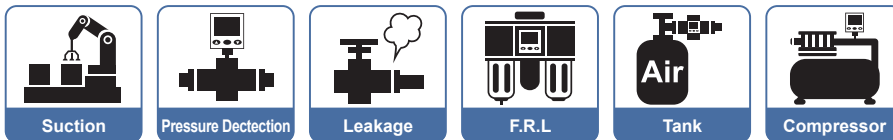


Features

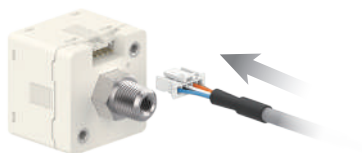
- 3-color digital LCD display
- Copy function
- Selectable pressure unit :
kPa 、 MPa 、 kgf / cm² 、 bar 、 psi 、 inHg 、 mmHg
- Dual LCD display allows setting value to be displayed
- Key-lock indicator
- Power-save mode



Features Highlight

1 Quick Installation

- Save Installation Time
- Easy Removal



(Removable Data Cable)

2 Copy Setting

- Avoid setting errors
- Reduce setting time

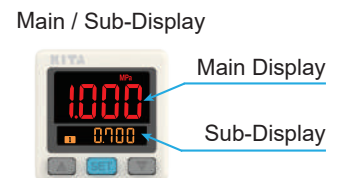


(Original Parameter)

(Copied)

3 Setting Value Easy Indication

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



4 2-Color Main Display

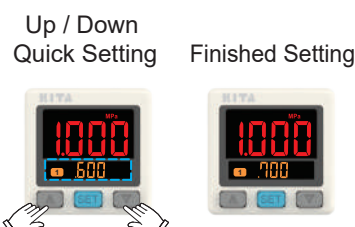
- User selectable color mode, for different conditions use



	SoG	SoR	Grn	rEd
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

5 OPS Quick Setting

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



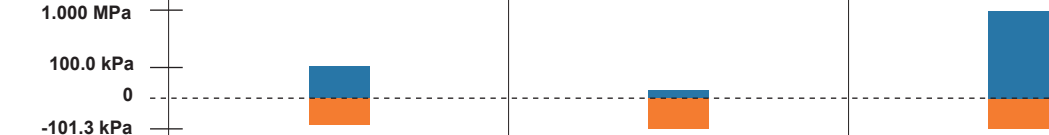
Finished Setting

6 Easy Unit Identification

- Unit conversion easy to read



Specifications

MODEL		KP43C	KP43V	KP43P
		Compound	Vacuum	Positive
				
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 / 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 ~ 24 V DC $\pm$ 10 %, Ripple (P-P) $\leq$ 10 %		
Current Consumption		$\leq$ 40 mA (with no load)		
Switch Output		2 NPN : open collector 2 outputs Max. Load Current : 125 mA Max. Supply Voltage : 30 V DC Residual Voltage : $\leq$ 1.5 V 2 PNP : open collector 2 outputs Max. Load Current : 125 mA Max. Supply Voltage : 24 V DC Residual Voltage : $\leq$ 1.5 V		
Repeatability		$\pm$ 0.2 % F.S. $\pm$ 1 digit		
Hysteresis	One Point Set Mode	Adjustable ※1		
	Hysteresis Mode			
	Window Comparator Mode			
Response Time		$\leq$ 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		$\pm$ 2 % F.S. $\pm$ 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 ~ 5 V $\pm$ 2.5 % F.S. (within rated pressure range) Linearity : $\pm$ 1 % F.S. Output Impedance : about 1 k Ω		
Analog Output (Current Output) ※3		Output Current : 4 ~ 20 mA $\pm$ 2.5 % F.S. (within rated pressure range) Linearity : $\pm$ 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	IP40		
	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	$\geq$ 50 M Ω (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	100 m/s ² (10 G), 3 times each in direction of X, Y and Z		
Temperature characteristic		$\pm$ 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		Ø4 Oil-resistance cable (PVC) - 26 AWG (0.15 mm ²) - 5 cores		
Weight (with 2 meter lead wire)		Approx. 80 g		

NOTE

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

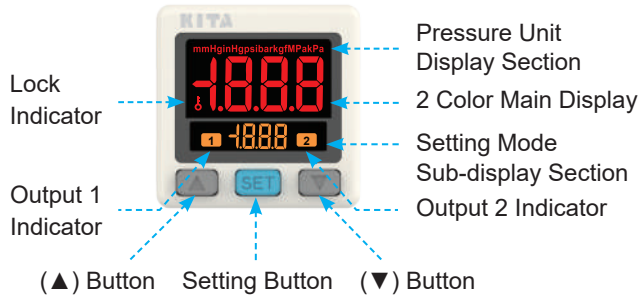
※2 : If analog voltage output is selected, the analog current output cannot be selected at the same time.

