



PV-3 SERIES

YOU LI HYDRAULIC

PROPORTIONAL VALVES

比例式控制閥

For MOBILE and INDUSTRIAL HYDRAULIC APPLICATIONS.

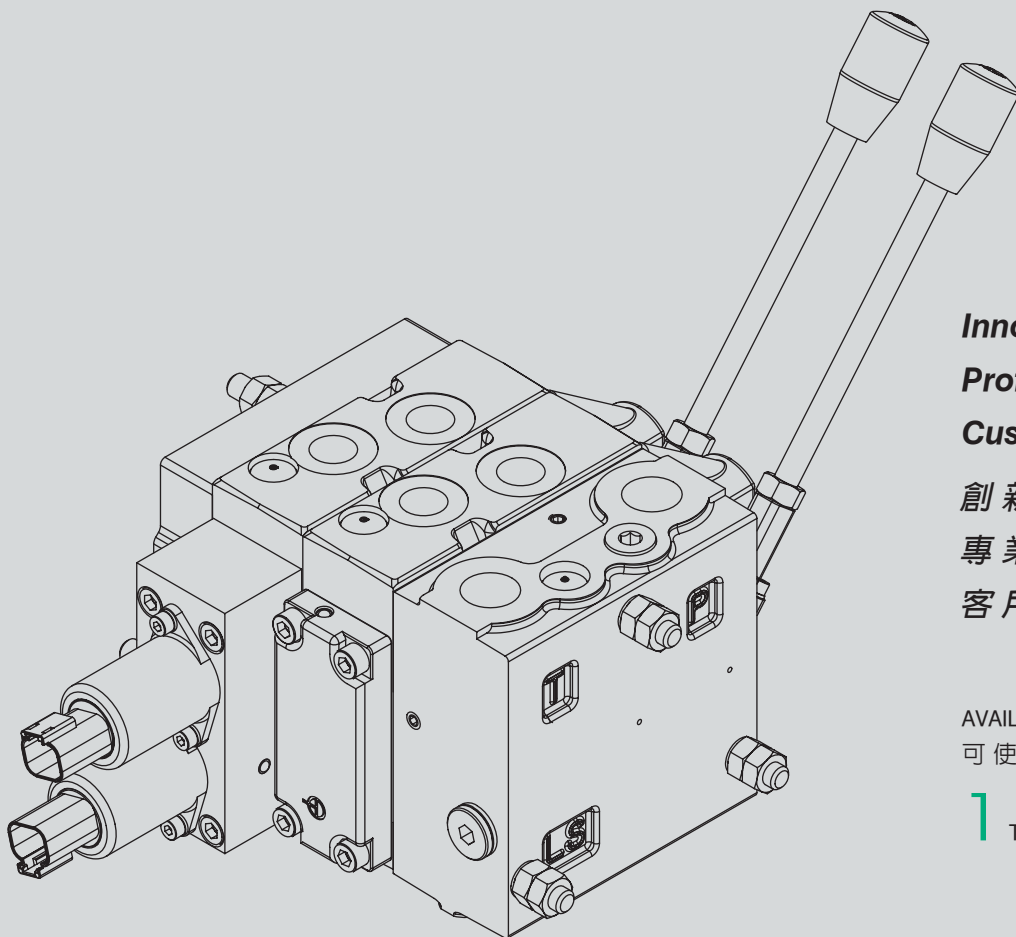
車輛及產業用油壓零件 / 各式油壓閥專業製造廠



油力油壓工業股份有限公司
YOU LI HYDRAULIC INDUSTRIAL CO.,LTD.

PV-3 Proportional Valves 比例式控制閥

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Innovative Designs
Professional Quality
Customer Satisfaction !

創新設計
專業品質
客戶滿意度

AVAILABLE SECTIONS FROM
可使用的聯數

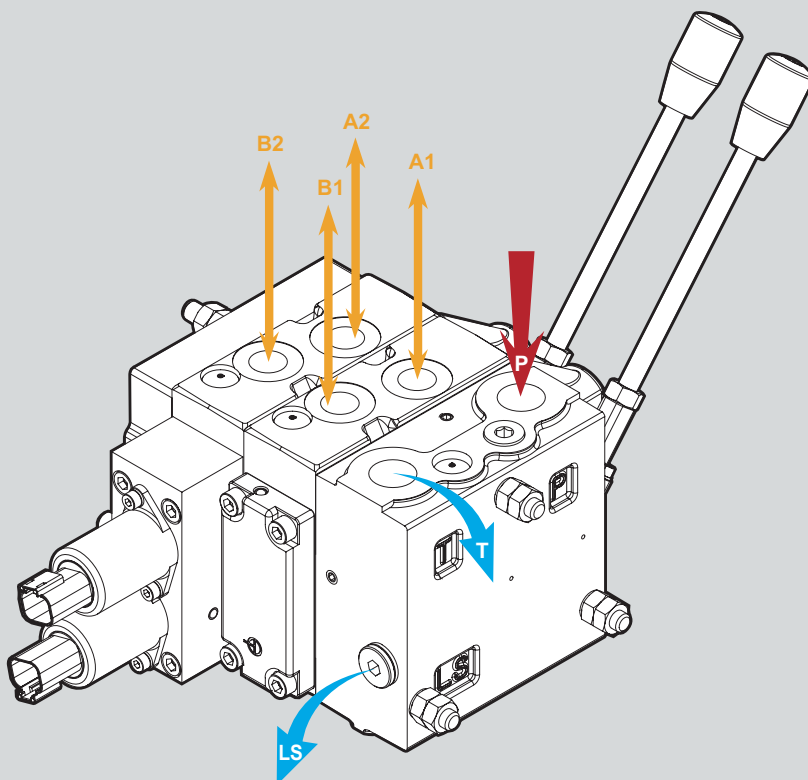
1 TO 12

PV-3

PV-3 Proportional Valves 比例式控制閥



PV-3 Proportional Valves 比例式控制閥

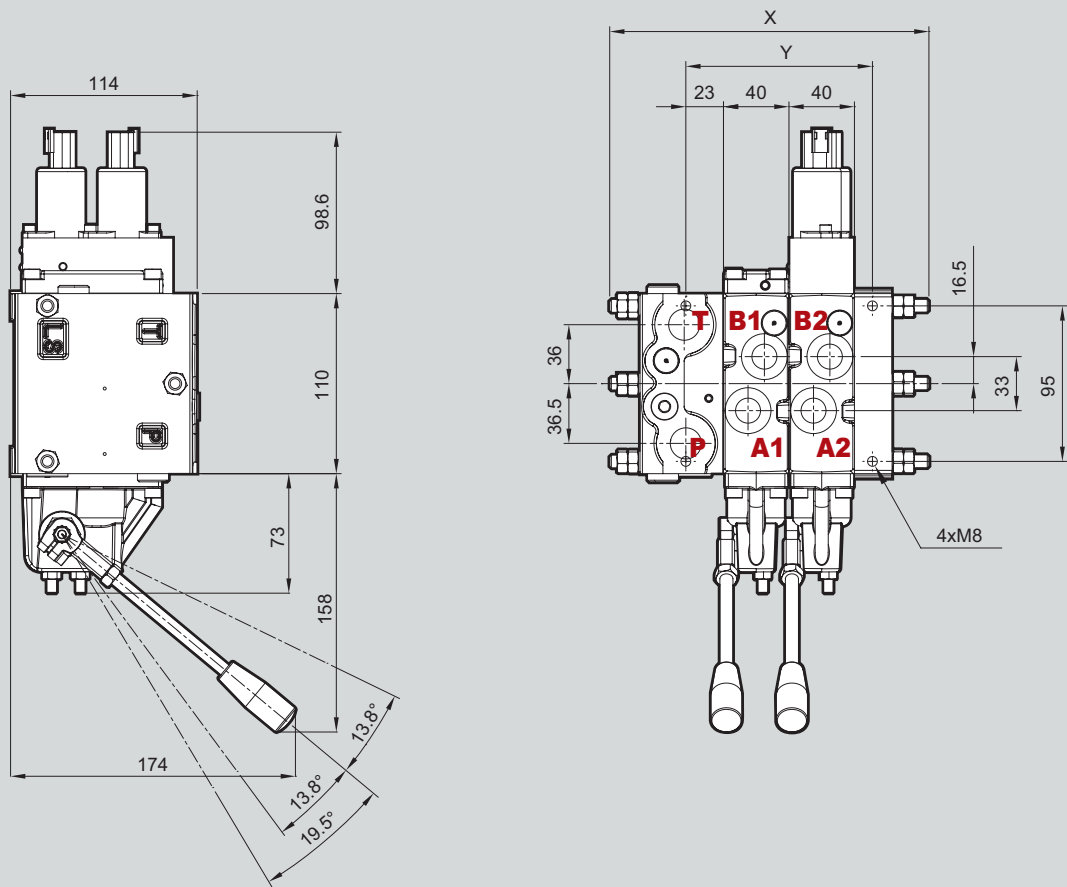


Specifications 規格

Oil Flow Rated 額定流量	P	140 L/min	37 gal/min
Max. pressure 最大壓力	P	350 bar	5075 psi
	A/B	350 bar	5075 psi
	T	40 bar	580 psi
Max. Internal leakage (Pressure 100 Bar Oil temperature 50 °C) 最大內洩量 (壓力100 Bar，油溫50 °C)	A/B	18 cm ³ /min	
Oil temperature 油溫		from - 20 °C ~ 90 °C	from - 4 °F ~ 194 °F
Oil viscosity 黏度	Operating range 工作範圍	from 15 mm ² /s ~ 75 mm ² /s	from 15 cst ~ 75 cst
	Min. 最小	12 mm ² /s	12 cst
	Max. 最大	400 mm ² /s	400 cst
Ambient temperature range 環境溫度		from - 30 °C ~ 60 °C	from - 22 °F ~ 140 °F
Max. contamination 最大污染		23 / 19 / 16 (ISO 4406)	
Filtration 過濾器		10 μm	

- All specifications, dimensions and design characteristics shown in this catalogue are subject to change without notice.
- 本公司之產品規格、設計特性，均不斷研究改進，尺寸規格如有變動，恕不另行通知。

PV-3 Proportional Valves 比例式控制閥



Standard Threads 螺紋規範

Port 口位	Inlet P 入油口	A and B ports 工作口	Outlet T 回油口
BSP	G1/2, G3/4	G3/8	G3/4
UN-UNF	7/8-14 UNF (SAE10), 1" 1/16-12 UN (SAE12)	3/4-16 UNF (SAE8)	1" 1/16-12UN (SAE12)

• G3/8: G3, G1/2: G4, G3/4: G6
SAE8: E8, SAE10: E10, SAE12: E12

Standard Dimensions 標準尺寸

TYPE 聯數	X		Y	
	mm	in	mm	in
PV3 /1S 一聯	155	6.10	74	2.91
PV3 /2S 二聯	195	7.68	114	4.49
PV3 /3S 三聯	235	9.25	154	6.06
PV3 /4S 四聯	275	10.83	194	7.64
PV3 /5S 五聯	315	12.40	234	9.21
PV3 /6S 六聯	355	13.98	274	10.79
PV3 /7S 七聯	395	15.55	314	12.36
PV3 /8S 八聯	435	17.13	354	13.94
PV3 /9S 九聯	475	18.70	394	15.51
PV3 /10S 十聯	515	20.28	434	17.09
PV3 /11S 十一聯	555	21.85	474	18.66
PV3 /12S 十二聯	595	23.43	514	20.24

