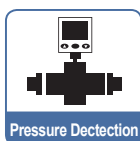
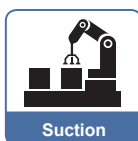


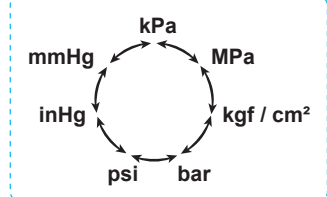
Features

- 2 output & analog output (1 ~ 5 V)
- 10mm width with compact size
- Key lock function
- Programmable pressure unit :
kPa 、 MPa 、 kgf / cm² 、 bar 、 psi 、 inHg 、 mmHg



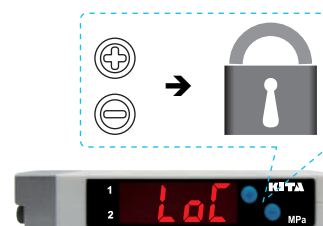
Features Highlight

1 Programmable Pressure Unit



2 Key Lock Function

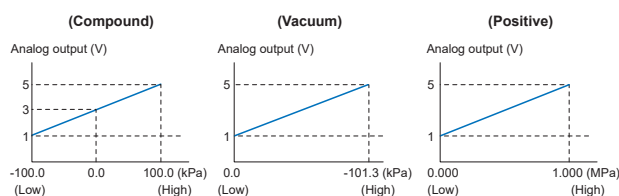
- Key lock mode to prevent unauthorized adjustments Press ⊕ and ⊖ button at the same time for 3 sec.



Key lock function

3 Analog Output

- Output range 1 to 5 V, proportional to the pressure range



4 Compact Size

KP90



VS.

KP30



Specifications

MODEL		KP90C (Compound)	KP90V (Vacuum)	KP90P (Positive)
1.000 MPa 100.0 kPa 0 -101.3 kPa				
Rated Pressure Range		-100.0 ~ 100.0 kPa	0.0 ~ -101.3 kPa	0.000 ~ 1.000 MPa
Set Pressure Range		-101.0 ~ 101.0 kPa	10.0 ~ -101.3 kPa	-0.100 ~ 1.000 MPa
Withstand Pressure		500 kPa		1.5 MPa
Fluid		Filtered Air, Non-corrosive / Non-flammable gas		
Set Pressure Resolution	kPa	0.1		-
	MPa	-		0.001
	kgf / cm ²	0.001		0.01
	bar	0.001		0.01
	psi	0.01		0.1
	inHg	0.1		-
	mmHg	1		-
Power Supply Voltage		12 to 24 V DC ±10 % , Ripple (P-P) 10 % or less		
Current Consumption		≤ 40 mA (With no load)		
Switch Output		2NPN : open collector 2 outputs Max. Load Current : 125 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1.5 V	2PNP : open collector 2 outputs Max. Load Current : 125 mA Max. Supply Voltage : 24 V DC Residual Voltage : ≤ 1.5 V	
Repeatability (Switch Output)		±0.2 % F.S. ±1 digit		
Hysteresis	Hysteresis Mode	Adjustable		
	Window Comparator Mode	Fixed (3 digits)		
Response Time		≤ 2.5 ms (chattering-proof function : 25 ms, 100 ms, 250 ms, 500 ms, 1000 ms and 1500 ms selectable)		
Output Short Circuit Protection		Yes		
Display		4 digit, 7 segment LED display (Red) (Sampling rate : 5 times / sec.)		
Indicator Accuracy		±2 % F.S. ±1 digit (ambient temperature : 25 ±3 °C)		
Switch on Indicator		Indicator Red : OUT1 & Indicator Green : OUT2		
Analog Output (Voltage Output)		Output Voltage : 1 to 5 V ±2.5 % F.S. (within rated pressure range) Linearity : ±1 % F.S. Output impedance : about 1 kΩ		
Environment	Enclosure	IP 40		
	Ambient Temp. Range	Operation : 0 ~ 50 °C, Storage : -10 ~ 60 °C (No condensation or freezing)		
	Ambient Humidity Range	Operation / Storage : 35 ~ 85 % RH (No condensation)		
	Withstand Voltage	1000 V AC in 1-min (between case and lead wire)		
	Insulation Resistance	50 MΩ (at 500 V DC, between case and lead wire)		
	Vibration	Total amplitude 1.5 mm or 10 G, 10 Hz - 150 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		
Temperature Characteristic		±2 % F.S. of detected pressure (25 °C) at temp. range of 0 ~ 50 °C		
Port Size		M5		
Lead Wire		Oil-resistance cable (0.14 mm²)		
Weight		Approx. 53 g (with 2 meter lead wire)		

