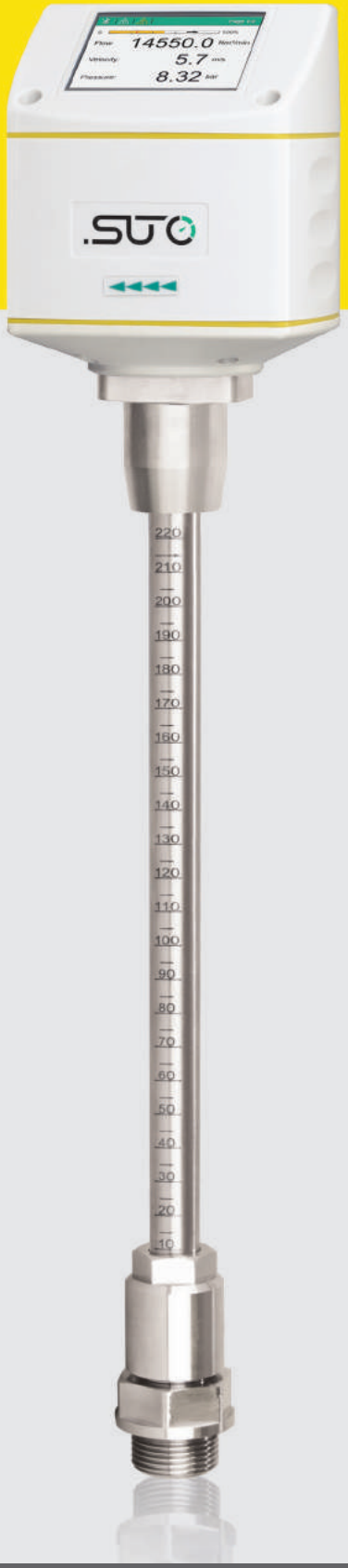
PITOT TUBE FLOW / CONSUMPTION SENSOR S430



SMARTPHONE ANDROID APP
For remote configuration

Measures air delivery at compressor discharge — **ideal flow meter for compressor performance tests**

S430 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

S430 FEATURES AT A GLANCE

- Flow and consumption measurement in wet air or high mass flow / velocity applications
- Measurement at compressor outlet
- Tube diameters of 1.25" to 10" through center installation, bigger diameters through non-center installation
- Insertion type, easy installation under pressure through ball valve possible
- High temperature applications up to 230°C
- No mechanical wear parts
- All parts which are in contact with flow medium are made of stainless steel
- Compressor-FAD-Measurement
- Measures Flow, Consumption, Temperature and Pressure

S430 BENEFITS

The S430 is based on the pitot tube principle to measure flow. Properly installed (refer to instruction manual for details) the sensor can measure in wet and dirty gases as occurring, for example, at the discharge of a compressor.

The sensor features long term stability, wide turndown ratio and good temperature stability. It can be used in compressed air and non-corrosive gases.

The sensor can be installed through a ball valve while the system is pressurised.

Various output signals allow the sensor to be connected to SUTO displays and/or third-party displays and PLCs.

S430 TECHNICAL DATA

General Specifications	
Flow range	Refer to table below
Pressure range	0 ... 1.6 MPa
Temperature range	-40 ... +230°C
Accuracy	Flow: ±(1.5%+0.3% full scale) Pressure: 0.5% F.S. Temperature: 0.5°C
Reference conditions	Programmable, default P = 1000 hPa(a), T = 20°C
Medium	Wet and dry air, non-corrosive gases
Output signals	4 ... 20 mA and Pulse (optional) Modbus/RTU (optional)
Medium temp.	-40 ... +230°C
Ambient temp.	-20 ... +60°C
Power supply	24 VDC, 150 mA
Display option	2.4" color graphic display with keypad
Process connection	3/4" G type (ISO 228-1)
Sensor material	Stainless steel 1.4404 (SUS 316L)

Flow Ranges

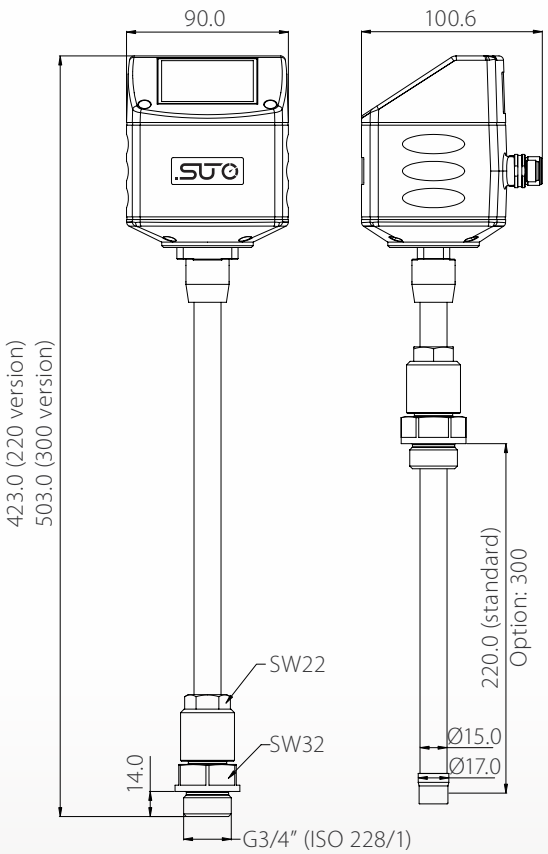
Tube		Volumetric Flow					
Inch	mm	m^3/h		m^3/min		cfm	
		Min	Max	Min	Max	Min	Max
1	27.3	23	229	0.38	3.8	13	135
1¼"	36.0	51	507	0.85	8.5	30	298
1½"	41.9	76	756	1.26	12.6	45	445
2"	53.1	130	1298	2.16	21.6	76	764
2½"	68.9	227	2274	3.79	37.9	134	1338
3"	80.9	318	3175	5.29	52.9	187	1869
4"	100.0	488	4880	8.13	81.3	287	2872
5"	125.0	763	7625	12.71	127.1	449	4488
6"	150.0	1099	10993	18.32	183.2	647	6470
8"	200.0	1961	19611	32.69	326.9	1154	11543
10"	250.0	3064	30642	51.07	510.7	1804	18035
12"	300.0	4412	44125	73.54	735.4	2597	25971

