

## DIFFERENTIAL PRESSURE FLOW METER

### PTF520 Pitot Tube Flow Meter

Flow Measurement  
& Monitoring



#### DESCRIPTION

PTF520 Pitot Tube Flow Meter uses the differential pressure measurement principle, suitable for compressed air applications. The 1/2" insertion connection probe and compact designed sensor can be used on pipes from DN25 to DN300. In high pressure applications, it can be installed or removed without stopping the processline, as the pipe is thinner, field engineers will be able to insert the meter to pipe very easily. It is less affected by the water contents in the compressed air. Bluetooth communication via APP allows plant operators to monitor, diagnose and configure the flowmeter from their mobile device during maintenance.

#### FEATURES

- ✓ Dry and wet air measurement
- ✓ Insertion type flow meter
- ✓ Bi-direction flow measurement
- ✓ Integrated pressure, temperature sensor, FAD measurement
- ✓ Wide pipe sizes DN25 to DN300
- ✓ Easy installation and maintenance
- ✓ Self-diagnose and remote diagnose function
- ✓ Communication via bluetooth and APP

#### TECHNICAL FEATURES

<b>Medium</b>	Air and none-corrosive gas
<b>Enclosure</b>	Nylon
<b>Pipe diameter</b>	DN25 to DN300 (1" to 12")
<b>Ambient temperature</b>	-20 to 60°C
<b>Atmosphere pressure</b>	86 to 106 Kpa
<b>Ambient humidity</b>	5 to 100%
<b>Process connection</b>	1/2 G insertion with ball valve
<b>Pressure rating</b>	10 barG
<b>Fluid temperature</b>	-40 to 150°C
<b>Wetted part material</b>	304SS
<b>Parameter measured</b>	Flow rate, temperature, pressure
<b>Power</b>	13.5 to 32V DC, 150mA max
<b>Analog</b>	4 wire passive 4-20mA
<b>Communication</b>	RS485, Bluetooth
<b>Flow accuracy</b>	±1.5% RD ±0.3% FS
<b>Flow repeatability</b>	±0.5% RD
<b>Response time</b>	1 second

I-SYSTEM MEASUREMENT  
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## MODEL SELECTION

Model	PTF520	X	X	X	X	X	X	X	X	X	XXX	
Basic Model	Insertion (G 1/2), anti-ejection design with ball valve	D										Standard
Probe Length	255mm, 11mm dia (1" to 4" or DN25 to DN100)	1										Optional
	320mm, 11mm dia (1" to 8" or DN25 to DN200)	2										Optional
	395mm, 11mm dia (1" to 12" or DN25 to DN300)	3										Standard
Material	304SS	1										Standard
Socket Material	Carbon steel		1									Standard
	304SS		2									Optional
	316SS		3									Optional
Transmitter	Integral					T						Standard
Pressure Rating	10 Bar G							1				Standard
	150 KpaA							2				Optional
Display and Output	Local display, RS485, Bluetooth								1			Standard
	Local display, 4wire 4 to 20mA, RS485, Bluetooth								2			Optional
Power Supply	13.5 to 42VDC									1		Standard
	13.5 to 42VDC with 24VDC to AC power converter									N		N
Pipe Size	Please indicate pipe size in 3 digits, ie s DN50=050, DN200=200										XXX	XXX

## DIMENSION/DRAWING

Standard flow range for compressed air @ 50°C and different pressure, unit is Normal flow Nm<sup>3</sup>/min ref to 1.01325 barA, 0°C

Pipe inner diameter			0 Bar G		4 Bar G		6 Bar G		7 Bar G		8 Bar G	
DN	mm	inch	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DN25	27.3	1"	0.19	1.93	0.43	4.29	0.51	5.08	0.54	5.43	0.58	5.76
DN32	36	1 1/4"	0.34	3.36	0.75	7.47	0.88	8.83	0.94	9.44	1.00	10.01
DN40	41.9	1 1/2"	0.45	4.55	1.01	10.11	1.20	11.96	1.28	12.79	1.36	13.56
DN50	53.1	2"	0.73	7.30	1.62	16.24	1.92	19.21	2.05	20.53	2.18	21.78
DN65	68.9	2 1/2"	1.23	12.29	2.73	27.34	3.23	32.34	3.46	34.57	3.67	36.66
DN80	80.9	3"	1.69	16.95	3.77	37.70	4.46	44.59	4.77	47.66	5.05	50.55
DN100	110	4"	3.13	31.33	6.97	69.70	8.24	82.44	8.81	88.12	9.35	93.45
DN125	133.7	5"	4.63	46.29	10.30	102.97	12.18	121.78	13.02	130.18	13.81	138.06
DN150	159.3	6"	6.57	65.71	14.62	146.17	17.29	172.89	18.48	184.80	19.60	195.99
DN200	200	8"	10.36	103.58	23.04	230.40	27.25	272.52	29.13	291.30	30.89	308.94
DN250	250	10"	16.18	161.85	36.00	360.01	42.58	425.80	45.52	455.15	48.27	482.72
DN300	300	12"	23.31	233.06	51.84	518.41	61.32	613.16	65.54	655.42	69.51	695.11

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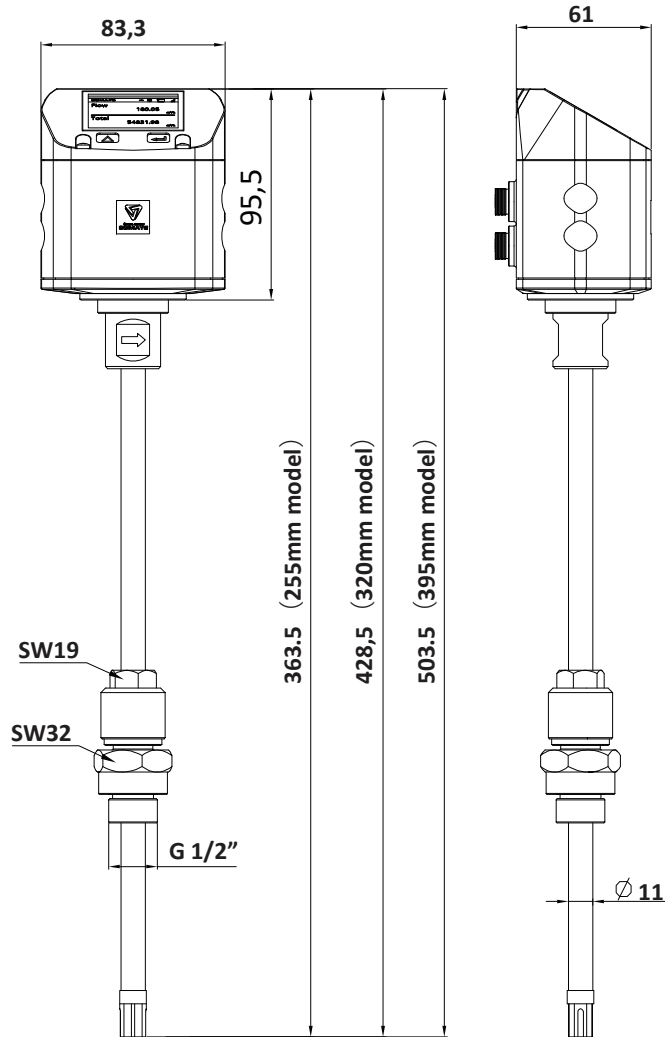
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DIMENSION/DRAWING



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