

ZNC-XQPS-Compact Pressure Switch Installation Manual



1. Safety Instructions

- Please read this manual carefully before installation to avoid operational errors that may cause personal injury or property damage.
- Check whether the product's application and materials are consistent with the specifications indicated in the product datasheet.
- During installation and wiring, disconnect the power supply, and restore power only after inspection.
- Prevent damage to the product's circuitry caused by connecting power during wiring or wiring incorrectly.
- Before installation, confirm that the product label matches the manual description, and follow the specific instructions in this manual for installation.

2. Functions and Features

The built-in piston is connected to a precision spring. When the pressure changes, the spring's compression or extension changes accordingly. When the pressure reaches the set value, a preset mechanical mechanism is triggered to output a switching signal.

The device features a compact structure, DIN-standard plug for easy wiring, wide measuring range (0–400 bar), high overload capacity (up to 1230 bar), high repeatability, both normally open (NO) and normally closed (NC) contacts, gold-plated contacts, and high contact capacity.

2.1 Practical Applications

- Suitable for measuring the pressure of water, oil, and gas.
- Corresponding model and standard measuring range reference table:

Standard Ranges (bar)

- 0.2 ... 2.5 bar
- 0.8 ... 5 bar
- 1 ... 12 bar
- 5 ... 50 bar
- 10 ... 100 bar
- 20 ... 200 bar
- 50 ... 400 bar

3. Installation

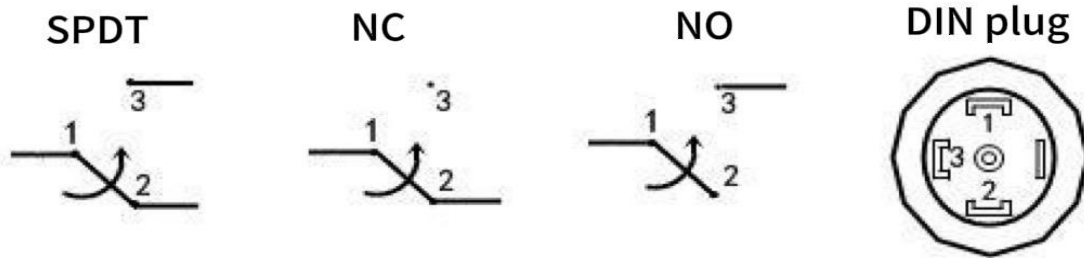
- Before installation, confirm whether the pressure range of the switch meets your system requirements.
- The thread of the connection port to be inserted must match. Confirm the fitting size before installation to avoid damage to the product.
- During installation, take care to protect the wiring plug, bottom probe, and other parts, and completely avoid any strong impact or damage.
- Ensure that the sealing surface inside and the measuring point are clean and undamaged.
- When tightening the pressure switch, use appropriate tools (preferably torque-specified tools) to avoid product damage or loosening.
- For the specific installation position, method, and detailed dimensions, refer to the diagram below:



4. Electrical Connection

- When installing the electrical circuit, national and international regulations and standards must be strictly observed.
- During wiring operations, the power supply must be disconnected to avoid personal injury and product damage.
- For wiring, simply open the protective cover of the junction box; it is strictly forbidden to disassemble or rotate other parts with tools to avoid damaging the pressure switch.
- If the cover of the junction box needs to be loosened for work purposes, tighten it promptly after completing the task to prevent damage to the pressure switch and its internal circuits.
- This pressure switch uses a **Hirschmann (DIN) connector**.
- Wiring must be carried out according to the wiring diagram; incorrect wiring will result in damage to the pressure switch.

