

TECHNOLOGY

HOLYKELL®

HPT701
PRESSURE
• DATASHEET •

1. Pressure Measurement 2. Level Measurement 3. Temperature Measurement
4. Flow Measurement 5. Display & Control Instruments

HPT 701

Standard Industry 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

Characters

- Min 1 Pa gas pressure sensitive
- Digital temperature compensation
- Germany silicon chips assembled
- Anti-humidity and water proof
- IP65 enclosure
- Advanced circuit linearity compensation
- CE approving

Profiles

HPT701 differential pressure transmitter is precision engineered for monitoring differential pressure of air and compatible gases in commercial and OEM applications and liquids with 0.25% accuracy.

Our low range air differential pressure transmitter provides an accurate solution for low pressure sensing with ranges available from 0-100pa to 0-100Kpa. Being assembled with imported chips, it embodies the world's best transmitter technology; The advanced circuit linearity and temperature compensation technology makes better transmitter performance. It is compact with stable structure and light weight; easy to install and use. It is suitable for the pressure or differential pressure measurement of various dry and non-corrosive gases with high measurement accuracy. It is widely used in many fields such as electric power, environmental protection, dust removal, textile, leak detection and etc.

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



RoHS

Measuring range

Measuring range	
bar	0 to 0.005...0.01 to 5
Kpa	0 to 0.05..... 1 to 500
psi	0 to 0.5..... 10 to 5000
mH2O	0 to 50 1000 to 500000

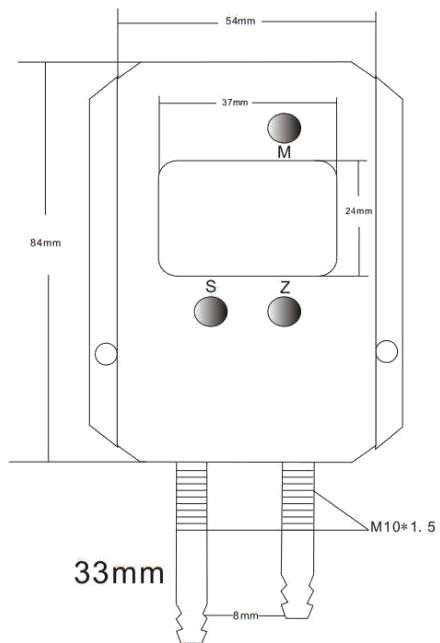
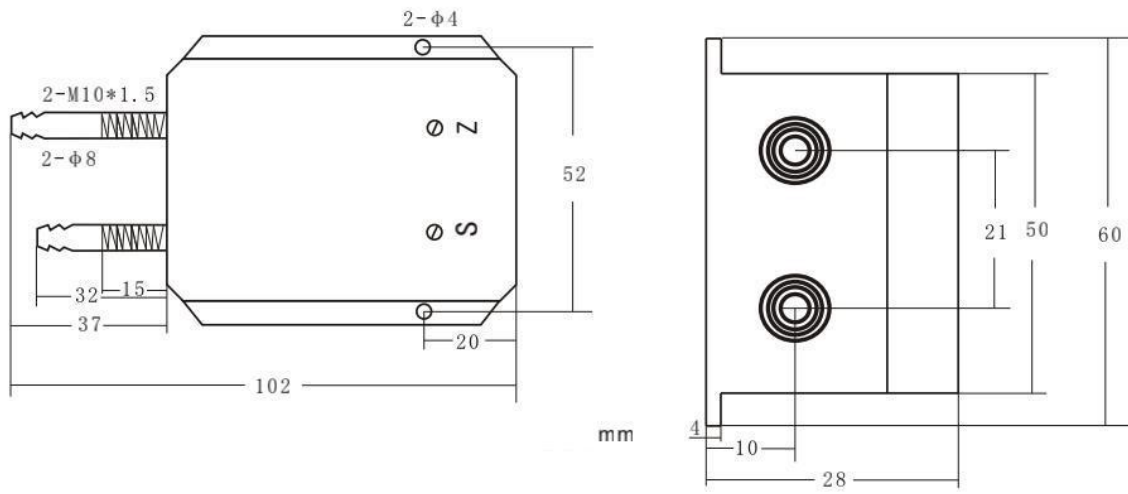
The measuring ranges are also available in Mpa,Pa,in Hg,mm Hg.