Flow range for Air at 6 barg, 50°C and 90% humidity. For other gas and condition please download Flow Range software from www.suto-itec.com

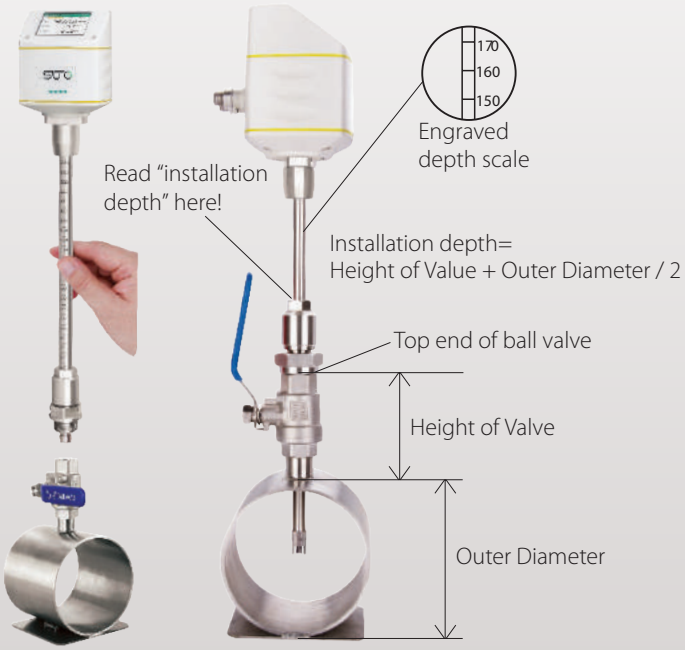
Stated measuring ranges under following conditions:

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

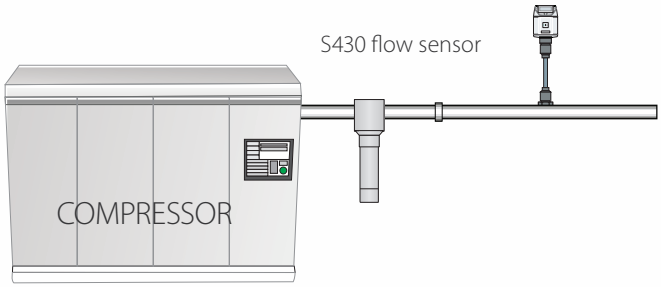
Dimensions



Installation



S430 Installation through a ball valve



Compressor air delivery measurement and FAD calculation

Colour graphic display for online values and sensor settings

S430 ORDERING

Please use the following tables 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

S430 Pitot Tube Flow Sensor, Insertion Type, 220 mm Shaft		
Order No.	**Code**	**Description**
S6954300	**S4300**	S430, pitot tube flow sensor, insertion type, 220 mm shaft
Connection thread		
	A	G ¾" standard
A1068	**B**	PT ¾"adaptor
A1069	**C**	NPT ¾" adaptor
Gas type		
A1007	**A**	Medium Air
A1008	**B**	Medium CO_2
A1009	**C**	Medium O_2 (Oil- & grease-free cleaned)
A1010	**D**	Medium N_2
A1011	**E**	Medium N_2O
A1012	**F**	Medium Ar
A1013	**G**	Medium Natural gas (Exact gas mix required)
A1014	**H**	Medium H_2
A1015	**I**	Others (Please specify the gas or gas mix)
A1016	**J**	Medium He
Fieldbus		
A1061	**A**	Modbus/RTU
A1062	**B**	Analog, Pulse
A1063	**C**	M-Bus
Calibration		
	A	Standard
A1066	**B**	Bi-directional
A1067	**C**	High speed: Max flow increased by 30%
Display		
	A	Without Display
A1060	**B**	With Display standard

S430 Pitot Tube Flow Sensor, Insertion Type, 300 mm Shaft		
Order No.	**Code**	**Description**
S695 4302	**S4302**	S430, pitot tube flow sensor, insertion type, 300 mm shaft
Connection thread		
	A	G ¾" standard
A1068	**B**	PT ¾"adaptor
A1069	**C**	NPT ¾" adaptor
Gas type		
A1007	**A**	Medium Air
A1008	**B**	Medium CO_2
A1009	**C**	Medium O_2 (Oil- & grease-free cleaned)
A1010	**D**	Medium N_2
A1011	**E**	Medium N_2O
A1012	**F**	Medium Ar
A1013	**G**	Medium Natural gas (Exact gas mix required)
A1014	**H**	Medium H_2
A1015	**I**	Others (Please specify the gas or gas mix)
A1016	**J**	Medium He
Fieldbus		
A1061	**A**	Modbus/RTU
A1062	**B**	Analog, Pulse
A1063	**C**	M-Bus
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	A	Standard
A1066	**B**	Bi-directional
A1067	**C**	High speed: Max flow increased by 30%
Display		
	A	Without Display
A1060	**B**	With Display standard

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