

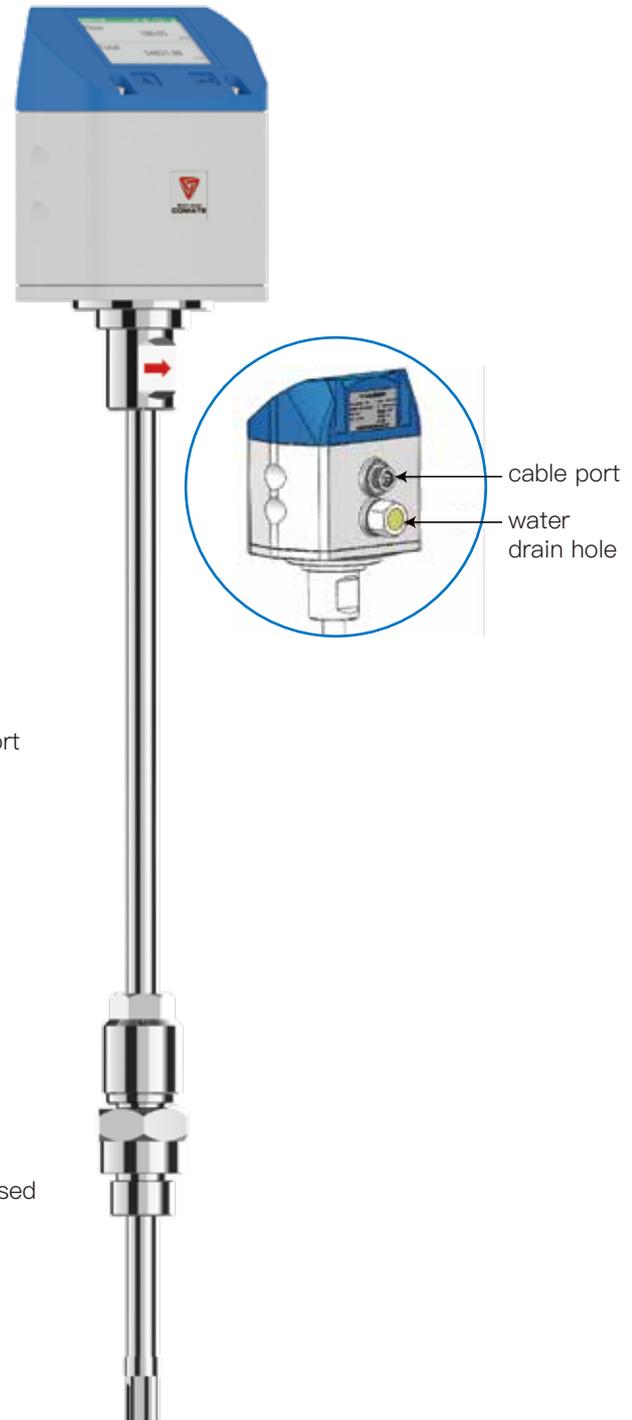
## Working principle

PTF520 Pitot tube flow meter is COMATE's latest technology base on different pressure technology specially designed for compressed air applications. As it has 1/2" insertion connection probe and compact designed sensor, it can be used on pipes from DN25~DN300. In some higher pressure applications, it can be installed / removed without stopping the fluid, as the pipe is thinner, field engineers will be able to insert the meter to pipe very easily. Also, due to its working principle, it is less effected by the water contents in the compressed air.

PTF520 Pitot tube flow meter also has integral temperature and pressure compensation, so it can measure standard flow, temperature and pressure also.

