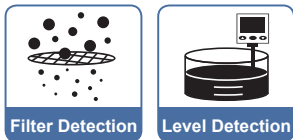


## Features

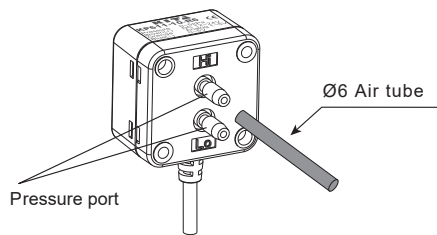
- Differential pressure sensor
- Analog output : 1 ~ 5 V or 4 ~ 20 mA
- Pressure range : 0 ~ 2 kPa or 0 ~ 5 kPa
- Simple installation, applicable to Ø6 air tubing
- IP40 enclosure



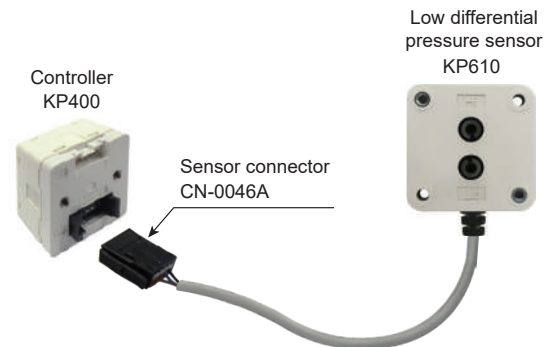
## Features Highlight

### 1 Simple Installation

- Plug-in port for air tube



- Plug connect with controller

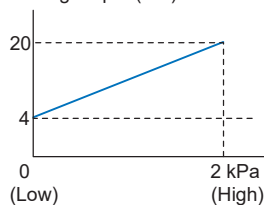


### 2 Analog Output

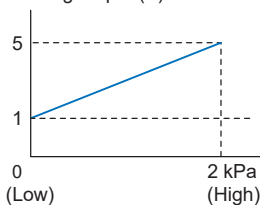
- 1 Analog output

Output range 1 to 5 V or 4 to 20 mA, proportional to the pressure range

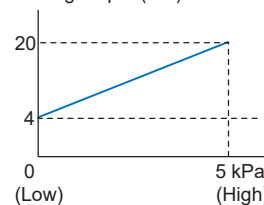
Analog output (mA)



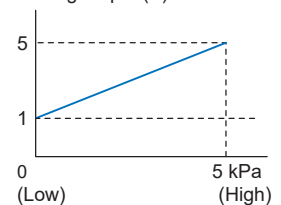
Analog output (V)



Analog output (mA)



Analog output (V)



## Specifications

MODEL	KP611	KP612
Rated Differential Pressure Range	0 ~ 5 kPa	0 ~ 2 kPa
Operating Pressure Range	-50 ~ 50 kPa *1	
Withstand Pressure	65 kPa	
Fluid	Filtered air, Non-corrosive / Non-flammable gas	
Power Supply Voltage	12 to 24 V DC $\pm 10\%$ , Ripple ( P-P ) 10 % or less	
Current Consumption	$\leq 15$ mA ( With no load )	
Analog Output ( Voltage Output )	Output Voltage : 1 to 5 V $\pm 1\%$ F.S. ( within rated pressure range ) Linearity : $\pm 0.5\%$ F.S. Output impedance : about 1 k $\Omega$	
Analog Output ( Current Output )	Output Current : 4 to 20 mA $\pm 1\%$ F.S. ( within rated pressure range ) Linearity : $\pm 0.5\%$ F.S. Max.Load impedance : 250 $\Omega$ at power supply of 12 V 600 $\Omega$ at power supply of 24 V	
Environment	Enclosure	IP 40
	Ambient Temp. Range	Operation : 0 ~ 50 °C, Storage : -20 ~ 70 °C ( No condensation or freezing )
	Ambient Humidity Range	Operation / Storage : 35 ~ 85 % RH ( No condensation )
	Withstand Voltage	1000 V AC in 1-min ( between case and lead wire )
	Insulation Resistance	50 M $\Omega$ ( at 500 V DC, between case and lead wire )
	Vibration	Total amplitude 1.5 mm or 10 G, 10 Hz - 150 Hz - 10 Hz scan for 1 minute, two hours each direction of X, Y and Z
	Shock	300 m/s <sup>2</sup> ( 30 G ), 3 times each in direction of X, Y and Z
Temperature Characteristic	$\pm 3\%$ F.S. of detected pressure ( 25 °C ) at temp. Range of 0 ~ 50 °C	
Port Size	4.8 ( $\varnothing 4.4$ in the end ) resin pipe ( Applicable to $\varnothing 6$ air tube )	
Lead Wire	Oil-resistance cable ( 0.15 mm <sup>2</sup> )	
Weight	Approx. 75 g ( with 2-meter lead wire )	

