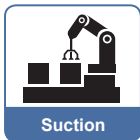


Features

- Set pressure range :
Compound (-100.0 ~ 100.0 kPa)
Vacuum (10.0 ~ -101.3 kPa)
Positive (-0.100 ~ 1.000 MPa)
- 2 outputs & analog output (1 ~ 5 V)
- Hysteresis adjustable
- Programmable pressure unit :
kPa 、 MPa 、 kgf / cm² 、 bar 、 psi 、 inHg 、 mmHg 、 mmH₂O



Suction



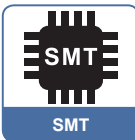
Pressure Detection



Vacuum Ejector



Gluing Machine

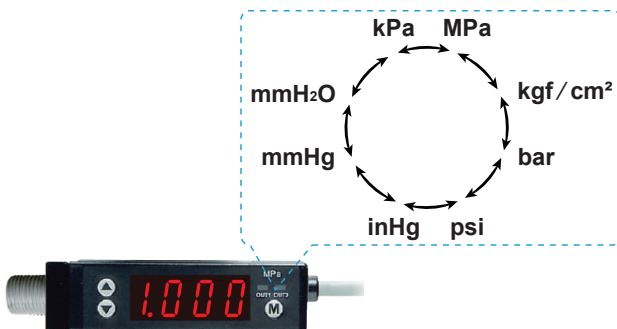


SMT



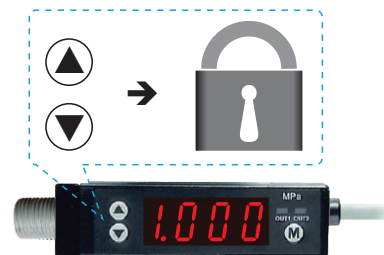
Features Highlight

1 Programmable Pressure Unit



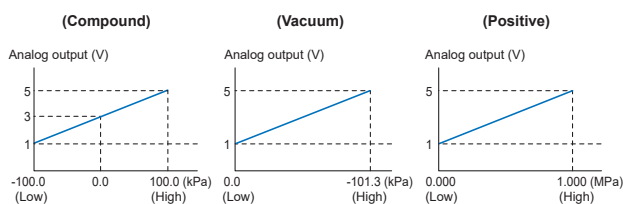
2 Key Lock Function

- Key lock mode to prevent unauthorized adjustments
Press **M** more than 5 seconds to enter key lock mode
Use **▲** or **▼** to select key lock status



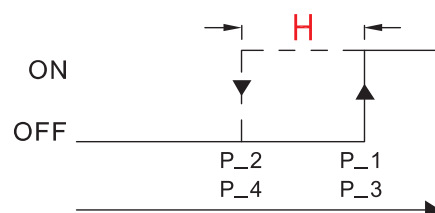
3 Analog Output

- 2 outputs & analog output (1 ~ 5 V)
Output range 1 to 5 V, proportional to the pressure range



