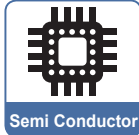
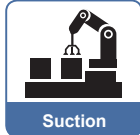


KP10 SERIES

Compact Pressure Sensor
- Switch Output

Features

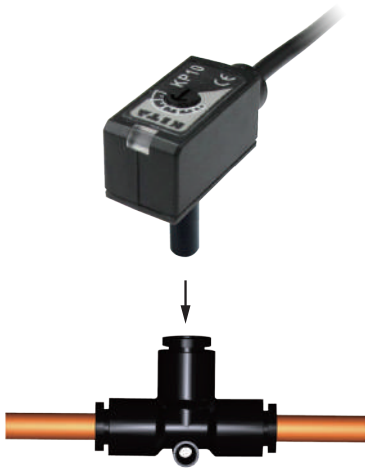
- Simple installation, plug-in port or thread-in fitting
- Set pressure range :
3-wire type : Vacuum (0 ~ -101.3 kPa)
Positive (0 ~ 0.6 MPa)
2-wire type : Normally Open /
Normally Close (- 0.1 ~ 0.6 MPa)



Features Highlight

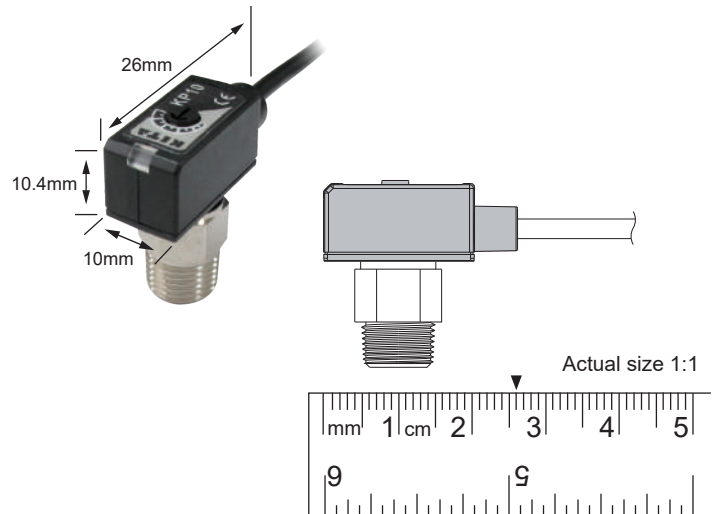
1 Simple Installation

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

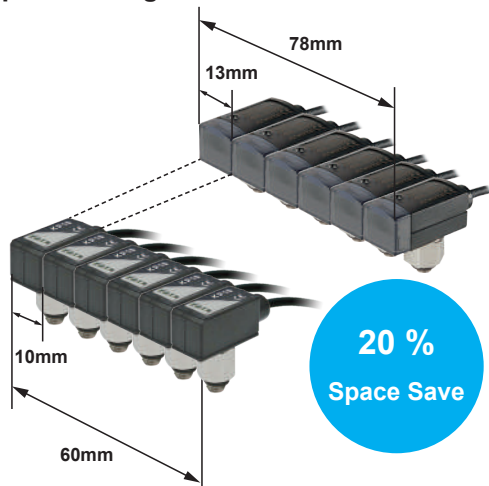


2 Compact Size

- Extremely compact size 26(L) × 10(W) × 10.4(H) mm to fit the most confined areas



3 Space-Saving



4 Sensor Installed Close to Pad

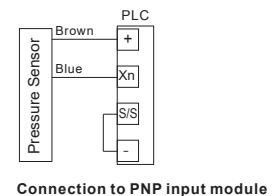
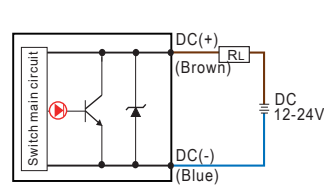
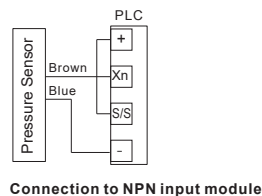
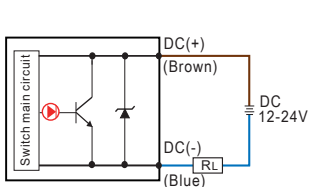


