FONRAY®

控制元件
CONTROL ELEMENT

A

4V100 系列 電磁閥、氣動閥
4V100 Series Solenoid Valve, Pneumatic Control Valve ---------- 01–04

4V200 系列 電磁閥、氣動閥
4V200 Series Solenoid Valve, Pneumatic Control Valve ---------- 05–09

4V300 系列 電磁閥、氣動閥
4V300 Series Solenoid Valve, Pneumatic Control Valve ---------- 10–14

4V400 系列 電磁閥、氣動閥
4V400 Series Solenoid Valve, Pneumatic Control Valve ---------- 15–17

100–400 系列 底座
100–400 Series Manifold ---------- 18

3V1 系列 電磁閥
3V1 Series Solenoid Valve ---------- 19–20

F3VJZF 系列 三口二位截止式電磁閥
F3VJZF Series 3/2 Way Stop Solenoid Valve ---------- 21–22

MVSC–180 系列 電磁閥
MVSC–180 Series Solenoid Valve ---------- 23–26

MVSC–260 系列 電磁閥
MVSC–260 Series Solenoid Valve ---------- 27–28

FMC/FMZ 系列 電磁閥
FMC/FMZ Series Solenoid Valve ---------- 29–31

BFG 系列 電磁閥
BFG Series Solenoid Valve ---------- 32–33

FSY3120 系列 電磁閥
FSY3120 Series Solenoid Valve ---------- 34–37

FSY5120 系列 電磁閥
FSY5120 Series Solenoid Valve ---------- 38–41

FSY7120 系列 電磁閥
FSY7120 Series Solenoid Valve ---------- 42–45

FDH3102 系列 高頻閥
FDH3102 Series High Frequency Valve ---------- 55–56

FQS 系列 高壓電磁閥
FQS Series High Pressure Solenoid Valve ---------- 57

2V 系列 二口二位電磁閥
2V Series 2/2 Way Solenoid Valve ---------- 58–59

2W 系列 二口二位直動式電磁閥
2W Series 2/2 Way Solenoid Valve (Direct Operated) ---------- 60
2W (大口徑) 系列 二口二位直動式電磁閥
2W (Large Port) Series 2/2 Way Solenoid Valve (Direct Operated) ---------- 61–62
FG 系列 三口二位電磁閥
FG Series 3/2 Way Solenoid Valve ---------- 63
2P 系列 二口二位直動式電磁閥
2P Series 2/2 Way Solenoid Valve (Direct Operated) ---------- 64
2L 系列 二口二位電磁閥
2L Series 2/2 Way Solenoid Valve ---------- 65
FVX2120 系列 二口二位直動式電磁閥
FVX2120 Series 2/2 Way Solenoid Valve (Direct Operated) ---------- 66
PU 系列 二口二位直動式電磁閥
PU Series 2/2 Way Solenoid Valve (Direct Operated) ---------- 67
PU 系列 電磁閥 (蒸汽型)
PU Series Solenoid Valve (For Steam) ---------- 68
PU225 系列 電磁閥
PU225 Series Solenoid Valve ---------- 69
2Q 系列 氣控二通閥
2Q Series 2/2 Way Valve ---------- 70
FSG5404 系列 高壓、高溫電磁閥
FSG5404 Series High Pressure and Temperature Solenoid Valve ---------- 71
FLJZE 系列 活塞式多介質角座閥
FLJZE Series Viton Type Multimedia Angle Valve ---------- 72
4H 系列 手動閥
4H Series Manual Valve ---------- 73–74
4HV 系列 手動閥
4HV Series Manual Valve ---------- 75–76
HV、K 系列 手動閥
4H、K Series Manual Valve ---------- 77
4L/3L 系列 手拉閥
4L/3L Series Hand Draw Valve ---------- 78–79
4F/FV 系列 脚踏閥
4F/FV Series Foot Valve ---------- 80–82
手動、脚踏機械閥系列
Manual Valve, Foot Valve Series ---------- 83
MSV 系列 機械閥
MSV Series Mechanical Valve ---------- 84–85
MV301/302 系列 機械閥
MV301/302 Series Mechanical Valve ---------- 86
ASC、RE 系列 流量控制閥
ASC、RE Series Flow Control Valve ---------- 87–88
QE、QEA 系列 快速排氣閥
QE、QEA Series Quick Exhaust Valve ---------- 89
TV 系列 梭閥
TV Series Shuttle Valve ---------- 90
HSV 系列 滑動閥
HSV Series Hand Sliding Valve ---------- 91
FPC 系列 空壓誘導止回閥
FPC Series Pilot Operated Check Valves ---------- 92
FVK 系列 震動器
FVK Series Vibrator ---------- 93
真空產生器
Vacuum Ejectors,Vacuum Pad ---------- 94–96

訂購代碼 Ordering Code

4V 1 10 – 06 NC – F – AC220V – W

規格代碼
4V: 五口二（三）位電磁閥
4A: 五口二（三）位氣動閥
3V: 三口二位電磁閥
3A: 三口二位氣動閥
Specification
4V: 5/2 (3) way solenoid valve
4A: 5/2 (3) way pneumatic control valve
3V: 3/2 way solenoid valve
3A: 3/2 way pneumatic control valve

系列代碼
Series Code
100 系列
100 Series

線圈及位數
10：單頭雙位置
20：雙頭雙位置
30C: 雙頭三位置封閉型
30E: 雙頭三位置排氣型
30P: 雙頭三位置壓力型
Coil and Type
10: Single coil
20: Double coil
30C: Mid–position closed
30E: Mid–position exhausted
30P: Mid–position pressed

接管口徑
Port Size
M5：M5 × 0.8
06：1/8″

接管形式及初始狀態
空白：管接式
NC: 三口二位常閉型
NO: 三口二位常閉型
Connection and Initial status
Blank: Threaded
NC: 3/2 way normal close
NO: 3/2 way normal open

本體形式
空白：壓鑄型
F：平板型
BK: 黑色本體
G: 灰色本體
AH: 金屬前導體
E: 硬氧
H: 耐磨型
B: 面板式
Valve Body
Blank: Die casting type
F : Flat type
BK: Black body
G: Grey body
AH: In front of the metal conductor
E: Hard oxygen
H: Wear resistant type
B: Sub–plated mounted (for 5/2,5/3 way only)

標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

線圈形式
空白：帶燈
EX: 防爆線圈
W: 出線
Coil type
Blank: With light
EX: Explosion proof coil
W: Lead wire

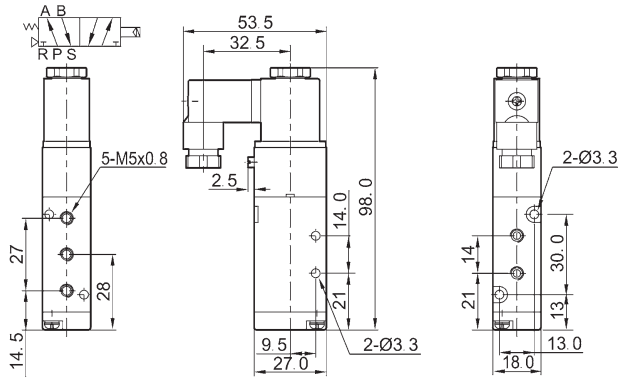
規格 Specification

型 號 Model	4V110-06	4V120-06	4V130C-06	4V130E-06	4V130P-06
	4A110-06	4A120-06	4A130C-06	4A130E-06	4A130P-06
位置數 Valve Type	五口二位 5/2 way		五口三位 5/3 way		
有效截面積 Effective Cross Section Area	12mm²(CV=0.67)		9mm²(CV=0.5)		

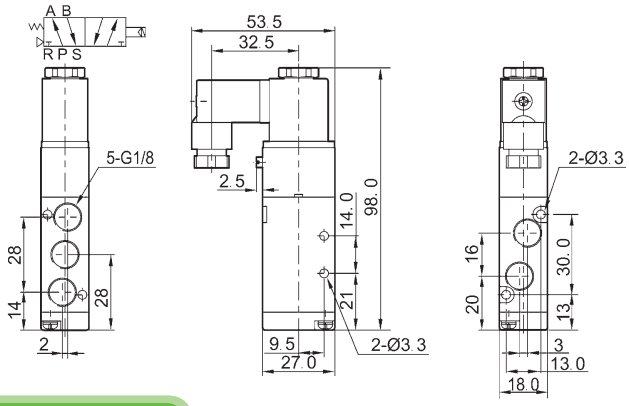
型 號 Model	3V110-06	3V120-06	3A110-06	3A120-06
位置數 Valve Type	三口二位 3/2 way			
有效截面積 Effective Cross Section Area	12mm²(CV=0.67)			
接管口徑 Port Size	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G1/8″			
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air			
動作方式 Operation	內部引導式 Internal Piloted			
使用壓力 Working–pressure	0.15 ~ 0.8MPa			
最大耐壓力 Max. Test Pressure	1.2MPa			
工作溫度 Ambient Temperature	5 ~ 50℃			
電壓範圍 Operating Voltage Tolerance	± 10%			
耗電量 Power Consumption	AC: 2.8VA DC: 2.8W			
絕緣性及防護等級 Connector Protection	F級 / F Class. IP65			
接線形式 Wiring / Connector	出線式或端子式 Cable / Lead Wire or DIN Connector			
最高動作頻率 Switching Frequency	每秒五次 5 Cycles / Sec.			
最短勵磁時間 Response Time	0.05秒 Sec.			

