

DTV...X

Differential pressure switch for air and neutral gases

Differential pressure switch for supervising air handling units, fans, filters or to control defrosting functions.

DTV...X is a pressure switch for supervision of air or non-aggressive, non-flammable gases in air handling systems. The device may be used in, for instance, the following applications:

- Air filters and air handling units
- Industrial air cooling circuits
- Fan overheating protection
- Ventilation duct flow monitoring
- Air control and fire protection dampers
- Heat exchanger frost protection systems

## Function

The pressure connected to the high pressure point inlet (P1) is compared to the low pressure connected to P2. When the differential pressure exceeds the setpoint value, the contact will close or open.

When the pressure switch is used to supervise a fan, it is possible to leave the P2 pressure connection (for atmospheric pressure) open.

### Setpoint value and setting

The setpoint value is set using a knob under the lid, with the setpoint value visible through the lid. The lid is secured with a single screw to facilitate mounting and service.

The device hysteresis is pre-set upon delivery.

### **Terminal connections**

DTV...X has 3 internal AMP flat plug connectors located under the plastic cover. 3 push-on screw terminals are included upon delivery for easy connection.

### Short facts about DTV...X

- For differential pressure up to 5000 Pa
- Lowest setpoint value is 20 Pa (DTV300X)
- Compact design
- Excellent long-term stability
- Easy installation and mounting
- Can be used at temperatures down to -20°C



### Models

Model	Pressure range	Hysteresis (P)
DTV300X	20300 Pa	10 Pa ± 15 %
DTV500X	50500 Pa	20 Pa ± 15 %
DTV1000X	2001000 Pa	100 Pa ± 15 %
DTV2500X	5002500 Pa	150 Pa ± 15 %
DTV5000X	10005000 Pa	250 Pa ± 15 %

#### Accessories

ANS-1 Two pressure outlets (60° cut) and 2 m plastic tube
ANS-3 Two pressure outlets (metal, 90° angle) and 2 m plastic tube

DBZ-14A Set with mounting brackets and screws (S-shaped)
DBZ-14B Set with mounting brackets and screws (L-shaped)

### Technical data

Medium Air, non-combustible and non-aggressive gases

Ambient temperature -20...+85°C Storage temperature -40...+85°C Max. differential pressure 10 kPa (all models)

Working life Over 10<sup>6</sup> switching operations

Material
Sensor housing Polystyrene

Membrane Silicone

Mounting bracket (optional) Galvanized stainless steel with two mounting holes (Ø 5 mm, cc 40 mm)

Protection class IP54
Weight 120 g

This product carries the CE mark. See www.regincontrols.com for

more information.

Inputs and outputs

Relay output Max. 1.5 A (0.4 A), 250 V AC, change-over contact

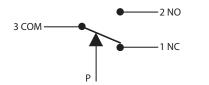
Cable connection AMP flat pin, 6.3 x 0.8 mm in accordance with DIN 46244. Cable gland with

cable strain relief.

Pressure connection Connection pipes for 6 mm tube, P1 (+) connects to higher pressure,

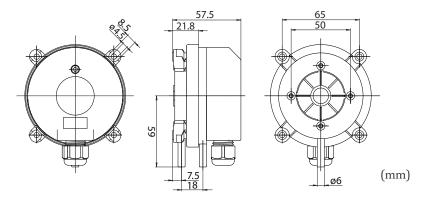
P2 (-) to lower pressure

# Contact arrangement

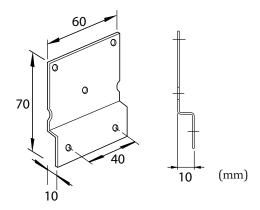


- 1 Normally closed
- 2 Normally open
- 3 Common

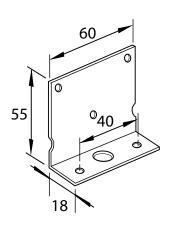
# Dimensions, pressure switch

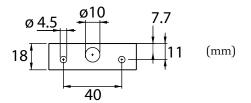


# Dimensions, DBZ-14A



# Dimensions, DBZ-14B





# Product documentation

Document	Type
Instruction DTVX	Instruction for DTVX

The product documentation can be downloaded from www.regincontrols.com.

Head office Sweden

Phone: +46 31 720 02 00 Web: www.regincontrols.com

Mail: info@regin.se