Specifications

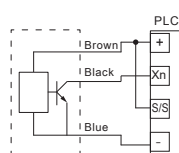
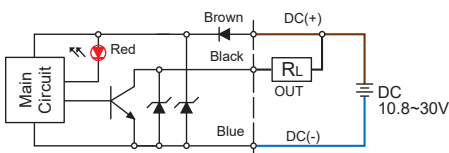
MODEL	KP10A	KP10B	KP10V-02/04	KP10P-02/04
0.6 MPa 0 -101.3 kPa 				
Set Pressure Range	- 0.1 ~ 0.6 MPa		0 ~ - 101.3 kPa	0 ~ 0.6 MPa
Withstand Pressure	1.5 MPa		0.6 MPa	1.5 MPa
Fluid	Air, Non-corrosive / Non-flammable gas			
Load Voltage	12 to 24 V DC ± 10 %, Ripple (P-P) 10 % or less		10.8 to 30 V DC (include ripple voltage)	
Load Current	5 ~ 40 mA		80 mA max	
Leak Current	≤ 1 mA		-	
Internal Voltage Drop	≤ 5 V		NPN ≤ 0.8 V, PNP ≤ 0.8 V	
Current Consumption	-		10 mA max	
Switch Output	Present Press. $\geq$ Set Press. : ON	Present Press. $\geq$ Set Press. : OFF	NPN or PNP	
Output Short Circuit Protection	Yes			
Setting Method	Adjusting by VR			
Repeatability	± 1 % F.S.			
Response Time	Approx. 1 ms			
Hysteresis	≤ 4 % F.S.		≤ 3 % F.S. max	
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 (32 ~ 140 °F), Storage : -20 ~ 70 °C (-4 ~ 158 °F) (No condensation or freezing)			
Ambient Humidity Range	Operation / Storage : 35 ~ 85 % RH (No condensation)			
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			
Piping Size	R4 : $\varnothing 4$ mm ; R6 : $\varnothing 6$ mm ; F1 : R1/8", M5 ; F2 : NPT1/8", M5 ; F3 : G1/8" (BSPP), M5 ; M5 : M5 * 0.8			
Lead Wire	Oil-resistance cable, 2 / 3 wires (0.18 mm ²), $\varnothing 2.6$			
Weight	Approx. 50 g (with 3 meter lead wire)			

Circuit Wiring Diagram

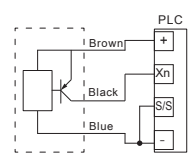
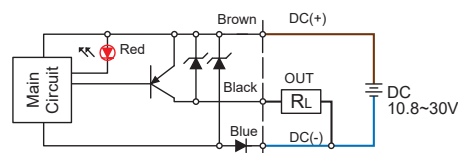
KP10A & KP10B



KP10□ - 02 - □ - □ NPN Output



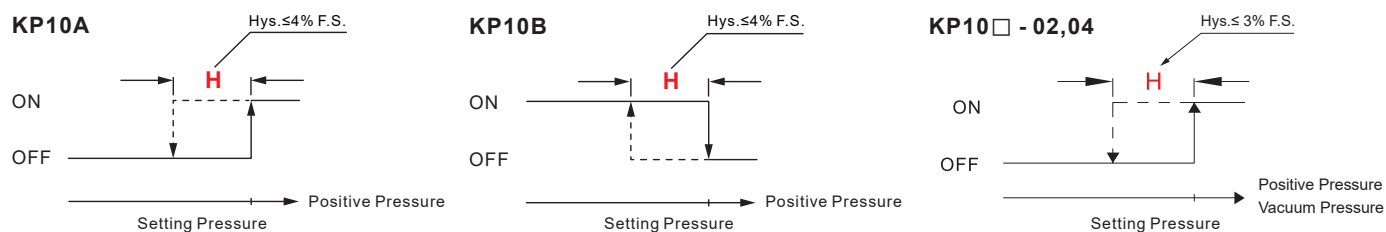
KP10□ - 04 - □ - □ PNP Output



KP10 SERIES

Compact Pressure Sensor - Switch Output

Output Type



Ordering Information

K P 1 0 A - -

Switch Specifications

- A : Switch turns ON when the pressure is larger than setting pressure. (Normally Open)
- B : Switch turns OFF when the pressure is larger than setting pressure. (Normally Close)

K P 1 0 V - 0 2 - -

Pressure Range

- V : Vacuum (0 ~ -101.3 kPa)
- P : Positive (0 ~ 0.6 MPa)

