

TECHNOLOGY

**HOLYKELL®**

# **HPT702**

## **PRESSURE**

### **• DATASHEET •**

- 1. Pressure Measurement**   2. Level Measurement   3. Temperature Measurement  
4. Flow Measurement   5. Display & Control Instruments  
6. Wireless Monitoring System   7. Velocity Measurement

# HPT 702

## LCD/LED Air Differential Pressure Transmitter

### Applications

- HAVC Air differential pressure
- Wind pipe pressure measurement
- Wind machine
- Industrial dust removal equipment
- Purification plant
- Blow down expander
- Leak detection device

### Features

- Pressure sensitive
- Digital temperature compensation
- Imported chip assembled
- Strong anti-humidity and water-resistance
- IP65 enclosure
- Advanced circuit linearity
- Compact and easy to install

### Profiles

HPT702 differential pressure transmitter is designed for monitoring pressure or differential pressure in industrial and OEM applications.

It features a big HD LCD/LED display. This differential pressure transmitter adopts imported chip and is made by advanced technology and processes. The circuit linearity and temperature compensation technologies make it better performance. It is compact with stable structure and light weight. This product is suitable for the pressure or differential pressure measurement of various dry and non-corrosive gases with high measurement accuracy, widely used in many fields such as electrical power, environmental protection, dust removal, textile, leakage detection and etc.

Its installation is very simple. There are M4 screw mounting holes on both sides of the housing, and the air nozzle is also threaded. The user can choose to fix it with screws or M10\*1.5 nuts.



#### Measuring range

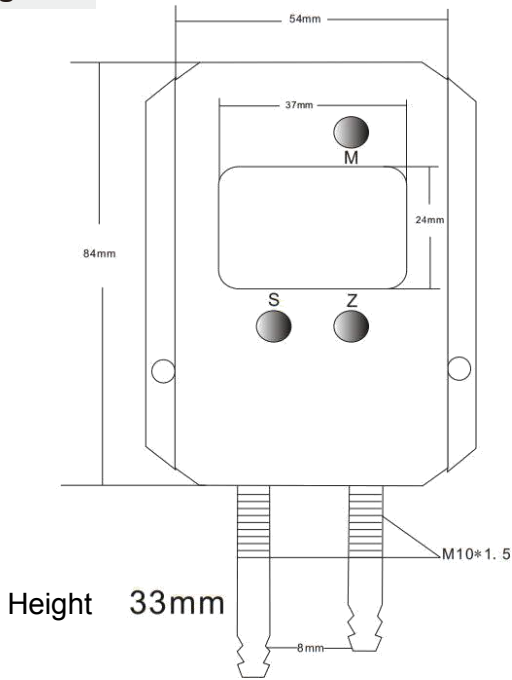
bar	0-2bar max or $\pm 1$ bar
KPa	0-200kpa max or $\pm 100$ kpa
Pa	0-200000pa max or $\pm 100000$ pa

Specifications

Ambient Temperature: 25°C (unless specified)

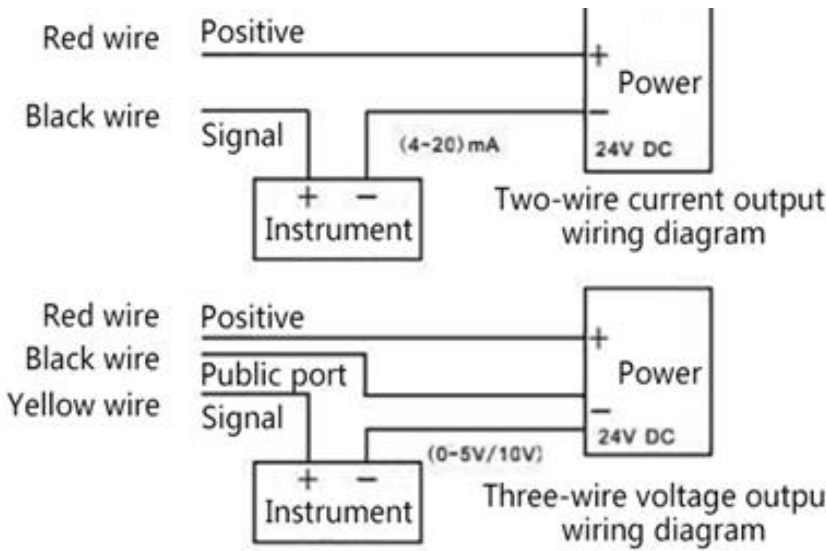
Parameter	HPT702				
Pressure Range	0-200kpa max or ± 100kpa				
Accuracy	0.5%F.S typical; 0.25%F.S(By customized) optional				
Medium Temp.	-10℃~80℃ at 25℃				
Temp. compensation	-10℃~80℃				
Medium compatible	Dry and non-corrosive gases				
Electrical Wire	2 Wires		3 Wires		4 Wires
Output	4-20mA	0-5V	0-10 V	0.5-4.5V	RS485 Modbus RTU
Power Supply	8-30V with potentiometer; 24-30V without potentiometer			5Vdc	8-30V with potentiometer; 24-30V without potentiometer
Electrical connection	Fixed cable outlet				
IP Rating	IP65				
Pressure connect port	Φ8 gas port, Φ6 gas port , quick connector optional				
Pressure Type	Differential pressure				
Housing materials	Aluminum				

