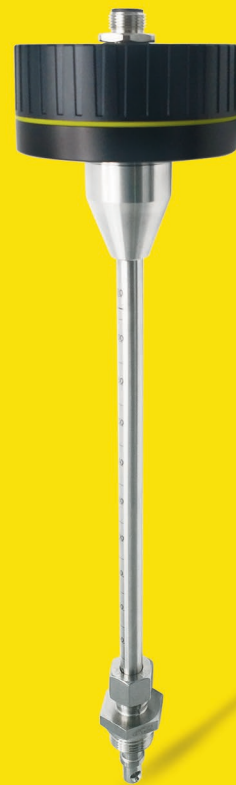


# THERMAL MASS FLOW SENSORS S402, OEM VERSION

Measure consumption and flow —  
**Private Label, OEM Version**



## S402 FEATURES



**SMARTPHONE  
ANDROID APP**  
For remote  
configuration



**ACCURATE  
RESULTS**  
Very fast  
response time



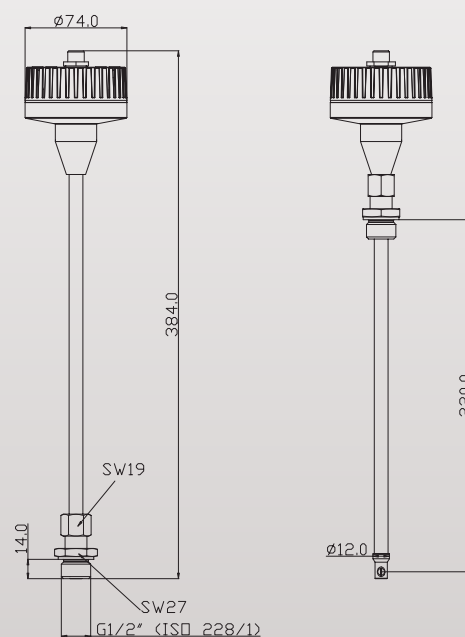
**EASY PROCESS  
MONITORING**  
Effective and  
inexpensive  
measurements



**TOTAL FLOW**  
High accuracy  
and reliable  
measurements

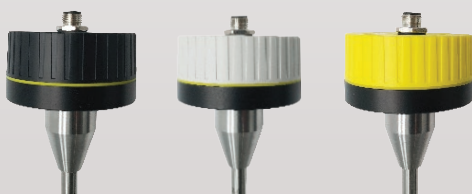
- Private label version available with different colors, labels and features (MOQ required)
- Measures standard flow, mass flow and consumption
- Thermal mass flow, independent of pressure and temperature changes
- IP65 casing provides robust protection in rough industrial environment
- Very fast response time
- High accuracy and wide measuring range
- Isolated mA and pulse output signals and Modbus/RTU interface
- Selectable gas type (Some gases require real gas calibration!)

## S402 DIMENSIONS



## S402 BENEFITS

- Tube diameters of DN25 to DN500.
- 2 installation types: center installation and 100 mm insertion depth installation for bigger pipes (> DN250)
- Installation under pressure through 1/2" ball valve



3 colors available

# S402 TECHNICAL DATA

General Specifications	
Accuracy	2% of reading + 0.3% full scale
Repeatability	0.25% of reading
Sampling rate	> 3 samples / sec
Reference conditions	Can be set by user. Standard conditions are Ps = 0.1 MPa and Ts = 20°C
Humidity of the meas. medium:	< 90% no condensation
Transport Temperature:	-30 ... +70°C
Material:	Metal parts 1.4404 (SUS 316L) Casing PC + ABS Sensor: Ceramic with glass coating
Classification:	IP65
Electrical connection (depending on the chosen signal output):	A1415: M12 6-pole (cable incl.) A1416: M12 5-pole (plug incl.) A1417: M12 5-pole (plug incl.) A1418: M12 5-pole (plug incl.)
Approvals:	CE, RoHS, FCC
Operating temperature	-30 ... +140°C fluid temperature -30 ... +70°C casing
Operating pressure	0 ... 1.6 MPa
Analogue output	Signal: 4 ... 20 mA Scaling: 0 ... max flow Max load: 250R
Pulse output	Isolated switch output, normally open, max 30 VDC, 20 mA 1 pulse per consumption unit
Modbus/RTU	Isolated RS-485 with Modbus RTU protocol
Power supply	15 ... 30 VDC / 200 mA

Volumetric flow ranges				
Inch	DN	Di (mm)	Standard (m <sup>3</sup> /h)	Max (m <sup>3</sup> /h)
1"	DN25	27.3	0.5 ... 147	0.6 ... 294
1¼"	DN32	36.0	0.9 ... 266	1.2 ... 531
1½"	DN40	41.9	1.2 ... 366	1.5 ... 731
2"	DN50	53.1	2.0 ... 600	2.5 ... 1197
2½"	DN65	68.9	3.5 ... 1026	5.0 ... 2048
3"	DN80	80.9	5.0 ... 1424	7.0 ... 2842
4"	DN100	100.0	10 ... 2183	12 ... 4357
5"	DN125	125.0	13 ... 3419	18 ... 6824
6"	DN150	150.0	18 ... 4930	25 ... 9838
8"	DN200	200.0	26 ... 8785	33 ... 17533
10"	DN250	250.0	40 ... 13743	52 ... 27428
12"	DN300	300.0	60 ... 19814	80 ... 39544

The table shows flow ranges up to 300 mm pipe diameter at standard conditions in air. Other standard conditions and gases flow ranges are available on request.  
In larger pipe diameters flow can also be measured.



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

## S402 ORDERING

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

S402 Thermal Mass Flow Meter (OEM Version)		
Order No.	Code	Description
S695 4105	S402	S402 Flow sensor, 220mm shaft
Connection thread		
Standard	A	G1/2"
A1005	B	NPT 1/2" Adapter
A1006	C	PT 1/2" Adapter
Output		
A1415	A	Isolated analogue 4...20 mA and pulse, 6 pole
A1416	B	Modbus/RTU, 5 pole
A1417	C	MBUS, Analogue 4..20mA, 5 pole
A1418	D	Modbus/RTU, Analogue 4...20 mA, 5 pole
Range		
Standard	A	Standard range version (92.7 m/s)
A1401	B	Max range version (185 m/s)
Gas type		
A1007	A	Air
A1008	B	CO <sub>2</sub>
A1009	C	O <sub>2</sub> (Oil- & grease-free cleaned)
A1010	D	N <sub>2</sub>
Casing color		
A1421	A	Casing color yellow
A1422	B	Casing color light gray
A1423	C	Casing color black

Example: S402ABBA

S402, G1/2" connection, Modbus/RTU, Max range calibration, for air, yellow casing

S402 Accessories	
Order No.	Description
A553 0104	Sensor cable 5m, M12 and open ends, 5 pole
A553 0105	Sensor cable 10m, M12 and open ends, 5 pole
A553 0144	Sensor cable 5m, M12 and open ends, 6 pole

Stated measuring ranges under following conditions:

- Standard flow in air
- Reference pressure: 1000 hPa
- Reference temperature: +20°C