

## AH0608LT-CA\*



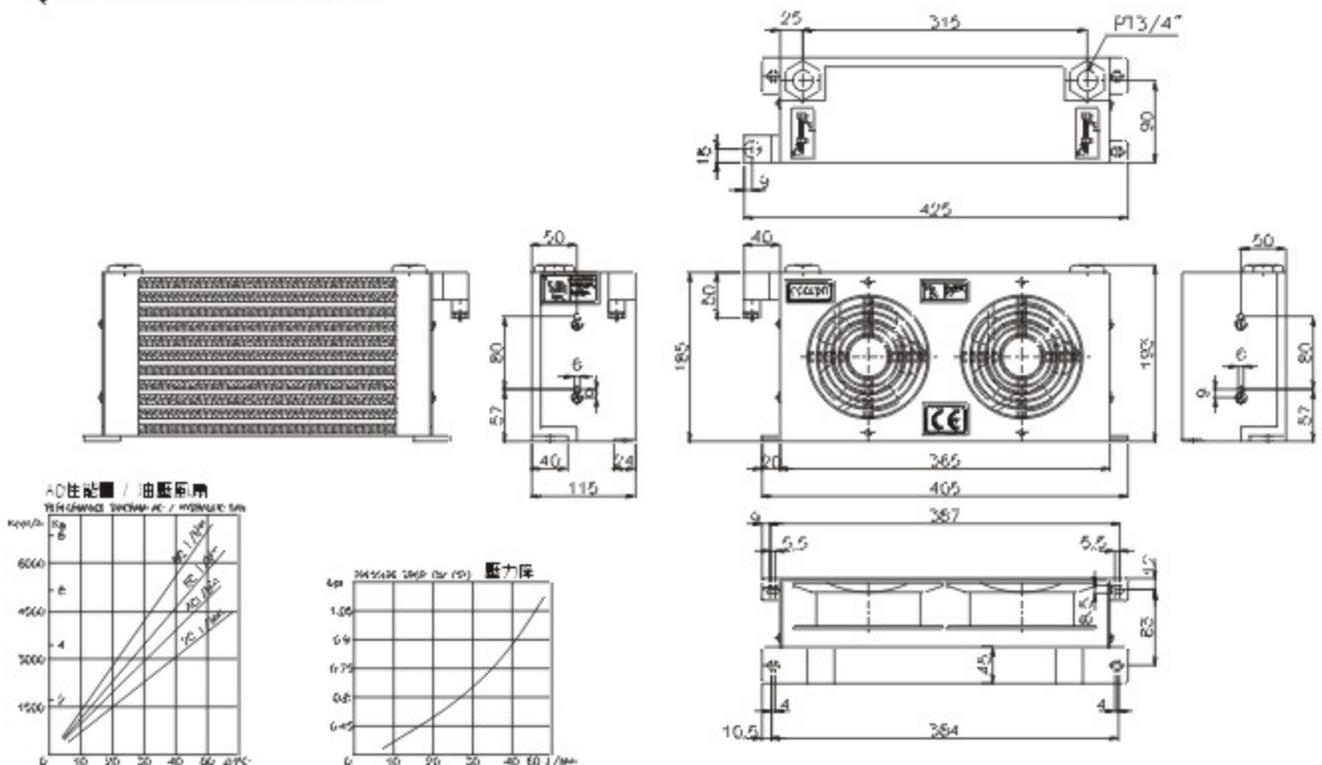
### ◆ SPECIFICATIONS 規格

MODEL 型式	AH0608LT-CA*
SIZE 尺寸	W405 x H200 x D115mm
DELIVERY CAP. 油流量	60 l/Min
THREAD 接口	PT3/4"
COOLING POWER 冷却能力	3000 Kcal/h $\Delta t=30^{\circ}\text{C}$
HYDRAULIC MOTOR 適用油壓機馬力	Under 3~5HP 以內
PRESSURE 使用壓力	20Bar (By-pass release circuit depend on your need 旁通洩壓閥視自行決定)
WEIGHT 重量	6 Kg

Hydraulic oil return circuit can be used the AH type oil cooler. If need please set by-pass release circuit for safety.

\*本AH型冷却器，適用於油壓回油管路，但視情況加裝旁通洩壓閥，以策安全。

### ◆ DIMENSIONS 外型尺寸



# HYDRAULIC ACCESSORIES

油壓附屬零配件

## AH0608T-CA\*



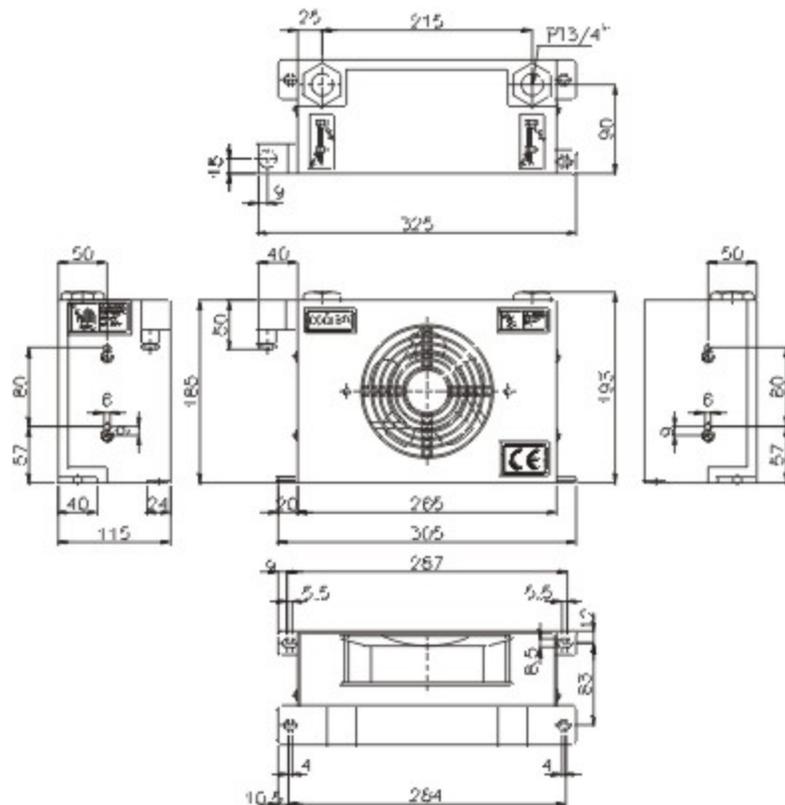
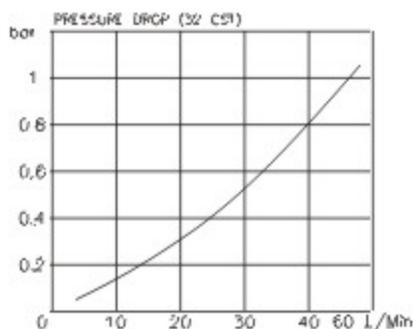
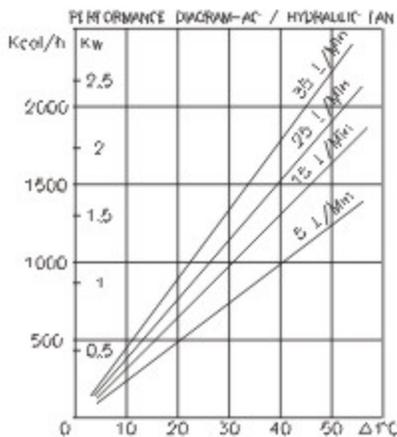
### ◆ SPECIFICATIONS 規格

MODEL 型式	AH0608T-CA*
SIZE 尺寸	W305xH200xD115 m/m
DELIVERY CAP. 流量	60 l/Min
THREAD 接口	PT3/4"
COOLING POWER 冷卻能力	1000 Kcal/h $\Delta t=30^{\circ}\text{C}$
HYDRAULIC MOTOR 適用油壓馬力	Under 2~3HP 以內
PRESSURE 使用壓力	20Bar (By-pass release circuit depend on your need 旁通旁路過熱請自行決定)
WEIGHT 重量	4.2 Kg

Hydraulic oil return circuit can be used the AH type oil cooler. If need please set by-pass release circuit for safety.

\*本AH型油 cooler，適用於油壓回油過熱，但視情況增加旁通旁路，以策安全。

### ◆ DIMENSIONS 外型尺寸



# HYDRAULIC ACCESSORIES

油壓附屬零配件

## AH1012-CA\*



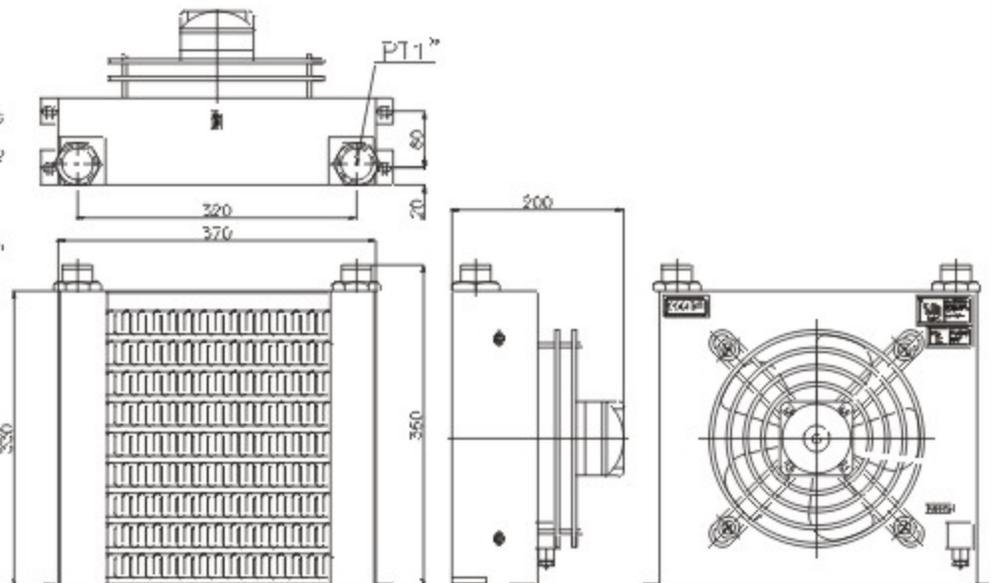
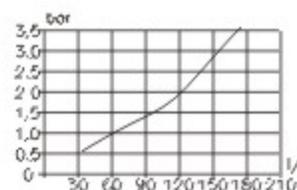
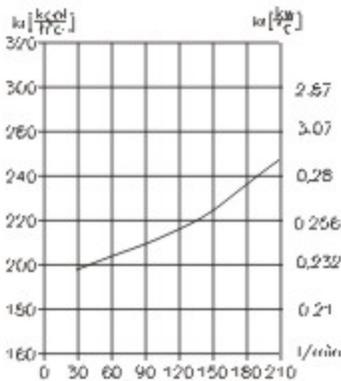
### ◆ SPECIFICATIONS 規格

MODEL 型式	AH1012-CA*
SIZE 尺寸	W410xH370xD200mm
DELIVERY CAP. 油流量	100L/Min (Back-pressure 背壓 1.3Bar)
THREAD 牙口	PT1"
COOLER 冷却器	Plate-fin heat exchangers 組合全封閉式高壓冷却器 AH1210
FAN MOTOR 風扇馬力	Single 單相 220V Power 功率 16W German EBM 德國EBM廠牌
HYDRAULIC MOTOR 適用油壓機馬力	Under 15HP 以內
PRESSURE 使用壓力	20Bar (By-pass release circuit depend on your need 旁通及泄油路請自行決定)
WEIGHT 重量	9.5 Kg

Hydraulic oil return circuit can be used the AH type oil cooler. If need please set by-pass release circuit for safety.

\*本AH型冷却器，適用於油壓回油管路，但視情況加裝旁通及泄油路，以策安全。

### ◆ DIMENSIONS 外型尺寸



# HYDRAULIC ACCESSORIES

油壓附屬零配件

## AH1470-CA\*



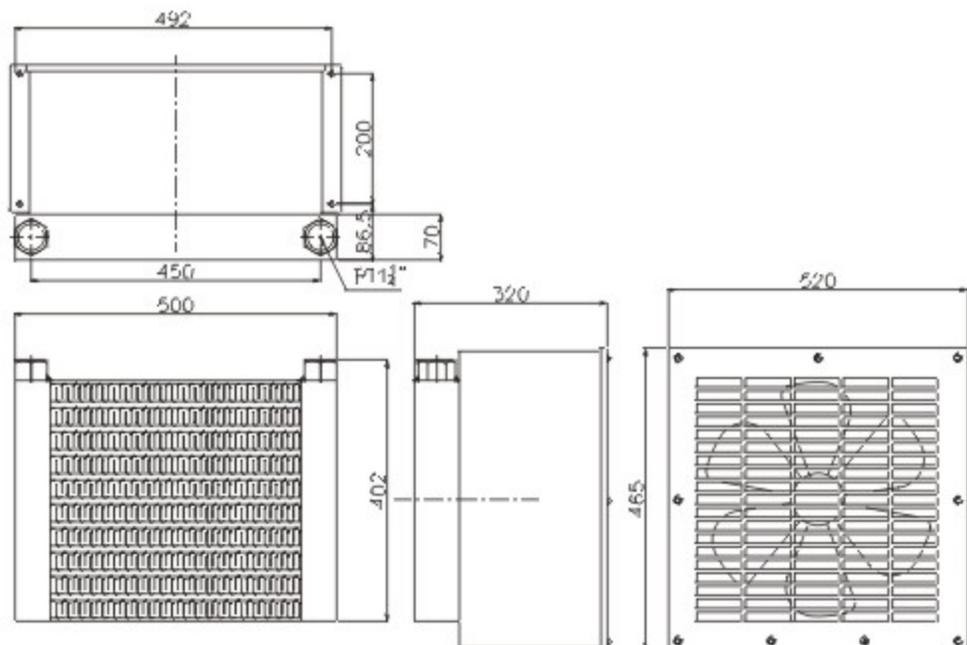
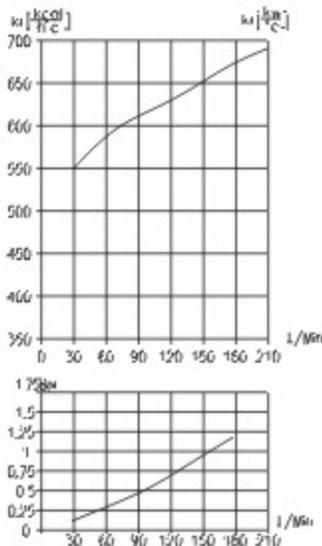
### ◆ SPECIFICATIONS 規格

MODEL 型式	AH1470-CA*
SIZE 尺寸	W520xH475XD200mm
DELIVERY CAP. 通油量	200L/Min (Back-pressure 背壓 1.3Bar)
THREAD 接口	PT1 1/4"
COOLER 冷卻器	Plate-fin heat exchangers 組合全封閉式高壓冷卻器
FAN MOTOR 風扇馬力	1/2HP 220/380 + 415V Three-phase 三相
AIR FLOW 風量	150 M <sup>3</sup> /Min
HYDRAULIC MOTOR 適用油壓機馬力	Under 30HP 以內
PRESSURE 使用壓力	20Bar (By-pass release circuit depend on your need 旁通放壓電路請自行決定)
WEIGHT 重量	25 Kg

Hydraulic oil return circuit can be used the AH type oil cooler. If need please set by-pass release circuit for safety. \*本AH型冷卻器，適用於油壓回油管路，但請視情況加裝旁通放壓電路，以策安全。

\*本AH型冷卻器，適用於油壓回油管路，但請視情況加裝旁通放壓電路，以策安全。

### ◆ DIMENSIONS 外型尺寸



## AH1470-A\*



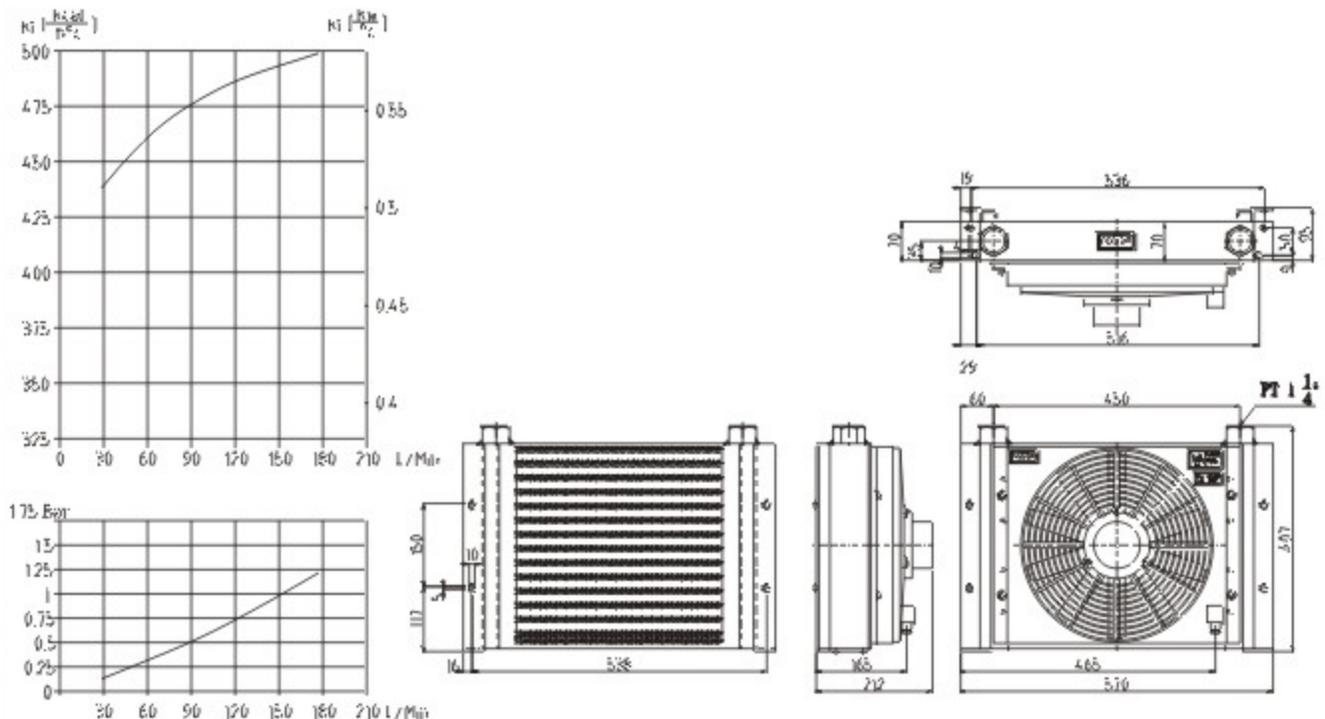
### ◆ SPECIFICATIONS 規格

MODEL 型式	AH1470-A*
SIZE 尺寸	W520xH475XD200mm
DELIVERY CAP. 流量	200L/Min(Back-pressure 背壓1.3Bar)
THREAD 牙口	PT1 1/4"
COOLER 冷却器	Plate-fin heat exchangers 組合全封閉式高壓冷却器 AH1470
FAN MOTOR 風扇馬力	50w 110/220 Single 單相
AIR FLOW 風量	55 M <sup>3</sup> /Min
HYDRAULIC MOTOR 適用油壓機馬力	Under 20HP 以內
PRESSURE 使用壓力	20Bar (By-pass release circuit depend on your need 旁通安全溢流閥自行決定)
WEIGHT 重量	13 Kg

Hydraulic oil return circuit can be used the AH type oil cooler. If need please set by-pass release circuit for safety.

\*本AH型冷却器，適用於油壓回油路，但情況情況加裝旁通溢流閥，以策安全。

### ◆ DIMENSIONS 外型尺寸



## AH1680- CA\*



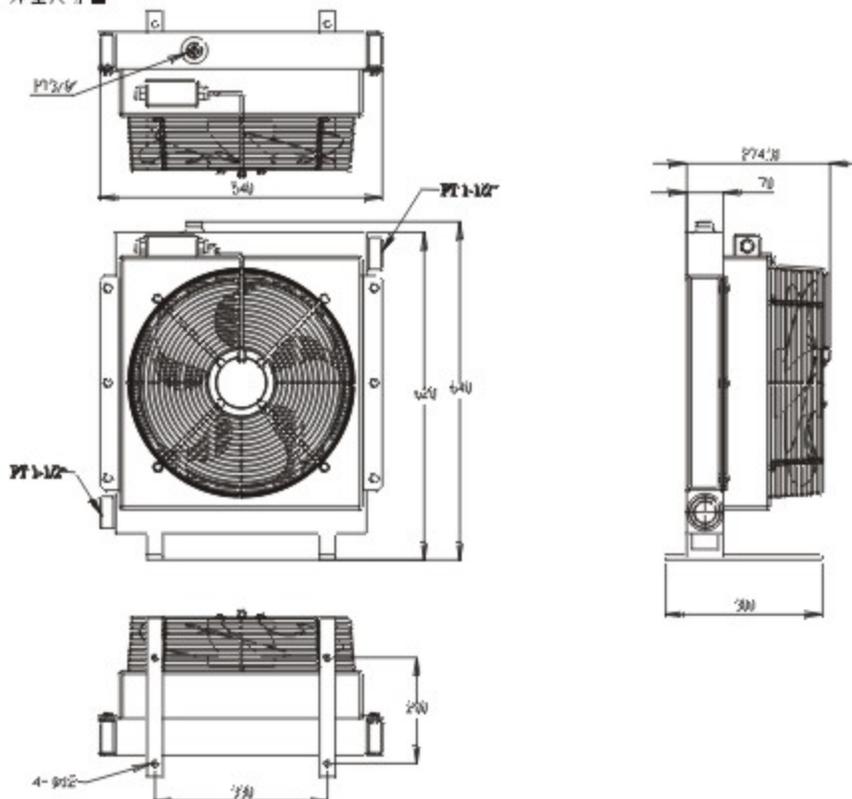
### ◆ SPECIFICATIONS 規格

MODEL 型式	AH1680- CA*
SIZE 尺寸	W520xH640xD300
DELIVERY CAP. 油流量	300L/Min (Back-pressure 背壓1.5 Bar)
THREAD 接口	PT1 1/2"
COOLER 冷卻器	Plate-fin heat exchangers 組合全封閉式高壓冷卻器 AH1680
FAN MOTOR 風扇馬力	德國 EBM Blades 葉片 D400mm=16" 220/380, 415, 440V Three-phase 50/60Hz 共用
HYDRAULIC MOTOR 適用油壓機馬力	Under 50HP 以內
PRESSURE 應用壓力	20Bar (By-pass release circuit depend on your need 旁通洩壓油路請自行決定)
WEIGHT 重量	30Kg

Hydraulic oil return circuit can be used the AH type oil cooler. If need please set by-pass release circuit for safety.

◆ 本AH型冷卻器，適用於油壓回油油路，但情況情況加裝旁通洩壓油路，以策安全。

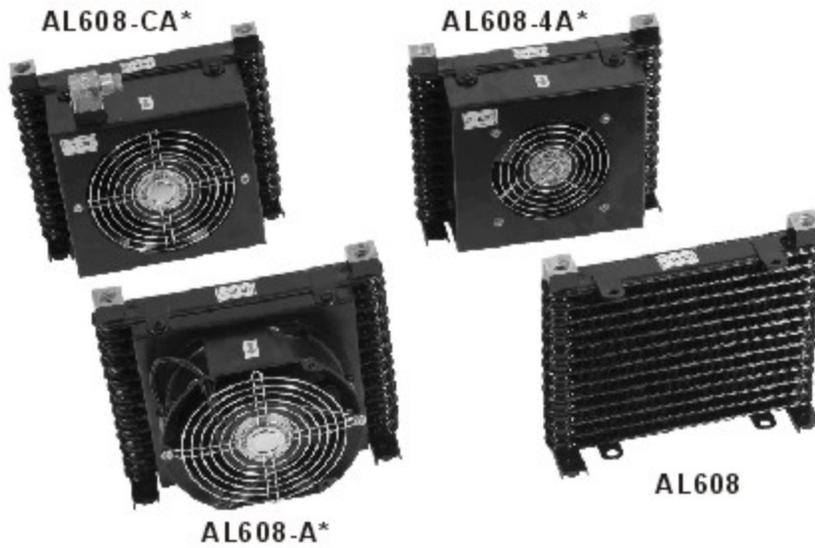
### ◆ DIMENSIONS 外型尺寸



# HYDRAULIC ACCESSORIES

油壓附屬零配件

## AL608

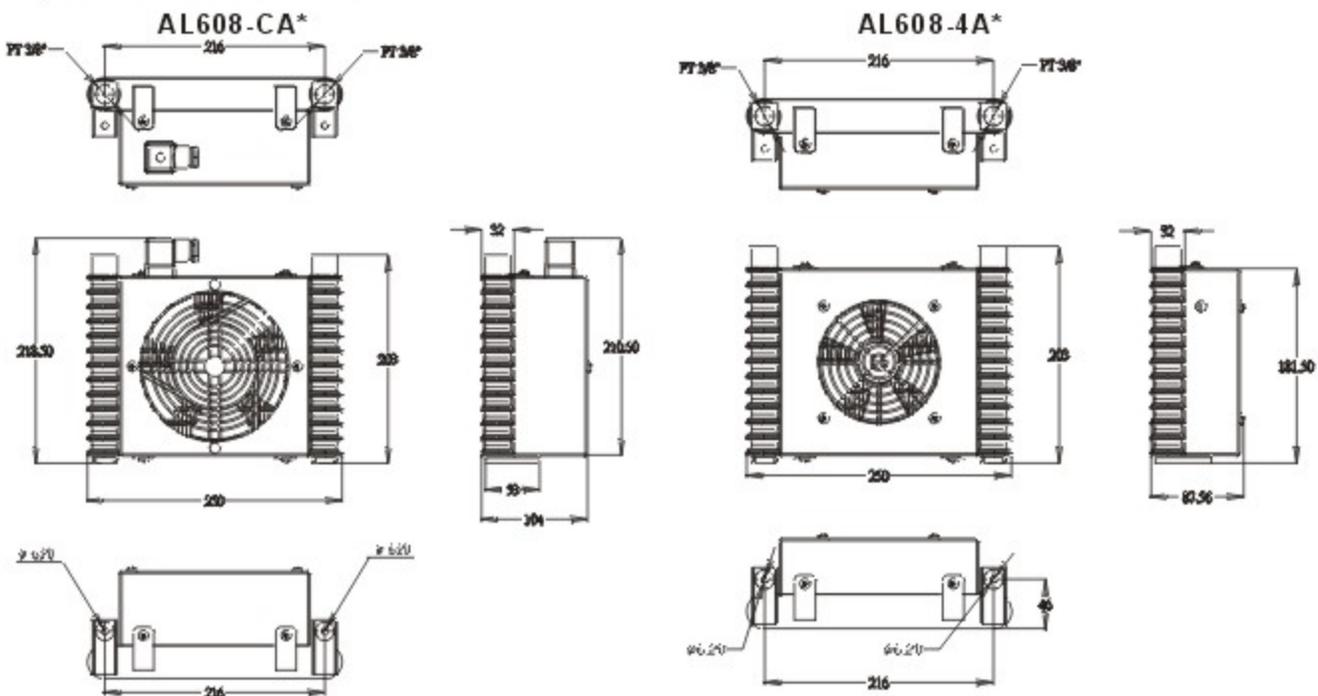


### ◆ SPECIFICATIONS 規格

PRESSURE 使用壓力	10 Bar
Maximum 最大使用流量	10 l/Min
THREAD 牙口	PT3/8"

	AL608 ONE PIECE 單片	AL608 -A*	AL608 -CA*	AL608 -FA*	AL608 -4A*
FAN SIZE 扇形規格	X	6"	6"	6"	6"
WIRING SYSTEM 配線方式	X	OUTER 外壓式	DIN PLUG SEAT 插座式	OUTER 外壓式	OUTER 外壓式
FILTER CLOTH 濾布網	X	X	X	○	X

### ◆ DIMENSIONS 外型尺寸

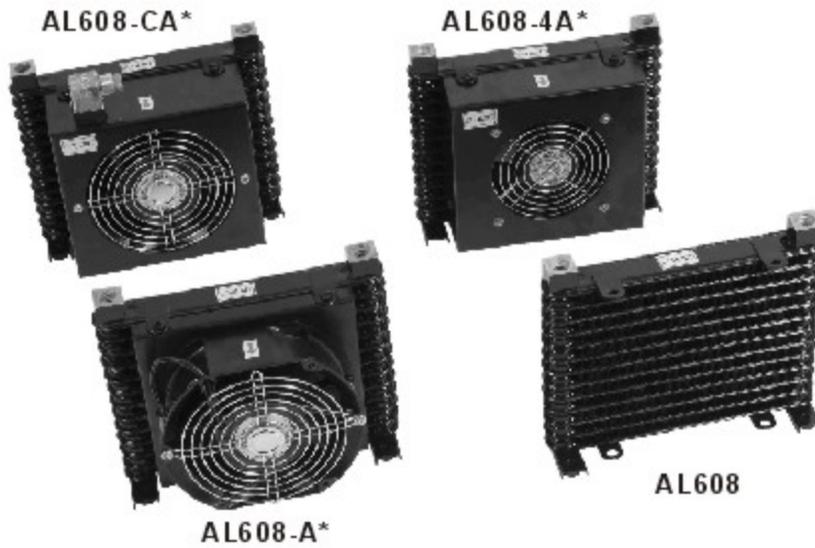


ACCESSORIES

# HYDRAULIC ACCESSORIES

油壓附屬零配件

## AL608

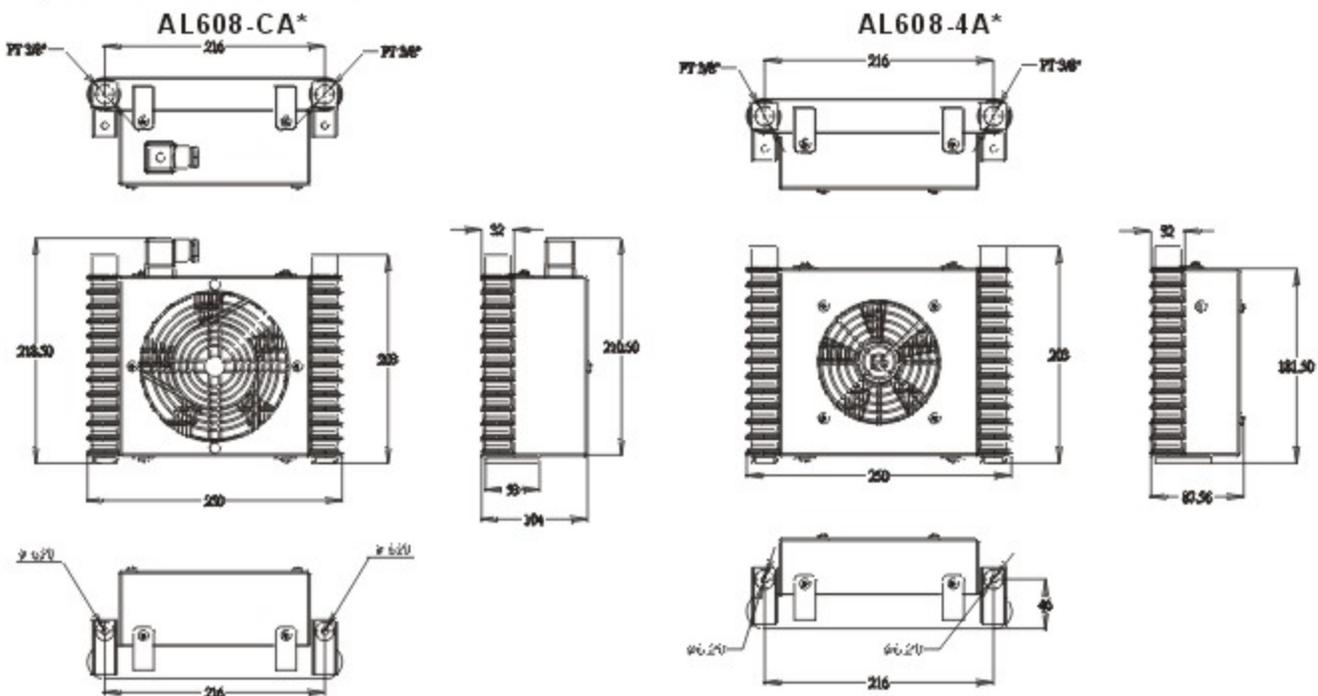


### ◆ SPECIFICATIONS 規格

PRESSURE 使用壓力	10 Bar
Maximum 最大使用流量	10 l/Min
THREAD 牙口	PT3/8"

	AL608 ONE PIECE 單片	AL608 -A*	AL608 -CA*	AL608 -FA*	AL608 -4A*
FAN SIZE 扇形規格	X	6"	6"	6"	6"
WIRING SYSTEM 配線方式	X	OUTER 外壓式	DIN PLUG SEAT 插座式	OUTER 外壓式	OUTER 外壓式
FILTER CLOTH 濾布網	X	X	X	○	X

### ◆ DIMENSIONS 外型尺寸



ACCESSORIES

# PROPORTIONAL ELECTRONIC CONTROLLER

比例電子控制器

AMP-V02 SERIES AMP-V02系列

## ◆ HOW TO ORDER 編號說明



### 1 VALVE SERIES 系列名稱

AMP= Proportional Electronic Controller  
比例電子控制器

### 2 DESIGN NO 設計編號

## ◆ DESCRIPTION 說明

These switch mode units provide stepless control for proportional solenoids. Start current (offset) and full load current (FLC) can be individually preset. The current in the solenoid is substantially independent of changes in solenoid resistance and supply voltage variation. The inherent dither, due to switch-mode operation helps to overcome friction effects in the solenoid.

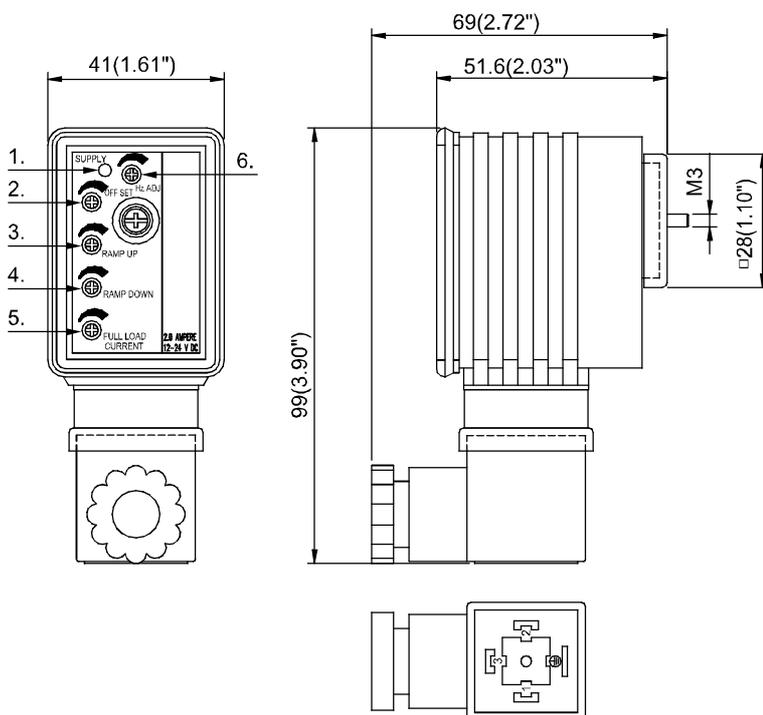
Ramp controls are fitted to give up to 10 seconds for the current in the solenoid to build up to its full load value, or to return to the offset point.

此切換模式提供分配閥的連續控制。啟動電流支流和滿載電流都是可以單獨預設。在閥裡的電流大致上是不受到固有的抖動變化和伏特變化。因為這個切換模式有助於克服在電磁閥裡的衝突作用。斜坡控制允許電流調整約10秒直到最大值或預設位置。

## ◆ TECHNICAL DATA 技術資料

Supply voltage 電源電壓 (V DC)	10 ~ 30	Ramp adjustment up/down 向上/向下斜坡調整 (s)	0 ~ 10
Control signal 控制信號 (V DC)	0 ~ 7.5	Frequency adjustment (PWM) 頻率調整 (Hz)	100 ~ 500
Maximum output current 12 and 24 V DC 最大輸出電流 (mA)	1800	Ambient operating temperature 工作環境溫度 (°C)	-5 ~ 60 (-41 ~ 140°F)
Minimum output current 最小輸出電流 (mA)	12V 0~900 24V 0~600	Protection rating 保護等級	IP 65
Weight 重量 (Kg)	0.15 (0.26 lbs)	IP 65 Only with protection seals properly mounted. 只有在正確地安裝了保護密封的情況下。	

## ◆ DIMENSIONS 外型尺寸圖



## ◆ INSTRUCTIONS FOR SETTING 設置說明

- SUPPLY 電源**  
LED
- OFF SET 開始電流**  
Minimum current adjustment. Adjust solenoid current so that the desired minimum value is obtained. Clockwise rotation increases current. 最小電流調整。調整電磁閥電流，以便得到想要的最小值。順時針增加電流。
- RAMP UP 斜坡向上**  
Ramping up time adjustment. 斜坡向上時間調整。
- RAMP DW 斜坡向下**  
Ramping down time adjustment. 斜坡向下時間調整。  
For long ramping times, turn potentiometers clockwise, for short ramping times, turn potentiometers counter clockwise. 要更長的斜坡時間，請順時針旋轉電位器，要更短的斜坡時間，請逆時針旋轉電位器。
- FULL LOAD C 滿載電流**  
Maximum current adjustment. Adjust solenoid current so that the desired maximum value is obtained (up to 2A). Clockwise rotation increases current. 最大電流調整。調整電磁閥電流，以便得到想要的最大值(達到2A)。順時針增加電流。
- FREQUENCY ADJ. 頻率調整**  
Adjusting this internal potentiometer (after removing the external plastic cover), it is possible to set the PWM frequency obtaining the desired control sensitivity. Clockwise rotation increases frequency from 100 to 500 Hz max. (Set frequency at 150 Hz when goods finished) 調整該內部電位器(除去外部塑料套後)，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100 Hz增加到最大值500 Hz。(出廠頻率設定為150 Hz)

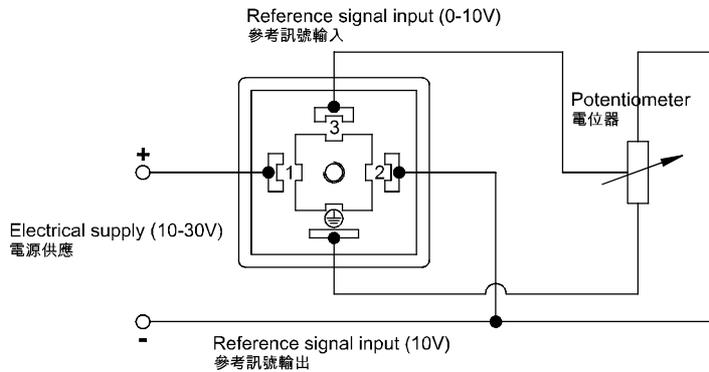
## ● VERY IMPORTANT 非常重要

Do not remove the amplifier from the coil while the power is on. This will cause a failure in the internal circuits of the amplifier, resulting in loss of output to the coil.

