

S435

Vortex Flow Meter for Steam (Inline)



INTEGRATED
TEMPERATURE SENSOR



Measures saturated steam consumption —

Automatic density adjustment achieves very accurate mass flow calculation



S435 FEATURES



INTERGRATED TEMPERATURE SENSOR
Automatic density adjustment



ACCURATE RESULTS
Very fast response time



EASY PROCESS MONITORING
Effective and inexpensive measurements



TOTAL FLOW
High accuracy and reliable measurements

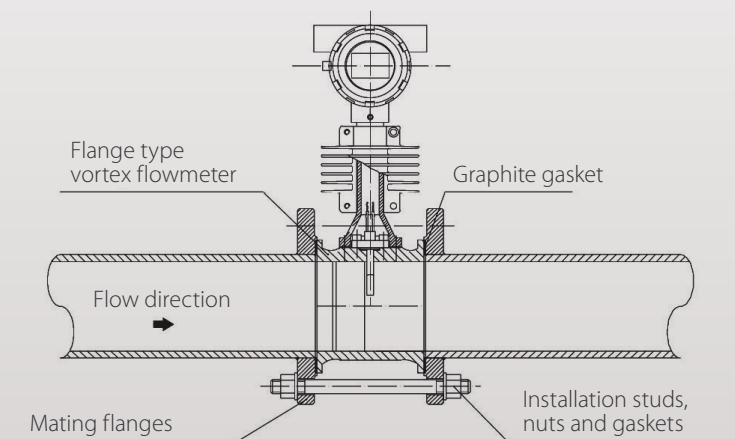
Vortex flow meters are the ideal choice for steam measurements due to their robust design, without any moving parts and high temperature/pressure resistance. S435 provides mass flow and consumption measurements in saturated steam with automatic density compensation. This guarantees always accurate results. Parameter settings can be done through the user interface (keys and display) at the flow meter directly. Connection to a SCADA system is through the Modbus/RTU interface or the analog output available.

Please ensure that the steam parameters such as temperature, pressure and nominal flow are within the specification of S435.

S435 BENEFITS

- Measures saturated steam
- Integrated temperature sensor
- Shows instant flow and consumption
- Display and keys for settings
- Small pressure loss
- Robust industrial design, high protection level
- Analog and Modbus output
- Wafer type — easy for installation
- No moving parts

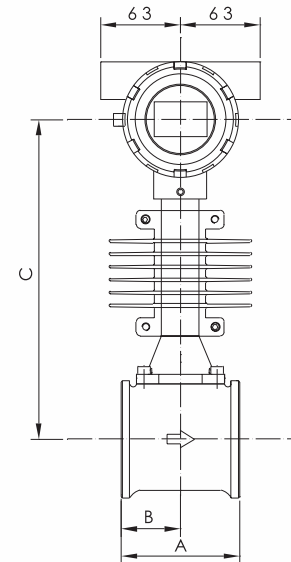
S435 INSTALLATION



Use double bolts and nuts. We provide gaskets and bolts.

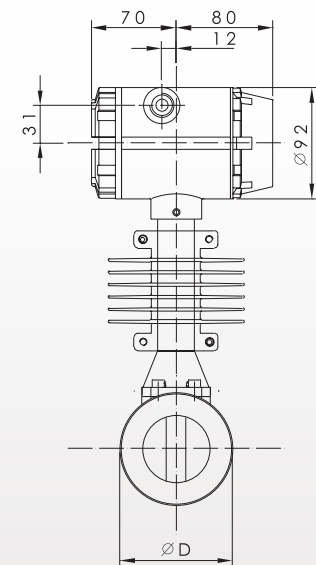
S435 DIMENSIONS

VORTEX STEAM FLOW METER S 345				
DN	Vortex Flow Meter dimension rated pressure 1.6 Mpa unit: mm			
	A	B	C	D
40	100	50	256	75
50	110	55	256	87
65	110	55	262	109
80	110	55	267	120
100	120	60	271	149
125	133	73	291	175
150	160	90	304	203
200	185	115	331	259
250	210	140	357	312
300	240	165	383	363



