

## VA 409 - Flow direction switch for compressed air systems



The thermal flow direction switch VA 409 with direction indication serves for determination of the flow direction of compressed air and gases especially in closed circular pipelines.

By means of VA 409 with flow direction indication the flow direction of the compressed air can be determined quickly and safely. Compared with the former mechanical paddle flow switches VA 409 is able to detect even the smallest changes in the flow direction quickly and without any mechanical movement.

The direction information in form of a potential-free contact (normally closed max. 60 VDC, 0.5 A) is transferred to the flow meters VA 5xx or to a separate building management system (BMS). Two LEDs show the flow direction.

In connection with 2 flow sensors VA 5xx incoming and out flowing compressed air in closed circular pipelines can be measured precisely.

## **Special features:**

- detects the smallest changes < 0.1 m/s relative to 20 °C and 1,000 mbar
- no mechanical wear parts
- easy installation under pressure



## **TECHNICAL DATA VA 409**

Response area detection of direction:

< 0.1 m/s relative to 20 °C and 1000 mbar

Measuring principle:

Calorimetric measurement

Sensor:

Pt 30/ Pt 700/ Pt 330

Measured medium: Operating temperaAir, gases

ture:

0...50 °C sensor tube -20...70 °C housing

Up to 16 bar

Operating pressure:

24 VDC, 40 mA

Power supply:

Max. 80 mA to 24 VDC

**Current consumption:** Protection class:

EMC:

in acc. with DIN EN 61326

Connection:

2 x M12, 5-pin, plug A and

plug B

2 potential-free con-

tacts:

2 x U max. 60 VDC, I max 0.5 A (normally closed); on

request: Normally open

Housing:

Polycarbonate

Sensor tube:

Stainless steel, 1.4301, length 160 mm, Ø 10 mm,

safety ring Ø 11.5 mm, longer sensors on request

Mounting thread: Housing diameter: **Direction indication:**  G 1/2" 65 mm

2 LED'S

**DESCRIPTION** ORDER NO. Direction switch VA 409 0695 0409 Mains unit in wall housing for maximum 2 sensors of the series VA/FA 0554 0110 5xx, 100-240 V, 23 VA, 50-60 Hz / 24 VDC, 0,35 A 0553 0104 Connection cable for VA/FA series 5 m Connection cable for VA/FA sensors, 10 m 0553 0105