當通電時，請不要從線圈上去除放大器。這樣會引起放大器內部電路故障，導致線圈輸出損失。

◆ **CONNECTION EXAMPLE** 連接範例

With external potentiometer 有外部電位器

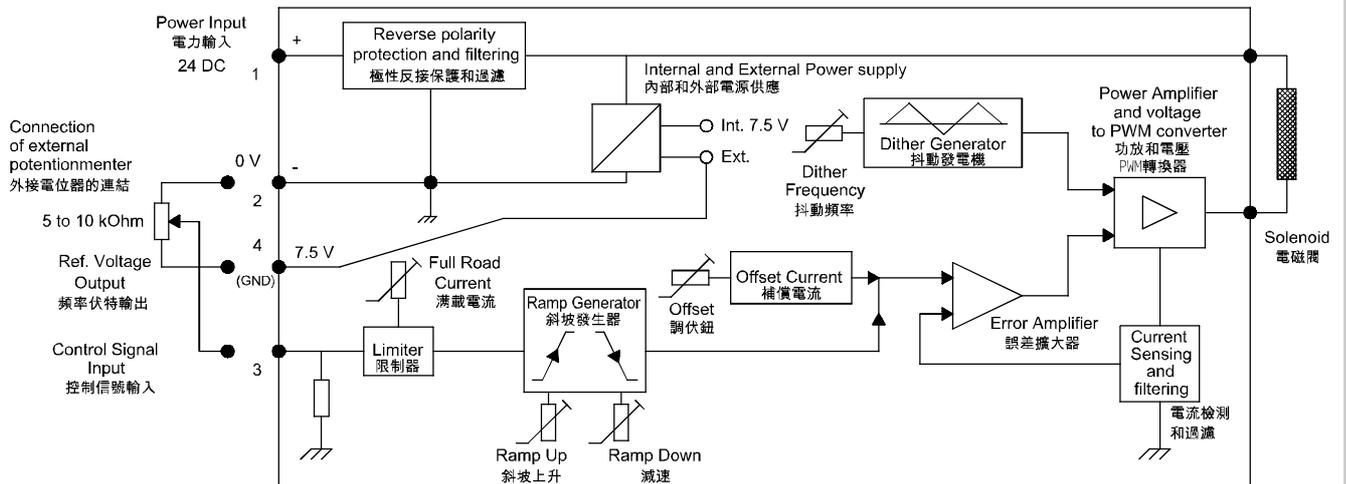


- Pin 1 : V Batt 電壓端
- Pin 2 : GND Batt 接地端
- Pin 3 : Input control signal 輸入控制訊號
- Pin GND : Control signal ground 控制訊號接地

● **NOTES** 注意

Electrical supply voltage ranges between 10 and 30 V DC. A power supply with rectified and filtered current is required. Use of a 4700  $\mu$ F - 35V electrolytic capacitor is recommended. The regulator is suitable for driving 12 or 24 V DC solenoid valves. In order to ensure the coil's maximum rated operating current, the controller supply voltage must be at least 1.5v higher than the coil's nominal voltage rating.  
 供電電壓範圍：10至30V DC，需要電源供應器(整流與濾波電流)，建議使用4700 $\mu$ F-35V電解電容器。調控器適用於驅動12或24V DC電磁閥。為了確保線圈的最大額定工作電流，控制器電壓必須高於線圈的名目電壓額定值至少1.5V。

◆ **CONTROL PORT(S)** 動作形式



### ◆ HOW TO ORDER 編號說明

**1**      **2**  
AMP — V02B

#### 1 VALVE SERIES 系列名稱

AMP= Proportional Electronic Controller  
比例電子控制器

#### 2 DESIGN NO 設計編號

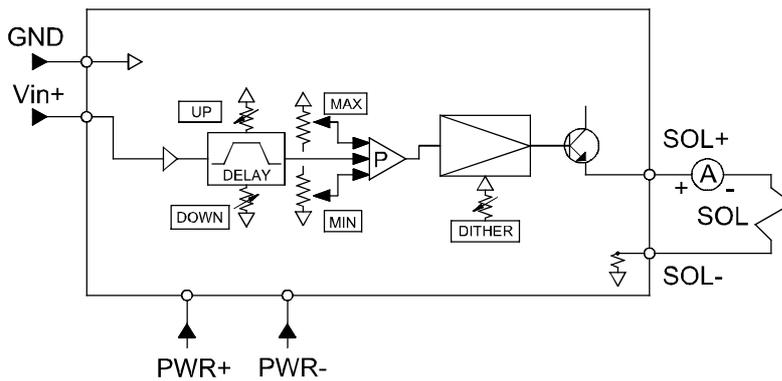
### ◆ DESCRIPTION 說明

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

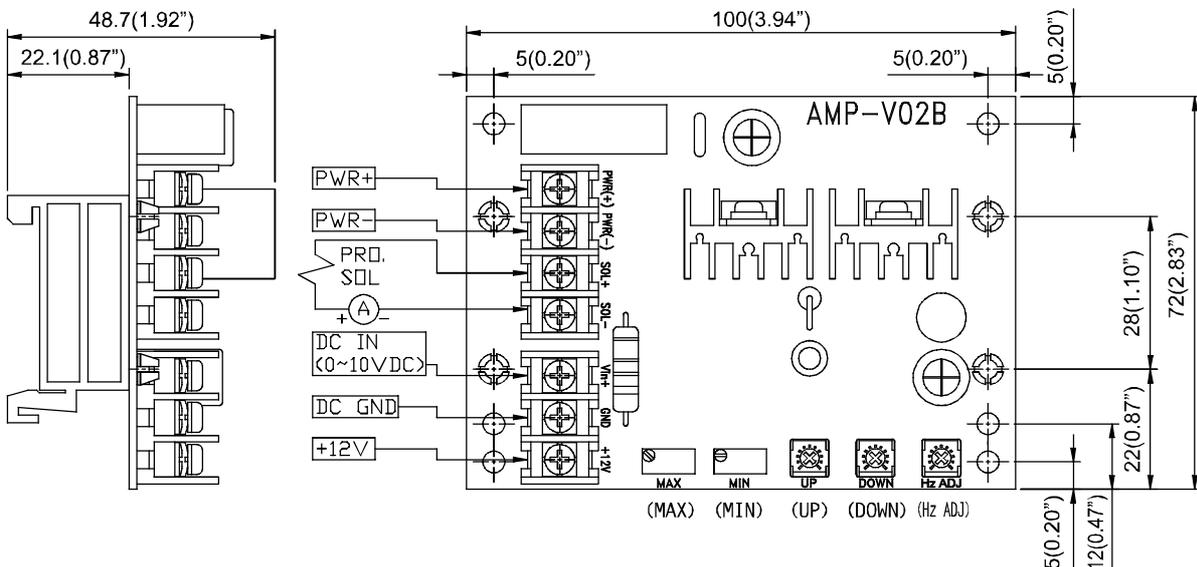
### ◆ TECHNICAL DATA 技術資料

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 (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
		Storage temperature 儲藏溫度 (°C)	-10 ~ 75(14 ~ 167°F)

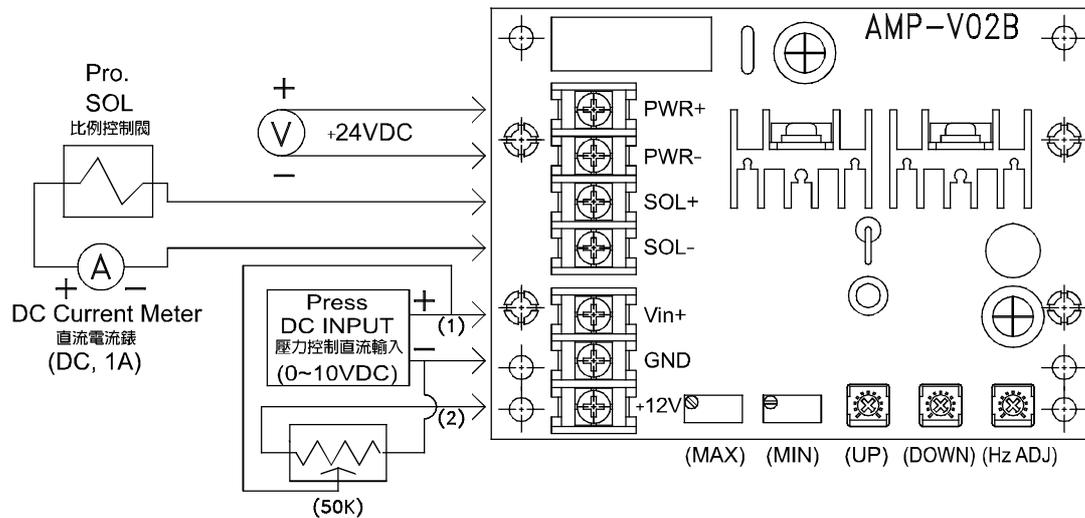
### ◆ CONTROL PORT(S) 動作形式



### ◆ 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)

# PROPORTIONAL ELECTRONIC CONTROLLER

比例電子控制器

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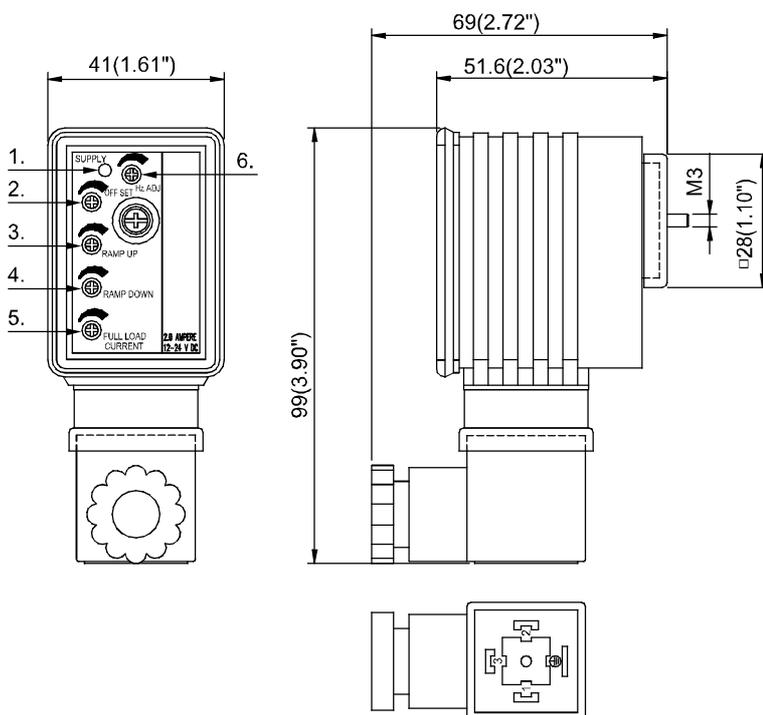
Ramp controls are fitted to give up to 10 seconds for the current in the solenoid to build up to its full load value, or to return to the offset point.

此切換模式提供分配閥的連續控制。啟動電流支流和滿載電流都是可以單獨預設。在閥裡的電流大致上是不受到固有的抖動變化和伏特變化。因為這個切換模式有助於克服在電磁閥裡的衝突作用。斜坡控制允許電流調整約10秒直到最大值或預設位置。

## ◆ TECHNICAL DATA 技術資料

Supply voltage 電源電壓 (V DC)	10 ~ 30	Ramp adjustment up/down 向上/向下斜坡調整 (s)	0 ~ 10
Control signal 控制信號 (V DC)	0 ~ 7.5	Frequency adjustment (PWM) 頻率調整 (Hz)	100 ~ 500
Maximum output current 12 and 24 V DC 最大輸出電流 (mA)	1800	Ambient operating temperature 工作環境溫度 (°C)	-5 ~ 60 (-41 ~ 140°F)
Minimum output current 最小輸出電流 (mA)	12V 0~900 24V 0~600	Protection rating 保護等級	IP 65
Weight 重量 (Kg)	0.15 (0.26 lbs)	IP 65 Only with protection seals properly mounted. 只有在正確地安裝了保護密封的情況下。	

## ◆ DIMENSIONS 外型尺寸圖



## ● VERY IMPORTANT 非常重要

Do not remove the amplifier from the coil while the power is on. This will cause a failure in the internal circuits of the amplifier, resulting in loss of output to the coil.

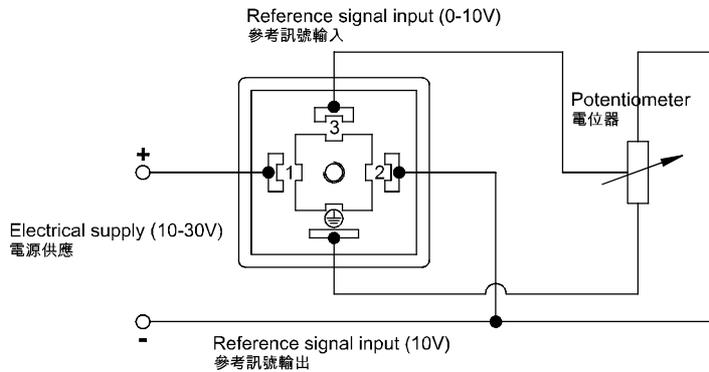
當通電時，請不要從線圈上去除放大器。這樣會引起放大器內部電路故障，導致線圈輸出損失。

## ◆ INSTRUCTIONS FOR SETTING 設置說明

- SUPPLY 電源**  
LED
- OFF SET 開始電流**  
Minimum current adjustment. Adjust solenoid current so that the desired minimum value is obtained. Clockwise rotation increases current. 最小電流調整。調整電磁閥電流，以便得到想要的最小值。順時針增加電流。
- RAMP UP 斜坡向上**  
Ramping up time adjustment. 斜坡向上時間調整。
- RAMP DW 斜坡向下**  
Ramping down time adjustment. 斜坡向下時間調整。  
For long ramping times, turn potentiometers clockwise, for short ramping times, turn potentiometers counter clockwise.  
要更長的斜坡時間，請順時針旋轉電位器，要更短的斜坡時間，請逆時針旋轉電位器。
- FULL LOAD C 滿載電流**  
Maximum current adjustment. Adjust solenoid current so that the desired maximum value is obtained (up to 2A). Clockwise rotation increases current.  
最大電流調整。調整電磁閥電流，以便得到想要的最大值(達到2A)。順時針增加電流。
- FREQUENCY ADJ. 頻率調整**  
Adjusting this internal potentiometer (after removing the external plastic cover), it is possible to set the PWM frequency obtaining the desired control sensitivity. Clockwise rotation increases frequency from 100 to 500 Hz max. (Set frequency at 150 Hz when goods finished)  
調整該內部電位器(除去外部塑料套後)，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100 Hz增加到最大值500 Hz。(出廠頻率設定為150 Hz)

## ◆ CONNECTION EXAMPLE 連接範例

With external potentiometer 有外部電位器



Pin 1 : V Batt 電壓端

Pin 2 : GND Batt 接地端

Pin 3 : Input control signal 輸入控制訊號

Pin GND : Control signal ground 控制訊號接地

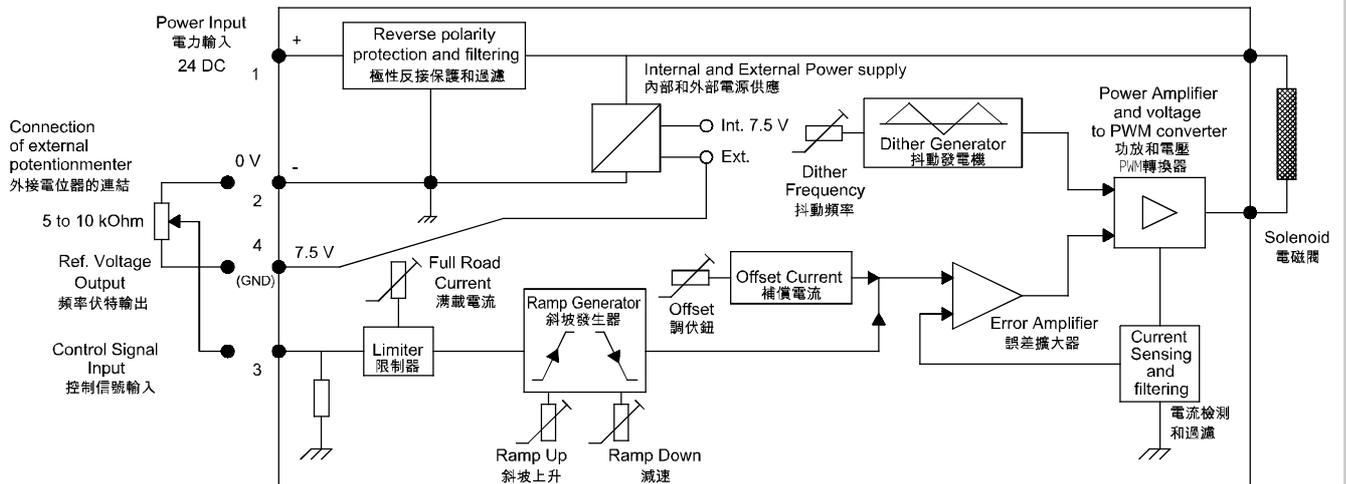
## ● NOTES 注意

Electrical supply voltage ranges between 10 and 30 V DC. A power supply with rectified and filtered current is required. Use of a 4700  $\mu\text{F}$  - 35V electrolytic capacitor is recommended.

The regulator is suitable for driving 12 or 24 V DC solenoid valves. In order to ensure the coil's maximum rated operating current, the controller supply voltage must be at least 1.5v higher than the coil's nominal voltage rating.

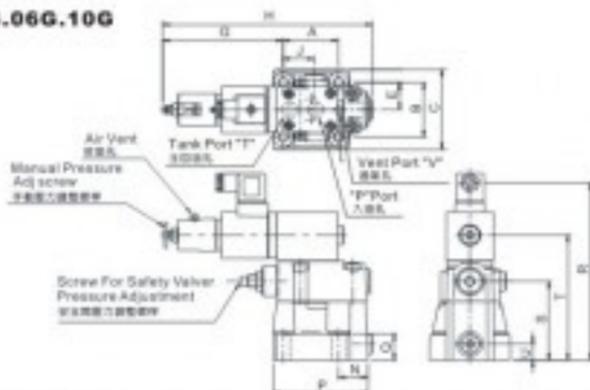
供電電壓範圍：10至30V DC，需要電源供應器(整流與濾波電流)，建議使用4700 $\mu\text{F}$ -35V電解電容器。調控器適用於驅動12或24V DC電磁閥。為了確保線圈的最大額定工作電流，控制器電壓必須高於線圈的名目電壓額定值至少1.5V。

## ◆ CONTROL PORT(S) 動作形式



◆ DIMENSIONS 尺寸 (mm)

EDB-03G.06G.10G



MODEL NO. 型號	A	B	C	E	G	H	J	N	P	Q	R	S	T	U
EDB-03	54	54	79	27	117.8	284.8	30.3	28.5	92	28	175.3	78	123.5	16
EDB-06	67	70	100	35	107.2	213.8	40.9	35.1	118	28	175.3	78	123.5	13.2
EDB-10	89	82.5	116	41.25	80.8	225.3	61.3	45	150.5	25.5	175.3	78	123.5	15.5

PROPORTIONAL AMPLIFIER

比例放大器

◆ HOW TO ORDER 如何訂購

1	2	3
AMP-01	1	10

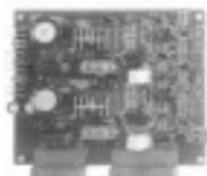
1 MODEL 型號

AMP= Proportional Amplifier 比例放大器

2 1: Single proportional 單比例

2: Dual proportional 雙比例

3 DESIGN NO 設計編號



<b>DIMENSIONS</b> (mm)	140 X 118 X 36.5	<b>(V) (AC) SUPPLY VOLTAGE</b>	90	24
<b>N.W.</b> (kg)	0.12	<b>(VA) POWER</b>	18 (18V)	36 (24V)
<b>CONNECTING STYLE</b> 接線方式	Wire Connecting 線接	<b>(mA) MAX. CURRENT CONSUMPTION</b>	100	
<b>DESIGN FUNCTIONS</b> 設計功能	Voltage Stabilizing, Core Current Stage Generator Wave Vibrating	<b>(A) MAIN FUSE</b>	2A, 250V	
<b>CONTROL TYPE</b> 控制類型	Adj. Resistance Control Constant Current Control	<b>(°C) IDEAL AMBIENT TEMP RANGE</b>	0 - 50	
		<b>(Hz) VIBRATING FREQUENCY</b>	200	
<b>(mA) MAX. OUTPUT CURRENT ADJ. RANGE</b>	0 - 1000			
<b>(mA) MIN. PILOT CURRENT ADJ. RANGE</b>	0 - 300			
<b>(s) SLOPE - UP TIME (T) ↑ ADJ. RANGE</b>	0.05 - 5 (Be Calculated according to Max. Input Wire Connection)			
<b>(s) SLOPE - DOWN TIME (T) ↓ ADJ. RANGE</b>	0.02 - 5 (Be Calculated according to Max. Input Wire Connection)			

Remarks: Can Be Installed Transformer Than 100W Devices 2 - 10/000 - 000

◆ **MODEL** 型号  
COB08



◆ **SPECIFICATIONS** 规格

Model Number 型号名称	VOLTAGE (V) 电压			RESISTANCE 电阻Ω	HOLDING CURRENT (A) 保持电流	Power (W) 功率
	SOURCE RATED 额定值	FZ 频率	RANGE 范围			
COB08-A1*	RAC110V	50	100-120	670	0.18	17
		60				
COB08-A2*	RAC220V	50	200-240	2320	0.1	17
		60				
COB08-D1*	DC12V	—	10.8-13.2	6.7	1.7	17
COB08-D2*	DC24V	—	21.8-26.4	3.2	0.9	17

\* Above value based on temperature 35°C, electric voltage allowance 10%. 以上数据基于环境温度 35°C，电压允许偏差 10%。

\* Coil - COB08 series application for VSE, VSV series, VWE08.

线圈 - COB08 系列适用于 VSE, VSV 系列, VWE08。

◆ **HOW TO ORDER** 订货

1 2 3 4  
COB 08 - A1 - \*

1 VALVE SERIES 系列名称

COB = COIL (SEMICIRCLE)

线圈 (半圆)

2 SUBPLATE MOUNTING SIZE 基板安装尺寸

Size: 88 间距尺寸

3 TYPE OF COIL 线圈类型

A1: RAC110V 60/50HZ

A2: RAC220V 60/50HZ

D1: DC12V

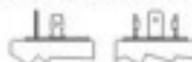
D2: DC24V

4 WIRING TYPE 接线方式

W-WIRING BOX TYPE

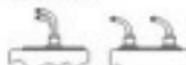
(DIN 43650-A / 804480)

H 插接盒式 (DIN 43650-A / 1504480)



X-DOUBLE LEAD

X 双引线方式



K-KRISTAL M27-1.0

M27



S-SAMP SUPERSEAL-V



D-DEUTSCH DT04-2P-V

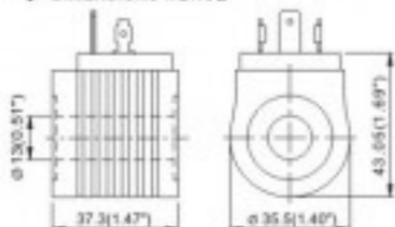


◆ **AVAILABLE WIRING TYPE FOR COIL TYPE**

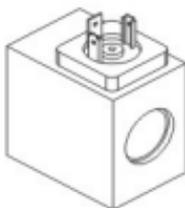
线圈可用接线方式

WIRING TYPE 接线方式	H	X	K	S	D
TYPE OF COIL 线圈类型					
A1: RAC110V	√	—	—	—	—
A2: RAC220V	√	—	—	—	—
D1: DC12V	√	√	√	√	√
D2: DC24V	√	√	√	√	√

◆ **DIMENSIONS** 尺寸



◆ **MODEL** 型 式  
 COB38



◆ **SPECIFICATIONS** 規 格

Model Number 型 式 號 碼	VOLTAGE (V) 電 壓			CURRENT & POWER AT RATED VOLTAGE 額 定 電 壓 的 電 流 和 電 功 率	
	SOURCE RATED 額 定 電 壓	HZ 頻 率	RANGE 範 圍	IN-RUSH CURRENT (A) 啓 動 電 流	HOLDING CURRENT (A) 穩 定 電 流
COB38-D1-*	DC12V	—	10.8-13.2		2.58
COB38-D2-*	DC24V	—	21.6-26.4		1.33

● Above value based on temperature 30°C, electric voltage allowance 15%. 以上數據基於為溫度30，電壓容許度15%。

● Coil - COB38 series application for DME, DMF-04.  
 附註 - COB38 系列適用於 DME, DMF-04。

◆ **HOW TO ORDER** 線 圈 註 冊



**1** **VALVE SERIES** 系列名稱  
 COB38 = COIL 線 圈

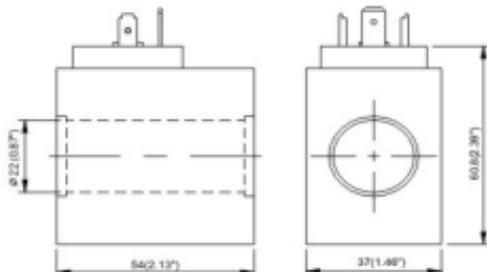
**3** **WIRING TYPE** 線 圈 型 式  
**H: WIRING BOX TYPE (DIN)**  
 (DIN 43650-A / ISO4400)  
 H 接線盒式  
 (DIN 43650-A / ISO4400)

**X: DOUBLE LEAD**  
 X 雙線接方式

**2** **TYPE OF COIL** 線 圈 類 型  
 D1 : DC12V  
 D2 : DC24V



◆ **DIMENSIONS** 尺 寸 及 圖 樣



## ◆ MODEL 型号

COD08



## ◆ SPECIFICATIONS 规格

Model Number 型号名称	VOLTAGE (V) 电压			RESISTANCE 电阻 Ω	HOLDING CURRENT 保持电流 (A)	POWER 功率 (W)
	SOURCE RATED 额定源	FZ 频率	RANGE 范围			
COD08-A1-★	RAC110V	50	100-120	469	0.2	20
		60				
COD08-A2-★	RAC220V	50	200-240	1430	0.14	20
		60				
COD08-A24-★	RAC24V	—	—	—	—	20
COD08-D1-★	DC12V	—	10.9-13.2	5.5	2	20
COD08-D2-★	DC24V	—	21.8-26.4	27.2	0.85	20
COD08-D14-★	DC14V	—	—	—	—	20
COD08-D28-★	DC28V	—	—	34.3	0.76	20

● Above value based on temperature 30° C, electric voltage allowance 10%. 以上数据仅供参考, 实际值可能会有偏差。

● Coil - COD08 series application for VSE, V5V series, VWE08.

● 线圈 - COD08 系列适用于 VSE, V5V 系列, VWE08.

## ◆ HOW TO ORDER 订购

1 2 3 4  
COD 08 - A1 - ★

### 1 VALVE SERIES 线圈系列

COD = COIL (RECTANGLE)  
线圈 (矩形)

### 2 SUBPLATE MOUNTING SIZE 基板尺寸

Size: 08

### 3 TYPE OF COIL 线圈类型

A1: RAC110V 60/50HZ  
A2: RAC220V 60/50HZ  
A24: RAC24V 60/50HZ  
D1: DC12V  
D2: DC24V  
D14: DC14V  
D28: DC28V

## 4 WIRING TYPE 接线形式

H-WIRING BOX TYPE  
(DIM 4380-A-1/504408)  
H 接线盒式 (DIM 4380-A-1/504408)



X DOUBLE LEAD  
X 双引线式



K/KOSTAL M27x1.0



S-AMP SUPERGAL-V



D-DEUTSCH DT64-2P-V

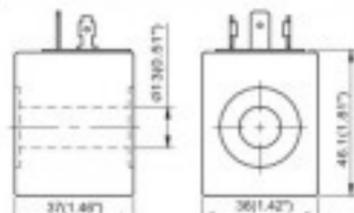


## ◆ AVAILABLE WIRING TYPE FOR COIL TYPE

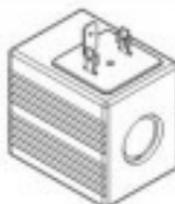
线圈适用的接线形式

WIRING TYPE 接线形式	H	X	K	S	D
A1: RAC110V	√	—	—	—	—
A2: RAC220V	√	—	—	—	—
A24: RAC24V	√	—	—	—	—
D1: DC12V	√	√	√	√	√
D2: DC24V	√	√	√	√	√
D14: DC14V	√	√	√	√	√
D28: DC28V	√	√	√	√	√

## ◆ DIMENSIONS 外形尺寸



◆ **MODEL** 型式  
COD10



◆ **SPECIFICATIONS** 規格

Model Number 型式名稱	VOLTAGE (V) 電壓			HOLDING CURRENT (A) 保持電流
	SOURCE RATED 源電壓	FZ 頻率	RANGE 電壓	
COD10-A1-*	RAC112V	50	100-120	0.15
		60		
COD10-A2-*	RAC222V	50	200-240	0.1
		60		
COD10-D1-*	DC12V	—	10.9-13.2	1.7
COD10-D2-*	DC24V	—	21.8-26.4	0.9

● Above value based on temperature 30°C, electric voltage allowance 10%. 以上數據皆假設為溫度30°C, 電壓容許差10%。

● Coil - COD10 series application for VWE-10 series.

● 線圈 - cod10 系列適用於 vwe-10 系列。

◆ **HOW TO ORDER** 如何訂貨



**1 VALVE SERIES** 閥門系列  
COD = COIL 線圈

**2 SUBPLATE MOUNTING SIZE**  
Size: 10 規格代號

**3 TYPE OF COIL** 線圈型式  
A1: RAC112V 60/50HZ  
A2: RAC222V 60/50HZ  
D1: DC12V  
D2: DC24V

**4 WIRING TYPE** 線圈型式

H: WIRING BOX TYPE  
(DIN 43850-A-1/ISO4408)  
H 接線盒式 (DIN 43850-A-1/ISO4408)



Ⓝ: DOUBLE LEAD  
雙線接線方式



K: KOSTAL M27x1.0



Ⓢ: 8AMP SUPERSEAL-V



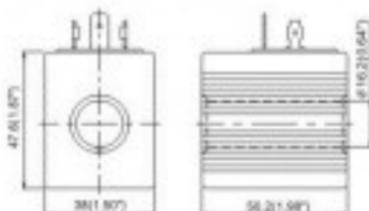
Ⓟ: DEUTSCH DT04-2P-V



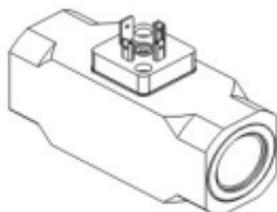
◆ **AVAILABLE WIRING TYPE FOR COIL TYPE**  
線圈適用接線盒型式

WIRING TYPE 接線盒型式	H	X	K	S	D
A1: RAC112V	✓	—	—	—	—
A2: RAC222V	✓	—	—	—	—
D1: DC12V	✓	✓	✓	✓	✓
D2: DC24V	✓	✓	✓	✓	✓

◆ **DIMENSIONS** 線圈尺寸



◆ **MODEL** 型式  
 COD38



◆ **SPECIFICATIONS** 規格

Model Number 型式號碼	VOLTAGE (V) 電壓			CURRENT & POWER AT RATED VOLTAGE 額定電壓時的電流和電功率	
	SOURCE RATED 額定電壓	HZ 頻率	RANGE 範圍	IN-RUSH CURRENT (A.) 啟動電流	HOLDING CURRENT (A.) 保持電流
COD38-D1-*	DC12V	—	10.8-13.2		2.58
COD38-D2-*	DC24V	—	21.6-26.4		1.33

● Above value based on temperature 30° C, electric voltage allowance 15%. 以上數據基於溫度30, 電壓容許度15%。

● Coil - COD38 series application for DMG.DMS-04 .  
 線圈 - COD38 系列適用於 DMG.DMS-04 .

◆ **HOW TO ORDER** 如何訂貨



**1 VALVE SERIES** 系列名稱  
 COD38 = COIL 線圈

**2 TYPE OF COIL** 線圈類型  
 D1 - DC12V  
 D2 - DC24V

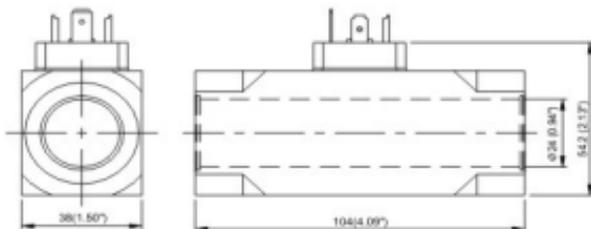
**3 WIRING TYPE** 接線型式  
**H WIRING BOX TYPE** (DIN)  
 (DIN 43650-A / ISO4400)  
 H: 接線盒式  
 (DIN 43650-A / ISO4400)



● **CODE** 編碼  

 1-2 Port A  
 1-2 端口 A  
 1-3 Port B  
 1-3 端口 B

◆ **DIMENSIONS** 外觀尺寸圖



◆ MODEL 系列



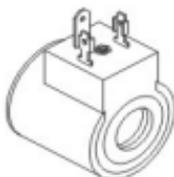
MODEL TO ORDER DRAWING 圖號	GDA39S250	GDA3Y9T250	GDA3R9T24	GDA3L9T250
<b>DIMENSIONS</b> 外型尺寸				
<b>WIRING OF Connector</b> 線圈接線				

◆ Technical Data 技術參數

Housing / Indicator Light 外殼 / 指示燈	Black / No light 黑色 / 無燈	Clear / With Light 透明 / 有燈	Clear / With LED 透明 / 有 LED	Clear / With LED 透明 / 有 LED
Contact holder: 接觸器殼	PA+30 %GF	PC	PC	PC
Gasket: 密封墊	Thermoplastic rubber 熱塑性橡膠	Thermoplastic rubber 熱塑性橡膠	Thermoplastic rubber 熱塑性橡膠	Thermoplastic rubber 熱塑性橡膠
Contact material: 接觸材料	Cu Zn (Ag)	Cu Zn (Ag)	Cu Zn (Ag)	Cu Zn (Ag)
Max. Voltage: 最大電壓 w/ to connector w/o any wiring 與插頭連接時 / 無任何線路時	250 AC / 300 V DC	250 AC	24DC	250 AC
Max. Current: 最大電流	16 A	16 A	16 A	
Operating current: 操作電流	10 A	10 A	10 A	RAC 阻性電流
Spacing: 間距	18 mm	18 mm	18 mm	18 mm
No. Of contacts: 接觸點數	3+ ground	3+ ground	3+ ground	3+ ground
Max. Wire cross-section: 最大線徑	AWG 14	AWG 14	AWG 14	AWG 14
Connector type: 插頭類型	PG 9 6-8mm	PG 9 6-8mm	PG 9 6-8mm	PG 9 6-8mm
Protection: 防護等級	IP 65 DIN 40050	IP 65 DIN 40050	IP 65 DIN 40050	IP 65 DIN 40050
Insulation: 絕緣等級	C-VDE 0110	C-VDE 0110	C-VDE 0110	C-VDE 0110
Operating temperature: 操作溫度	-40°C...+150°C	-40°C...+150°C	-40°C...+150°C	-40°C...+150°C

◆ **MODEL** 型式

COS08



◆ **SPECIFICATIONS** 規格

Model Number 型式號碼	VOLTAGE (V) 電壓		RESISTANCE 電阻 Ω	HOLDING CURRENT (A) 保持電流	Power (W) 功率
	SOURCE RATED 額定值	RANGE 範圍			
COS08-D1-*	DC12V	10.9 ~ 13.2	8.7	1.7	17
COS08-D2-*	DC24V	21.8 ~ 26.4	3.2	0.9	17

● Above value based on temperature 30° C, electric voltage allowance 10%. 以上數據基礎為溫度30.電壓容許值10%。

● Coil - COS08 series application for VSE, VSV series, VWE08.

線圈 - COS08 系列適用於 VSE, VSV 系列, VWE08.

◆ **HOW TO ORDER** 線圈說明



**1 VALVE SERIES** 系列名稱

COS = COIL ( IRON COVER IP 65-67)  
 線圈 (鐵製外殼 IP65-67)

**2 SUBPLATE MOUNTING SIZE**

Size : 08 線圈口徑

**3 TYPE OF COIL** 線圈類型

D1 : DC12V  
 D2 : DC24V

**4 WIRING TYPE** 線圈型式

H: WIRING BOX TYPE  
 (DIN 43650-A / ISO4408)  
 H: 接線盒式 (DIN 43650-A/ISO4408)

S : AMP SUPERSEAL-V

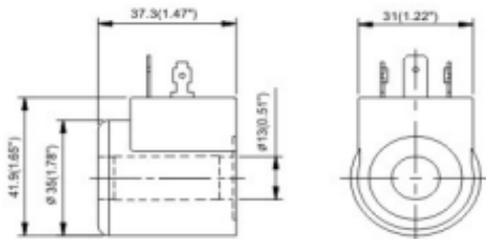


X : DOUBLE LEAD  
 X: 雙線線方式

D : DEUTSCH DT04-2P-V

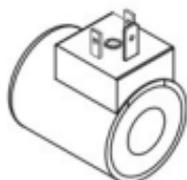


◆ **DIMENSIONS** 線圈尺寸



**◆ MODEL 型式**

COS12

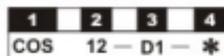

**◆ SPECIFICATIONS 規格**

Model Number 型式號碼	VOLTAGE (V) 電壓		HOLDING CURRENT (A) 固定電流	Power (W) 功率
	SOURCE RATED 源電壓	RANGE 範圍		
COS12-D1-*	DC12V	10.9 ~ 13.2	1.9	23
COS12-D2-*	DC24V	21.8 ~ 26.4	1.0	23

● Above value based on temperature 30°C, electric voltage allowance 10%. 以上數據基於溫度30, 電壓容許度10%。

● Coil - COS12 series application for EVR-01.10.

線圈 - COS12 系列適用於 EVR-01.10。

**◆ HOW TO ORDER 線圈訂明**

**1 VALVE SERIES 系列名稱**

COS = PROPORTIONAL VALVES SERIES COIL  
(IRON COVER IP65-67)  
比例閥系列線圈鐵蓋外殼 IP65-67

**2 SUBPLATE MOUNTING SIZE 線圈底座**

Size : 12

**3 TYPE OF COIL 線圈類型**

D1 : DC12V  
D2 : DC24V

**4 WIRING TYPE 接線型式**

H: WIRING BOX TYPE  
(DIN 43650-A / ISO4400)  
H 接線盒式 (DIN 43650-A/ISO4400)

S : AMP SUPERSEAL-V



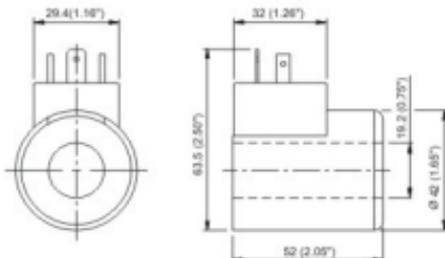
X : DOUBLE LEAD  
X : 雙線接方式



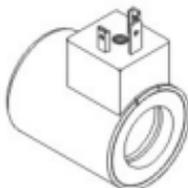
D : DEUTSCH DT04-2P-V



● Coil type of proportional valve, is available in H type only at this moment.  
比例閥適合使用的線圈, 目前只有 H 型可購買。

**◆ DIMENSIONS 外型尺寸圖**


◆ **MODEL 型式**  
COT08



◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	VOLTAGE (V) 電壓			HOLDING CURRENT (A) 磁芯電流	POWER (W) 功率	MAXIMUM CURRENT (MA) 最大電流
	SOURCE RATED 額定電壓	HZ 頻率	RANGE 範圍			
COT08-D1-*	DC12V	—	10.9-13.2	1.65	20	1150
COT08-D2-*	DC24V	—	21.8-26.4	0.83	20	590

● Above value based on temperature 30° C, electric voltage allowance 10%. 以上數據基於溫度30,電壓容許度10%。

● Coil - COT08 series application for EVR-T8.

線圈 - COT08 系列適用於 EVR-T8。

◆ **HOW TO ORDER 編號說明**



**1 VALVE SERIES 系列名稱**

COT - PROPORTIONAL VALVES SERIES COIL

(IRON COVER IP65-67)

比例閥系列鐵蓋鑲裝外殼 (IP65-67)

**2 SUBPLATE MOUNTING SIZE 螺絲口徑**

Size :08 (T - 8A)

**3 TYPE OF COIL 線圈類型**

D1 : DC12V

D2 : DC24V

**4 WIRING TYPE 接線型式**

H: WIRING BOX TYPE

(DIN 43690-A / ISO4400)

H: 接線盒式 (DIN 43690-A / ISO 4400)

S : AMP SUPERSEAL-V



X : DOUBLE LEAD

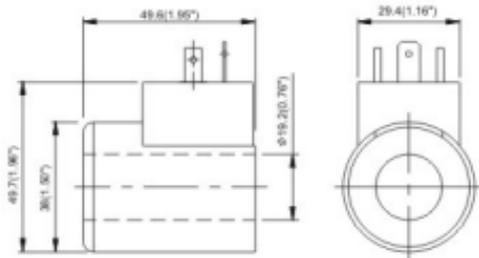
X: 雙接線方式

D : DEUTSCH DT04-2P-V

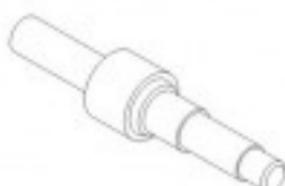


● Coil type of proportional valve, is available in H type only at this moment.  
比例閥適合使用的線圈, 目前只有 H 型可選購。

◆ **DIMENSIONS 外型尺寸圖**



◆ MODEL 型号



◆ HOW TO ORDER 订货

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
CTCS	08	2N	R

**1 VALVE SERIES 系列**  
 CTCS=刀具(SIZE规格)  
 CTCT=刀具(SUN规格)

**2 SUBPLATE MOUNTING SIZE 副板规格**

Type 类型	Subplate Mounting Size 副板规格		
SIZE	08= 3/16-16 UNF	12= 1/2-12 UNF	
	13= 1/2-14 UNF	16= 5/16-12 UNF	
SUN	2A: T2A	18A: T18A	92A: T182A
	3A: T3A	19A: T19A	93A: T183A
	5A: T5A	21A: T21A	
	8A: T8A	22A: T22A	
	10A: T10A	23A: T23A	
	11A: T11A	24A: T24A	
	13A: T13A	63A: T63A	
	16A: T16A	64A: T64A	
	17A: T17A		

**3 CAVITY TYPE 类型**  
 NONE-SUN SPECIFICATIONS 非SUN规格  
 2N: 2-WAY  
 3N: 3-WAY  
 4N: 4-WAY  
 3S: 3-WAY

**4 TYPE 类型**  
 R: Rougher 粗糙加工刀具  
 F: Finisher 精加工刀具

◆ APPEARANCE 外观

Cavity Rougher  
 粗糙加工刀具



Cavity Finisher  
 精加工刀具



# PROPORTIONAL ELECTRONIC CONTROLLER

AMP-W02 SERIES

電子比例控制器

## ◆ HOW TO ORDER 編號說明

1	2
AMP	W02

### 1 VALVE SERIES 系列名稱

AMP= Proportional Electronic Controller  
比例電子控制器

### 2 DESIGN NO 設計編號

## ◆ DESCRIPTION 說明

This compact, multi-function power amplifier uses advanced hybrid integrated circuits.  
採用混合IC尖端技術，具有小型，多功能的動力放大器

## ◆ GENERAL PRECAUTIONS 一般注意事項

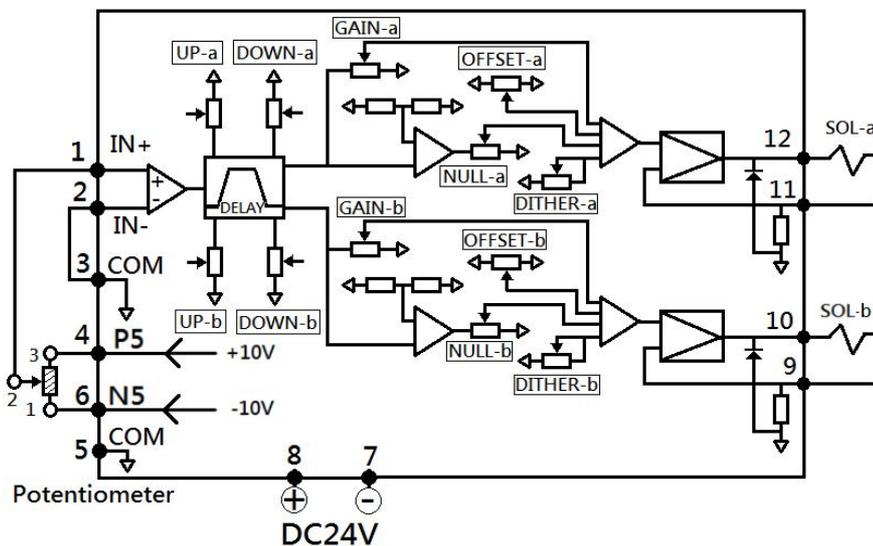
For connection between the amp/controller and solenoid coil, use a 2-conductor shielded wire with a conductor nominal cross-section area of 2.0mm<sup>2</sup>. Type VCTF (Rated Voltage: 300V vinyl cab tire cord. Wiring between the command voltage generator and amplifier should be VCTF 0.75mm<sup>2</sup> 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2.0mm<sup>2</sup>、線心數為2的屏蔽線，其型號為VCTF(額定電壓300V乙烯膠絕緣軟線)。指令電壓發生器和放大器之間的結線，請使用0.75mm<sup>2</sup>、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

Input type 輸入形態	1 DC inputs	Supply to external power 供給外部電源 (V DC)	+10 -10
Maximum output current 最大輸出電流 (mA)	900 (20Ω)	Dither frequency (DITHER) 高頻脈動頻率 (Hz)	80 ~ 250
Input voltage 輸入電壓 (V DC)	-10 ~ +10	Supply voltage 電源電壓 (V DC)	24(24 ~ 30)
Input impedance 輸入阻抗 (Ω)	50k	Power consumption 消耗電力 (VA)	30
Externally set variable resistance 外部設定可變電阻 (Ω)	10k	Ambient operating temperature 工作環境溫度 (°C)	0 ~ 50 (32 ~ 120°F)
Drive solenoid 驅動線圈	SOL a, SOL b	Temperature drift (max.) 溫度轉移(最大)	0.2mA/°C
Zero adjust (NULL) 零點調整 (mA)	0 ~ 900	Weight 重量 (Kg)	0.3 (0.66 lbs)
Gain adjust (GAIN) 增益調整 (mA)	0 ~ 900mA/2.5V		

## ◆ CONTROL PORT(S) 動作形式



- Current is supplied to SOL a when input signal voltage polarity is positive, and to SOL b when negative. Either SOL a or SOL b can be driven at any one time.  
輸入信號電壓是正極時，向SOL a提供電流；是負極時，則向SOL b提供電流。  
同時，SOL a與SOL b中僅有一個線圈可以驅動。
- Push-pull drive is also supported.  
推挽驅動也有可能。
- To measure current, measure the voltage at SOL a terminal 11 and SOL b terminal 9, using terminal 5 as reference. The voltage across the 0.5Ω current detection resistor at 1A is 0.5V. Use a measurement device with an input impedance of at least 1MΩ.  
電流的測定，以5號端子為基準，用SOL a測定11端子的電壓，用SOL b測定9端子的電壓。因為兩端電壓有0.5Ω的電阻，所以1A電流上只有0.5V的電壓。測定器請使用輸入電阻在1MΩ以上的產品。
- To use SOL a only, connect terminal 1 of the knob to amp terminal 2, use an input voltage range of 0 to 5V. (ER)  
僅使用SOL a時，請把電位器的1號端子連接到放大器的2號端子，並把輸入電壓範圍設定在0~5V的範圍內。(ER)

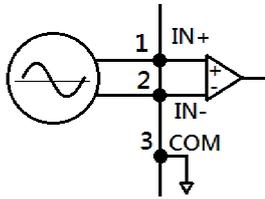
# PROPORTIONAL ELECTRONIC CONTROLLER

電子比例控制器

AMP-W02 SERIES

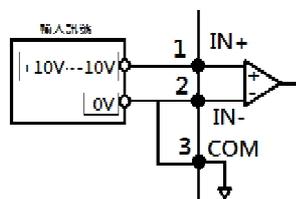
- Input signal can use (1) Differential Input (2) Singal End (3) Potentiometer  
輸入信號可使用(1)差動輸入 (2)單點輸入 (3)可變電阻

(1) Differential Input  
差動輸入



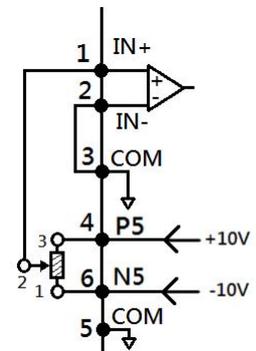
- 1) "Terminal Block-1"(IN+) and "Terminal Block-2"(IN-) then enter differential signal.  
"端子台-1"(IN+)和"端子台-2"(IN-) 接輸入差動訊號。
- 2) "Terminal Block-3"(COM) in connect.  
"端子台-3"(COM)不接。

(2) Singal End  
單點輸入



- 1)"Terminal Block-1"(IN+) then enter voltage signal.  
"端子台-1"(IN+)接輸入電壓訊號。
- 2) "Terminal Block-2"(IN-) connect to "Terminal Block-3"(COM) and with input signal 0V.  
"端子台-2"(IN-)和"端子台-3"(COM) 相接,並和輸入訊號的0V接一起。

(3) Potentiometer  
可變電阻



- 1) As drawing 如圖示。
- 2)"Terminal Block-2"(IN-) connect with "Terminal Block-3"(COM)  
"端子台-2"(IN-)和"端子台-3"(COM)相接。

## ◆ INSTRUCTIONS FOR SETTING 設置說明

- **POWER** 電源

LED

- **OFF SET** 開始電流

Minimum current adjustment. Adjust solenoid current so that the desired minimum value is obtained. Clockwise rotation increases current.

最小電流調整. 調整電磁閥電流, 以便得到想要的最小值. 順時針增加電流.

- **UP** 向上

Ramping up time adjustment. 斜坡向上時間調整.

- **DOWN** 向下

Ramping down time adjustment. 斜坡向下時間調整.

For long ramping times, turn potentiometers clockwise, for short ramping times, turn potentiometers counter clockwise. 要更長的斜坡時間, 請順時針旋轉電位器, 要更短的斜坡時間, 請逆時針旋轉電位器.

- **NULL** (Zero Adjust) (零點調整)

This knob sets the lower limit of the operating pressure and flow rate. Rotating it clockwise increases the output current. This knob is also used for manual control while checking valve operation.

使用電位器設定所使用的電壓和流量的下限額. 按順時針轉動, 則輸出電流變大. 另外, 還可以當作手動電位器來確定閥的工作情況.

- **GAIN** (Gain Adjust) (增益調整)

This knob adjust output current in proportion to input signal voltage or the channel level knob rotation angle. Rotating it clockwise increases gain.

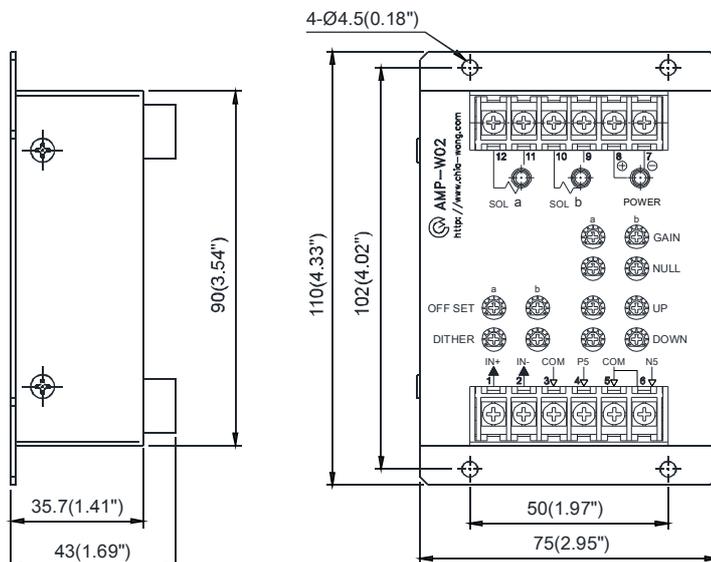
對於輸入信號電壓或者電路水平電位器回轉角度來說, 其相應的輸出電流比例調整, 是通過電位器來完成的, 按順時針方向轉動, 則增益變大.

- **DITHER** (Dither) (高頻脈動)

Adjusting potentiometer, it is possible to set the PWM frequency obtaining the desired control sensitivity. Clockwise rotation increases frequency from 80 to 250 Hz max. (Set frequency at 150 Hz when goods finished )

調整電位器, 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80 Hz增加到最大值250 Hz. (出廠頻率設定為150 Hz)

## ◆ DIMENSIONS 外型尺寸圖



No.	Name 名稱
1	Input signal terminal IN+ 輸入信號端子
2	Input signal terminal IN- 輸入信號端子
3	Input signal terminal COM 輸入信號端子
4	Supply to external power P5 供給外部電源
5	Input signal terminal COM 輸入信號端子
6	Supply to external power N5 供給外部電源
7	DC24V
8	
9	Output terminal valve 電流輸出端子
10	SOL b
11	Output terminal valve 電流輸出端子
12	SOL a

### ◆ MODEL 型式

COD02



### ◆ SPECIFICATIONS 规格

Model Number 型号规格	VOLTAGE (V) 电压		CURRENT & POWER AT RATED VOLTAGE 额定电压下的电流及功率		
	SOURCE RATED 额定电压	Hz 频率	RANGE 范围	IN-RUSH CURRENT (A) 浪涌电流	HOLDING CURRENT (A) 维持电流
COD02-A1	AC180	50	80-110	2.2	0.52
	AC110	60	80-120	2.0	0.38
COD02-A24	AC 24	50	21-26		2.4
		60			2.1
COD02-A115	AC115	50	90-130	2.0	0.47
	AC115	60	100-130	1.8	0.35
COD02-A2	AC200	50	180-220	1.1	0.26
	AC220	60	180-240	1.0	0.19
COD02-A230	AC220	50	180-240	1.0	0.24
	AC230	60	200-260	0.91	0.17
COD02-R1	RF110	50	100-125		0.31
		60			
COD02-R2	RF230	50	180-230		0.18
		60			
COD02-D1	DC12V	—	10.8-13.2		2.5
COD02-D2	DC24V	—	21.6-26.4		1.25

● Above value based on temperature 30° C, electric voltage allowance 15%. 以上数据基于环境温度 30°C，电压允许偏差 15%。

● Coil - COD02 series application for WE-D2. 线圈 - COD02 系列适用于 WE-D2。

### ◆ HOW TO ORDER 订货



**1 VALVE SERIES 系列**  
COD = COIL 系列

**2 SUBPLATE MOUNTING SIZE 规格**  
Size : 02

**3 TYPE OF COIL 型式**  
 A1 - AC115V 50Hz D1 - DC12V  
 A15 - AC115V 50Hz D2 - DC24V  
 A230 - AC230V 50Hz R1 - RF110V 60Hz/50Hz  
 A2 - AC230V 60Hz R2 - RF220V 60Hz/50Hz  
 A24 - AC24V 50Hz/60Hz

### 4 WIRING TYPE 接线方式

**H WIRING BOX TYPE**  
(DN 43050-A/150440)  
H 接线盒式 (DN 43050-A/150440)



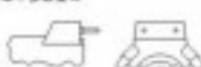
**X DOUBLE LEAD**  
X 双引线式



**D-DEUTSCH DT04-2P-V**

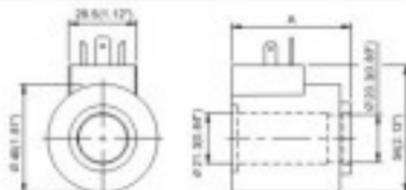


**E-CONCENTRATE WIRING BOX TYPE**  
E 集中接线盒式



### ◆ DIMENSIONS 尺寸

Model 型号	Size K V A
AC	50(1.97")
DC	60.8(2.39")



◆ MODEL 型式  
COD63

DC



AC



◆ SPECIFICATIONS 規格

Model Number 型式號碼	VOLTAGE (V) 電壓			CURRENT & POWER AT RATED VOLTAGE 額定電壓下的電流及功率	
	SOURCE RATED 源電壓	RZ 阻值	RANGE 範圍	INFLUSH CURRENT (A) 吸合電流 (A)	HOLDING CURRENT (A) 保持電流 (A)
COD03-A1 - ●	AC110	50	90-110	4.75	0.86
		60	90-126	4.2	0.74
COD03-A115 - ●	AC115	50	99-121	4.25	0.78
		60	108-138	3.96	0.7
COD03-A2 - ●	AC220	50	180-220	2.31	0.42
		60	188-242	2.05	0.36
COD03-A230 - ●	AC230	50	188-242	2.04	0.37
		60	216-276	1.88	0.33
COD03-R1 - ●	RF110	50	90-126	0.47	0.47
		60			
COD03-R2 - ●	RF220	50	188-253	0.24	0.24
		60			
COD03-D1 - ●	DC12V	—	13.8-13.2	—	2.58
COD03-D2 - ●	DC24V	—	21.6-26.4	—	1.33

● Above value based on temperature 30°C, electric voltage allowance 15%. 以上數據係指於溫度30°C, 電壓容許偏差15%。

● Coil - COD03 series application for WE-03. 線圈 - COD03系列適用於 WE-03。

◆ HOW TO ORDER 如何訂貨

1 2 3 4  
COD 03 - A1 - ●

1 VALVE SERIES 系列

COD = COIL 線圈

2 SUBPLATE MOUNTING SIZE 副板尺寸

Size: 03

3 TYPE OF COIL 線圈型式

A1 : AC110V 50HZ    D1 : DC12V  
A115 : AC115V 50HZ    D2 : DC24V  
A230 : AC230V 50HZ    R1 : RF110V 50HZ/50HZ  
A2 : AC220V 50HZ    R2 : RF220V 50HZ/50HZ  
A24 : AC24V 50HZ/50HZ

4 WIRING TYPE 線圈型式

WIRING BOX TYPE (DIN)  
(DIN 43535A / ISO4400)  
H 線圈型式  
(DIN 43535-A / ISO 4400)

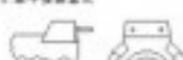
X DOUBLE LEAD  
X 雙線圈型式



◎ DEUTSCH DT04-2P-V

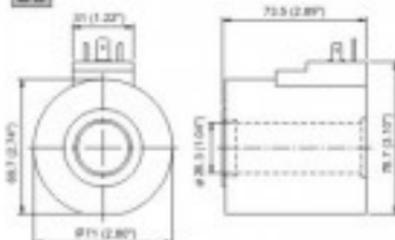


◎ CONCENTRATE WIRING BOX TYPE  
◎ 集中線圈型式

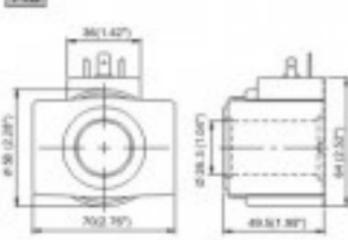


◆ DIMENSIONS 尺寸

DC



AC



### ◆ MODEL 型号

COS02



### ◆ SPECIFICATIONS 规格

Model Number 型号规格	VOLTAGE (V) 电压			CURRENT & POWER AT RATED VOLTAGE 额定电压下的电流及功率		
	SOURCE RATED 额定电压	IN 额定	RANGE 范围	IN-RUSH CURRENT (A) 浪涌电流	HOLDING CURRENT (A) 额定电流	WATTAGE 功率
COS02-R1 *	RF113	50	100-125		0.31	32
		60				
		60				
COS02-R2 *	RF220	50	180-220		0.18	32
		60				
		60				
COS02-D1 *	DC12V	—	10.8-13.2		2.6	30
COS02-D2 *	DC24V	—	21.6-26.4		1.25	30

● Above value based on temperature 30°C, electric voltage allowance 10%. 以上数据基于环境温度30℃,电压容许量10%。

● Coil - COS02 series application for WE-02. 线圈 - coso系列适用规格: we-02.

### ◆ HOW TO ORDER 如何订购



#### 1 VALVE SERIES 系列

COS = COIL (IRON COVER IP68)  
线圈铁壳外罩 (IP68)

#### 2 SUBPLATE MOUNTING SIZE 基板规格

02 = 1/2" (6mm)  
ISO CETOP3  
DIN NG 6  
NFPA D03

#### 3 TYPE OF COIL 线圈类型

01: DC12  
02: DC24  
R1: RF113 50/40/30/2  
R2: RF220 50/40/30/2

#### 4 WIRING TYPE 接线方式

H WIRING BOX TYPE  
(DIN 43653-A / ISO4460)  
插接盒式 (DIN 43653-A / ISO4460)

X DOUBLE LEAD  
双引线式

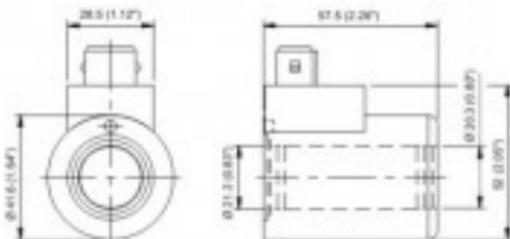


B : DEUTSCH DT64-2P-V

P-AMP JUNIOR  
P-AMP 线圈



### ◆ DIMENSIONS 尺寸规格



## ◆ MODEL 型號

### COS03



## ◆ SPECIFICATIONS 規格

Model Number 型號	VOLTAGE (V) 電壓			CURRENT & POWER AT RATED VOLTAGE 額定電壓下的電流及功率		
	SOURCE RATED 源電壓	AC 交流	KA/RATED 額定電流	IN-RUSH CURRENT (A) 吸合電流	HOLDING CURRENT (A) 保持電流	HEATAGE 瓦特數
COS03-R1	RF110	50	99-126	0.47	0.47	32
		60				
COS03-R2	RF220	50	199-253	0.24	0.24	32
		60				
COS03-D1	DC12V	—	10.8-13.2	—	2.58	30
COS03-D2	DC24V	—	21.6-26.4	—	1.33	30

● Above value based on temperature 30° C, electric voltage allowance 15%. 以上數據係以溫度30°C, 電壓容許偏差15%。

● Coil - COS03 series application for WE-03. 線圈 - COS03系列適用於 WE-03.

## ◆ HOW TO ORDER 如何訂貨



### 1 VALVE SERIES 閥系列

COS = COIL/IRON COVER (FES)  
鐵殼線圈系列 (FES)

### 2 SUBPLATE MOUNTING SIZE 副板安裝尺寸

03: 38(3mm)  
ISO CETOP5  
DIN NG 10  
NFA-D05

### 3 TYPE OF COIL 線圈類型

D1: DC12V  
D2: DC24V  
R1: RF110 60HZ/50HZ  
R2: RF220 60HZ/50HZ

### 4 WIRING TYPE 線圈接法

W-WIRING BOX TYPE

(DIN 43880-A/ISO4080)

H 線圈盒式 (DIN 43880-A/ISO4080)

X-DOUBLE LEAD

X 雙線圈方式

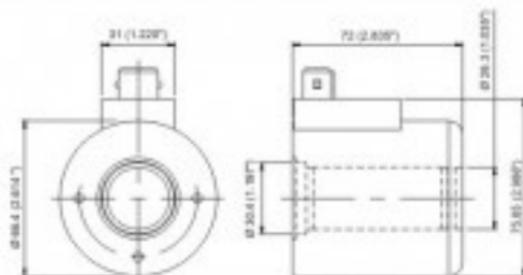


P-AMP JUNIOR

P-AMP 線圈



## ◆ DIMENSIONS 外型尺寸圖



# CAVITY PLUGS 孔口塞

## GCS SERIES PLUGS GCS系列塞

### ◆ HOW TO ORDER 如何订购

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
GCS	— 08 —	2	N

#### 1 VALVE SERIES 系列

GCS= GAG  
塞

#### 2 SUBPLATE MOUNTING SIZE 副板口径

08= 3/4"-16 UNF  
10= 7/8"-14 UNF  
12= 1 1/16"-12 UNF  
16= 1 5/16"-12 UNF

#### 3 TYPE 型式

1 = 1-WAY  
2 = 2-WAY  
3 = 3-WAY  
4 = 4-WAY

#### 4 SEALS 密封

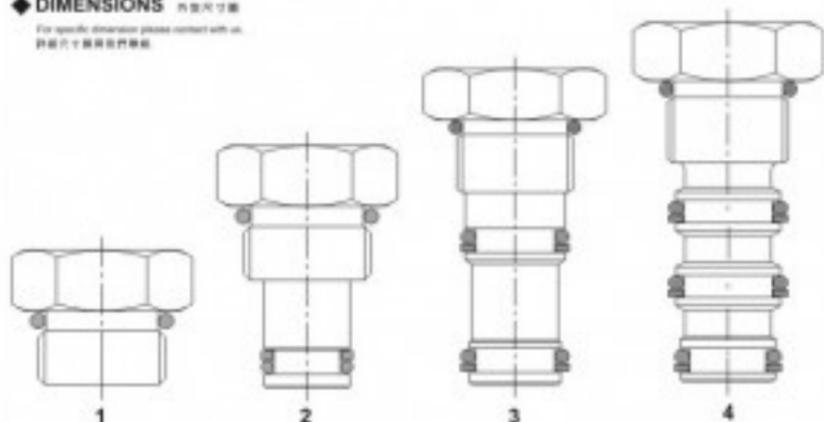
N = Buna "N" 丁腈橡胶  
V = Viton 氟橡胶

### ◆ SPECIFICATIONS 规格

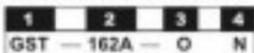
Model Number 型号规格	O-RING O型圈						
GCS-08-2V	AS-908	AS-012					
GCS-08-3V	AS-808	AS-014	AS-013				
GCS-08-4V	AS-808	AS-014	AS-013	AS-012			
GCS-08-5V							
GCS-10-2V	AS-810	AS-014					
GCS-10-3V	AS-910	AS-015	AS-014				
GCS-10-4V	AS-910	AS-016	AS-015	AS-014			
GCS-10-5V	AS-810	AS-116	AS-015	AS-014	AS-013		
GCS-12-2V	AS-812	AS-115					
GCS-12-3V	AS-812	AS-019	AS-018				
GCS-12-4V	AS-912	AS-018	AS-018	AS-017			
GCS-12-5V	AS-912	AS-019	AS-018	AS-017	AS-016		
GCS-16-2V	AS-816	AS-119					
GCS-16-3V	AS-816	AS-119	AS-117				
GCS-16-4V	AS-916	AS-119	AS-118	AS-117			
GCS-16-5V	AS-916	AS-125	AS-119	AS-118	AS-117		

### ◆ DIMENSIONS 尺寸规格

For specific dimension please contact us.  
如有尺寸疑问请联系我们。



◆ HOW TO ORDER 订货须知



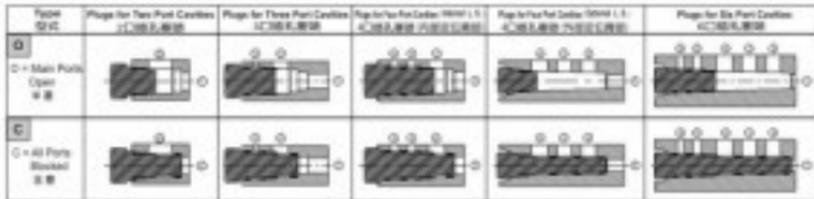
1 VALVE SERIES 系列

GST=PLUG  
系列

2 SUBPLATE MOUNTING SIZE 尺寸

Plugs for Two Port Cavities 二孔孔塞		Plugs for Three Port Cavities 三孔孔塞		Plugs for Four Port Cavities (Series L) 四孔孔塞(系列L)		Plugs for Four Port Cavities (Series L) 四孔孔塞(系列L)		Plugs for Six Port Cavities 六孔孔塞	
Order No. 订货号	Threaded type 螺口规格	Order No. 订货号	Threaded type 螺口规格	Order No. 订货号	Threaded type 螺口规格	Order No. 订货号	Threaded type 螺口规格	Order No. 订货号	Threaded type 螺口规格
SA	M16x1.5	SA	M16x1.5	SA	M20x1.5	SA	M20x1.5	SA	M20x1.5
162A	M16x1.5	162A	M16x1.5	2SA	1.0-14.0P10-20	2SA	1.0-14.0P10-20	2SA	1.0-14.0P10-20
17A	M20x1.5	17A	M20x1.5	3SA	M16x2.0	3SA	M16x2.0	3SA	M16x2.0
18A	M20x1.5	2A	1.0-14.0P10-20	3A	M16x2.0	3A	M16x2.0	3A	M16x2.0
SA	1.0-14.0P10-20	17A	M20x2.0						
SA	1.0-14.0P10-20	18A	M16x2.0						
16A	M16x2.0								
18A	M16x2.0								

3 TYPE 型式

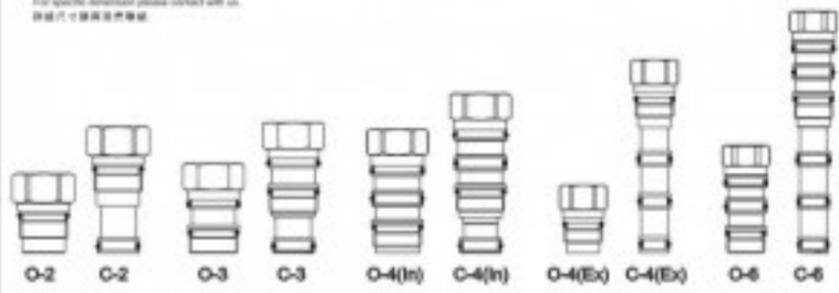


4 SEALS 密封

N = SUNA "N" 丁腈  
V = VITON 氟橡胶

◆ DIMENSIONS 尺寸

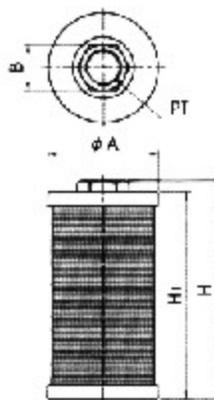
For specific dimension please contact with us.  
欲知详细尺寸请洽我们。



# HYDRAULIC ACCESSORIES

油壓附屬零件

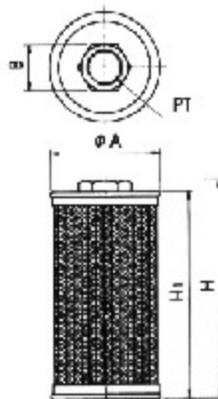
## N TYPE SUCTION FLITER (N型濾油網)



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	H1 mm	H mm	流量 Flow l/min	過濾精度(目) Filtration mesh	重量 Weight kg
N-04	1/2"	64	27	153	160	35	150	0.27
N-06	3/4"	64	34	153	166	46		0.28
N-08	1"	83	42	198	210	90		0.48
N-10	1 1/4"	103	53	215	231	150		0.77
N-12	1 1/2"	122	61	232	246	205		0.96
N-16	2"	122	74	317	332	320		1.27
N-20	2 1/2"	148	105	419	434	550		2.0
N-24	3"					600		2.68

## MF TYPE SUCTION FLITER (MF型濾油網)



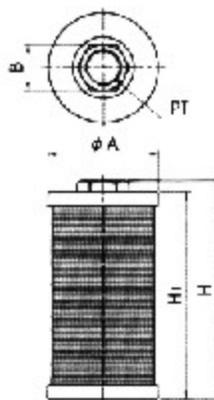
### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	H1 mm	H mm	流量 Flow l/min	過濾精度(目) Filtration mesh	重量 Weight kg	
MF-02	1/4"	54	21	86	92	20	100	0.09	
MF-03	3/8"					25			
MF-04	1/2"		27			30			
MF-06	3/4"	66	34	121	137	55			0.15
MF-08	1"		42	147	163	110			0.18
MF-10	1 1/4"		54	166	184	210			0.21
MF-12	1 1/2"		85	61	177	194			285
MF-16	2"	105	74	198	214	395			0.42
MF-20	2 1/2"	158	109	252	275	750	1.07		
MF-24	3"					800			
MF-32	4"					208		142	356

# HYDRAULIC ACCESSORIES

油壓附屬零件

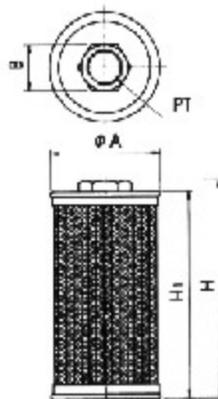
## N TYPE SUCTION FLITER (N型濾油網)



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	H1 mm	H mm	流量 Flow l/min	過濾精度(目) Filtration mesh	重量 Weight kg
N-04	1/2"	64	27	153	160	35	150	0.27
N-06	3/4"	64	34	153	166	46		0.28
N-08	1"	83	42	198	210	90		0.48
N-10	1 1/4"	103	53	215	231	150		0.77
N-12	1 1/2"	122	61	232	246	205		0.96
N-16	2"	122	74	317	332	320		1.27
N-20	2 1/2"	148	105	419	434	550		2.0
N-24	3"					600		2.68

## MF TYPE SUCTION FLITER (MF型濾油網)



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	H1 mm	H mm	流量 Flow l/min	過濾精度(目) Filtration mesh	重量 Weight kg	
MF-02	1/4"	54	21	86	92	20	100	0.09	
MF-03	3/8"					25			
MF-04	1/2"		27			30			
MF-06	3/4"	66	34	121	137	55			0.15
MF-08	1"		42	147	163	110			0.18
MF-10	1 1/4"		54	166	184	210			0.21
MF-12	1 1/2"		85	61	177	194			285
MF-16	2"	105	74	198	214	395			0.42
MF-20	2 1/2"	158	109	252	275	750	1.07		
MF-24	3"					800			
MF-32	4"					208		142	356

