

**FLOOD DETECTOR
«STZ-Ex»**

Installation Guide



1 General Information

Flood detector «STZ-Ex» (hereinafter, STZ-Ex) refers to explosion-proof electric equipment with the type of explosion proofing «intrinsically safe circuit» level «ia» and is intended for the detection of water leaks from water and heating supply networks of premises, buildings or boiler houses with the following generation of an alarm message to the zone extension module «BRSS-Ex».

2 Principal Technical Characteristics

- 2.1 Explosion-proof labeling of the detector 0ExiallBT6 X.
- 2.2 STZ-Ex comprises signal processor unit (hereinafter, SPU) and three sensor elements (hereinafter, SE).
- 2.3 The electric circuits of the detector (power-supply circuits «±12 V» and alarm loops «AL») have the following valid parameters:
 - maximum input voltage (U_i) – 16 V;
 - maximum input current (I_i) - 150 mA;
 - maximum internal capacitance (C_i) – 1000 pF;
 - maximum internal inductance (L_i) – 0.01 mH
- 2.4 STZ-Ex warm-up time – not more than 5 sec.
- 2.5 STZ-Ex generates alarm message in 10 safter reaching water leak level of 1 mm in the place of the detector location.
- 2.6 Duration of the alarm message generated by STZ-Ex is not less than 2 sec.
- 2.7 Current consumption in «Standby» and «Alarm» modes does not exceed 10 mA.
- 2.8 Maximum dimensions are:
 - 80 x 80 x 35 mm for signal processor unit (SPU);
 - 65 x 21 x 16 mm for sensor elements (SE) with terminals, having length does not exceeding 1500 mm.
- 2.9 Weight, max:
 - 0.08 kg for SPU;
 - 0.05 kg for SE.
- 2.10 The STZ-Ex design ensures IP rating:
 - IP30 for SPU;
 - IP65 for SE.
- 2.11 STZ-Ex ensures safe operation under the following conditions:
 - ambient temperature range from minus 10 to +50 °C;
 - relative air humidity up to 95 % at a temperature +25 °C;
 - after exposure of sinusoidal vibration with acceleration up to 0.1 g in frequency range from 10 to 55 Hz.
- 2.12 STZ-Ex warm-up time after transportation in conditions different from the exploitation operating environment is not less than 6 hours.
- 2.13 STZ-Ex ensures safe operation in the supply DC voltage range from 8 to 14 V.
- 2.14 STZ-Ex ensures safe operation (does not generate «Alarm» message) under the following conditions:
 - a) touchdown STZ-Ex by moisty item;
 - b) electromagnetic interference.
- 2.15 Industrial noises created by the STZ-Ex don't exceed the level for the technical means.
- 2.16 Average mean time to failure under the operation in «Norm» mode is not less than 60 000 hours.
- 2.17 Average service life is not less than 6 years.

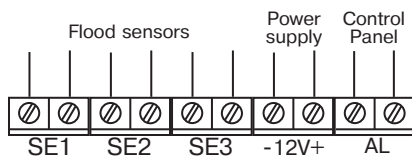


Figure 1

4 Scope of Delivery

Each STZ-Ex unit package contains items listed in Table 1.

Table 1

Name	QNT
Flood detector «STZ-Ex» in composition of:	
– signal processor unit (SPU)	1 pc.
– sensor element (SE)	3 pcs.
Screw 3-3x30.016	8 pcs.
Wall plug NAT 5x25 SORMAT	8 pcs.
Resistor C2-23H-0.125-1MΩ±5%	2 pcs.
Flood detector «STZ-Ex». Installation Guide	1 copy

5 Transportation and Storage

5.1 STZ-Ex in original transportation package may be transported by any means of transportation in closed vehicles (railway wagons, closed motor vehicles, sealed and heated airplane compartments, vessel holds, etc.) over all distances.

When transporting the detector, the rules and regulations applicable to various means of transportation must be adhered.

5.2 Storage premises must not contain any current-conducting dust, acid and alkali fumes, as well as corrosive gases or those destroying insulation.

5.3 Maximum shelf life of the detector in transportation package is three years; whereupon the transportation package must be dry and clean.

6 Manufacturer's Guarantees

6.1 The manufacturer guarantees conformity of STZ-Ex to the requirements of specifications provided the transportation, storage, installation and operation conditions are observed.

6.2 The guaranteed shelf life of STZ-Ex is 63 months since the date of manufacture. The guaranteed useful life is 60 months since the day of putting into operation within the guaranteed shelf life.

6.3 The detector STZ-Ex that is found non-conforming to the requirements of specifications during the guarantee period under the observance of exploitation and installation rules shall be repaired by the manufacturer.

7 Packing Certificate

Flood detector «STZ-Ex» has been manufactured in compliance with the active technical documentation and classified as fit for operation and packed by «RIELTA» JSC.

Packing date _____
month, year