

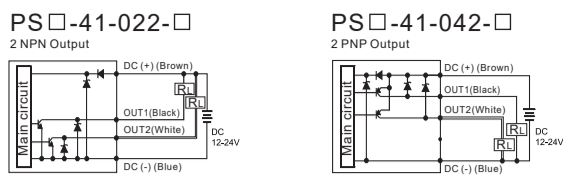
For your safety, please read the following before using.

- 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

TYPE	PSN-41 (Positive)	PSC-41 (Compound)
Rated pressure range	0.000~1.000MPa	-100.0~100.0kPa
Set pressure range	-0.100~1.000MPa	-101.0~101.0kPa
Withstand pressure	1.5MPa	300kPa
Fluid	Filtered air, Non-corrosive / Non-flammable gas	
Set pressure resolution	kPa	0.1
	MPa	0.001
	kgf/cm ²	0.001
	bar	0.001
	psi	0.01
	inHg	0.1
Power supply voltage	12 to 24V DC ±10%, Ripple (P-P) 10% or less	
	Current consumption ≤ 40mA (With no load)	
Switch output	Output type 2 NPN or 2 PNP open collector	
	Max. load current 125 mA	
Display	Max. supply voltage 30V DC (at NPN output), 24V DC (at PNP output)	
	Residual voltage ≤ 1.5V	
Repeatability (Switch output)	Response time Chattering-proof function: 50ms, 250ms, 500ms, 1000ms, 2000ms, 3000ms selections	
	Output short circuit protection Yes	
LCD display	3 1/2 digital, 7 segment LCD display (Red/Green/Orange) (Sampling rate: 5 times/sec.)	
	Switch on indicator Orange indicator 1: OUT1 & Orange indicator 2: OUT2	
Environment	Updates time Adjustment	
	Indicator accuracy ±2% F.S. ±1 digit (ambient temperature: 25 ±3°C)	
Temperature characteristic	Repeatability (Switch output) ±0.2% F.S. ±1 digit	
	Enclosure IP40	
Lead wire	Operation ambient temp. range 0 ~ 50°C	
	Storage ambient temp. range -10 ~ 60°C (No condensation or freezing)	
Weight	Ambient humidity range 35 ~ 85% RH (No condensation)	
	Withstand voltage 1000V AC in 1-min (between case and lead wire)	
Weight	Insulation resistance 50MΩ (at 500V DC, between case and lead wire)	
	Vibration Total amplitude 1.5mm or 10G, 10Hz~55Hz~10Hz scan for 1 minute, two hours each direction of X, Y and Z	
Weight	Shock 100ms ² (10G), 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	
Weight	Lead wire Ø4 Oil-resistance cable (PVC) - 26 AWG (0.15 mm ²) - 4 cores	
	Approx. 65g (with 2 meter lead wire) Approx. 30g (with male connector)	

B. OUTPUT CIRCUIT WIRING DIAGRAMS



C. ORDERING INFORMATION

P S C - 4 1 - 0 2 2 - Q D

Pressure Range

C: Compound (-101.0~101.0kPa)
N: Positive (-0.100~1.000MPa)