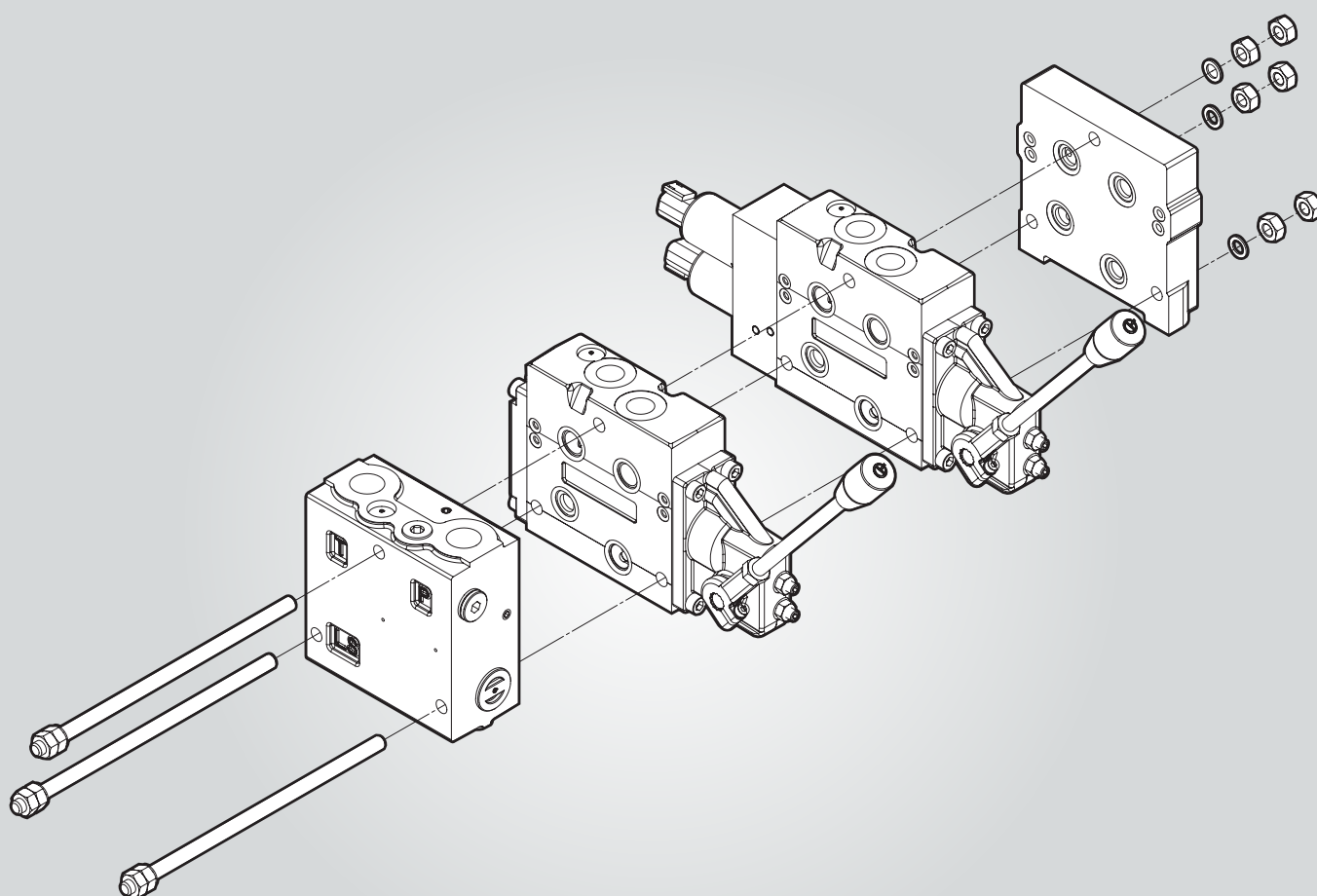
PV-3 Proportional Valves 比例式控制閥

HOW TO ORDER FOR A COMPLETE ASSEMBLED VALVE

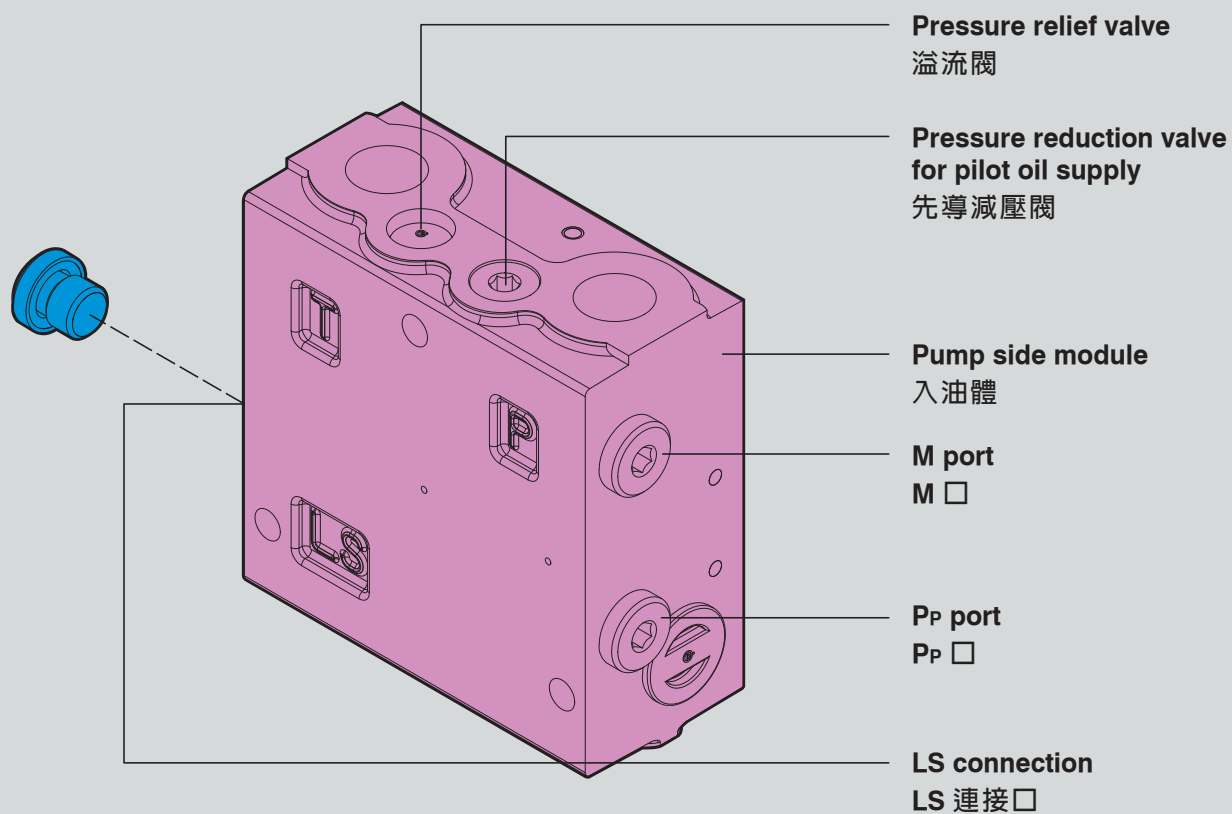
訂購範例/說明：

PV-3 / **※※※※** / **G 636**

PV-3	Series code	系列號
※※※※	Reference code	參考代碼
G 636	Thread code	牙口



PV-3 Proportional Valves 比例式控制閥

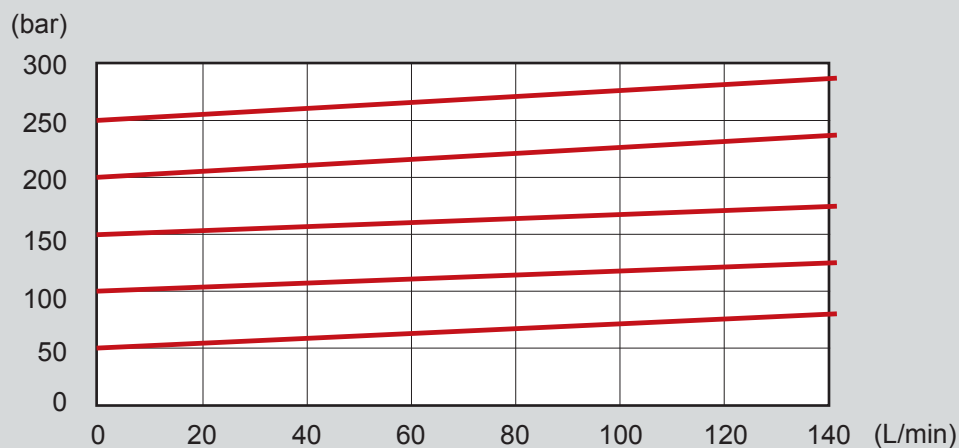


- Please refer to the page 7~11 for details.
- 詳細內容請參考 P.7~11 頁

PV-3 Proportional Valves 比例式控制閥

Pressure Relief Valve Characteristic

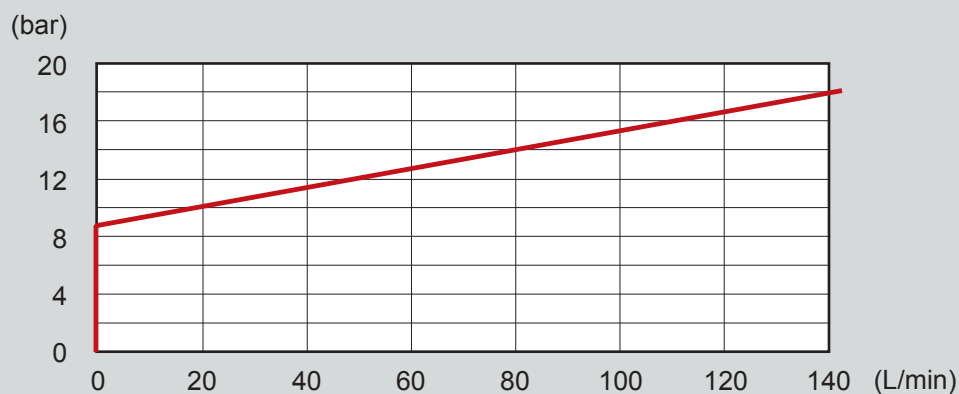
溢流閥特性：



INITIAL DATA 初始狀態：

Pressure Flow Characteristics

壓力流量特性：



PV-3 Proportional Valves 比例式控制閥

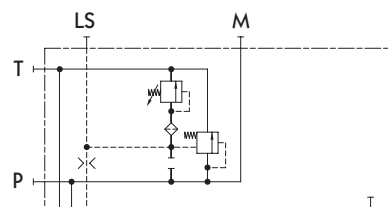
PV4P0101

For mechanically actuated valves

Open center pump side module for pumps with fixed displacement.

開迴路模塊，配合定量泵，用於機械驅動。

PV4P0101-G4	P port: G1/2
PV4P0101-E10	P port: 7/8-14UNF
PV4P0101-G6	P port: G3/4
PV4P0101-E12	P port: 1-1/16UN



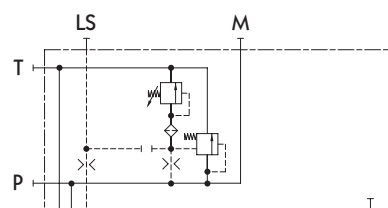
PV4P0201

For mechanically actuated valves.

Closed center pump side module for pumps with variable displacement.

閉迴路模塊，配合變量泵，用於機械驅動。

PV4P0201-G4	P port: G1/2
PV4P0201-E10	P port: 7/8-14UNF
PV4P0201-G6	P port: G3/4
PV4P0201-E12	P port: 1-1/16UN



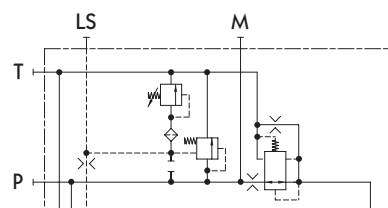
PV4P0102

With pilot oil supply for electrically actuated valves.

Open center pump side module for pumps with fixed displacement.

開迴路模塊，配合定量泵，提供電控先導油。

PV4P0102-G4	P port: G1/2
PV4P0102-E10	P port: 7/8-14UNF
PV4P0102-G6	P port: G3/4
PV4P0102-E12	P port: 1-1/16UN



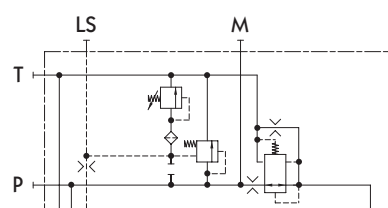
PV4P0102H

With pilot oil supply for 3EPVE electrically actuated valves.