Specifications

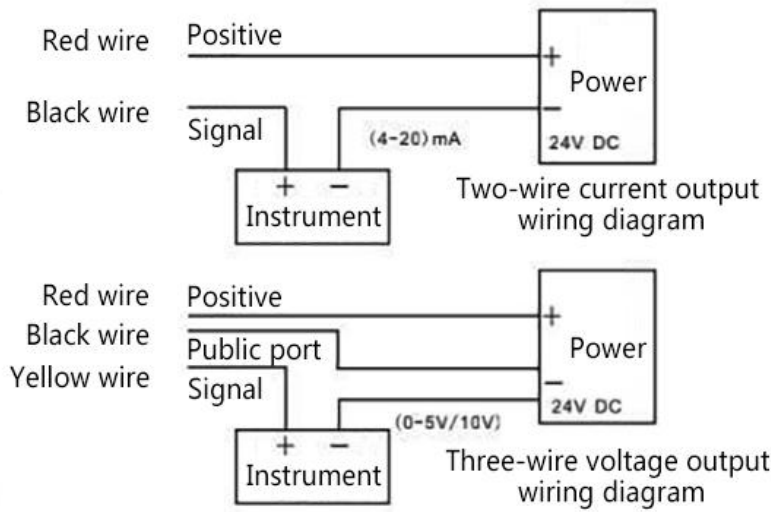
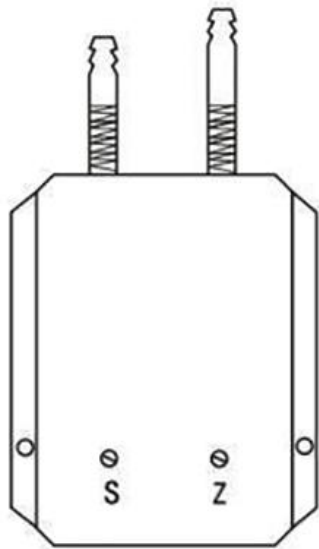
Ambient Temperature: 25°C (unless specified)

Parameter	HPT701				
Pressure Range	0~100Pa~100Kpa				
Safe overload	200% F.S.				
Burst Pressure	300% F.S.				
Accuracy(Linearity hysteresis repeatability)	0.25%F.S 0.5%F.S optional				
Long Time Stability	Standard: 0.25%F.S				
Working Temp	-10°C~80°C				
Storage Temp	-10°C~80°C				
Temperature compensation	-10°C~80°C				
Zero Point Temp Drift	≤±0.5%F.S/°C				
Full Scale Temp Drift	≤±0.1%F.S/°C				
Zero Error	≤±0.5%F.S				
Total Error	≤±0.75%F.S				
Medium compatible	Air or non-corrosive gas				
Electronic Wire	2 Wires		3 Wires		
Output	4~20mA	0~5V	0~10 V	0.5-4.5V	RS485 optional
Power Supply	24 ~ 30 V DC				
Electronic connection	Fixed cable and water proof IP65				
Pressure connect port	M10*1.5 male thread				
Response time	< 1s				
Adjustment	Support local zero and span calibration.				
Pressure Type EMC	Differential pressure (Gage pressure)				
Standard	Approving				
Weight	Around 0.25KG (excluding package)				

