

INSTRUCTION MANUAL

Please keep these operating instructions.

LOW PRESSURE SWITCH WITH CHANGE-OVER CONTACT TYPE 501,557



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Attention: All of the following warnings and notes must be considered.



Note: This document can be downloaded from our homepage www.Kant-Druckschalter.de
Only the documents currently available on the homepage are valid.

SAFETY INSTRUCTIONS

These installation and operating instructions are intended for fitters and maintenance personnel as well as for designers who require the pressure switch for an application. Please read the complete operating instructions carefully before commissioning and pay particular attention to the following hazard warnings and notes.



Caution: Failure to observe these instructions may result in injury.

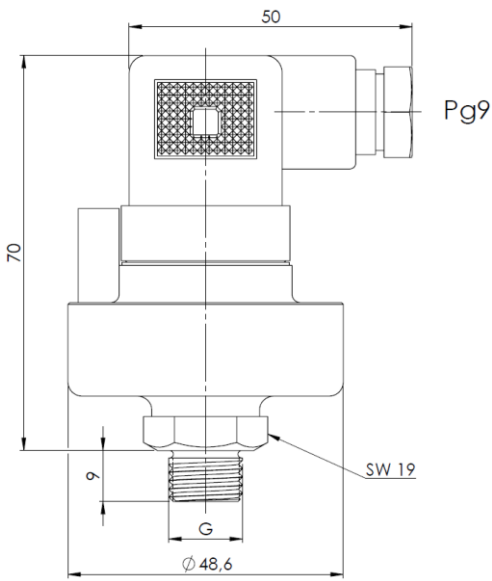
Instructions for the safe use of the pressure switch:

- Do not exceed any of the specified limits.
- Remove all packaging before installation.
- Extreme environmental conditions such as high temperatures, humidity, dirt etc. must be avoided at all costs. These can cause the pressure switch to fail.
- Do not use damaged installation elements and always ensure proper fastening.
- Always make sure that the fastening screws are complete and ensure firm screwing.
- The pressure switch must not be subjected to strong shocks.
- The user must check whether the plug connection complies with the regulations of the specified degree of protection.
- Switch off the pressure medium during assembly or repair work on the pressure switch.
- Piston pressure switches are not suitable for gaseous media (oxygen etc.). When using oxygen with diaphragm pressure switches, all safety regulations must be observed.
- The overpressure protection refers to static load. Under dynamic load the value is reduced by at least 25%.
- Always consider all safety instructions and warnings during installation and commissioning.

FUNCTION

A Kant Low Pressure Switch Type 501/551/557 has an integrated electric changeover switch. By applying a pressure, a diaphragm is deformed by a lifting movement. The deformation or movement depends on an adjustable spring preload. When the switching point is reached, the diaphragm has undergone a defined movement, via which the switch is actuated and the electrical circuit is closed.

