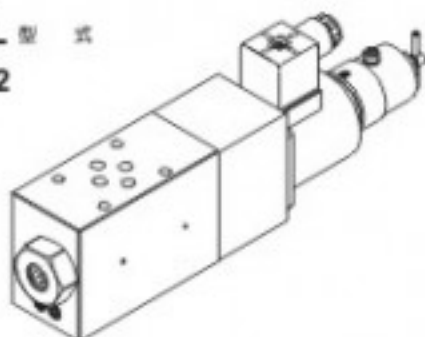


# MODULAR TYPE ELECTRO-HYDRAULIC PROPORTIONAL REDUCING VALVES

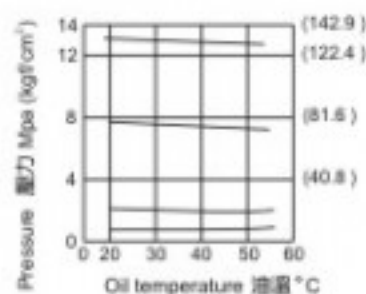
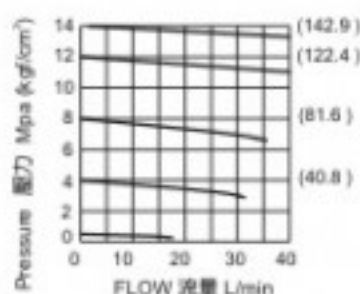
基層型電磁比例減壓閥

EMBR SERIES

## ◆ MODEL 型 式 EMBR-02



## ◆ PERFORMANCE 特性曲線



## ◆ HANDING DESCRIPTION 使用說明

### 1. Air Bleeding 排出空氣

To enable proper pressure control, loosen the air vent starting up the pump in order to bleed any air from the pump, and fill the inside of the solenoid with hydraulic operating fluid. 要進行良好的壓力控制, 初次使用時, 轉鬆氣孔充分排出空氣, 並使電磁體內充滿液壓油。

### 2. Manual Pressure Adjusting Screw 手動壓力調整螺絲

For the initial adjustment or when there is no input current to the valve due to an electrical problem or some other reason, valve pressure can be increased by rotating the manual adjustment screw clockwise (rightward). Normally, the manual adjusting screw should be rotated back fully to the left (counterclockwise) and secured with the lock nut.

初期調整或因電路故障等原因無輸入電流時, 通過手動調整螺絲向右轉動可以使壓力上升。平時必須把手動調整螺絲全部轉回原位, 並鎖緊螺母。

### 3. Minimum Control Pressure 最低控制壓力

Since this valve has an internal drain system, T port back pressure has an effect on minimum control pressure. 由於是內部洩油方式, 所以最低控制壓力受T口背壓的影響。

## ◆ SPECIFICATIONS 規格

| Model Number<br>型式號碼          | Maximum Pressure<br>最大壓力 bar | T Part Allowable back Pressure<br>T口容許背壓 bar | Maximum Flow<br>最大流量 lpm     | Rated Current<br>額定電流 mA | Coil Resistance<br>線圈阻抗 Ω | Hysteresis<br>滯後性 % | Voltage<br>電壓 VDC |
|-------------------------------|------------------------------|----------------------------------------------|------------------------------|--------------------------|---------------------------|---------------------|-------------------|
| EMBR-02                       | 250(3625 psi)                | 25(362 psi) max. 以下                          | 30 ( 7.93 gpm)               | 850                      | 20 (20°C)                 | 3 max. 以下           | 24                |
| Fluid Type 液體型式               |                              |                                              | ISO VG 32, 46, 68            |                          |                           |                     |                   |
| Viscosity 黏性 cSt              |                              |                                              | 10~400 (59~1854 SSU)         |                          |                           |                     |                   |
| Operating Temperature 操作溫度 °C |                              |                                              | -15~70 (-5~158 °F)           |                          |                           |                     |                   |
| Contamination Level 污染標準      |                              |                                              | ISO4406: 21/19/16 NAS1638,10 |                          |                           |                     |                   |

● All screws with metric measure, if require inch measure, please contact us.

所有螺絲皆為公制標準規格品, 若需英制螺絲請另外備註說明。

## ◆ HOW TO ORDER 編號說明

|      |    |   |   |
|------|----|---|---|
| 1    | 2  | 3 | 4 |
| EMBR | 02 | P | * |

### 1 VALVE SERIES 系列名稱

EMBR = Modular Type Electro-hydraulic Proportional Reducing Valves 基層型電磁比例減壓閥

### 2 SUBPLATE MOUNTING SIZE: 編口口徑

02 = 1/4" (6mm)  
ISO CETOP3  
DIN NG 6  
NFFA D03

## ◆ WEIGHT 重量

3.8 Kg (8.4 lbs)

### 3 CONTROL PORT(S) 動作形式

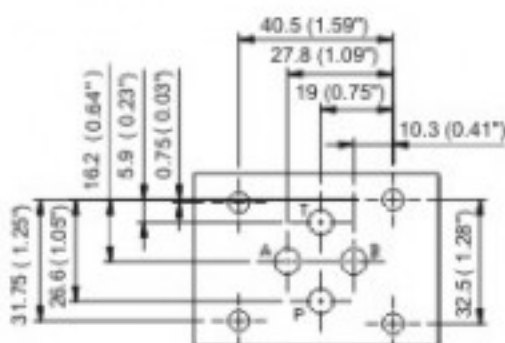


### 4 ADJUSTMENT PRESSURE 壓力調整範圍

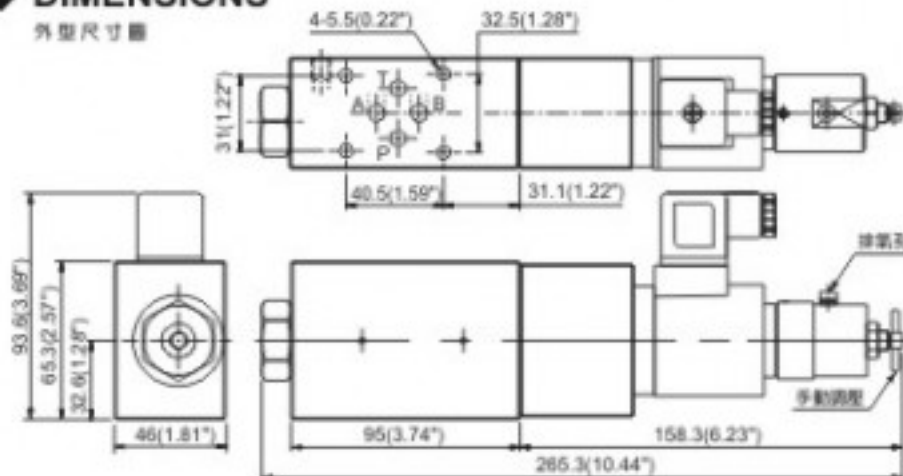
1 : 4 ~ 70 (bar) 2 : 6 ~ 140 (bar)

## ◆ Mounting Interface 基礎尺寸圖

ISO 4401-AB-03-4-A



## ◆ DIMENSIONS 外型尺寸圖



G  
EMBR

# MODULAR TYPE ELECTRO-HYDRAULIC PROPORTIONAL REDUCING VALVES

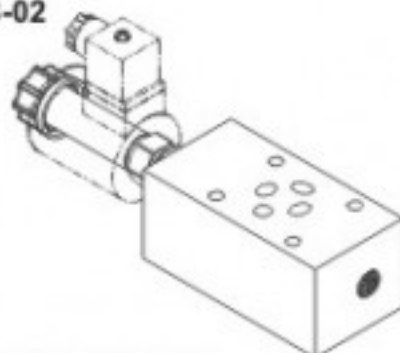
## EMGB SERIES

基礎型電磁比例減壓閥

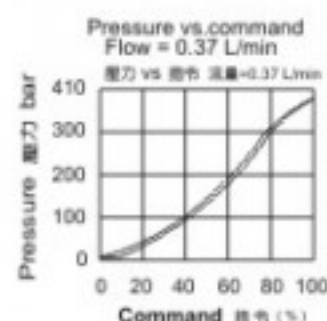
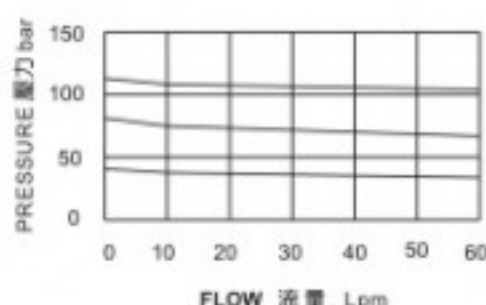
G  
EMGB

### ◆ MODEL 型 式

EMGB-02



### ◆ PERFORMANCE 特性曲線



### ◆ SPECIFICATIONS 規 格

| Model Number 型式號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 Kg   |
|-------------------------------|---------------------------|------------------------------|----------------|
| EMGB-02                       | 350 (5076psi)             | 40 (10.57 gpm)               | 1.8 (3.97 lbs) |
| Fluid Type 液體型式               |                           | ISO VG 32, 46, 68            |                |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)         |                |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158°F)            |                |
| Contamination Level 污染標準      |                           | ISO4406, 21/19/16 NAS1638,10 |                |

● All screws with metric measure, if require inch measure, please contact us.  
所有螺絲皆為公制標準規格品。若需英制螺絲請另外備註說明。

### ◆ HOW TO ORDER 編號說明

| 1    | 2  | 3 | 4 | 5 |
|------|----|---|---|---|
| EMGB | 02 | P | * | * |

#### 1 VALVE SERIES 系列名稱

EMGB = Modular Type Electro-hydraulic Proportional Reducing Valves  
基礎型電磁比例減壓閥

#### 2 SUBPLATE MOUNTING SIZE: 插牌口徑

02 = 1/4"(6mm)  
ISO CETOP3  
DIN NG 6  
NFPAD03

#### 3 CONTROL PORT(S) 動作形式



P=P Port Only

#### 4 ADJUSTMENT PRESSURE 壓力調整範圍

| Order 編號 | Adjustment pressure 壓力調整範圍 |
|----------|----------------------------|
| 1        | 4 ~ 50 (bar)               |
| 2        | 10 ~ 105 (bar)             |
| 3        | 20 ~ 210 (bar)             |
| 4        | 35 ~ 350 (bar)             |

#### 5 TYPE OF COIL 線圈類型

Non: Without Coil 無配線·無線圈

D1: DC12V

D2: DC24V

Model number 型式編號: COT08

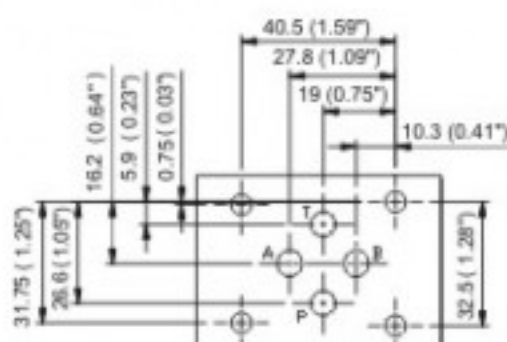
● Coils must be ordered separately  
線圈必須分開訂購

● The datasheet of proportional electric controller.  
Please check AMP-V02, AMP-V02B  
比例電子控制器規格請參考編號 AMP-W02, AMP-V02B.

### ◆ Mounting Interface

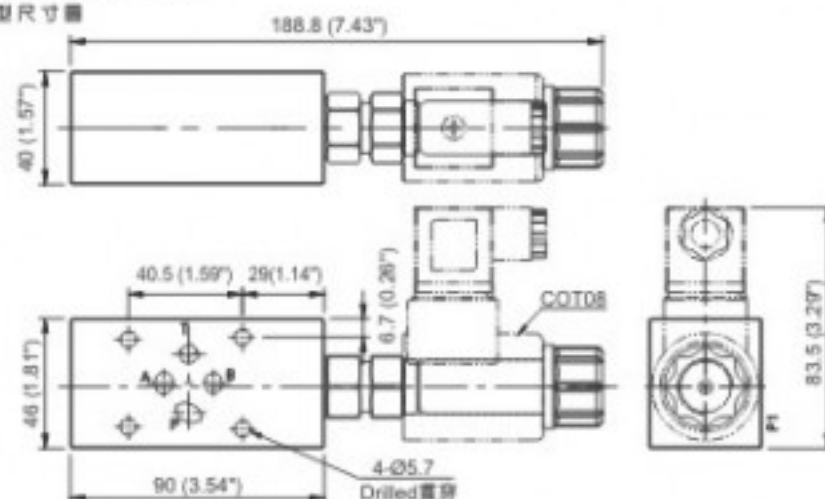
基座尺寸圖

ISO 4401-AB-03-4-A



### ◆ DIMENSIONS

外型尺寸圖



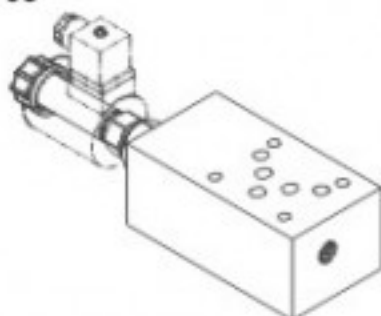
# MODULAR TYPE ELECTRO-HYDRAULIC PROPORTIONAL REDUCING VALVES

基層型電磁比例減壓閥

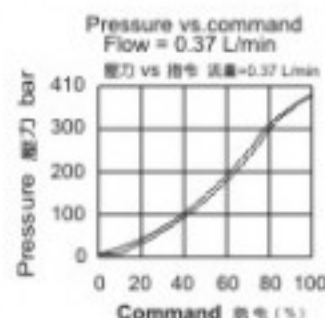
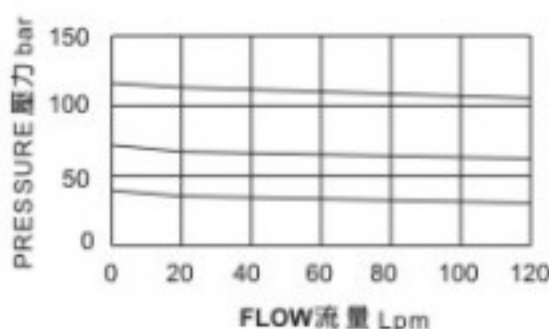
EMGB SERIES

## ◆ MODEL 型 式

EMGB-03



## ◆ PERFORMANCE 特性曲線



## ◆ SPECIFICATIONS 規 格

| Model Number 型式號碼             | Maximum Pressure 最大壓力 bar    | Maximum Flow 最大流量 lpm | Weight 重量 Kg   |
|-------------------------------|------------------------------|-----------------------|----------------|
| EMGB-03                       | 350 (5076psi)                | 80 (21.13 gpm)        | 4.4 (9.70 lbs) |
| Fluid Type 液體型式               | ISO VG 32, 46, 68            |                       |                |
| Viscosity 黏性 cSt              | 10~400 (59~1854 SSU)         |                       |                |
| Operating Temperature 操作溫度 °C | -15~70 (-5~158° F)           |                       |                |
| Contamination Level 污染標準      | ISO4406. 21/19/16 NAS1638,10 |                       |                |

● All screws with metric measure, if require inch measure, please contact us.  
所有螺絲皆為公制標準規格品。若需英制螺絲請另外備註說明。

## ◆ HOW TO ORDER 編號說明

| 1    | 2      | 3   | 4   | 5 |
|------|--------|-----|-----|---|
| EMGB | — 03 — | P — | * — | * |

### 1 VALVE SERIES 系列名稱

EMGB = Modular Type Electro-hydraulic Proportional Reducing Valves  
基層型電磁比例減壓閥

### 2 SUBPLATE MOUNTING SIZE: 插穿口徑

03 = 3/8" (9mm)  
ISO CETOP5  
DIN NG 10  
NFPA D05

### 3 CONTROL PORT(S) 動作形式



P=P Port Only

### 4 ADJUSTMENT PRESSURE 壓力調整範圍

| Order 編號 | Adjustment pressure 壓力調整範圍 |
|----------|----------------------------|
| 1        | 4 ~ 50 (bar)               |
| 2        | 10 ~ 105 (bar)             |
| 3        | 20 ~ 210 (bar)             |
| 4        | 35 ~ 350 (bar)             |

### 5 TYPE OF COIL 線圈類型

Non : Without Coil 無記號-無線圈

D1 : DC12V

D2 : DC24V

Model number 型式編號: COT08

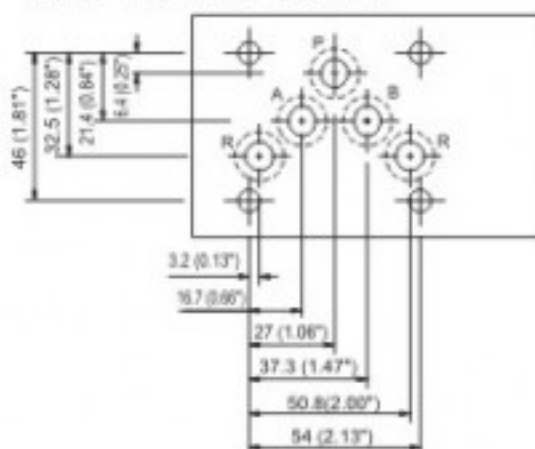
● Coils must be ordered separately  
線圈必須分開訂購

● The datasheet of proportional electric controller.  
Please check AMP-V02 · AMP-V02B  
比例電子控制器規格請參考編號 AMP-W02 · AMP-V02B.

## ◆ Mounting Interface

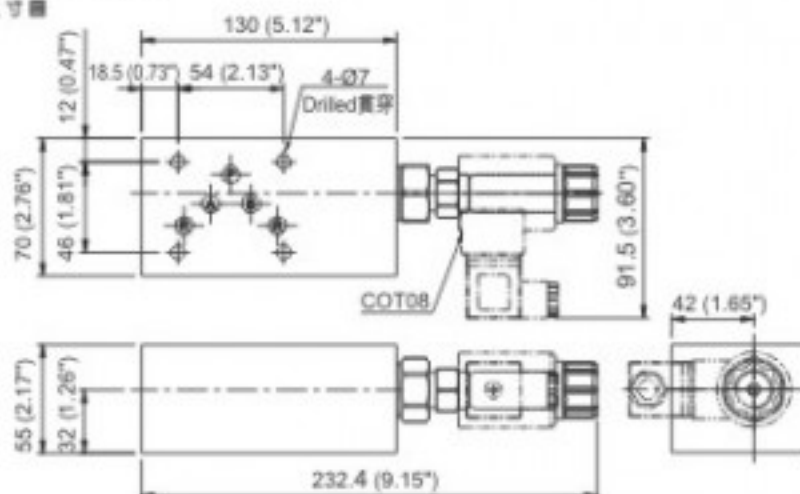
基座尺寸圖

ISO 4401-AC-05-4-A



## ◆ DIMENSIONS

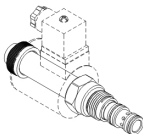
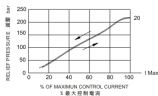
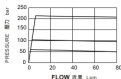
外型尺寸圖



G  
EMGB

◆ **MODEL 型 式**

EVBP-10

◆ **PERFORMANCE 特性曲線**◆ **SPECIFICATIONS 規 格**

| Model Number 型號               | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 Kg   |
|-------------------------------|---------------------------|------------------------------|----------------|
| EVBP-10                       | 250 (3626psi)             | 80 (21.13 gpm)               | 0.3 (0.66 lbs) |
| Fluid Type 液體型號               |                           | ISO VG 32, 46, 68            |                |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)         |                |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158 °F)           |                |
| Contamination Level 污染標準      |                           | ISO4406, 21/19/16 NAS1638,10 |                |

◆ **HOW TO ORDER 編號說明**

|          |          |          |
|----------|----------|----------|
| <b>1</b> | <b>2</b> | <b>3</b> |
| EVBP     | 10       | 20       |

- 1 VALVE SERIES 系列名稱**  
EVBP = Proportional Reducing Valves  
比例減壓閥

- 2 SUBPLATE MOUNTING SIZE 板接口徑**  
Size:10  
Cavity 孔口: CS10-3N  
See Page Appendixes-A\_002  
見附錄A\_002 頁面

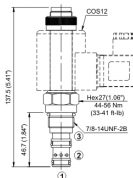
- 3 ADJUSTMENT PRESSURE 壓力調整範圍**

| Order 編號 | Adjustment pressure 壓力調整範圍 |
|----------|----------------------------|
| 20       | 20 ~ 210 (bar)             |

◆ **TYPE OF COIL 線圈類型**

Model number 型號編號: COS12  
See Page Appendixes-D  
見附錄 D

- Coils must be ordered separately  
線圈必須分開訂購

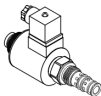
◆ **CONTROL PORT(S) 操作形式**◆ **DIMENSIONS 外型尺寸圖**

# PROPORTIONAL VALVES 比例閥

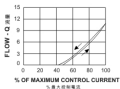
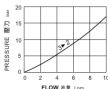
## EVEP SERIES PROPORTIONAL DIRECTIONAL VALVES EVEP系列比例方向閥

### ◆ MODEL 型 式

EVEP-08



### ◆ PERFORMANCE 特性曲線



### ◆ SPECIFICATIONS 規 格

| Model Number<br>型 式 號         | Operating Pressure<br>操作壓力 bar | Flow<br>流量 lpm               | Weight<br>重量 Kg |
|-------------------------------|--------------------------------|------------------------------|-----------------|
| EVEP-08                       | 210 (3046 psi)                 | 10 (2.64 gpm)                | 0.45 (0.99 lbs) |
| Fluid Type 液體型式               |                                | ISO VG 32, 46, 68            |                 |
| Viscosity 黏性 cSt              |                                | 10~400 (50~1854 SSU)         |                 |
| Operating Temperature 操作溫度 °C |                                | -15~70 (-5~158° F)           |                 |
| Contamination Level 污染標準      |                                | ISO4406, 21/19/16 NAS1638,10 |                 |

### ◆ HOW TO ORDER 編號說明

|      |    |   |    |
|------|----|---|----|
| 1    | 2  | 3 | 4  |
| EVEP | 08 | * | D2 |

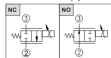
#### 1 VALVE SERIES 系列名稱

EVEP = Proportional Directional Valves  
(Non Compensated Flow Regulators)  
比例方向閥(非補償流量調節閥)

