

Description

The flow switch ST-7 is solely designed for the control of fluid flows combined with the electric transduction of a signal. The installation is possible independent of its position.



General safety notes

- To guarantee a safe operation the flow switch ST-7 may only be used in accordance with these Operating Instructions.
- Keep these Operating Instructions in a safe place for later reference.
- The housing of the flow switch may only be opened by an electrician by means of the required special tools.
- Fitting, electrical connection, implementing, operation and maintenance may only be carried out by skilled and authorized personnel.
- An operation with damaged components is forbidden. Damaged components need to be replaced immediately.
- Wear suitable protective clothing when working, for this please adhere to the relevant instructions.
- The flow switch ST-7 contains among other things a neodymium magnet which can be dangerous to many devices and commodities due to the extremely strong magnetic fields. Screens, computers, hard disks, EC cards and video cassettes are especially susceptible to strong magnetic fields. Mortal danger can arise for people having a pacemaker! Measurements at mechanical devices can also be affected by the magnets.
- Furthermore, the required safety and legal regulations for the actual application need to be observed. This way of proceeding also applies to all accessories.

Safety



Hazard!

If these instructions are not followed there is a danger of physical injury, danger to life and material damage!



Please comply with the Operating Instructions! Incorrect operation can lead to serious injury. Read the Operating Instructions before you use the appliance.



Info In addition the required safety and legal regulations for the respective type of use must be observed. This also applies to all accessories used.



Intended use

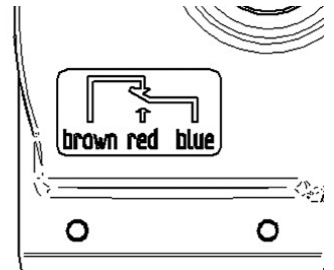
- The flow switch ST-7 is designed for the control of volume flows combined with the electric transduction of a signal.
- Only fluids of group 2 of the pressure equipment directive (PED) are allowed to be taken as a medium. In case of any doubts please refer to the equipment manufacturer.
- This device may only be operated with an appropriate pressure generator and an appropriate voltage source.
- This device is not designed for the use by persons (children included) having limited physical, sensory and mental capabilities due to a lack of experience and/or a lack of knowledge unless they are supervised by a person who is responsible for their safety or they have received instructions from that person regarding the use of the device.
- As a matter of principle it is strictly forbidden that children use this device.



The choice of perfection

Starting up

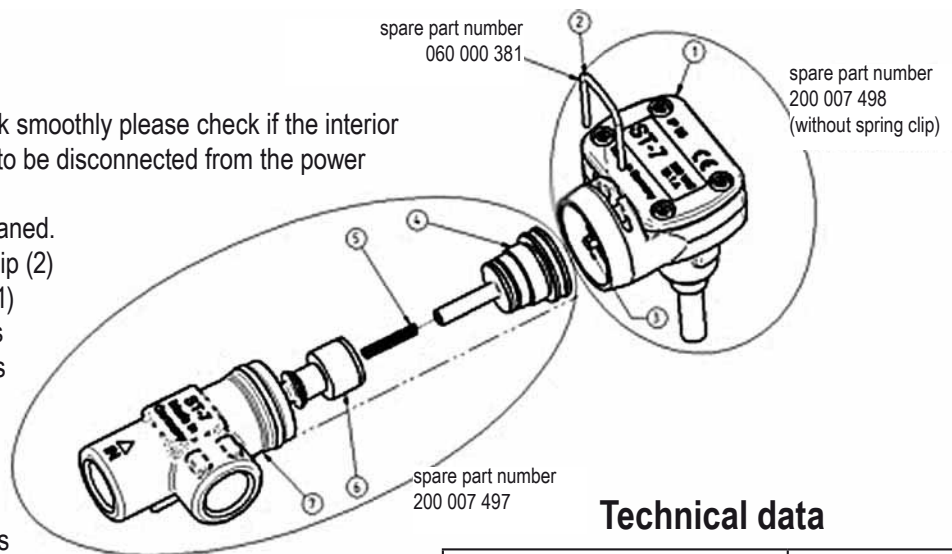
- All components need to be checked for damages before the flow switch is attached.
- The connections need to be attached appropriately to the medium. „IN“ marks the inlet. The outlet is not marked.
- The electric connection needs to be connected according to the circuit diagram placed at the back of the housing of the flow switch. Please carefully observe the wire colours of the connection cable.
- After the use with sticking media the flow switch ST-7 needs to be rinsed with clear water for several minutes in order to guarantee the functionality of the interior parts. Otherwise, sticking residue may settle in the flow switch and impair its functionality.



Otherwise, sticking residue may settle in the flow switch and impair its functionality.

Maintenance / repair

- If the flow switch ST-7 does not work smoothly please check if the interior is dirty. If so, the flow switch needs to be disconnected from the power supply and dismantled.
- After this the flow switch can be cleaned. For this please remove the spring clip (2) between the micro switch housing (1) and the brass housing (7) by means of a screwdriver. Please put all parts on a clean base. Afterwards please check the plunger (3) to see if it is in practicability. The screw joint (4) needs then to be removed by means of a suitable Allen key. The housing may now be tipped over. Please ensure that all interior parts (especially observe the spring) are caught. Moreover, please make sure that the ring magnet does not attract any magnetic small parts lying around. Please check now if all connections are free. Sticking dirt needs to be removed from the parts. The magnet needs to be treated with care as it may split in case of strongly mechanical stress.
- If all parts are clean and undamaged the flow switch can be put together and connected.
- Available spare part numbers are obtained from the above drawing.
- It is only allowed to use original spare parts. Otherwise, all liability and warranty claims are rejected.



Technical data

Model	200 007 500
max. pressure	350 bar
max. recommended pressure	315 bar
min. pressure	10 bar
max. volume flow	45 l/min
permissible temperature range	0 - 80 °C
Volume flow at the time of switching on (horizontal fitting position)	4.8 l/min
Volume flow at the time of switching off (horizontal fitting position)	3.5 l/min
Volume flow at the time of switching on (vertical fitting position)	4.9 l/min
Volume flow at the time of switching off (vertical fitting position)	3.5 l/min
pressure loss at 15 l/min	approx. 1.0 bar
pressure loss at 30 l/min	approx. 1.6 bar
inlet	G 3/8 F
outlet	G 3/8 F
tension	230 V AC
max. permissible current	10.1 A
protection class	IP 65
installation height	approx. 102 mm
installation width	55 mm
min. installation depth (due to bending radius of the cable)	approx. 110 mm
weight	approx. 0.35 kg