

PIEZUS

TERMINATION BOX BZ (models 05, 10)

Operation manual and passport

www.piezus.ru



1 Technical specifications

1.1 BZ termination box (hereinafter referred to as "device") has two channels; BZ 05 is a version for pressure transmitters, BZ 10 is a version for resistance thermometer Pt100 or the like.

1.2 See Table 1 for basic channel specifications.

1.3 Consumed power (with transmitter/thermometer connected) - $\leq 1.5W$.

1.4 The device is an aluminum box with two cable glands; refer to Supplement A for dimensions. Cable glands are polyamide, permissible clamped cable diameter ranges from 6 to 10 mm.

1.5 Housing ingress protection (GOST 14254) - IP65.

Table 1 - Channel specifications

Name		Value
Number of analog output channels		up to 2
Output current range in channels, mA		from 4 to 20
1 channe	Power supply U_{power1} (pressure), V	from 12 to 36 *
	Maximum load resistance, Ohm	$(U_{power1}-12) / 0.02$ *
1 channe	Power supply U_{power2} (temperature), V	from 11 to 35
	Maximum load resistance, Ohm	$(U_{power2}-11) / 0.02$
Measured temperature (Pt100), °C: - standard version - custom version		from 0 to +70 from -40 to +400
Temperature measurement channel accuracy, °C		± 0.5 max

* Voltage in the pressure measuring channel depends on the type of pressure transmitter used and may differ from the one indicated. When using a third-party transmitter, make sure supply voltage and maximum load resistance match values specified in its operation manual.

1.6 BZ output receives signal for the pressure measurement channel; Pt100 thermometer sends its signal (for the temperature control channel) to the amplifier that converts resistance fluctuations into a unified 4 to 20 mA analog DC signal.

1.7 Weight, max - 0.56 kg.

2 Operating conditions

- enclosed explosion-proof spaces free from aggressive vapors and gases;
- ambient air temperature from -40 to +85 °C, relative humidity from 5 to 95% (no moisture condensation);
- atmospheric pressure from 84 to 106.7 kPa;
- max altitude above sea level - 1000 m.

The product has built-in protection against transients in communication lines (may be caused by lightning, welding equipment).

3 Mounting

3.1 Mount the device next to the transmitters onto a vertical surface through two mounting holes found under the cover (see Supplement A). Make sure its cable glands point downwards. Signal cable enters housing through the cable gland and connects to corresponding terminals. Vent valve ensures correct operation of gauge pressure transmitters.

3.2 See Supplement B for the wiring diagram. Required power supply - 11 ... 36 V DC. Observe polarity when connecting the circuits.

3.3 Use shielded copper cables (wire cross-section from 0.2 to 2.5 mm²) when mounting signal circuits. Use a cable with wire cross-section up to 2.5 mm² to connect housing to ground.

4 Package contents

See Table 2 for delivery package contents.

Table 2 - Package contents

Name	Quantity
BZ termination box	1 pc
Operation manual (abridged) and passport (this paper)	1 copy*

* You can download the comprehensive operation manual from the manufacturer's website.

5 Sale and acceptance certificate

BZ termination box, serial number _____, was manufactured and accepted as required by state standards; the device was acknowledged fully functioning.

Date of manufacture _____

QC seal _____

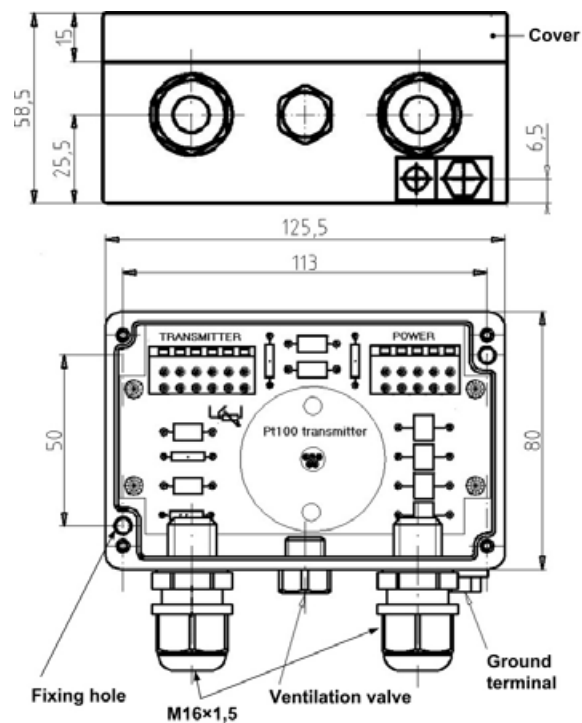
Sale date _____

6 Manufacturer's warranty

6.1 The warranty period is 24 months from the date of sale.

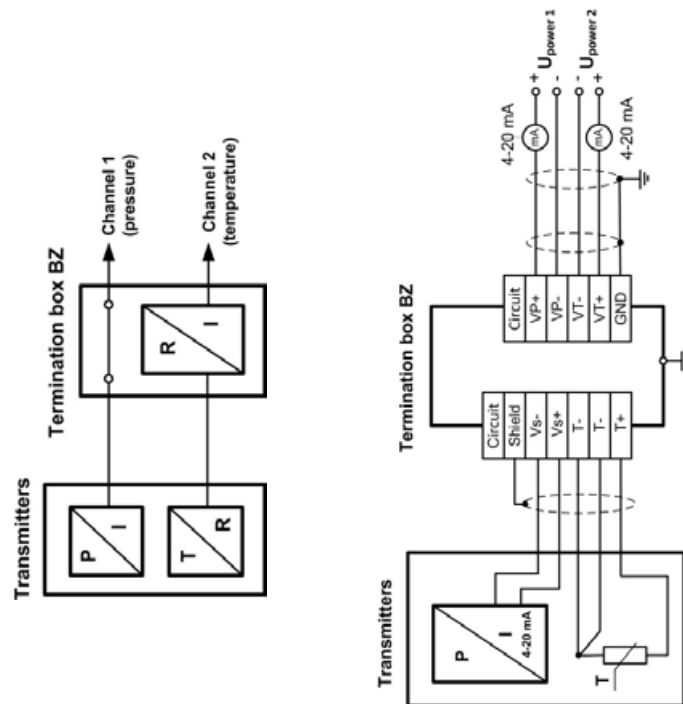
6.2 Please send your repairs-related inquiries to PIEZUS, to the address specified at www.piezus.ru.

Supplement A Housing dimensions



Housing with cover removed

Supplement B Wiring diagrams



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<http://www.piezus.ru>