

HOW TO ORDER 編號說明

1	2	3	4
AMP —	V	02B —	**

1 VALVE SERIES 系列名稱

AMP= Proportional Electronic Controller
比例電子控制器

2 OUTPUT SIGNAL 輸出信號

A : 4 - 20mA
V : 0 - 10V

3 DESIGN NO 設計編號

4 MAXIMUM OUTPUT CURRENT 最大輸出電流

Non : 1 (A) (Standard) 無記號 : 1 (A) (標準型)
18 : 1.8 (A)

DESCRIPTION 說明

Power amplifiers for proportional valves.
比例閥用功率放大器。

GENERAL PRECAUTIONS 一般注意事項

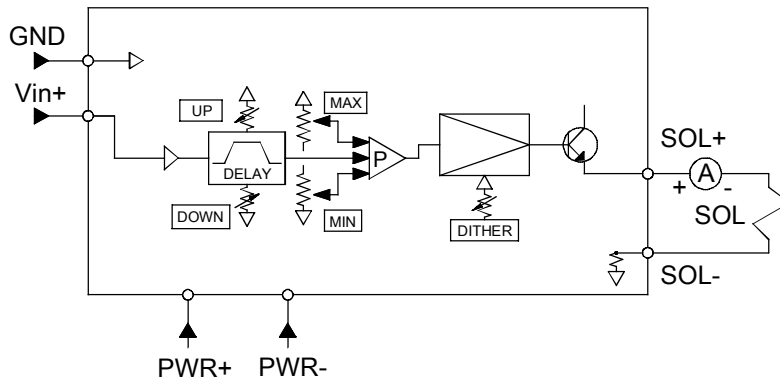
For connection between the amp/controller and solenoid coil, use a 2-conductor shielded wire with a conductor nominal cross-section area of 2.0mm². Type VCTF (Rated Voltage: 300V vinyl cab tire cord. Wiring between the command voltage generator and amplifier should be VCTF 0.75mm² 3-conductor wire. Class 3 grounding. If the ground line is unstable, do not connect the shield to anything.

放大器、控制器和電磁線圈之間的連接，請使用導體通用橫斷面積為2.0mm²、線心數為2的屏蔽線，其型號為VCTF(額定電壓300V乙稀橡膠絕緣軟線)。指令電壓發生器和放大器之間的結線，請使用0.75mm²、線心數為3的VCTF型號。屏蔽線使用第3種接地方式。但是在地線不穩定的情況下，不要連接到任何線上。

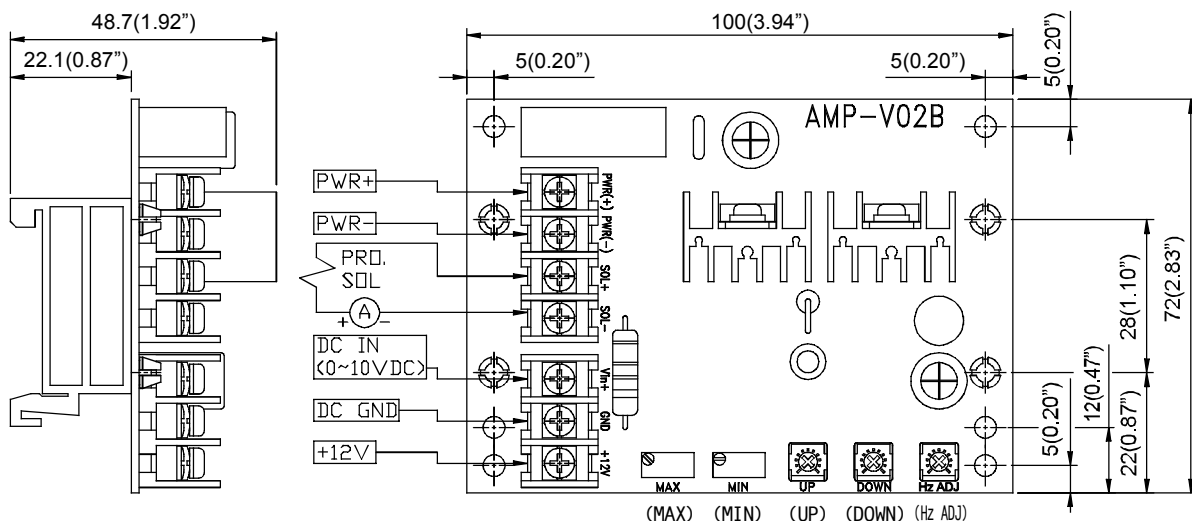
TECHNICAL DATA 技術資料

Voltage type 功能型式	DC Input 輸入	Dither frequency (DITHER) 高頻脈動頻率 (Hz)	50 ~ 300
DC Power Input DC電源輸入 (V DC)	24	Input control volt. 控制訊號輸入	(mA) 4 ~ 20
			(V DC) 0 ~ 10
Maximum power 最大輸出功率 (W)	30	FUSE (A)	2
Valve coil resistance 負載組抗 (R)	10	Operation temperature 環境溫度 (°C)	0 ~ 65(32 ~ 149°F)
Maximum output current 最大輸出電流 (A)	1	Temperature drift (max.) 溫度轉移(最大)	0.3mA/°C
	1.8	Storage temperature 儲藏溫度 (°C)	-10 ~ 75(14 ~ 167°F)