Output Specifications

022: 2 NPN Output
042: 2 PNP Output

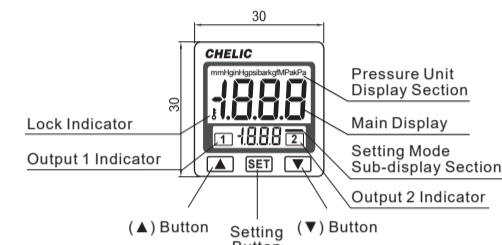
Cable Length/Connector

Blank: With 2 meter cable
QD: With M8, 4Pin male connector

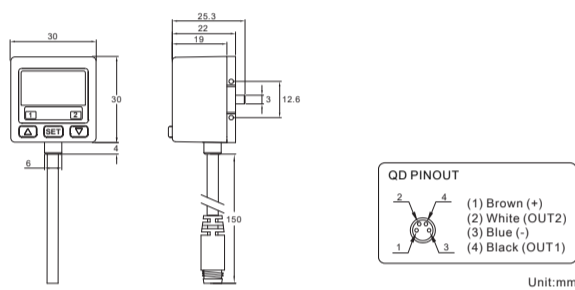
Optional Parts

PS-2M-PVC: M8, 4Pin female connector

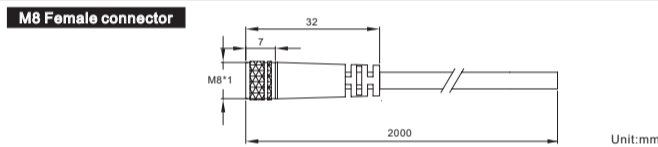
D. PANEL DESCRIPTION



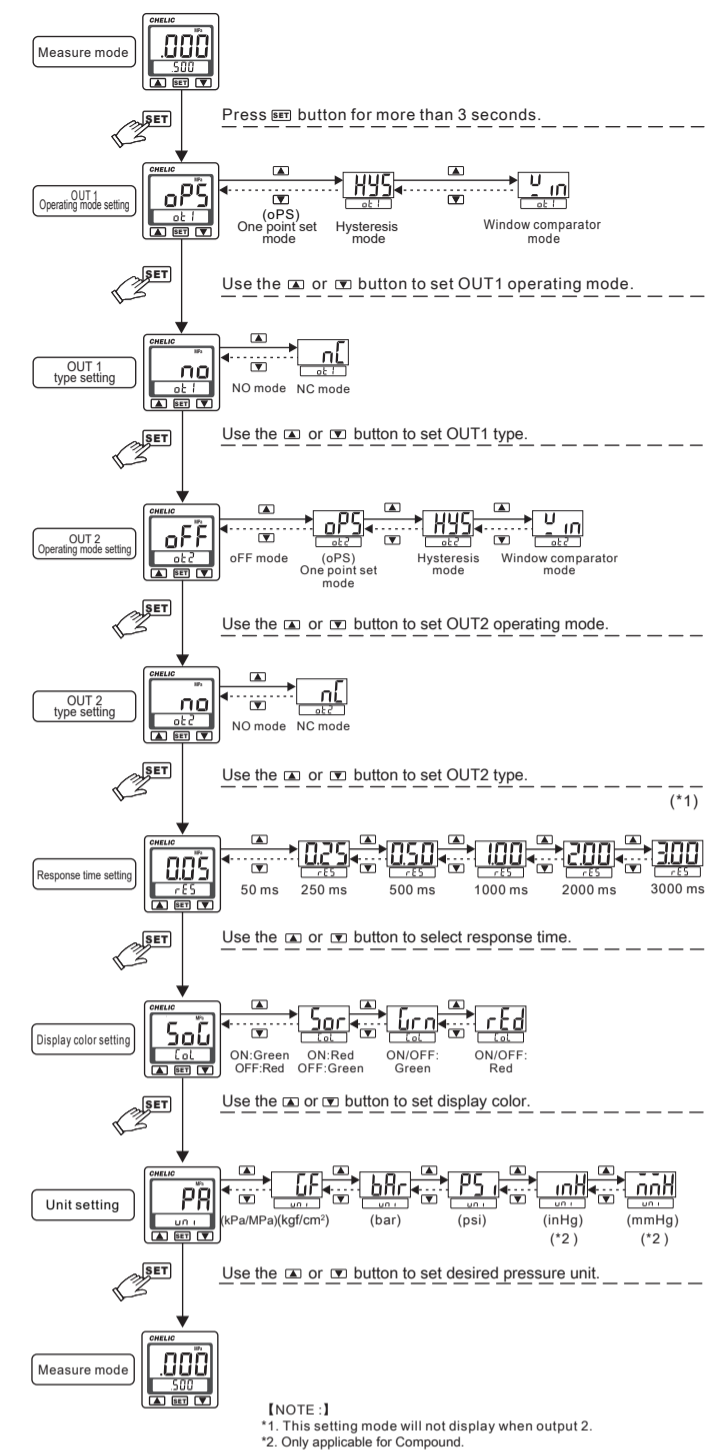
E. DIMENSIONS



F. OPTIONAL PART DIMENSIONS

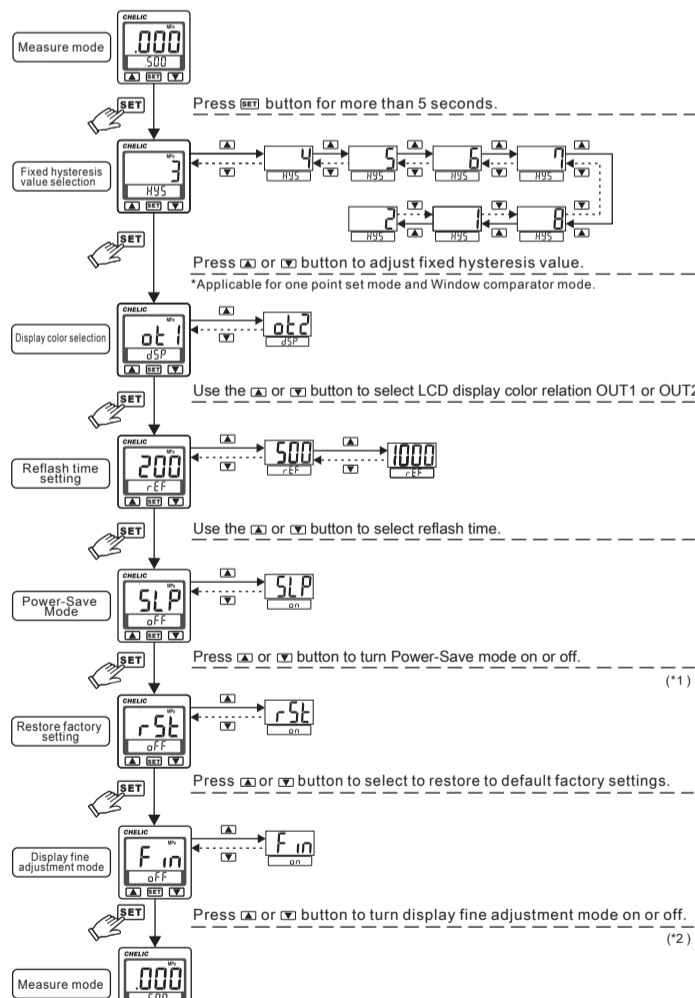


G. INITIAL SETTING MODE



[NOTE:]
*1. This setting mode will not display when output 2.
*2. Only applicable for Compound.

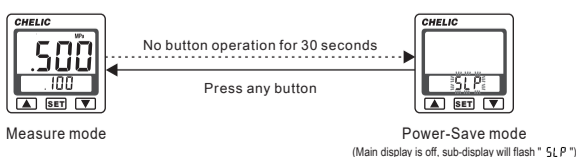
H. ADVANCE SETTING MODE



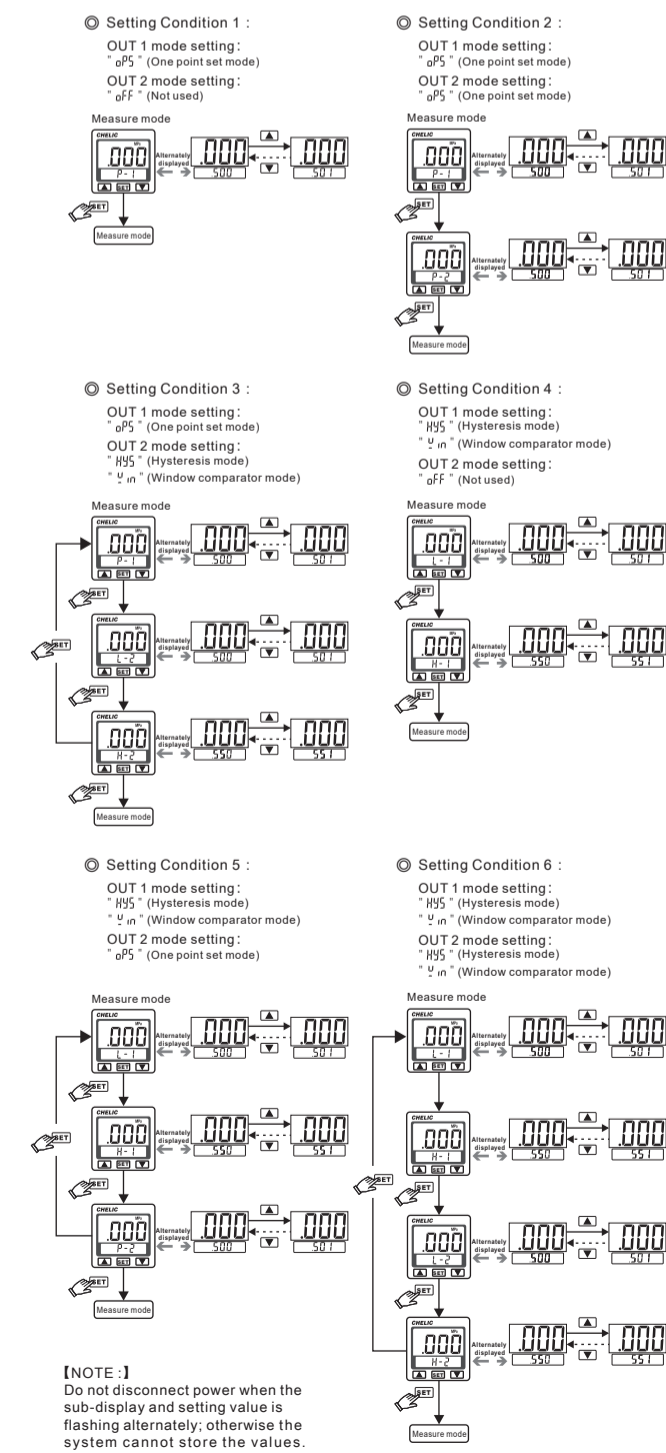
[NOTE:]
*1. When the sub-display shows "ON", Power-Save mode is active. Please refer to Section [I] for detailed explanation.
*2. When the sub-display shows "ON", Display fine adjustment mode is active. Please refer to Section [O] for detailed explanation.