**Dimensions and Drawing**

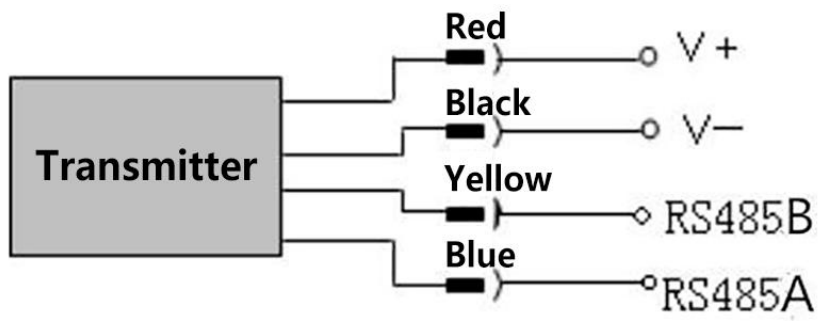


**Electrical Connections**

**Wiring for current and voltage output**



**Wiring for RS485 output**

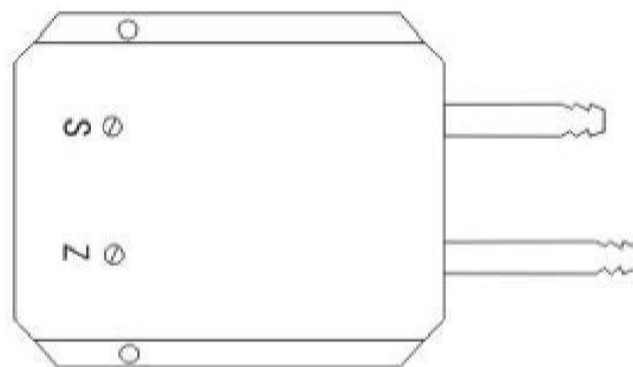


### Pressure method

The default pressure port is  $\Phi 8$  gas mouth, in which the long nozzle is the high-end pressure port and the short nozzle is the low-end pressure port. ( $\Phi 6$  gas mouth or quick connector can also be used)

### Zero and Full Scale Adjustment

There are two types of air differential pressure transmitter with potentiometer and without potentiometer. If the user chooses the potentiometer hole (the user can manually adjust the zero. Note: If there is no standard pressure source, do not touch the full-scale potentiometer, otherwise it will affect the accuracy of the transmitter), users can also choose the body without potentiometer hole (not adjustable).



As shown in the figure: Z is for zero adjustment, S is for full scale adjustment.

### Reset Main Variable

If the user chooses the on-site display type of air differential pressure transducer, due to the small range, some on-site installation location, temperature, environment and other factors may affect the zero output value and cause a slight deviation, so we can reset. (Please do not operate unless necessary, so as not to disturb the factory calibration data and affect the usage.)

