

**SANDSUN**

山田順精機

**AIR DRIVEN HYDRAULIC PUMP UNIT**  
**氣動油壓泵浦單元**





**SANDSUN** ISO 9001 CE

**MANAGING PHILOSOPHY**

Moderate & Reliable    Aggressive & Creative  
Demanding for Perfection    Constant Operation

**QUALITY POLICY**

Quality Stability    Customer Satisfaction

**經營理念**

穩健踏實    精進創新    止於至善    永續經營

**品質政策**

品質穩定    客戶肯定

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[www.sandsun.com.tw](http://www.sandsun.com.tw)



PB-1P2V



PB-1P3V



PB-1P1V



PC-1P4V



PB-1P4V



PC-2P4V



PC-2P6V

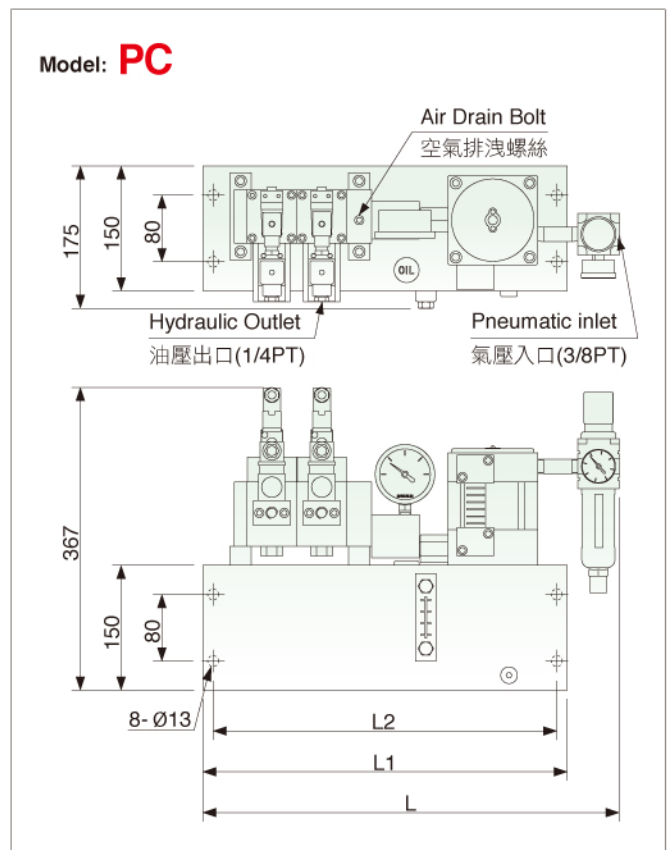
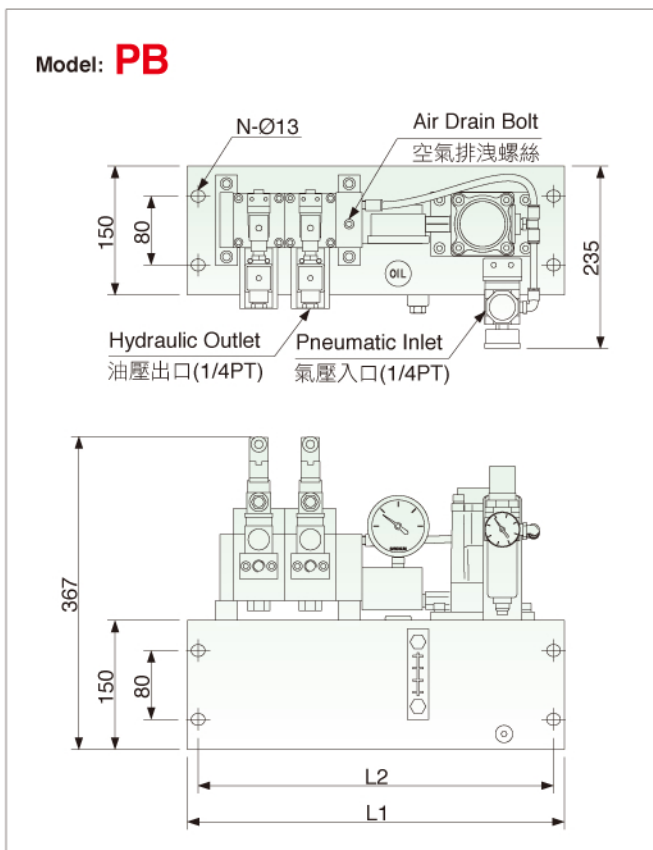
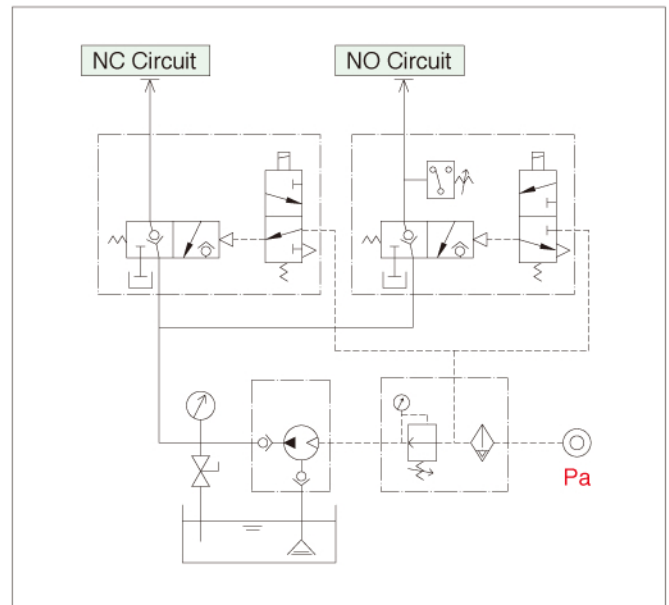
- Use air to drive hydraulic pump. Once the outlet hydraulic pressure reaches the setting pressure, it will stop driving and won't waste any energy. If the outlet pressure is reducing, it will supplement pressure automatically to maintain the pressure continuously.
