

# KP25 SERIES

## Features

- Setting pressure range : Compound (-100.0~100.0 kPa)  
Vacuum (10.0~-101.3 kPa)  
Positive (-0.100~1.000 MPa)
- 2 outputs & analog output (1~5V)
- Hysteresis adjustable
- Programmable pressure unit :  
kPa 、MPa 、kgf/cm<sup>2</sup> 、bar 、psi 、inHg 、mmHg 、mmH<sub>2</sub>O
- IP65 enclosure

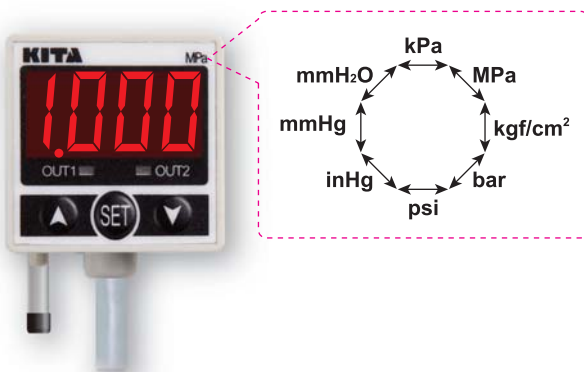


## SPECIFICATIONS

TYPE	Compound	Vacuum	Positive
MODEL	KP25C	KP25V	KP25P
Rated pressure range	-100.0 ~ 100.0 kPa	0.0 ~ -101.3 kPa	0.000 ~ 1.000 MPa
Setting pressure range	-100.0 ~ 100.0 kPa	10.0 ~ -101.3 kPa	-0.100 ~ 1.000 MPa

## FEATURES HIGHLIGHT

### 1 Programmable pressure unit



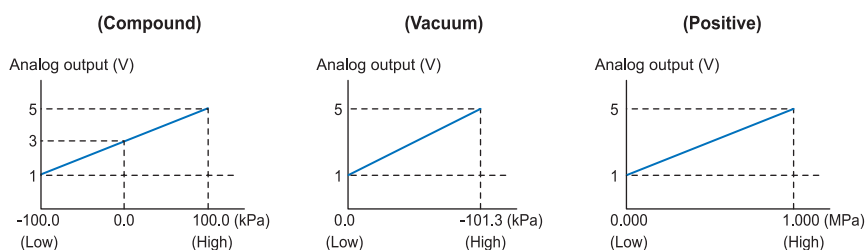
### 2 Dust-proof and splash-proof

Enclosure protection rating: IP 65



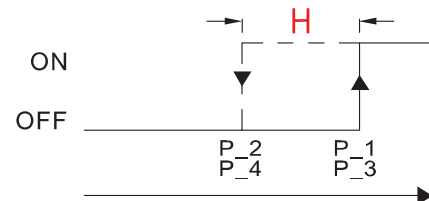
### 3 Analog output

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




### 4 Hysteresis adjustable

Output hysteresis (H) is adjustable by user

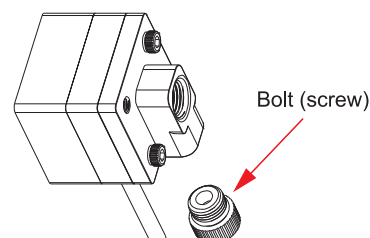


## ■ SPECIFICATIONS

MODEL		KP25C (Compound)	KP25V (Vacuum)	KP25P (Positive)
				
Rated pressure range		-100.0 ~ 100.0 kPa	0.0 ~ -101.3 kPa	0.000 ~ 1.000 MPa
Setting 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		-
Power supply voltage		12 to 24V DC ±10%, Ripple (P-P) 10% or less		
Current consumption		≤ 55mA		
Switch output		NPN : open collector 2 outputs Max. load current : 80mA Max. supply voltage : 30V DC Residual voltage : ≤ 1V	PNP : open collector 2 outputs Max. load current : 80mA Max. supply voltage : 24V DC Residual voltage : ≤ 1V	
Repeatability(Switch output)		±0.2% F.S. ±1 digit		
Hysteresis	Hysteresis mode	Adjustable		
	Window comparator mode	Fixed (3 digits)		
Response time		≤ 2.5ms (chattering-proof function: 24ms, 192ms and 768ms selectable)		
Output short circuit protection		Yes		
7 segment LED display		3 ½ digit LED display (Sampling rate: 5 times/1sec.)		
Indicator accuracy		±2% F.S. ±1 digit (Ambient temperature: 25 ±3°C)		
Indicator		OUT1 = Green, OUT2 = Red		
Analog output (Only type KP25□-01-□, KP25□-03-□)		Output voltage : 1 to 5V ±5% F.S. (within rated pressure range) Linearity : ±1% F.S.	Output voltage : 1 to 5V ±2.5% F.S. (within rated pressure range) Linearity : ±1% F.S.	
Environment	Enclosure	IP 65		
	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	1000V AC in 1-min (between case and lead wire)		
	Insulation resistance	50MΩ (at 500V DC, between case and lead wire)		
	Vibration	Total amplitude 1.5mm, 10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X, Y and Z		
Shock		980m/s <sup>2</sup> (100G), 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:Rc1/8"; F2:NPT1/8"; F3:G1/8"(BSPP)		
Lead wire		Oil-resistance cable (0.15mm <sup>2</sup> )		
Weight		Approx. 105g (with 2 meter lead wire), Approx. 71g (with M8 4Pin male connector)		