#### 2 SUBPLATE MOUNTING SIZE 端接口徑

Size: 08  
Cavity 孔口: CS08-3N  
See Page Appendixes-A\_002  
頁附錄A\_002 頁面

#### 3 CONTROL PORT(S) 動作形式

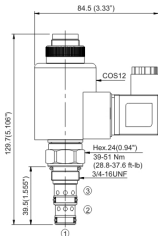


#### 4 TYPE OF COIL 線圈類型

D1: DC12V  
D2: DC24V

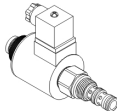
※ For more technical information of coil please refer to the appendixes-D or contact with us .  
※ 線圈詳細技術資料請參閱附錄-D或與我們聯繫。

### ◆ DIMENSIONS 外型尺寸圖

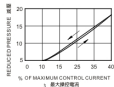
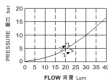


◆ **MODEL 型 式**

EVEP-10



◆ **PERFORMANCE 特性曲線**



◆ **SPECIFICATIONS 規 格**

| Model Number<br>型 式 號 碼       | Operating Pressure<br>操作壓力 bar | Flow<br>流量 lpm               | Weight<br>重量 Kg |
|-------------------------------|--------------------------------|------------------------------|-----------------|
| EVEP-10                       | 210 (3046 psi)                 | 40 ( 10.56 gpm)              | 0.7 ( 1.54lbs)  |
| Fluid Type 液體型式               |                                | ISO VG 32 , 46 , 68          |                 |
| Viscosity 黏性 cSt              |                                | 10~400 (59~1854 SSU)         |                 |
| Operating Temperature 操作溫度 °C |                                | -15~70 (-5~158°F)            |                 |
| Contamination Level 污染標準      |                                | ISO4406, 21/19/16 NAS1638,10 |                 |

◆ **HOW TO ORDER 編號說明**

|      |    |    |    |
|------|----|----|----|
| 1    | 2  | 3  | 4  |
| EVEP | 10 | K* | D2 |

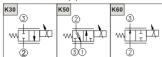
1 **VALVE SERIES 系列名稱**

EVEP = Proportional Directional Valves  
(Non Compensated Flow Regulators)  
比例方向閥(非補償流量調節閥)

2 **SUBPLATE MOUNTING SIZE 接口口徑**

Size: 10  
Cavity 孔口: CS10-3N  
See Page Appendix-A\_002  
見附錄A\_002 頁面

3 **CONTROL PORT(S) 動作形式**

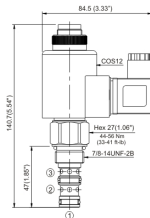


4 **TYPE OF COIL 線圈類型**

D1 : DC12V  
D2 : DC24V

※ For more technical information of coil please refer to the appendixes-D or contact with us .  
※ 線圈詳細技術資料請參閱附錄-D或與我們聯繫。

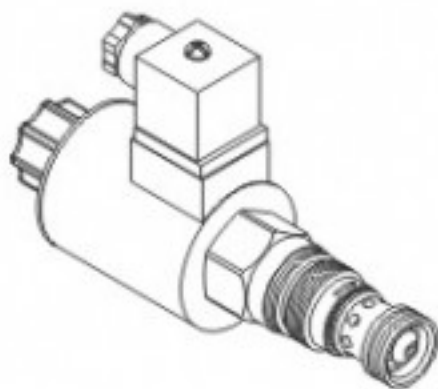
◆ **DIMENSIONS 外觀尺寸圖**



# PROPORTIONAL VALVES 比例閥

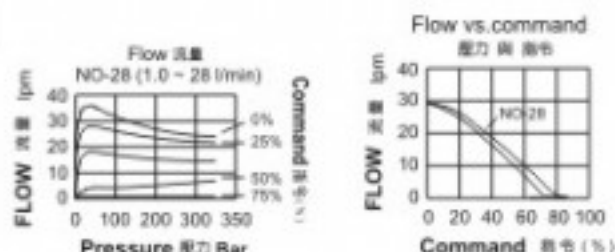
## EVF SERIES ELECTRO-PROPORTIONAL, THROTTLE VALVES EVF系列電磁比例節流閥

### ◆ MODEL 型 式 EVF-13

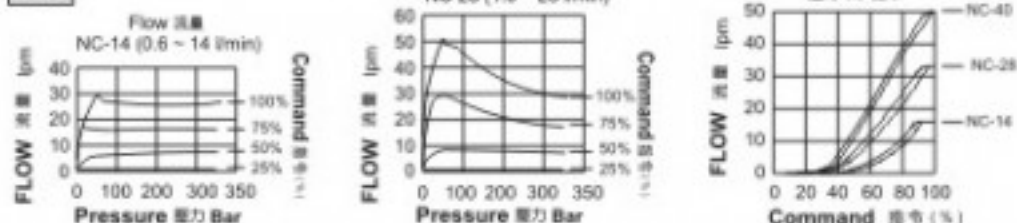


### ◆ PERFORMANCE 特性曲線

NO



NC



### ◆ DESCRIPTION 說明

The electro-proportional throttle valve, is either a normally-open type or normally-closed type. The valve is open or closed THROUGH spring biased FUNCTION. Energizing the coil generates an opening or closing force on the spool proportional to the command current and this force is countered by the spring and flow forces. This force balance creates a metering orifice whose effective size is proportional to the current. The valve exhibits a large degree of self-compensation in the 1 to 2 direction and will provide proportional flow control in the 2 to 1 direction with the addition of an external compensator. Full reverse flow (2 to 1) with 100% command or no command in the 2 to 1 direction is possible without a compensator under all conditions.

電比例節流閥有常開式或常閉式。閥在彈簧偏置作用下打開或關閉。線圈得電將產生一動作力在閥芯上使閥打開或關閉的力。此力與線圈電流大小成比例並與彈簧力和液動力相平衡。在平衡狀態下，此閥將形成一個與電流大小成比例的節流孔。此閥在口1到口2方向上具有很大程度上的補償效果。在口2到口1方向上如接入外部壓力補償器時，此閥可提供電比例流量控制。在口2到口1方向上即使無外部補償器時，無指令下或最大指令下通過公稱流量（口2到口1）也是可以的。

### ◆ SPECIFICATIONS 規格

| Model Number 型式編號             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 Kg    |
|-------------------------------|---------------------------|------------------------------|-----------------|
| EVF-13                        | 350 (5076psi)             | 40 (10.57 gpm)               | 0.28 (0.62 lbs) |
| Fluid Type 液體型式               |                           | ISO VG 32, 46, 68            |                 |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)         |                 |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158°F)            |                 |
| Contamination Level 污染標準      |                           | ISO4406, 21/19/16 NAS1638,10 |                 |

### ◆ HOW TO ORDER 編號說明

| 1   | 2  | 3  | 4  |
|-----|----|----|----|
| EVF | 13 | NC | 14 |

#### 1 VALVE SERIES 系列名稱

EVF = ELECTRO-PROPORTIONAL, THROTTLE VALVES  
電磁比例節流閥

#### 2 SUBPLATE MOUNTING SIZE 稱呼口徑

13 : T-13A  
Cavity 孔口 : CST-13A  
See Page Appendixes-A\_006 見附錄A\_006 頁面

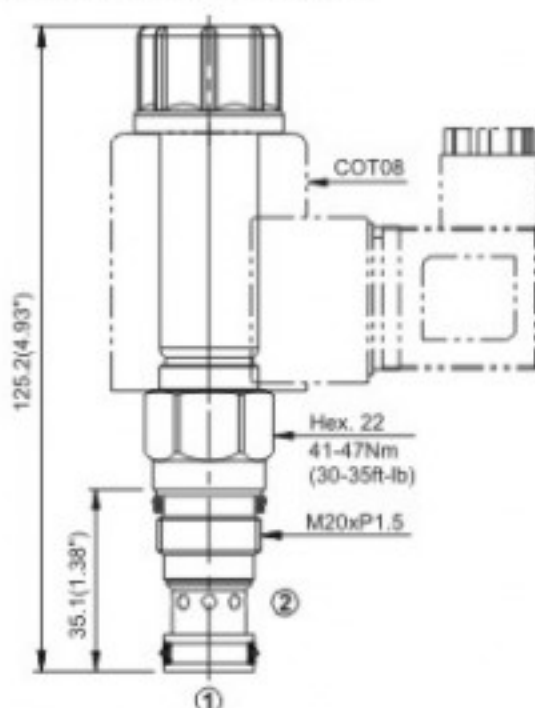
#### 3 CONTROL PORT(S) 動作形式

| NO normally open 常開 | NC normally close 常閉 |
|---------------------|----------------------|
| NO<br>              | NC<br>               |

