(III) Flow

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 °F and 1,000 mbar
- · no mechanical wear parts
- · easy installation under pressure



DESCRIPTION	ORDER NO.
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, 16 ft	0553 0104
Connection cable for VA/FA sensors, 32 ft	0553 0105

TECHNICAL DATA VA 409			
Response area detection of direction:	< 0.1 m/s relative to 68 °F and 1000 mbar		
Measuring principle:	Calorimetric measurement		
Sensor:	Pt 30/ Pt 700/ Pt 330		
Measured medium:	Air, gases		
Operating temperature:	32122 °F sensor tube -4158 °F housing		
Operating pressure:	up to 232 psi		
Power supply:	24 VDC, 40 mA		
Current consumption:	Max. 80 mA to 24 VDC		
Protection class:	IP 54		
EMC:	in acc. with DIN EN 61326		
Connection:	2 x M12, 5-pin, plug A and		

2 x U max. 60 VDC, I max

0.5 A (normally closed); on request: Normally open

Polycarbonate

Sensor tube:	Stainless steel, 1.4301, length 629 inch, Ø 0.39, safety ring Ø 0.45 mm, lon- ger sensors on request
Mounting thread:	G 1/2"
Housing diameter:	2.5 inch
Direction indication:	2 LEDs

2 potential-free con-

tacts:

Housing: