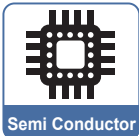
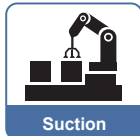


KP10 SERIES

Compact Pressure Sensor
- Switch Output

Features

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



Features Highlight

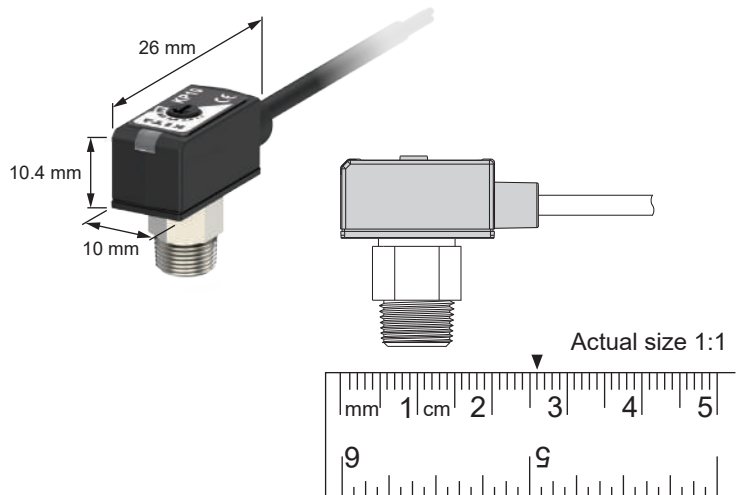
1 Simple Installation

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

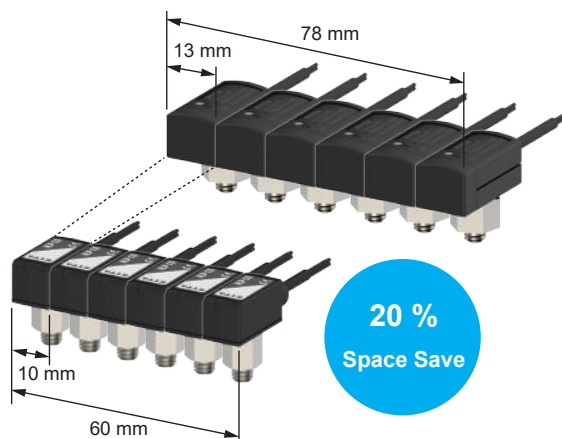


2 Compact Size

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



3 Space-Saving



20 %
Space Save

4 Sensor Installed Close to Pad

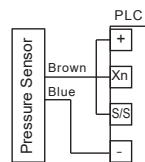
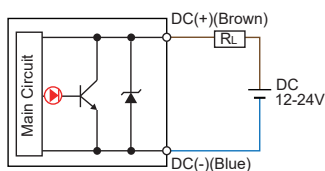


Specifications

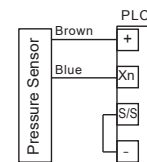
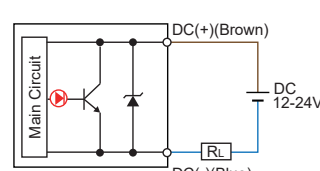
MODEL		KP10A	KP10B	KP10V-02/04	KP10P-02/04
Set Pressure Range		- 0.1 ~ 0.6 MPa		0 ~ - 101.3 kPa	0 ~ 0.6 MPa
Withstand Pressure		1.5 MPa		0.6 MPa	1.5 MPa
Fluid		Air, Non-corrosive / Non-flammable gas			
Power Supply Voltage		12 ~ 24 V DC $\pm$ 10 %, Ripple (P-P) $\leq$ 10 %		10.8 ~ 30 V DC (include ripple voltage)	
Load Current		5 ~ 40 mA		$\leq$ 80 mA	
Current Consumption		-		$\leq$ 10 mA	
Internal Voltage Drop		$\leq$ 5 V		$\leq$ 0.8 V	
Leak Current		$\leq$ 1 mA		-	
Switch Output		Present Press. $\geq$ Set Press. : ON	Present Press. $\geq$ Set Press. : OFF	NPN or PNP	
Output Short Circuit Protection		No		Yes	
Setting Method		Adjusting by VR			
Repeatability		$\pm$ 1 % F.S.			
Hysteresis		$\leq$ 4 % F.S.		$\leq$ 3 % F.S.	
Response Time		Approx. 1 ms			
Switch on Indicator		Red Indicator : ON			
Environment	Enclosure	IP40			
	Ambient Temp. Range	Operation : 0 ~ 60 °C ; Storage : -20 ~ 70 °C (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, 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)			
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 $\times$ 0.8			
Lead Wire		$\varnothing$ 2.6 Oil-resistance cable (PVC) - 24 AWG (0.22 mm ²) - 2 cores		$\varnothing$ 2.6 Oil-resistance cable (PVC) - 26 AWG (0.15 mm ²) - 3 cores	
Weight (with 3 meter lead wire)		Approx. 50 g			