Open center pump side module for pumps with fixed displacement.

開迴路模塊，配合定量泵，提供電控先導油，搭配3EPVE使用。

PV4P0102H-G4	P port: G1/2
PV4P0102H-E10	P port: 7/8-14UNF
PV4P0102H-G6	P port: G3/4
PV4P0102H-E12	P port: 1-1/16UN



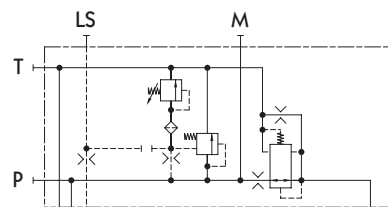
PV4P0202

With pilot oil supply for electrically actuated valves.

Closed center pump side module for pumps with variable displacement.

閉迴路模塊，配合變量泵，提供電控先導油。

PV4P0202-G4	P port: G1/2
PV4P0202-E10	P port: 7/8-14UNF
PV4P0202-G6	P port: G3/4
PV4P0202-E12	P port: 1-1/16UN



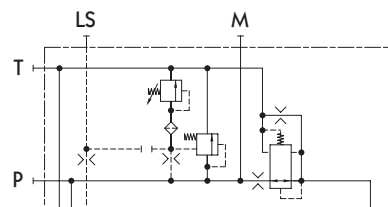
PV4P0202H

With pilot oil supply for 3EPVE electrically actuated valves.

Closed center pump side module for pumps with variable displacement.

閉迴路模塊，配合變量泵，提供電控先導油，搭配3EPVE使用。

PV4P0202H-G4	P port: G1/2
PV4P0202H-E10	P port: 7/8-14UNF
PV4P0202H-G6	P port: G3/4
PV4P0202H-E12	P port: 1-1/16UN



PV-3 Proportional Valves 比例式控制閥

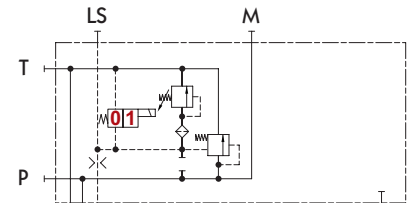
PV4P0103

**For mechanically actuated valves.
Connection for LS unloading valves.**

**Open center pump side module for
pumps with fixed displacement.**

開迴路模塊，配合定量泵，用於機械驅動，可連接電控LS卸載閥。

PV4P0103-G4	P port: G1/2
PV4P0103-E10	P port: 7/8-14UNF
PV4P0103-G6	P port: G3/4
PV4P0103-E12	P port: 1-1/16UN



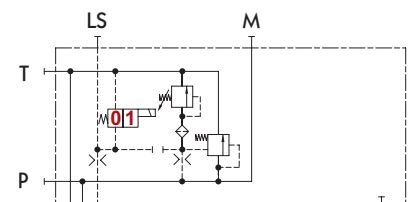
PV4P0203

**For mechanically actuated valves.
Connection for LS unloading valves.**

**Closed center pump side module for
pumps with variable displacement.**

閉迴路模塊，配合變量泵，用於機械驅動，可連接電控LS卸載閥。

PV4P0203-G4	P port: G1/2
PV4P0203-E10	P port: 7/8-14UNF
PV4P0203-G6	P port: G3/4
PV4P0203-E12	P port: 1-1/16UN



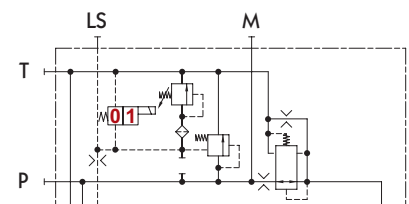
PV4P0104

**Connection for electrical LS
unloading valves.**

**Open center pump side module for
pumps with fixed displacement. With
pilot oil supply for electrically
actuated valves.**

開迴路模塊，配合定量泵，提供電控先導油，可連接電控LS卸載閥。

PV4P0104-G4	P port: G1/2
PV4P0104-E10	P port: 7/8-14UNF
PV4P0104-G6	P port: G3/4
PV4P0104-E12	P port: 1-1/16UN



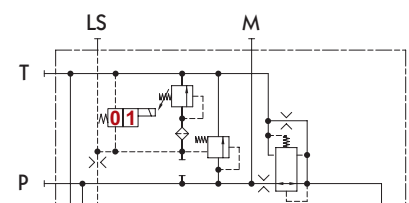
PV4P0104H

**Connection for electrical LS
unloading valves.**

**Open center pump side module for
pumps with fixed displacement. With
pilot oil supply for 3EPVE electrically
actuated valves.**

開迴路模塊，配合定量泵，提供電控先導油，搭配3EPVE使用，可連接電控LS卸載閥。

PV4P0104H-G4	P port: G1/2
PV4P0104H-E10	P port: 7/8-14UNF
PV4P0104H-G6	P port: G3/4
PV4P0104H-E12	P port: 1-1/16UN



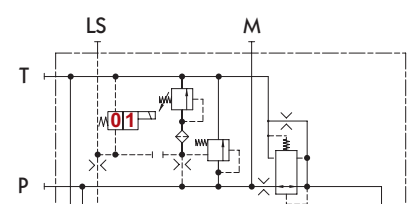
PV4P0204

**Connection for electrical LS
unloading valves.**

**Closed center pump side module for
pumps with variable displacement.
With pilot oil supply for electrically
actuated valves.**

閉迴路模塊，配合變量泵，提供電控先導油，可連接電控LS卸載閥。

PV4P0204-G4	P port: G1/2
PV4P0204-E10	P port: 7/8-14UNF
PV4P0204-G6	P port: G3/4
PV4P0204-E12	P port: 1-1/16UN



PV-3 Proportional Valves 比例式控制閥

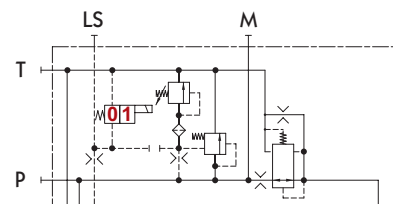
PV4P0204H

Connection for electrical LS unloading valves.

Closed center pump side module for pumps with variable displacement. With pilot oil supply for 3EPVE electrically actuated valves.

閉迴路模塊，配合變量泵，提供電控先導油，搭配3EPVE使用，可連接電控LS卸載閥。

PV4P0204H-G4	P port: G1/2
PV4P0204H-E10	P port: 7/8-14UNF
PV4P0204H-G6	P port: G3/4
PV4P0204H-E12	P port: 1-1/16UN



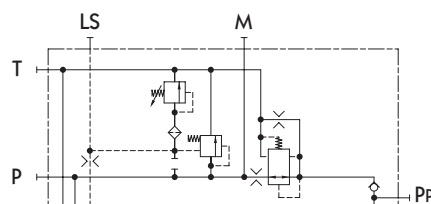
PV4P0105

With pilot oil supply for electrically actuated and connection for pilot oil pressure.

Open center pump side module for pumps with fixed displacement.

開迴路模塊，配合定量泵，提供電控先導油，並有先導油輸出口。

PV4P0105-G4	P port: G1/2
PV4P0105-E10	P port: 7/8-14UNF
PV4P0105-G6	P port: G3/4
PV4P0105-E12	P port: 1-1/16UN



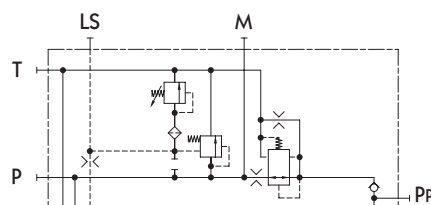
PV4P0105H

With pilot oil supply for 3EPVE electrically actuated and connection for pilot oil pressure.

Open center pump side module for pumps with fixed displacement.

開迴路模塊，配合定量泵，提供電控先導油，搭配3EPVE使用，並有先導油輸出口。

PV4P0105H-G4	P port: G1/2
PV4P0105H-E10	P port: 7/8-14UNF
PV4P0105H-G6	P port: G3/4
PV4P0105H-E12	P port: 1-1/16UN



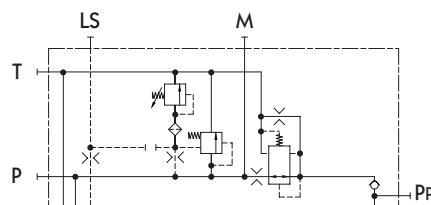
PV4P0205

With pilot oil supply for electrically actuated and connection for pilot oil pressure.

Closed center pump side module for pumps with variable displacement.

閉迴路模塊，配合變量泵，提供電控先導油，並有先導油輸出口。

PV4P0205-G4	P port: G1/2
PV4P0205-E10	P port: 7/8-14UNF
PV4P0205-G6	P port: G3/4
PV4P0205-E12	P port: 1-1/16UN



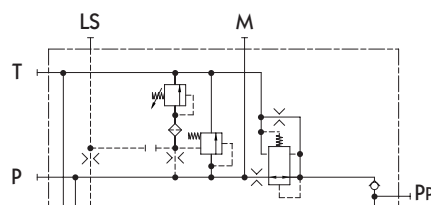
PV4P0205H

With pilot oil supply for 3EPVE electrically actuated and connection for pilot oil pressure.

Closed center pump side module for pumps with variable displacement.

閉迴路模塊，配合變量泵，提供電控先導油，搭配3EPVE使用，並有先導油輸出口。

PV4P0205H-G4	P port: G1/2
PV4P0205H-E10	P port: 7/8-14UNF
PV4P0205H-G6	P port: G3/4
PV4P0205H-E12	P port: 1-1/16UN



PV-3 Proportional Valves 比例式控制閥

PV4P0106H

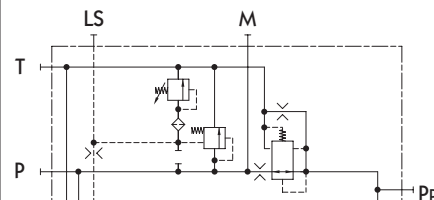
With pilot oil supply for hydraulic actuated and connection for pilot oil pressure.

Open center pump side module for pumps with fixed displacement.

Can connection with hydraulic pilot linear operation type JHP.

開迴路模塊，配合定量泵，提供液控先導油，並有先導油輸出口，可連接液控元件，例: JHP。

PV4P0106H-G4 P port: G1/2
 PV4P0106H-E10 P port: 7/8-14UNF
 PV4P0106H-G6 P port: G3/4
 PV4P0106H-E12 P port: 1-1/16UN



PV4P0206H

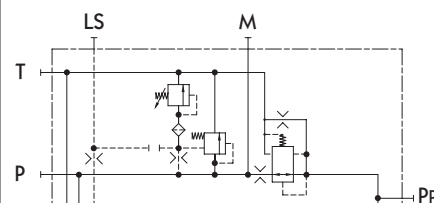
With pilot oil supply for hydraulic actuated and connection for pilot oil pressure.

Closed center pump side module for pumps with variable displacement.

Can connection with hydraulic pilot linear operation type JHP.

閉迴路模塊，配合變量泵，提供液控先導油，並有先導油輸出口，可連接液控元件，例: JHP。

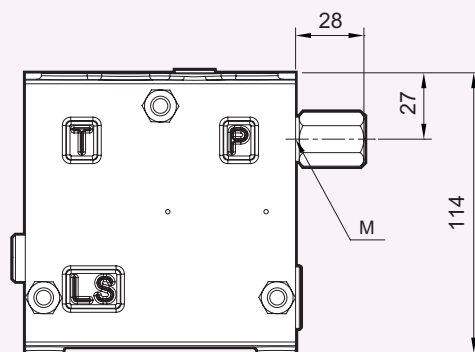
PV4P0206H-G4 P port: G1/2
 PV4P0206H-E10 P port: 7/8-14UNF
 PV4P0206H-G6 P port: G3/4
 PV4P0206H-E12 P port: 1-1/16UN



Plug For External Pilot Oil Supply 外部先導油接頭

PV-3 Proportional Valves 比例式控制閥

Dimension 外觀尺寸



CODE 編號

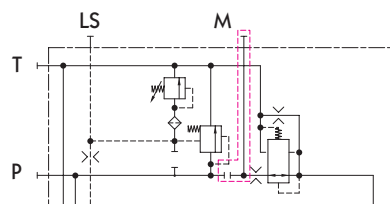
PV4-POG Thread Code 牙口: G1/4

PV4-POE Thread Code 牙口: 1/2-20 UNF

Symbol 符號

Plug for external pilot oil supply, it's suitable for fixed displacement or variable displacement.