I. POWER-SAVE MODE

- During Power-Save mode, the main display will be turned off if no buttons are pressed after 30 seconds.
- During Power-Save mode, the output LCD may not be synchronized with the output. It is normal and will not affect output operation.
- Press any button to turn-on main display temporarily.

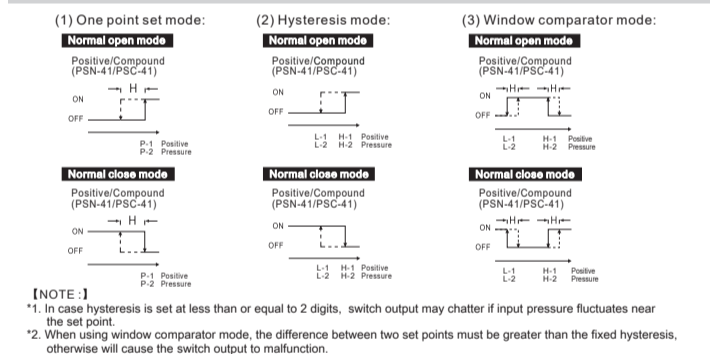


J. PRESSURE SETTING MODE

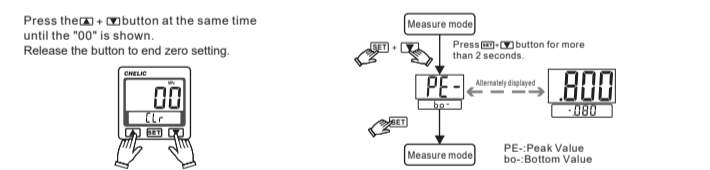


[NOTE:]
Do not disconnect power when the sub-display and setting value is flashing alternately; otherwise the system cannot store the values.

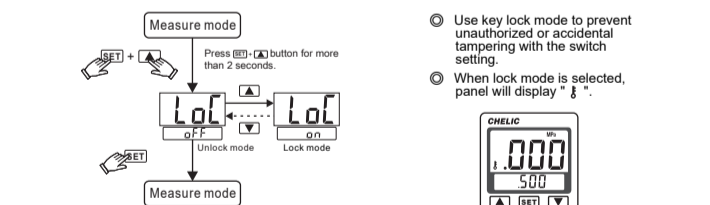
K. OUTPUT TYPE



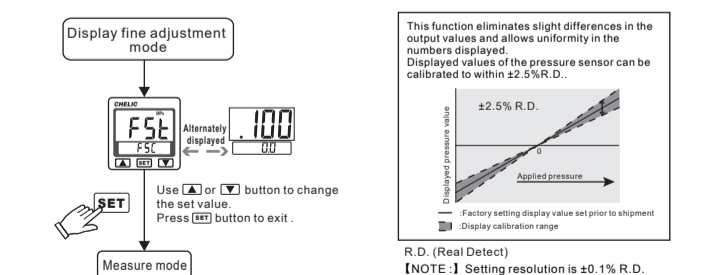
L. ZERO POINT SETTING **M. PEAK/BOTTOM HOLD FUNCTION**



N. KEY LOCK/UNLOCK MODE



O. FINE ADJUSTMENT MODE



P. ERROR CODE INSTRUCTION

Error Type	Error code	Error Condition	Troubleshooting
Excess load current error	Er 1	Output 1 load current is more than 125 mA	Turn power off and check the cause of overload current or lower the current load under 125 mA, then restart.
Residual pressure error	Er 3	During zero reset, ambient pressure is over ±3% F.S.	Change input pressure to ambient pressure and perform zero reset again.
Applied pressure error	HHH	Supply pressure exceeds the upper limit of pressure setting.	Adjust the pressure within operating pressure range.
	LLL	Supply pressure exceeds the lower limit of pressure setting.	
System error	Er 4	Internal system error	Turn power off, and then restart. If error condition remains, please return to factory for inspection.
	Er 5	Internal system error	
	Er 6	Internal data error	