Circuit Wiring Diagram

KP10A & KP10B



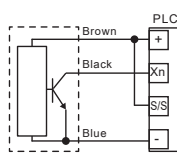
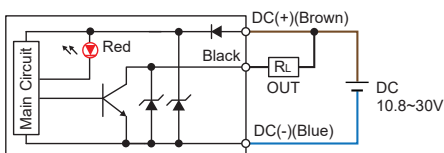
Connection to NPN input module



Connection to PNP input module

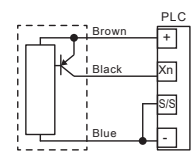
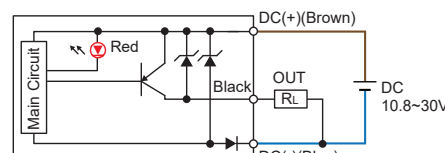
KP10□ - 02 - □ - □

NPN Output



KP10□ - 04 - □ - □

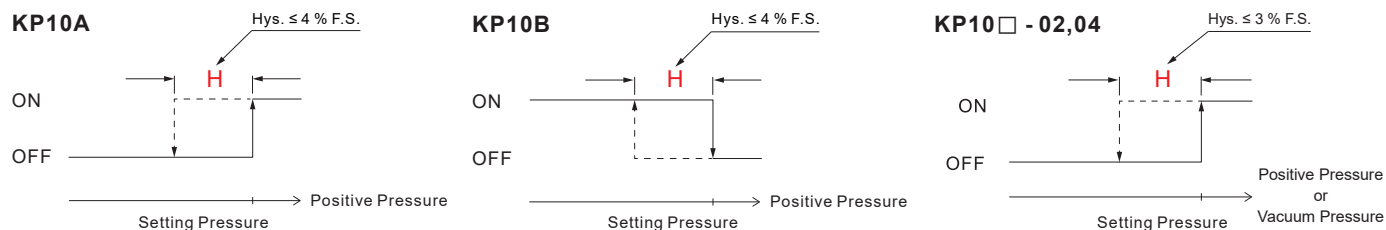
PNP Output



KP10 SERIES

Compact Pressure Sensor - Switch Output

Output Type



Ordering Information

K P 1 0 A - R 4 -

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 - R 4 -

Pressure Range

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

Output Specification

- 02 : NPN output
- 04 : PNP output

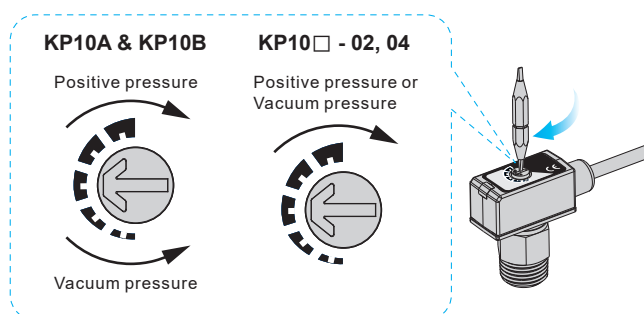
Cable Length / Connector

- 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

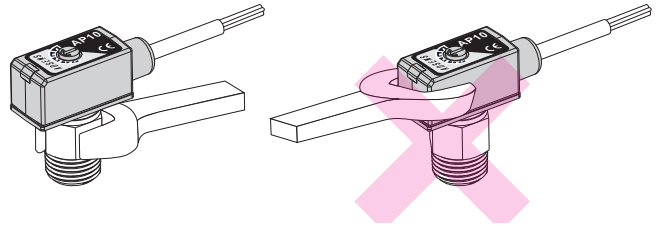
How to Set Pressure

- 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.



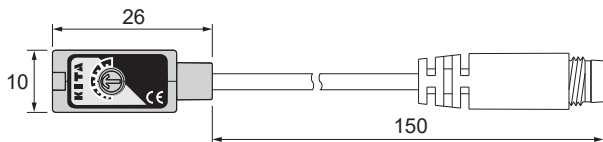
Installation Precautions

- 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 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.



