

# DTV-500

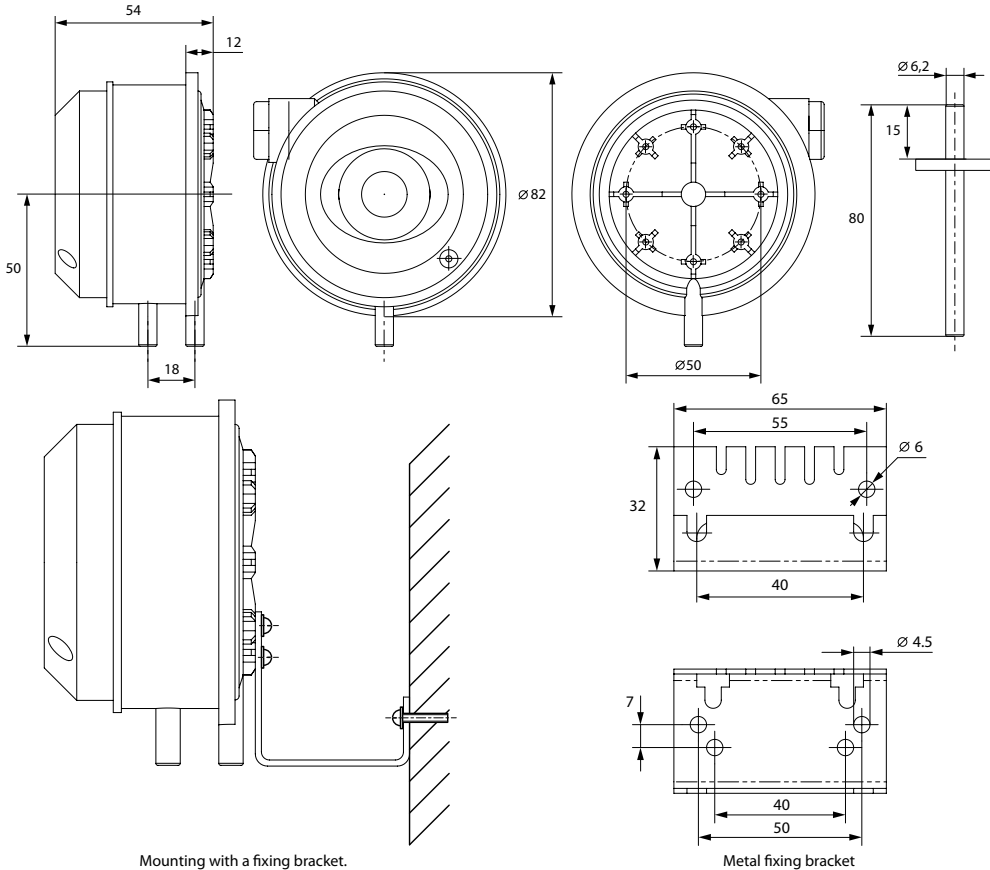
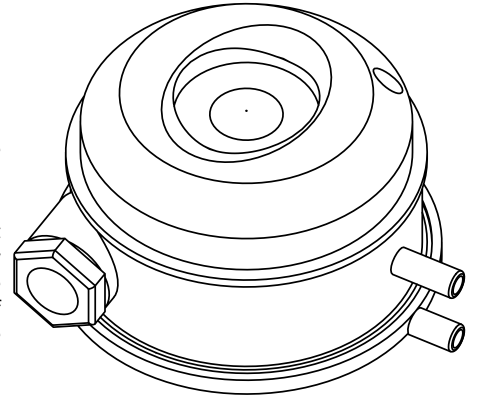
The pressure differential switch with regulated air pressure is used for air pressure control in cooling air circuits, air flow monitoring, air and fire damper control, filter and fan control, fan coil overheating protection. .

## INSTALLATION

To mount the pressure differential switch, fix the casing with two screws or fix the pressure differential switch with a fixing bracket (not included into the delivery set). For mounting with a fixing bracket use the screws of  $\varnothing 8$  mm max. .

## WARNING!

Make sure the pressure differential switch is not damaged. Do not use a damaged product. Do not install the pressure differential switch on an uneven surface! While tightening the screws do not apply excessive force not to damage the product. While mounting the differential pressure switch the pressure connections must be directed downwards to enable condensate drainage. The horizontal installation of the differential pressure switch is possible only if no condensate generation is possible. Be sure that the electric connections are directed upwards. In case of the horizontal installation the switching threshold deviation is 20 Pa as indicated on the scale.