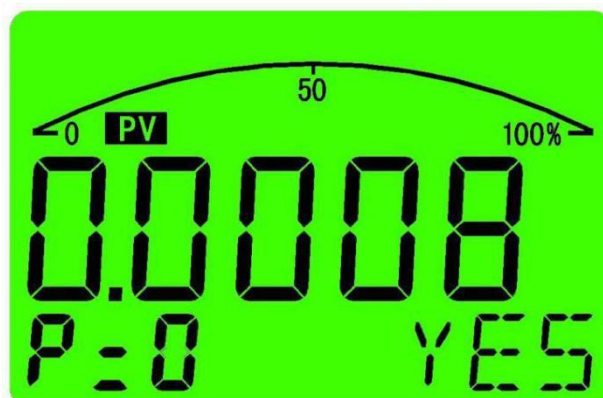
The main variable reset is PV reset, which is relative to the zero point under atmospheric pressure, not that of the sensor range. Place the transmitter directly under atmospheric pressure, press and hold the "M" key for more than 5 seconds to enter the main variable reset function, as shown in the figure below, the menu area displays "P=0", press the "S" key and "Z" key to select the required operation, and the prompt area will display accordingly:

"NO" refers to not to reset the main variable;

"YES" refers to reset the main variable;

"RESET" restores the zero point before the reset operation;

If there is no key operation within 30 seconds, the meter will automatically return to the test mode.



### How to Order

#### 1. Pressure Range Selection Table

01	0~1KPa	07	0~7KPa	13	0~40KPa	19	0~100KPa		
02	0~2KPa	08	0~8KPa	14	0~50KPa	20	0~150KPa		
03	0~3KPa	09	0~9KPa	15	0~60KPa	21	0~200KPa		
04	0~4KPa	10	0~10KPa	16	0~70KPa	X	By Customized		
05	0~5KPa	11	0~20KPa	17	0~80KPa				
06	0~6KPa	12	0~30KPa	18	0~90KPa				





Kindly according to your application select suitable range code , Example: Code 16 =70Kpa .  
Unit of measure select on the Part Number Selection Table . Example: Code K=kPa , that's 70KPa.

#### 2. Part Number Selection Table

<b>702</b> Selection Type	<b>C</b>	<b>18</b>	<b>K</b>	<b>E5</b>	<b>S12</b>	<b>40</b>	<b>P1</b>	<b>1</b>	<b>002</b>
Display	C=LCD E=LED								
Pressure range	Range refer to pressure range selection table code								
Pressure unit	A=Pa    K=kPa    B=bar								
Signal output	E7=0-10V (3 wires)   E5=4-20mA(2 wires) E6=0-5V (3 wires)   E8=0.5-4.5V (3 wires) E11=RS485 Modbus RTU X= By Customized								
Power supply	S12=8-30V dc    S40=24-30Vdc    S6=5Vdc    X= By Customized								
Pressure connection	39= Ø6 gas mouth    40= Ø8 gas mouth 41= Quick connector    X= By Customized								
Max static pressure	P1= Standard by DP Range								
Accuracy	1=0.5%F.S    2=0.25%(by customized)								
Cable length	000=Non-Cable    001= Cable 1M    002= Cable 2M    X= By Customized								

### Accessories

(Notes: Please purchase separately. For the price of accessories, please contact our sales.)

	Description	Order number
	<b>Liquid level display control device</b> With all kinds of liquid level sensor, measurement according to liquid level, and according to the setting of the container structure and size and the density of liquid, calculation, display liquid volume or quality.	0008
	<b>Adapter Converter</b> It is able to convert RS-232 signal to RS-485 balanced differential signal and extend the communication distance to 1.2km. It uses a particular pump to gain power from RS-232 signal (RTS, DTR, TXD) without initializing the RS-232 series interface. This interface converter does this without requiring any AC or DC power.	0005
	<b>Surge electrostatic protector</b> Anti-surge $\pm 2000V/\pm 4000V$ , anti-static 18KV, suitable for protecting 4-20ma and RS485 circuits.	0014
	<b>Terminal box</b> The terminal box, with IP67 and watertight ventilation element, provides a moisture-free electrical termination for the submersible pressure transmitter. It should be mounted in dry environment or directly in the switch cabinet.	0003

### Order information

Model /Measuring range /Output Signal/Medium/Cable length/Case/Accessories