外觀尺寸 Overall Dimension

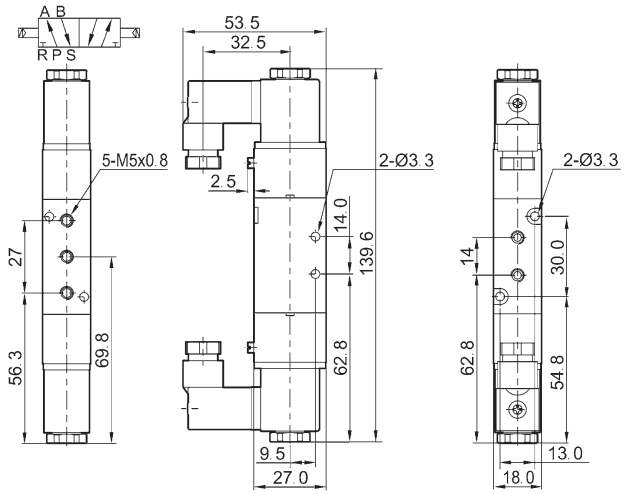
4V110-M5



4V110-06



4V120-M5



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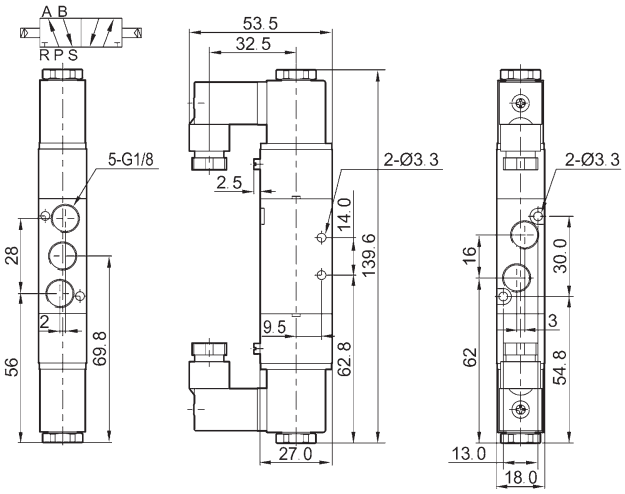

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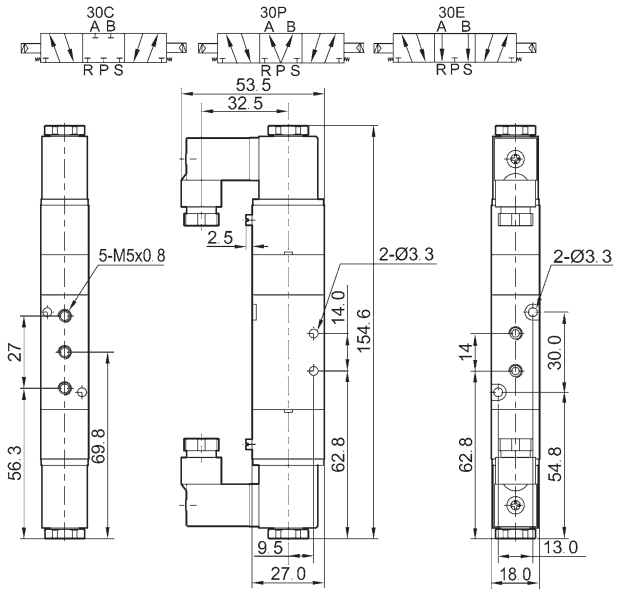

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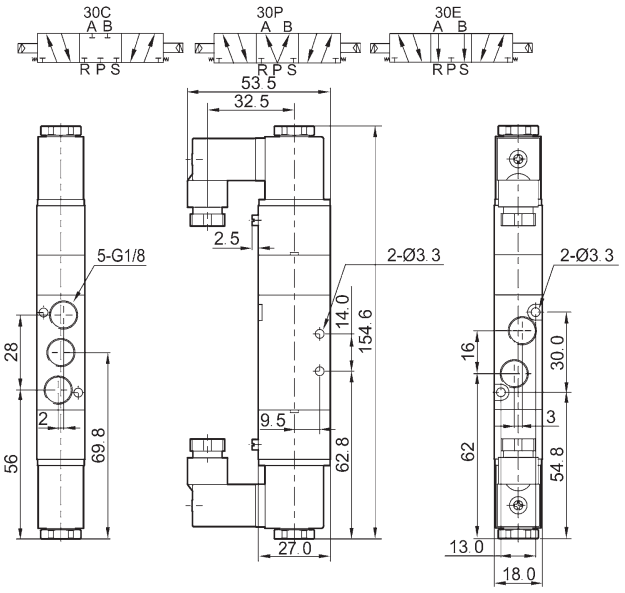
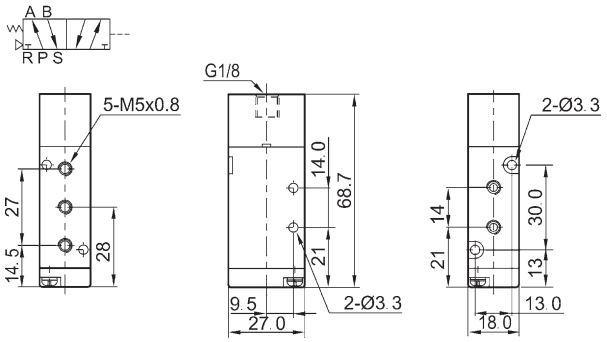


外觀尺寸 Overall Dimension

4A110-M5



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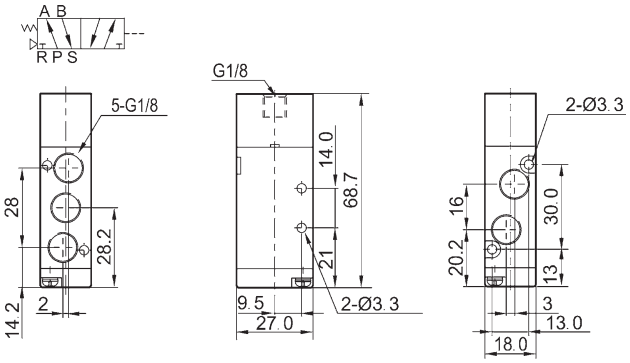

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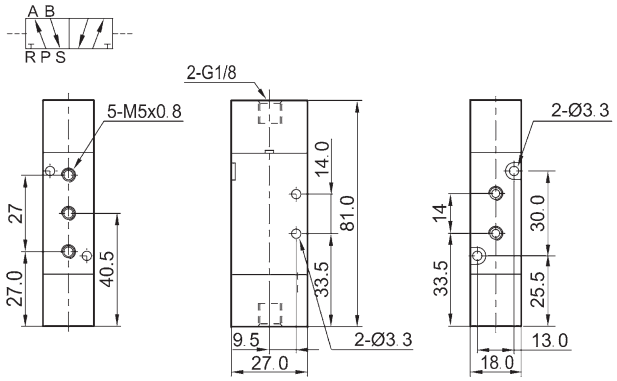

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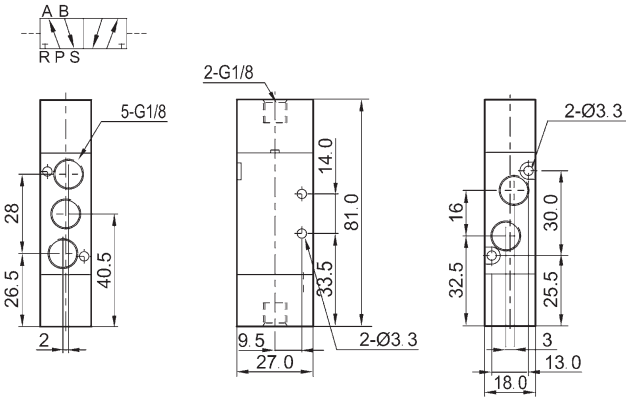

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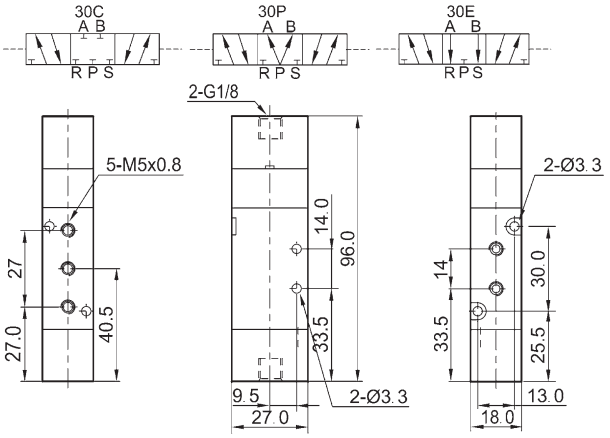

