

# INSTRUCTION MANUAL

Please keep these operating instructions.

## PRESSURE SWITCH WITH CHANGE-OVER CONTACT TYPE 902



DRUCKSCHALTER GMBH

Maybachstraße 18  
72175 Dornhan  
Tel +4974559461-0  
Fax +4974559461-13  
Email: info@kant-druckschalter.de  
www.kant-druckschalter.de



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



Note: This document can be downloaded from our homepage [www.Kant-Druckschalter.de](http://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 Pressure Switch Type 802 has an integrated electric changeover switch. By applying a pressure, a diaphragm is deformed or a piston is displaced by a lifting movement. The deformation or movement depends on an adjustable spring preload. When the switching point is reached, the diaphragm or piston has undergone a defined movement, via which the switch is actuated and the electrical circuit is closed.

## TECHNICAL DATA

Pressure switch with change-over contact

Dimensions 30 x 30 x 107

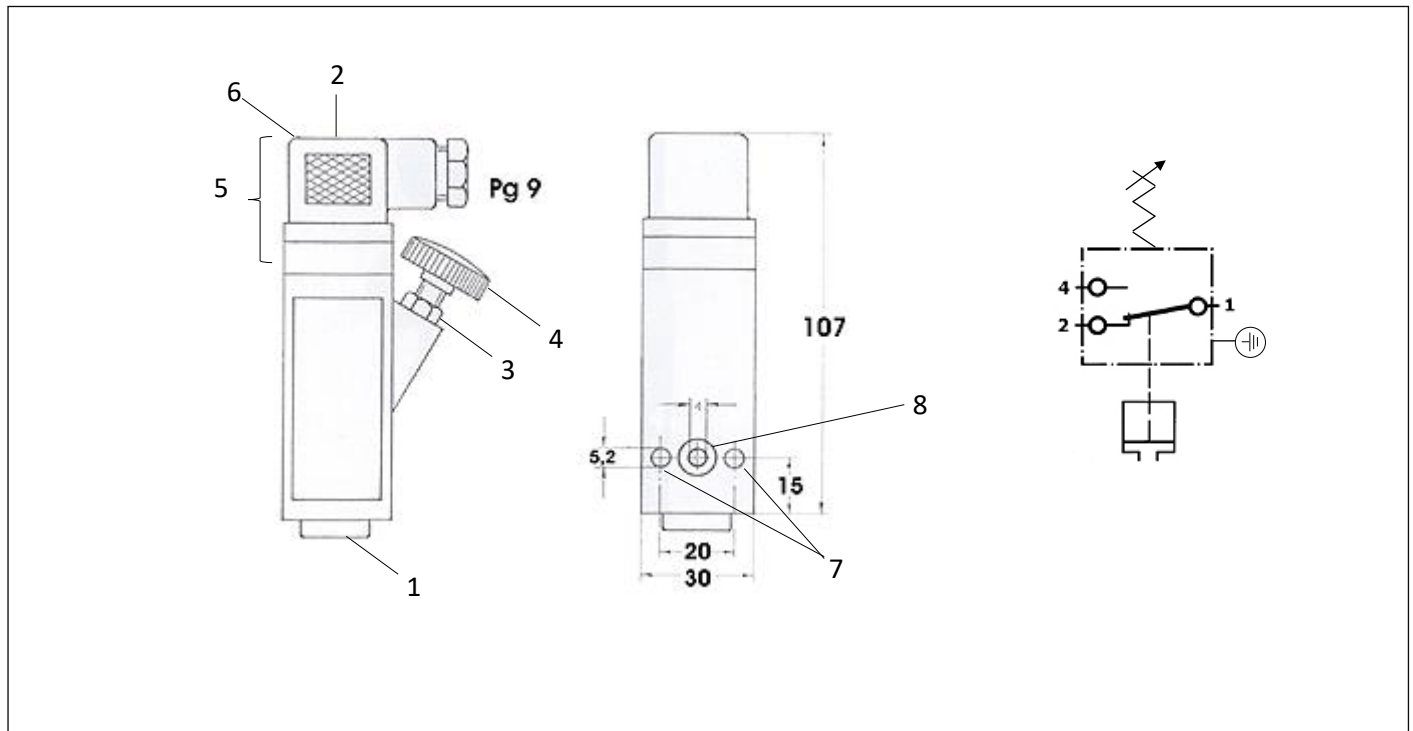
Connection G 1/4" or slab connection

Cylinder in AL or VA (1.4305) with BAM approval up to 200 bar also for slab connection.

Type = Ref. No.	902-2	902-10	902-20	902-50	902-100M	902-100	902-200	902-400
Range of adjustment, bar	0,2-2	1-10	2-20	5-50	10-100	10-100	20-200	40-400
Overpressure safety	100 bar		200 bar			600 bar		
Sealing element	Diaphragm					Piston		
Reproducibility	~2-5%							
Hysteresis	~20-30%		Smaller upon request					
Switching element	Change-over contact							
Switching frequency	200/min							
Voltage, max	250 Volt							
Current, max	2 Amp.		Optional: 10 Amp.					
Type of protection	IP 55							
Temperature, permissible	-20° bis +100°							
Weight	0,38 kg							

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

## DESIGN OF THE PRESSURE SWITCH



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## ASSEMBLY

Connect the pressure switch to the pressure connection (1) (observe maximum tightening torque). Use a suitable sealing ring for sealing.

Type 902-P

Insert the supplied O-ring into the connection hole (8) and fasten the pressure switch with the drilled holes (7) provided for this purpose using two M5 screws.



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

For the electrical connection use the supplied cable plug.  
Make sure that the cable is laid without kinks or squeezing.

### Cabling of the cable plug:

- Loosen the fastening screw (2) until the cable plug (5) can be removed.
- Push the connecting plate out of the cable plug (5).
- Connect the cables (max. conductor cross-section 1.5 mm<sup>2</sup>) to the screw terminals.
- Slide the connecting plate into the plug housing (6) and mount it with the fastening screw (2).
- Plug the cable plug (5) 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.

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## COMMISSIONING

- Loosen the fastening screw (2) and remove the cable plug (5).
- Wire the electrical connections according to the schematic diagram.



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

- Loosen the lock nut (3). Turn the knurled screw (4) by hand as far as possible.
- Apply the desired switching pressure to the pressure switch.
- Unscrew the knurled screw (4) until the pressure switch switches and outputs the electrical signal.
- Check the switching signal by switching the pressure on and off. Correct any error by adjusting the knurled screw (4).
- When the adjustment is complete retighten the lock nut (3).
- Attach the cable plug and fasten by tightening the fastening screw (2).

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

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## DISASSEMBLY

Follow these instructions when removing the pressure switch:

- The pressure switch must be in a pressureless and deenergised state.
- Use a suitable tool to disassemble the 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.

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## 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.