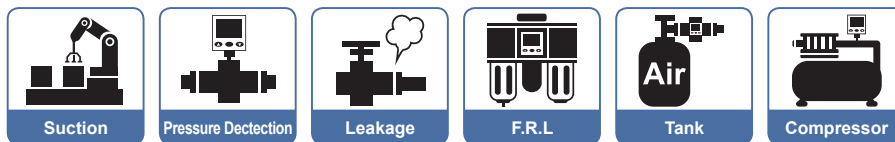


Features

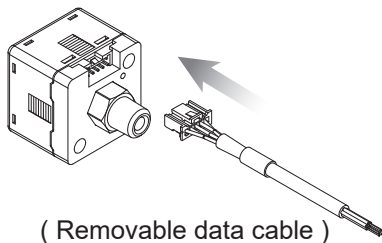
- 3-color digital LCD display
- Copy function
- Programmable pressure unit :
kPa、MPa、kgf/cm²、bar、psi、inHg、mmHg
- Dual LCD display allows setting value to be displayed
- Key lock indicator
- Power-save mode



Features Highlight

1 Quick Installation

- Save Installation Time
- Easy Removal



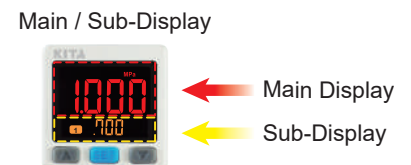
2 Copy Setting

- Avoid setting errors
- Reduce setting time



3 Setting Value Easy Indication

- User can easily observe the setting value from sub-display.



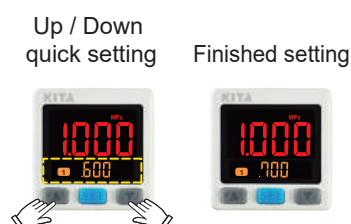
4 2-Color Main Display

- User programmable color mode, for different setting conditions.



5 OPS Quick Setting

- Sub-display allows changing the parameter directly, reduce setting step by 3/4.



6 Easy Unit Identification

- Conversion unit is on display and easy to read.



Specifications

MODEL		KP43C (Compound)	KP43V (Vacuum)	KP43P (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		300 kPa		1.5 MPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas		
Set Pressure Resolution	kPa	0.1		-
	MPa	-		0.001
	kgf / cm²	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	One Point Set Mode	Adjustable *1		
	Hysteresis Mode			
	Window Comparator Mode			
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		3 ½ digital, 7 segment LCD display (Red / Green / Orange) (Sampling rate : 5 times / sec.)		
Indicator Accuracy		±2 % F.S. ±1 digit (ambient temperature : 25 ±3 °C)		
Switch on Indicator		Orange indicator 1 : OUT1 & Orange indicator 2 : OUT2		
Analog Output (Voltage Output) *2		Output Voltage : 1 to 5 V ±2.5 % F.S. (within rated pressure range) Linearity : ±1 % F.S. Output Impedance : about 1 kΩ		
Analog Output (Current Output) *3		Output Current : 4 to 20 mA ±2.5 % F.S. (within rated pressure range) Linearity : ±1 % F.S. Max.Load Impedance : 300 Ω at power supply of 12 V 600 Ω at power supply of 24 V Min.Load Impedance : 50 Ω		
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 - 55 Hz - 10 Hz scan for 1 minute, two hours each direction of X, Y and Z		
	Shock	100 m/s² (10 G), 3 times each in direction of X, Y and Z		
Temperature characteristic		±2.5 % F.S. of detected pressure (25 °C) at temp. Range of 0 ~ 50 °C		
Port size		F1 : R1/8", M5 ; F2 : NPT1/8", #10-32 UNF ; F3 : G1/8" (BSPP), M5		
Lead wire		Oil-resistance cable (0.15 mm²)		
Weight		Approx. 80 g (with 2 meter lead wire)		

NOTE :

*1 : Hysteresis value is adjustable within 1 ~ 8 digits for one point set mode and window comparator mode.

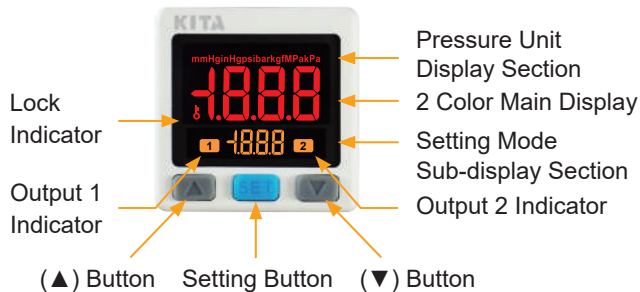
*2 : If analog voltage output is selected, the analog current output cannot be selected at the same time.