S435 TECHNICAL DATA

General Specifications	
Measured fluid	Saturated Steam
Nominal diameter (mm)	DN40...DN300 wafer type
Operating pressure	1.6 MPa (Optional: 2.5 MPa, 4.0 MPa)
Medium temperature	-40 ... 250 °C
Measuring range	Refer to the table below
Ambient temperature	-10 ... 60 °C
Accuracy	±1.5 % of reading
Repeatability	0.5 %
Display	Instant flow rate/ Total flow rate/ Frequency/ Percentage of flow range
Signal output	Pulse output/ 4 ... 20 mA/ Modbus/RTU
Protection level	IP65
Electrical connection	1/2" -14NPT
Installing type	Wafer type
Wetted parts material	304 stainless steel
Process control material	Carbon steel/ 304/ 316/ 316L(Flange/Wafer)
Detector probe	316 Stainless steel
Connecting rod	304 Stainless steel
Radiator	Aluminium alloy
Turn down ratio	10:1



S435 MEASURING RANGES

Saturated Steam Mass Flowrate (Unit: t/h)												
DN (mm)	0.20 Mpa		0.50 Mpa		0.60 Mpa		0.70 Mpa		1.00 Mpa		1.50Mpa	
DN40	(28.8 ~ 329.8 kg/h)		(39.9 ~ 633.0 kg/h)		(42.9 ~ 732.5 kg/h)		0.05	0.83	0.05	1.13	0.06	1.61
DN50	0.04	0.52	0.06	0.99	0.07	1.14	0.07	1.29	0.08	1.76	0.1	2.52
DN65	0.08	0.87	0.11	1.67	0.11	1.93	0.12	2.18	0.14	2.97	0.17	4.26
DN80	0.12	1.32	0.16	2.53	0.17	2.93	0.18	3.3	0.21	4.5	0.25	6.45
DN100	0.18	2.06	0.25	3.96	0.27	4.58	0.28	5.16	0.33	7	0.4	10.08
DN125	0.28	3.22	0.39	6.18	0.42	7.15	0.44	8.06	0.52	11	0.62	15.76
DN150	0.4	4.64	0.56	8.9	0.6	10.3	0.64	11.61	0.75	15.83	0.9	22.69
DN200	0.72	8.25	1	15.83	1.07	18.31	1.14	20.64	1.33	28.14	1.59	40.34
DN250	1.12	12.88	1.56	24.73	1.68	28.61	1.78	32.25	2.1	44	2.49	63.03
DN300	1.62	18.55	2.24	35.61	2.41	41.2	2.56	46.45	3	63.3	3.58	90.76

S435 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

S435 Vortex Flow Meter for Steam (Inline)	
Order-No.	Description
S695 4359	S435 Vortex Flow Meter DN40, wafer type
S695 4350	S435 Vortex Flow Meter DN50, wafer type
S695 4351	S435 Vortex Flow Meter DN65, wafer type
S695 4352	S435 Vortex Flow Meter DN80, wafer type
S695 4353	S435 Vortex Flow Meter DN100, wafer type
S695 4354	S435 Vortex Flow Meter DN125, wafer type
S695 4355	S435 Vortex Flow Meter DN150, wafer type
S695 4356	S435 Vortex Flow Meter DN200, wafer type
S695 4357	S435 Vortex Flow Meter DN250, wafer type
S695 4358	S435 Vortex Flow Meter DN300, wafer type
A695 0001	Blind pipe for uninstillation - DN40&DN50
A695 0002	Blind pipe for uninstillation - DN65
A695 0003	Blind pipe for uninstillation - DN80
A695 0004	Blind pipe for uninstillation - DN100
A695 0005	Blind pipe for uninstillation - DN125
A695 0006	Blind pipe for uninstillation - DN150
A695 0007	Blind pipe for uninstillation - DN200

Notes:

All Flow meters: Wafer connection (Companion flange, bolt and gasket included), temperature compensation, local display, medium temperature <250 °C, 4-20 mA signal output, 1/2-14 NPT electric connection, IP65, accuracy +1.5 %, 24 VCD, Modbus/RTU, Pulse, for saturated steam only