

For your safety, please read the following before using.

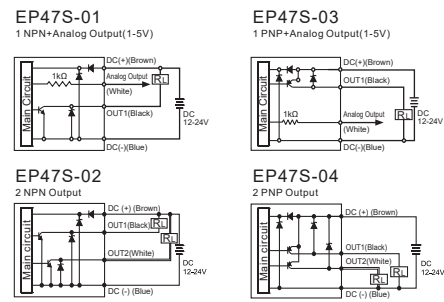
- Do not use corrosive or flammable gas or liquid with this product.
- Please use within the rating pressure range. Do not apply pressure beyond recommended maximum withstand pressure, permanent damage to the pressure sensor may occur.
- Do not drop, hit or allow excessive shock. Even if switch body appears undamaged, internal components may be broken and can cause malfunction.
- Turn power off before connecting wiring. Wrong wiring or short circuit will damage and / or cause malfunction.
- Do not use in environment containing steam or oil vapor.
- This product is not explosion-proof rated. Do not use in atmosphere containing flammable or explosive gases.
- Wiring for pressure sensor should avoid power source line and high voltage line. If use in the same circuit, noise may cause malfunction.

A. SPECIFICATIONS

MODEL	EP47S								
Pressure range type	01	02	03	04	05	06	07	08	09
Rated pressure range (kPa)	0.00 ~ -10.00	0.00 ~ -5.00	0.00 ~ -3.00	0.00 ~ 10.00	0.00 ~ 5.00	0.00 ~ 3.00	-10.00 ~ 10.00	-5.00 ~ 5.00	-3.00 ~ 3.00
Setting pressure range (kPa)	0.00 ~ -10.10	0.00 ~ -5.10	0.00 ~ -3.10	0.00 ~ 10.10	0.00 ~ 5.10	0.00 ~ 3.10	-10.10 ~ 10.10	-5.10 ~ 5.10	-3.10 ~ 3.10
Withstand pressure	20 kPa								
Fluid	Air, Non-corrosive / Non-flammable gas								
Pressure unit	kPa								
Indicator Resolution	0.01 kPa								
Power supply voltage	12 to 24V DC ±10%, Ripple (P-P) 10% or less								
Current consumption	≤ 40mA (with no load)								
Switch Output	NPN open collector output Max. load current : 80mA Max. supply voltage : 30V DC Residual voltage : ≤ 1V				PNP open collector output Max. load current : 80mA Max. supply voltage : 24V DC Residual voltage : ≤ 1V				
Repeatability (Switch output)	≤ ±0.4 kPa								
Hysteresis	One point set mode								
	Hysteresis mode	Adjustable (*1)							
	Window comparator mode								
Response time	≤ 2.5ms (chattering-proof function : 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selections)								
Output short circuit protection	Yes								
Display	4 digital, 7segment LCD display (Red / Green / Orange) (Sampling rate : 0.2, 0.5, 1 seconds / time selectable)								
Indicator accuracy	≤ ±0.4 kPa								
Switch on indicator	Orange indicator 1 : OUT1 & Orange indicator 2 : OUT2								
Analog output (Voltage output)	Output Voltage : 1 to 5V ± 2.5% F.S. (within rated pressure range) Linearity : ± 1% F.S. Output Impedance : about 1kΩ								
Enclosure	IP40								
Ambient temp. range	Operation : 0 ~ 50 °C, Storage : -10 ~ 60 °C (No condensation or freezing)								
Ambient Humidity Range	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 or 10G , 10Hz~150Hz~10Hz scan for 1 minute , two hours each direction of X, Y and Z								
Shock	100m/s ² (10G), 3 times each in direction of X, Y and Z								
Temperature characteristic	±0.4 kPa 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"(BSPF), M5 ; M5 : M5 female thread								
Lead wire	Oil-resistance cable (0.15mm ²)								
Weight	Approx. 67g (with 2 meter lead wire)								

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

B. OUTPUT CIRCUIT WIRING DIAGRAMS



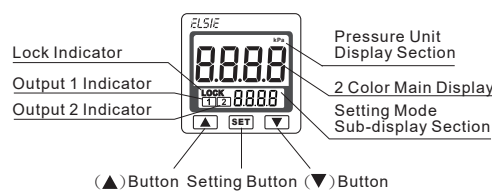
C. ORDERING INFORMATION

EP47S-01-F1

- Output Specifications**
- 01 : 1 NPN output + Analog output (1 - 5V)
 - 02 : 2 NPN output
 - 03 : 1 PNP output + Analog output (1 - 5V)
 - 04 : 2 PNP output