*3 : If analog current output is selected, the analog voltage output cannot be selected at the same time.

KP43 SERIES

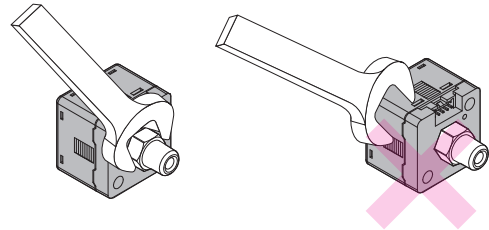
General Pressure Sensor

Panel Description



Installation Precautions

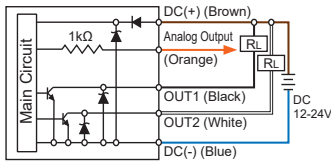
- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damages to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply pressure and power after installation and make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



Circuit Wiring Diagrams

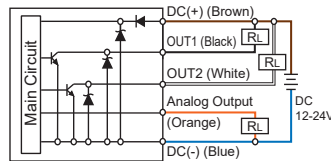
KP43□ - 010 - □

2NPN + Analog Output (1 ~ 5 V)



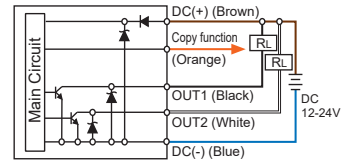
KP43□ - 011 - □

2NPN + Analog Output (4 ~ 20 mA)



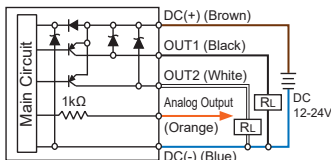
KP43□ - 02 - □

2NPN + Copy Function



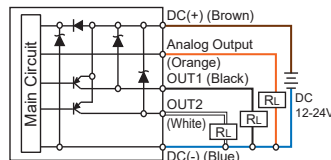
KP43□ - 030 - □

2PNP + Analog Output (1 ~ 5 V)



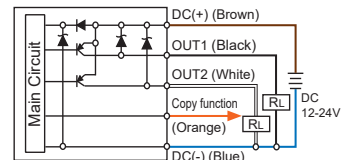
KP43□ - 031 - □

2PNP + Analog Output (4 ~ 20 mA)



KP43□ - 04 - □

2PNP + Copy Function



Ordering Information

K P 4 3 C - 0 1 0 - F 1

Pressure Range

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

Output Specifications

010 : 2 NPN Output & Analog Output (1 ~ 5 V)
011 : 2 NPN Output & Analog Output (4 ~ 20 mA)
02 : 2 NPN Output & Copy Function
030 : 2 PNP Output & Analog Output (1 ~ 5 V)
031 : 2 PNP Output & Analog Output (4 ~ 20 mA)
04 : 2 PNP Output & Copy Function

Pressure Port

F1 : R1/8", M5
F2 : NPT1/8", #10-32UNF
F3 : G1/8" (BSPP), M5

Optional Parts

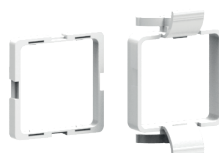
BT-12 : Mounting bracket
BT-13 : Mounting bracket
PA-C : Panel adapter
PA-D : Panel adapter + Front protective lid