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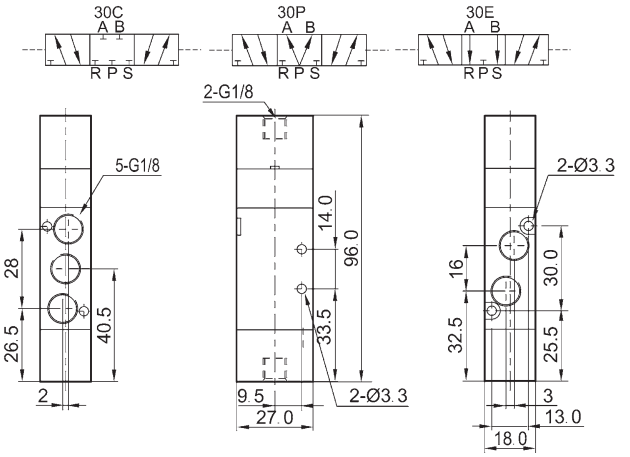
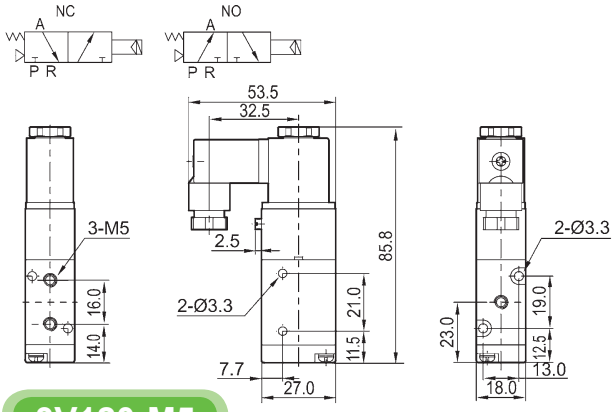


外觀尺寸 Overall Dimension

3V110-M5



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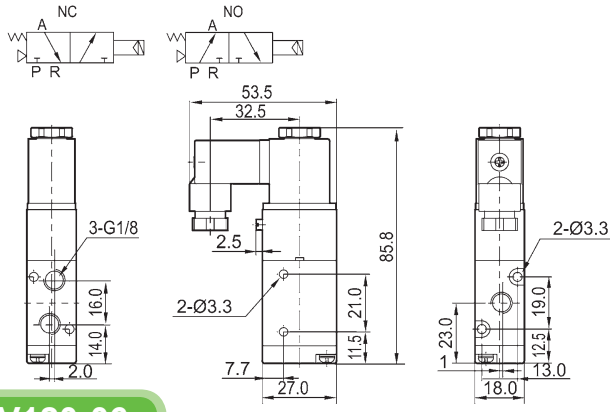

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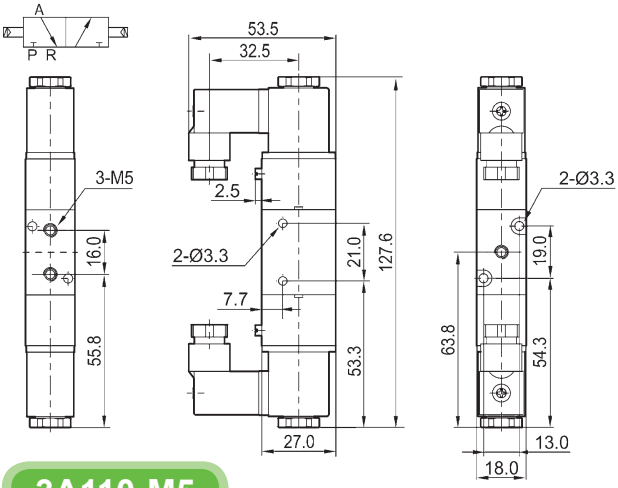

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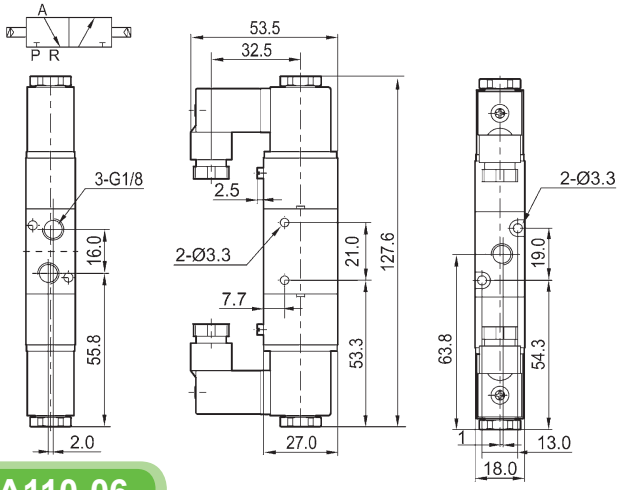

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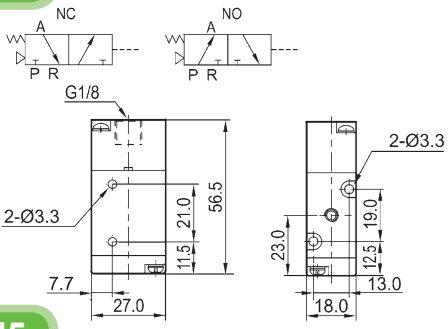

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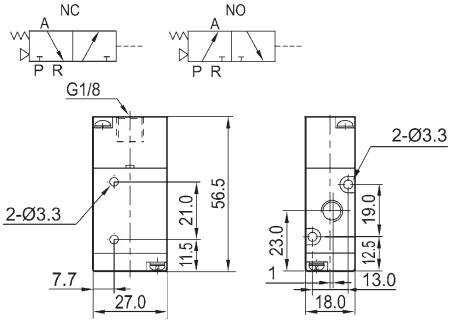

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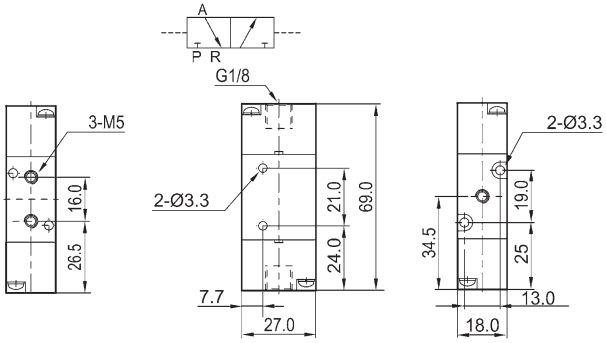

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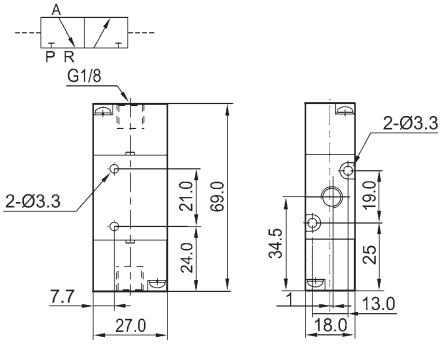


訂購代碼 Ordering Code

4V 2 10 – 08 NC – F – AC220V – W

規格代碼
4V: 五口二（三）位電磁閥
4A: 五口二（三）位氣動閥
3V: 三口二位電磁閥
3A: 三口二位氣動閥
Specification
4V: 5/2 (3) way solenoid valve
4A: 5/2 (3) way pneumatic control valve
3V: 3/2 way solenoid valve
3A: 3/2 way pneumatic control valve

系列代碼
Series Code
200 系列
200 Series

線圈及位數
10：單頭雙位置
20：雙頭雙位置
30C: 雙頭三位置封閉型
30E: 雙頭三位置排氣型
30P: 雙頭三位置壓力型
Coil and Type
10: Single coil
20: Double coil
30C: Mid–position closed
30E: Mid–position exhausted
30P: Mid–position pressed

接管口徑
Port Size
06：1/8″
08：1/4″

接管形式及初始狀態
空白：管接式
NC: 三口二位常閉型
NO: 三口二位常開型
Connection and Initial status
Blank: Threaded
NC: 3/2 way normal close
NO: 3/2 way normal open

本體形式
空白：壓鑄型
F：平板型
BK: 黑色本體
G: 灰色本體
AH: 金屬前導體
E: 硬氧
H: 耐磨型
B: 面板式
Valve Body
Blank: Die casting type
F : Flat type
BK: Black body
G: Grey body
AH: In front of the metal conductor
E: Hard oxygen
H: Wear resistant type
B: Sub–plated mounted (for 5/2,5/3 way only)

標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

線圈形式
空白：帶燈
EX: 防爆線圈
W: 出線
Coil type
Blank: With light
EX: Explosion proof coil
W: Lead wire