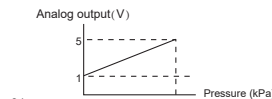
- Pressure Port**
- F1 : R1/8", M5
 - F2 : NPT1/8", #10-32UNF
 - F3 : G1/8"(BSPF), M5
 - M5 : M5
- Optional Parts**
- BT-22 : Mounting bracket
 - BT-23 : Mounting bracket
 - PA-C : Panel adapter
 - PA-D : Panel adapter + Front protective lid

D. PANEL DESCRIPTION

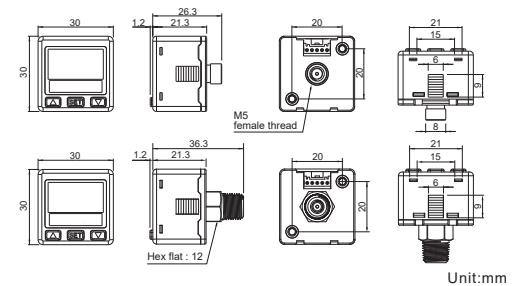


E. ANALOG OUTPUT DESCRIPTION

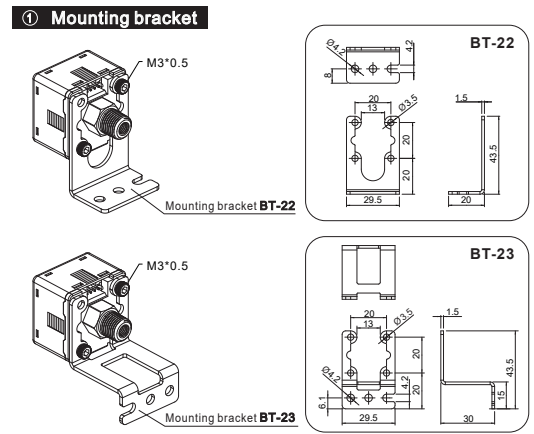
Analog output range 1-5V, proportional to the pressure range.



F. DIMENSIONS

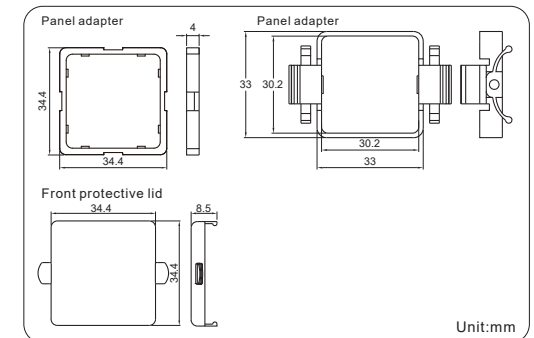
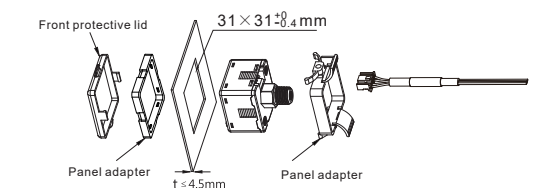