Output Specification

- 02 : NPN output
- 04 : PNP output

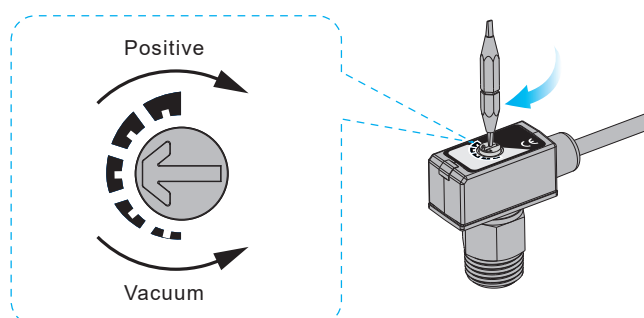
Cable Length / Connector

- Blank : With 3 meter cable
- C : With M8, 3Pin male connector

Pressure Port	R4	R6	F1 / F2 / F3	M5
Appearance				
Port size	R4 : $\varnothing 4$ mm	R6 : $\varnothing 6$ mm	F1 : R1/8", M5 F2 : NPT1/8", M5 F3 : G1/8" (BSPP), M5	M5 : M5 * 0.8

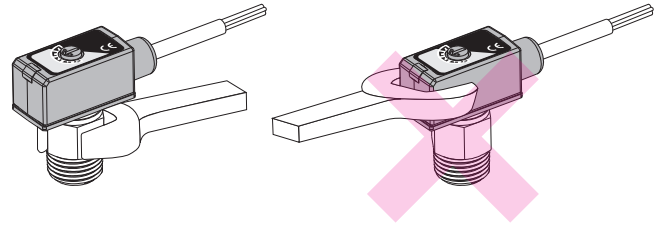
How to Set Pressure

- Use the pressure setting trimmer to set "ON" pressure. Rotate clockwise to increase pressure setpoint. Rotate counter-clockwise to decrease pressure 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.



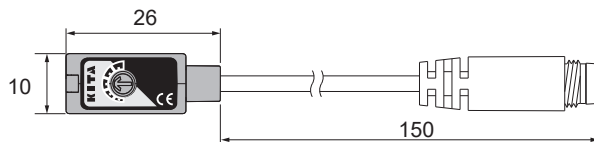
Installation Precautions

- 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.

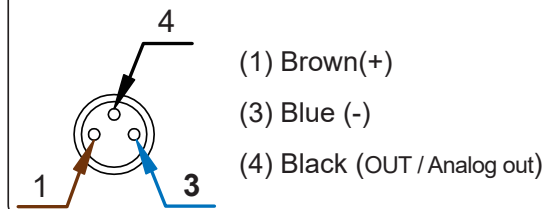


Dimensions

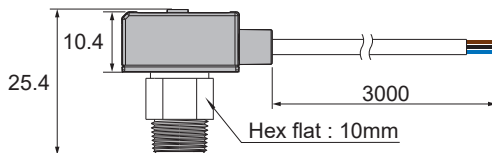
KP10□ - 02, 04 - □ - C



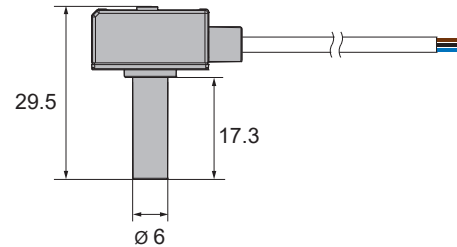
QD PINOUT



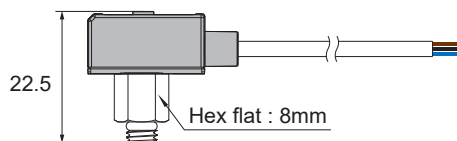
KP10□ - 02, 04 - F1, F2, F3



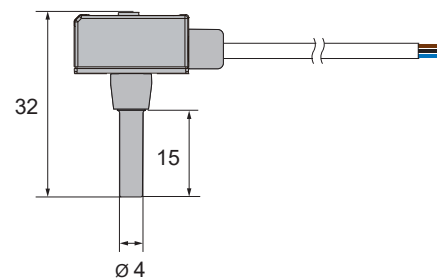
KP10□ - 02, 04 - R6



KP10□ - 02, 04 - M5



KP10□ - 02, 04 - R4



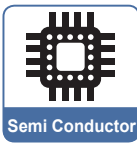
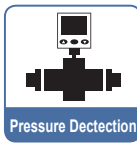
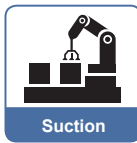
Unit : mm