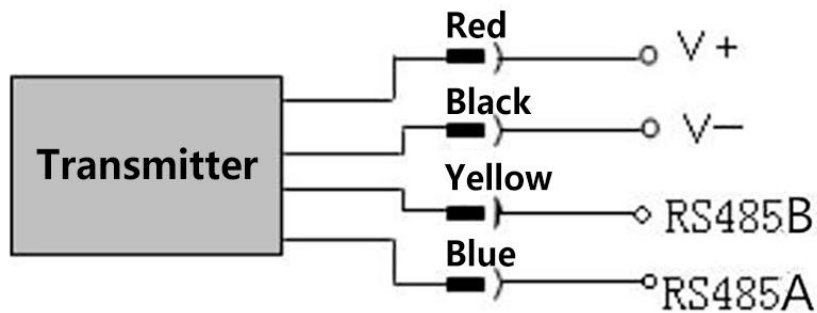
■ Dimensions and Drawing



Electronic Connections



RS485 output wiring diagram

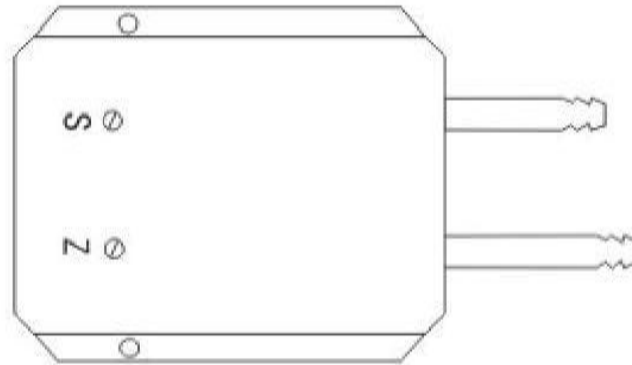


Pressure method

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 wind differential pressure transmitter with potentiometer and without potentiometer. If the user chooses the potentiometer hole (the user can manually adjust the zero position. Note: If there is no standard pressure source, do not move the full-scale potentiometer, otherwise it will affect the accuracy of the transducer), 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 wind 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 transducer 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	0~100Pa	07	0~400Pa	13	0~900Pa	19	0~10kPa	25	0~200kPa	31	-50~50Pa	37	-200~200Pa	43	-10~10KPa	47	-100~250KPa
02	0~150Pa	08	0~450Pa	14	0~1000Pa	20	0~20kPa	26	0~250kPa	32	-100~0Pa	38	-300~300Pa	44	-50~50KPa	48	-100~500KPa
03	0~200Pa	09	0~500Pa	15	0~2kPa	21	0~30kPa	27	0~300kPa	33	-100~100Pa	39	-500~500Pa	45	-100~100KPa	49	-100~1000KPa
04	0~250Pa	10	0~600Pa	16	0~3kPa	22	0~50kPa	28	0~500kPa	34	-150~0Pa	40	-1~1KPa	46	-100~200KPa		
05	0~300Pa	11	0~700Pa	17	0~4kPa	23	0~100kPa	29	0~1000kPa	35	-150~150Pa	41	-2~2KPa	X	By Customized		
06	0~350Pa	12	0~800Pa	18	0~5kPa	24	0~150kPa	30	-50~0Pa	36	-200~0Pa	42	-5~5KPa				

Kindly according to your application select suitable range code , Example: Code 16 =3kPa .
 Unit of measure select on the Part Number Selection Table . Example: Code K=kPa , that's 3 kPa.

2. Part Number Selection Table:

HPT701 Selection Type	18	A	E5	S10	33	P1	1	002
Pressure range	Range reference to pressure range selection table code.							
Pressure unit	A=Pa K=kPa H=mH2O							
Signal output	E0= 1-5V (3 wires) E5= 4-20mA(2 wires) E6= 0-5V (3 wires) E8= 0.5-4.5 V (3 wires) E9=RS485 X= By Customized							
Power supply	S10=24~30V DC							
Pressure connection	11=M10*1.5 male thread 33=Ø8 gas mouth X= By Customized							
Max static pressure	P1 Standard by DP Range P2 High Static Pressure Type X By Customized							
Accuracy	1=0.5%F.S 2=0.25%F.S							
Cable length	000=Non-Cable 001= Cable 0.7M 002= Cable 2M X= By Customized							

Accessories

	Description	Order number
	<p>Liquid level display control device 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.</p>	0008
	<p>NPT adapter The 316 SS G1/2 adapter replaces the removable protective cap and converts the threads to 1/2"NPT male external, 1/4" female internal threads.</p>	0001
	<p>Attached indicator for transmitters Standard version for Ex version</p>	0006
	<p>Adapter Converter 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</p>	0005
	<p>Terminal box The terminal box, with IP 67 ingress protection 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.</p>	0003

Order information

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