G. OPTIONAL PARTS DIMENSIONS

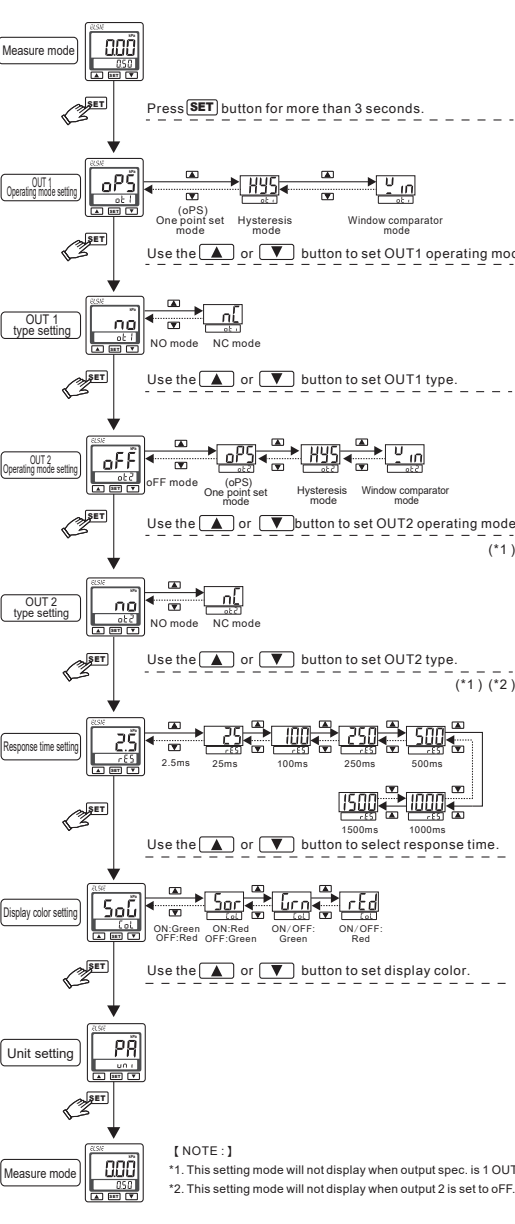


- Caution :**
- *1. Screws suitable hexagonal wrench size is 2.5mm.
 - *2. Use non-standard screws, the length must be limited to 5mm.

