

EasyConn PB

Profibus Connector



EasyConn PB:

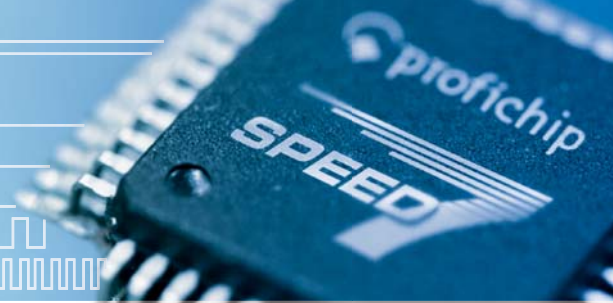
The bus connector EasyConn PB is used for the connection of Profibus participants to the bus line. The fully visible diagnostic LEDs facilitate the installation considerably. Users can immediately check the status of bus activity, termination resistors, power supply and bus status. The integrated controller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

Features:

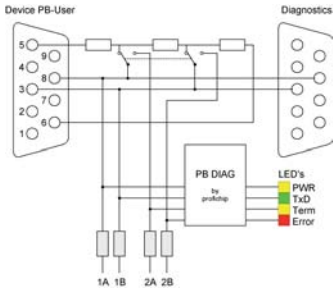
- Cable slots with transparent covers for high visibility (wiring, position of screen and cable)
- Full metal construction for noise immunity and harsh environment
- State monitoring via integrated LEDs for bus diagnosis
- Comfortable IDC technology for fast and reliable wire connection
- Captive single-screw-mounting 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:

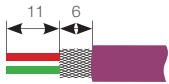
- Bus line according to DIN 19245 and EN 50170
- Two wires stranded (Red/Green)
- Sheathing PVC mixture (violet, RAL4001)
- Flame-retardant according to VDE 0472, part 804, Test procedure B (IEC 332.1)
- Use of stranded wire
(Lapp Cable Art. No. 2170222, 2170822, 2170322)



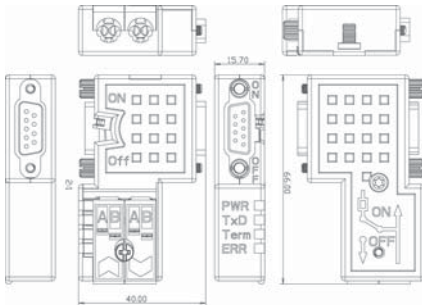
Wiring diagramm - Connector 90°



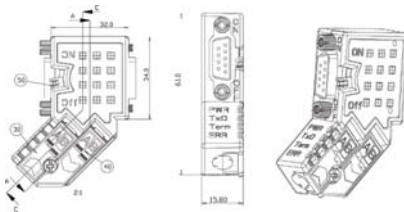
Insulation Stripping



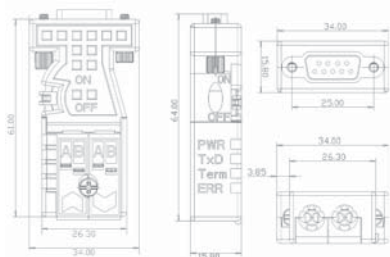
PA003135 - 90°



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 | | | | |
| Power input | | DC 4.75 bis 5.25 V (Supply comes from the terminal 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 | 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 | | |