外部先導油接頭，用於定量與變量模塊。



CODE 編號

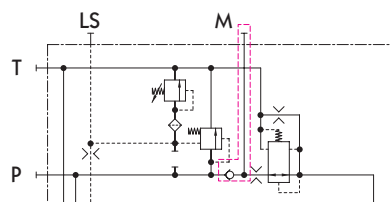
PV4-PCG Thread Code 牙口: G1/4

PV4-PCE Thread Code 牙口: 1/2-20 UNF

Symbol 符號

Plug for external pilot oil supply with check valve. It's suitable for fixed displacement.

外部先導油接頭，帶單向閥，用於定量模塊。



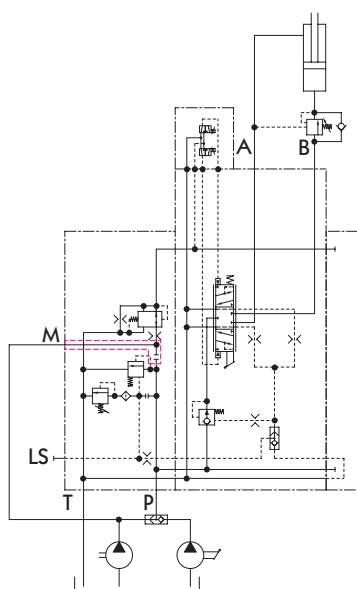
Application Circuit 應用迴路

PV4-PO

Used when a manual emergency pump is required.

When main pump failure, using manual emergency pump with PV handle.

用於需要連接手動應急泵時，主泵失效時使用手動應急泵，並操作PV手柄控制。

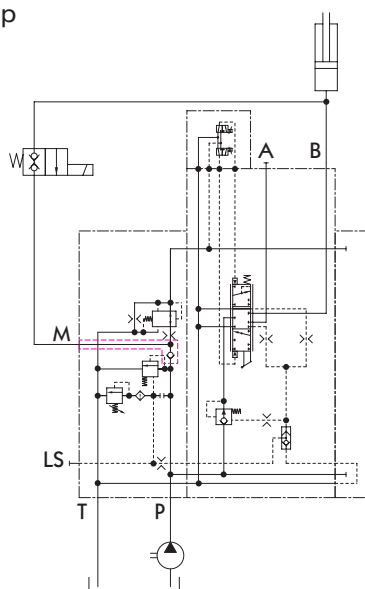


PV4-PC

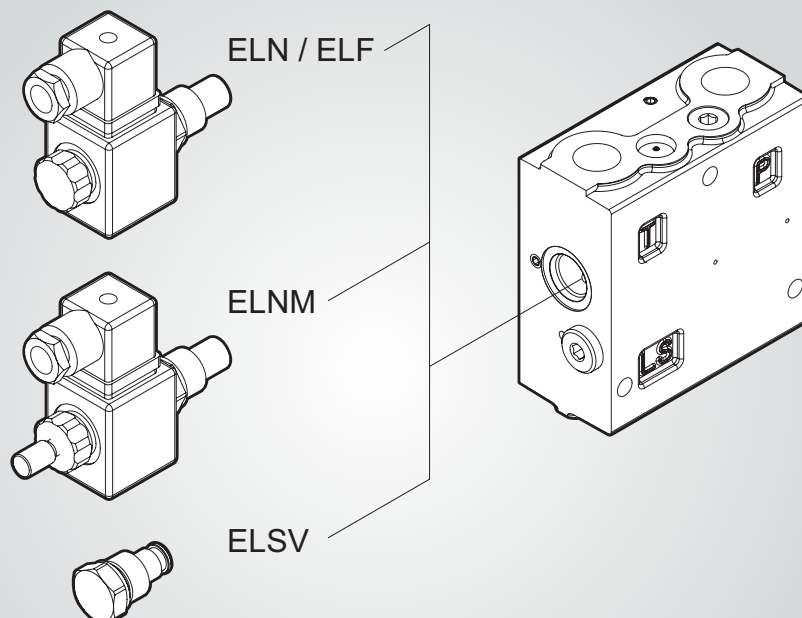
Without using the pump flow to control the solenoid valve.

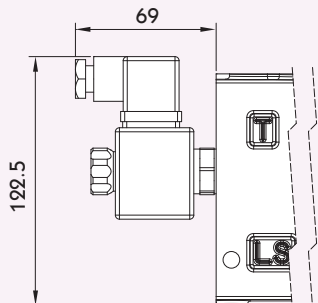
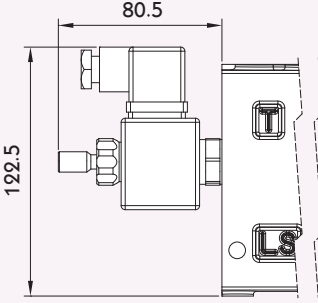
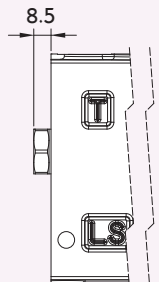
Used the hydraulic pressure drop to provide solenoid valve oil source.

用於不需使用泵的流量來控制電磁閥，利用油壓缸下降壓力，提供電磁閥油源。



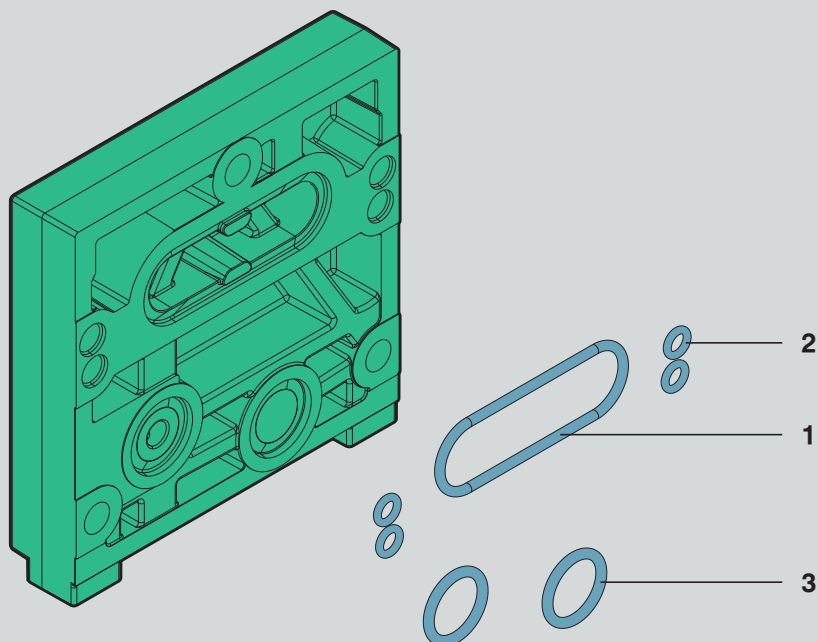
PV-3 Proportional Valves 比例式控制閥



Dimension 尺寸	Code 編號	Symbol 符號
	PV4-ELN12 Rated Voltage 額定電壓: 12VDC	Normally Open (NO) 常開型 
	PV4-ELN24 Rated Voltage 額定電壓: 24VDC	
	PV4-ELF12 Rated Voltage 額定電壓: 12VDC	Normally Closed (NC) 常閉型 
	PV4-ELF24 Rated Voltage 額定電壓: 24VDC	
	PV4-ELNM12 Rated Voltage 額定電壓: 12VDC	Emergency button for Normally Open (NO) 常開型手動緊急按鈕 
	PV4-ELNM24 Rated Voltage 額定電壓: 24VDC	
	PV4-ELSV	Plug 塞頭 

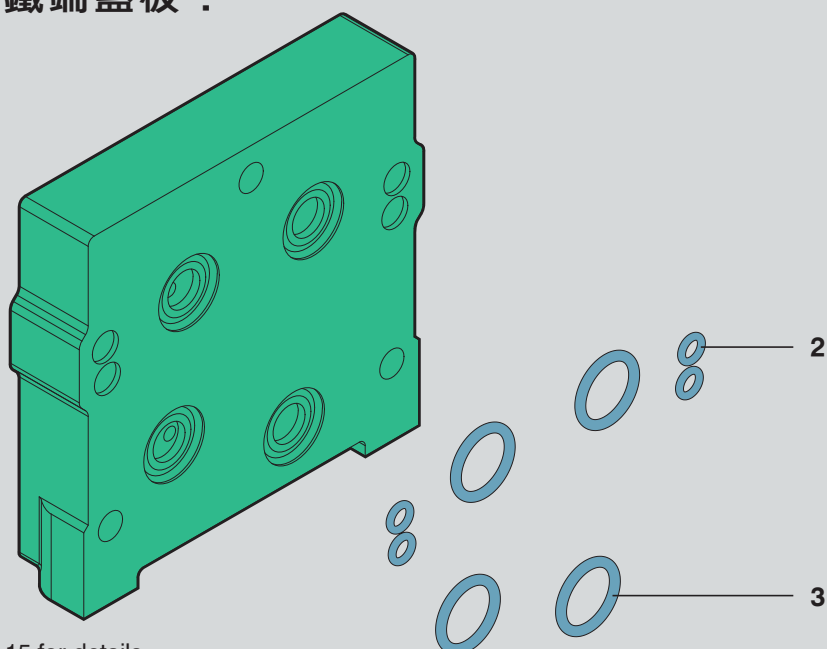
PV-3 Proportional Valves 比例式控制閥

Aluminum Casting 鑄鋁端蓋板：



- Please refer to the page 15 for details.
- 詳細內容請參考 P.15 頁

Iron Casting 鑄鐵端蓋板：



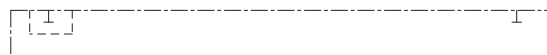
- Please refer to the page 15 for details.
- 詳細內容請參考 P.15 頁

Item 代碼	Code 編號	Aluminum Casting 鑄鋁端蓋板 (Q'TY 數量)	Iron Casting 鑄鐵端蓋板 (Q'TY 數量)
1	PV-ORN-001	1	
2	OR-00502	4	4
3	AS114	2	4

PV-3 Proportional Valves 比例式控制閥

PV4C0101

Aluminum Casting, No connection.
Max. pressure: 300 bar (4351 psi).
鑄鋁，無外接油口
最大壓力 300 bar (4351 psi)



PV4C0102

Aluminum casting, LS G1/8 X port for external connection.
Max. pressure: 250 bar (3625 psi).
鑄鋁，帶 LS 外接油口，X 口為 G1/8
最大壓力 250 bar (3625 psi)



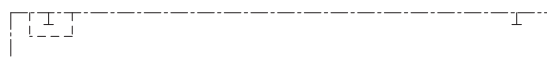
PV4C0103

Aluminum casting, LS 3/8-24 UNF X port for external connection.
Max. pressure: 250 bar (3625 psi).
鑄鋁，帶 LS 外接油口，X 口為 3/8-24 UNF
最大壓力 250 bar (3625 psi)



PV4C0201

Iron casting, No external connection.
Max. pressure: 350 bar (5075 psi).
鑄鐵，無外接油口
最大壓力 350 bar (5075 psi)



PV4C0202

Iron casting, LS G1/4 X port for external connection.
Max. pressure: 350 bar (5075 psi).
鑄鐵，帶 LS 外接油口，X 口為 G1/4
最大壓力 350 bar (5075 psi)