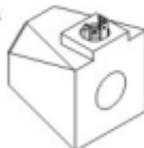
◆ MODEL 型式 XE-02



XE-03



XE-04



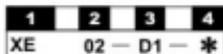
◆ SPECIFICATIONS 規格

MODEL NUMBER 型式號碼	COIL MODEL NUMBER 線圈型式號碼	VOLTAGE (V) 電壓		CURRENT & POWER AT RATED VOLTAGE 額定電壓時的電流及功率	
		SOURCE RATED 額定電壓	RANGE 範圍	RESISTANCE 電阻 Ω	HOLDING CURRENT (A) 磁吸電流
XEF-02	XE-02 D1	DC 12V	10.8 ~ 13.2	3.7	2.95
	XE-02 D2	DC 24V	21.6 ~ 26.4	21.0	1.2
XEF-03	XE-03 D1	DC 12V	10.8 ~ 13.2	4.0	2.95
	XE-03 D2	DC 24V	21.6 ~ 26.4	14.0	1.8
XEF-04	XE-04 D1	DC 12V	10.8 ~ 13.2	5.0	2.5
	XE-04 D2	DC 24V	21.6 ~ 26.4	17.4	1.5

● Above value based on temperature 30° C, electric voltage allowance 15%. 以上數據係以溫度30°C, 電壓容許度15%。

● Coil - XE series application for XEF series. 線圈 - XE 系列適用於 XEF 系列。

◆ HOW TO ORDER 線圈訂貨



1 VALVE SERIES 系列名稱

XE = XEF MODEL COIL 11F 型式號碼

2 SUBPLATE MOUNTING SIZE 板安裝尺寸

Size : 02=XEF-02 / 03=XEF-03 / 04=XEF-04

3 TYPE OF COIL 線圈類型

D1 : DC12V  
D2 : DC24V

4 WIRING TYPE 接線型式

H: WIRING BOX TYPE  
(DIN 43650-A / ISO4400)

H 接線盒式  
(DIN 43650-A / ISO4400)



D : DEUTSCH DT04-2P-V



X: DOUBLE LEAD

X 雙線接線方式



P: AMP JUNIOR  
P-AMP 接線器

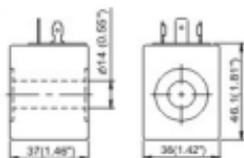


◆ AVAILABLE WIRING TYPE FOR COIL TYPE  
線圈適用接線型式

WIRING TYPE 接線型式	H	X	D	P
A1: RAC110V	✓	—	—	—
A2: RAC220V	✓	—	—	—
D1: DC12V	✓	✓	✓	✓
D2: DC24V	✓	✓	✓	✓

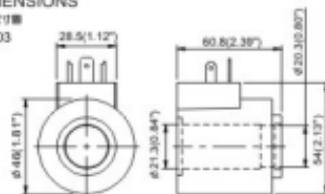
◆ DIMENSIONS 外觀尺寸

XE-02



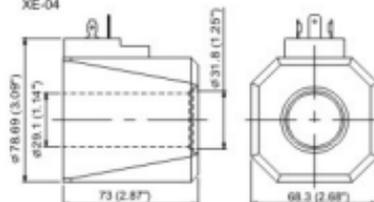
◆ DIMENSIONS 外觀尺寸

XE-03



◆ DIMENSIONS 外觀尺寸

XE-04



● Coil type XE-04 is available for wiring type "H" and "X" only at this moment.  
● 線圈型式 XE-04 目前只與接線型式 "H" 和 "X" 可接線。

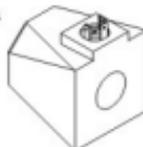
◆ MODEL 型式 XE-02



XE-03



XE-04



◆ SPECIFICATIONS 規格

MODEL NUMBER 型式號碼	COIL MODEL NUMBER 線圈型式號碼	VOLTAGE (V) 電壓		CURRENT & POWER AT RATED VOLTAGE 額定電壓時的電流及功率	
		SOURCE RATED 額定電壓	RANGE 範圍	RESISTANCE 電阻 Ω	HOLDING CURRENT (A) 磁吸電流
XEF-02	XE-02 D1	DC 12V	10.8 ~ 13.2	3.7	2.95
	XE-02 D2	DC 24V	21.6 ~ 26.4	21.0	1.2
XEF-03	XE-03 D1	DC 12V	10.8 ~ 13.2	4.0	2.95
	XE-03 D2	DC 24V	21.6 ~ 26.4	14.0	1.8
XEF-04	XE-04 D1	DC 12V	10.8 ~ 13.2	5.0	2.5
	XE-04 D2	DC 24V	21.6 ~ 26.4	17.4	1.5

● Above value based on temperature 30° C, electric voltage allowance 15%. 以上數據係以溫度30℃,電壓容許度15%。

● Coil - XE series application for XEF series. 線圈 - XE 系列適用於 XEF 系列。

◆ HOW TO ORDER 線圈訂貨



1 VALVE SERIES 系列名稱

XE = XEF MODEL COIL 11F 型式號碼

2 SUBPLATE MOUNTING SIZE 板安裝尺寸

Size : 02=XEF-02 / 03=XEF-03 / 04=XEF-04

3 TYPE OF COIL 線圈類型

D1 : DC12V  
D2 : DC24V

4 WIRING TYPE 接線型式

H: WIRING BOX TYPE  
(DIN 43650-A / ISO4400)

H 接線盒式  
(DIN 43650-A / ISO4400)



D : DEUTSCH DT04-2P-V



X: DOUBLE LEAD

X 雙線接線方式



P: AMP JUNIOR  
P-AMP 接線器

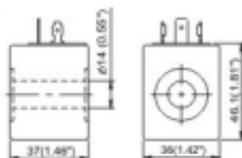


◆ AVAILABLE WIRING TYPE FOR COIL TYPE  
線圈適用接線型式

WIRING TYPE 接線型式	H	X	D	P
A1: RAC110V	✓	—	—	—
A2: RAC220V	✓	—	—	—
D1: DC12V	✓	✓	✓	✓
D2: DC24V	✓	✓	✓	✓

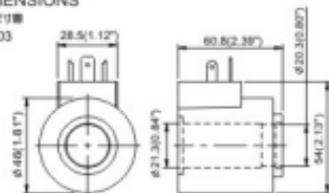
◆ DIMENSIONS 外觀尺寸

XE-02



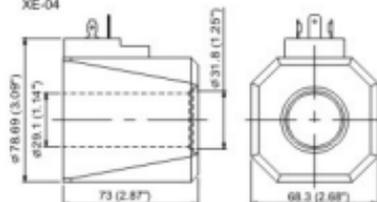
◆ DIMENSIONS 外觀尺寸

XE-03



◆ DIMENSIONS 外觀尺寸

XE-04



● Coil type XE-04 is available for wiring type "H" and "X" only at this moment.  
● 線圈型式 XE-04 目前只與接線型式 "H" 和 "X" 可接線。

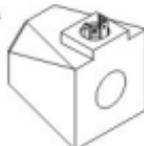
◆ MODEL 型式 XE-02



XE-03



XE-04



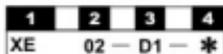
◆ SPECIFICATIONS 規格

MODEL NUMBER 型式號碼	COIL MODEL NUMBER 線圈型式號碼	VOLTAGE (V) 電壓		CURRENT & POWER AT RATED VOLTAGE 額定電壓時的電流及功率	
		SOURCE RATED 額定電壓	RANGE 範圍	RESISTANCE 電阻 Ω	HOLDING CURRENT (A) 磁吸電流
XEF-02	XE-02 D1	DC 12V	10.8 ~ 13.2	3.7	2.95
	XE-02 D2	DC 24V	21.6 ~ 26.4	21.0	1.2
XEF-03	XE-03 D1	DC 12V	10.8 ~ 13.2	4.0	2.95
	XE-03 D2	DC 24V	21.6 ~ 26.4	14.0	1.8
XEF-04	XE-04 D1	DC 12V	10.8 ~ 13.2	5.0	2.5
	XE-04 D2	DC 24V	21.6 ~ 26.4	17.4	1.5

● Above value based on temperature 30° C, electric voltage allowance 15%. 以上數據係以溫度30℃,電壓容許度15%。

● Coil - XE series application for XEF series. 線圈 - XE 系列適用於 XEF 系列。

◆ HOW TO ORDER 線圈訂貨



1 VALVE SERIES 系列名稱

XE = XEF MODEL COIL 11F 型式號碼

2 SUBPLATE MOUNTING SIZE 板口尺寸

Size : 02=XEF-02 / 03=XEF-03 / 04=XEF-04

3 TYPE OF COIL 線圈類型

D1 : DC12V  
D2 : DC24V

4 WIRING TYPE 接線型式

H: WIRING BOX TYPE  
(DIN 43650-A / ISO4400)

H 接線盒式  
(DIN 43650-A / ISO4400)



D: DEUTSCH DT04-2P-V



X: DOUBLE LEAD

X 雙線接線方式



P: AMP JUNIOR  
P-AMP 接線器

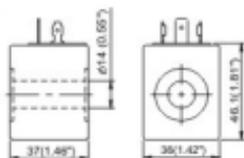


◆ AVAILABLE WIRING TYPE FOR COIL TYPE  
線圈適用的接線型式

WIRING TYPE 接線型式	H	X	D	P
A1: RAC110V	✓	—	—	—
A2: RAC220V	✓	—	—	—
D1: DC12V	✓	✓	✓	✓
D2: DC24V	✓	✓	✓	✓

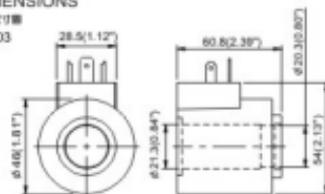
◆ DIMENSIONS 外觀尺寸

XE-02



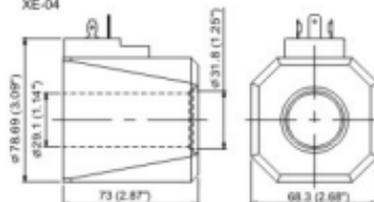
◆ DIMENSIONS 外觀尺寸

XE-03



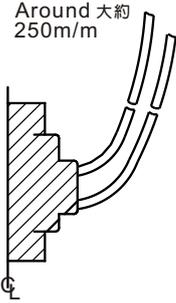
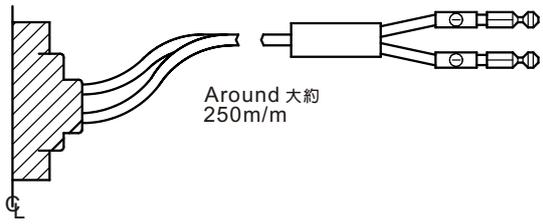
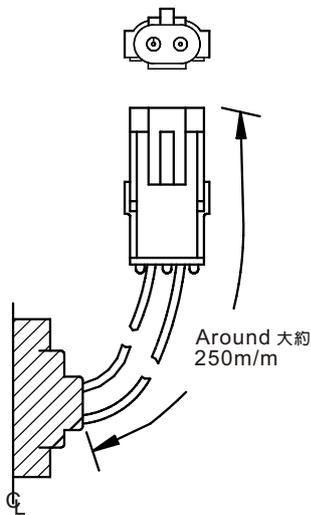
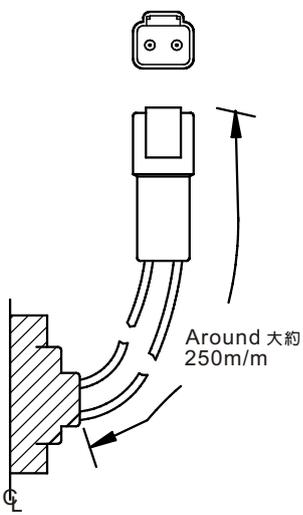
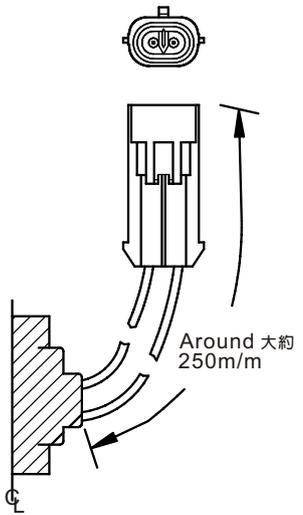
◆ DIMENSIONS 外觀尺寸

XE-04



● Coil type XE-04 is available for wiring type "H" and "X" only at this moment.  
● 線圈型式 XE-04 目前只與接線型式 "H" 和 "X" 可接線。

◆ **MODEL 型式**

MODEL TO ORDER 訂單型式	<b>X</b>	<b>XBD</b>	
DESCRIPTION 說明	Double Lead 雙接線	Double Lead 雙接線 Bullet Terminals 子彈型公端子 Matching Bullet Sockets 相配母端子 BL2-195A-0	
DRAWING 圖示	 <p>Around 大約 250m/m</p>	 <p>Around 大約 250m/m</p>	
MODEL TO ORDER 訂單型式	<b>XW</b>	<b>XD</b>	<b>XM</b>
DESCRIPTION 說明	Weather-Pack <sup>®</sup> 插頭 Matching Connector 相配插頭 Delphi-12015792	DT04-2P 德制插頭 Matching Connector 相配插頭 Deutsch - DT06-2S	Metri-Pack <sup>®</sup> 插頭 Matching Connector 相配插頭 Delphi-12052641
DRAWING 圖示	 <p>Around 大約 250m/m</p>	 <p>Around 大約 250m/m</p>	 <p>Around 大約 250m/m</p>

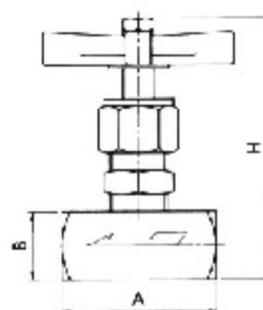
# HYDRAULIC ACCESSORIES

油壓附屬零配件

## NEEDLE VALVE 中止閥(針閥)



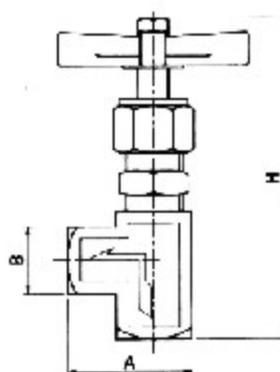
GCT



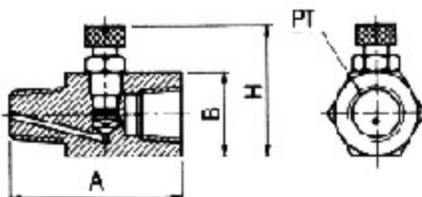
ST-180



ST-90



SB-02



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	H mm	流量 Flow	最高壓力 Max. Pressure kgf/cm <sup>2</sup>	重量 Weight kg
GCT-02	1/4"	51	22	95	3	350	0.33
GCT-03	3/8"	61	25	100	21		0.43
GCT-04	1/2"	62	32	114	30		0.65
GCT-06	3/4"	90	38	148	100		1.46
GCT-08	1"	102	50	164	300		2.50
ST-02-180	1/4"	50	25	99	3	210	0.28
ST-02-90		41	22	108			0.29
ST-03-180	3/8"	50	25	99	21		0.27
ST-03-90		41	22	108			0.29
SB-02	1/4"	43	21	35	0.5	70	0.10

## PRESSURE GAUGES W/GLYCERINE 甘油式壓力計

### ◆ HOW TO ORDER 選購說明

1	2	3	4	5	6
G	100	LM	250	K	10

#### 1 VALVE SERIES 系列名稱

G=Pressure Gauges 壓力錶

#### 2 PRESSURE SURFACE DIA. 壓力表面直徑

 50:  $\varnothing$ 50mm 60:  $\varnothing$ 60mm  
 100:  $\varnothing$ 100mm

#### 3 MOUNTING TYPE 安裝方式

LM: Side Mounting 側裝式

CBM: Panel Mounting 面板裝式

#### 4 MEAS. RANGE 量程

 See Specifications  
 參閱規格表

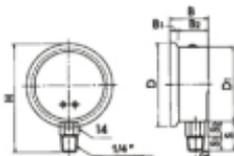
#### 5 PRESSURE UNIT 壓力單位

 K: kgf/cm<sup>2</sup>; P: PSI  
 B: bar; KP: Kpa

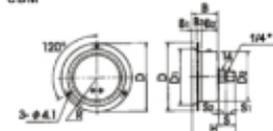
#### 6 DESIGN NO 設計編號



G60LM



CBM

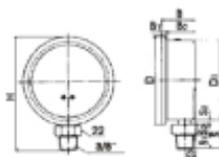


### ◆ SPECIFICATIONS 規格

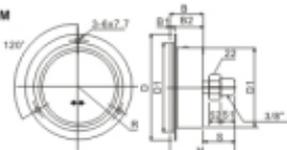
Model 型號名稱	Scale 量程	Type 型式	kgf/cm <sup>2</sup> 量程	$\varnothing$ D mm	$\varnothing$ D1 mm	$\varnothing$ D2 mm	B mm	B1 mm	B2 mm	B3 mm	S mm	S1 mm	S2 mm	H mm	G mm	R mm
G60LM-35	2 1/2" PT1/4	Bottom mount 側立式	0-35	71.5	63.5		32	7	25		25	12	13	88.5	11	
G60LM-70			0-70													
G60LM-100			0-100													
G60LM-150			0-150													
G60LM-250			0-250													
G60LM-350			0-350													
G60LM-400	0-400															
G60CBM-35	2 1/2" PT1/4	Panel mount 側入式	0-35	87.5	72	63	33	6.7	20.5	5.8	25	12	13	55	40	
G60CBM-70			0-70													
G60CBM-100			0-100													
G60CBM-150			0-150													
G60CBM-250			0-250													
G60CBM-350			0-350													
G60CBM-400	0-400															



G100LM



CBM



### ◆ SPECIFICATIONS 規格

Model 型號名稱	Scale 量程	Type 型式	kgf/cm <sup>2</sup> 量程	$\varnothing$ D mm	$\varnothing$ D1 mm	$\varnothing$ D2 mm	B mm	B1 mm	B2 mm	B3 mm	S mm	S1 mm	S2 mm	H mm	G mm	R mm
G100LM-35	4" PT3/8	Bottom mount 側立式	0-35	110	99		40	6	34	37	6	14	17	141	14	
G100LM-70			0-70													
G100LM-100			0-100													
G100LM-150			0-150													
G100LM-250			0-250													
G100LM-350			0-350													
G100LM-400	0-400															
G100CBM-35	4" PT3/8	Panel mount 側入式	0-35	131.8	110	98	36	7.5	28.5	37	13	13	6	74	58.5	
G100CBM-70			0-70													
G100CBM-100			0-100													
G100CBM-150			0-150													
G100CBM-250			0-250													
G100CBM-350			0-350													
G100CBM-400	0-400															

# HYDRAULIC ACCESSORIES

油壓附屬零件

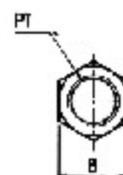
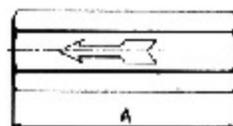
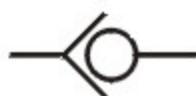
## FLUID LEVEL & TEMPERATURE GAUGES 油面計