4 Hysteresis adjustable

- Output hysteresis (**H**) is adjustable by user

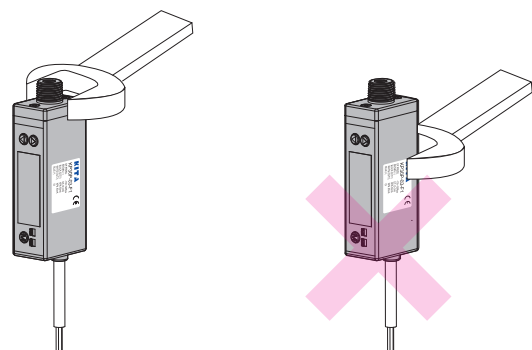


Specifications

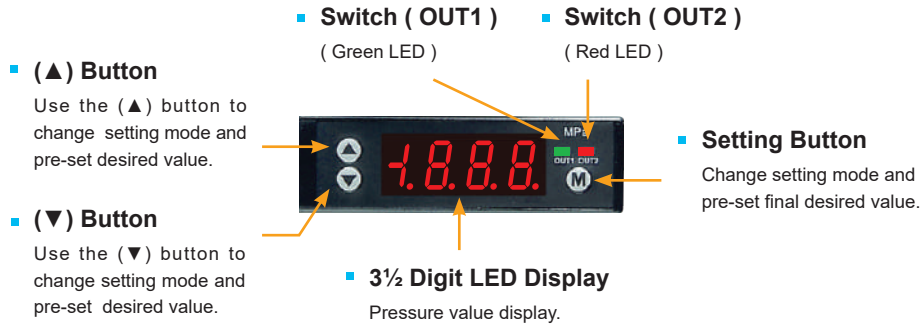
MODEL		KP30C (Compound)	KP30V (Vacuum)	KP30P (Positive)
1.000 MPa 100.0 kPa 0 -101.3 kPa				
Rated Pressure Range		-100.0 ~ 100.0 kPa	0.0 ~ -101.3 kPa	0.000 ~ 1.000 MPa
Set Pressure Range		-100.0 ~ 100.0 kPa	10.0 ~ -101.3 kPa	-0.100 ~ 1.000 MPa
Withstand Pressure		300 kPa		1.5 MPa
Fluid		Filtered air, 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		-
	mmH ₂ O	0.1		-
Power Supply Voltage		12 to 24 V DC ±10 %, Ripple (P-P) 10 % or less		
Current Consumption		≤ 60 mA		
Switch Output		2NPN : open collector 2 outputs Max. Load Current : 100 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1 V	2PNP : open collector 2 outputs Max. Load Current : 100 mA Max. Supply Voltage : 24 V DC Residual Voltage : ≤ 1 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 : 24 ms, 192 ms and 768 ms selectable)		
Output Short Circuit Protection		Yes		
Display		3 ½ 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 Green : OUT1 & Indicator Red : OUT2		
Analog Output (Only Type Kp30 □ - 01 - □ , Kp30 □ - 03 - □)		Output voltage : 1 to 5 V ±5 % F.S. (within rated pressure range) Linearity : ±1 % F.S.	Output voltage : 1 to 5 V ±2.5 % F.S. (within rated pressure range) Linearity : ±1 % F.S.	
Environment	Enclosure	IP 40		
	Ambient Temp. Range	Operation : 0 ~ 50 °C, storage : -20 ~ 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 - 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		
Temperature Characteristic		±2 % F.S. of detected pressure (25 °C) at temp. Range of 0 ~ 50 °C		
Port Size		F1 : R1/8", M5 ; F2 : NPT1/8", M5 ; F3 : G1/8" (BSPP), M5		
Lead Wire		Oil-resistance cable (0.15 mm ²)		
Weight		Approx. 67 g (with 2 meter lead wire)		

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.



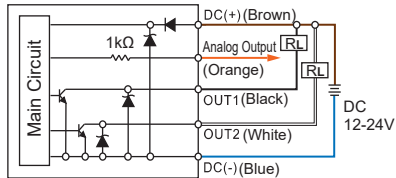
Panel Description



Circuit Wiring Diagrams

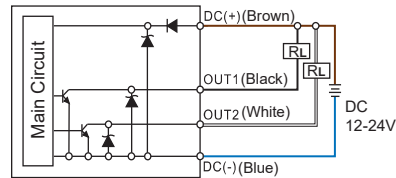
KP30 □ - 01 - □ - □

NPN Output & Analog Output (1 ~ 5 V)



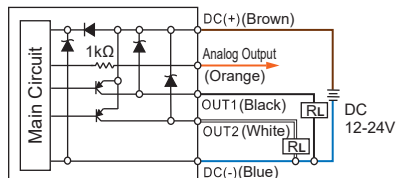
KP30 □ - 02 - □ - □

NPN Output



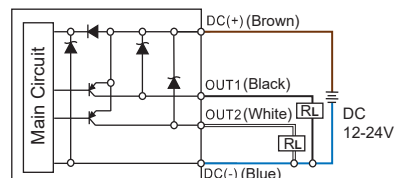
KP30 □ - 03 - □ - □

PNP Output & Analog Output (1 ~ 5 V)