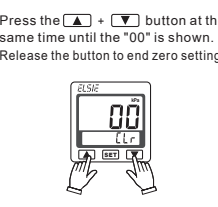
① Mounting bracket



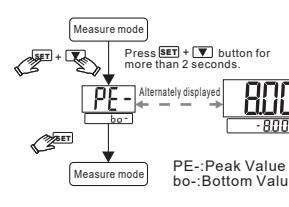
H. INITIAL SETTING MODE



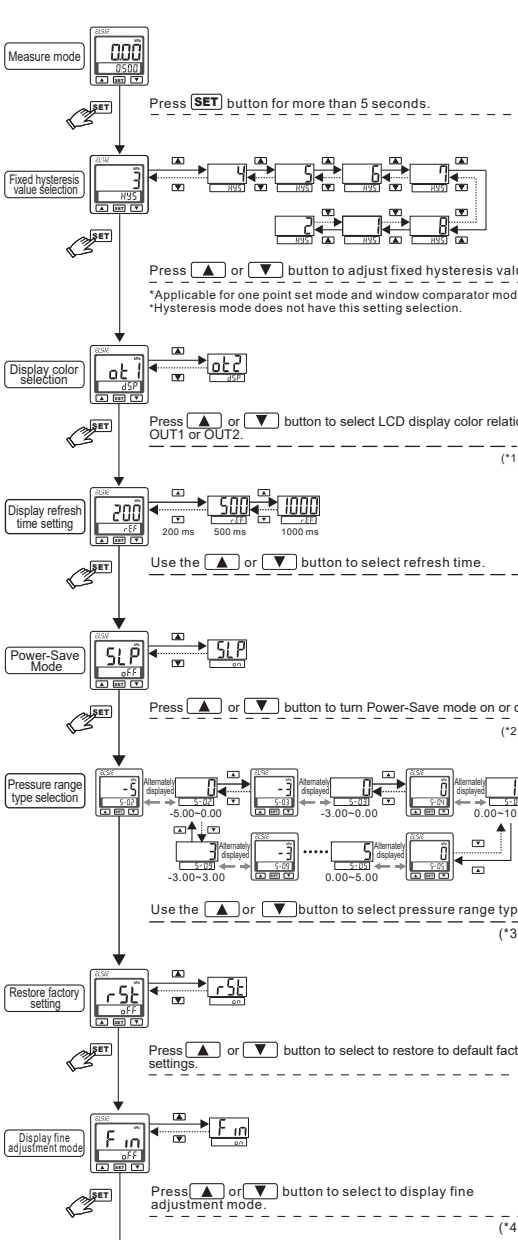
I. ZERO POINT SETTING



J. PEAK/BOTTOM HOLD FUNCTION

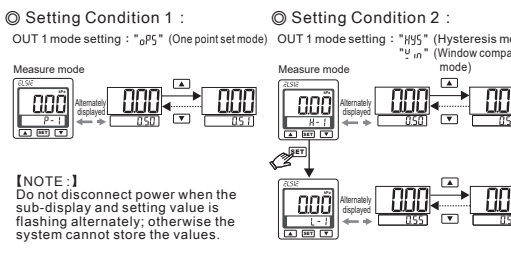


K. ADVANCE SETTING MODE

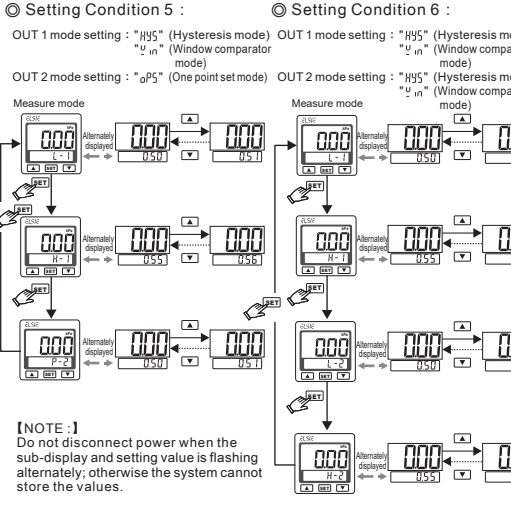
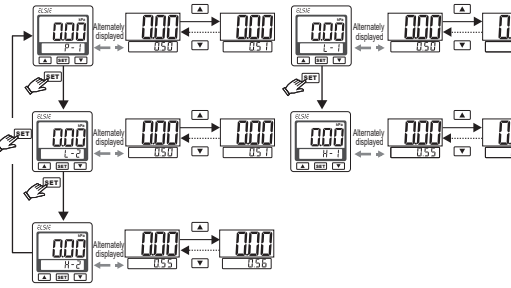
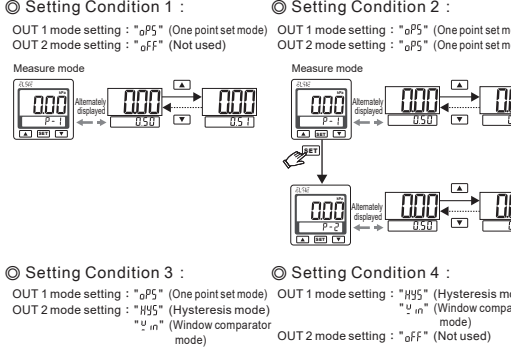


- [NOTE:]**
- *1. This setting mode will not display OUT2 when output spec. is 1 OUT.
 - *2. When setting is "SLP", the power-save mode is active. Please refer to the item "POWER-SAVE MODE" in detailed.
 - *3. After selecting pressure range type, please return to zero.
 - *4. When setting is "FAD", the display fine adjustment mode is active. Please refer to the item "FINE ADJUSTMENT MODE" in detailed.

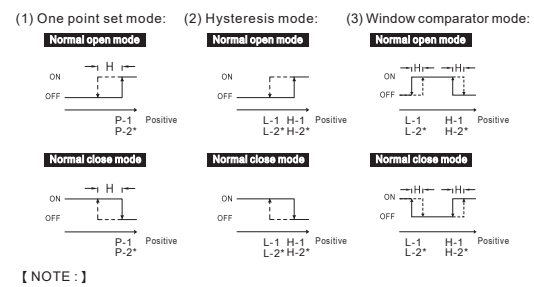
L. PRESSURE SETTING MODE (1 OUT)



M. PRESSURE SETTING MODE (2 OUT)

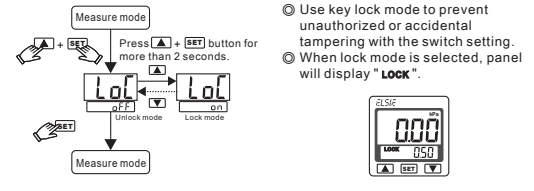


N. OUTPUT TYPE

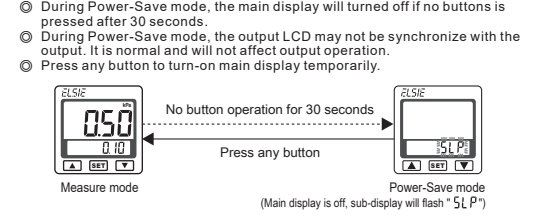


- [NOTE:]**
- *1. Pressure setting value of P-2, L-2 or H-2 won't be shown when output spec. is 1 OUT.
 - *2. In case hysteresis is set at less than or equal to 2 digits, switch output may chatter if input pressure fluctuates near the set point.
 - *3. When using window comparator mode, the difference between two set points must be greater than the fixed hysteresis, otherwise will cause the switch output to malfunction.

