## **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 sensors VA 5xx or to a separate building management system (mbs). 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 smallest changes < 0,1 m/s referrend to 20°C and 1.000 mbar
- no mechanical wear parts
- easy installation under pressure



DESCRIPTION	ORDER-NO.
Flow direction switch VA 409	0695 0409
Mains unit in wall housing for maximum 2 sensors of the series VA/FA 5xx,100-240 V, 23 VA, 50-60 Hz / 24 VDC, 0.35 A	0554 0110
Connection cable for VA/FA series, 5 m	0553 0104
Connection cable for VA/FA series, 10 m	0553 0105

## **TECHNICAL DATA VA 409**

Detection range reco- gnition flow direction:	< 0.1 m/s referred to auf 20 °C and 1000 mbar
Measuring principle:	calorimetric measurement
Sensor:	Pt 30/ Pt 700/ Pt 330
Measuring medium:	Air, gases
Operating temp.	050 °C probe tube -2070 °C housing
Operating pressure:	up to 16 bar
Power supply:	24 VDC, 40 mA
Power input:	Max. 80 mA to 24 VDC
Protection class:	IP 54
EMV:	acc. to DIN EN 61326
Connection:	2 x M12, 5-pole, 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
Probe tube:	stainless steel, 1,4301, length 160 mm, Ø 10 mm, safety ring Ø 11.5 mm, longer probes on request
Mounting thread:	G 1/2"
Diameter housing:	65 mm
Flow direction:	2 LEDs