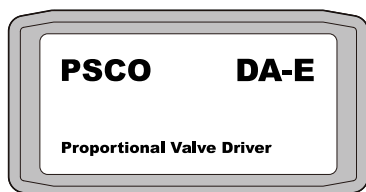


產品外觀

PRODUCT APPEARANCE



MADE IN TAIWAN

訂購代號

ORDER NO.

PSCO	-	A
系列	信號	
PSCO	A	類比信號 Analog Signal
	P	PWM 信號 PWM Signal

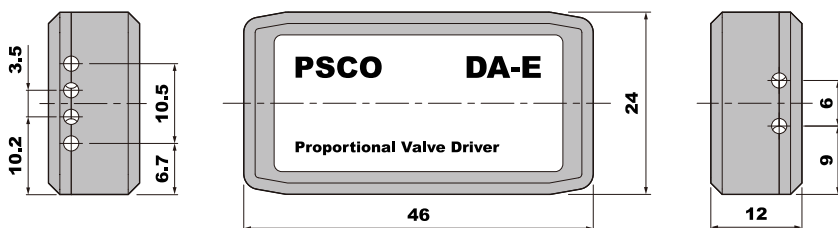
- 標準化規格，嚴格品質管控，確保產品穩定可靠

**Standardized Specifications, Strict Quality Control,
Ensuring Consistent and Reliable Performance**

尺寸圖

DIMENSION

Proportional Valve Driver



原理說明

OPERATING PRINCIPLE

- 比例閥控制器供電後，透過內部開關元件快速切換輸出電源，以調節流經比例閥線圈的電流。控制器持續偵測輸出電流，並根據電流回授調整輸出，使電流維持在設定值，進而在電壓源供電條件下實現穩定的定電流驅動。

When powered, the proportional valve controller rapidly switches the output through internal switching devices to regulate the current flowing through the valve coil.

The controller continuously monitors the output current and adjusts the output based on current feedback to maintain the set value, providing stable constant-current drive from a voltage source.

型 號 Type	信號 Signal	電阻阻止 Resistance	控制器對應電流規格 Corresponding Controller Current Rating
PSCO-A	類比信號 Analog Signal 0~20mA / 4~20mA 0~5V / 0~10V	200 mΩ	125 / 250 / 500 / 1000 mA
		500 mΩ	50 / 100 / 200 mA
PSCO-P	PWM 信號 PWM Signal 3~5V	200 mΩ	125 / 250 / 500 / 1000 mA

當 200 mΩ 與 500 mΩ 控制器皆符合所需電流規格時，建議優先選用 200 mΩ 控制器

When both 200 mΩ and 500 mΩ controllers meet the required current specifications, the 200 mΩ controller is recommended.

1

控制信號 CONTROL SIGNAL

控制器支援 0~5 V / 0~10 V / 0~20 mA / 4~20 mA 標準控制信號，可依需求選擇其中一種
控制器依輸入信號比例調整輸出電流，控制比例閥開度

The controller supports standard 0-5 V, 0-10 V, 0-20 mA, and 4-20 mA control signals.
The output current is adjusted proportionally to the input signal to control the valve opening.

