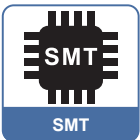
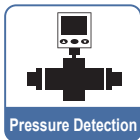
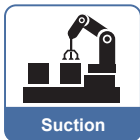


# KP30 SERIES

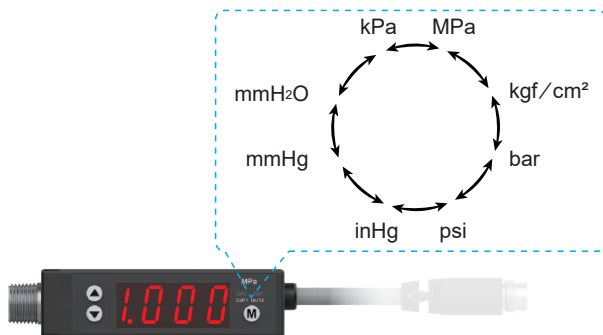
## Features

- Set pressure range :  
Compound pressure ( -100.0 ~ 100.0 kPa )  
Vacuum pressure ( 10.0 ~ -101.3 kPa )  
Positive pressure ( -0.100 ~ 1.000 MPa )
- 2 outputs & analog output ( 1 ~ 5 V )
- Hysteresis adjustable
- Programmable pressure unit :  
kPa, MPa, kgf / cm<sup>2</sup>, bar, psi, inHg, mmHg, mmH<sub>2</sub>O



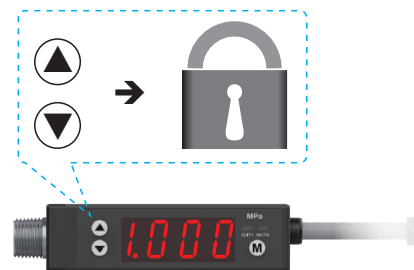
## Features Highlight

### 1 Programmable Pressure Unit



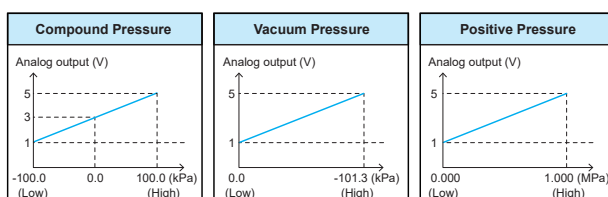
### 2 Key Lock Function

- 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



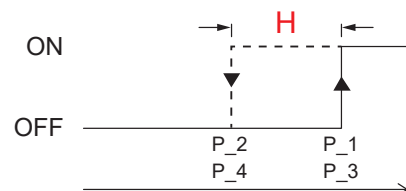
### 3 Analog Output

- 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

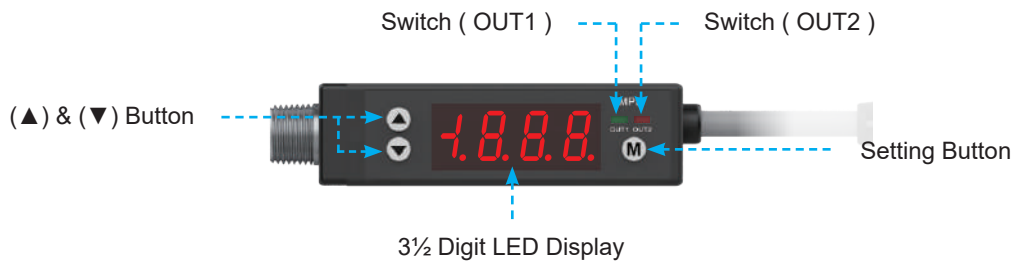


## Specifications

MODEL	KP30C	KP30V	KP30P
	Compound Pressure	Vacuum Pressure	Positive Pressure
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 <sup>2</sup>	0.001	0.01
	bar	0.001	0.01
	psi	0.01	0.1
	inHg	0.1	-
	mmHg	1	-
	mmH <sub>2</sub> O	0.1	-
Power Supply Voltage	12 ~ 24 V DC ± 10 %, Ripple ( P-P ) ≤ 10 %		
Current Consumption	≤ 60 mA		
Switch Output	2 NPN : open collector 2 outputs Max. Load Current : 100 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1 V	2 PNP : open collector 2 outputs Max. Load Current : 100 mA Max. Supply Voltage : 24 V DC Residual Voltage : ≤ 1 V	
Repeatability	± 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	Green Indicator : OUT1 & Red Indicator : OUT2		
Analog Output ( Only Type KP30 □ - 01 - □ , KP30 □ - 03 - □ )	Output Voltage : 1 ~ 5 V ± 5 % F.S. ( within rated pressure range ) Linearity : ± 1 % F.S.	Output Voltage : 1 ~ 5 V ± 2.5 % F.S. ( within rated pressure range ) Linearity : ± 1 % F.S.	
Environment	Enclosure	IP40	
	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, 2 hours each direction of X, Y and Z	
	Shock	980 m/s <sup>2</sup> ( 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	Ø4 Oil-resistance cable ( PVC ) - 26 AWG ( 0.15 mm <sup>2</sup> ) - 5 cores ( KP30 □ - 01 / 03 ) ; Ø4 Oil-resistance cable ( PVC ) - 26 AWG ( 0.15 mm <sup>2</sup> ) - 4 cores ( KP30 □ - 02 / 04 )		
Weight	Approx. 67 g ( with 2 meter lead wire ) ; Approx. 35 g ( with M8 4Pin male connector )		

# KP30 SERIES

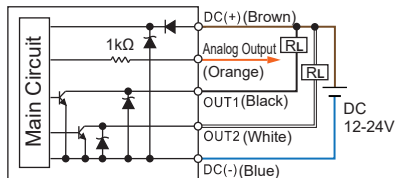
## Panel Description



## Circuit Wiring Diagrams

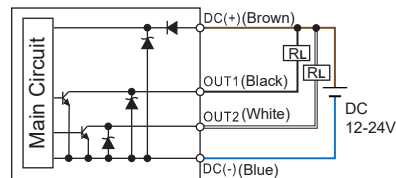
KP30  - 01 -  -

NPN Output & Analog Output ( 1 ~ 5 V )



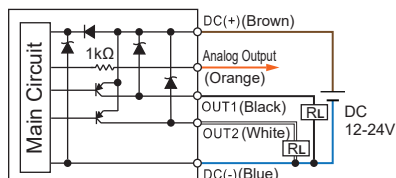
KP30  - 02 -  -

NPN Output



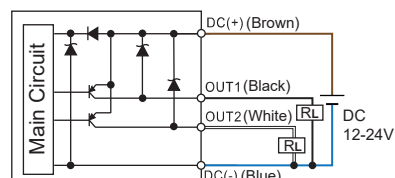
KP30  - 03 -  -

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

### Pressure Port

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

### Output Specification

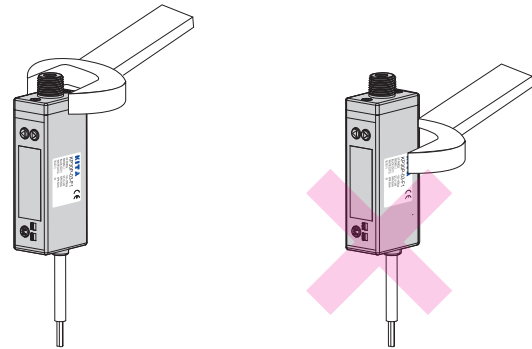
01 : 2 NPN output & Analog output ( 1 ~ 5 V )  
 02 : 2 NPN output  
 03 : 2 PNP output & Analog output ( 1 ~ 5 V )  
 04 : 2 PNP output

### Cable Length / Connector

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

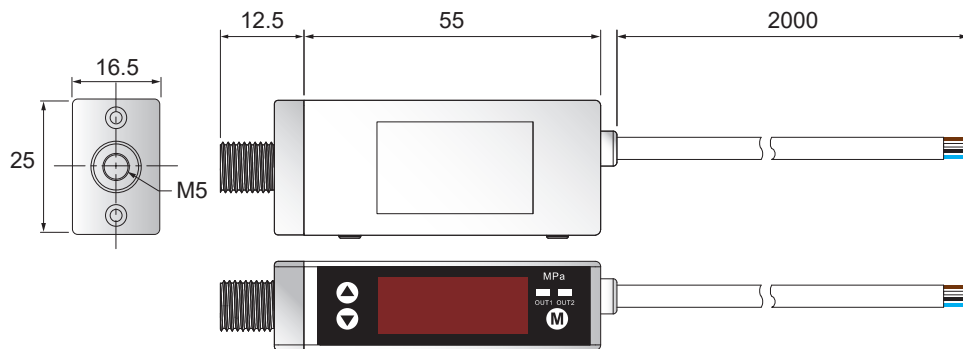
## Installation Precautions

- 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.

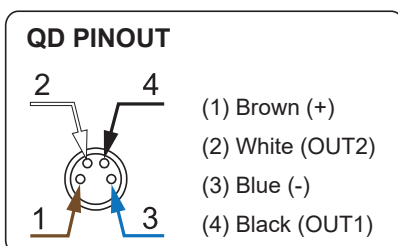
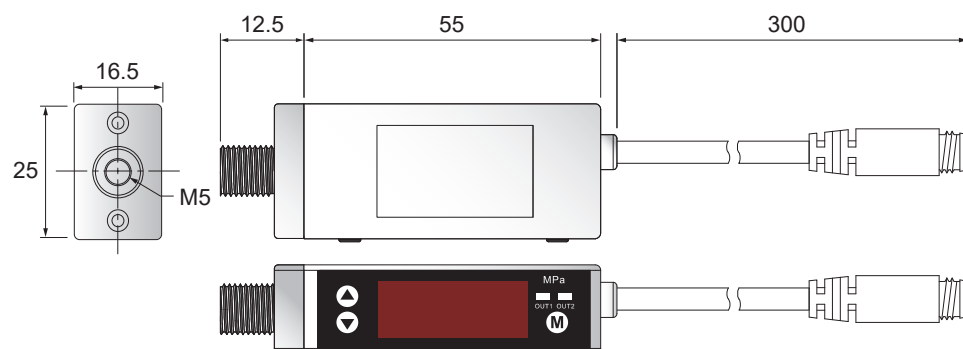


## Dimensions

KP30□ - □ - □



KP30□ - □ - □ - QD



Unit : mm