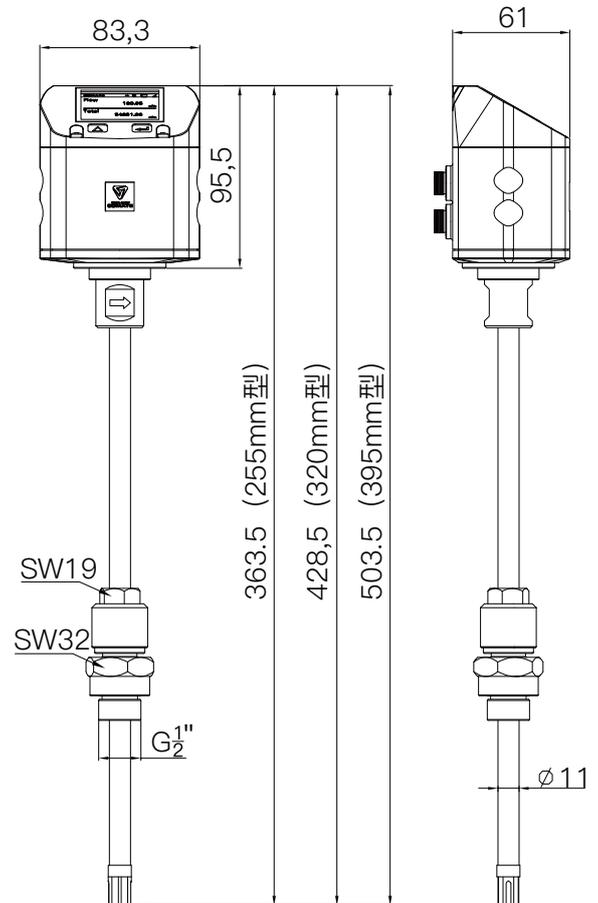
## Special features

- Cellphone APP for reading and setting
- Self-diagnose and remote diagnose function to provide with best support
- Bid-directional flow measurement
- No need to set 0 point
- Measures flow rate, temperature, pressure, FAD measurement available
- Wide measurement range
- Fast response time
- No mechanical wear part
- Insertion mounting, available for hot tapping.
- For both dry and wet air measurement, possible for measuring compressed air at output of compressor



## Specification

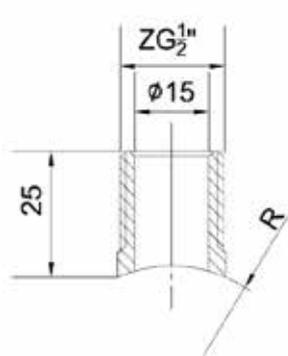
Medium	Air and none-corrosive gas
Enclosure	Nylon
Pipe size range	1"~12" (DN25~DN300)
Ambient temperature	-20~60°C
Atmosphere pressure	86~106 Kpa
Ambient humidity	5~100%
Process connection	1/2 G insertion with ball valve
Pressure rating	10 barG
Fluid temperature	-40~ 150°C
Wet part material	304ss
Parameter measured	Flow rate, temperature , pressure
Power	13.5~32V DC,150mA max
Analog	4 wire passive 4~20mA
Communication	RS485@Modbus-RTU, blue tooth
Flow Accuracy	±1.5%RD±0.3%FS
Flow Repeatability	±0.5%RD
Response time	1 second



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								
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

## Socket tube (Material according to pipeline)



## Read & Set on Screen

PTF520 has integral TFT 2" High Resolution display with two capacitive key for setting

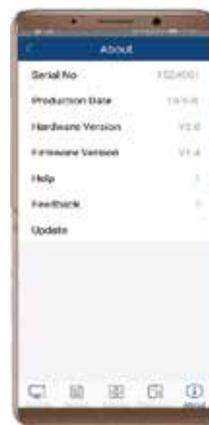


## Read & Set on in COMATE APP

Instead of traditional keyboard, COMATE PTF500 implement a cellphone setting system. All PTF500 have Bluetooth communication. Users can install COMATE APP on their cellphone or tablet and use the APP to connect with a PTF520 flow meter to read or set the flow meter.

This APP also support a remote diagnose function. Whenever there is anything wrong with the flow meter, customer can ask for a remote diagnose support. When this function is working, COMATE engineer back in office can remotely check the setting of the meter, and the signal of sensor, to provide users with most accurate trouble shooting advise.

COMATE APP has made the using of the product simple and efficient .



Device list

Setting interface

Remote diagnose interface

## Mode number

The standard model number is usually PTF520-I1-T-1-1-XXXX,  
Please reference to the table below for what the model codes stand for.

### Mode codes

1	General model	D	Insertion (G 1/2) ,anti-ejection design with ball valve	Standard
		1	255mm, 11mm dia (1"~4" or DN25~DN100)	Option
2	Probe Length	2	320mm, 11mm dia (1"~8" or DN25~DN200)	Option
		3	395mm, 11mm dia (1"~12" or DN25~DN300)	Standard
3	Probe Material	1	304 SS	Standard
		1	Carbon steel	Option
4	Socket material	2	304 SS	Standard
		3	316 SS	Option
5	Transmitter	T	Integral	Standard
6	Pressure Rating	1	10 Bar G	Standard
		2	150 KpaA	Option
7	Display and output	1	Local display, RS485, Bluetooth	Standard
		2	Local display, 4wire 4~20mA, RS485, Bluetooth	Option
8	Power supply	1	13.5~42VDC	Standard
		N	13.5~42VDC with 24VDC to AC power converter	N
9	Pipe size	XXX	please use 3 digit pipe size, such as DN50=050, DN200=200	XXX

Remark:

1. Hot-tap hole opener are as accessories, please remark if you need any of them
2. Please indicate flow rate along with the model number selected
3. If anything beyond this chart, please check with us to see the availability
4. The model selected in 1st line is the standard configuration with no accessories