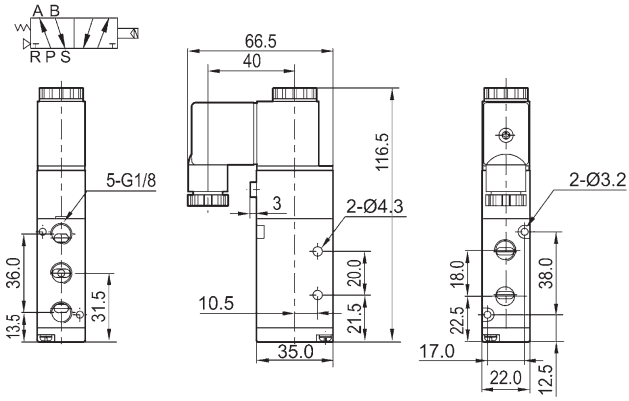
規格 Specification

型 號 Model	4V210-08	4V220-08	4V230C-08	4V230E-08	4V230P-08
	4A210-08	4A220-08	4A230C-08	4A230E-08	4A230P-08
位置數 Valve Type	五口二位 5/2 way		五口三位 5/3 way		
有效截面積 Effective Cross Section Area	16mm²(CV=0.89)		12mm²(CV=0.67)		

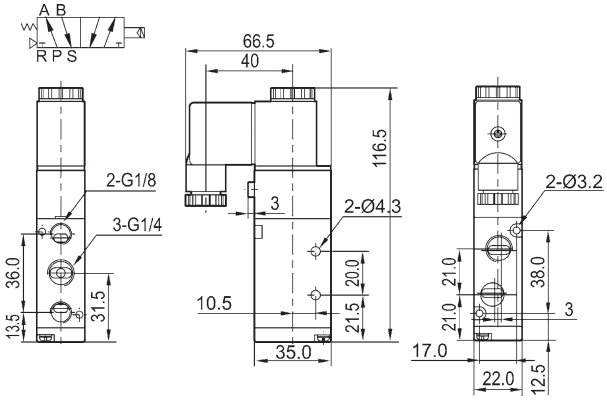
型 號 Model	3V210-08	3V220-08	3A210-08	3A220-08
位置數 Valve Type	三口二位 3/2 way			
有效截面積 Effective Cross Section Area	16mm²(CV=0.89)			
接管口徑 Port Size	進氣 = 出氣 Inlet, Outlet = G1/4″ 排氣 Exhaust Port = G1/8″			
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air			
動作方式 Operation	內部引導式 Internal Piloted			
使用壓力 Working–pressure	0.15 ~ 0.8MPa			
最大耐壓力 Max. Test Pressure	1.2MPa			
工作溫度 Ambient Temperature	5 ~ 50℃			
電壓範圍 Operating Voltage Tolerance	± 10%			
耗電量 Power Consumption	AC: 5.5VA DC: 4.8W			
絕緣性及防護等級 Connector Protection	F級 / F Class. IP65			
接線形式 Wiring / Connector	出線式或端子式 Cable / Lead Wire or DIN Connector			
最高動作頻率 Switching Frequency	每秒五次 5 Cycles / Sec.			
最短勵磁時間 Response Time	0.05秒 Sec.			

外觀尺寸 Overall Dimension

4V210-06



4V210-08



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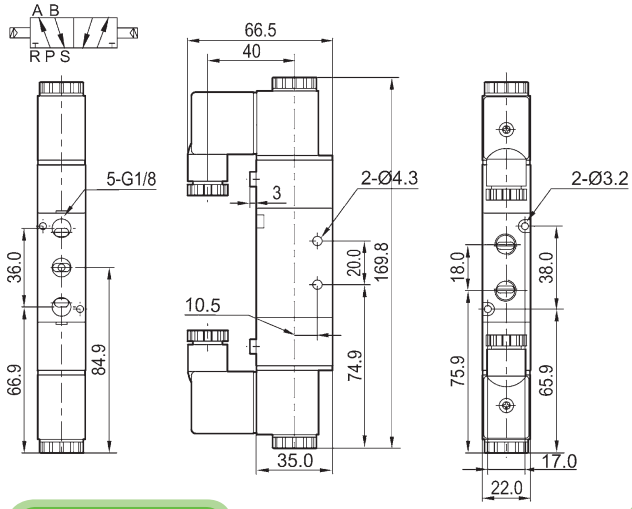

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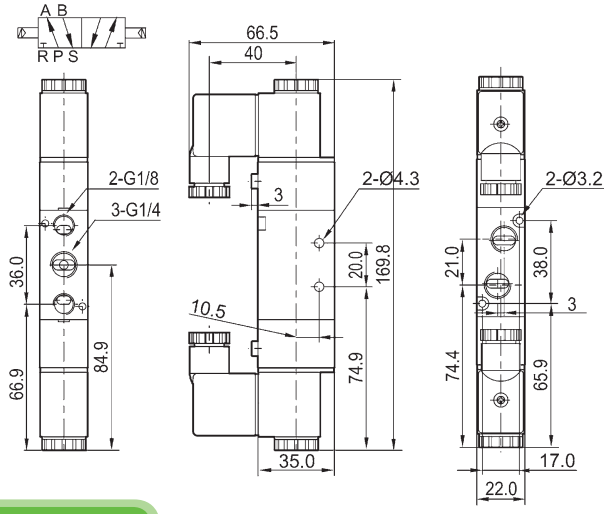

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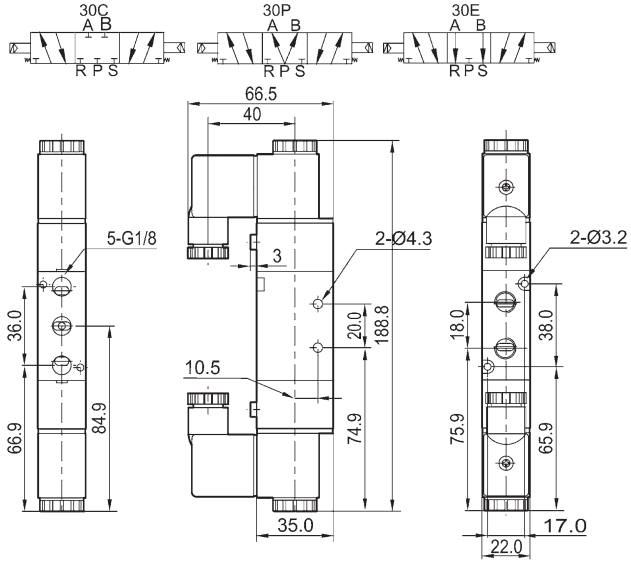

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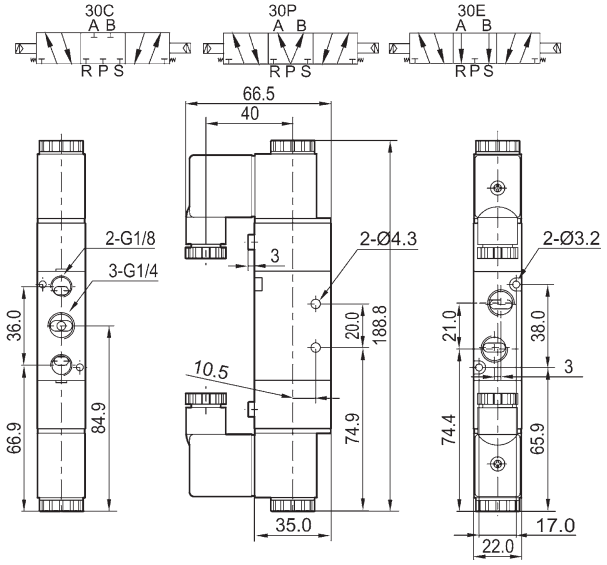
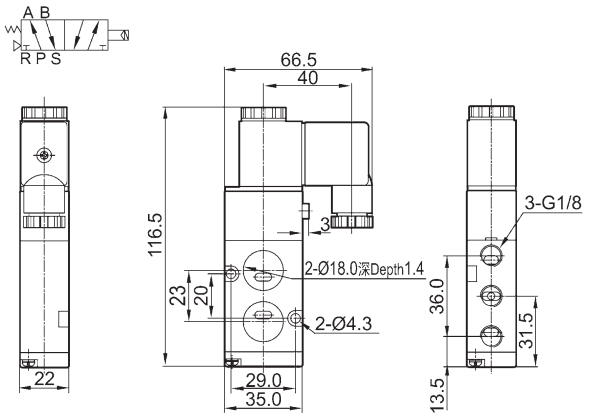
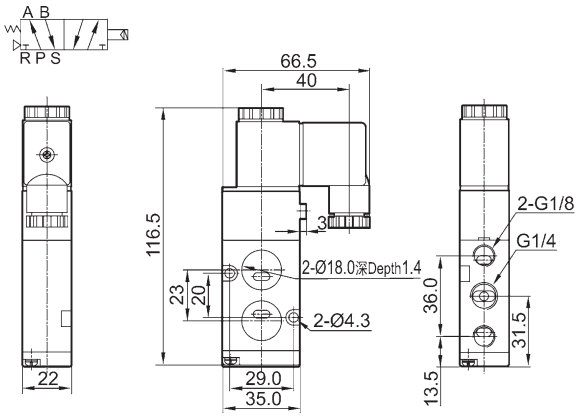