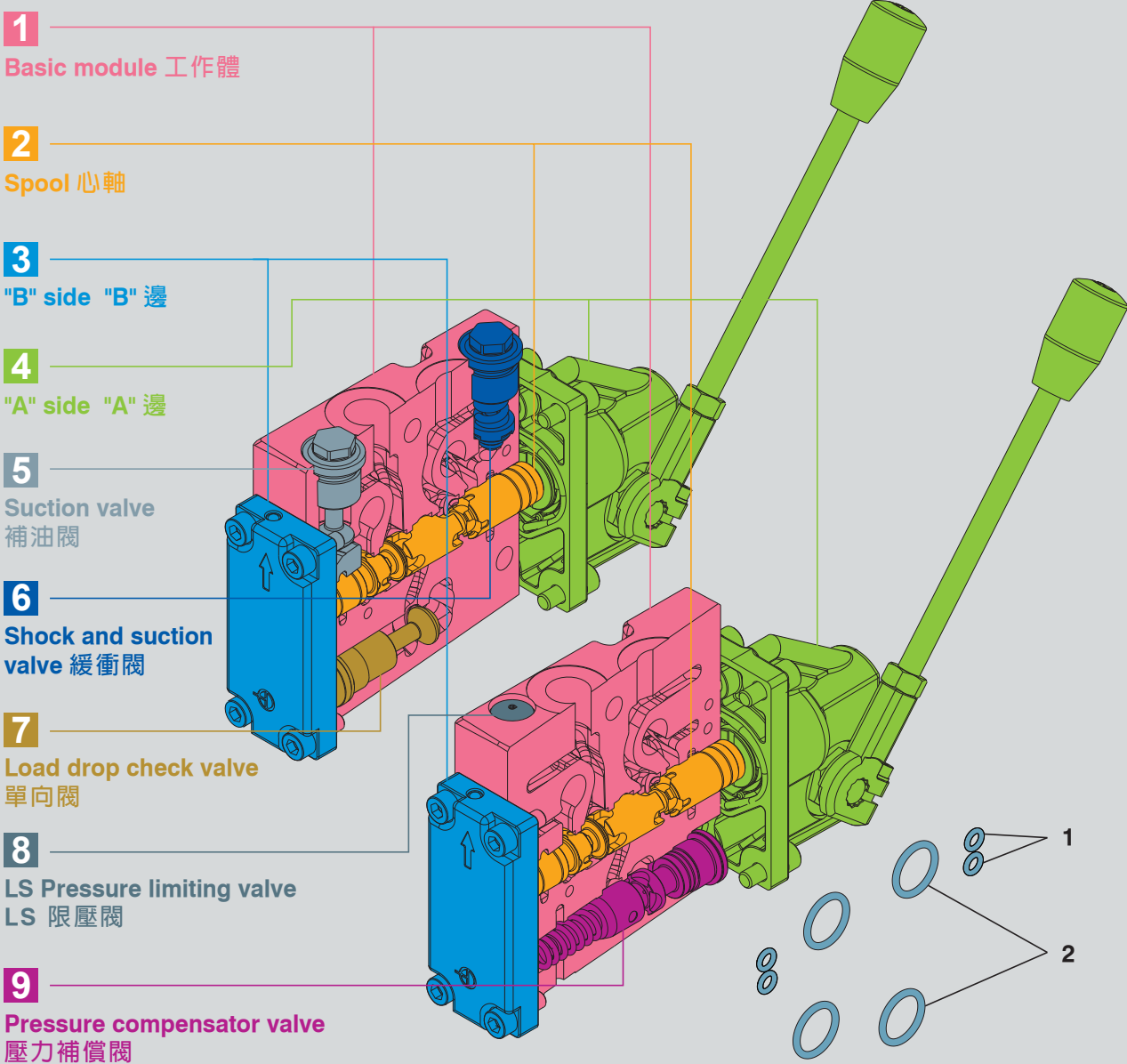


PV4C0203

Iron casting, LS 1/2-20 UNF X port for external connection.
Max. pressure: 350 bar (5075 psi).
鑄鐵，帶 LS 外接油口，X 口為 1/2-20 UNF
最大壓力 350 bar (5075 psi)



PV-3 Proportional Valves 比例式控制閥



Seal For Basic Module 工作體油封

Item 代碼	Code 編號	Q'TY 數量
1	OR-00502	4
2	P16	4

- Basic Module: See page 17.
- Spool options: See page 18~19.
- "B" side: See page 23~27.
- "A" side: See page 21~22.
- Suction valve: See page 28~29.

- 工作體: 詳細內容請參考 P. 17 頁
- 心軸: 詳細內容請參考 P. 18~19 頁
- "B"邊: 詳細內容請參考 P. 23~27 頁
- "A"邊: 詳細內容請參考 P. 21~22 頁
- 補油閥: 詳細內容請參考 P. 28~29 頁

PV-3 Proportional Valves 比例式控制閥

PV3V01

Without load drop check valve and pressure compensated valve.

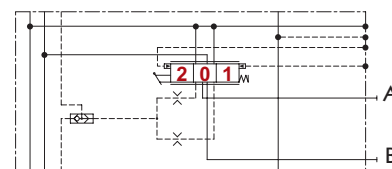
無負載失效單向閥與壓力補償閥。

PV3V01-G3

AB port: G3/8

PV3V01-E8

AB port: 3/4-16UNF



PV3V01U

With ports for suction valve or shock and suction valve.

Without load drop check valve and pressure compensated valve.

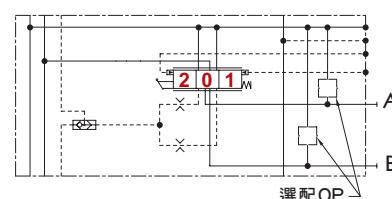
無負載失效單向閥與壓力補償閥，有補油閥口可裝補油閥或緩衝閥。

PV3V01U-G3

AB port: G3/8

PV3V01U-E8

AB port: 3/4-16UNF



PV3V02

With load drop check valve.

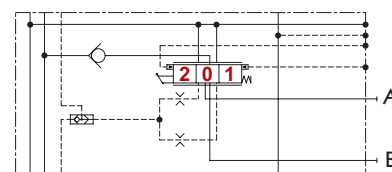
帶負載失效單向閥。

PV3V02-G3

AB port: G3/8

PV3V02-E8

AB port: 3/4-16UNF



PV3V02U

With ports for suction valve or shock and suction valve.

With load drop check valve.

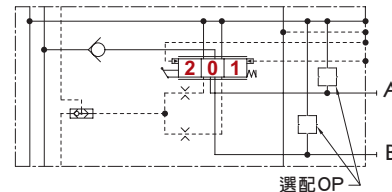
帶負載失效單向閥，有補油閥口可裝補油閥或緩衝閥。

PV3V02U-G3

AB port: G3/8

PV3V02U-E8

AB port: 3/4-16UNF



PV3V03

With pressure compensated valve.

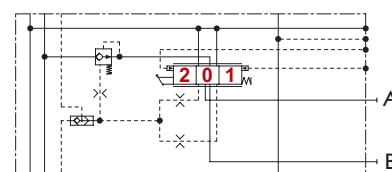
帶壓力補償閥。

PV3V03-G3

AB port: G3/8

PV3V03-E8

AB port: 3/4-16UNF



PV3V03U

With ports for suction valve or shock and suction valve

With pressure compensated valve.

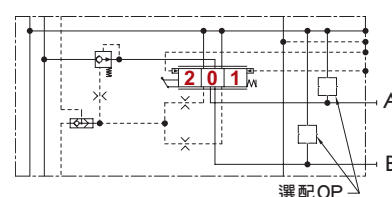
帶壓力補償閥，有補油閥口可裝補油閥或緩衝閥。

PV3V03U-G3

AB port: G3/8

PV3V03U-E8

AB port: 3/4-16UNF



PV3V04

With pressure compensated valve, and adjustable LS pressure limiting valve.

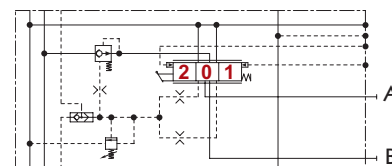
帶壓力補償閥和LS限壓閥。

PV3V04-G3

AB port: G3/8

PV3V04-E8

AB port: 3/4-16UNF



Flow Control Spools 心軸選項

PV-3 Proportional Valves 比例式控制閥

YLWPV32 01 ※※※

01 Spool circuit 心軸迴路 ※※※ Spool flow 心軸流量 **HA** Hydraulic actuation 液壓驅動 **EP** Proportional pressure reducing actuation 比例減壓閥驅動

YLWPV32 01 ※※※※※

3 1 0 2 BA TP T	3 1 0 2 BA TP T	3 1 0 2 BA TP T	3 1 0 2 BA TP T
A & B → T P Closed	P → B A → T	P & T & A & B Closed	P → A B → T

Flow 流量	5 (L/min)	10 (L/min)	25 (L/min)	40 (L/min)	65 (L/min)
Code 編號	YLWPV3201005	YLWPV3201010	YLWPV3201025	YLWPV3201040	YLWPV3201065
	YLWPV3201005HA	YLWPV3201010HA	YLWPV3201025HA	YLWPV3201040HA	YLWPV3201065HA
	YLWPV3201005EP	YLWPV3201010EP	YLWPV3201025EP	YLWPV3201040EP	YLWPV3201065EP

YLWPV32 02 ※※※

02 Spool circuit 心軸迴路 ※※※ Spool flow 心軸流量 **HA** Hydraulic actuation 液壓驅動 **EP** Proportional pressure reducing actuation 比例減壓閥驅動

YLWPV32 02 ※※※※※

3 1 0 2 BA TP T	3 1 0 2 BA TP T	3 1 0 2 BA TP T	3 1 0 2 BA TP T
A & B → T P Closed	P → B A → T	A & B → T P Closed	P → A B → T

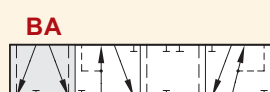
Flow 流量	5 (L/min)	10 (L/min)	25 (L/min)	40 (L/min)	65 (L/min)
Code 編號	YLWPV3202005	YLWPV3202010	YLWPV3202025	YLWPV3202040	YLWPV3202065
	YLWPV3202005HA	YLWPV3202010HA	YLWPV3202025HA	YLWPV3202040HA	YLWPV3202065HA
	YLWPV3202005EP	YLWPV3202010EP	YLWPV3202025EP	YLWPV3202040EP	YLWPV3202065EP

PV-3 Proportional Valves 比例式控制閥

YLWPV32 L1 ※ ※ ※

L1 Spool circuit 心軸迴路	※ ※ ※ Spool flow 心軸流量	HA Hydraulic actuation 液壓驅動	EP Proportional pressure reducing actuation 比例減壓閥驅動
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YLWPV32 L1 ※ ※ ※ ※

3 1 0 2  TP T	3 1 0 2  TP T	3 1 0 2  TP T	3 1 0 2  TP T
A & B → T P Closed	P → B A → T	P & T & A & B Closed	P → A B → T

Flow 流量	25 (L/min)	40 (L/min)	65 (L/min)
Code 編號	YLWPV32L1025	YLWPV32L1040	YLWPV32L1065
	YLWPV32L1025HA	YLWPV32L1040HA	YLWPV32L1065HA
	YLWPV32L1025EP	YLWPV32L1040EP	YLWPV32L1065EP