KP10 SERIES

Compact Pressure Sensor
- Analog Output

Features

- Simple installation, plug-in port or thread-in fitting
- Compact size : 26 × 10 × 10.4 mm
- Rated pressure range :
 - Compound (-100 ~ 100 kPa)
 - Compound (-101 ~ 500 kPa)
 - Low (0 ~ 100 kPa)
 - Vacuum (0 ~ -101.3 kPa)
 - Positive (0 ~ 1.0 MPa)
 - Micro pressure S1 (0 ~ 10 kPa)
 - Micro pressure S2 (0 ~ 5 kPa)

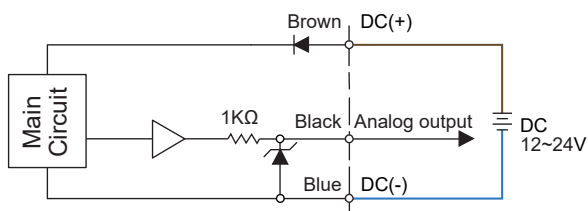


Specifications

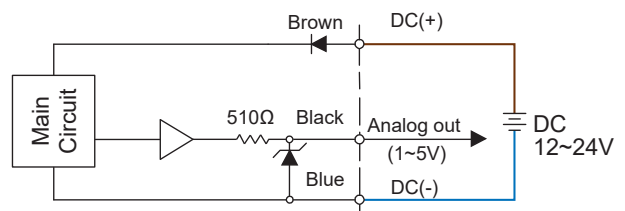
MODEL	KP10S1	KP10S2	KP10C-01	KP10L-01	KP10V-01	KP10R-01	KP10P-01
1.0 MPa 0 -101.3 kPa							
Rated Pressure Range	0 ~ 10 kPa	0 ~ 5 kPa	-100 ~ 100 kPa	0 ~ 100 kPa	0 ~ -101.3 kPa	-101 ~ 500 kPa	0 ~ 1.0 MPa
Withstand Pressure	20 kPa		0.2 MPa			1.5 MPa	
Fluid	Filtered air, Non-corrosive / Non-flammable gas						
Power Supply Voltage	12 to 24 V DC (5 % ripple voltage)						
Current Consumption	15 mA max			10 mA max			
Analog Output	1 ~ 5 V ±1 % F. S. / Linearity ±0.5 % F. S.	1 ~ 5 V ±1.5 % F. S. / Linearity ±1 % F. S.	1 ~ 5 V ±1 % F. S. / Linearity ±0.5 % F. S.				
Enclosure	IP 40						
Temperature Characteristic	±3 % F.S. (Range of 0 ~ 50 °C)		±2 % F.S. (Range of 0 ~ 50 °C)				
Ambient Temp. Range	Operation : 0 ~ 50 °C (32 ~ 122 °F), Storage : -20 ~ 70 °C (-4 ~ 158 °F) (No condensation or freezing)						
Ambient Humidity Range	Operation / Storage : 35 ~ 85% RH (No condensation)						
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/s² (100 G), 3 times each in direction of X, Y and Z						
Piping Method	R4 : ø4 mm ; 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, 3 wires (0.18 mm²), Ø 2.6 mm						
Weight	Approx. 50 g (with 3 meter lead wire)						

Circuit Wiring Diagrams

KP10S□ - 01 - □ - □
Analog Output (1 ~ 5 V)

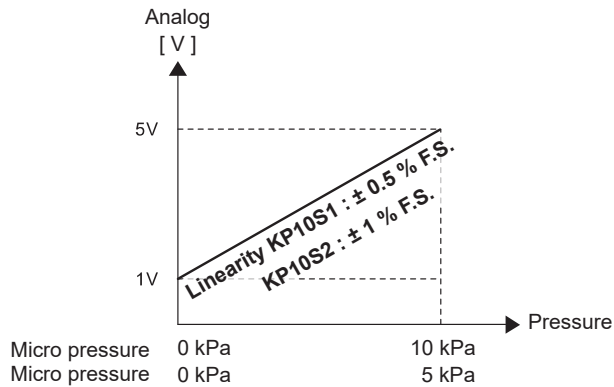


KP10□ - 01 - □ - □
Analog Output (1 ~ 5 V)

