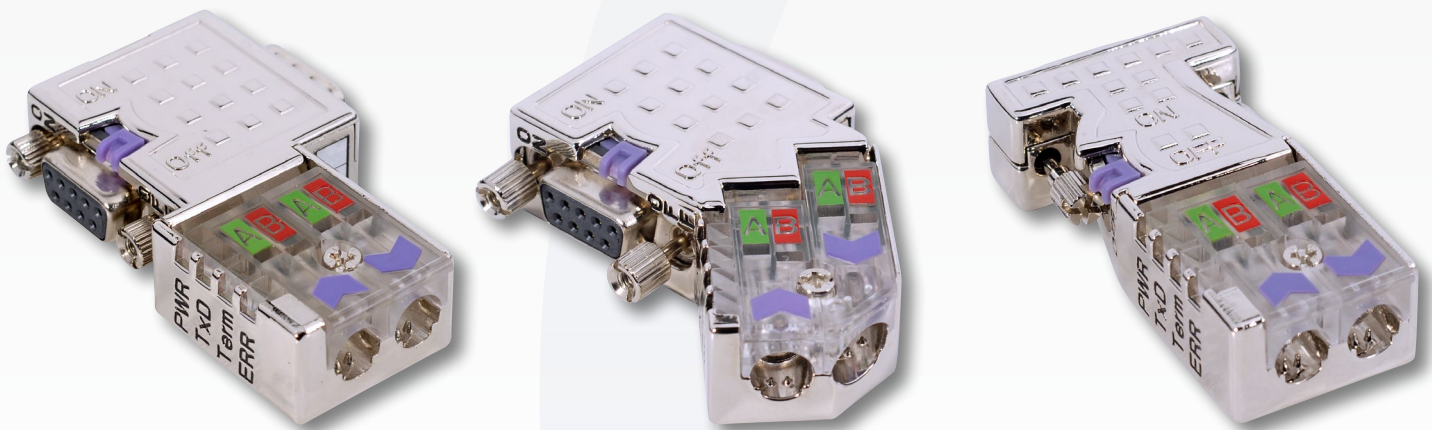


# EasyConn PB Profibus Connector



## 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.

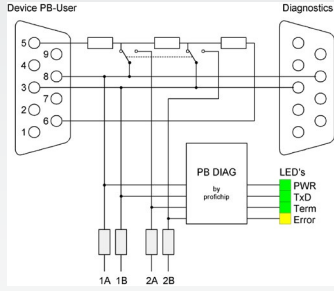
## Features:

- 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

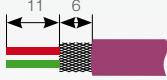
## Standard bus line for fixed and flexible wiring Features:

- 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)

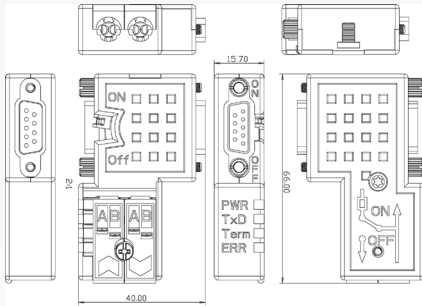
## Wiring diagramm - Connector 90°



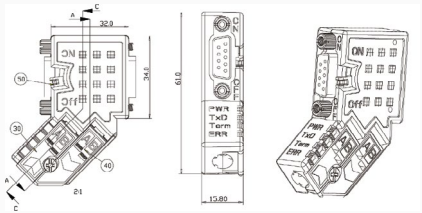
## Insulation Stripping



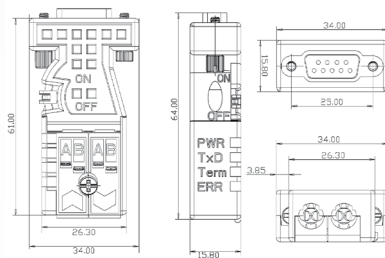
## PA003135 - 90°



## PA003121 - 45°



## PA003122 - 0°



Technical Data		EasyConn PB			
<b>Connections</b>					
Profibus		9pole SubD pin headers			
PG/diagnostics		9pole SubD socket*			
Insertion (withdraw.) cycle		min. 200			
Cable diameter		8mm			
Fixing screws/max. tightening torque		4-40 UNC/0.4Nm			
<b>Enclosure</b>					
Material		die-cast zinc			
Protection		IP 20			
<b>Voltage supply</b>					
Power input		DC 4.75 to 5.25 V (Supply comes from the terminal max. 30mA)			
<b>Temperature range</b>		-20°C to +75°C			
<b>Insulation stripping lengths</b>		incomming bus line    outgoing bus line			
Outer sheath		17mm	17mm		
Shield		11mm	11mm		
<b>Connection technology</b>		IDC technology			
<b>Bus line</b>		fixed wire Type A (EN 50 170)			
		stranded wire (e.g. Lapp/LEONIE) Type A (EN 50 170)			
<b>Linear expansion</b>					
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			
<b>Switch</b>	<b>PWR</b>	<b>TxD</b>	<b>Term</b>	<b>ERR</b>	<b>Description</b>
ON/OFF	green	green	green	yellow	
x	●	x	x	x	Power is OK (+5V ±5%)
x	☀	x	x	x	Power is out of +5V ±5%
x	☀	x	x	☀	Short-circuit of bus wire possible
x	x	○	x	x	No bus activity of participant
x	x	☀	x	x	Bus activity of participant
x	x	●	x	x	Bus activity, RTS (pin 4) of RS485 is not connected
OFF	x	x	○	x	Termination is switched off
OFF	x	x	☀	x	Internal terminating resistor faulty
ON	x	x	●	x	Termination is activated
x	x	x	x	○	No errors detected
OFF	x	☀	○	●	Bus is not terminated
OFF	x	○	○	●	Bus is open
on: ●   off: ○   flashing: ☀   not relevant: X					
<b>Standard bus line</b>					
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 aprox.		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 <sub>eff</sub>		1500V			
Wire resistance (loop)		max.110Ω/km			
Min. bend radius		75mm			
Temperature range		-40°C to +70°C			
<b>Ordering information</b>					
EasyConn PB 90°		PA003135 - PA003125 (without integrated diagnosis)			
EasyConn PB 45°		PA003121			
EasyConn PB 0°		PA003122			
EasyStrip (Stripping tool)		PA003160			