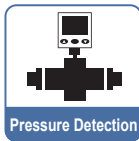
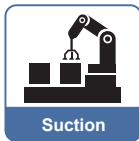


Features

- 1 output (hysteresis adjustable)
- 2 outputs
- Easy installation
- Response time : less than 5 ms

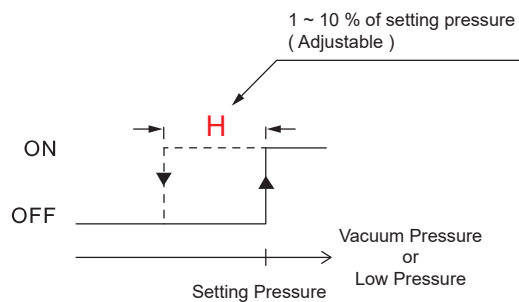


Features Highlight

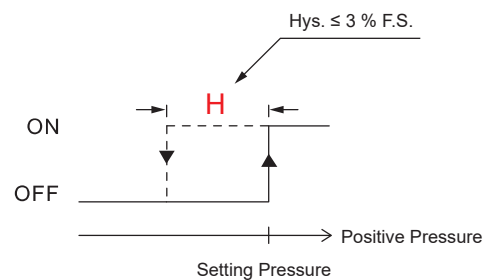
1 Hysteresis Adjustable

- Output hysteresis (H) is adjustable

KP1 - □ - 01, 02

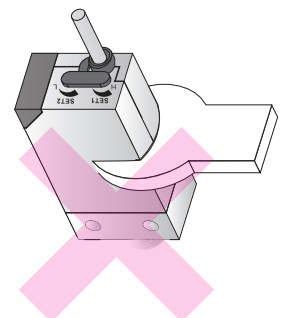
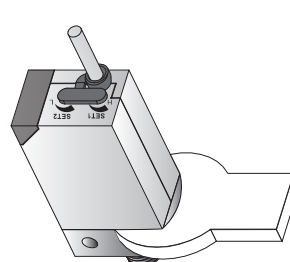


KP1 - □ - 03



Installation Precautions

- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damage to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply air pressure and power after installation, make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



Specifications

MODEL	KP1-1	KP1-2	KP1-3
	Vacuum Pressure	Low Pressure	Positive Pressure
Set Pressure Range	-101 ~ 0 kPa	0 ~ 100 kPa	0 ~ 1 MPa
Withstand Pressure	300 kPa		1.5 MPa
Fluid	Filtered air, Non-corrosive / Non-flammable gas		
Power Supply Voltage	12 ~ 24 V DC \pm 10 %, Ripple (P-P) \leq 10 %		
Current Consumption	1 NPN or 1 PNP output : \leq 21 mA ; 2 NPN output : \leq 35 mA		
Repeatability	\pm 1 % F.S.		
Response Time	\leq 5 ms		
Environment	Enclosure IP40		
	Ambient Temp. Range Operation : 0 ~ 50 °C ; storage : -20 ~ 60 °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 \geq 50 M Ω (at 500 V DC, between case and lead wire)		
	Vibration Total amplitude 1.5 mm or 10 G, 10 Hz ~ 55 Hz ~ 10 Hz scan for 1 minute, 2 hours each direction of X, Y and Z		
Shock 980 m/s ² (100 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	PT : 1/8"PT (R1/8"), M5 ; NPT : NPT1/8" , M5 ; G : G1/8" (BSPP), M5		
Lead Wire	\varnothing 4 Oil-resistance cable (PVC) - 24 AWG (0.22 mm ²) - 3 cores		
Weight (with 1 meter lead wire)	Approx. 50 g		

Circuit Wiring Diagrams

MODEL	KP1 - □ - 01	KP1 - □ - 02	KP1 - □ - 03
Connect Diagram			
Characteristics	NPN open collector 30 V 80 mA		NPN open collector 30 V 80 mA
Output Method	NPN open collector 30 V 80 mA		PNP open collector 80 mA
Hysteresis	1 ~ 10 % of setting pressure (Adjustable)		\leq 3 % F.S. (Fixed)
Switch Output	1 Output		2 Outputs
Operation Indicating Lamp	Red LED turns on		Out1 = Red, Out2 = Green

Ordering Information

K P 1 - 1 - 0 1 - 0 1 - N P T

Pressure Range

- 1 : Vacuum pressure (-101 ~ 0 kPa)
- 2 : Low pressure (0 ~ 100 kPa)
- 3 : Positive pressure (0 ~ 1 MPa)

Pressure Port

- PT : 1/8"PT (R1/8"), M5
- NPT : NPT1/8", M5
- G : G1/8" (BSPP), M5

Output Specification

- 01 : NPN output
- 02 : PNP output
- 03 : 2 NPN output

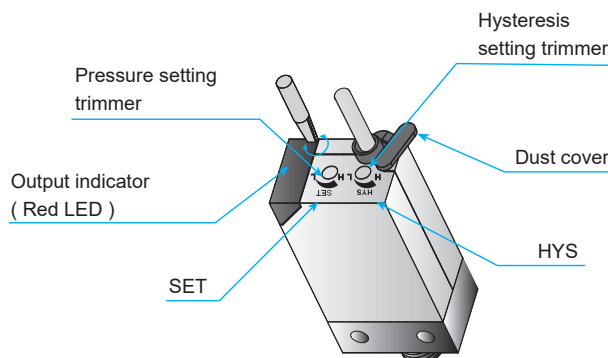
Cable Length / Connector

- 01 : With 1 meter cable
- 03 : With 3 meter cable
- C : With M8 4Pin male connector

