

COMATE INTELLIGENT SENSOR PTF500 Pitot Tube flow meter datasheet

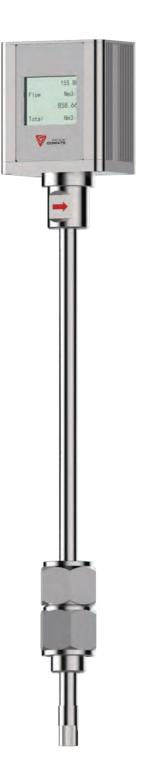
Working principle

PTF500 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.

PTF500 Pitot tube flow meter also has integral temperature and pressure compensation, so it can measure standard flow, temperature and pressure also.

Features

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

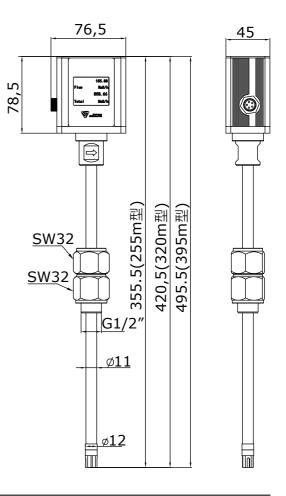




COMATE INTELLIGENT SENSOR PTF500 Pitot Tube flow meter datasheet

Specification

| Model | PTF500 |
|---------------------|-----------------------------------|
| Medium | Air and none-corrosive gas |
| Pipe size range | 1"~12" (DN25~DN300) |
| Ambient temperature | -40~60 °C |
| 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/316ss |
| Parameter measured | Flow rate, temperature , pressure |
| Power | 13.5~32V DC,150mA max |
| Communication | RS485@Modbus-RTU, blue tooth |
| Flow Accuracy | ±1.5%RD±0.3%FS |
| Flow Repeatability | ±0.5%RD |
| Response time | 1 second |

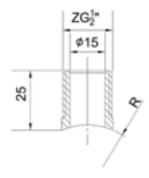


| Standard flow range for compressed air @ 50 °C and different pressure, unit is Normal flow Nm3/min ref to 1.01325 barA, 0 °C | | | | | | | arA, 0 ºC | | | | | |
|--|-------|---------|-------|---------|-------|--------|-----------|---------|-------|---------|-------|--------|
| Pipe innder diameter | | 0 Bar G | | 4 Bar G | | 6 BarG | | 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 |



COMATE INTELLIGENT SENSOR PTF500 Pitot Tube flow meter datasheet

Socket tube (Material according to pipeline)

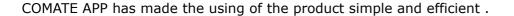


Setting in COMATE APP

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 PTF500 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.











Setting interface



Remote diagnose interface



COMATE INTELLIGENT SENSOR PTF500 Pitot Tube flow meter datasheet

Model Selection

| Process Connection | D | Standard | Insertion (G 1/2) ,anti-ejection design with ball valve | | | | |
|--------------------|-----|----------|---|--|--|--|--|
| Probe Length | 1 | Option | 255mm, 11mm dia (1"~4" or DN25~DN100) | | | | |
| | 2 | Option | 320mm, 11mm dia (1"~8" or DN25~DN200) | | | | |
| | 3 | Standard | 395mm, 11mm dia (1"~12" or DN25~DN300) | | | | |
| Probe Material | 1 | Standard | 304 SS | | | | |
| Socket material | 1 | Standard | Carbon steel | | | | |
| | 2 | Option | 304 SS | | | | |
| | 3 | Option | 316 SS | | | | |
| Transmitter | Т | Standard | Integral | | | | |
| Pressure Rating | 1 | Standard | 10 Bar G | | | | |
| | 2 | Option | 150 KpaA | | | | |
| Display and output | 1 | Option | No display, RS485, Bluetooth | | | | |
| | 2 | Option | No display, 4wire 4~20mA, RS485, Bluetooth | | | | |
| | 3 | Standard | Local display, RS485, Bluetooth | | | | |
| | 4 | Option | Local display, 4wire 4~20mA, RS485, Bluetooth | | | | |
| Power supply | 1 | Standard | 13.5~42VDC | | | | |
| | N | N | 13.5~42VDC with 24VDC to AC power concerter | | | | |
| Pipe size | XXX | XXX | please use 3 digit pipe size, such as DN50=050, DN200=200 | | | | |

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

Contact us

Hefei Comate Intelligent Sensor Technology Co,. Ltd 2nd floor, Building D2, Hefei Innovation Industrial Park, No.800 Wangjiang West Road, Hefei Tech Development Zone, Hefei, China

Mobile: +86 13365696245 Skype: comatesales

Tel: +86 (0551) 63653564 E-mail: fangliang@comatemeter.com; comatesales@gmail.com

Fax: +86 (0551) 65316075 Website: http://gw.comatemeter.com/en/products.htm



Representantes / Distribuidores Exclusivos

Argentina

Tel: (+54 11) 5352 2500 Email: info@dastecsrl.com.ar Web: www.dastecsrl.com.ar