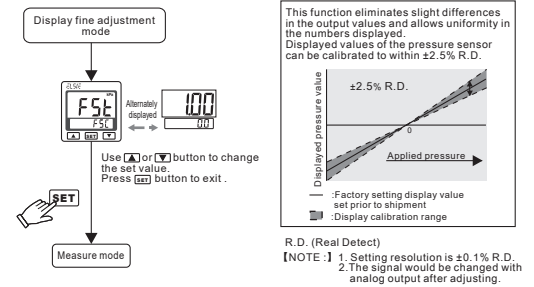
O. KEY LOCK/UNLOCK MODE



P. POWER-SAVE MODE



Q. FINE ADJUSTMENT MODE



R. China RoHS

Part Name	Hazardous Substances					
	Pb	Hg	Cd	Cr VI	PBB	PBDE
Metal Part	X	O	O	O	O	O
Plastic Part	O	O	O	O	O	O
Electronic	X	O	O	O	O	O
Cable & Cabling accessories	O	O	O	O	O	O

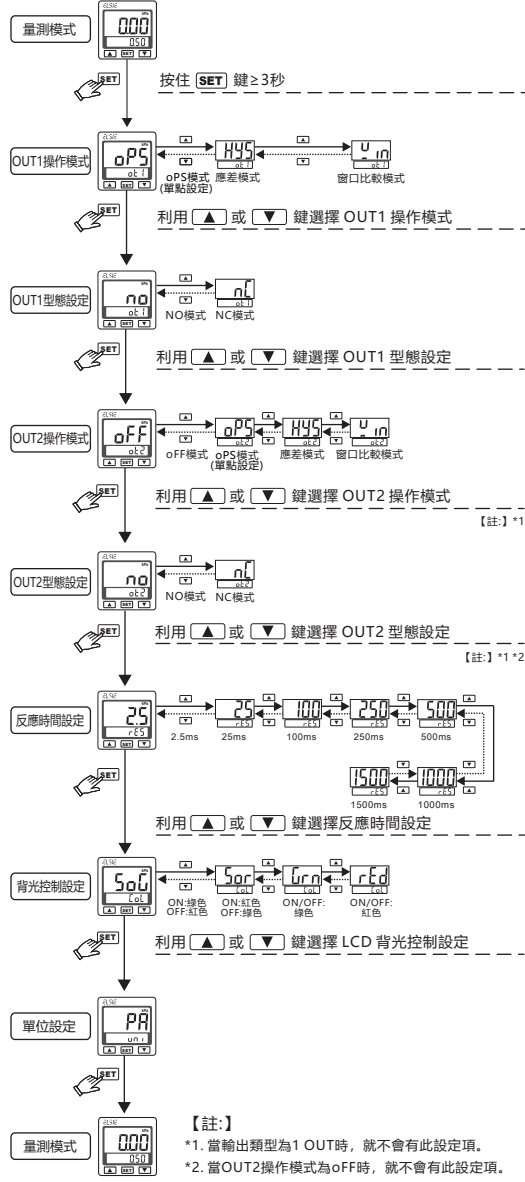
This table is made according to SJ/T 11364.
 O: Indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.
 X: Indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572.

A. 規格表

Table with columns for Model (EP47S), Range (01-09), and various specifications like Pressure Range, Accuracy, and Environmental Conditions.