- The outlet pressure of the pump and the pneumatic pressure of driving are as direct ratio. The outlet pressure will base on the adjustment of pneumatic pressure to change.
- The hydraulic pressure (available hydraulic pressure from 4~34.3MPa (40~350kg/cm<sup>2</sup>)(570~5000psi) , flow rate of pump and circuit control system will base on the requirement to be different.
- The circuit control system has the function of check. If there is no pneumatic pressure, the hydraulic pressure will be maintained.
- The best application is for work clamping systems or hydraulic pressure supply system which needs to maintain pressure for a long time but less operate.
- It has the function of inspection pressure and can be interlocked with the machine.
- 利用空氣驅動泵浦，出口油壓達設定壓力立即停止作動不需繼續消耗能源，若出口油壓下降則自動補壓，具持續保持壓力功能。
- 泵浦的出口壓力與驅動的空氣壓力成正比，因此出口壓力也隨著空氣壓力的調節而變化。
- 可依需要搭配不同壓力4~34.3MPa(40~350kg/cm<sup>2</sup>) (570~5000psi)、不同流量之泵浦及不同型式之迴路控制系統。
- 迴路控制系統具逆止功能，空氣壓力消失時油壓壓力可保持。
- 最適用於油壓夾治具或作動不頻繁，需較長時間持壓之油壓供給系統。
- 具壓力檢出功能，可以與機台連線。