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

KP43 SERIES

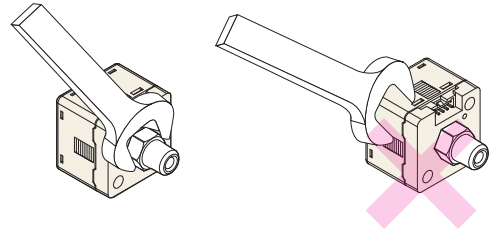
General Pressure Sensor

Panel Description



Installation Precautions

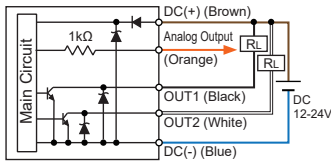
- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damage to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply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



Circuit Wiring Diagrams

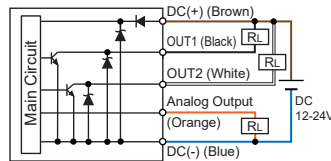
KP43□ - 010 - □

2NPN + Analog Output (1 ~ 5 V)



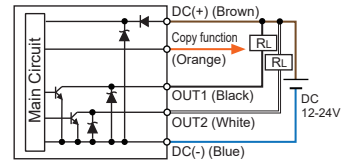
KP43□ - 011 - □

2NPN + Analog Output (4 ~ 20 mA)



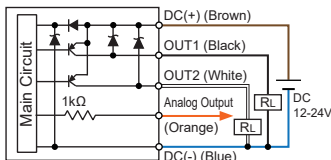
KP43□ - 02 - □

2NPN + Copy Function



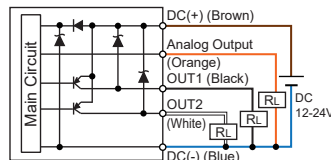
KP43□ - 030 - □

2PNP + Analog Output (1 ~ 5 V)



