

For your safety, please read the following before using.

- ① Do not use corrosive or flammable gas or liquid with this product.
- ② Please use within the setting pressure range. Do not apply pressure beyond recommended maximum pressure, permanent damage to the pressure sensor may occur.
- ③ Do not drop, hit or allow excessive shock. Even if switch body appears undamaged, internal components may be broken and can cause malfunction.
- ④ Turn power off before connecting wiring. Wrong wiring or short circuit will damage and/or cause malfunction.
- ⑤ Do not use in environment containing steam or oil vapor.
- ⑥ This product is not explosion-proof rated. Do not use in atmosphere containing flammable or explosive gases.
- ⑦ Wiring for pressure sensor should avoid power source line and high voltage line. If use in the same circuit, noise may cause malfunction.
- ⑧ ESD protection $\pm 4\text{KV}$.
- ⑨ Sensors at end-of-life must be disposed of in accordance with E-Waste regulations of the country/region, NOT disposed of with regular garbage.

A SPECIFICATIONS

MODEL		KP10V-02/04	KP10P-02/04	KP10C-01	KP10L-01	KP10V-01	KP10R-01	KP10P-01
Rated pressure range		—		-100 ~ 100 kPa	0 ~ 100 kPa	0 ~ -101.3 kPa	-101 ~ 500 kPa	0 ~ 1.0 MPa
Set pressure range		0 ~ -101.3 kPa	0 ~ 0.6 MPa	—				
Withstand pressure		0.6 MPa	1.5 MPa	0.2 MPa			1.5 MPa	
Fluid		Filtered air, Non-corrosive/Non-flammable gas						
Power supply voltage		10.8 ~ 30V DC (include ripple voltage)		12 ~ 24V DC (5 % ripple voltage)				
Load current		≤ 80mA		—				
Current consumption		≤ 10mA						
Internal voltage drop		≤ 0.8V		—				
Switch output		NPN or PNP		—				
Analog output		—		1 ~ 5V ±1% F.S. / Linearity ±0.5% F.S.				
Output short circuit protection		Yes		—				
Setting method		Adjusting by VR		—				
Repeatability		±1% F.S.		—				
Hysteresis		≤ 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)		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 : Ø 4mm ; R6 : Ø 6mm ; 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						

B ORDERING INFORMATION

K P 1 0 V - 0 2 - -

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 : $\varnothing 4\text{mm}$
R6 : $\varnothing 6\text{mm}$
F1 : R1/8", M5
F2 : NPT1/8", M5
F3 : G1/8"(BSPP), M5
M5 : M5*0.8

K P 1 0 V - 0 1 - -

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)

Output Specification

01 : Analog output (1 ~ 5V)

Cable Length/Connector

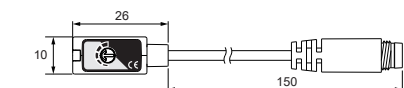
Blank : With 3 meter cable
C : With M8, 3Pin male connector

Pressure Port

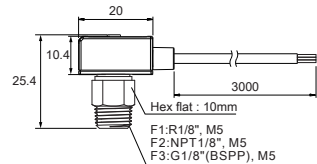
R4 : $\varnothing 4\text{mm}$
R6 : $\varnothing 6\text{mm}$
F1 : R1/8", M5
F2 : NPT1/8", M5
F3 : G1/8"(BSPP), M5
M5 : M5*0.8

C DIMENSIONS

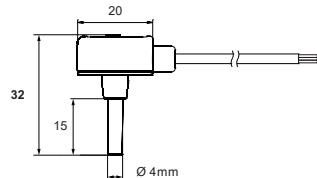
• KP10□-02/04



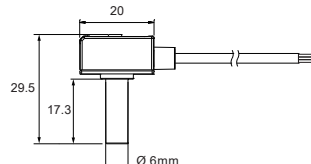
F1, F2, F3



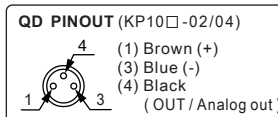
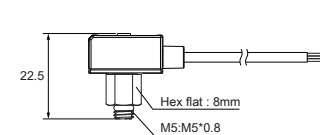
R4



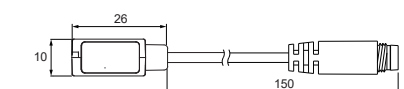
R6



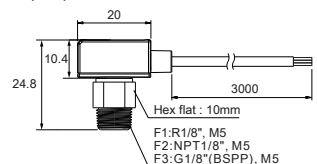
M5



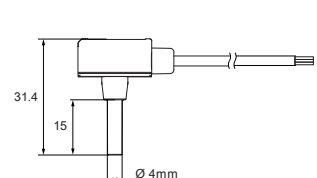
• KP10□-01



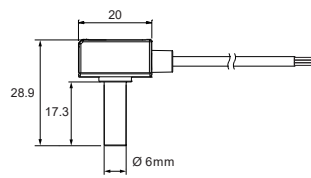
F1, F2, F3



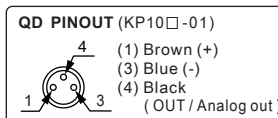
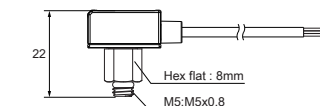
R4



R6



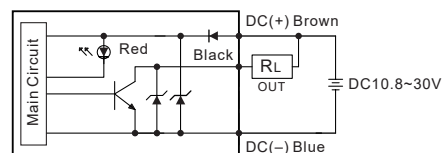
M5



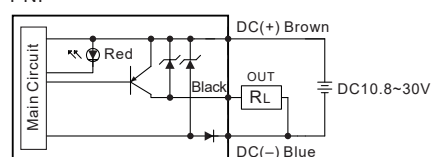
D CIRCUIT WIRING DIAGRAM

• KP10□-02/04

NPN

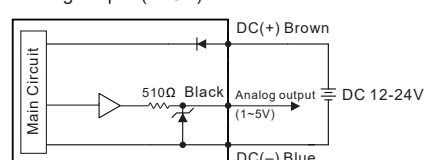


PNP



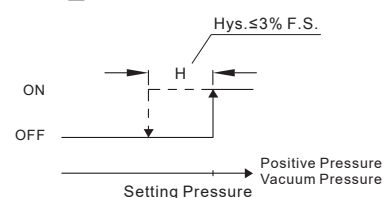
• KP10□-01

Analog output (1~5V)

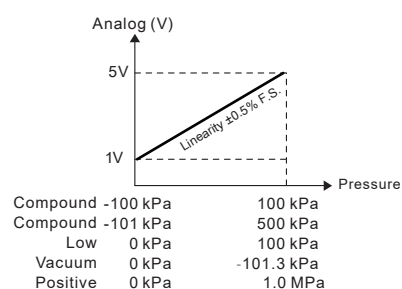


E OUTPUT TYPE

• KP10□-02/04



• KP10□-01



F 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.

• KP10□-02/04

Positive & Vacuum