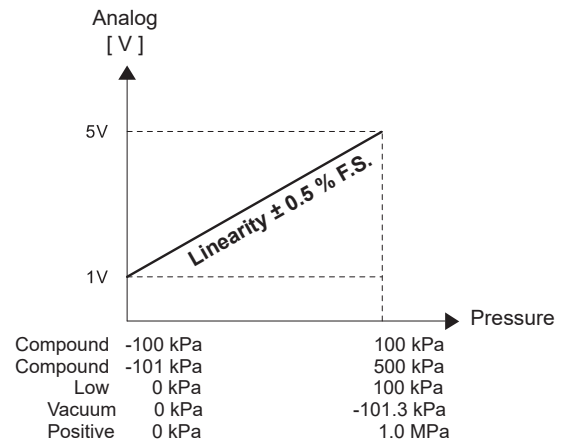


Output Type

KP10S□ - 01 - □ - □



KP10□ - 01 - □ - □



Ordering Information

K P 1 0 V - 0 1 - □ - □

Pressure Range

C : Compound (-100 ~ 100 kPa) P : Positive (0 ~ 1.0 MPa)
R : Compound (-101 ~ 500 kPa) S1 : Micro pressure (0 ~ 10 kPa)
L : Low (0 ~ 100 kPa) S2 : Micro pressure (0 ~ 5 kPa)
V : Vacuum (0 ~ -101.3 kPa)

Output Specification

01 : Analog output
(1 ~ 5 V)

Cable Length / Connector

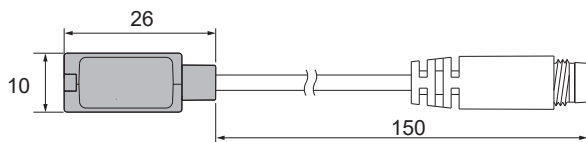
Blank : With 3 meter cable
C : With M8 3Pin male connector

Pressure Port

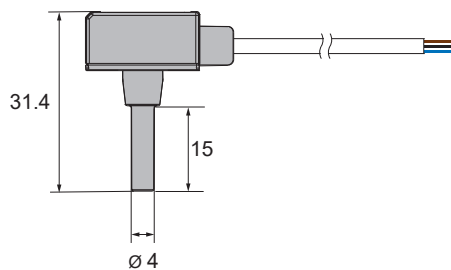
R4 : Ø4 mm F2 : NPT1/8", M5
R6 : Ø6 mm F3 : G1/8" (BSPP), M5
F1 : R1/8", M5 M5 : M5 * 0.8

Dimensions

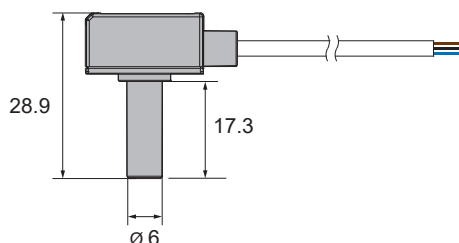
KP10□ - 01 - □ - C



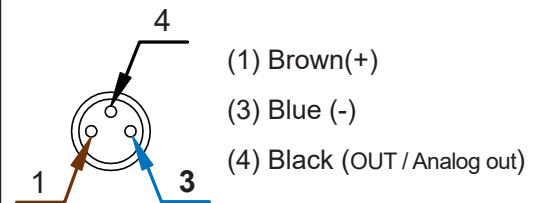
KP10□ - 01 - R4



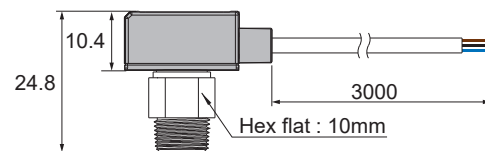
KP10□ - 01 - R6



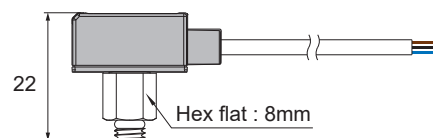
QD PINOUT



KP10□ - 01 - F1, F2, F3



KP10□ - 01 - M5



Unit : mm