## SELECTION OF SYSTEM COMPONENTS 選用規範

### Model Selection 形式選用 : 1 - 2 P 3 4

1	Pump Model 泵浦型式	PB07 ~ 16 PC12 ~ 22
2	No. of pump 泵浦數量	1 : 1 Pcs 2 : 2 Pcs
3	No. of Circuits 迴路數	1~6
4	Non-leak valve control 氣控閥控制	V : SV04 M : SV10

- Please provide : control voltage, number of pressure switch and number of circuits for "NO" or "NC"  
訂購時請提供 : 使用電壓、壓力開關數量、迴路之 NO 或 NC 數量



Model 型式	L1	L2	N	Volume
PB□-1P1V	378	353	16	6 Liter
PB□-1P2V	438	413		7 Liter
PB□-1P3V	498	473		8 Liter
PB□-1P4V	588	563		10 Liter
PB□-1P5V	648	623	8	12 Liter
PB□-1P6V	708	683		13 Liter

Model 型式	L	L1	L2	Volume
PC□-1P1V	440	378	353	6 Liter
PC□-1P2V	500	438	413	7 Liter
PC□-1P3V	560	498	473	8 Liter
PC□-1P4V	650	588	563	10 Liter
PC□-1P5V	710	648	623	12 Liter
PC□-1P6V	770	708	683	13 Liter

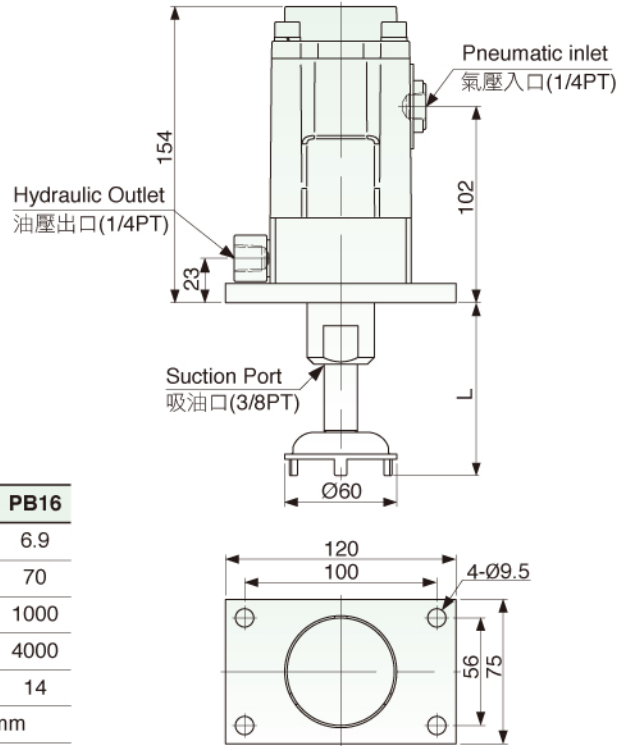
- Numbers of pump & Non-leak valve depend on control circuits.  
可依迴路需要增加泵浦及氣控閥。

- Numbers of pump & Non-leak valve depend on control circuits.  
可依迴路需要增加泵浦及氣控閥。

- The Ø13 hole for 5V and 6V is located at the bottom and backside  
5V、6V Ø13孔為下方及後側。

# AIR DRIVEN HYDRAULIC PUMP 氣動油壓泵浦

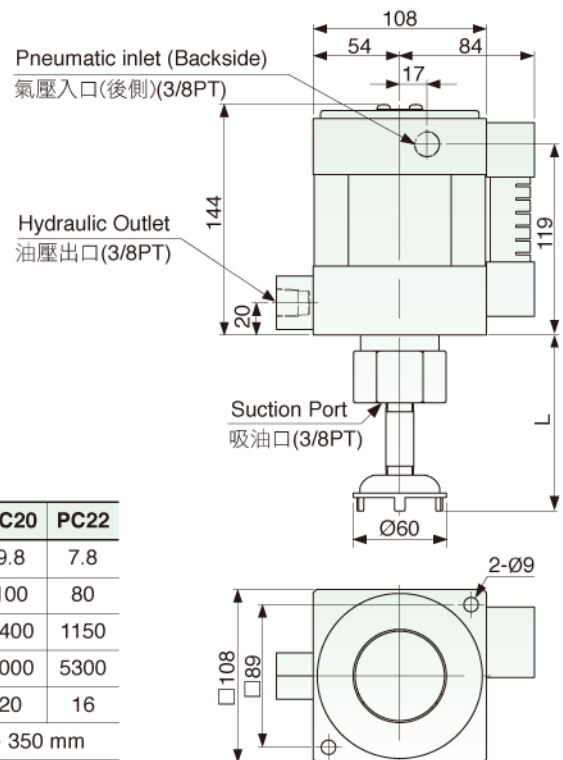
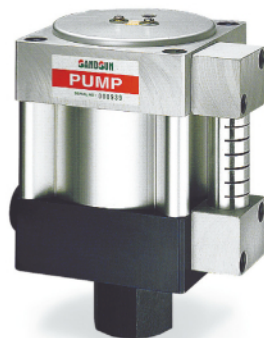
Model: **PB**