Mounting with a fixing bracket.

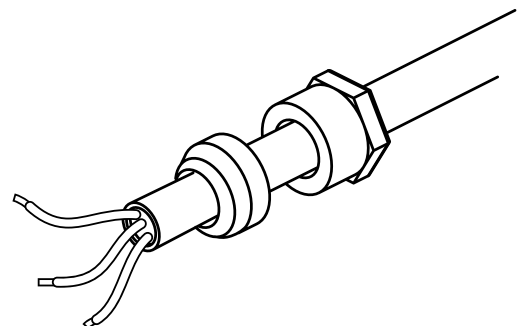
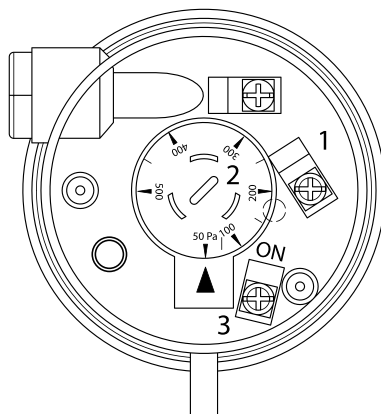
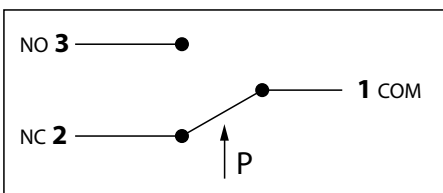
Metal fixing bracket

## ELECTRIC CONNECTION

### WARNING!

All mounting, added works, re-design and maintenance operations are allowed by duly qualified professional electricians. Cut off power supply prior to any operations. Use a three-wire cable with an outer diameter 5-10 mm for the electrical connections. Tighten the screwed cable gland with the force of 2.5 Nm. To facilitate the connection of the pressure switch contacts, use 6.3 mm flat crimp sockets. Connect the terminals to the matching contacts. The switch (P) in the pressure differential switch operates as a change over contact. The switch 3 (COM) closes the contact 2 (normally open contact) as pressure exceeds the set point as well as the contact 1 (normally closed contact) as pressure drops below the set point. Do not connect the devices with current consumption above the following value:

Max. 2 A / 250 VAC, active load



## HOSE CONNECTION

### WARNING!

Do not bend the hoses while mounting to prevent its damage. Untight hoses or hose connections may result in operation troubles and false readings of the pressure switch. Be sure to remove the cap at P2 connection installed for transportation safety!

The inner diameter of the hose is 6.2 mm to ensure the best clamping.

P1 - Connection for higher pressure

P2 - Connection for lower pressure

P1 and P2 - measurements of the differential pressure

## DIFFERENTIAL PRESSURE SWITCH ADJUSTMENTS

### WARNING! Electric shock hazard!

Make sure the product is not under mains voltage prior to any adjustment operations!

Set the required pressure threshold by rotating the control knob with a screwdriver. As pressure rises above the set point, the pressure differential switch trips and closes the contacts.

As pressure drops below the set point, the pressure differential switch resets to the initial position. Place the cover on the pressure differential switch and fix it with a screw. The pressure differential switch is allowed for operation only with a covered casing only. Check the pressure differential switch tripping and resetting by slowly increasing and decreasing the pressure.

### TECHNICAL DATA

Measured differential pressure range	50-500 Pa (0,5-5,0 mbar)
Maximum / minimum operating pressure	Air / 5 kPa for all pressure range
Temperature range	Medium temperature and ambient temperature: from -15 °C up to +60 °C Storage temperature from -40 up to +85°C
Pressure connectors	P1 (+) - connection for higher pressure P1 (-) - connection for lower pressure
Weight	100 g without fixing bracket
Service life	Above 106 switching operations
Electric ratings	
Standard modification:	max. 2 A (0.4 A) / 250 VAC
Switching rate	max. 6 cycles / minute
Contact designation	NC - normally closed contact NO - normally opened contact COM - common
Ingress Protection Rating	IP54 with a closed cover, IP00 without a cover