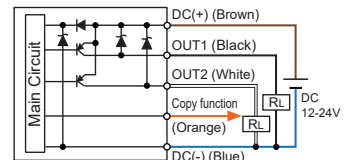
KP43□ - 031 - □

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



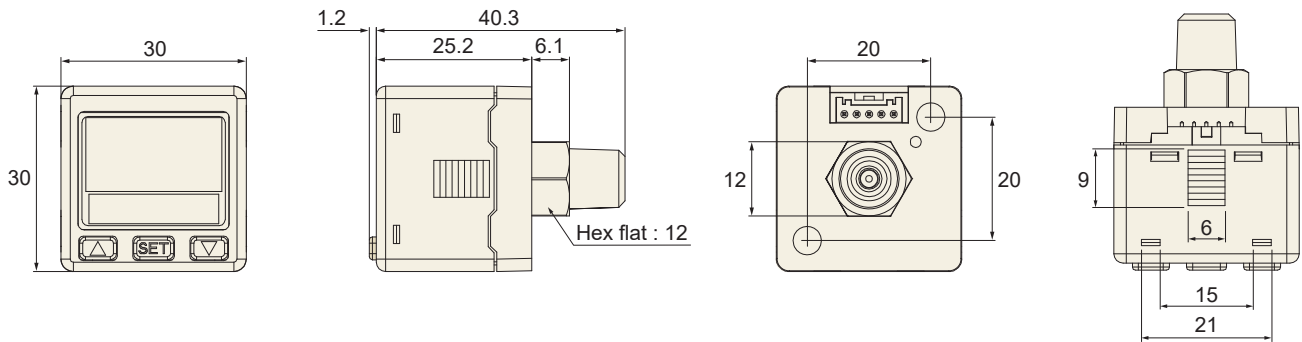
- Panel adapter : PA-C



- Panel adapter + Front protective lid : PA-D

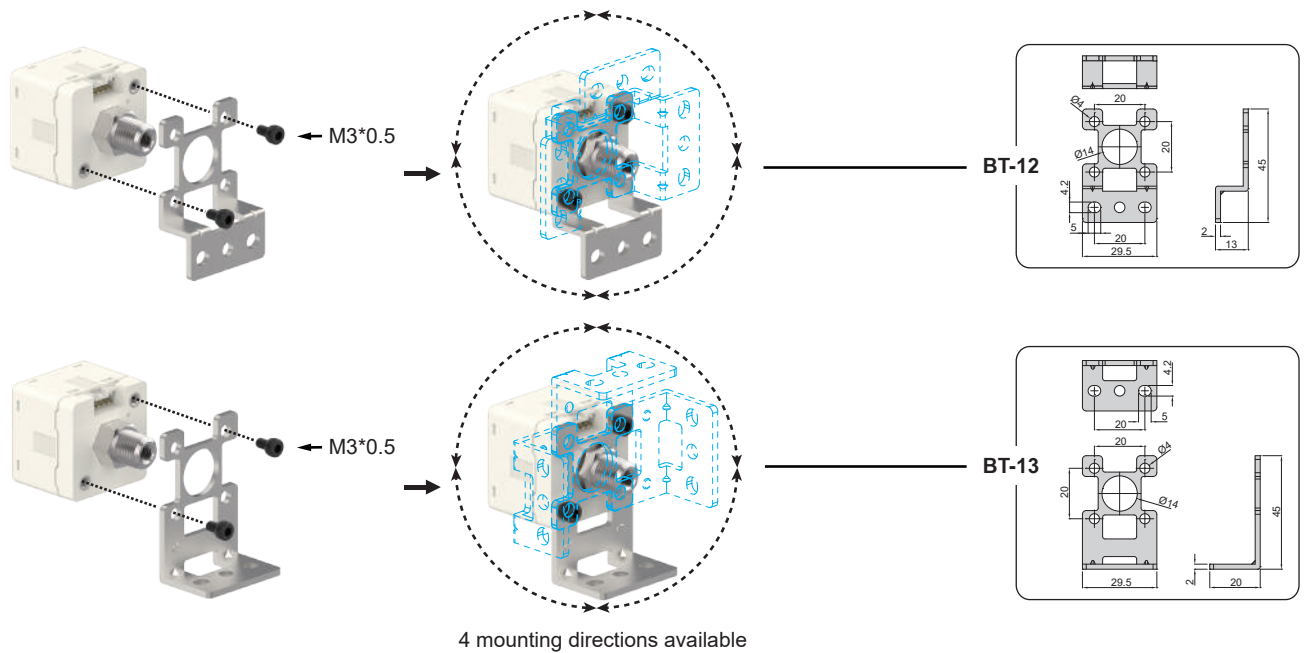


Dimensions

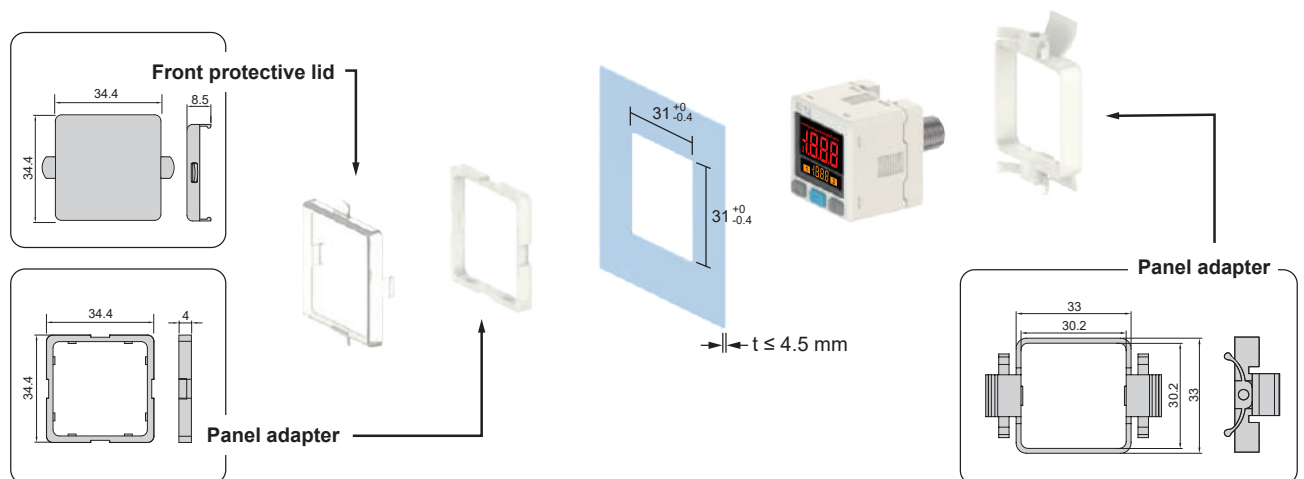


Optional Parts Dimensions

1 Mounting Bracket



2 Panel Mount Adapter + Front Protective Lid



Unit : mm