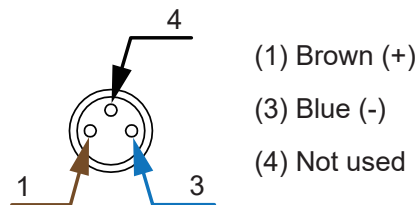
Dimensions

KP10□ - 02, 04 - □ - C



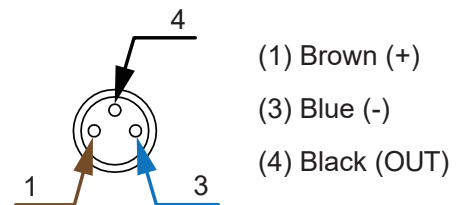
QD PINOUT

KP10A - □ - C、KP10B - □ - C

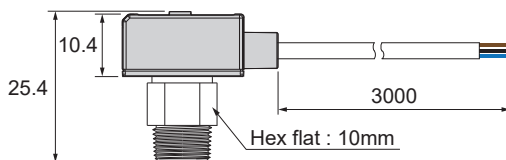


QD PINOUT

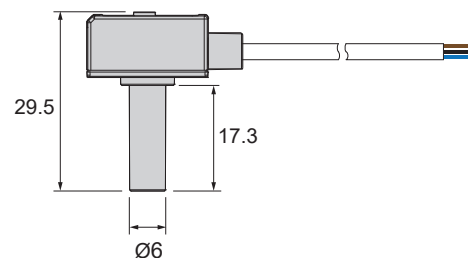
KP10□ - 02, 04 - □ - C



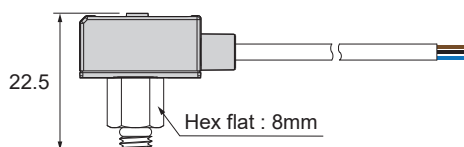
KP10□ - 02, 04 - F1, F2, F3



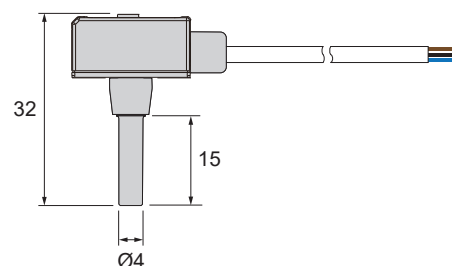
KP10□ - 02, 04 - R6



KP10□ - 02, 04 - M5



KP10□ - 02, 04 - R4



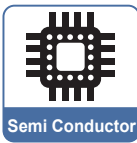
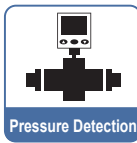
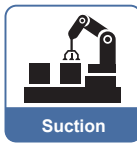
Unit : mm

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 pressure (-100 ~ 100 kPa)
 - Compound pressure (-101 ~ 500 kPa)
 - Low pressure (0 ~ 100 kPa)
 - Vacuum pressure (0 ~ -101.3 kPa)
 - Positive pressure (0 ~ 1.0 MPa)
 - Micro pressure S1 (0 ~ 10 kPa)
 - Micro pressure S2 (0 ~ 5 kPa)

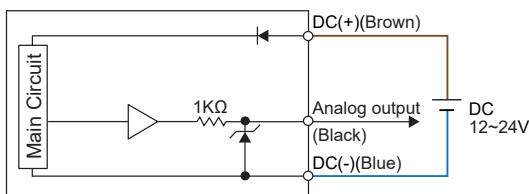


Specifications

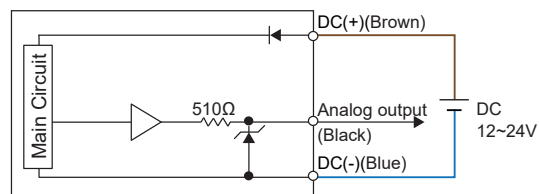
MODEL		KP10S1	KP10S2	KP10C-01	KP10L-01	KP10V-01	KP10R-01	KP10P-01
Rated Pressure Range		0 ~ 10 kPa	0 ~ 5 kPa	-100 ~ 100 kPa	0 ~ 100 kPa	0 ~ -101.3 kPa	-101 ~ 500 kPa	0 ~ 1.0 MPa
Withstand Pressure		20 kPa			0.2 MPa		1.5 MPa	
Fluid		Filtered air, Non-corrosive / Non-flammable gas						
Power Supply Voltage		12 ~ 24 V DC (5 % ripple voltage)						
Current Consumption		≤ 15 mA			≤ 10 mA			
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.				
Environment	Enclosure	IP40						
	Ambient Temp. Range	Operation : 0 ~ 50 °C ; Storage : -20 ~ 70 °C (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, 2 hours each direction of X, Y and Z						
	Shock	980 m/s² (100 G) , 3 times each in direction of X, Y and Z						
Temperature Characteristic		± 3 % F.S. of detected pressure (25 °C) at temp. (Range of 0 ~ 50 °C)		± 2 % F.S. of detected pressure (25 °C) at temp. (Range of 0 ~ 50 °C)				
Piping Size		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		Ø2.6 Oil-resistance cable (PVC) - 26 AWG (0.15 mm²) - 3 cores						
Weight (with 3 meter lead wire)		Approx. 50 g						