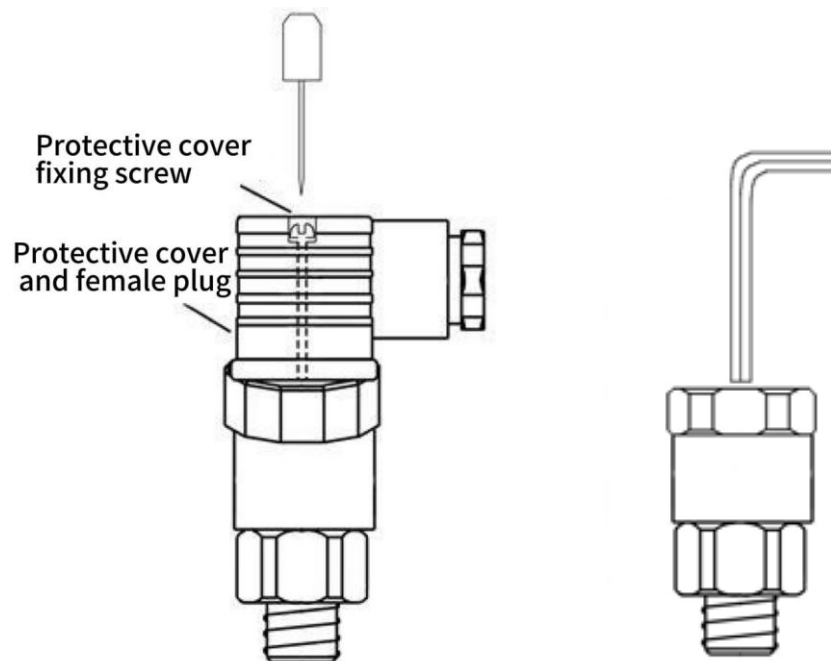
Wiring Diagram



DIN Plug or Cable Output Parameter Table

Terminal	DC Input	AC Input
COM	$\leq$ DC 42 V, 1 A	$\leq$ AC 42 V, 3 A
NC	$\leq$ DC 115 V, 0.15 A	$\leq$ AC 125 V, 3 A
		$\leq$ AC 250 V, 0.5 A
NO	—	—

5. Pressure Switch Setpoint Adjustment



Step 1:

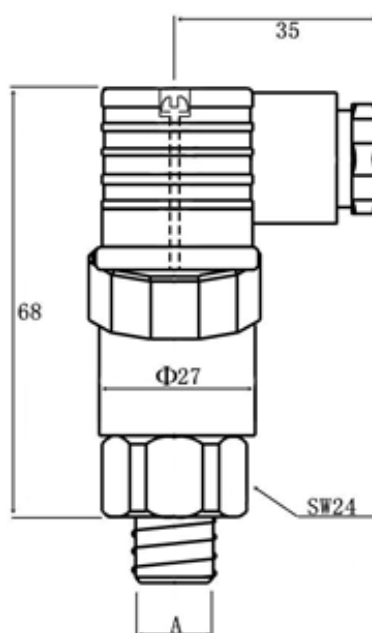
Use a screwdriver to loosen the fixing screw of the protective cover, and remove the protective cover and the female plug (when removing, do not rotate the Hirschmann connector left or right to avoid breaking the internal wiring).

Step 2:

Refer to the diagram above and use a hex key (Allen wrench) to adjust the setpoint of the pressure switch.

Turn clockwise to increase the setpoint, and counterclockwise to decrease it.

6. Housing Dimensions



7. Technical Specifications

Parameter	Specification
Measuring Range	See range code
Hysteresis	10 ... 20% of setpoint
Accuracy	±3% of setpoint
Output	NO + NC contacts, gold-plated ≤ DC 42 V, 1 A ≤ DC 115 V, 0.15 A ≤ AC 42 V, 3 A ≤ AC 125 V, 3 A ≤ AC 250 V, 0.5 A
Medium Temperature	-20 ... 85 °C
Protection Class	IP65
Wiring Method	Terminal connection
Materials	Diaphragm (≤ 12 bar): NBR Piston (> 12 bar type): Steel piston with NBR seal Process connection: Galvanized steel Housing: Engineering plastic



Note:

- Installation and use should follow the above specifications. If you have any questions, please contact our company promptly.
- If any issues are found during operation, please contact the supplier immediately. Do not attempt to disassemble the product yourself. If such disassembly occurs, our company will not be held responsible and reserves the right to pursue corresponding legal action.