

FLOW DIRECTION SWITCH FOR COMPRESSED AIR/GASES S409



Detect your flow direction — Easy and efficient



S409 FEATURES



**NO MECHANICAL
WEAR PARTS**



**EASY
INSTALLATION**
Under pressure

S409 BENEFITS

- Detects smallest changes < 0.1 m/s referred to 20°C and 1000 hpa
- No mechanical wear parts
- Easy installation under pressure

S409 OPERATION PRINCIPLE

The thermal mass flow direction switch S409 allows the detection of direction of the flow. It can be used in compressed air and non-corrosive gases.

The sensor element is very robust and completely of stainless steel. Through a 1/2"G-type ball valve the switch can be inserted into the pipe under pressure.

The flow and direction information is output through 2 normally open relay switches. The signals can be transferred to the SUTO flow sensor to activate and deactivate the flow measurement depending on the flow direction.

Ø12 mm



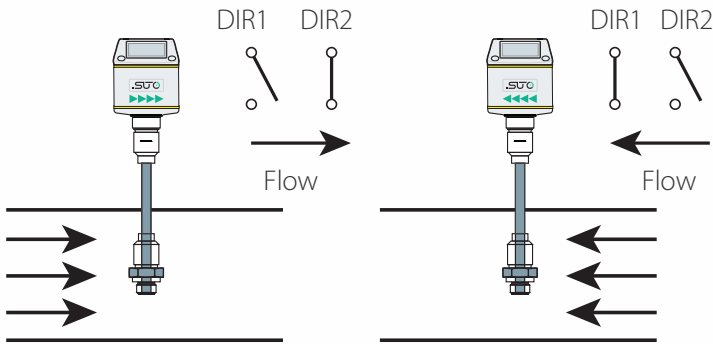
Thermal mass flow
sensor element

S409 TECHNICAL DATA

General Specifications	
Detection range	0.02 ... 25 m/s @ 7barg, 20°C
Sensor	2 x Pt 1000
Medium	air, gases
Medium humidity	< 100% (no condensation)
Medium temp.	-20 ... +80°C
Ambient temp.	-20 ... +70°C
Operating pressure	0 ... 1.6 MPa
Power supply	24 VDC, 60 mA
Output	2 x Relay, 60V, 1A
Process connection	1/2" G type (ISO 228-1)
Sensor material	Stainless steel 1.4404 (SUS 316L)

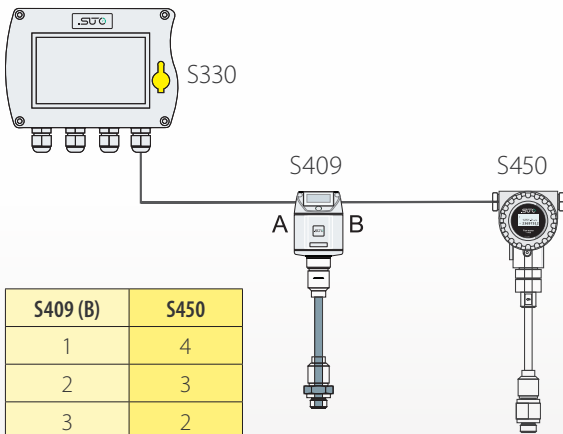
S409 FLOW DIRECTION SWITCH

Relay output at switch



Pin arrangement of flow switch					
	Pin1	Pin2	Pin3	Pin4	Pin5
A	SDI	-VB	+VB	DIR1	DIR1
B	SDI	-VB	+VB	DIR2	DIR2

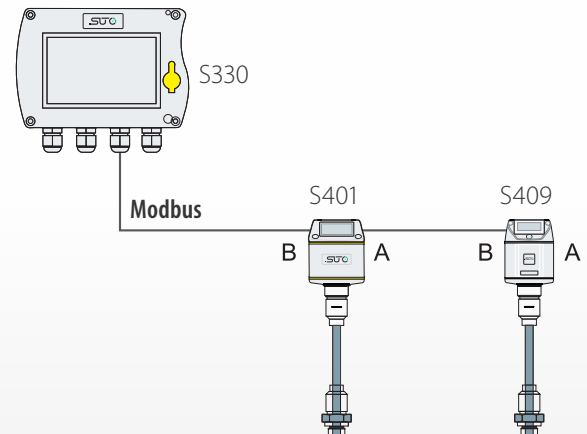
Connection of S330 to S450 via flow switch



S409 (B)	S450
1	4
2	3
3	2
4	5
5	6

Connection between S409 and S450 / S452

Connection of S330 to S401 via flow switch



Attention: Flow sensors S450 / S401 need to have the bi-directional calibration option to operate in both directions

S409 ORDERING

Please use the following table to assist in placing your order with our sales staff.

Visit our website or e-mail us:
www.suto-itec.com
sales@suto-itec.com

S409 FLOW DIRECTION SWITCH	
Order No.	Description
S695 0409	S409, flow direction switch, insertion type
A553 0104	Sensor cable 5 m, with M12 connector, open wires, AWG24 (0.2 mm ²)
A553 0105	Sensor cable 10 m, with M12 connector, open wires, AWG24 (0.2 mm ²)



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