#### 4 FLOW SPECIFICATIONS 流量規格

| Flow Option 流量選擇    |                |                      |                |
|---------------------|----------------|----------------------|----------------|
| NO normally open 常開 |                | NC normally close 常閉 |                |
| 14                  | —              | 14                   | 0.6 ~ 14 l/min |
| 28                  | 1.0 ~ 28 l/min | 28                   | 1.0 ~ 28 l/min |
| —                   | —              | 40                   | 1.0 ~ 40 l/min |

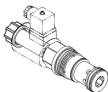
### ◆ DIMENSIONS 外型尺寸圖



### ◆ TYPE OF COIL 線圈類型

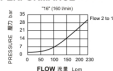
Model number 型式編號 : COT08  
See Appendixes-D  
見附錄 D

● Coils must be ordered separately 線圈必須分開訂購

◆ **MODEL 型 式****EVF-16**◆ **DESCRIPTION 說 明**

This valve is a pilot operated, normally closed, electro-proportional throttle with reverse free flow check. Energizing the coil generates an opening force on the pilot stage which vents the main stage poppet to open proportionally. Metered flow is from port 1 to port 2 with reverse free flow from port 2 to port 1.

此閥是一種先導控制、常閉、電磁比例節流閥，具有反向自由流通。電磁線圈 energizing 可以在先導級產生作用力，從而比例地打開主閥芯的閥芯，使流方向由口1流到口2，口2到口1直接流通。

◆ **PERFORMANCE 特性曲線**◆ **SPECIFICATIONS 規 格**

| Model Number 型號號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 Kg   |
|-------------------------------|---------------------------|------------------------------|----------------|
| EVF-16                        | 350 (5076psi)             | 240 (63.40 gpm)              | 0.7 (1.54 lbs) |
| Fluid Type 液體型式               |                           | ISO VG 32, 46, 68            |                |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)         |                |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158 °F)           |                |
| Contamination Level 污染標準      |                           | ISO4406, 21/19/16 NAS1638,10 |                |

◆ **HOW TO ORDER 編號說明**

|     |    |    |
|-----|----|----|
| 1   | 2  | 3  |
| EVF | 16 | 16 |

1 **VALVE SERIES 系列名稱**

EVF = Electro-proportional, Throttle Valves  
(Check Valves Included)  
電磁比例節流閥(附止逆閥)

2 **SUBPLATE MOUNTING SIZE 編排口徑**

16 : T-16A  
Cavity 孔口 : CST-16A  
See Page Appendixes-A\_007  
見附錄 A\_107 頁碼

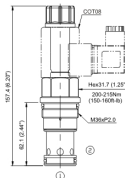
3 **FLOW SPECIFICATIONS 流量規格**

| Flow Option 流量選擇 |           |
|------------------|-----------|
| 08               | 80 l/min  |
| 16               | 160 l/min |
| 24               | 240 l/min |

◆ **TYPE OF COIL 線圈類型**

Model number 型號號碼 : COT08  
See Appendixes-D  
見附錄 D

- Coils must be ordered separately 線圈必須分開訂購

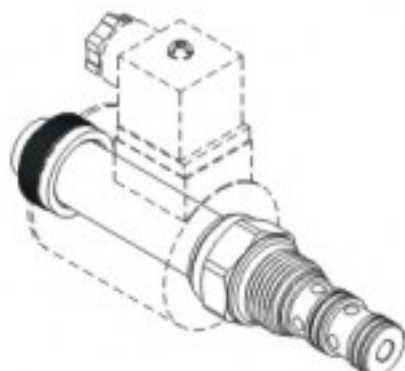
◆ **CONTROL PORT(S) 操作形式**◆ **DIMENSIONS 外型尺寸圖**

# PROPORTIONAL VALVES 比例閥

## EVGB SERIES PROPORTIONAL REDUCING VALVES EVGB 系列比例減壓閥

### ◆ MODEL 型 式

EVGB-10



### ◆ DESCRIPTION 說明

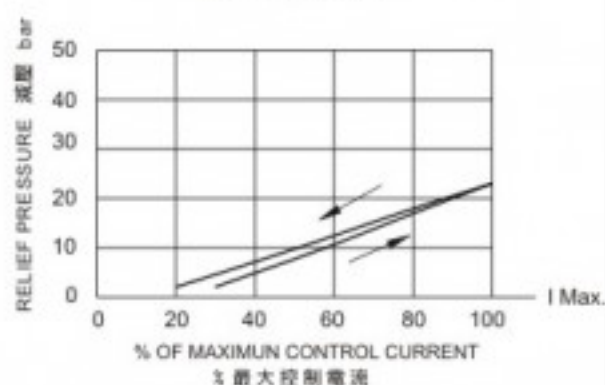
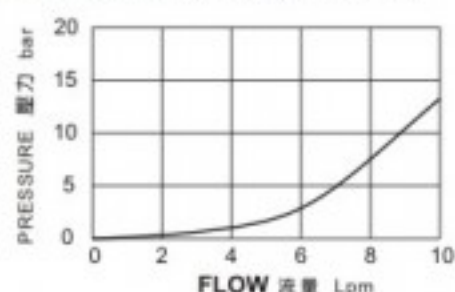
Direct acting, spool-type reducing/relieving valve, which can be infinitely adjusted across a prescribed range using a variable electric input. Pressure output is proportional to DC current input. This valve is intended for use as a pressure control device in demanding applications.

The EVGB10 allows free flow from 1 to 3 when no current is applied to the coil. When the coil is energized, 2 is connected to 1. Increasing current applied to the coil will increase the control (reduced) pressure proportionally. If pressure at 1 exceeds the setting induced by the coil, pressure from 1 is relieved to 3.

直動滑軸式減壓/溢流閥,利用可變電輸入可實現指定範圍內的連續調節.輸出壓力與DC電流輸入成比例.該閥在設備中可用作壓力控制裝置.

線圈中無電流時,EVGB10允許油液從1自由流向油口3.線圈通電時,2將連至1.控制(減壓)壓力將隨著線圈中電流的增大而成比例地增大.如果1處的壓力超過線圈的設定壓力,則在油口3溢流.