## ■ INSTALLATION

- This product has two inlet pressure ports, select the one most convenient for installation.
- Please plug the unused inlet port with supplied port plug. Use seal tape to prevent pressure leak.



# KP25 SERIES

## ■ PANEL DESCRIPTION

### Switch (OUT1)

(Green LED)

### (▲) Button

Use the (▲) button to change setting mode and pre-set desired value.

### Setting Button

Change setting mode and pre-set final desired value.



### 3 1/2 Digit LED Display

Pressure value display.

### Switch (OUT2)

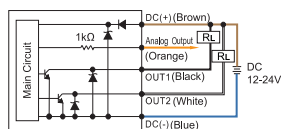
(Red LED)

### (▼) Button

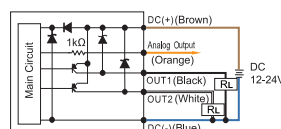
Use the (▼) button to change setting mode and pre-set desired value.

## ■ OUTPUT CIRCUIT WIRING DIAGRAMS

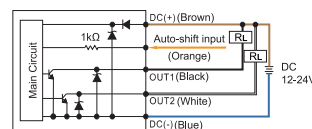
**KP25□-01-□-□**  
NPN Output & Analog Output



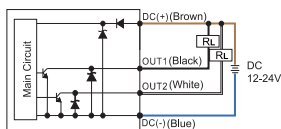
**KP25□-03-□-□**  
PNP Output & Analog Output



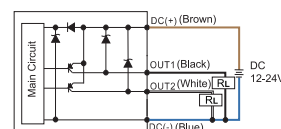
**KP25□-05-□-□**  
NPN Output & Auto-shift input



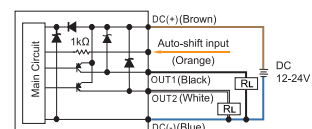
**KP25□-02-□-□**  
NPN Output



**KP25□-04-□-□**  
PNP Output



**KP25□-07-□-□**  
PNP Output & Auto-shift input



## ■ ORDERING INFORMATION

**K P 2 5 C - 0 1 - F 1 - □**

### Pressure Range

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

### Output Specification

01 : 2 NPN output & Analog output(1~5V)  
02 : 2 NPN output  
03 : 2 PNP output & Analog output(1~5V)  
04 : 2 PNP output  
05 : 2 NPN output & Auto-shift input  
07 : 2 PNP output & Auto-shift input

### Pressure Port

F1 : Rc1/8"  
F2 : NPT1/8"  
F3 : G1/8"(BSPP)

### Cable Length / Connector

Blank : With 2 meter cable  
QD : With M8 4Pin male connector  
\*(Only type KP25□-02-□, KP25□-04-□)

### Optional Parts

M84R-W0085-2M : With M8 4Pin female connector  
BT-1: Mounting bracket  
BT-2 : Mounting bracket  
PA-A : Panel adapter  
PA-B : Panel adapter+Front protective lid

### Optional Parts

#### M8 4Pin female connector



■ M84R-W0085-2M

#### Mounting bracket



■ BT-1      ■ BT-2

#### Panel adapter



■ PA-A

#### Panel adapter+Front protective lid



■ PA-B

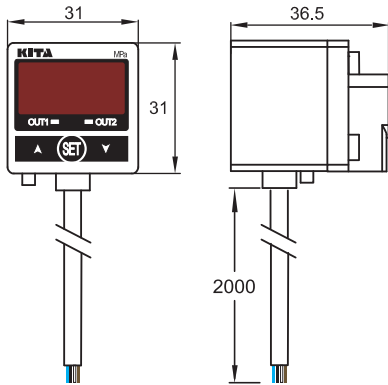
GENTLE AUTOMATIC SOLUTION SDN BHD

No. 36 Jalan Industri USJ 1/13, Taman Perindustrian USJ 1, 47600 Subang Jaya, Selangor.