外觀尺寸 Overall Dimension

4V210-06B



4V210-08B



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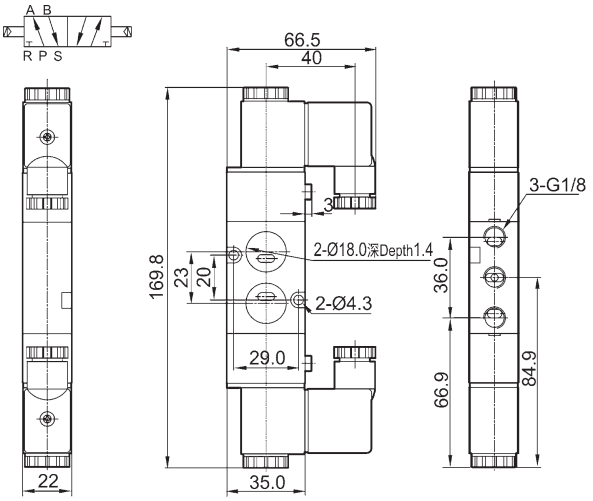

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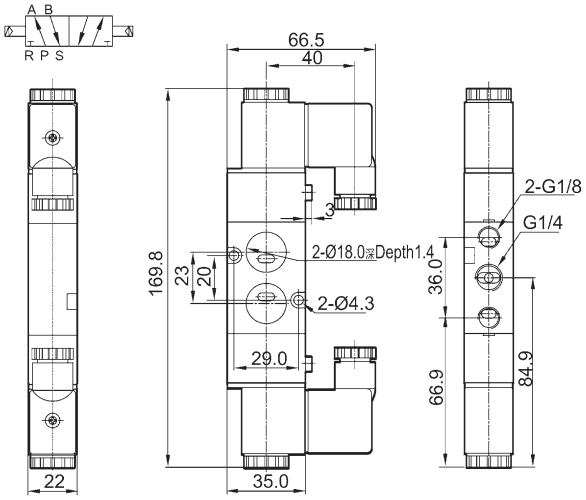

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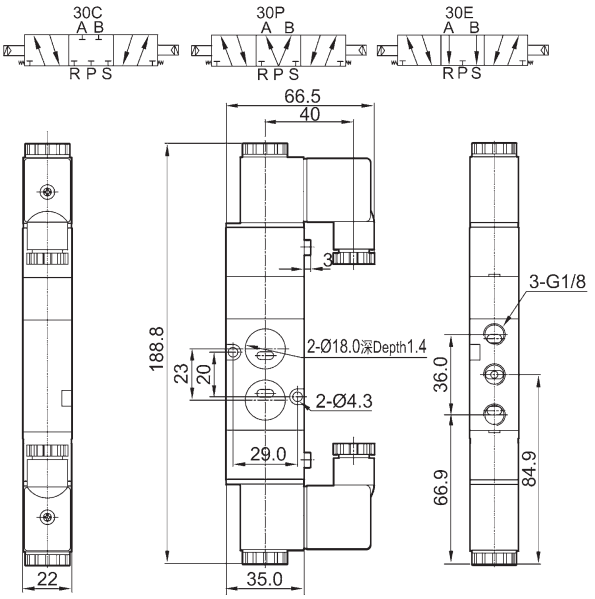

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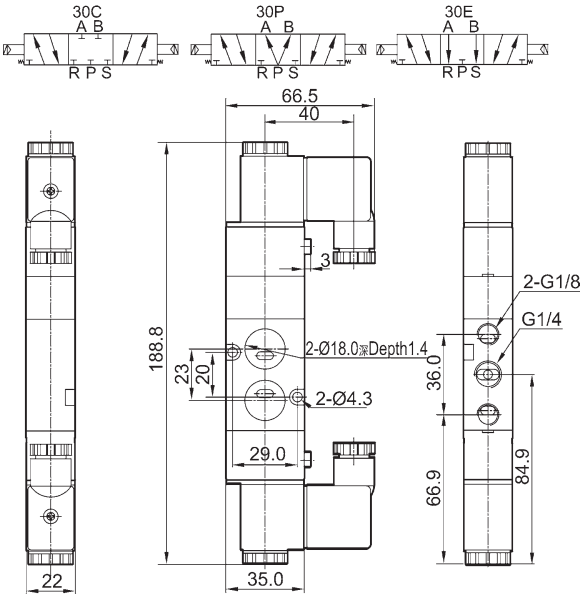
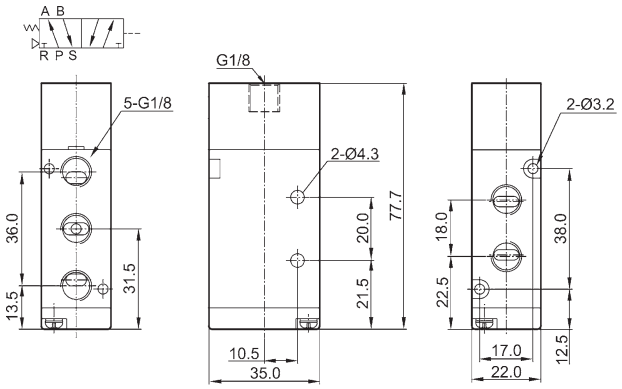


外觀尺寸 Overall Dimension

4A210-06



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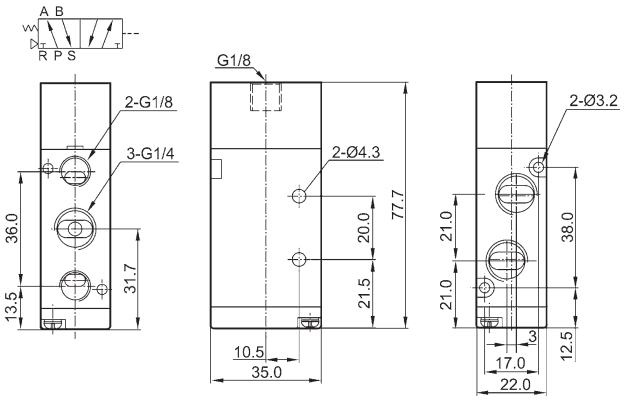

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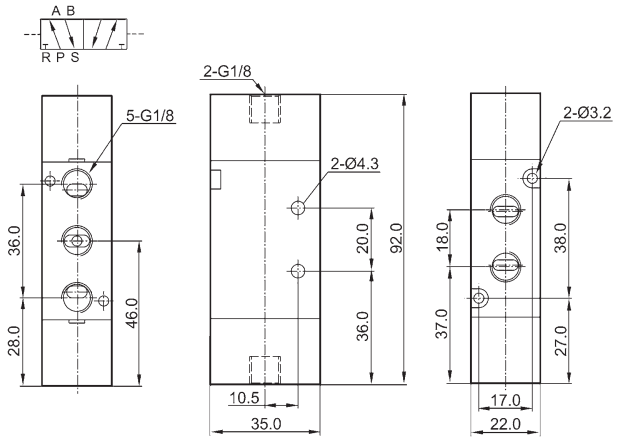

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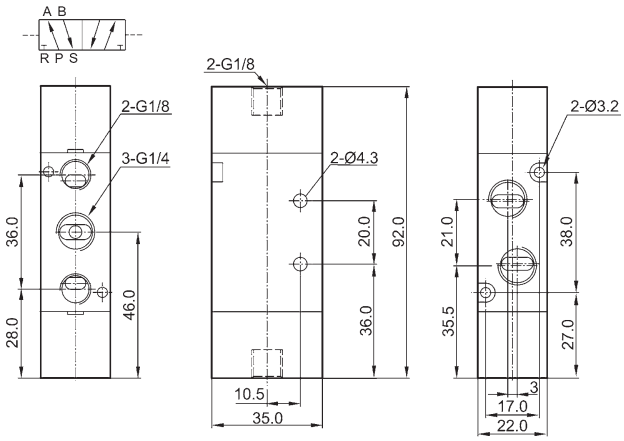

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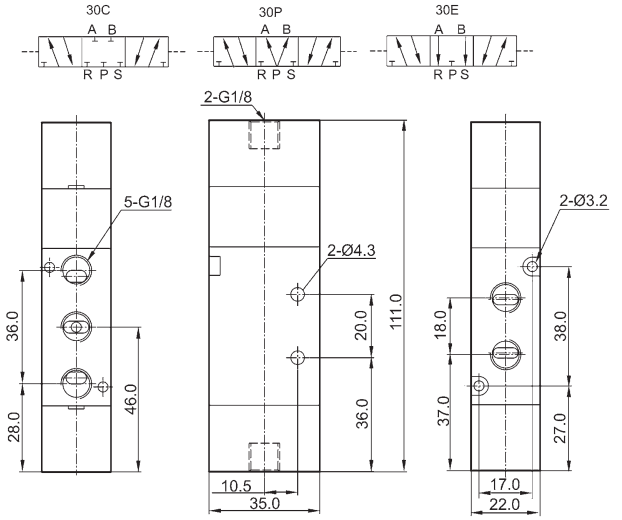

