

The selection is detailed on page 4



# DPT70

## Differential Pressure Transmitter

### Working principle

The working medium pressure is transmitted through the standard process connector and then affects the internal pressure sensor element. Internal electronics convert raw transmitter signals into filtered, amplified, temperature compensated and standardized signals such as 4... 20mA signal, etc. The output signal is transmitted to the next unit for signal processing via standardized connectors or cables.

### Product application

Pharmaceutical industry  
 Electronics industry clean room  
 Machinery manufacturing industry

### Product description

DPT series micro-differential pressure instrument high-precision sensor and digital technology, easy to install, LCD display, clear and accurate reading. Suitable for measuring the pressure of fans and blowers, filter resistance, wind speed, furnace body ventilation, orifice plate, medical equipment and other pressure difference; Optional analog output type (current/voltage) or digital output type (RS485) version, can choose two relay output, suitable for users to flexibly control other devices.

### Functional characteristics

DPT series differential pressure sensors/transmitters detect differential or gauge pressure and convert this pressure value into a proportional electrical output for intelligent building energy management systems to measure the precise pressure and flow required for building pressurization and air flow control. The use pressure value can be set on site by the dip switch built into the DPT series.

Measuring range: 0 ~ ±10Pa/0 ~ ±10,000Pa

Accuracy: ±1.0%

Multiple pressure units can be switched

LCD backlit digital display or no display

Automatic zero calibration on startup

The response time is adjustable on site by the built-in code switch (0.5S ~ 4S).

Manual key differential zero calibration

The rotating mode is fixed on the installation backplane (the installation plate is separate from the main machine, so that the installation can be carried out by steps and stages)



## Technical parameter

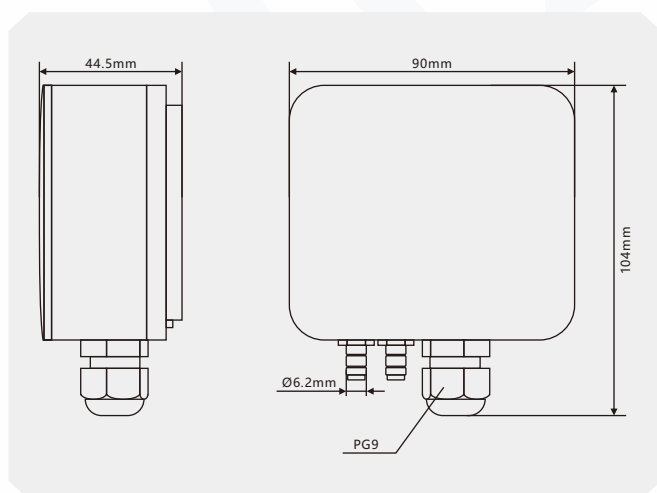
Range range	DPT70 (-1000 ~ +1000Pa)	The minimum value ranges from 0 to +100Pa
	DPT72 (-10000 ~ +10000Pa)	The minimum value ranges from 0 to +1000Pa
	DPT73 (-100 ~ +100Pa)	The minimum value ranges from 0 to +10Pa
Precision class	±1.0%	
Pressure unit	Pa,mmH2O,mbar,inWC,mmHG,daPa,KPa,hPa	
Output signal	0~5VDC、0~10VDC、4~20mA、RS-485 signal	
	(Two wire system, three wire system output, can use analog signals at the same time; RS-485 only RS-485 signal output)	
Power supply	Two sets of simultaneous output, input voltage is 16~30VAC/VDC, can be equipped with 24VDC adapter (3.5x1.35mm) power supply	
	4~20mA(two-wire system) output, input voltage is non-polar 1) 12~30VDC	
	0~5V/10VDC output, input voltage 16~30VAC/VDC	
	RS-485 output, input voltage is 12~30VAC/VDC	
Power dissipation	≤1.5W	

1) Input voltage sources are not positive or negative

## Transmitter function

Response time	0.5s,1s,2s,4s	
Resolution	DPT70/DPT72	1Pa,0.1mmH2 O,0.01mbar,0.004inWG,0.007mmHG,0.1daPa,0.001KPa,0.001hPa
	DPT73	0.1Pa,0.01mmH2 O,0.01mbar,0.01daPa,0.001hPa
Zero calibration	Manual key zero calibration	
Measuring medium	Air and neutral gases	
Allowable overvoltage	15KPa(DPT70); 150KPa(DPT72); 4.5KPa(DPT73)	
Service temperature	-10~+60°C	
Storage temperature	-10~+70°C	