Optional Parts

- Mounting bracket : BT-12 / BT-13



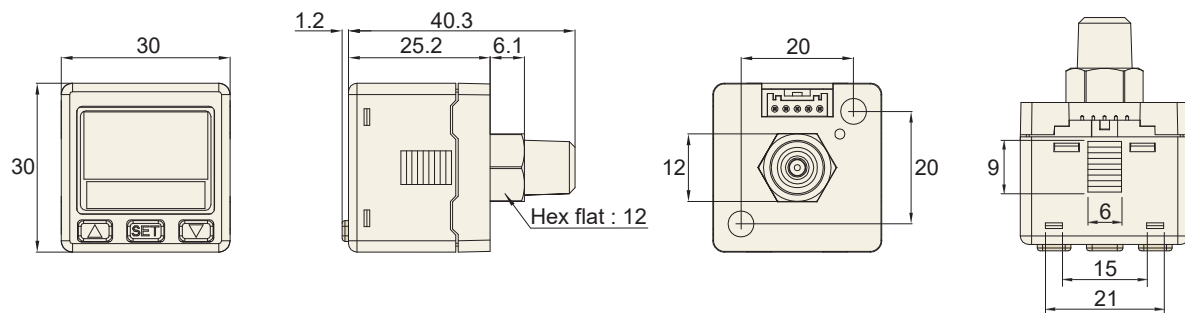
- Panel adapter : PA-C



- Panel adapter + Front protective lid : PA-D

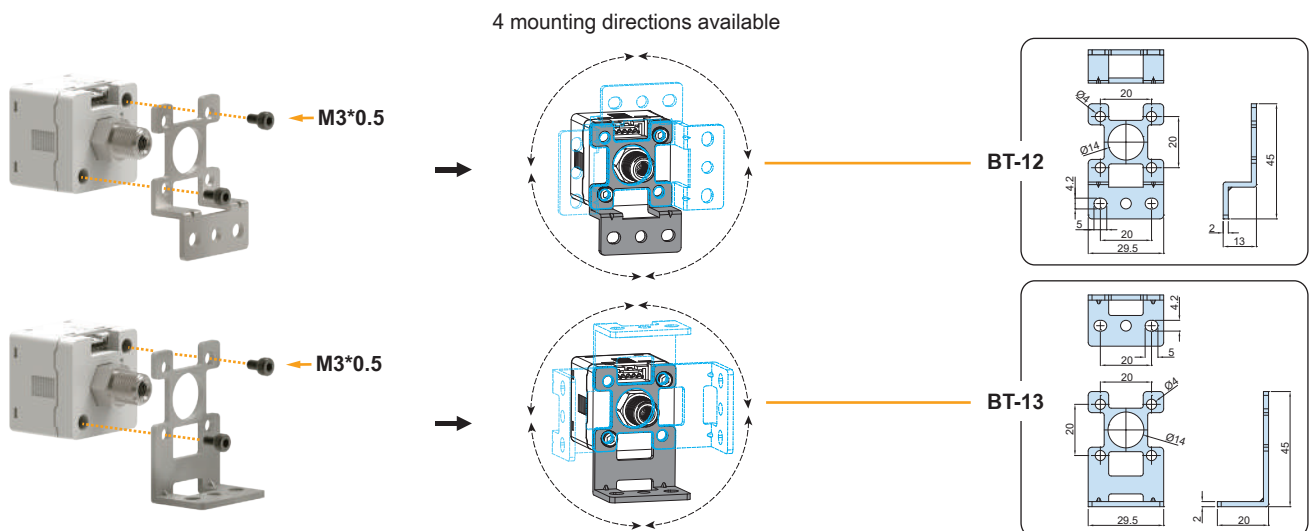


Dimensions

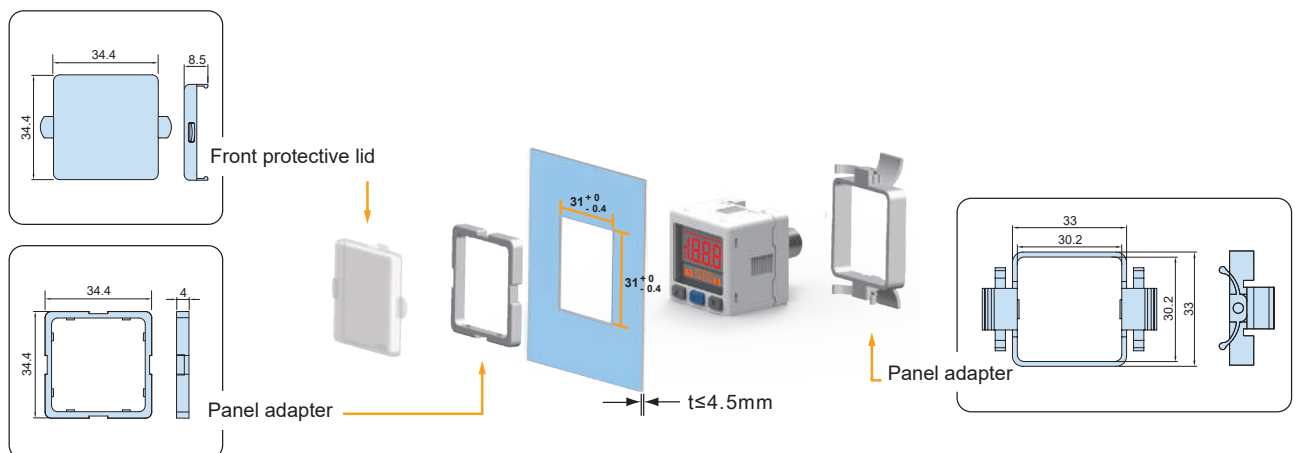


Optional Parts Dimensions

1 Mounting Bracket



2 Panel Mount Adapter + Front Protective Lid



Unit : mm