Circuit Wiring Diagrams

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

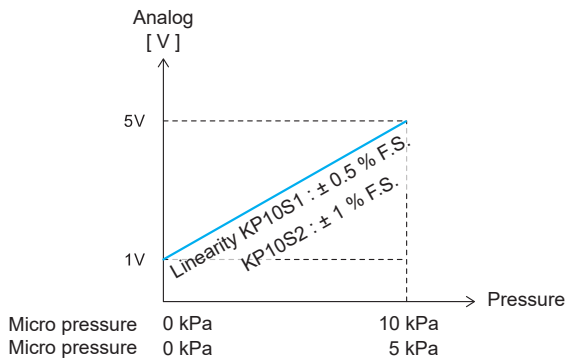


KP10□ - 01 - □ - □
Analog Output (1 ~ 5 V)

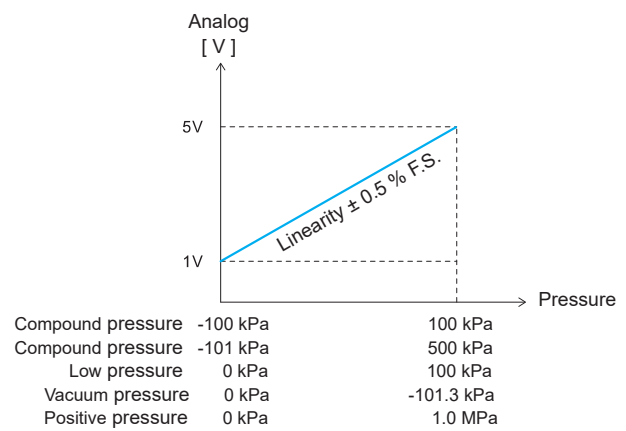


Output Type

KP10S□ - 01 - □ - □



KP10□ - 01 - □ - □



Ordering Information

K P 1 0 V - 0 1 - R 4 - □

Pressure Range

C : Compound pressure (-100 ~ 100 kPa)
R : Compound pressure (-101 ~ 500 kPa)
L : Low pressure (0 ~ 100 kPa)
V : Vacuum pressure (0 ~ -101.3 kPa)

P : Positive pressure (0 ~ 1.0 MPa)
S1 : Micro pressure (0 ~ 10 kPa)
S2 : Micro pressure (0 ~ 5 kPa)

Cable Length / Connector

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

Output Specification

01 : Analog output (1 ~ 5 V)

Pressure Port

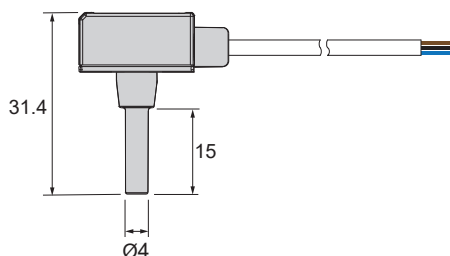
R4 : Ø4 mm
R6 : Ø6 mm
F1 : R1/8", M5
F2 : NPT1/8", M5
F3 : G1/8" (BSPP), M5
M5 : M5 × 0.8

Dimensions

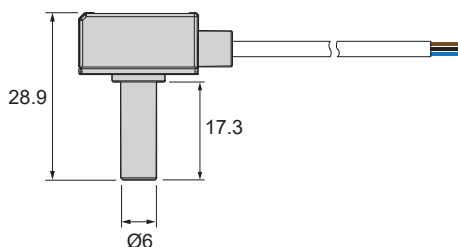
KP10□ - 01 - □ - C



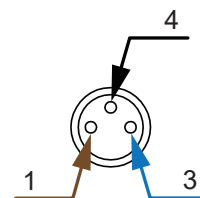
KP10□ - 01 - R4



KP10□ - 01 - R6

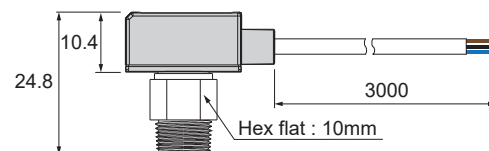


QD PINOUT

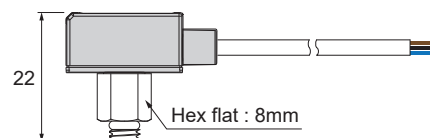


(1) Brown (+)
(3) Blue (-)
(4) Black (Analog out)

KP10□ - 01 - F1, F2, F3



KP10□ - 01 - M5



Unit : mm