YLWPV32 L2 ※ ※ ※

L2 Spool circuit 心軸迴路	※ ※ ※ Spool flow 心軸流量	HA Hydraulic actuation 液壓驅動	EP Proportional pressure reducing actuation 比例減壓閥驅動
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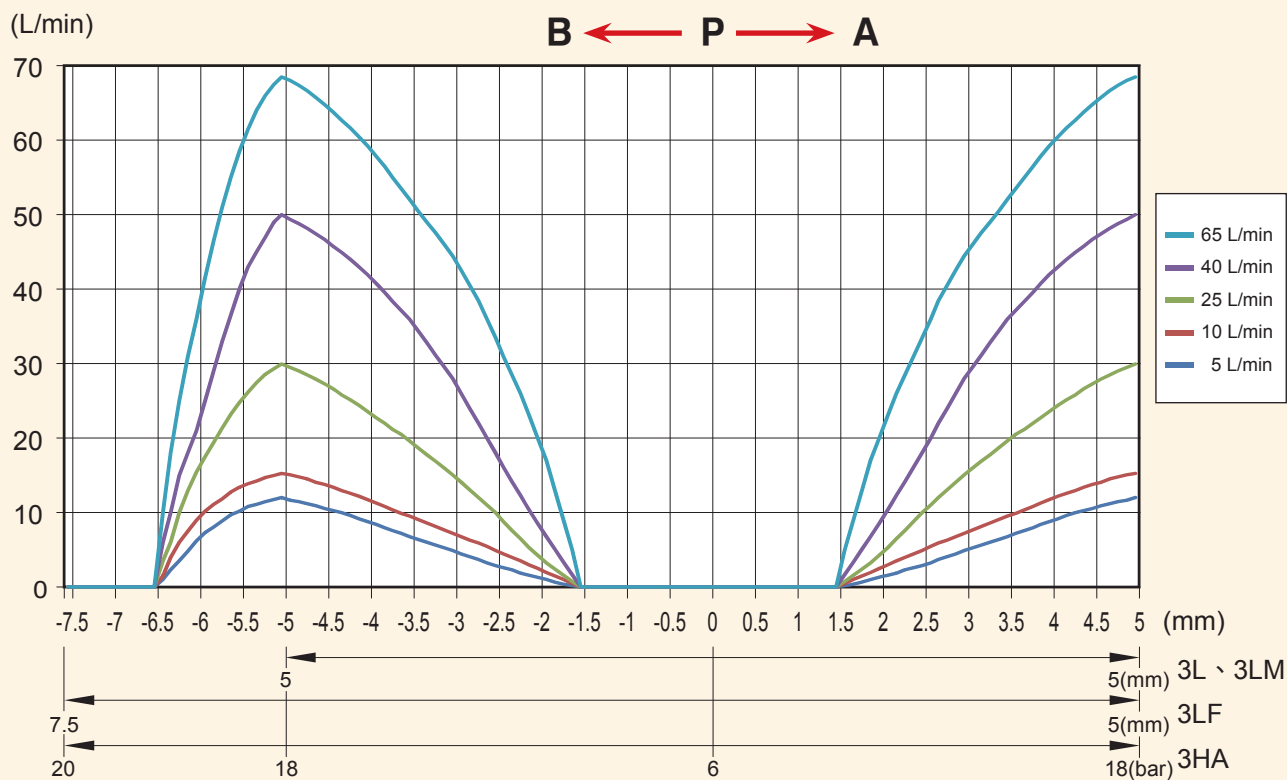
YLWPV32 L2 ※ ※ ※ ※

3 1 0 2  TP T	3 1 0 2  TP T	3 1 0 2  TP T	3 1 0 2  TP T
A & B → T P Closed	P → B A → T	A & B → T P Closed	P → A B → T

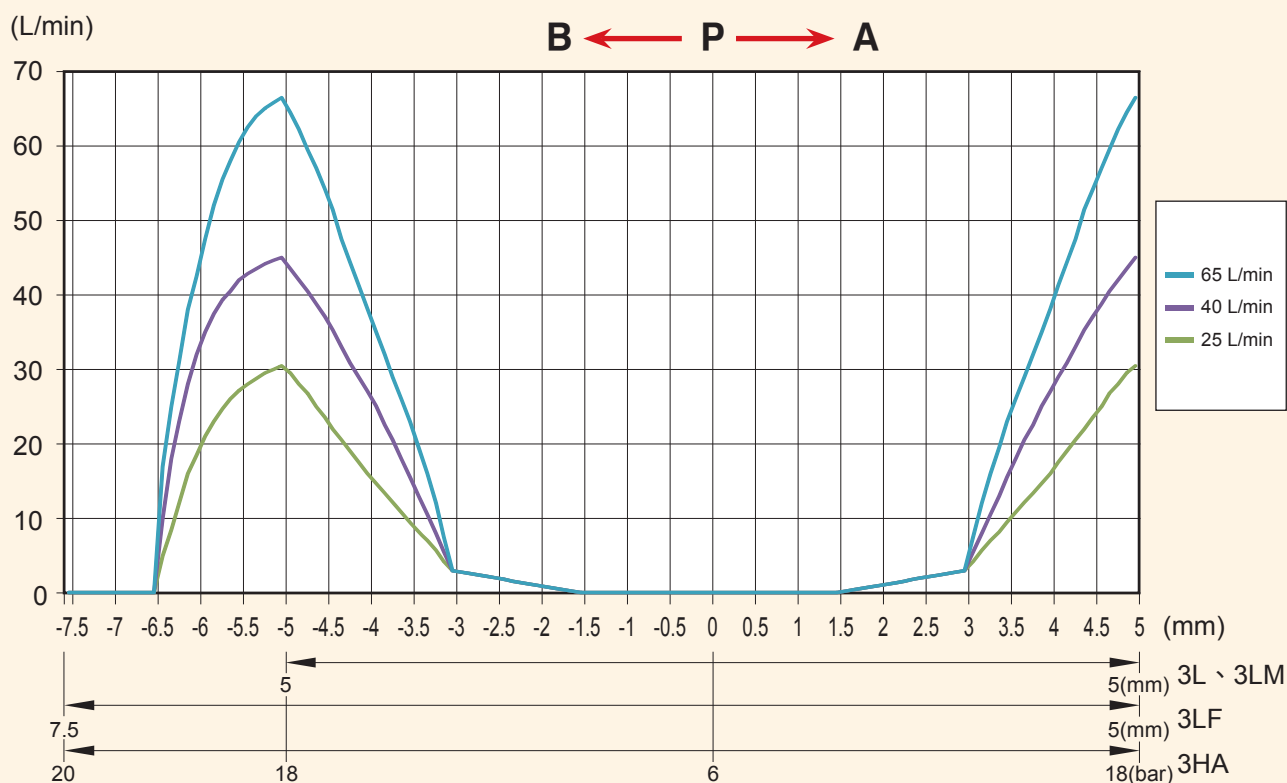
Flow 流量	25 (L/min)	40 (L/min)	65 (L/min)
Code 編號	YLWPV32L2025	YLWPV32L2040	YLWPV32L2065
	YLWPV32L2025HA	YLWPV32L2040HA	YLWPV32L2065HA
	YLWPV32L2025EP	YLWPV32L2040EP	YLWPV32L2065EP

PV-3 Proportional Valves 比例式控制閥

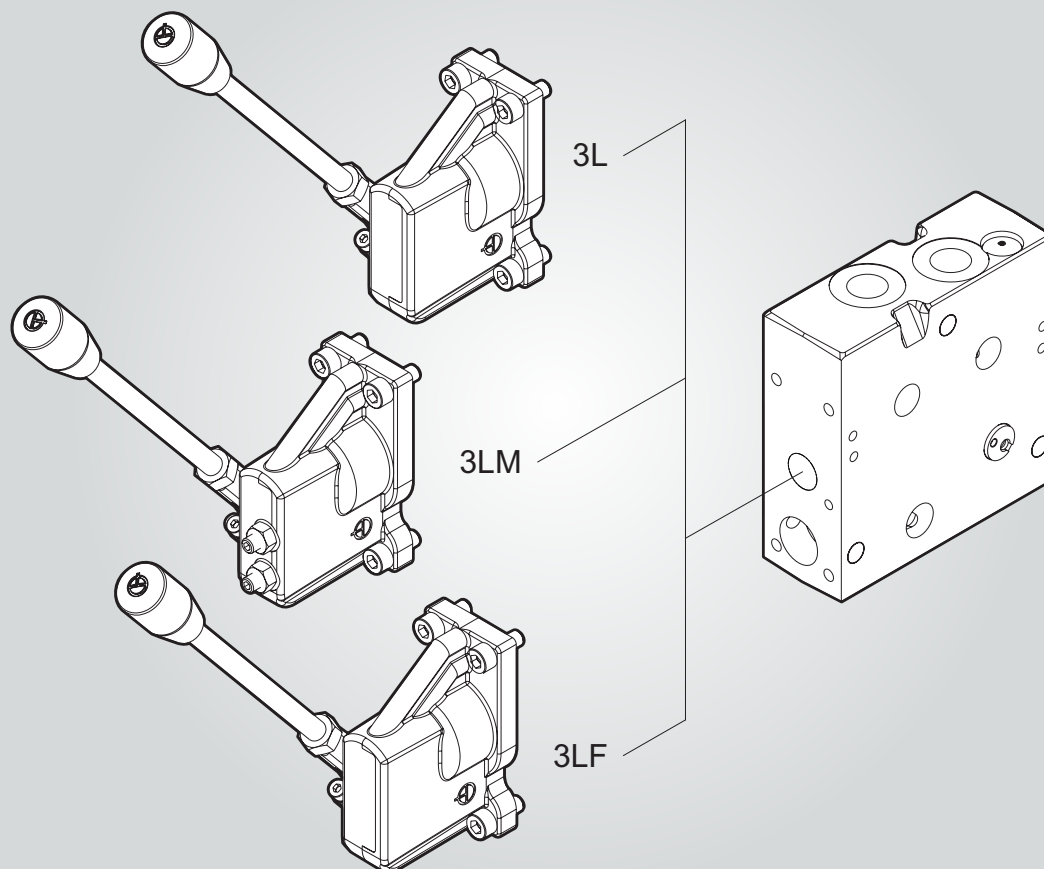
PV-3 Flow curve 流量曲線

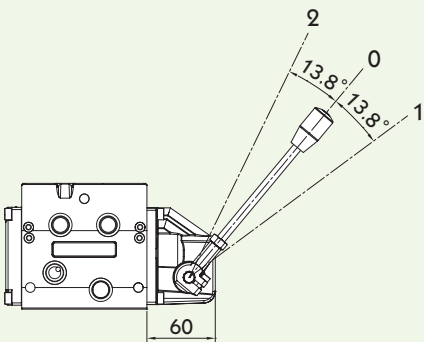
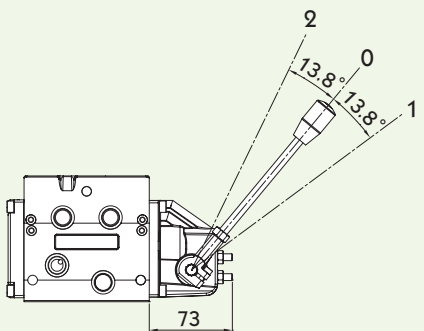


PV-3 Linear flow curve 線性流量曲線

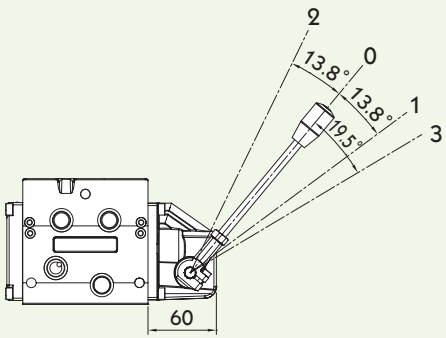
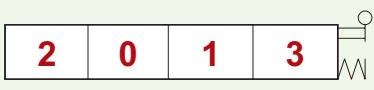
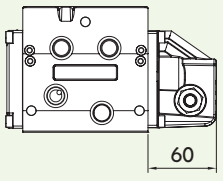
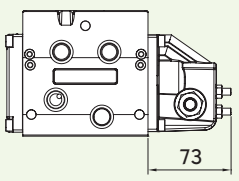
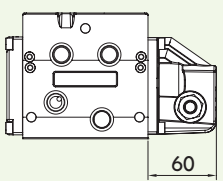
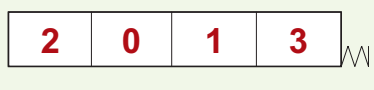