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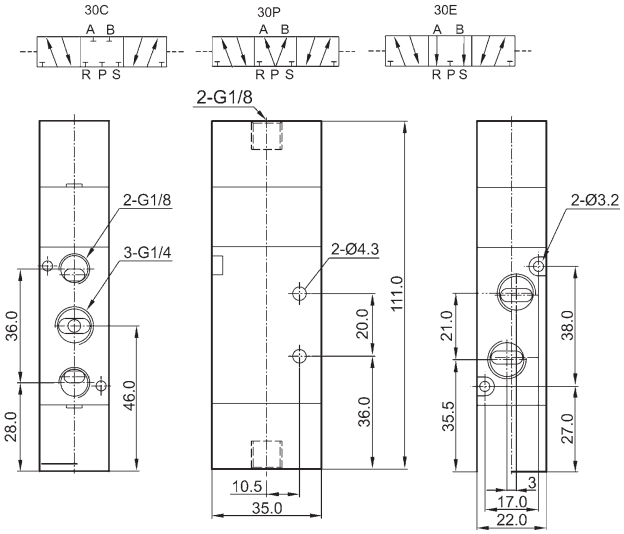
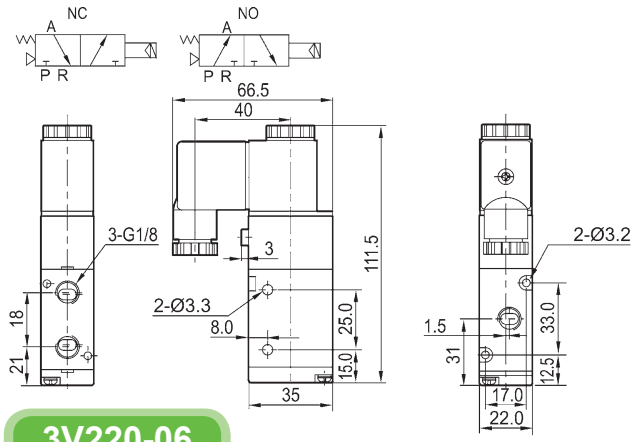


外觀尺寸 Overall Dimension

3V210-06



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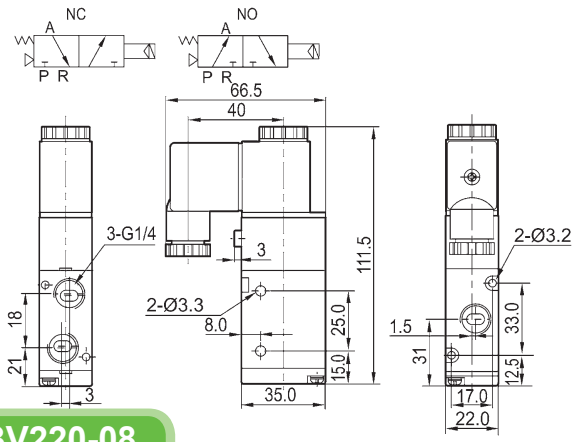

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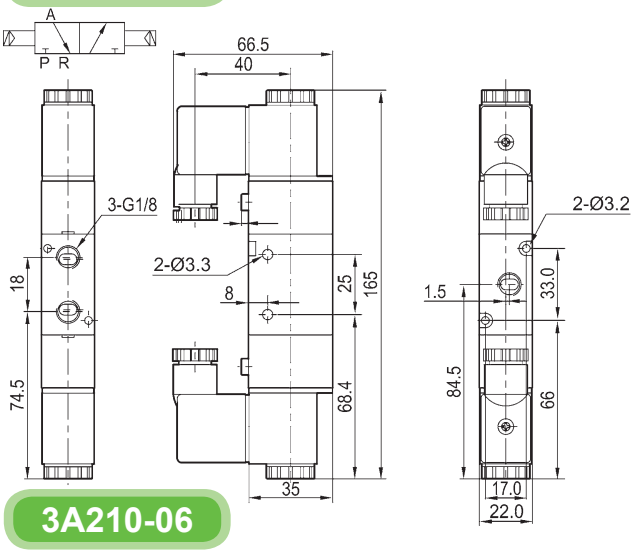

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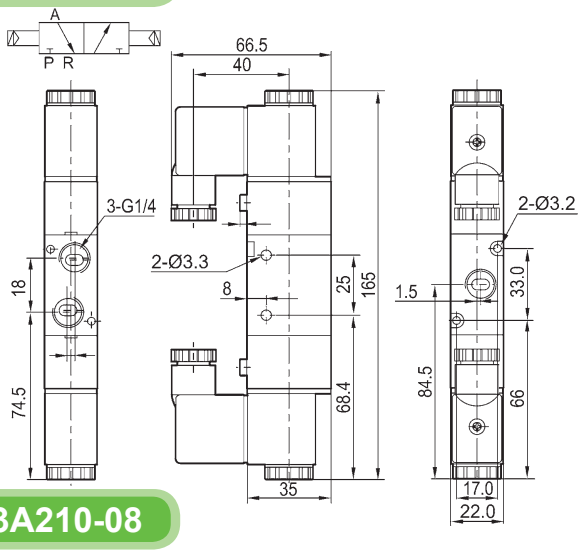

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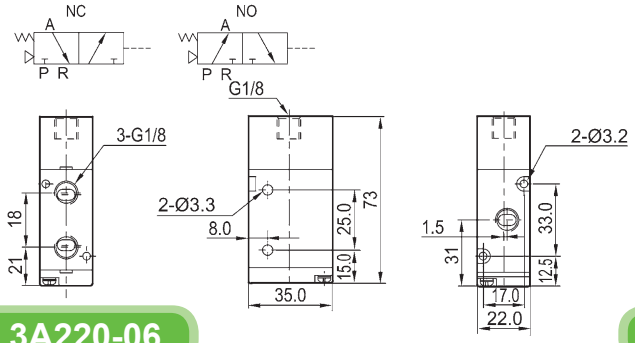

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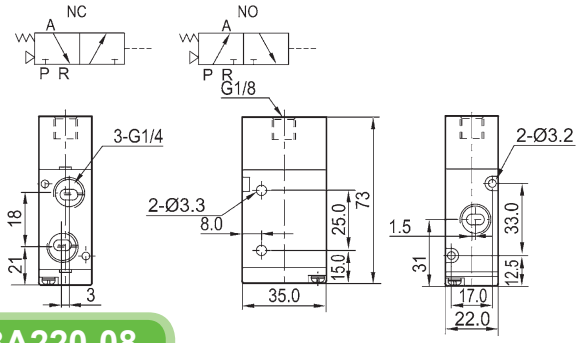

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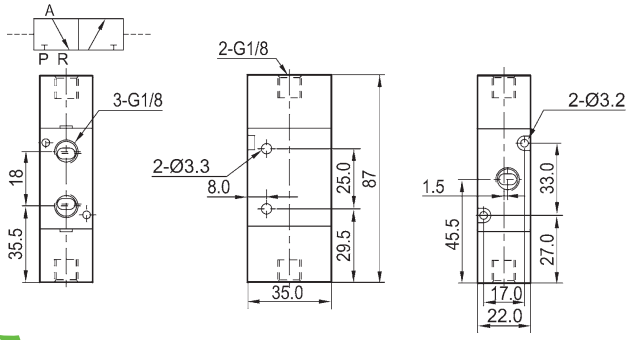

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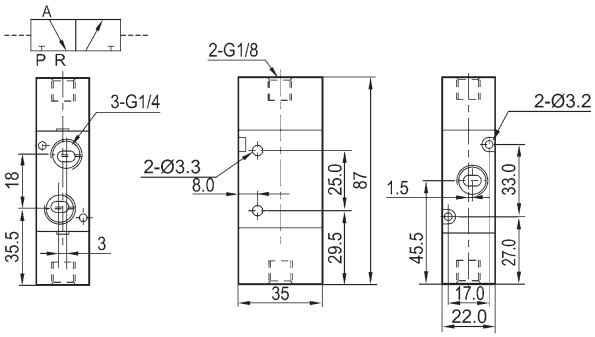


訂購代碼 Ordering Code

4V 3 10 – 10 NC – F – AC220V – W

4V — 規格代碼
4V: 五口二（三）位電磁閥
4A: 五口二（三）位氣動閥
3V: 三口二位電磁閥
3A: 三口二位氣動閥
Specification
4V: 5/2 (3) way solenoid valve
4A: 5/2 (3) way pneumatic control valve
3V: 3/2 way solenoid valve
3A: 3/2 way pneumatic control valve

3 — 系列代碼
Series Code
300 系列
300 Series

10 — 線圈及位數
10：單頭雙位置
20：雙頭雙位置
30C: 雙頭三位置封閉型
30E: 雙頭三位置排氣型
30P: 雙頭三位置壓力型
Coil and Type
10: Single coil
20: Double coil
30C: Mid–position closed
30E: Mid–position exhausted
30P: Mid–position pressed