KP30 □ - 04 - □ - □

PNP Output



Ordering Information

K P 3 0 C - 0 1 - F 1 - □

Pressure Range

C : Compound (-100.0 ~ 100.0 kPa)
 V : Vacuum (10.0 ~ -101.3 kPa)
 P : Positive (-0.100 ~ 1.000 MPa)

Pressure Port

F1 : R1/8", M5
 F2 : NPT1/8", M5
 F3 : G1/8" (BSPP), M5

Optional Part

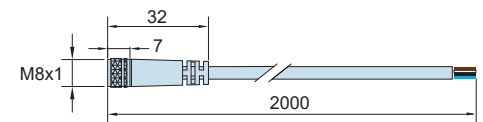
M84R - W0085 - 2M : M8 4Pin female connector

Output Specification

01 : 2 NPN output & Analog output (1 ~ 5 V)
 02 : 2 NPN output
 03 : 2 PNP output & Analog output (1 ~ 5 V)
 04 : 2 PNP output

Cable Length / Connector

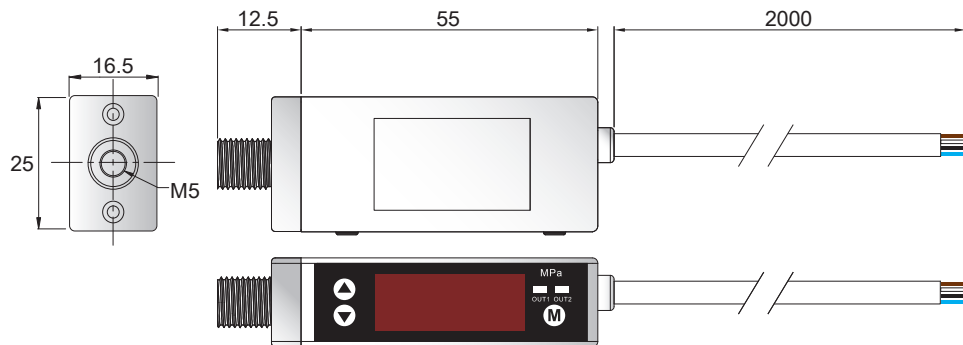
Blank : With 2 meter cable
 QD : With M8 4Pin male connector
 * (Only type KP30 □ - 02 - □ , KP30 □ - 04 - □)



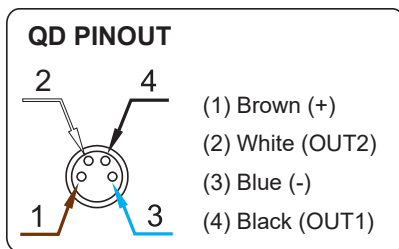
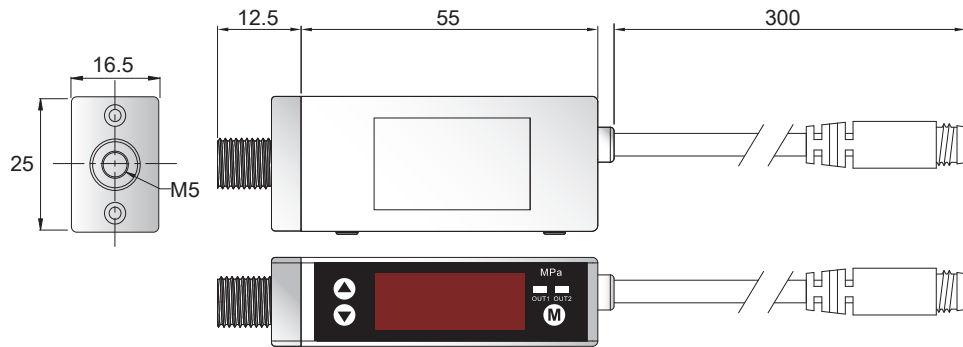
Unit : mm

Dimensions

KP30□ - □ - □



KP30□ - □ - □ - QD



Unit : mm