KP10A / KP10B Series | Compact Pressure Sensor

PR-0166N 2023/02 Online Version



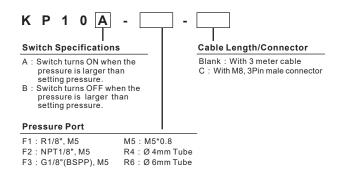
For your safety, please read the following before using.

- 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.
- 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.
- 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 ±4KV.
- ⑤ 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.

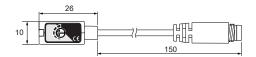
A SPECIFICATIONS

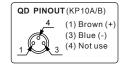
MODEL		KP10A	KP10B
Set pressure range		-0.1 ~ 0.6 MPa	
Withstand pressure		1.5 MPa	
Fluid		Filtered air, Non-corrosive/Non-flammable gas	
Power supply voltage		12 ~ 24V DC ±10% Ripple (P-P) ≤ 10%	
Load current		5 ~ 40mA	
Internal voltage drop		≤ 5V	
Leak current		≤1mA	
Switch output		Present Press.≥ Set Press.:ON	Present Press.≥ Set Press.:OFF
Output short circuit protection		No No	
Setting method		Adjusting by VR	
Repeatability		±1% F.S.	
Hysteresis		≤ 4% F.S.	
Response time		Approx. 1 ms	
Switch on indicator		Red indicator : ON	
Environment	Enclosure	IP40	
	Ambient temp. range	Operation : 0 \sim 60 °C, Storage : -20 \sim 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)	
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) - 24 AWG (0.22 mm²) - 2 cores	
Weight (with 3 meter lead wire)		Approx. 50 g	

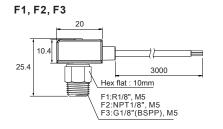
B ORDERING INFORMATION

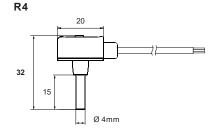


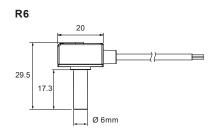
C DIMENSIONS

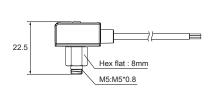








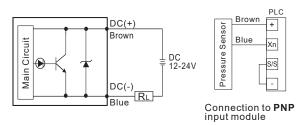


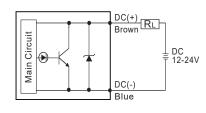


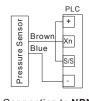
M5

Unit: mm

D CIRCUIT WIRING DIAGRAM

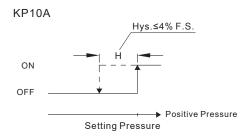


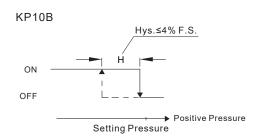




Connection to **NPN** input module

E OUTPUTTYPE





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.