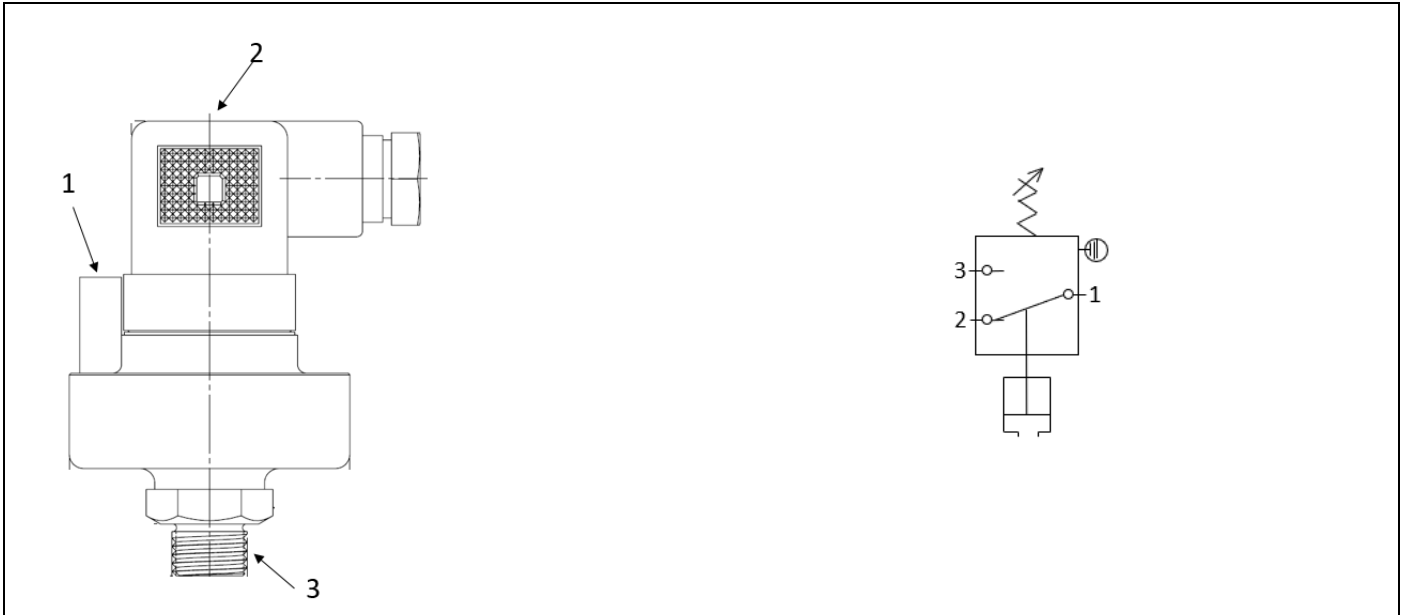
TECHNICAL DATA



| | | | |
|---------------------|-------------------|------------------|----------|
| SWITCHING ELEMENT | Changeover switch | | |
| REPRODUCIBILTY | ~ 3-5% | MAX. CURRENT | 5Amp |
| HYSTERESIS | ~ 5-10%* | MAX. VOLTAGE | 250V |
| SWITCHING FREQUENCY | 200/min | PROTECTION CLASS | IP55 |
| TEMPERATURE RANGE | -20 to +100° C | WEIGHT | 0,185 kg |

The functions breaking, making or changing relate to rising pressure.

DESIGN OF THE PRESSURE SWITCH



ASSEMBLY

- Connect the pressure switch to the pressure connection (3) (observe maximum tightening torque). Use a suitable sealing ring for sealing.
- Loosen the fastening screw (2) until the cable plug can be removed.
- Push the connecting plate out of the cable plug.
- Connect the cables (max. conductor cross-section 1.5 mm²) to the screw terminals.
- Slide the connecting plate into the plug housing and mount it with the fastening screw (2).
- Plug the cable plug onto the pressure switch and mount and tighten the fastening screw (2).
- Ensure that the strain relief is properly installed to ensure its function and degree of protection.



Caution: Tighten the low pressure switch only on the metal housing - risk of damage!

COMMISSIONING

- Loosen the fastening screw (2) and remove the cable plug.
- Wire the electrical connections according to the schematic diagram.



Caution: Observe the permissible electrical switching capacity - risk of damage!

- Completely tighten the adjusting screw (1) with low torque. Then unscrew the adjustment screw until the continuity tester reacts to set the desired switching pressure.

When commissioning the pressure switch, please observe the relevant safety regulations of the employers' liability insurance association or the respective national regulations.

DISASSEMBLY

Follow these instructions when removing the low pressure switch:

- The low pressure switch must be in a pressureless and deenergised state.
- Use a suitable tool to disassemble the low pressure switch on the provided wrench surfaces or hexagonal profiles. Damage may occur if other surfaces or unsuitable tools are used.
- Always observe all relevant safety regulations.

NOTE

The data and descriptions in this manual have been compiled to the best of our knowledge. However, the manufacturer cannot be held liable for errors. In any case, the operator must ensure that a failure or defect of the product cannot lead to further damage.