



For your safety, please read the following before using.

- ① Do not use corrosive or flammable gas or liquid with this product.
- ② Please use within the setting pressure range. Do not apply pressure beyond recommended maximum pressure, permanent damage to the pressure sensor may occur.
- ③ Do not drop, hit or allow excessive shock. Even if switch body appears undamaged, internal components may be broken and can cause malfunction.
- ④ Turn power off before connecting wiring. Wrong wiring or short circuit will damage and / or cause malfunction.
- ⑤ Do not use in environment containing steam or oil vapor.
- ⑥ This product is not explosion-proof rated. Do not use in atmosphere containing flammable or explosive gases.
- ⑦ Wiring for pressure sensor should avoid power source line and high voltage line. If use in the same circuit, noise may cause malfunction.
- ⑧ If using the product to detect very small pressure rates, warm up the product for 20 to 30 minutes first. There will be a drift on the analogue output of approximate $\pm 1\%$ immediately after the power supply is turned on, within 10 minutes.
- ⑨ Sensors at end-of-life must be disposed of in accordance with E-Waste regulations of the country/region, NOT disposed of with regular garbage.

A SPECIFICATIONS

MODEL		KP611
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 $\pm 10\%$, Ripple (P-P) $\leq 10\%$
Current consumption		≤ 15 mA (with no load)
Analog output (Voltage output)		Output Voltage : 1 ~ 5 V $\pm 1\%$ F.S. (within rated pressure range) Linearity : $\pm 0.5\%$ F.S. Output Impedance : about 1 k Ω
Analog output (Current output)		Output Current : 4 ~ 20 mA $\pm 1\%$ F.S. (within rated pressure range) Linearity : $\pm 0.5\%$ 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 $^{\circ}$ C, Storage : -20 ~ 70 $^{\circ}$ 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 Ω (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		$\pm 3\%$ F.S. of detected pressure (25 $^{\circ}$ C) at temp. (Range of 0 ~ 50 $^{\circ}$ C)
Port Size		$\varnothing 4.8$ ($\varnothing 4.4$ in the end) resin pipe (Applicable to $\varnothing 6$ air tube)
Lead wire		$\varnothing 4$ Oil-resistance cable (PVC) - 26 AWG (0.15 mm ²) - 3 cores
Weight (with 2 meter lead wire)		Approx. 75 g

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

B ORDERING INFORMATION

K P 6 1 1 - 1 0 - R 6

Pressure Range

1 : 0 ~ 5 kPa

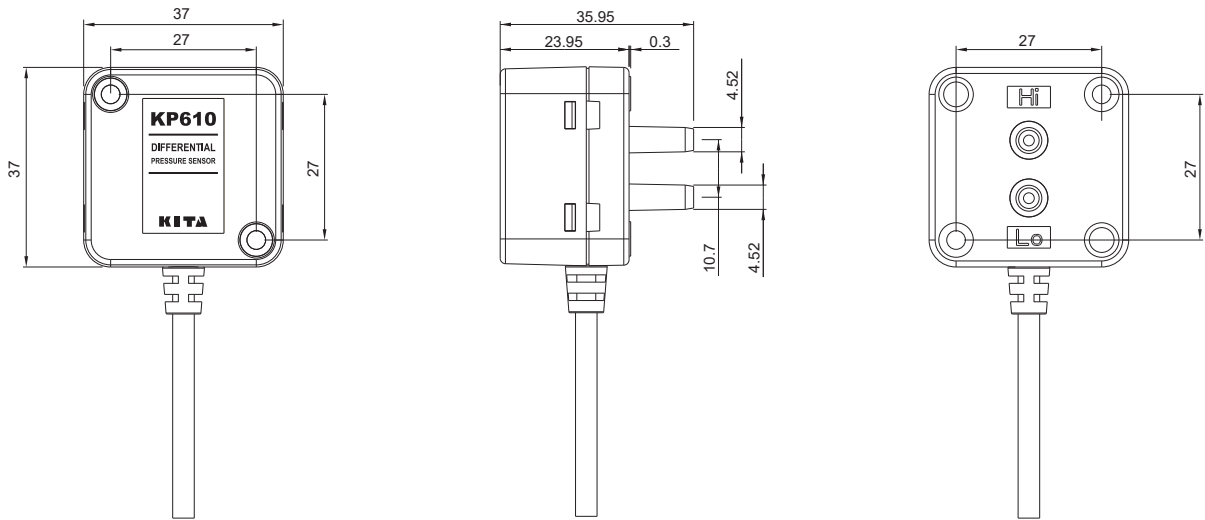
Output Specifications

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

Optional Parts

BT-16 : Mounting bracket

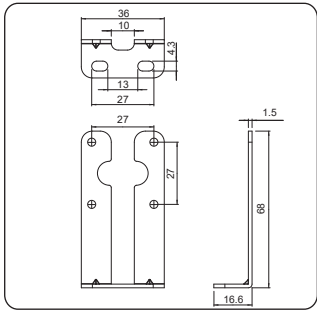
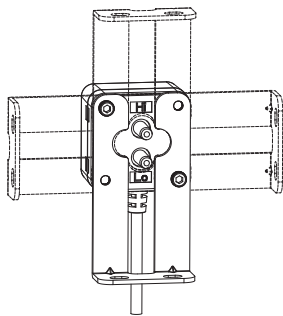
C DIMENSIONS



Unit:mm

D OPTIONAL PARTS DIMENSIONS

Mounting Bracket BT-16

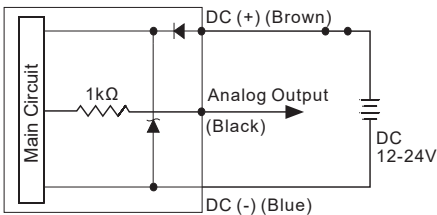


Unit:mm

E OUTPUT CIRCUIT WIRING DIAGRAMS

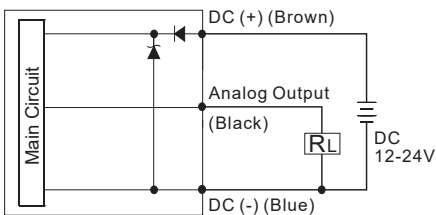
KP611-10-R6

Analog Output (1~5V)



KP611-11-R6

Analog Output (4~20mA)



F ANALOG OUTPUT

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