*1. 單點設定模式及窗口比較模式僅可調整 1 - 8 digits 的應差。

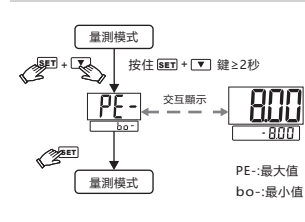
H. 基本設定模式



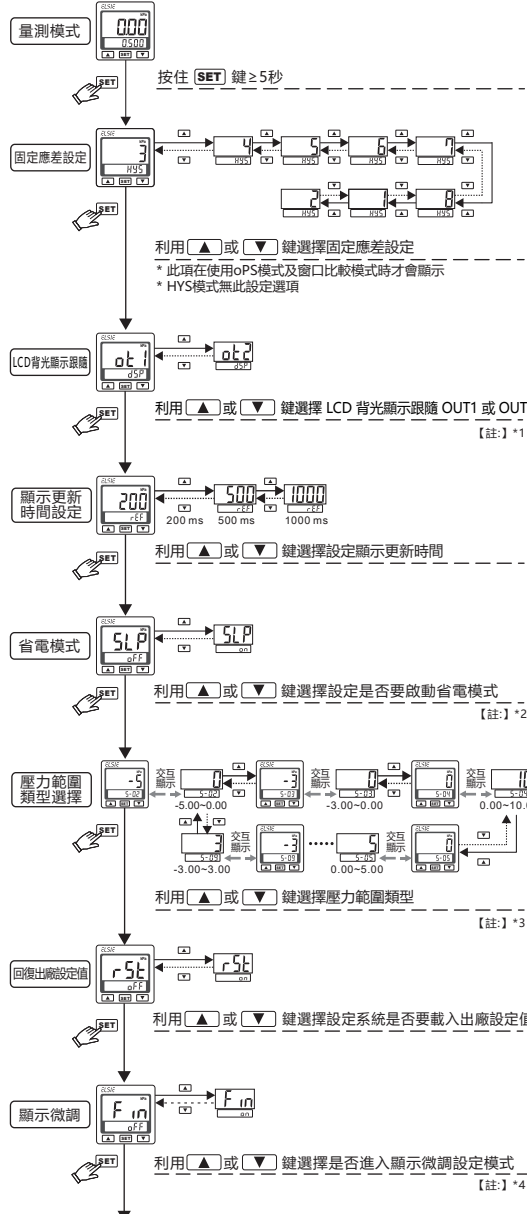
I. 歸零設定



J. 最大/最小值顯示

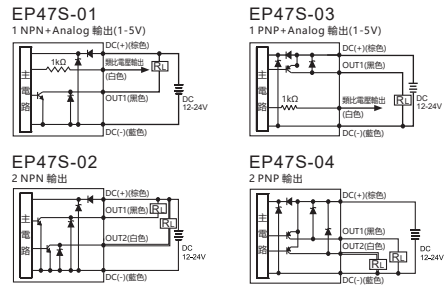


K. 進階設定模式



Notes for advanced settings, including output type and display adjustment.

B. 輸出電路接線圖



C. 型號規格說明

EP47S-01-F1

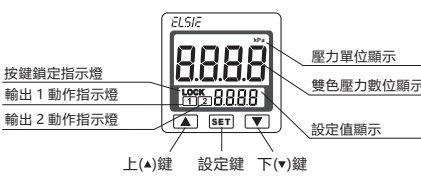
- Output types: 01: 1 NPN output, 02: 2 NPN output, 03: 1 PNP output, 04: 2 PNP output.

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

配件類型 (選購)

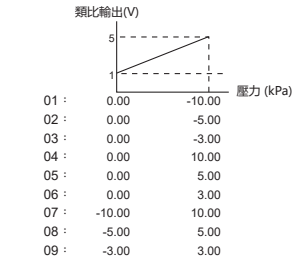
- BT-22: 固定架; BT-23: 固定架; PA-C: 面板接合器; PA-D: 面板接合器+前保護蓋.

D. 面板說明

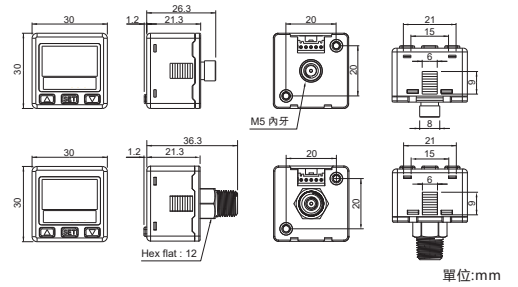


E. 線性類比輸出說明

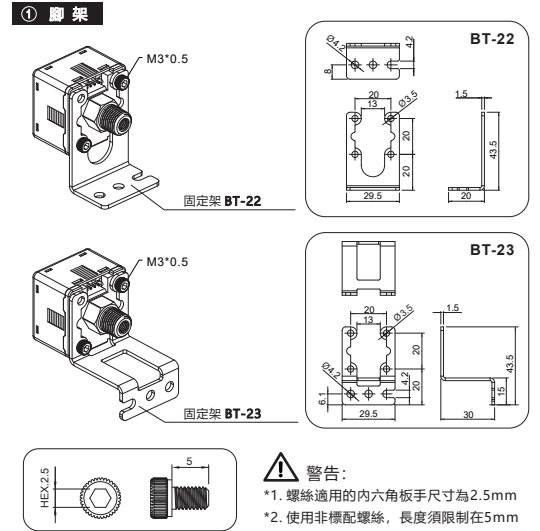
類比輸出範圍介於1-5V, 符合所需壓力範圍值。



F. 外觀尺寸



G. 配件類型 / 尺寸圖



② 面板式