### ◆ PERFORMANCE 特性曲線



### ◆ SPECIFICATIONS 規格

| Model Number 型式號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 Kg   |
|-------------------------------|---------------------------|------------------------------|----------------|
| EVGB-10                       | 210 (3046psi)             | 10 ( 2.64 gpm)               | 0.3 (0.66 lbs) |
| Fluid Type 液體型式               |                           | ISO VG 32 , 46 , 68          |                |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)         |                |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158° F)           |                |
| Contamination Level 污染標準      |                           | ISO4406. 21/19/16 NAS1638,10 |                |

### ◆ HOW TO ORDER 編號說明

|      |    |    |
|------|----|----|
| 1    | 2  | 3  |
| EVGB | 10 | 02 |

#### 1 VALVE SERIES 系列名稱

EVGB = Proportional Reducing Valves (Direct Type)  
比例減壓閥(直動式)

#### 2 SUBPLATE MOUNTING SIZE 端接口徑

Size:10  
Cavity 孔口: CS10-3N  
See Page Appendixes-A\_002  
見附錄A\_002 頁面

#### 3 ADJUSTMENT PRESSURE 壓力調整範圍

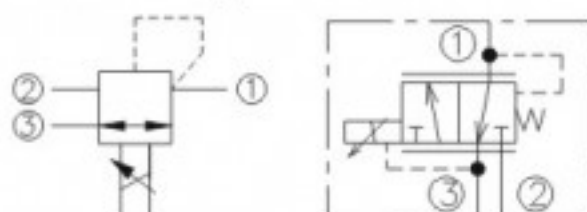
| Order 編號 | Adjustment pressure 壓力調整範圍 |
|----------|----------------------------|
| 02       | 2 ~ 22 (bar)               |

### ◆ TYPE OF COIL 線圈類型

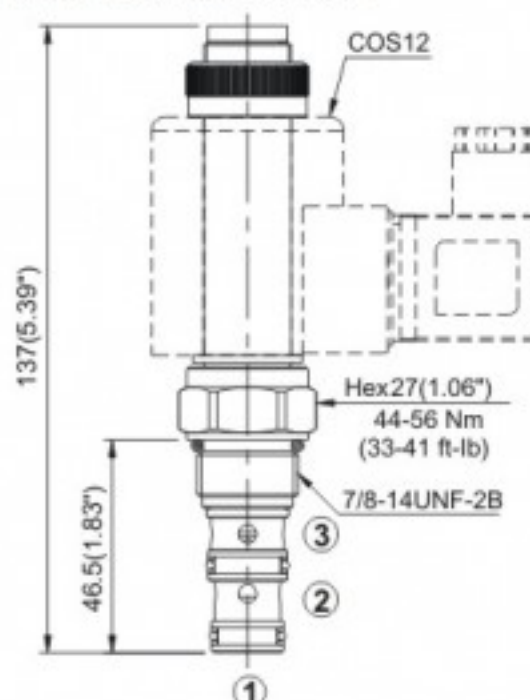
Model number 型式編號: COS12  
See Appendixes-D  
見附錄D

- Coils must be ordered separately  
線圈必須分開訂購

### ◆ CONTROL PORT(S) 動作形式

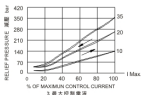
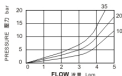


### ◆ DIMENSIONS 外型尺寸圖



◆ **MODEL 型 式**

EVR-01

◆ **PERFORMANCE 特性曲線**◆ **SPECIFICATIONS 規 格**

| Model Number 型式號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm         | Weight 重量 Kg   |
|-------------------------------|---------------------------|-------------------------------|----------------|
| EVR-01                        | 350 (5076psi)             | 5 (1.3 gpm)                   | 0.3 (0.66 lbs) |
| Fluid Type 液體型式               |                           | ISO VG 32, 46, 68             |                |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)          |                |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158° F)            |                |
| Contamination Level 污染標準      |                           | ISO4406, 21/19/16 NAS1638, 10 |                |

◆ **HOW TO ORDER 編號說明**

|     |    |    |
|-----|----|----|
| 1   | 2  | 3  |
| EVR | 01 | 10 |

1 **VALVE SERIES 系列名稱**

EVR = Proportional Relief Valves  
比例直動型

2 **SUBPLATE MOUNTING SIZE 稱呼口徑**

Size: 01  
Cavity 孔口: CS08-2N  
See Page Appendix-A\_001  
見附錄A\_001頁

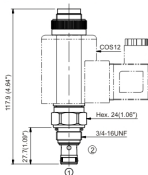
3 **ADJUSTMENT PRESSURE 壓力調整範圍**

| Order 編號 | Adjustment pressure 壓力調整範圍 |
|----------|----------------------------|
| 10       | 15 ~ 140 (bar)             |
| 25       | 30 ~ 250 (bar)             |
| 35       | 35 ~ 350 (bar)             |

◆ **TYPE OF COIL 線圈類型**

Model number 型式號碼: COS12  
See Appendix-D  
見附錄D

● Coils must be ordered separately  
線圈必須分開訂購

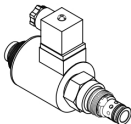
◆ **CONTROL PORT(S) 動作形式**◆ **DIMENSIONS 外型尺寸圖**

# PROPORTIONAL VALVES 比例閥

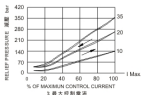
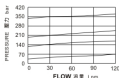
## EVR SERIES PROPORTIONAL RELIEF VALVES EVR 系列比例溢流閥

### ◆ MODEL 型 式

EVR-10



### ◆ PERFORMANCE 特性曲線



### ◆ SPECIFICATIONS 規 格

| Model Number 型式號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 Kg   |
|-------------------------------|---------------------------|------------------------------|----------------|
| EVR-10                        | 350 (5076psi)             | 120 (32 gpm)                 | 0.3 (0.66 lbs) |
| Fluid Type 液體型式               |                           | ISO VG 32, 46, 68            |                |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)         |                |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158°F)            |                |
| Contamination Level 污染標準      |                           | ISO4406: 21/19/16 NAS1638,10 |                |

### ◆ HOW TO ORDER 編號說明

|     |    |      |
|-----|----|------|
| 1   | 2  | 3    |
| EVR | 10 | — 10 |

#### 1 VALVE SERIES 系列名稱

EVR = Proportional Relief Valves  
比例溢流閥

#### 2 SUBPLATE MOUNTING SIZE 插牌口徑

Size: 10  
Cavity 3/4: CS10-2N  
See Page Appendixes-A\_001  
見附錄A\_001 頁面

#### 3 ADJUSTMENT PRESSURE 壓力調整範圍

| Order 編號 | Adjustment pressure 壓力調整範圍 |
|----------|----------------------------|
| 10       | 15 ~ 140 (bar)             |
| 25       | 30 ~ 250 (bar)             |
| 35       | 35 ~ 350 (bar)             |

### ◆ TYPE OF COIL 線圈類型

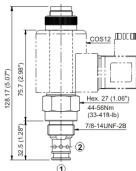
Model number 型式編號: COS12  
See Appendixes-D  
見附錄 D

● Coils must be ordered separately  
線圈必須分開訂購

### ◆ CONTROL PORT(S) 操作形式

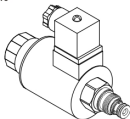
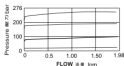


### ◆ DIMENSIONS 外型尺寸圖



◆ **MODEL 型 式**

EVR-T8

◆ **PERFORMANCE 特性圖表**◆ **SPECIFICATIONS 規 格**

| Model Number 型式號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm       | Weight 重量 Kg    |
|-------------------------------|---------------------------|-----------------------------|-----------------|
| EVR-T8                        | 350 (5076psi)             | 1 (0.25 gpm)                | 0.22 (0.49 lbs) |
| Fluid Type 液體型式               |                           | ISO VG 32, 46, 68           |                 |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)        |                 |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158°F)           |                 |
| Contamination Level 污染標準      |                           | ISO406, 21/19/16 NAS1638,10 |                 |

◆ **HOW TO ORDER 標號說明**

|          |          |          |
|----------|----------|----------|
| <b>1</b> | <b>2</b> | <b>3</b> |
| EVR      | T8       | 10       |