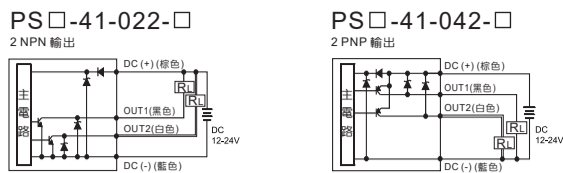
使用本產品應注意事項：

- 禁止使用於腐蝕性及易燃性的氣體或任何液體。
- 請在規格表內的額定壓力範圍內使用，若供給之壓力超過最大耐壓會使本產品損壞，導致功能異常。
- 裝設本產品時，請勿用力撞擊或從高處掉落，即使外觀未受損傷也可能因內部零件損壞而導致功能異常。
- 在連接本產品於電路控制系統時，應先關閉電源，因為錯誤的接線或短路會導致本產品損壞。
- 本產品請勿使用在有水氣或油霧的環境中。
- 本系列產品並未有防塵驗證，請勿使用於空氣中含有爆炸性氣體或粉塵環境中。
- 不可將連接本產品的導線與電源線或其它高壓電線纏繞在一起，以避免雜訊的干擾，而影響到本產品的功能。

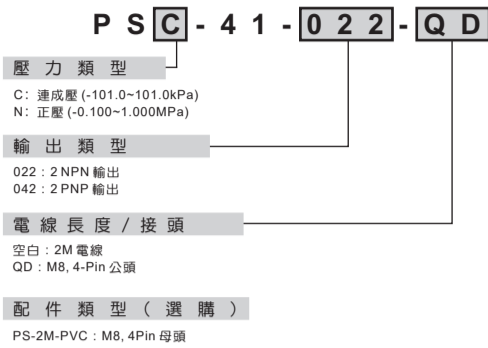
A. 規格表

型號	PSN-41 (正壓)	PSC-41 (差壓)
額定壓力範圍	0.000~1.000MPa	-100.0~100.0kPa
設定壓力範圍	-0.100~1.000MPa	-101.0~101.0kPa
耐壓力	1.5MPa	300kPa
適用氣體	空氣、非腐蝕性、不可燃性	
壓力單位設定 最小刻度	kPa	0.1
	MPa	—
	kgf/cm ²	0.001
	bar	0.001
	psi	0.01
	inHg	0.1
mmHg	—	1
電源電壓	12 to 24V DC ±10%, 漣波係數 ≤10%	
消費電流	≤ 40mA (無負載時)	
開關輸出	輸出型態	2 NPN 或 2 PNP 開集極輸出
	最大負載電流	125 mA
	最大供應電壓	2 NPN 30V DC, 2 PNP 24V DC
	內部壓降	≤ 1.5V
反應時間	預設動作功能: 50ms, 250ms, 500ms, 1000ms, 2000ms, 3000ms 可選擇	
輸出短路保護	有	
顯示	顯示方式	3 1/2 位 7 段 LCD 顯示 (紅/綠/橙) (取樣率: 5次/秒)
	動作顯示燈	橙色指示燈 1: OUT1 & 綠色指示燈 2: OUT2
	更新時間	可調整
	顯示精度	±2% F.S. ±1 digit (在範圍溫度: 25 ±3°C)
重複精度	±0.2% F.S. ±1 digit	
耐環境	結構保護等級	IP40
	使用溫度範圍	0 ~ 50°C
	儲存溫度範圍	-10 ~ 60°C (無水露及不結冰狀況下)
	環境濕度範圍	35 ~ 85% RH (無水露)
耐衝擊	耐電壓	1000V AC 1分鐘 (引線及塑膠外殼間)
	絕緣阻抗	50MΩ 以上 (500V DC) (引線及塑膠外殼間)
	耐振動	複振幅 1.5mm 或 10G, 每1分鐘 10Hz-55Hz-10Hz, X-Y-Z 每軸方向各2小時
耐衝擊	100ms ² (10G), X-Y-Z 每軸方向各3次	
溫度特性	±2% F.S. 比較參考溫度 25°C (0-50°C 溫度範圍內)	
電線規格	Ø4 耐油 PVC-26 AWG (0.15 mm ²) - 4 芯	
重量	約 65g (包含 2 公尺的電線) 約 30g (包含 M8.4Pin 公頭)	