10 — 接管口徑
Port Size
08：1/4″
10：3/8″

NC — 接管形式及初始狀態
空白：管接式
NC: 三口二位常閉型
NO: 三口二位常閉型
Connection and Initial status
Blank: Threaded
NC: 3/2 way normal close
NO: 3/2 way normal open

F — 本體形式
空白：壓鑄型
F：平板型
BK: 黑色本體
G: 灰色本體
AH: 金屬前導體
E: 硬氧
H: 耐磨型
B: 面板式
Valve Body
Blank: Die casting type
F : Flat type
BK: Black body
G: Grey body
AH: In front of the metal conductor
E: Hard oxygen
H: Wear resistant type
B: Sub–plated mounted (for 5/2,5/3 way only)

AC220V — 標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

W — 線圈形式
空白：帶燈
EX: 防爆線圈
W: 出線
Coil type
Blank: With light
EX: Explosion proof coil
W: Lead wire

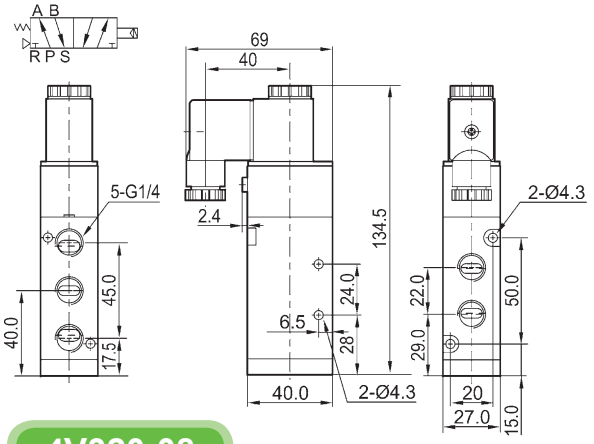
規格 Specification

型 號 Model	4V310-08	4V320-08	4V330C-08	4V330E-08	4V330P-08	4V310-10	4V320-10	4V330C-10	4V330E-10	4V330P-10
	4A310-08	4A320-08	4A330C-08	4A330E-08	4A330P-08	4A310-10	4A320-10	4A330C-10	4A330E-10	4A330P-10
位置數 Valve Type	五口二位 5/2 way		五口三位 5/3 way			五口二位 5/2 way		五口三位 5/3 way		
有效截面積 Effective Cross Section Area	25mm²(CV=1.40)		18mm²(CV=1.00)			30mm²(CV=1.68)		18mm²(CV=1.00)		

型 號 Model	3V310-06	3V320-06	3A310-06	3A320-06	3V310-08	3V320-08	3A310-08	3A320-08
位置數 Valve Type	三口二位 3/2 way							
有效截面積 Effective Cross Section Area	25mm²(CV=1.40)				30mm²(CV=1.68)			
接管口徑 Port Size	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G1/4″				進氣 = 出氣 Inlet, Outlet = G3/8″ 排氣 Exhaust Port = G1/4″			
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air							
動作方式 Operation	內部引導式 Internal Piloted							
使用壓力 Working–pressure	0.15 ~ 0.8MPa							
最大耐壓力 Max. Test Pressure	1.2MPa							
工作溫度 Ambient Temperature	5 ~ 50℃							
電壓範圍 Operating Voltage Tolerance	± 10%							
耗電量 Power Consumption	AC: 5.5VA DC: 4.8W							
絕緣性及防護等級 Connector Protection	F級 / F Class. IP65							
接線形式 Wiring / Connector	出線式或端子式 Cable / Lead Wire or DIN Connector							
最高動作頻率 Switching Frequency	每秒五次 5 Cycles / Sec.							
最短勵磁時間 Response Time	0.05秒 Sec.							

外觀尺寸 Overall Dimension

4V310-08



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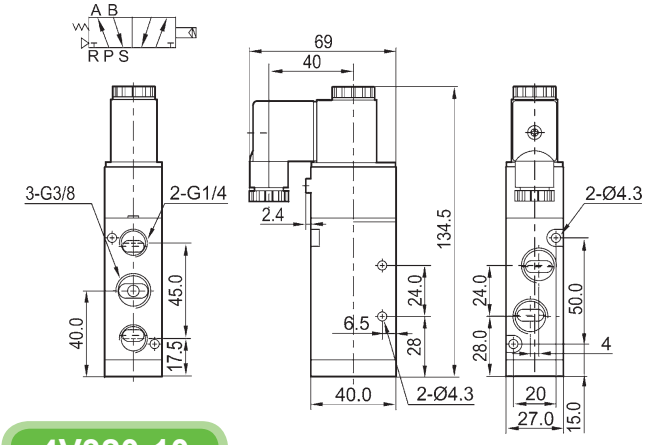

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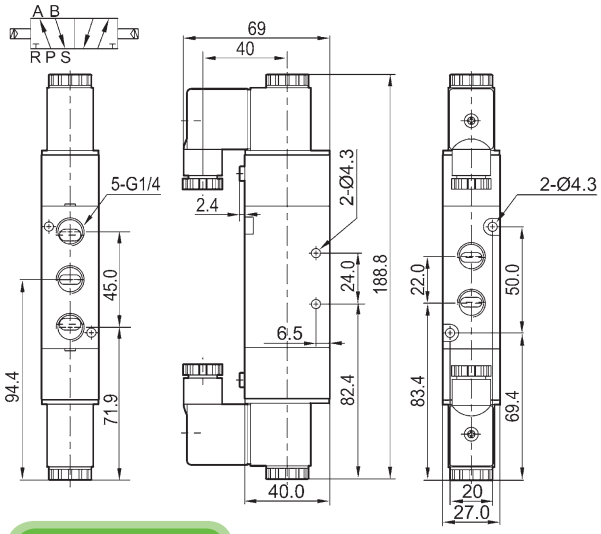

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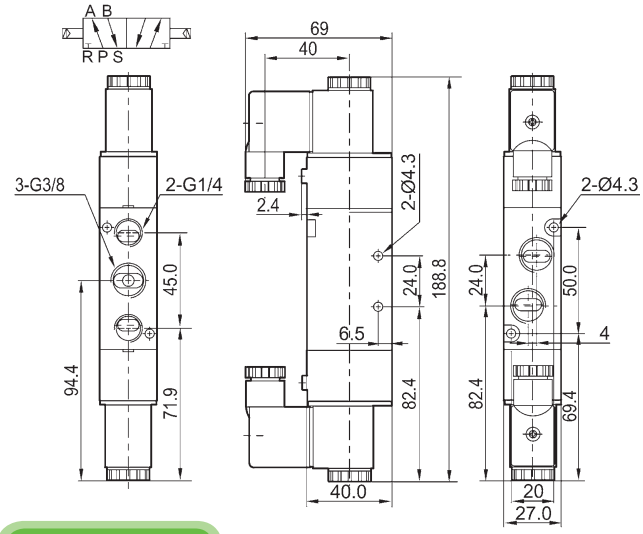

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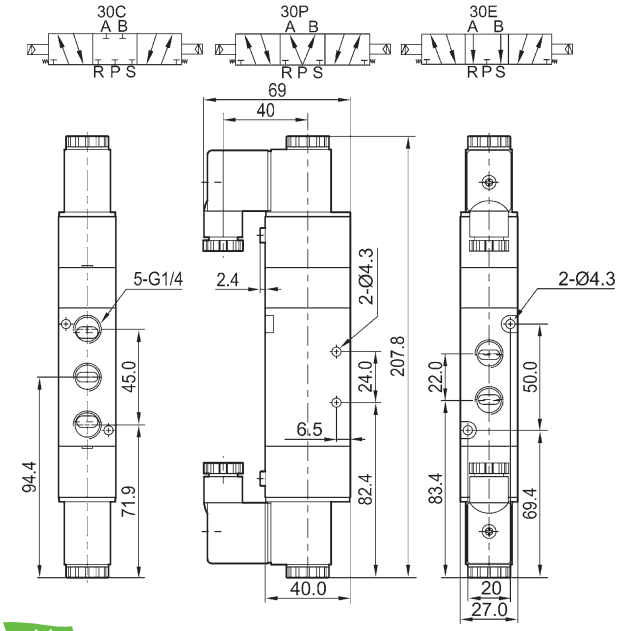

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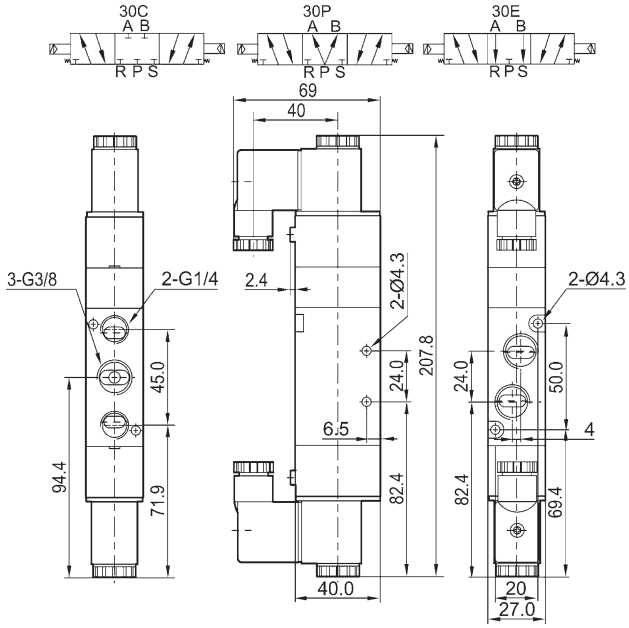