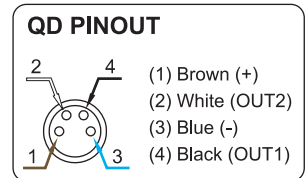
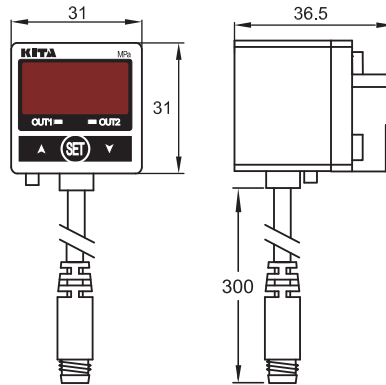
TEL: 603-8023 7743 / 8743    FAX: 603-8023 9743    email: sales@gentle.com.my

## DIMENSIONS

KP25 □ - □ - □

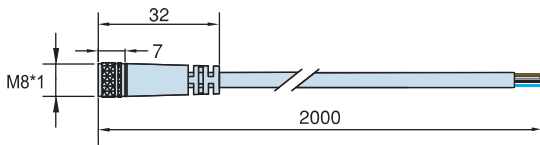


KP25 □ - □ - □ - QD

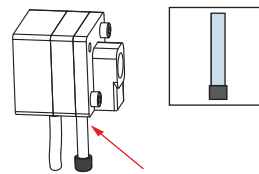


## OPTIONAL PARTS DIMENSIONS

**1 M8 Female Connector** model : M84R-W0085-2M



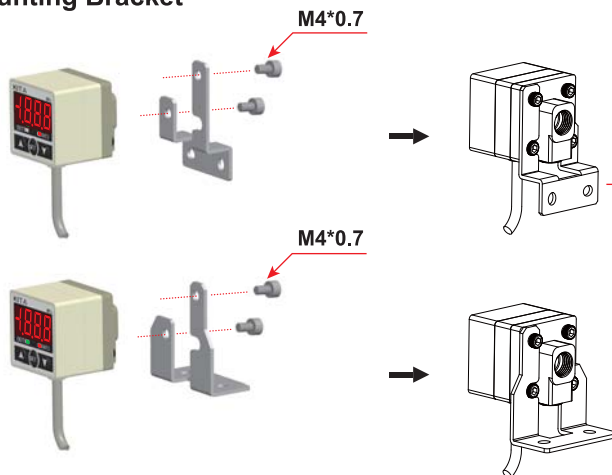
**2 IP65 Protector**



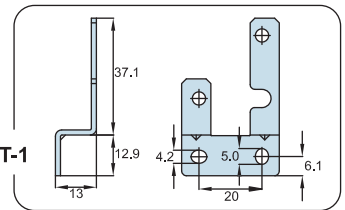
**Caution:**  
This device must be installed to maintain IP 65(Dust and splash proof) enclosure rating.

Dustproof protector

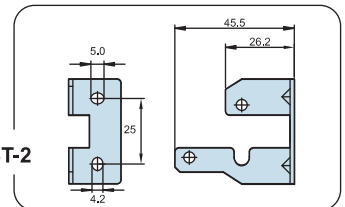
**3 Mounting Bracket**



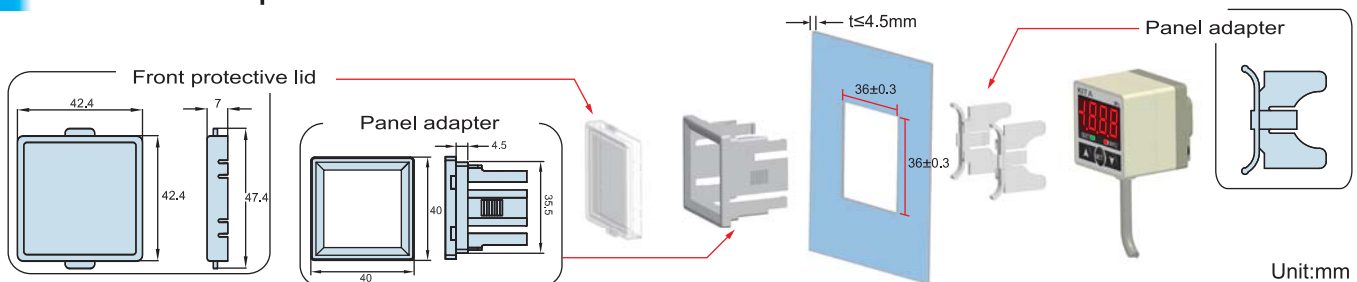
Mounting bracket **BT-1**



Mounting bracket **BT-2**



**4 Panel Mount Adapter + Front Protective Lid**



Unit:mm