### ◆ SPECIFICATIONS 規格

型式編號 Model	A mm	B mm	C mm	D mm	E mm	F mm	重量 Weight kg
LS-3"	118	41	80	18	37	M10	0.18
LS-7"	180	52	127	19.5	46	M12	0.33
KS-3"	101	36.5	76	19	38	M10	0.10
KS-5"	151		127				0.12
LG-3"	105	25	74.5	13	46.5	M10	0.12
LG-4"	130		99				0.13
LG-5"	155		127				0.14
LG-200	230	28	200	25	54	M12	0.29
LG-300	330		300		63		0.38
LG-400	430		400		54		0.44
LG-500	530		500				0.52

## INLINE CHECK VALVES 防逆閥



### ◆ SPECIFICATIONS 規格

Model 型式編號	PT 口徑	A mm	B mm	Flow 流量 l/min	Max. Pressure 最高壓力 kgf/cm <sup>2</sup>	Weight 重量 kg
CV-03T	3/8"	74	23	40	210	0.18
CV-04T	1/2"	81	29	60		0.33
CV-06T	3/4"	91	35	100		0.48
CV-08T	1"	114	46	150		1.10
CV-10T	1 1/4"	133	56	200		1.98
CV-12T	1 1/2"	134	66	280		2.78
CV-16T	2"	153	76.5	400		3.64
CIT-03T	3/8"	74	23	40	315	0.18
CIT-04T	1/2"	81	29	60		0.33
CIT-06T	3/4"	91	35	100		0.48
CIT-08T	1"	114	46	150		1.10
CIT-10T	1 1/4"	133	56	200		1.98
CIT-12T	1 1/2"	134	66	280		2.78
CIT-16T	2"	153	76.5	400		3.64

Remarks : The valve crack pressure of CV inline check valve are 0.5kgf/cm<sup>2</sup> and 5kgf/cm<sup>2</sup>

註：CV型號作業壓力可分為0.5kgf/cm<sup>2</sup>與5kgf/cm<sup>2</sup>兩種。

# HYDRAULIC ACCESSORIES

油壓附屬零件

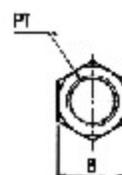
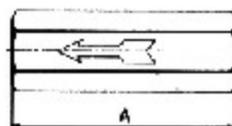
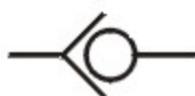
## FLUID LEVEL & TEMPERATURE GAUGES 油面計



### ◆ SPECIFICATIONS 規格

型式編號 Model	A mm	B mm	C mm	D mm	E mm	F mm	重量 Weight kg
LS-3"	118	41	80	18	37	M10	0.18
LS-7"	180	52	127	19.5	46	M12	0.33
KS-3"	101	36.5	76	19	38	M10	0.10
KS-5"	151		127				0.12
LG-3"	105	25	74.5	13	46.5	M10	0.12
LG-4"	130		99				0.13
LG-5"	155		127				0.14
LG-200	230	28	200	25	54	M12	0.29
LG-300	330		300		63		0.38
LG-400	430		400		54		0.44
LG-500	530		500				0.52

## INLINE CHECK VALVES 防逆閥



### ◆ SPECIFICATIONS 規格

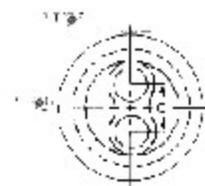
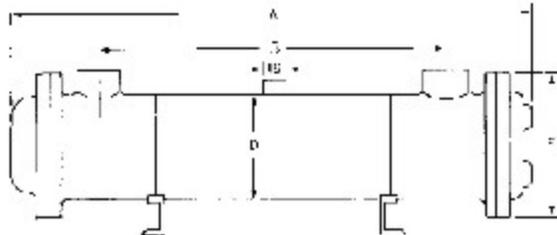
Model 型式編號	PT 口徑	A mm	B mm	Flow 流量 l/min	Max. Pressure 最高壓力 kgf/cm <sup>2</sup>	Weight 重量 kg
CV-03T	3/8"	74	23	40	210	0.18
CV-04T	1/2"	81	29	60		0.33
CV-06T	3/4"	91	35	100		0.48
CV-08T	1"	114	46	150		1.10
CV-10T	1 1/4"	133	56	200		1.98
CV-12T	1 1/2"	134	66	280		2.78
CV-16T	2"	153	76.5	400		3.64
CIT-03T	3/8"	74	23	40	315	0.18
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CIT-06T	3/4"	91	35	100		0.48
CIT-08T	1"	114	46	150		1.10
CIT-10T	1 1/4"	133	56	200		1.98
CIT-12T	1 1/2"	134	66	280		2.78
CIT-16T	2"	153	76.5	400		3.64

Remarks : The valve crack pressure of CV inline check valve are 0.5kgf/cm<sup>2</sup> and 5kgf/cm<sup>2</sup>

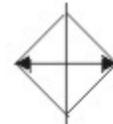
註：CV型號作業壓力可分為0.5kgf/cm<sup>2</sup>與5kgf/cm<sup>2</sup>兩種。

## OIL COOLER 油壓冷卻器

### ◆ OR-TYPE SERIES



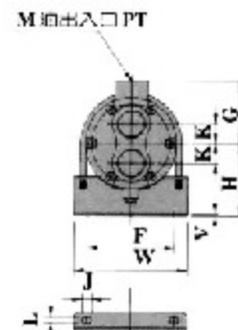
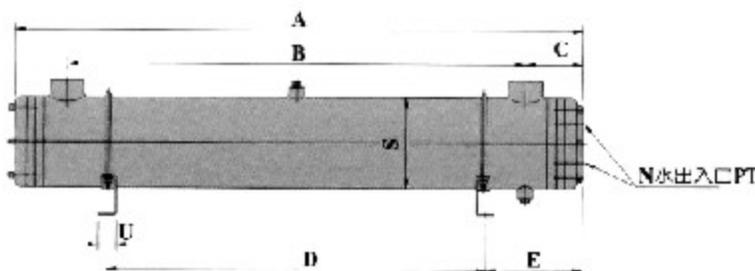
### ◆ SYMBOLS 油壓表示記號



### ◆ SPECIFICATIONS 規格

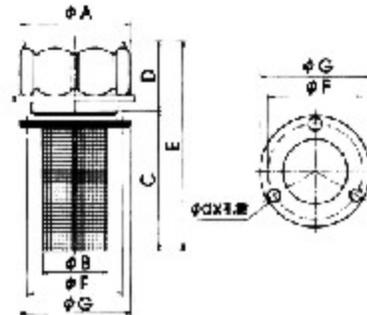
MODEL 型式	A	B	C	D	E	φF	φG	RADIATOR TUBE 散熱管	RADIATOR AREA 散熱面積	OIL CAPACITY 油箱容量	WEIGHT 重量	PUMP FLOW 泵浦流量	WATER FLOW 水流量
OR - 60	465	295	40	89.1	120	3/4	3/4	22	0.24	60	8	100	60
OR - 100	540	370	55	114.3	140	3/4	3/4	26	0.35	100	12	200	100
OR - 150	580	375	65	139.8	170	1 1/4	3/4	42	0.6	150	15	300	150
OR - 250	800	600	65	139.8	170	1 1/4	3/4	58	1.2	250	22	300	150
OR - 350	1205	1000	65	139.8	170	1 1/4	3/4	58	1.9	350	30	300	150
OR - 600	1225	970	85	165.2	196	2	1 1/2	58	1.9	600	40	400	200
OR - 800	1725	1470	85	165.2	196	2	1 1/2	58	2.8	800	50	400	200
OR - 1000	2140	1890	85	165.2	196	2	1 1/2	58	3.5	1000	60	400	200
OR - 1200	2520	2270	85	165.2	196	2	1 1/2	58	4.2	1200	70	400	200

### ◆ HH-TYPE SERIES



TYPE 型式	A	B	C	D	E	F	J	G	H	K	L	M	N	S	U	V	W	Area 面積 m <sup>2</sup>	Flow 流量 l/min	Mass 重量 Kg
HH-0905	590	408	88	270	150	80	25	63	80	22	10	3/4"	3/4"	89.5	30	2.3	115	0.41	60	10
HH-0908	880	720	78	500	190	80	25	63	80	22	10	3/4"	3/4"	89.5	30	2.3	115	0.7	100	14
HH-1405	600	398	100	270	162	140	32	90	110	28	12	1 1/4"	1 1/4"	140.8	40	3.2	176	1.1	150	20
HH-1408	890	710	85	500	202	140	32	90	110	28	12	1 1/4"	1 1/4"	140.8	40	3.2	176	1.9	250	25
HH-1412	1310	1110	100	700	303	140	32	90	110	28	12	1 1/2"	1 1/4"	140.8	40	3.2	176	2.9	350	37
HH-1712	1335	1060	138	700	310	145	32	115	125	32	12	2"	1 1/4"	166.5	40	3.2	200	4.6	600	48
HH-1716	1745	1510	118	850	460	145	32	115	125	32	12	2"	1 1/4"	166.5	40	3.2	200	6.5	840	56
HH-1722	2200	1850	160	1650	270	145	32	115	125	32	12	2"	1 1/4"	166.5	40	3.2	200	7.2	1000	72

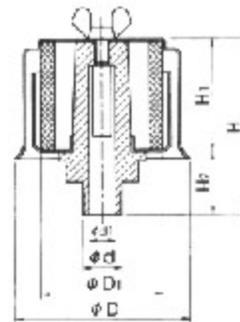
## FILLER BREATHER FILTERS 注油器



### ◆ SPECIFICATIONS 規格

Model 型式編號	Net Dia 活動網口徑 mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	dx孔數 Hole	Filtration micron 過濾精度	Weight 重量 kg
AB-1162	32	53	31	65	34	99	45.5	53	Ø6X3	400	0.07
AB-1163	50	75	48	88	49	137	71	Ø6X6	0.19		

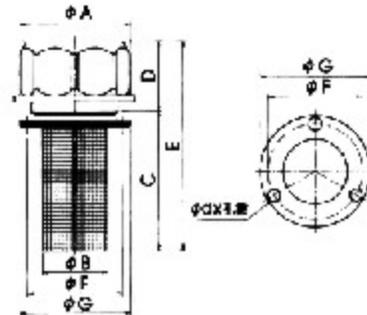
## AIR FILTERS 空氣濾清器



### ◆ SPECIFICATIONS 規格

Model 型式編號	d PT	d1 mm	D mm	D1 mm	H1 mm	H2 mm	H mm	Filtration mesh 過濾精度	Weight 重量 kg
AB-02	1/4"	8	52	41	36	22	58	40	0.09
AB-03	3/8"								0.11
AB-04	1/2"	19	67	51	41	27	68		0.2
AB-06	3/4"								0.2
AB-08	1"	25	100	65	45	26	74		0.28
AB-16	2"	48	130	92	90	37	130		0.64
AB-20	2 1/2"	61	187	150	115	59	174		1.52
AB-32	4"	113	210	165	140	50	193		1.76

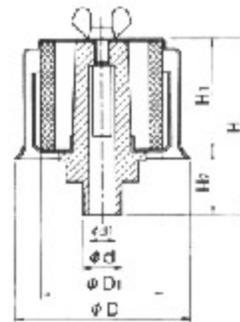
## FILLER BREATHER FILTERS 注油器



### ◆ SPECIFICATIONS 規格

Model 型式編號	Net Dia 活動網口徑 mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	dx孔數 Hole	Filtration micron 過濾精度	Weight 重量 kg
AB-1162	32	53	31	65	34	99	45.5	53	Ø6X3	400	0.07
AB-1163	50	75	48	88	49	137	71	Ø6X6	0.19		

## AIR FILTERS 空氣濾清器



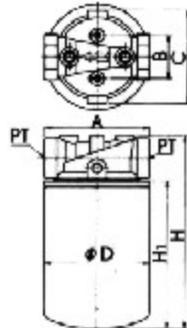
### ◆ SPECIFICATIONS 規格

Model 型式編號	d PT	d1 mm	D mm	D1 mm	H1 mm	H2 mm	H mm	Filtration mesh 過濾精度	Weight 重量 kg
AB-02	1/4"	8	52	41	36	22	58	40	0.09
AB-03	3/8"								0.11
AB-04	1/2"	19	67	51	41	27	68		0.2
AB-06	3/4"								0.2
AB-08	1"	25	100	65	45	26	74		0.28
AB-16	2"	48	130	92	90	37	130		0.64
AB-20	2 1/2"	61	187	150	115	59	174		1.52
AB-32	4"	113	210	165	140	50	193		1.76

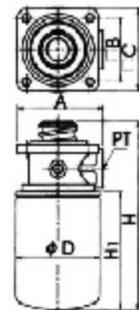
## RETURN FILTERS 管線過濾器



GBF



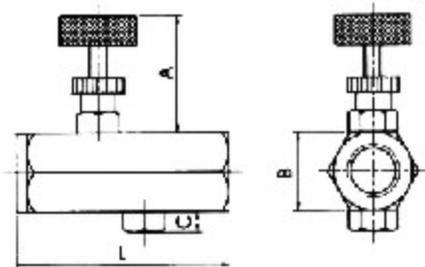
GBF-06G



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	C mm	D mm	H1 mm	H mm	流量 Flow l/min	固定方式 Mounted	重量 Weight kg
GBF-06	3/4"	92	38	82	93	127	170	60	管式(Pip lag)	0.62
GBF-06G	3/4"	97	70	90	93	127	207	60	箱上式(Tank)	0.87
GBF-10	1 1/4"	137	48	136	128	167	236	144	管式(Pip lag)	1.84

## THROTTLE & CHECK VALVE 流量控制閥



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	C mm	L mm	流量 Flow l/min	材質 Material	最高壓力 Max. Pressure kgf/cm <sup>2</sup>	重量 Weight kg
K(C)-02	1/4"	40	23	7	62	12	鐵(Steel)	30	0.24
K(C)-03	3/8"	38	26		70	20	鐵(Steel)		0.30
K(C)-04	1/2"	43	32	10	81	30	鐵(Steel)		0.50
K(C)-06	3/4"	47	41	12	92	48	鐵(Steel)		0.92

# HYDRAULIC ACCESSORIES

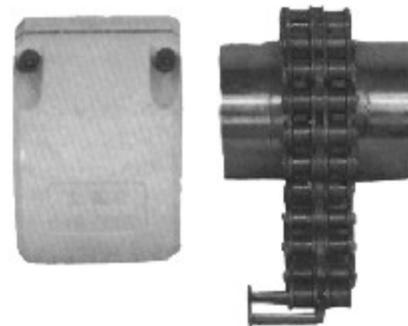
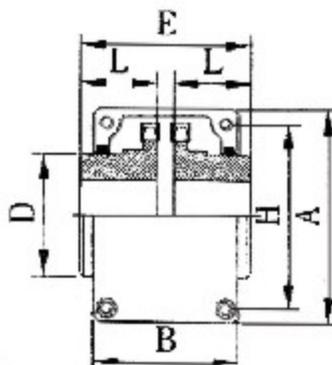
油壓附屬零件

## DRIVE-COUPLING 連軸器



### ◆ SPECIFICATIONS 規格

Model 型式編號	Torque kg-m 適用力矩	r.p.m. 最高回轉數	軸孔徑 Shaft Dia		d3 軸徑	d5 外徑	L	S1	Weight 重量 kg
			Min.(mm)	Max.(mm)					
CP-67	2.2	10,000	9	28	46	67	30	2.5±0.5	0.93
CP-82	5.0	8,000	10	32	53	82	40	3±1	1.78
CP-97	10.5	7,000	12	42	69	97	50	3±1	3.46
CP-112	16.7	6,000	14	48	79	112	60	3.5±1	5.0
CP-128	26.7	5,000	18	55	90	128	70	3.5±1	7.9
CP-148	41.7	4,500	22	65	107	148	80	3.5±1.5	12.3
CP-168	69.5	4,000	28	75	124	168	90	3.5±1.5	18.4
CP-194	112	3,500	32	85	140	194	100	3.5±1.5	26.3
CP-214	167	3,000	45	95	157	214	110	4±2	35.7



### ◆ SPECIFICATIONS 規格

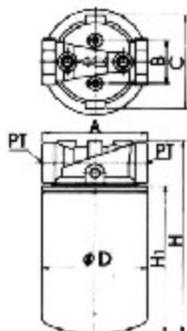
Model 型式編號	Bore DIA 加工孔徑		A mm	B mm	E mm	L mm	D mm	H mm	Weight 重量 kg	
	Min.(mm)	Max.(mm)							Casing 外殼	Coupling 聯軸器
HT4012	11	22	75	75	80	36	35	61	0.3	0.8
HT4016	15	30	92	75	80	36	50	77	0.4	1.4
HT5016	15	40	111	85	100	45	60	96	0.6	2.6
HT5018	19	45	122	85	100	45	70	106	0.7	3.5
HT6018	22	55	142	106	120	54	85	128	1.0	6.2
HT6022	25	75	167	106	120	54	110	152	1.2	9.8
HT8018	30	78	186	130	150	67	115	170	2.3	13.9
HT8022	35	95	220	130	150	67	140	202	2.4	20.2
HT10020	35	110	248	152	201	94	160	228	3.2	34.0
HT12018	48	120	305	180	261	119	17	252	5.6	51.0
HT12022	58	150	355	180	261	119	210	300	7.1	66.0

ACCESSORIES

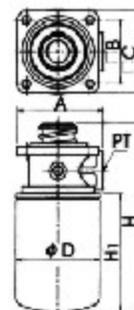
## RETURN FILTERS 管線過濾器



GBF



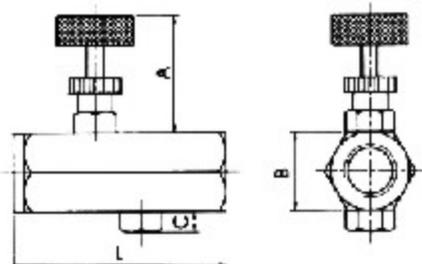
GBF-06G



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	C mm	D mm	H1 mm	H mm	流量 Flow l/min	固定方式 Mounted	重量 Weight kg
GBF-06	3/4"	92	38	82	93	127	170	60	管式(Pip lag)	0.62
GBF-06G	3/4"	97	70	90	93	127	207	60	箱上式(Tank)	0.87
GBF-10	1 1/4"	137	48	136	128	167	236	144	管式(Pip lag)	1.84

## THROTTLE & CHECK VALVE 流量控制閥



### ◆ SPECIFICATIONS 規格

型式編號 Model	口徑 PT	A mm	B mm	C mm	L mm	流量 Flow l/min	材質 Material	最高壓力 Max. Pressure kgf/cm <sup>2</sup>	重量 Weight kg
K(C)-02	1/4"	40	23	7	62	12	鐵(Steel)	30	0.24
K(C)-03	3/8"	38	26		70	20	鐵(Steel)		0.30
K(C)-04	1/2"	43	32	10	81	30	鐵(Steel)		0.50
K(C)-06	3/4"	47	41	12	92	48	鐵(Steel)		0.92