Diagnostic connector PG/90° Fast Connect

Function

The PG/Service interface serves as feedback-free measuring point for measurements with PB-Q^{ONE}/PROFtest II/PB-INspektor® NT can also be used as programming interface. The plug is completely shielded by the metal-coated casing. The plug for the terminating resistor that is accessible from outside, disconnects the outgoing segment when being in ON position. The design meets the Fast Connect requirement.

The integrated 4 LEDs (Power, TxD, Termination, Error) allow a quick diagnosis of the bus status. With the Error LED, for example reflections and missing terminating resistors are signalled.

Bus connection

- 9-pin sub-D interface
- Insulation piercing terminal (suitable for Fast Connect cable)
- 90° cable outlet

Electrical parameters

- Terminating resistor: integrated, can be switched with a sliding switch from outside
- Baud rate: 9.6 kbps to 12 Mbps
- Supply voltage: 4.75 to 5.25 VDC
  has to be provided by each PROFIBUS user (Pin 5 GND, Pin 6 +5V)
- Current drain: 10 ... 30 mA
- Diagnostic display through LED status

Ambient conditions

- Operating temperature: -20 °C to +75 °C
- Industrial protection: IP20

Design

- Dimensions (H x W x D):   66 x 15,8 x 40 mm
- Interface: 9-pin sub-D
- Weight: approx. 80 g
- Casing: zinc die cast
- Max. fastening torque: 0,02 Nm

Status display for diagnostic function

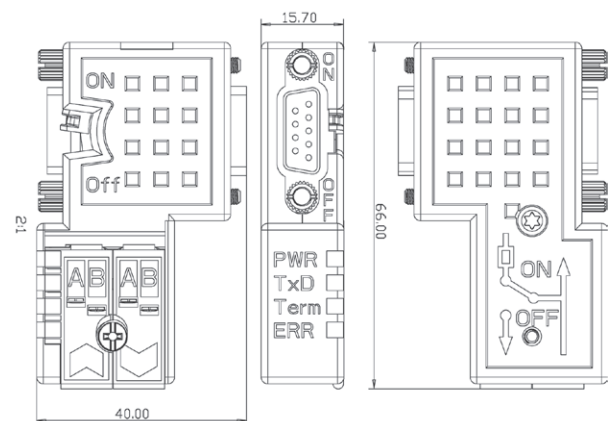| Switch ON/OFF	PWR Green	TxD Green	Term Green	ERR Yellow	Description
x	•	x	x	x	Power is OK (+5V ±5%)
x	☼	x	x	x	Power is out of (+5V ±5%)
x	☼	x	x	☼	Short-circuit of bus wire possible
X	X	○	X	X	No bus activity of participant
X	X	☼	X	X	Bus activity of participant
X	X	•	X	X	Bus activity, RTS (pin 4) of 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 (5Hz): ☼   extraneous: x
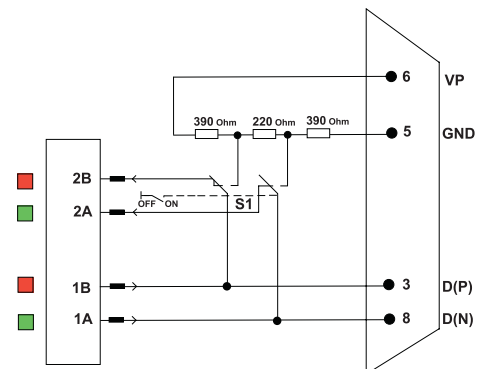
CE mark

Plugs are passive components and are subject to the CE mark system pursuant to EU Directives.

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Engineering drawing

Functional diagram

Ordering details	Art. No.
Diagnostic connector PG/90° Fast Connect	**110050006**