How To Set Pressure

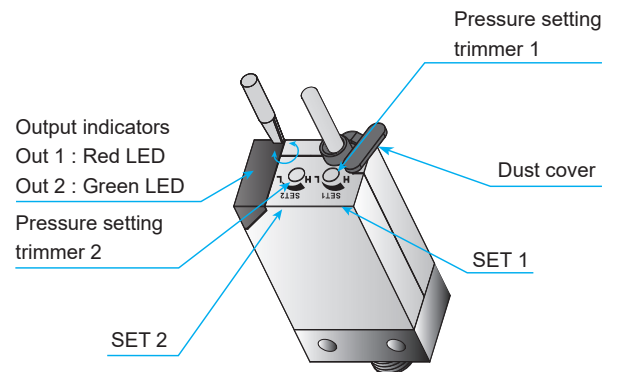
1 KP1 - □ - 01, 02

- Remove dust cover to make adjustments to pressure value. Replace dust cover when finished to prevent foreign object from entering.
- Pressure setting trimmer (SET) is for setting the output (ON) pressure. Rotate SET trimmer counter-clockwise to increase (Pressure or Vacuum) the setting pressure (ON) point. Rotate clockwise to decrease the setting pressure.
- Hysteresis setting trimmer (HYS) is for changing the hysteresis. Rotate trimmer counter-clockwise to increase the range 1 ~ 10 %.
- Use appropriate size screwdriver for the setting trimmers. Gently turn the screwdriver to make adjustments. Do not force the trimmer when it comes to a stop to prevent damage to the setting trimmer.



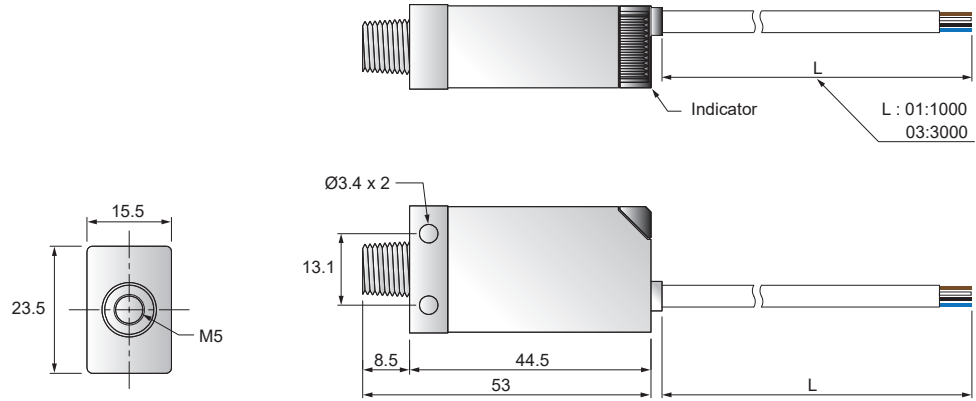
2 KP1 - □ - 03

- Remove dust cover to make any adjustments. Replace dust cover when finished to prevent foreign object from entering.
- Pressure setting trimmer (SET 1, SET 2) is for setting the output (ON) pressure. Rotate SET trimmer counter-clockwise to increase (Pressure or Vacuum) the ON point. Rotate clockwise will decrease the setting pressure.
- Hysteresis for models with two outputs is 3 % fixed.

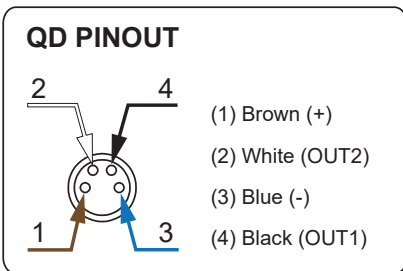
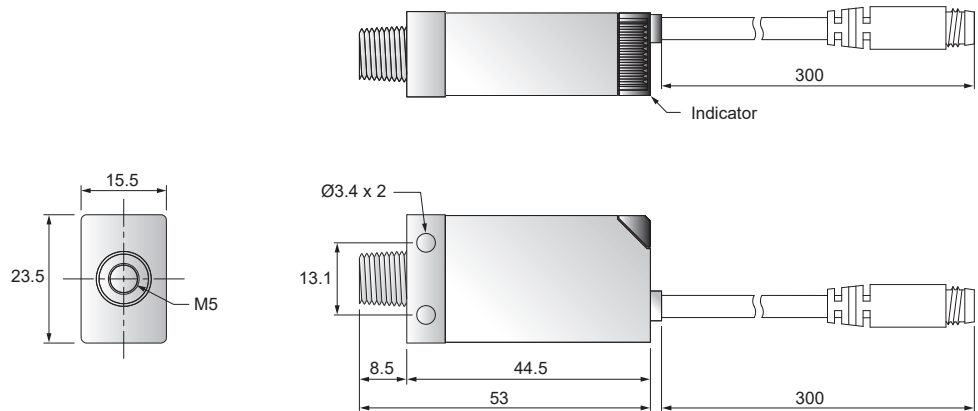


Dimensions

KP1 - □ - □ - □



KP1 - □ - C - □



Unit : mm