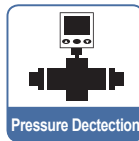
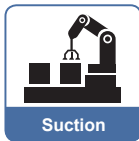


Features

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

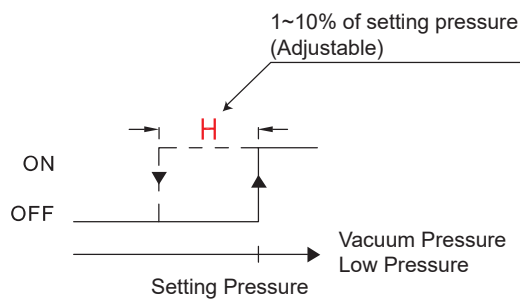


Features Highlight

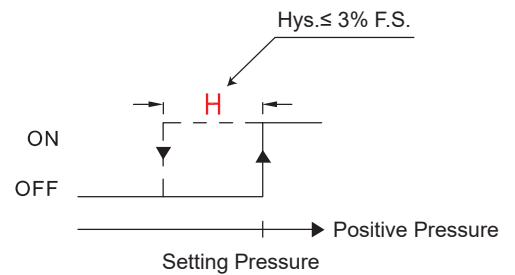
1 Hysteresis Adjustable

- Output hysteresis (H) is user adjustable

KP1- □ - 01, 02

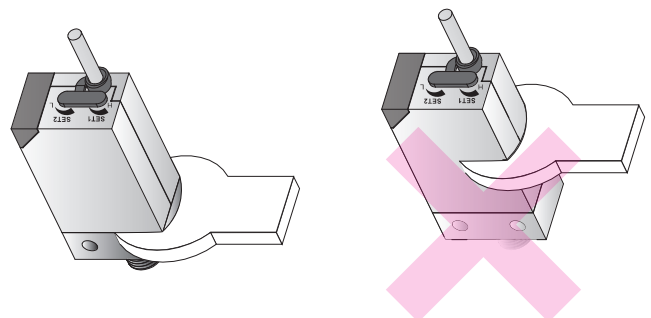


KP1 - □ - 03



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 damages to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply pressure and power after installation and make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



Specifications

MODEL	KP1-1 (Vacuum)	KP1-2 (Low)	KP1-3 (Positive)
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 to 24 V DC $\pm 10\%$, Ripple (P-P) 10 % or less		
Response Time	5 ms or less		
Repeatability	$\pm 1\%$ F.S.		
Current Consumption	1 NPN or 1 PNP output : 21 mA max. ; 2 NPN output : 35 mA max.		
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	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, two 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	Oil-resistance cable (0.18 mm ²)		
Weight	Approx. 50 g (with 1 meter lead wire)		

Circuit Wiring Diagrams

MODEL	KP1 - □ - 01	KP1 - □ - 02	KP1 - □ - 03
Connect Diagram			
Characteristics			
Output Method	NPN open collector 30 V 80 mA	PNP open collector 80mA	NPN open collector 30 V 80 mA
Hysteresis	1~10 % of setting pressure (Adjustable)		3 % F.S.or less (Fixed)
Setting Points	1 Point		2 Points
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

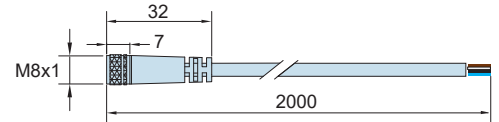
- 1 : Vacuum (-101 ~ 0 kPa)
- 2 : Low (0 ~ 100 kPa)
- 3 : Positive (0 ~ 1 MPa)