PV-3 Proportional Valves 比例式控制閥

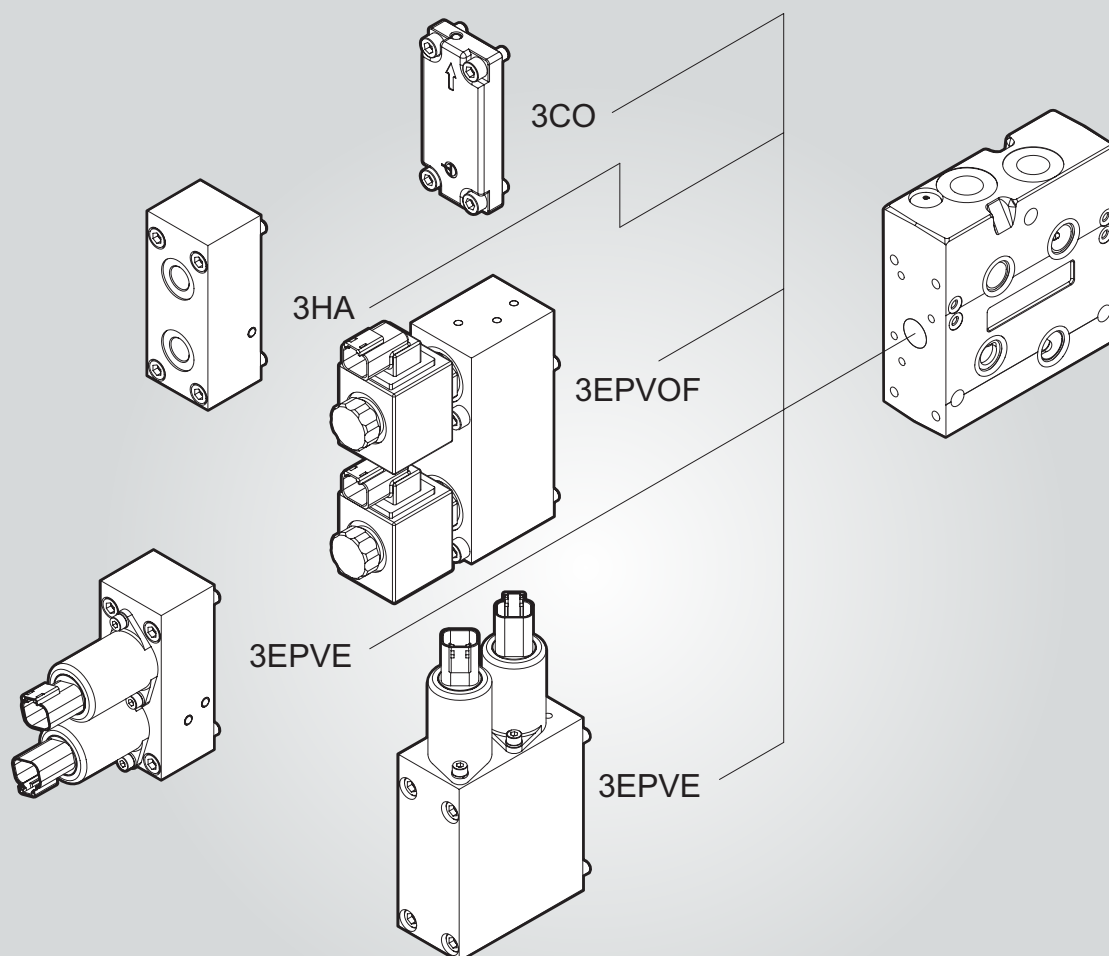


Type 3L 型式	Circuit 迴路	
		Standard lever. 標準把手。
Type 3LM 型式	Circuit 迴路	
		Standard lever; individual oil flow adjustment to ports A and B. 標準把手，帶 A/B 口最大流量調節螺絲。

PV-3 Proportional Valves 比例式控制閥

Type 3LF 型式	Circuit 迴路	
		Floating lever. 浮動把手。
Type 3LN 型式	Circuit 迴路	
		Standard lever-cover without handle. 標準把手蓋，無手把。
Type 3LMN 型式	Circuit 迴路	
		Standard lever-cover without handle with individual oil flow adjustment to ports A and B. 標準把手蓋，無手把，帶 A/B □最大流量調節螺絲。
Type 3LFN 型式	Circuit 迴路	
		Floating lever-cover without handle. 浮動把手蓋，無手把。

PV-3 Proportional Valves 比例式控制閥



Type 3CO 型式	Symbol 符號	
		Standard cover. 標準後蓋。
Type 3HA-G2 型式	Symbol 符號	Thread Code 牙口: G1/4
Type 3HA-E5 型式		Thread Code 牙口: 1/2-20 UNF
		Cover for hydraulic actuation to match HA spool. Control range: For 3L、3LM: 0~5 mm → 6~18 Bar. For 3LF: 0~7.5 mm → 6~20 Bar. ★ This type can connect with JHP1 & JHP2. 液壓驅動蓋板，須搭配 HA 心軸 可調節範圍： 搭配 3L、3LM: 0~5 mm → 6~18 Bar. 搭配 3LF: 0~7.5 mm → 6~20 Bar. ★ 可搭配 JHP1、JHP2 控制。

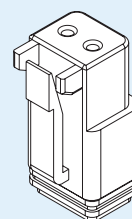
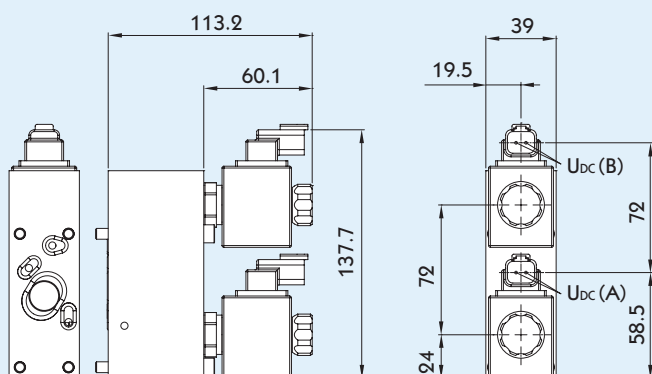
PV-3 Proportional Valves 比例式控制閥

Function 功能	功能
The main spool is controlled by ON/OFF modulated Plug-in Solenoid valve, reaction from neutral position to max spool travel.	插式電磁閥，經由開關控制，驅動主閥心從中位到達最大行程位置。

Code 編號	Description 描述	Connector 接頭	Enclosure to IEC 529 防護等級
3EPVOF-D1201	ON/OFF modulation plug-in solenoid valve, rated voltage 12V. 插式型開關電磁閥，額定電壓 12V。	Deutsh	IP67
3EPVOF-D2401	ON/OFF modulation plug-in solenoid valve, rated voltage 24V. 插式型開關電磁閥，額定電壓 24V。	Deutsh	IP67

Parameter 參數	12V DC	24V DC
Permissible deviation from rated supply voltage 額定電壓範圍	$\pm 10\%$	
Resistance 電阻	$7.5 \Omega \pm 7\%$	$28.6 \Omega \pm 7\%$
Power consumption 功率	20 W	
Ambient temperature 環境溫度	$-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$ $\{-22^{\circ}\text{F} \sim 140^{\circ}\text{F}\}$	
Oil temperature (Inlet temperature) 液壓溫度	$-40^{\circ}\text{C} \sim 120^{\circ}\text{C}$ $\{-40^{\circ}\text{F} \sim 248^{\circ}\text{F}\}$	
Filtration (Max.) 過濾精度 (最大)	$25 \mu\text{m}$	

Circuit 迴路	Function 功能圖
Standard type-Deutsh 標準型-Deutsh	Deutsh 插件



Description 描述	QTY 數量	Deutsh 代碼
Connector 接頭	1	W2S

- ★ By Purchased (non-provided)
- ★ 自購零件(無法提供)

PV-3 Proportional Valves 比例式控制閥

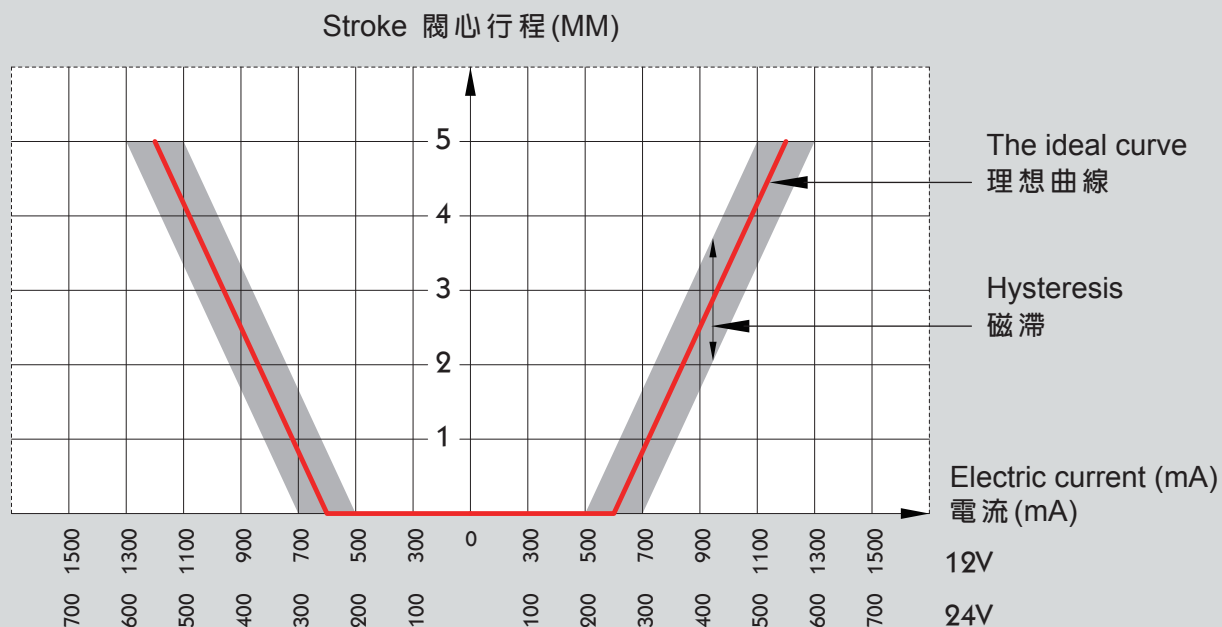
Function 功能	功能
The main spool position is adjusted with the electrical proportional actuation, in this condition, the position corresponds to an electrical control signal. The control signal is converted into a hydraulic pressure signal that make the spool moved in the valve. This is done by means of two proportional pressure reducing valve. The electrical actuation can be controlled by both current amplifier card and a programmable micro-controller directly. ※ Use 25 BAR pilot pressure, to match with EP spool. it can't assembly with 3LF.	主閥心位置通過電比例驅動件來調整,完成閥心位置與電控信號,對應控制訊號轉為驅動主閥心的液壓壓力信號,控制訊號的轉化由兩個比例減壓閥完成,電器驅動元件可以由電流放大板或可編程微控制器直接控制。 ※ 使用 25 BAR 先導壓力,需搭配 EP 心軸。 不可搭配 3LF。

Code 編號	Description 描述	Connector 接頭	Enclosure to IEC 529 防護等級
3EPVE-A1201	Proportional control, rated voltage 12V, standard type. 比例控制、額定電壓 12V, 標準型。	AMP	IP66
3EPVE-A2401	Proportional control, rated voltage 24V, standard type. 比例控制、額定電壓 24V, 標準型	AMP	IP66
3EPVE-D1201	Proportional control, rated voltage 12V, standard type. 比例控制、額定電壓 12V, 標準型。	Deutsch	IP67
3EPVE-D2401	Proportional control, rated voltage 24V, standard type. 比例控制、額定電壓 24V, 標準型	Deutsch	IP67
3EPVE-A1202	Proportional control, rated voltage 12V, vertical type. 比例控制、額定電壓 12V, 直立型。	AMP	IP66
3EPVE-A2402	Proportional control, rated voltage 24V, vertical type. 比例控制、額定電壓 24V, 直立型。	AMP	IP66
3EPVE-D1202	Proportional control, rated voltage 12V, vertical type. 比例控制、額定電壓 12V, 直立型。	Deutsch	IP67
3EPVE-D2402	Proportional control, rated voltage 24V, vertical type. 比例控制、額定電壓 24V, 直立型。	Deutsch	IP67