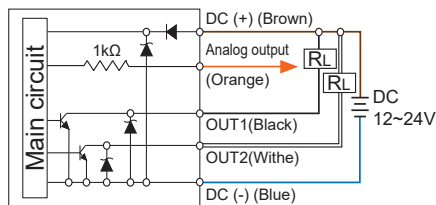
Panel Description



Output Circuit Wiring Diagrams

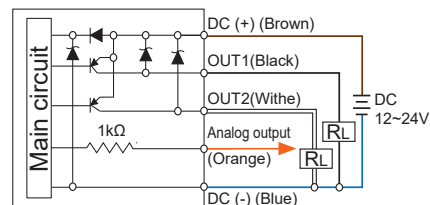
KP90 ☐ - 010 - M5

2 NPN Output + Analog Output (1 ~ 5 V)



KP90 ☐ - 030 - M5

2 PNP Output + Analog Output (1 ~ 5 V)



Ordering Information

K P 9 0 P - 0 1 0 - M 5

Pressure Range

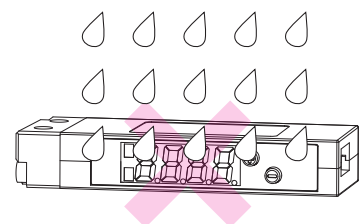
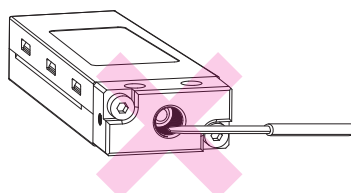
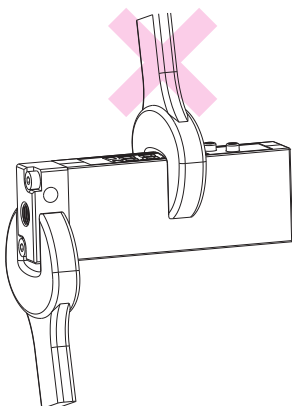
C : Compound (-101.0 ~ 101.0 kPa)
V : Vacuum (10.0 ~ -101.3 kPa)
P : Positive (-0.100 ~ 1.000 MPa)

Output Specification

010 : 2 NPN output & Analog output (1 ~ 5 V)
030 : 2 PNP output & Analog output (1 ~ 5 V)

Installation Precautions

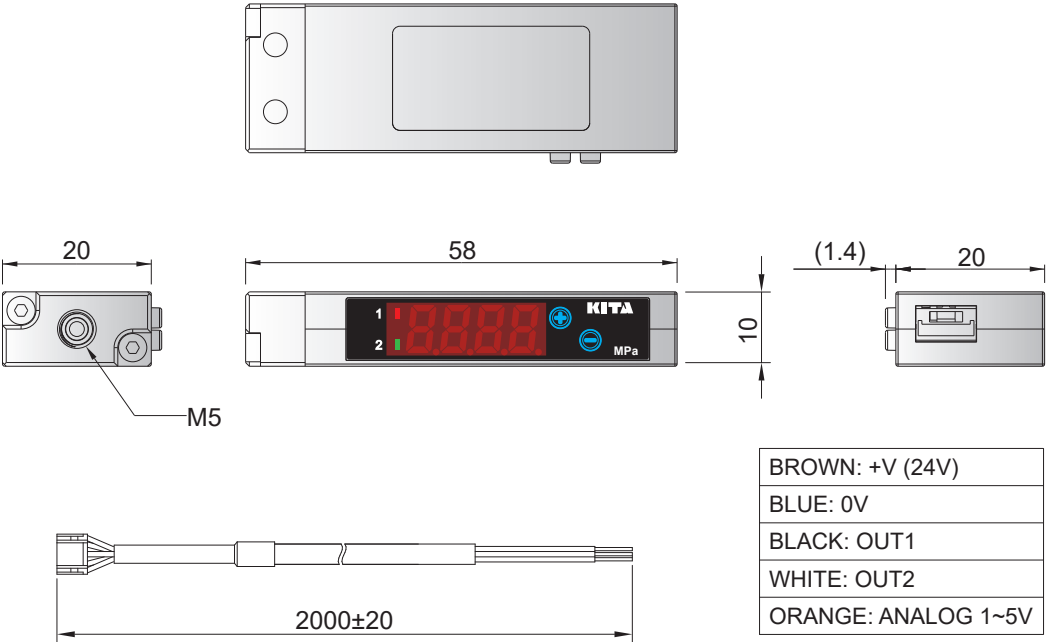
- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Do not use a sharp tool to insert the pressure inlet to avoid damaging the sensor chip.
- Do not use the product in an environment that is exposed to the splash of water or dust. Otherwise failure or malfunction may occur.





Dimensions

KP90□ - □ - M5



Unit : mm