Pressure Port

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

Optional Part

M84R - W0072 - 2M : M8 4Pin female connector



Unit : mm

Output Specification

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

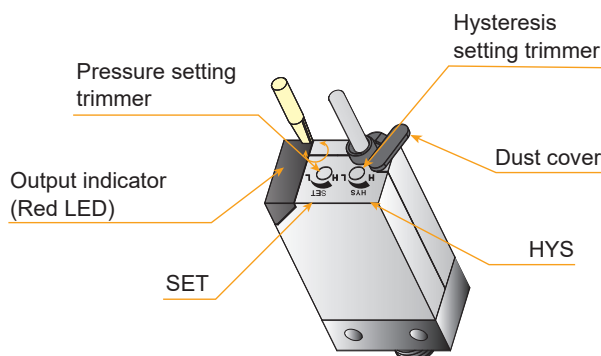
Cable Length / Connector

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

How To Set Pressure

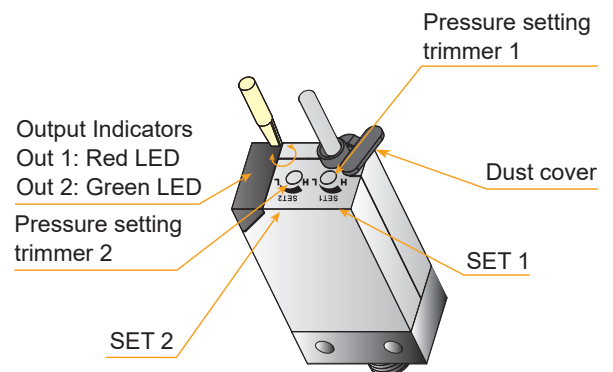
1 KP1 - □ - 01, 02

- Remove dust cover to make any adjustments. 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 ON point. Rotate clockwise will 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.



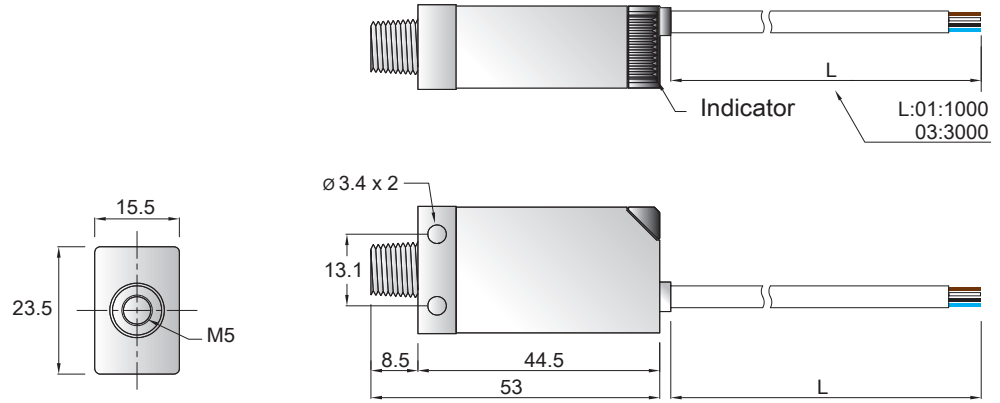
2 KP1 - □ - 03

- 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.

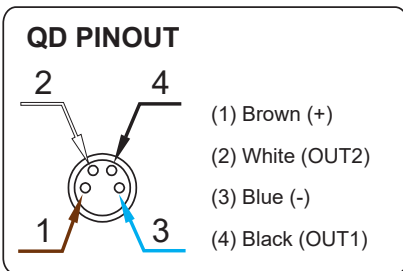
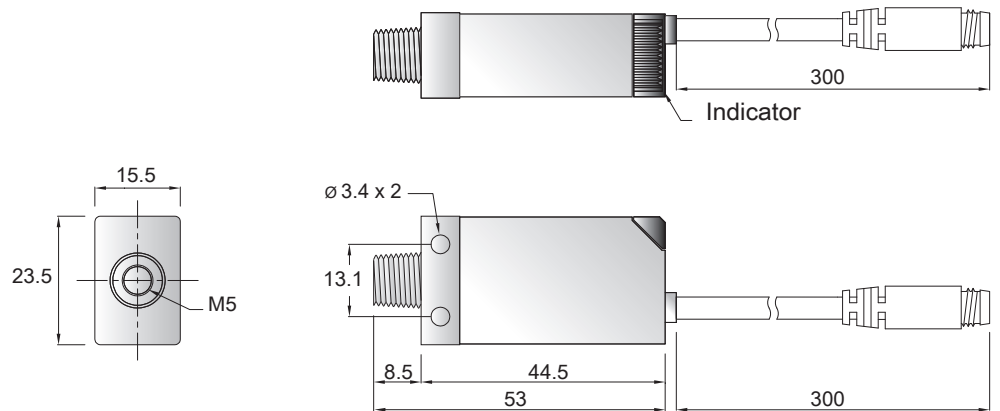


Dimensions

KP1 - □ - □ - □



KP1 - □ - C - □



Unit : mm