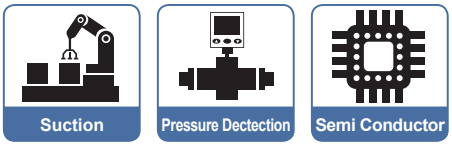
KP101
KP102 SERIES

Compact Pressure Sensor

Features

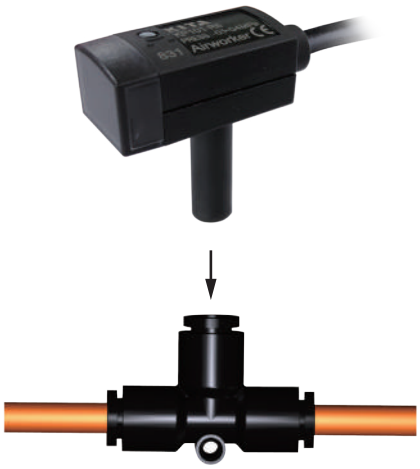
- Simple installation, plug-in port or thread-in fitting
- Set pressure range : -0.1 ~ 0.4 MPa
- Normally Open / Normally Close



Features Highlight

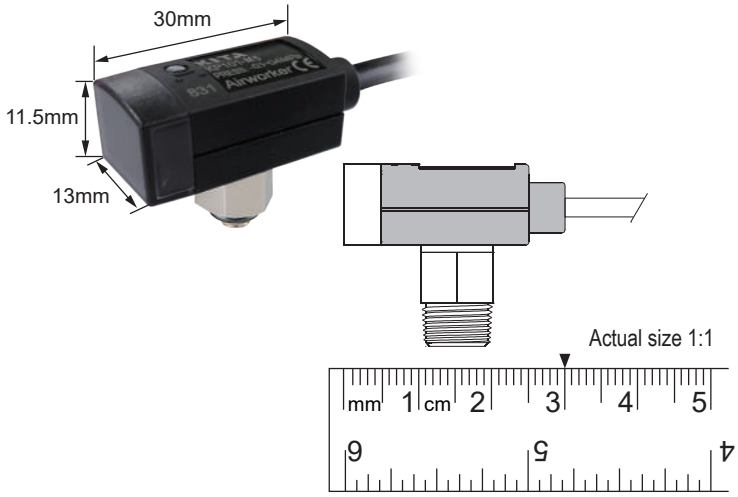
1 Simple Installation

- Plug-in port for push-to-connect fittings



2 Compact Size

- Extremely compact size 30(L) × 13(W) × 11.5(H)mm to fit the most confined areas

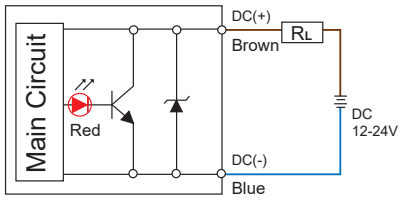


Specifications

MODEL	KP101	KP102
	0.4 MPa 0 -0.1 MPa	
Set Pressure Range	- 0.1 ~ 0.4 MPa	
Fluid	Filtered air, Non-corrosive / Non-flammable gas	
Load Voltage	12 to 24 V DC ±10 %, Ripple (P-P) 10 % or less	
Load Current	5 ~ 40 mA	
Leak Current	≤ 1 mA	
Internal Voltage Drop	≤ 5 V	
Switch Output	Present Press. ≥ Set Press. : ON	Present Press. ≥ Set Press. : OFF
Repeatability	±1 % F.S.	
Response Time	Approx. 1 ms	
Hysteresis	≤ 4 % F.S.	
Switch on Indicator	Indicator Red : ON	
Enclosure	IP 40	
Temperature Characteristic	±3 % F.S. of detected pressure (25 °C) at temp. Range of 0 ~ 50 °C	
Ambient Temp. Range	Operation : 0 ~ 60 °C (No condensation or freezing)	
Piping Size	R6 : ø6 mm ; F1 : R1/8", M5 ; F2 : NPT1/8", M5 ; F3 : G1/8" (BSPP), M5 ; M5 : M5 * 0.8	
Lead Wire	Oil-resistance cable, 2 wires (0.18 mm²), Ø 2.6 mm	
Weight	Approx. 38 g (with 2 meter lead wire)	