## Size mm

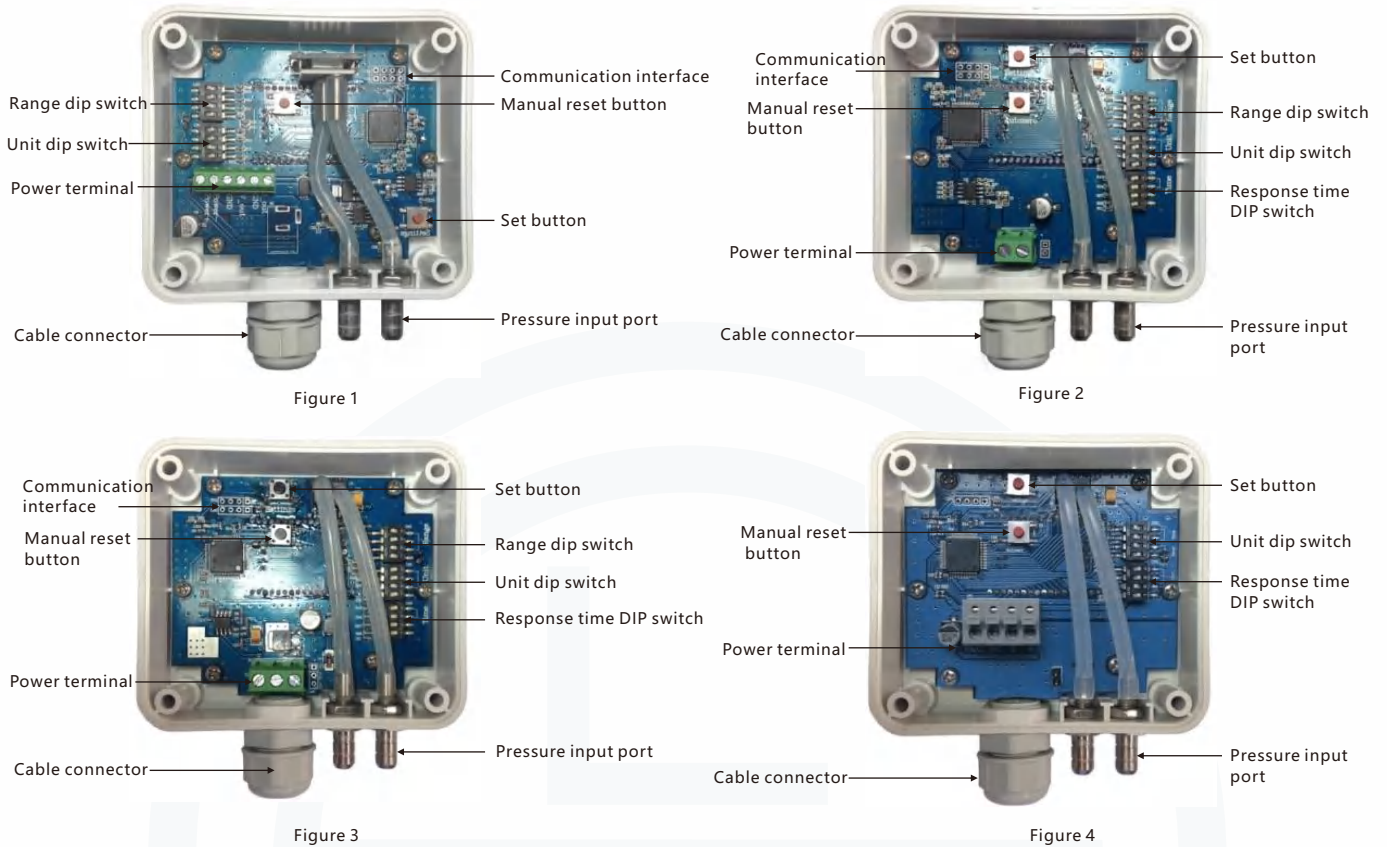


## Transmitter function

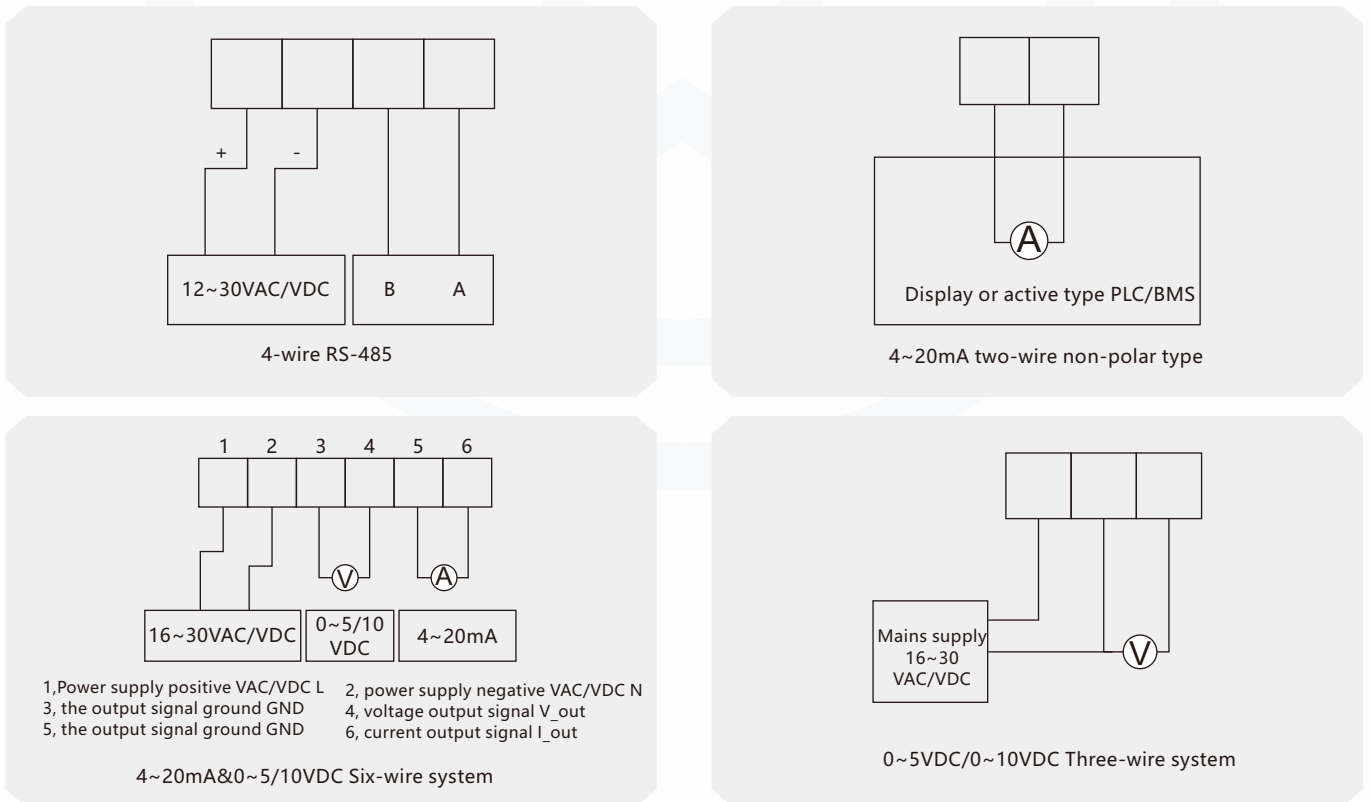
Shell material	Industrial plastics, protection class IP65
Display screen	Backlit LCD display, 50× 22.5mm (two-wire no backlight)
Digital height	Measurement value 10 mm, unit 5 mm
Pressure connection	Metal barb connector, Ø6.2 mm
Cable joint	Maximum diameter of cable Ø8 mm
weight	166g



Function introduction



Connection mode



Note: Remove the front cover plug and rear cover rubber plug, pass the wire through the waterproof connector, connect the terminal correctly, tighten the waterproof connector, and cover the rear cover rubber plug.

## DPT70-Selection composition

Selection example **DPT70**

1	A	2	H	3	F	4	W	5	L
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1.Measuring range	<b>A</b>	-1,000~1,000Pa
	<b>B</b>	-10,000~10,000 Pa
	<b>C</b>	-100~100Pa
2.Output signal	<b>G</b>	4~20mA&0~5/10VDC(two outputs)
	<b>H</b>	4~20mA (two-wire)
	<b>L</b>	4~20mA (six-wire)
	<b>I</b>	0~10VDC (three-wire system)
	<b>J</b>	0~5VDC (three-wire system)
	<b>K</b>	RS-485 Communication (Four-wire system)
3.Precision class	<b>F</b>	±1.0%FS
4.Installation mode	<b>W</b>	wall-mounted
5.Liquid crystal display	<b>L</b>	With display
	<b>V</b>	No display screen

## Instructions:

DPT70 differential pressure transmitter, measuring range: -10,000~10,000pa, output signal 4-20mA(two-wire system), accuracy level ± 1.00% FS, wall-mounted, with liquid crystal display.

## Product Certification

Compliance and approval; Rodewieg pressure gauges meet key standards and certifications for process measurement technology; Thus guaranteeing the highest reliability in such Settings;