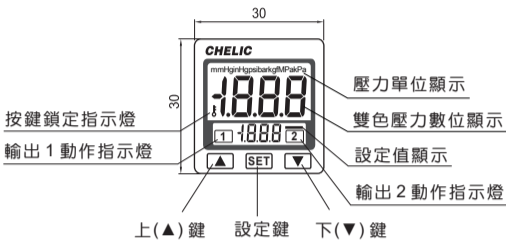
B. 輸出電路接線圖



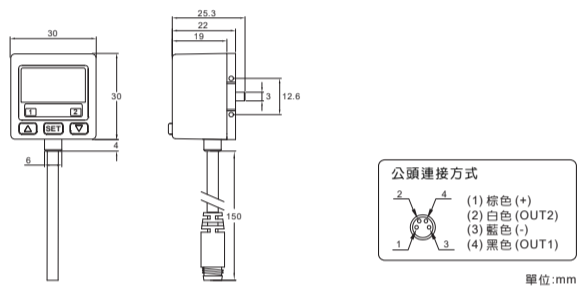
C. 型號規格說明



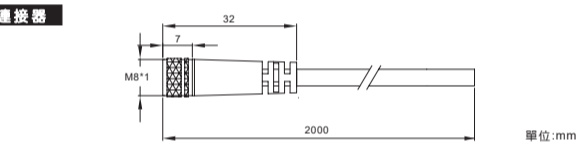
D. 面板說明



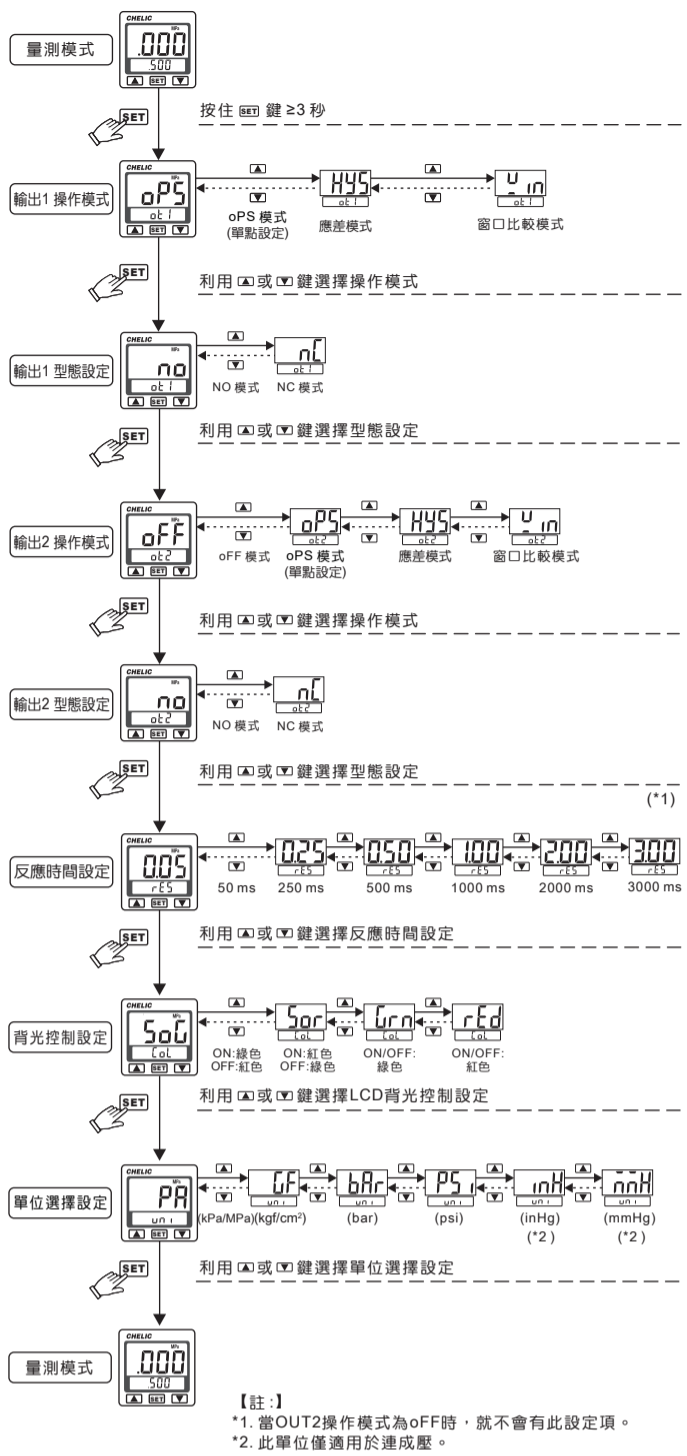
E. 外觀尺寸