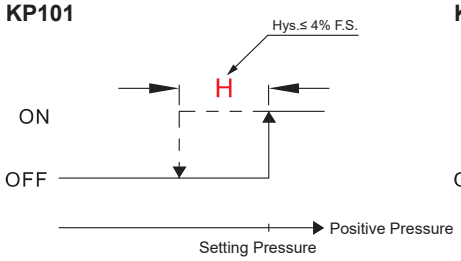
RoHS

Circuit Wiring Diagram

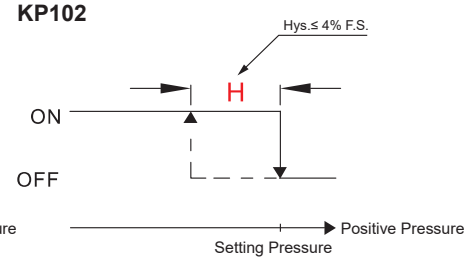


Output Type

KP101



KP102



Ordering Information

K P 1 0 1 - F 1 - ☐

Sensor Specification

101 : Switch turns ON when the pressure is larger than setting pressure.
102 : Switch turns OFF when the pressure is larger than setting pressure.

Pressure Port

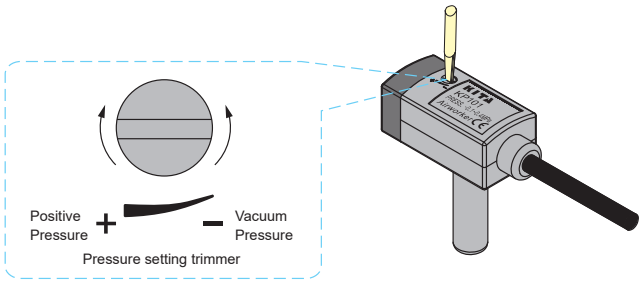
R4 : Ø4 mm	F2 : NPT1/8", M5
R6 : Ø6 mm	F3 : G1/8" (BSPP), M5
F1 : R1/8", M5	M5 : M5 * 0.8

Cable Length / Connector

Blank : With 2 meter cable
C : With M8 3Pin male connector

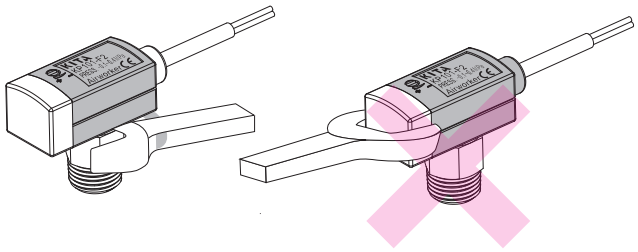
How to Set Pressure

- Use the pressure setting trimmer to set "ON" pressure. Rotate clockwise to increase pressure setpoint (or to decrease vacuum setpoint). Rotate counter-clockwise to decrease pressure setpoint (or to increase vacuum setpoint).
- Use appropriate size screwdriver for the setting trimmers. Gently turn the screwdriver to make adjustments. To prevent damage to the pressure setting trimmer, DO NOT force the trimmer when it comes to a stop.



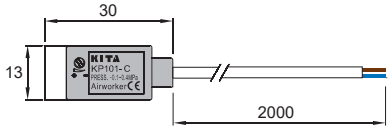
Installation Precautions

- 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.

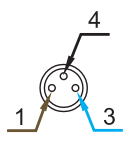


Dimensions

KP10☐ - ☐

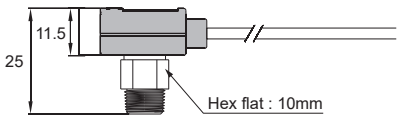


QD PINOUT

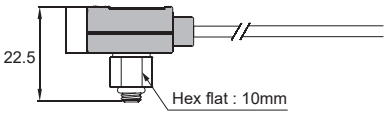


(1) Brown(+)
(3) Blue (-)
(4) Not used

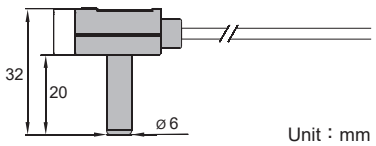
KP10☐ - F1, F2, F3



KP10☐ - M5



KP10☐ - R6



Unit：mm