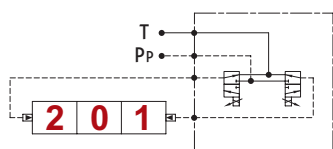
Parameter 參數	12V DC	24V DC
Controller output current range 控制器輸出電流範圍	0~1500 mA	0~750 mA
Resistance 電阻	4.72 Ω $\pm$ 5%	20.8 Ω $\pm$ 5%
Current consumption 消耗電流	24 mA (12V)	20 mA (24V)
Control type 控制型態	Current control recommended: PWM 100HZ 電流控制推薦: PWM 100HZ	
Pilot pressure 先導壓力	Min. 最小 21 bar { 305 psi } , Max. 最大 25 bar { 636 psi }	
Pressure control range 壓力控制範圍	5~15 bar { 72.5~217.5 psi }	
Ambient temperature 環境溫度	-30°C~80°C { -22°F~176°F }	
Medium temperature 介質溫度	-20°C~80°C { -4°F~176°F }	
Oil Viscosity 液壓油黏度	Range 範圍: 12~75 mm ² /s { 65~350 SUS }	
	Min. 最小: 4 mm ² /s { 40 SUS }	
	Max. 最大: 400 mm ² /s { 2130 SUS }	
Filtering in the hydraulic system 液壓系統過濾	Max. allowed degree of contamination (ISO 4406) 允許最大污染 (ISO 4406)	

PV-3 Proportional Valves 比例式控制閥

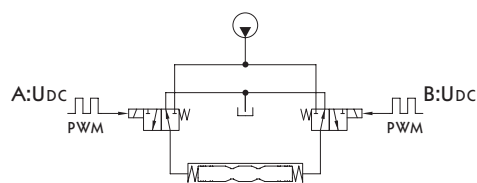
Performance Graphs 曲線圖：



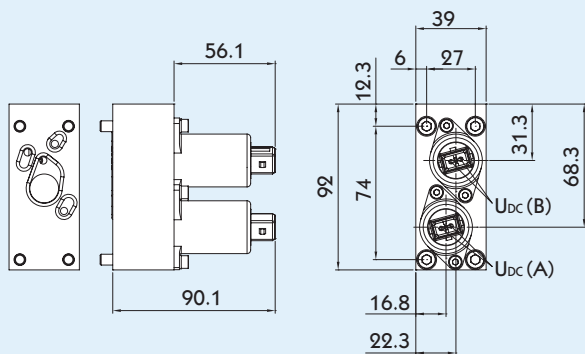
Circuit 迴路



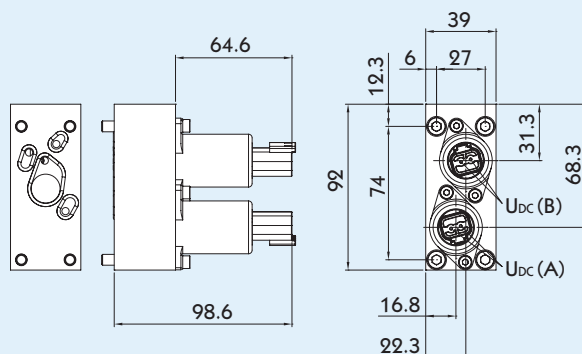
Function 功能圖



Standard type-AMP 標準型-AMP

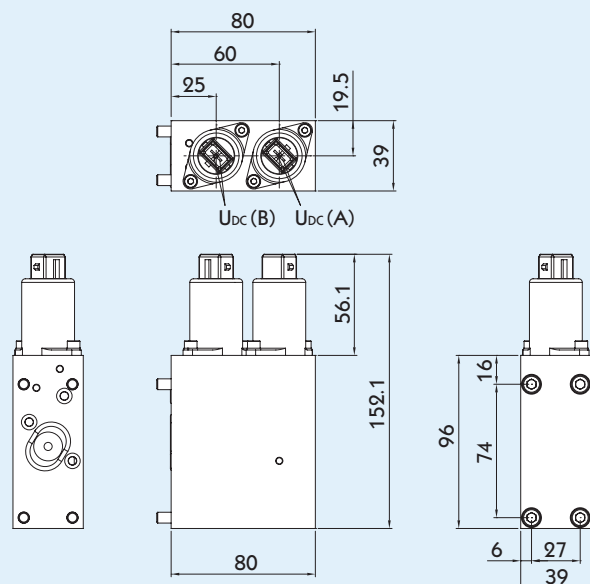


Standard type-Deutsh 標準型-Deutsh

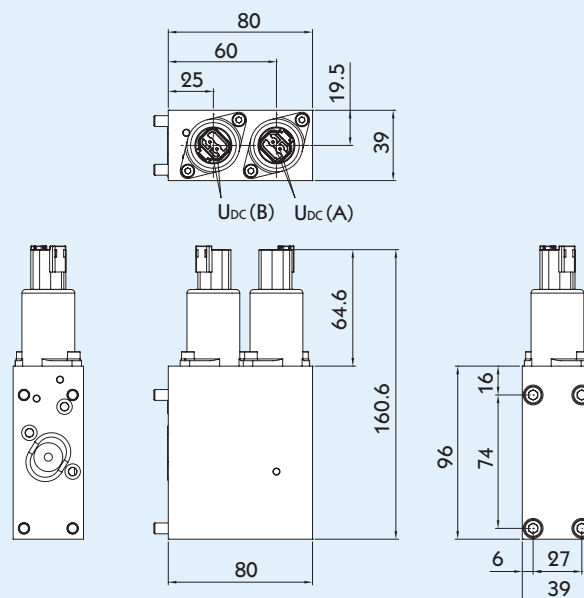


PV-3 Proportional Valves 比例式控制閥

Vertical type-AMP 直立型-AMP



Vertical type-Deutch 直立型-Deutch

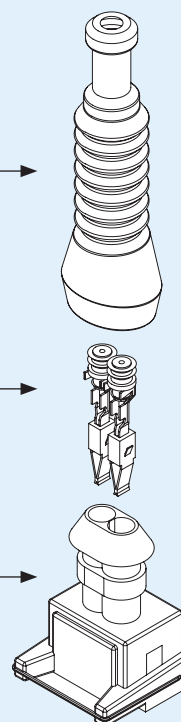


AMP Connector Version AMP 插件

Description 描述	QTY 數量	AMP 代碼
Seal kit 密封件	1	880810-1

Description 描述	QTY 數量	AMP 代碼
Contacts 觸點	2	828905-1
Contacts 觸點	2	929930-3

Description 描述	QTY 數量	AMP 代碼
Connector 接頭	1	282189-1

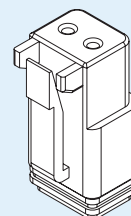


- ★ By Purchased (non-provided)
- ★ 自購零件(無法提供)

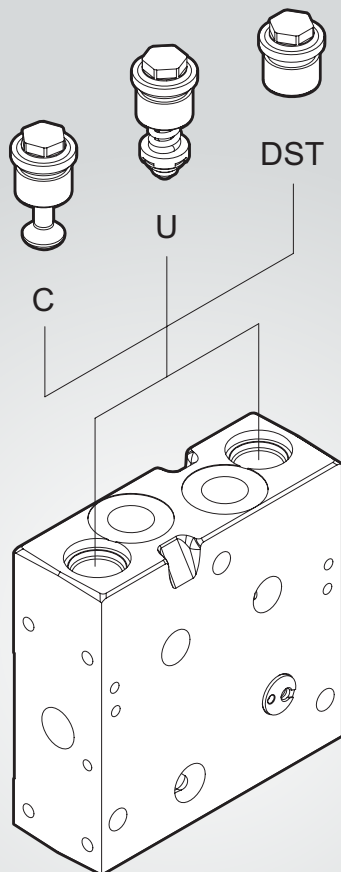
Deutch Connector Version Deutch 插件

Description 描述	QTY 數量	AMP 代碼
Connector 接頭	1	W2S

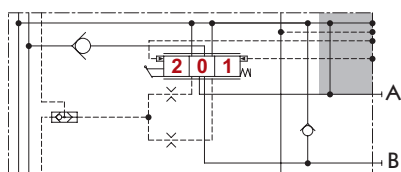
- ★ By Purchased (non-provided)
- ★ 自購零件(無法提供)



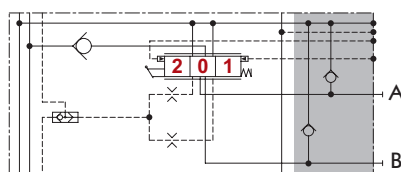
PV-3 Proportional Valves 比例式控制閥



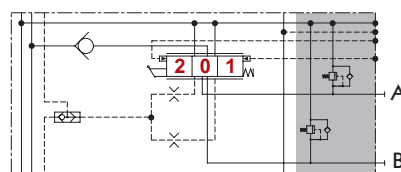
PV3-Type DST



PV3-Type C



PV3-Type U



PV-3 Proportional Valves 比例式控制閥

Shock And Suction Valve Options 緩衝壓力選擇

Setting pressure 設定壓力		Item 代碼
bar	psi	
32	460	U32
50	725	U50
63	914	U63
80	1160	U80
100	1450	U100
125	1813	U125
140	2031	U140
150	2175	U150
160	2320	U160
175	2538	U175
190	2755	U190
210	3045	U210
230	3335	U230
240	3480	U240
250	3625	U250
265	3843	U265
280	4061	U280
300	4351	U300
320	4641	U320
350	5075	U350

PV-3 Proportional Valves 比例式控制閥

Assembly Torque Data 安裝扭力值

Thread type-G G牙		Thread type-E E牙	
Specification 規格	N-m	Specification 規格	N-m
		3/8"-24 UNF (SAE 3)	18
G2 (PF 1/4)	40	7/16"-20 UNF (SAE 4)	29
G3 (PF 3/8)	80	1/2"-20 UNF (SAE 5)	32
G4 (PF 1/2)	115	9/16"-18 UNF (SAE 6)	40
G6 (PF 3/4)	180	3/4"-16 UNF (SAE 8)	70
G8 (PF 1)	310	7/8"-14 UNF (SAE 10)	115
G10 (PF 1-1/4)	450	1-1/16"-12 UN (SAE 12)	185
		1-5/16"-12 UN (SAE 16)	270
		1-5/8"-12 UN (SAE 20)	340

※ Assembly torque data $\pm 10\%$ N-m.

※ 安裝扭力值 $\pm 10\%$ N-m.

PV-3 Proportional Valves 比例式控制閥

	【Description of Function】 功能描述	P1:	P:				P2:
							Bar
1		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
2		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
3		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
4		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
5		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
6		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
7		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
8		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
9		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
10		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
11		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
12		A:	L: Bar	W:	W2:	B:	
			W1:	G:			
		M:	T:				

Specification sheet: 【P: Pump side module 【P1: Plug for external pilot oil supply 【P2: LS Solenoid Unloading vavle LS
 【A: A side options 【B: B side options 【W: Basic moldules 【W1/W2: Shock and suction valve
 【L: LS Pressure relief valve setting 【G: Spool 【T: End plate 【M: Tie rod kit

表框選項: 【P: 入油體 【P1: 外部先導油接頭 【P2: LS電磁洩壓閥 【A: A 邊選項 【B: B 邊選項
 【W: 工作體 【W1/W2: 緩衝補油閥 【L: LS 限壓閥設定值 【G: 心軸 【T: 端蓋板
 【M: 串聯螺絲組

PV-3 Proportional Valves 比例式控制閥

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