**1 VALVE SERIES 系列名稱**

EVR = Proportional Relief Valves  
比例溢流閥

**2 SUBPLATE MOUNTING SIZE 輪母口徑**

T8 : T-8A  
Cavity 孔口 : CST-8A  
See Page Appendix-A\_007  
參閱圖A\_007 頁面

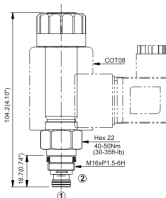
**3 ADJUSTMENT PRESSURE 壓力調整範圍**

| Order 標號 | Adjustment pressure 壓力調整範圍 |
|----------|----------------------------|
| 05       | 4 ~ 50 (bar)               |
| 10       | 10 ~ 105 (bar)             |
| 20       | 20 ~ 210 (bar)             |
| 35       | 35 ~ 350 (bar)             |

◆ **TYPE OF COIL 線圈類型**

Model number 型式編號 : COT08  
See Appendix-D  
參閱圖 D

- Coils must be ordered separately  
線圈必須分開訂購

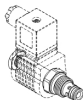
◆ **CONTROL PORT(S) 接口形式**◆ **DIMENSIONS 外型尺寸圖**

# PROPORTIONAL VALVES 比例閥

## EVSU SERIES PROPORTIONAL CHECK VALVES EVSU 系列比例止逆閥

### ◆ MODEL 型 式

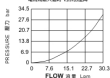
EVSU08-20



### ◆ PERFORMANCE 特性曲線

PRESSURE OF 1-MAX DROP 2 to 1.

電流為最大電流 2 對 1 的關係



### ◆ SPECIFICATIONS 規 格

| Model Number 型號號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 kg   |
|-------------------------------|---------------------------|------------------------------|----------------|
| EVSU08-20                     | 250 (3626psi)             | 20 (5.28 gpm)                | 0.1 (0.22 lbs) |
| Fluid Type 液體類型               |                           | ISO VG 32, 46, 68            |                |
| Viscosity 黏性 cSt              |                           | 10~400 (50~1854 SSU)         |                |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158°F)            |                |
| Contamination Level 污染標準      |                           | ISO4406, 21/19/16 NAS1638,10 |                |

### ◆ HOW TO ORDER 編號說明

|      |    |    |   |
|------|----|----|---|
| 1    | 2  | 3  | 4 |
| EVSU | 08 | 20 | Y |

#### 1 VALVE SERIES 系列名稱

EVSU = Proportional Check Valves  
比例止逆閥

#### 2 SUBPLATE MOUNTING SIZE 插母口徑

Size: 08  
Cavity 孔口: CS08-2N  
See Page Appendix-A\_001  
見附錄A\_001 頁碼

#### 3 CONTROL PORT(S) 動作形式

20:



#### 4 ADJUSTMENT OPTION 調整選擇

|     |                                                   |  |
|-----|---------------------------------------------------|--|
| Non | Non-Standard<br>非標準 / 標準型                         |  |
| Y   | Y-Pull Style Manual<br>Override<br>拉動型—<br>手動操作選位 |  |

### ◆ TYPE OF COIL 線圈類型

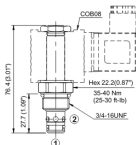
Model number 型號編號: COB08  
See Appendix-D  
見附錄D

- Coils must be ordered separately  
線圈必須分開訂購

### ◆ DESCRIPTION 說明

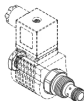
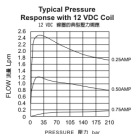
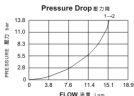
A proportional solenoid-operated, 2-way, spool-type, normally closed, screw-in hydraulic cartridge valve for low leakage blocking and load-holding applications. 比例電磁驅動, 2通座閥式, 常閉, 液壓螺紋式閥, 用於要求低滲漏的截止或負載保持應用。

### ◆ DIMENSIONS 外型尺寸圖



◆ **MODEL 型 式**

EVSV08-25

◆ **PERFORMANCE 特性曲線**◆ **SPECIFICATIONS 規 格**

| Model Number 型號號碼             | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 lpm        | Weight 重量 Kg    |
|-------------------------------|---------------------------|------------------------------|-----------------|
| EVSV08-25                     | 210 (3048psi)             | 15 (3.96 gpm)                | 0.11 (0.25 lbs) |
| Fluid Type 液體類型               |                           | ISO VG 32, 46, 68            |                 |
| Viscosity 黏性 cSt              |                           | 10-400 (59-1854 SSU)         |                 |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158 °F)           |                 |
| Contamination Level 污染標準      |                           | ISO4406, 21/19/16 NAS1638,10 |                 |

◆ **HOW TO ORDER 線號說明**

|          |          |          |
|----------|----------|----------|
| <b>1</b> | <b>2</b> | <b>3</b> |
| EVSV     | 08       | 25       |

- 1 VALVE SERIES 系列名稱**  
EVSV = Proportional Check Valves  
比例止回閥

- 2 SUBPLATE MOUNTING SIZE 板穿口徑**  
Size: 08  
Cavity 孔口: CS08-2N  
See Page Appendixes-A\_001  
見附圖A\_001 頁碼

- 3 CONTROL PORT(S) 板穿形式**  
25:

◆ **TYPE OF COIL 線圈類型**

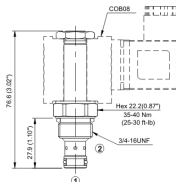
Model number 型號編號: COB08  
See Appendixes-D  
見附圖D

- Coils must be ordered separately  
線圈必須分開訂購

◆ **DESCRIPTION 說明**

A proportional solenoid-operated, 2-way, spool-type, normally open, bi-directional, screw-in hydraulic cartridge valve.

比例電磁驅動, 2通滑閥式, 常開, 雙向液壓螺紋插式閥

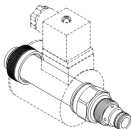
◆ **DIMENSIONS 外型尺寸圖**

# PROPORTIONAL VALVES 比例閥

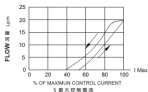
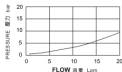
## EVSV SERIES PROPORTIONAL CHECK VALVES EVSV 系列比例止逆閥

### ◆ MODEL 型 式

EVSV08-28



### ◆ PERFORMANCE 特性曲線



### ◆ SPECIFICATIONS 規 格

| Model Number 型 號              | Maximum Pressure 最大壓力 bar | Maximum Flow 最大流量 Lpm        | Weight 重量 Kg    |
|-------------------------------|---------------------------|------------------------------|-----------------|
| EVSV08-28                     | 210 (3046psi)             | 20 ( 5.28 gpm)               | 0.25 (0.55 lbs) |
| Fluid Type 液體型號               |                           | ISO VG 32 , 46 , 68          |                 |
| Viscosity 黏性 cSt              |                           | 10~400 (59~1854 SSU)         |                 |
| Operating Temperature 操作溫度 °C |                           | -15~70 (-5~158°F)            |                 |
| Contamination Level 污染程度      |                           | ISO4406, 21/19/16 NAS1638,10 |                 |

### ◆ HOW TO ORDER 編號說明

|      |    |    |
|------|----|----|
| 1    | 2  | 3  |
| EVSV | 08 | 28 |

#### 1 VALVE SERIES 系列名稱

EVSV = Proportional Check Valves  
比例止逆閥

#### 2 SUBPLATE MOUNTING SIZE 板接口徑

Size: 08  
Cavity 孔口: CS08-2N  
See Page Appendixes-A\_001  
見附錄 A\_001 頁面

#### 3 CONTROL PORT(S) 動作形式

28:

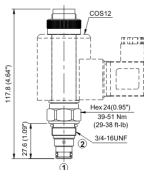


### ◆ TYPE OF COIL 線圈類型

Model number 型號編號: COS12  
See Appendixes-D  
見附錄 D

● Coils must be ordered separately  
線圈必須分開訂購

### ◆ DIMENSIONS 外觀尺寸圖



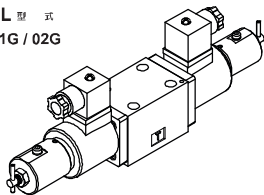
# ELECTRO-HYDRAULIC PROPORTIONAL FLOW AND DIRECTIONAL CONTROL VALVES

電磁比例流量及換向控制閥

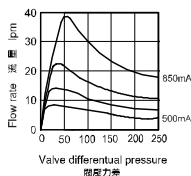
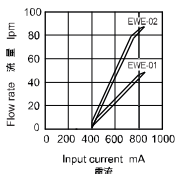
EWE SERIES

## ◆ MODEL 型 式

EWE-01G / 02G



## ◆ PERFORMANCE 特性曲線



## ◆ HANDING DESCRIPTION 使用說明

1. Air Bleeding : In order to ensure stable control , loosen the air vent and bleed air from the valve before starting operation.
2. Manual Adjusting Screw :  
For the initial adjustment or when there is no input current to the valve due to an electrical problem or some other reason, the valve can be operated and valve pressure can be increased by rotating the manual adjustment screw clockwise (rightward). normally, the manual adjusting screw should be rotated back fully to the left (count-erclockwise) and secured with the lock nut.
3. Valve Mounting Orientation : Install the valve so the spool axis line is horizontal.
1. 排 出 空 氣 : 要穩定的進行控制, 須轉鬆排氣孔, 排出空氣。
2. 手 動 調 整 螺 絲 :  
初期調整或因電氣故障等原因閥中無輸入電流時, 通過手動調整螺絲向右轉動驅動閥可增加流量, 平時必須把手動調整螺絲全部轉回原位, 並鎖緊螺母。
3. 閥 的 安 裝 方 向 : 滑閥軸線成水平安裝。

## ◆ SPECIFICATIONS 規 格

| Model Number<br>型 式 號         | Maximum Pressure<br>最大壓力 Bar | T Part Allowable back Pressure<br>T口容許背壓 bar | Flow Rate<br>流量 lpm                                                         | Rated Current<br>額定電流 mA | Coil Resistance<br>線圈阻抗 Ω         | Hysteresis<br>磁滯性 % | Voltage<br>電壓 VDC | Response Time<br>反應時間 S | Weight<br>重 量 Kg |
|-------------------------------|------------------------------|----------------------------------------------|-----------------------------------------------------------------------------|--------------------------|-----------------------------------|---------------------|-------------------|-------------------------|------------------|
| EWE-01G                       | 255 (3698 psi)               | 250 (3625 psi)                               | Rated flow Rate 額定流量<br>10 (2.64 gpm)<br>Maximum Flow 最大流量<br>25 (6.60 gpm) | 850                      | 20<br>(20°C)                      | 5 max.<br>以下        | 24                | 0.04<br>(Note 2)<br>註1  | 2<br>(4.1 lbs)   |
| EWE-02G                       | 255 (3698 psi)               | 250 (3625 psi)                               | Rated flow Rate 額定流量<br>20 (5.28 gpm)<br>Maximum Flow 最大流量<br>25 (6.60 gpm) |                          |                                   |                     |                   | 0.04<br>(Note 2)<br>註1  |                  |
| Fluid Type 液體型式               |                              |                                              |                                                                             |                          | ISO VG 32, 46, 68                 |                     |                   |                         |                  |
| Viscosity 黏性 cSt              |                              |                                              |                                                                             |                          | 10~400 (59~1854 SSU)              |                     |                   |                         |                  |
| Operating Temperature 操作溫度 °C |                              |                                              |                                                                             |                          | -15~70 (-5~158°F)                 |                     |                   |                         |                  |
| Contamination Level 污染標準      |                              |                                              |                                                                             |                          | ISO4406, 21/19/16 NAS1638,10      |                     |                   |                         |                  |
| Surface Treatment 表面處理        |                              |                                              |                                                                             |                          | Zinc Phosphate Compound 鋅 磷酸鹽 化合物 |                     |                   |                         |                  |

NOTE)1. Response time is typical value for a supply pressure of 143 bar (2074.07 psi) and fluid temperature of 40°C (kinematic viscosity : 40 cSt ). 註1. 反應時間是供給壓力143 bar (2074.07 psi) 液溫40°C (黏性在40cSt)。

● All screws with metric measure , if require inch measure , please contact us . 所有螺絲皆為公制標準規格品, 若需英制螺絲請另向備註說明。

## ◆ HOW TO ORDER 編號說明

|     |     |    |   |    |
|-----|-----|----|---|----|
| 1   | 2   | 3  | 4 | 5  |
| EWE | *** | 01 | G | 30 |

### 1 VALVE SERIES 系列名稱

EWE = ELECTRO-HYDRAULIC PROPORTIONAL FLOW AND DIRECTIONAL CONTROL VALVES  
電磁比例流量及換向控制閥

### 2 SPOOL TYPES 滑柱型式

| CODE 編號 | HYDRAULIC SYMBOL 液壓符號 |
|---------|-----------------------|
| 3C2     |                       |
| 3C40    |                       |

### 3 SUBPLATE MOUNTING SIZE: 接底座尺寸

01 = 1/8" (3mm)    02 = 1/4" (6mm)  
ISO CETOP3  
DIN NG 6  
NFPA D03

### 4 CONNECTING TYPE 連接型式

G: TYPE: BASEPLATE MOUNTING TYPE  
(板式連接)

### 5 DESIG NO 設計編號

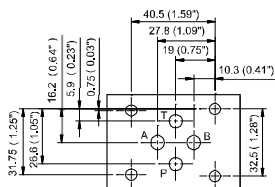
● The datasheet of proportional electric controller.  
Please check AMP-W02.

比例電子控制閥規格請參考編號 AMP-W02。

## ◆ Mounting Interface

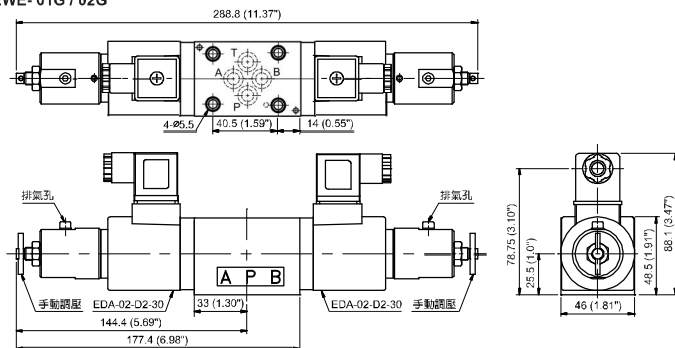
基座尺寸圖

ISO 4401-AB-03-4-A



## ◆ DIMENSIONS 外觀尺寸圖

EWE-01G / 02G



## ◆ SEAL KITS 油封配件

| NO | Description | Qty | Specification |
|----|-------------|-----|---------------|
| 2  | O-ring      | 2   | AS-019        |
| 8  | O-ring      | 2   | P22           |
| 12 | O-ring      | 2   | S-025         |
| 13 | O-ring      | 2   | AS-016        |
| 18 | O-ring      | 2   | P07           |
| 26 | O-ring      | 4   | P09           |

| ACCESSORIES 相關配件               |        |
|--------------------------------|--------|
| (Valve mounting bolts) (閥安裝螺栓) |        |
| HEX. COUNTER-SINK SCREW 4      | M5x45L |