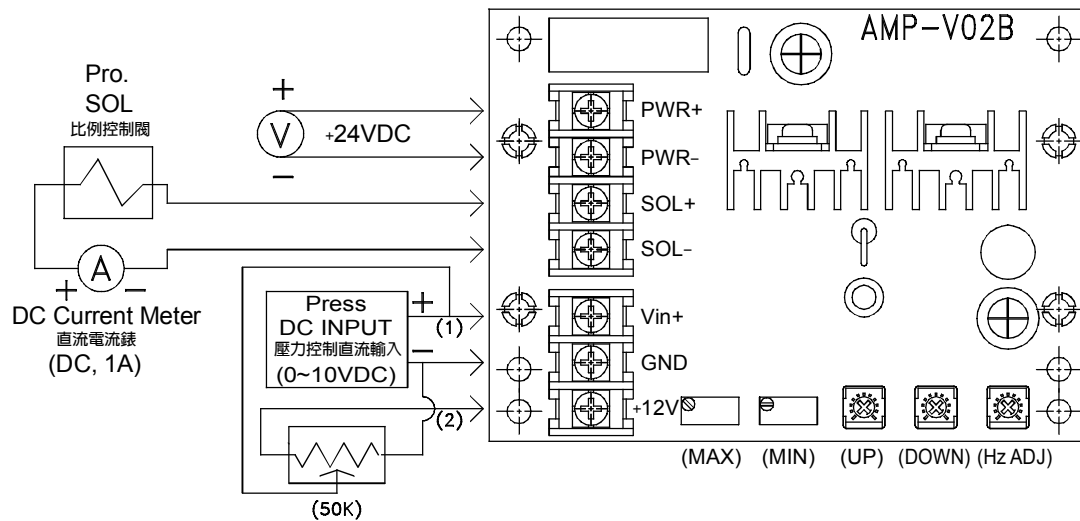
CONTROL PORT(S) 動作形式



DIMENSIONS 外型尺寸圖



◆ ADJUSTMENT 配線調整



● CONTROL METHODS 控制方法

- (1) Controller D/A Output, 控制器 D/A 輸出控制
- (2) Potential Meter (50K) for Manual. Adj. 手動調整的電位電錶(50K)

● WIRING 配線方式

- 1) Wiring following diagram as above. Please use DC 1A Current Meter. If without designing in current meter, please adjust according to hydraulic pressure indicator for pressure adjustment.
電流錶配線如上圖例, 選擇1安培直流電流錶(1A, DC). 壓力若不裝電流錶, 則以壓力錶作為調整的依據。
- 2) List two control methods for just one using at a time:
列出兩種控制方式, 僅能選擇其中一種方式做控制:
 - (1) Controller D/A output DC 0~10V
控制器輸出 D/A DC 0~10V
 - (2) Potential Meter (50K) for Manual adjustment which using +12VDC on board.
手動調整的電流錶(50K)是用12VDC.

● ADJUSTMENT STEPS 調整步驟

- 1) MIN ADJ. 最小值調整
When control signal output is 0V, adjust MIN VR to the setting value of DC current (with current meter) or pressure (with pressure indicator). (clockwise for increasing value)
當輸出控制信號是0V, 調整最小值來設定DC(用電流錶)的電流或壓力(用壓力計). (順時針增加)
- 2) MAX ADJ. 最大值調整
When control signal output is 10V (for D/A output) or maximum voltage (for potential meter), adjust MAX VR to the setting value of DC current (with current meter) or pressure (with pressure indicator). (clockwise for increasing value. For potential meter, input voltage can up to 12V with no damage)
當D/A輸出控制信號是10V或最大值伏特(電位電錶), 調整最大VR來設定DC電流值(用電流錶)或壓力(用壓力計). (順時針增加電位電錶的話最大可以到12V)
- 3) Ramp (UP) 上升斜率調整
Clockwise adjustment rising time shorter reaction speed faster.
Counter clockwise adjustment rising time longer reaction speed slower.
順時針調整, 上升時間短, 反應速度快。
逆時針調整, 上升時間長, 反應速度慢。
- 4) Ramp (DOWN) 下降斜率調整
Clockwise adjustment decline time shorter reaction speed faster.
Counter clockwise adjustment decline time longer reaction speed slower.
順時針調整, 下降時間短, 反應速度快。
逆時針調整, 下降時間長, 反應速度慢。
- 5) FREQUENCY ADJ. (Hz ADJ) 頻率調整
Adjusting potentiometer, it is possible to set the PWM frequency obtaining the desired control sensitivity. Clockwise rotation increases frequency from 50 to 300 Hz max. (Set frequency at 150 Hz when goods finished)
調整該內部電位器, 能夠進行PWM頻率設置, 得到想要的控制靈敏度。順時針轉動, 把頻率從50 Hz增加到最大值300 Hz. (出廠頻率設定為150 Hz)