2

接線與操作 WIRING & OPERATION

正確連接電源、控制信號及比例閥，並依比例閥與控制器規格選擇適用的供電電壓
供電後，即可透過調整控制信號控制比例閥開度

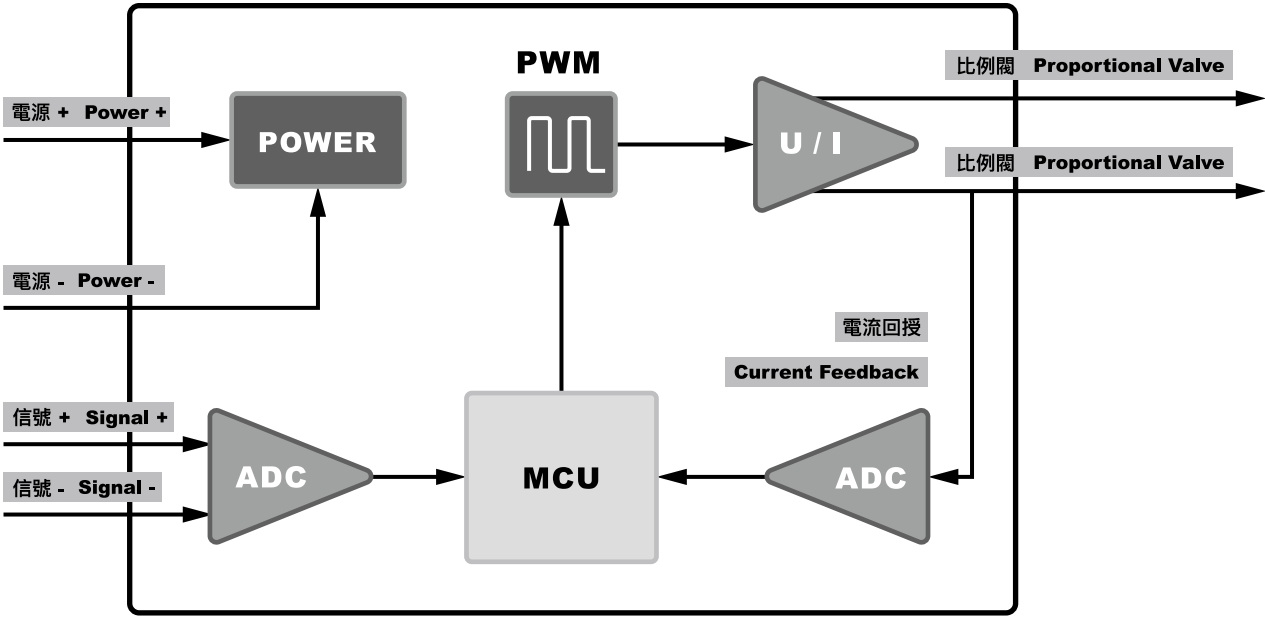
Connect the power supply, control signal, and proportional valve correctly.
Select the appropriate supply voltage according to the valve and controller specifications.
Once powered, the valve opening can be controlled by adjusting the input signal.

3

控制範例 CONTROL EXAMPLE

以 0~5 V 輸入、最大輸出電流 1A 為例，當輸入信號為 4V (80%) 時，控制器輸出電流約為 0.8 A (80%)
實際流量請依比例閥的流量特性或規格資料確認

For a 0-5 V input and a maximum output current of 1 A, a 4 V input (80%) produces approximately 0.8 A (80%) output current. Refer to the valve's flow characteristics or specifications for the corresponding flow rate.



接線說明

WIRING INSTRUCTIONS



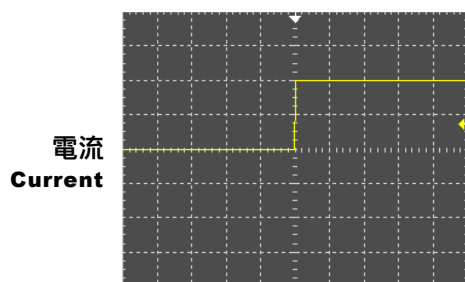
顏色 COLOR	說明 DESCRIPTION	信號說明 SIGNAL DESCRIPTION
紅色 Red	電源 + POWER +	DC12V / DC24V <small>電壓依比例閥規格而定</small> Voltage Depends on Proportional Valve Specifications
藍色 Blue	電源 - POWER -	共地 Common GND
黃色 Yellow	信號 - SIGNAL -	共地 Common GND
灰色 Gray	信號 + SIGNAL +	0~5V / 0~10V or 0~20mA / 4~20mA <small>選配：比例閥流量控制信號</small> Optional: Proportional Valve Flow Control Signal
黑色 Black	比例閥輸出端 Proportional Valve Output	連接比例閥驅動端 Proportional Valve Drive Connection

	功能 FUNCTION	控制方法 CONTROL METHOD
電磁閥 Solenoid Valve	僅有開啟與關閉兩種狀態，分別對應流體的導通與截止 Operates in only two states, ON and OFF, corresponding to flow and shut-off respectively.	通電時，電磁閥作動；斷電時，電磁閥停止作動 Energized: Solenoid valve operates ; De-energized: Solenoid valve stops operating.
比例閥 Proportional Valve	可連續且成比例地調整閥的開度，進而控制流體的流量或壓力 Provides continuous and proportional valve opening control to regulate fluid flow or pressure.	透過連續可調的電流，成比例地控制比例閥開度 Controls the proportional valve opening by continuously varying the current.

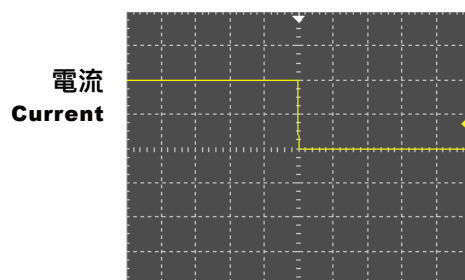
電磁閥 vs. 比例閥 | 控制波形

SOLENOID VALVE vs. PROPORTIONAL VALVE CONTROL WAVEFORMS

電磁閥 SOLENOID VALVE



電壓升高，電磁閥完成動作
Voltage Applied, Solenoid Valve Actuated



電壓回零，電磁閥歸位
Voltage Removed, Solenoid Valve Returns to Normal Position

比例閥 PROPORTIONAL VALVE