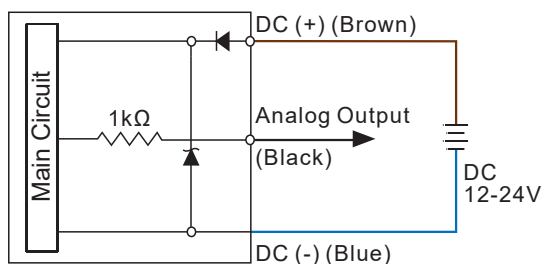
**NOTE :**

\*1 : To detect differential pressure from 0 ~ 2 kPa or 0 ~ 5 kPa within the range of -50 ~ 50 kPa.

## Circuit Wiring Diagrams

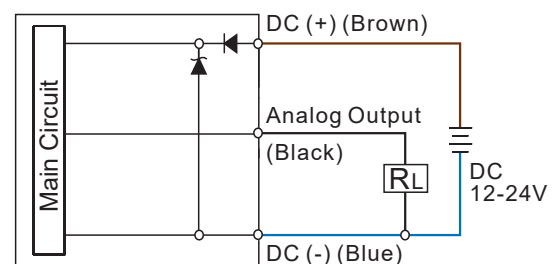
### KP61 □ - 10 - R6

Analog Output ( 1 ~ 5 V )



### KP61 □ - 11 - R6

Analog Output ( 4 ~ 20 mA )



# KP610 SERIES

# Differential Pressure Sensor

## Ordering Information

K P 6 1 1 - 1 0 - R 6

### Pressure Range

- 1 : 0 ~ 5 kPa
- 2 : 0 ~ 2 kPa

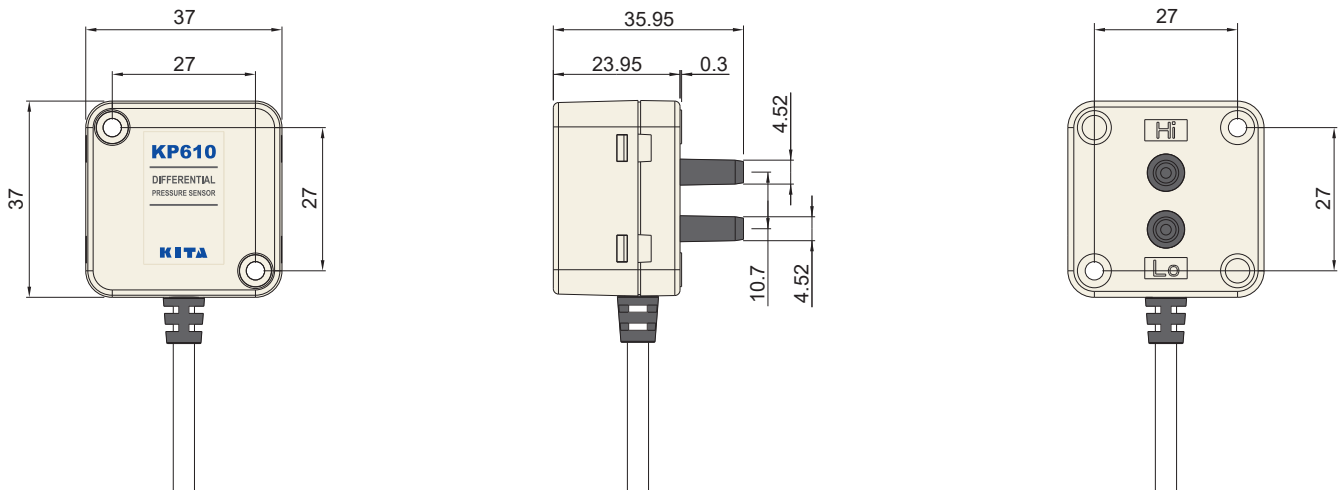
### Output Specifications

- 10 : Analog output ( 1 ~ 5 V )
- 11 : Analog output ( 4 ~ 20 mA )

