

KP610 SERIES

Differential Pressure Sensor

Features

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



Specifications

MODEL		KP611
	5 kPa — 2 kPa — 0 —	
Rated Differential Pressure Range		0 ~ 5 kPa
Operating Pressure Range		-50 ~ 50 kPa ※1
Withstand Pressure		65 kPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas
Power Supply Voltage		12 ~ 24 V DC ± 10 %, Ripple (P-P) ≤ 10 %
Current Consumption		≤ 15 mA (with no load)
Analog Output (Voltage Output)		Output Voltage : 1 ~ 5 V ± 1 % F.S. (within rated pressure range) Linearity : ± 0.5 % F.S. Output Impedance : about 1 kΩ
Analog Output (Current Output)		Output Current : 4 ~ 20 mA ± 1 % F.S. (within rated pressure range) Linearity : ± 0.5 % F.S. Max. Load Impedance : 250 Ω at power supply of 12 V, 600 Ω at power supply of 24 V
Environment	Enclosure	IP40
	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 MΩ (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, 2 hours each direction of X, Y and Z
	Shock	300 m/s ² (30 G), 3 times each in direction of X, Y and Z
Temperature Characteristic		± 3 % F.S. of detected pressure (25 °C) at temp. (Range of 0 ~ 50 °C)
Port Size		Ø4.8 (Ø4.4 in the end) resin pipe (Applicable to Ø6 air tube)
Lead Wire		Ø4 Oil-resistance cable (PVC) - 26 AWG (0.15 mm ²) - 3 cores
Weight (with 2 meter lead wire)		Approx. 75 g

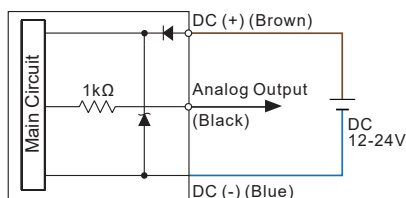
NOTE

※1 : To detect differential pressure from 0 ~ 5 kPa within the range of -50 ~ 50 kPa.

Circuit Wiring Diagrams

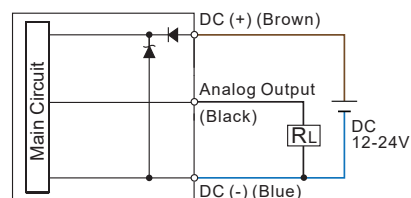
KP611 - 10 - R6

Analog Output (1 ~ 5 V)



KP611 - 11 - R6

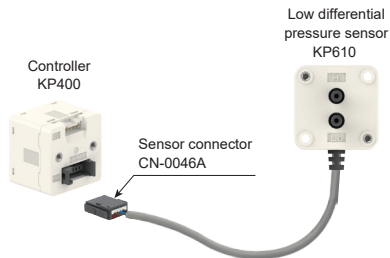
Analog Output (4 ~ 20 mA)



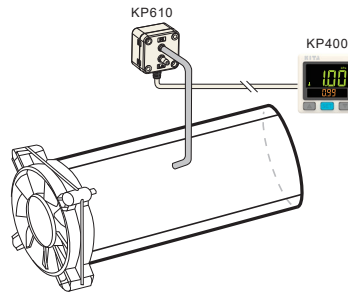
Application

1 Simple Installation

- Plug connect with controller

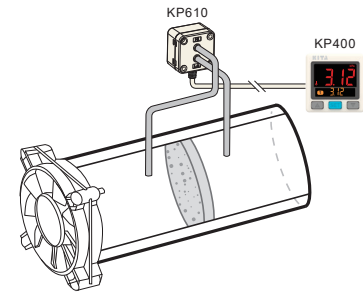


2 Air Flow Detection



3 Filter Air Monitoring

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



Ordering Information

K P 6 1 1 - 1 0 - R 6

Pressure Range

1 : 0 ~ 5 kPa

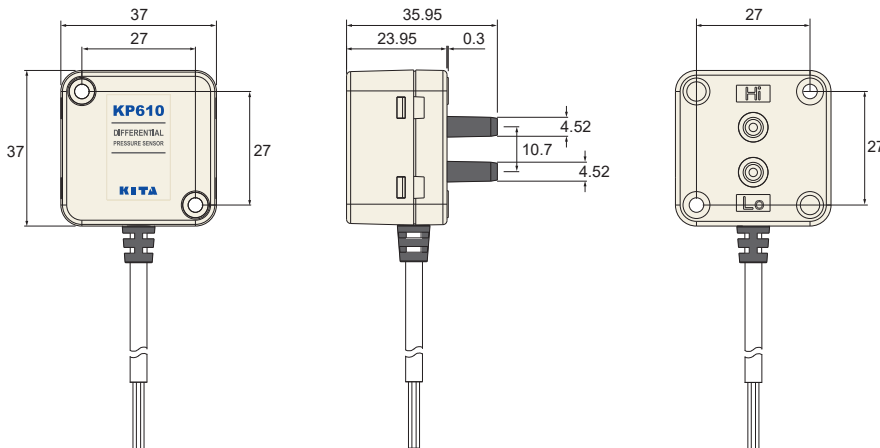
Output Specifications

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

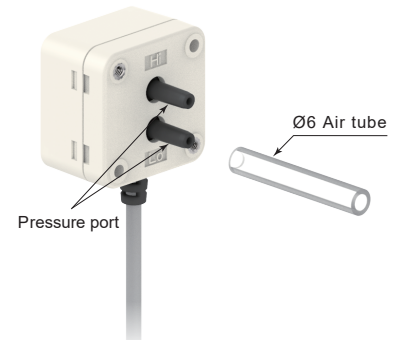
Optional Parts

BT-16 : Mounting bracket

Dimensions

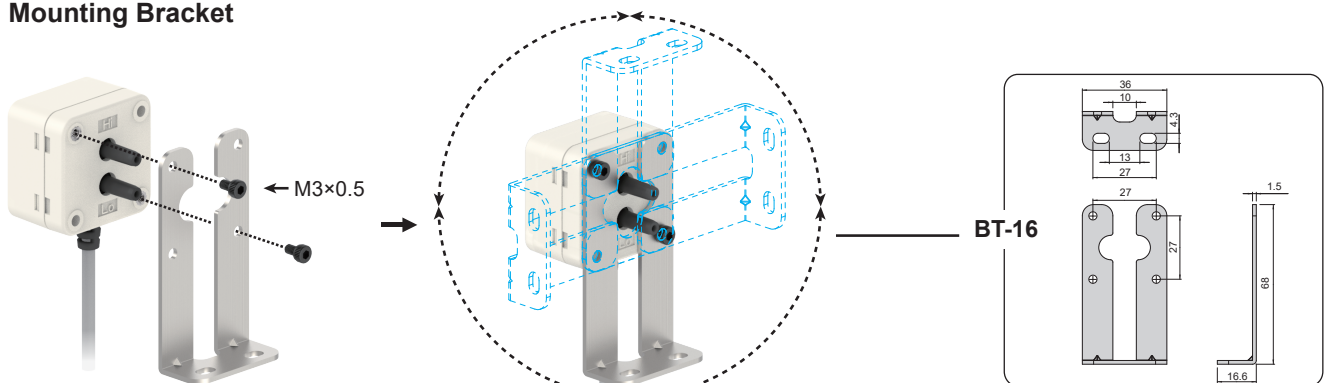


- Plug-in port for air tube



Optional Parts Dimensions

- Mounting Bracket



4 mounting directions available

Unit : mm