Model 型式		PB06	PB07	PB08	PB09	PB10	PB12	PB14	PB16
Hydraulic pressure 油壓壓力	MPa	43.1	33.3	26.0	20.6	16.7	10.8	8.8	6.9
	kg/cm <sup>2</sup>	440	340	265	210	170	110	90	70
	psi	6250	4800	3750	3000	2400	1550	1300	1000
Flow/流量	cc/min	1200	1600	2100	2300	2600	3200	3500	4000
Pressure ratio/增壓比		88	68	53	42	34	22	18	14
L (Length / 長度) : 75、95、110、125、155、185、215、245、275、305、335 mm									

■ Air pressure supplied at 0.49MPa(5kg/cm<sup>2</sup>)(71psi)/以上使用空氣壓力為0.49MPa(5kg/cm<sup>2</sup>)(71psi)

Model: **PC**



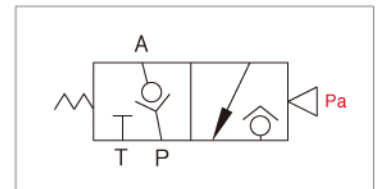
Model 型式		PC09	PC10	PC12	PC14	PC16	PC18	PC20	PC22
Hydraulic pressure 油壓壓力	MPa	49	40	25.5	19.6	16.7	11.8	9.8	7.8
	kg/cm <sup>2</sup>	500	410	260	200	170	120	100	80
	psi	7100	5850	3700	2850	2400	1700	1400	1150
Flow/流量	cc/min	1150	1600	2700	3600	4100	4750	5000	5300
Pressure ratio/增壓比		100	82	52	40	34	24	20	16
L (Length / 長度) : 80、110、125、140、170、200、230、260、290、320、350 mm									

■ Air pressure supplied at 0.49MPa(5kg/cm<sup>2</sup>)(71psi)/以上使用空氣壓力為0.49MPa(5kg/cm<sup>2</sup>)(71psi)

## NON-LEAK VALVE 氣控閥單元

Model: **SV04 · 10**

- It won't leak oil inside, and has the function to maintain pressure for a long time.
- Application for:
  - a. Clamp & oil cylinder.
  - b. Hydraulic pressure supply system which requires to maintain pressure for a long time.
- 具有零內漏，長時間持壓功能。
- 適用於夾具、油壓缸及長時間保持壓力系統。



Model 型式	SV04	SV10
Effective area / 有效斷面積	mm <sup>2</sup> 15	25

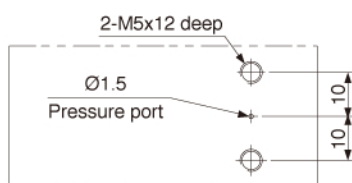
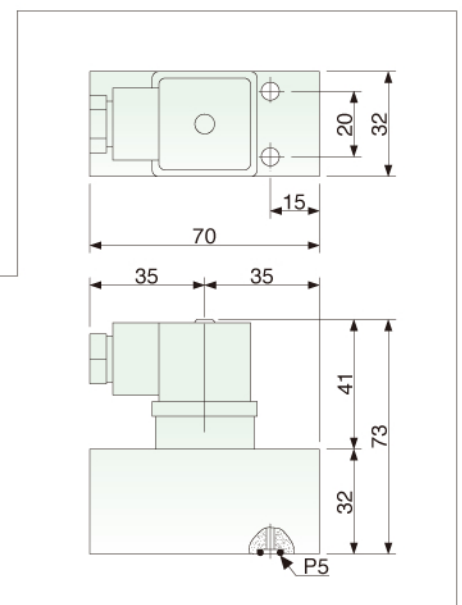
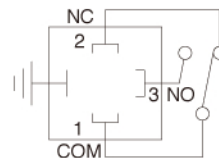
■ Max.hydraulic pressure / 最高使用壓力37.3MPa(380kg/cm<sup>2</sup>)(5400psi)

## PRESSURE SWITCH 壓力開關

Model: **ST-P16 · P40**

- Signal of notified pressure can be connected with working machine
- 壓力檢知訊號，可與機台做連線。

Model 型式	ST-P16	ST-P40	
Pressure setting range 設定範圍	MPa	2 ~ 16	4 ~ 40
	kg/cm <sup>2</sup>	20 ~ 160	40 ~ 400
	psi	285 ~ 2250	570 ~ 5700
Voltage max. / 最大容許電壓	250V		
Current max. / 最大容許電流	3A		
Temperature max. / 最大容許溫度	80°C		