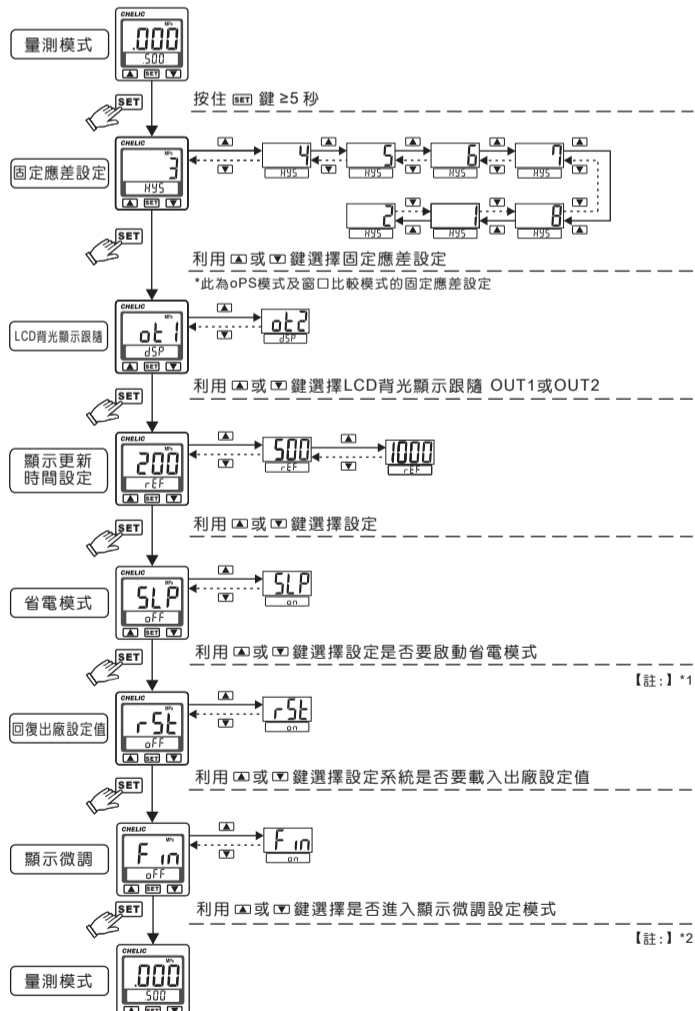
F. 配件類型/尺寸圖



G. 基本設定模式



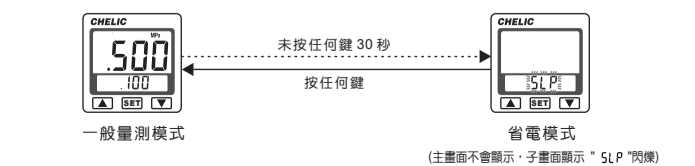
H. 進階設定模式



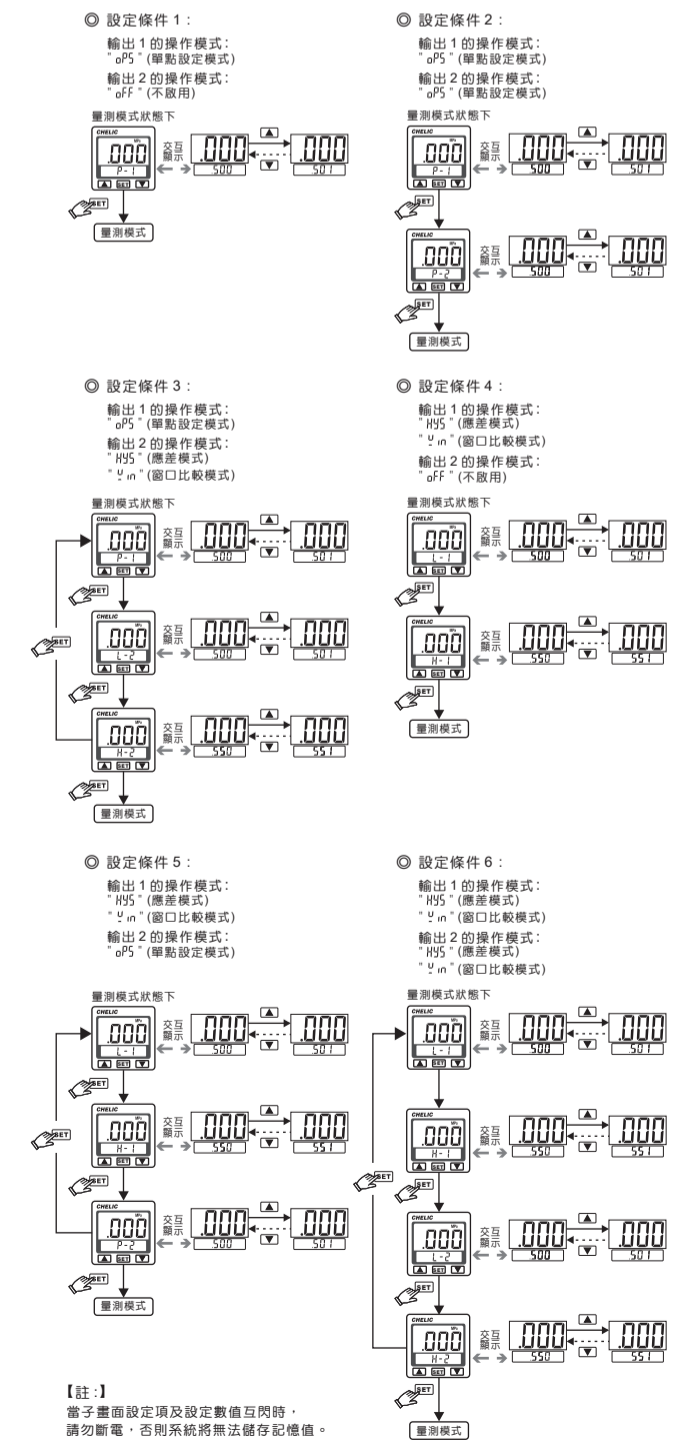
【註：】
*1. 當設定為ON時，即啟動省電模式，詳細說明請參考說明書第□項。
*2. 當設定為ON時，即進入顯示微調的設定模式，詳細說明請參考說明書第□項。