### Optional Parts

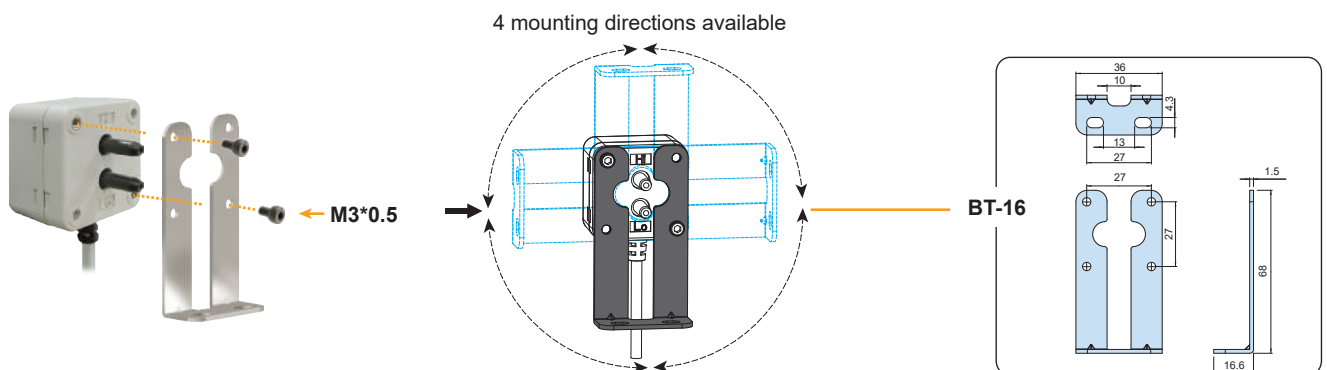
- BT-16 : Mounting bracket

## Dimensions



## Optional Parts Dimensions

### Mounting Bracket

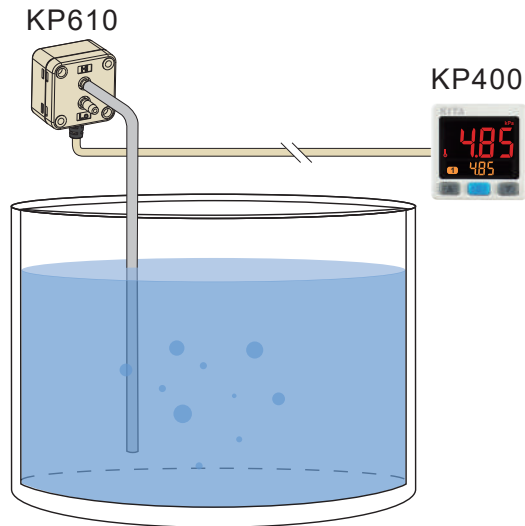


Unit : mm

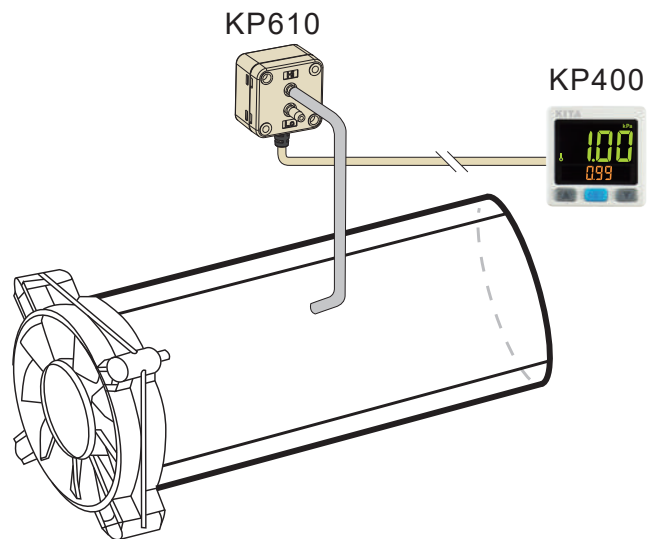
## Application

### 1 Liquid Level Detection

To detect the liquid level by sensing the change of line pressure.



### 2 Air Flow Detection



### 3 Filter Air Monitoring

To monitor the clogging of filter by detecting the differential pressure.