## SLIDE LOCK PUMP UNIT 滑塊固鎖泵浦單元

Model: **PE · PF**

Application:  
High speed press-slide lock  
Single circuit control  
適用於：  
高速沖床滑塊固鎖  
單一迴路控制



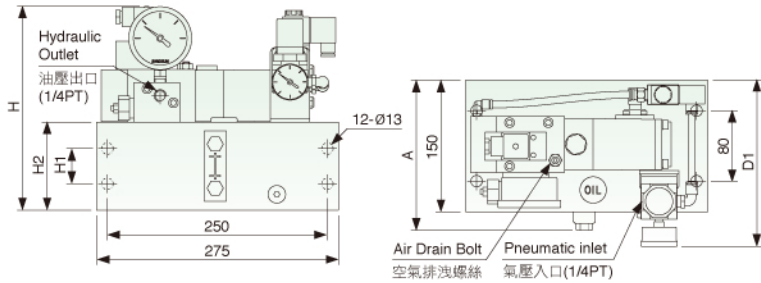
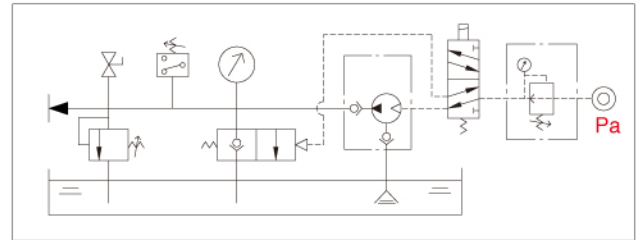
PE□-PRS



PF□-PRS

### Model Selection 形式選用：1 - 2 - 3

1	Model 型式	PE07~10 PF07~10	
2	Assembly code 配件代號	P	Pressure switch 壓力開關
		R	Pressure relief valve 洩壓閥
		S	Pressure regulator valve 調壓閥
3	Electronic control voltage 使用電壓	0 : DC24V 1 : AC110V 2 : AC220V	



Model 型式	A	H	H1	H2	D1	Volume
PE	170	250	40	100	-	2.5 Liter
PF	175	300	80	150	210	4.0 Liter

■ Air pressure supplied at 0.49MPa(5kg/cm<sup>2</sup>)(71psi)/以上使用空氣壓力為0.49MPa(5kg/cm<sup>2</sup>)(71psi)

## PUMP UNIT FOR FEEDER 送料架泵浦單元

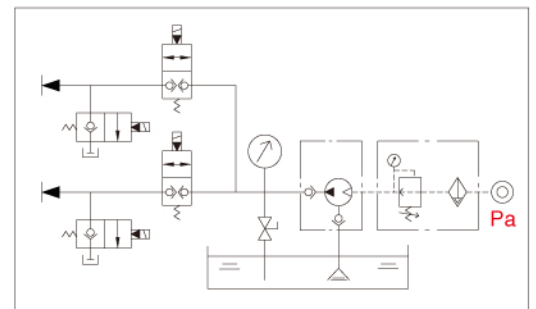
Model: **PB-2E**

Application:  
Hydraulic pressure supply for feeder  
適用於：  
送料架之油壓供給

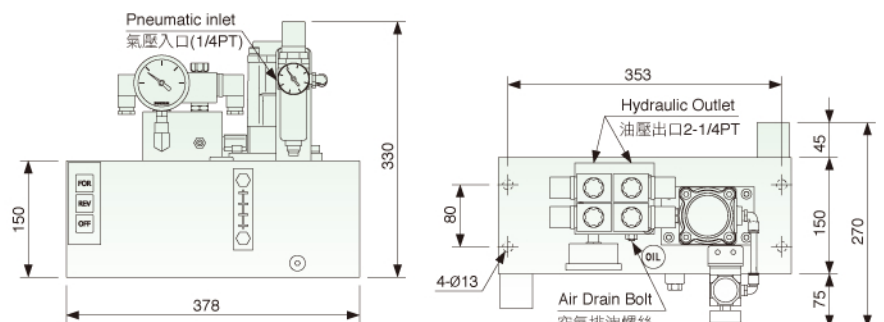
### Model Selection 形式選用：1 - 2E - 2

1	Model 型式	PB08~16	
2	Electronic control voltage 使用電壓	0 : DC24V 1 : AC110V 2 : AC220V	

■ Tank volume 5.8Liter



PB10-2E



# STICK RELEASE PUMP UNIT 卡模解脫泵浦單元

Model: **PB-B-E**

Application:

Press and hydraulic press - stick release

適用於：

沖床、油壓機之卡模解脫



PB□-B



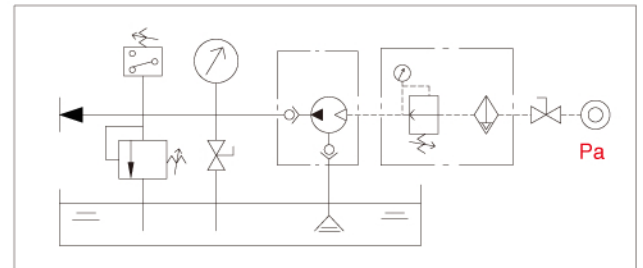
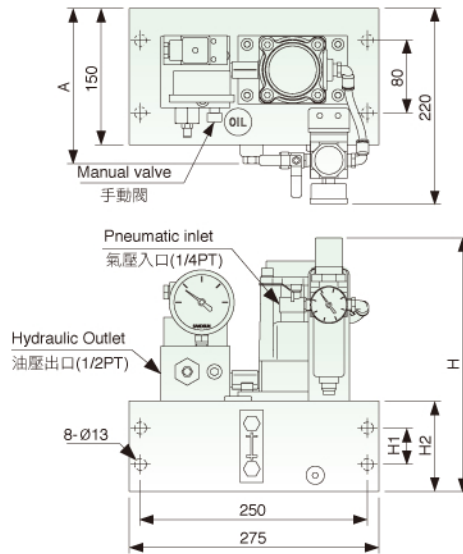
PB□-E

## Model Selection 形式選用：1 - 2 - 3 - 4

1	Model 型式	PB07~16	
2	Control type 控制方式	B	Manual operation 手動操作控制
		E	Inserting solenoid valve 插入式電磁閥控制

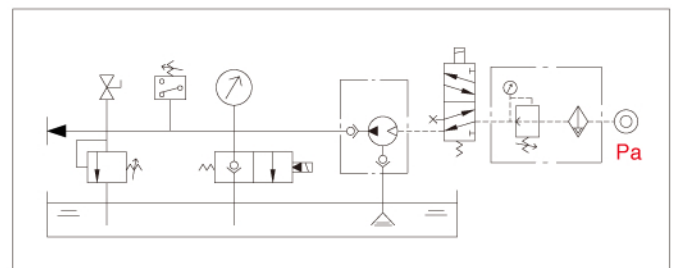
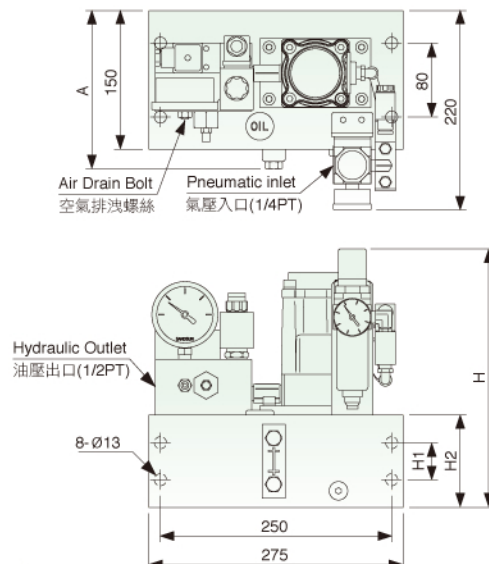
3	Assembly code 配件代號	P	Pressure switch 壓力開關
		R	Pressure relief valve 洩壓閥
		S	Pressure regulator valve 調壓閥
4	Electronic control voltage 使用電壓	0	DC24V
		1	AC110V
		2	AC220V

Type: **B**



Model 型式	H	H1	H2	A	Volume
PB□-B	280	40	100	170	2.5 Liter
	330	80	150	175	4.0 Liter

Type: **E**



Model 型式	H	H1	H2	A	Volume
PB□-E	280	40	100	170	2.5 Liter
	330	80	150	175	4.0 Liter