I. 省電模式

- 當啟動省電模式設定時，壓力傳感器在量測模式下，未按任何鍵30秒後，壓力傳感器會進入省電模式。
- 當壓力傳感器處於省電模式時，傳感器動作指示燈可能會有不同步的現象，但不會影響傳感器的動作。
- 當壓力傳感器處於省電模式時，按下任何鍵，壓力傳感器會自動回到一般量測模式。

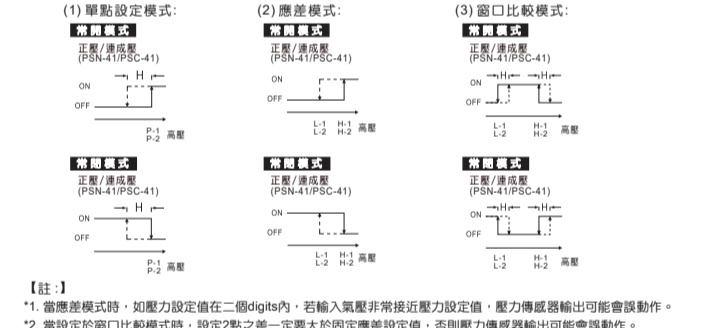


J. 壓力設定模式

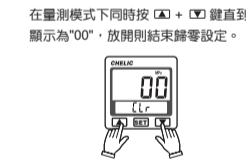


【註：】
當子畫面設定項及設定數值互閃時，請勿斷電，否則系統將無法儲存記憶值。

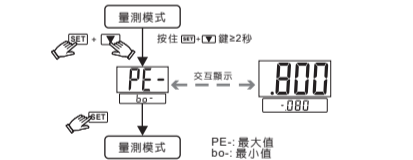
K. 輸出型態



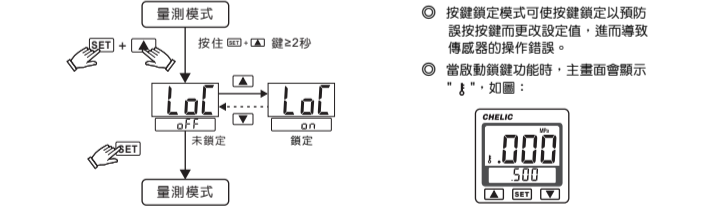
L. 歸零設定



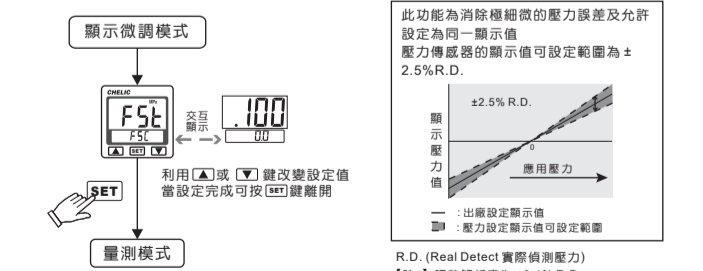
M. 最大/最小值顯示



N. 按鍵鎖定功能



O. 顯示微調功能



P. 錯誤訊息說明

錯誤名稱	錯誤顯示	錯誤說明	解決
過電流錯誤	Er1	輸出1負載電流超過125mA	關閉電源，檢查負載電流過大的原因或將負載電流降至125mA以內再重新啟動
殘留壓力錯誤	Er3	零值設定範圍超過±3% F.S.	改變周邊壓力之後，再重新作歸零
使用壓力錯誤	HHH	使用的壓力超過壓力設定值的上限	供給壓力請調整在使用壓力範圍內
	LLL	使用的壓力超過壓力設定值的下限	
	Er4	內部系統錯誤	
系統錯誤	Er5	內部系統錯誤	切斷電源並重新供電若沒回復正常狀態則需送回原廠分析
	Er6	內部資料錯誤	
	Er7	內部資料錯誤	
	Er8	內部資料錯誤	