外觀尺寸 Overall Dimension

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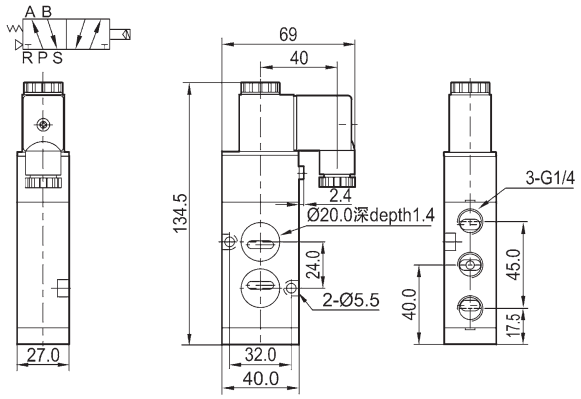

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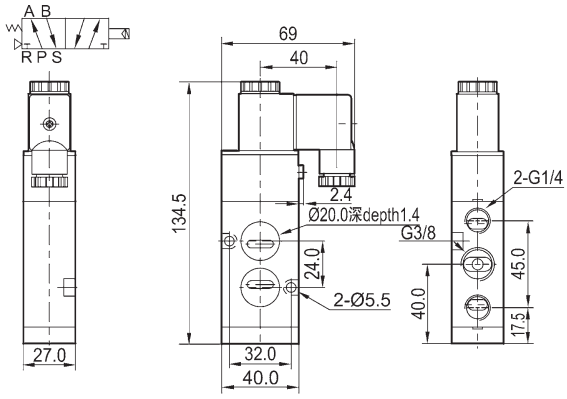

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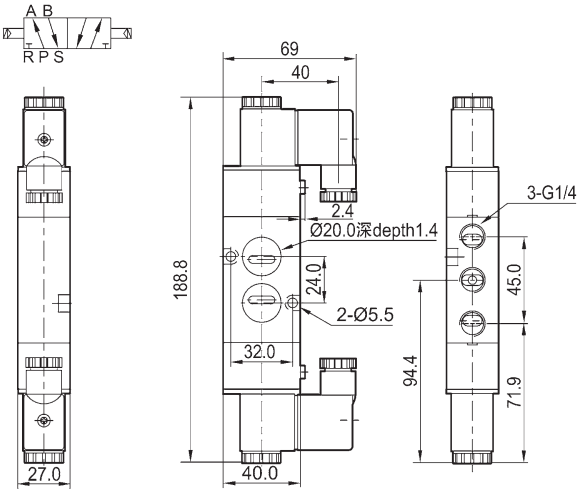

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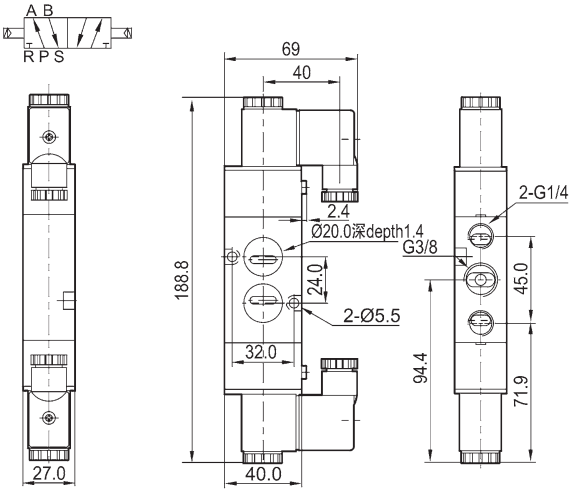

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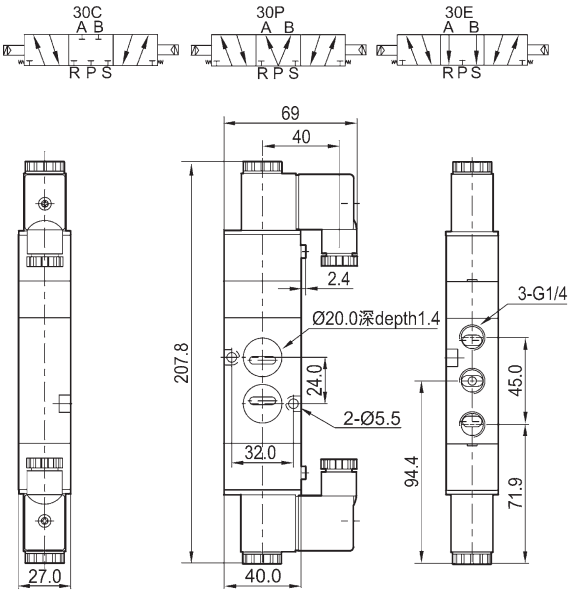

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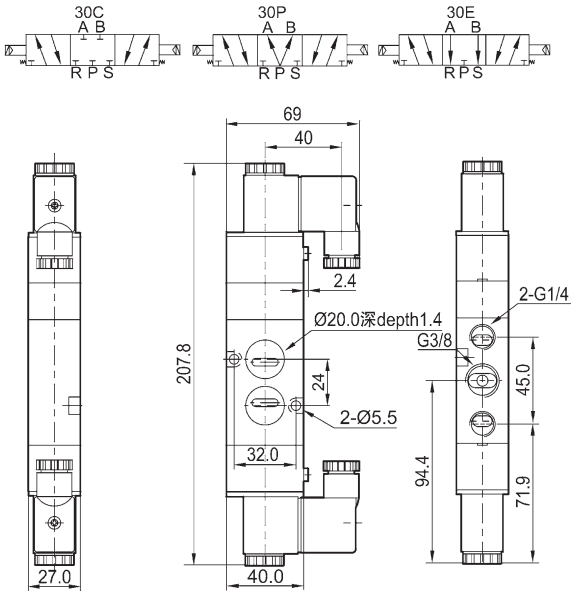
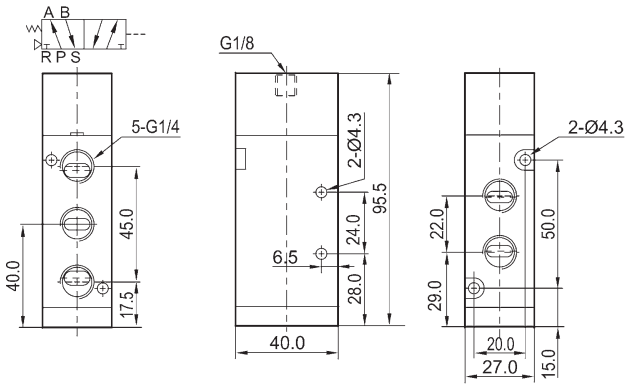


外觀尺寸 Overall Dimension

4A310-08



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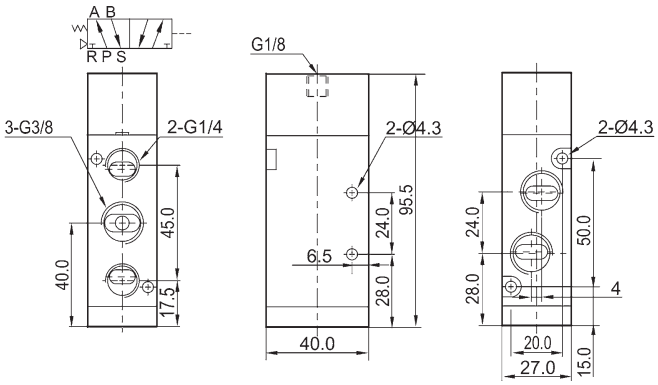

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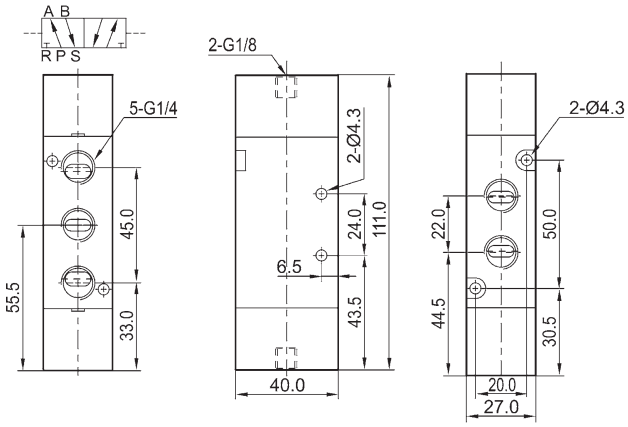

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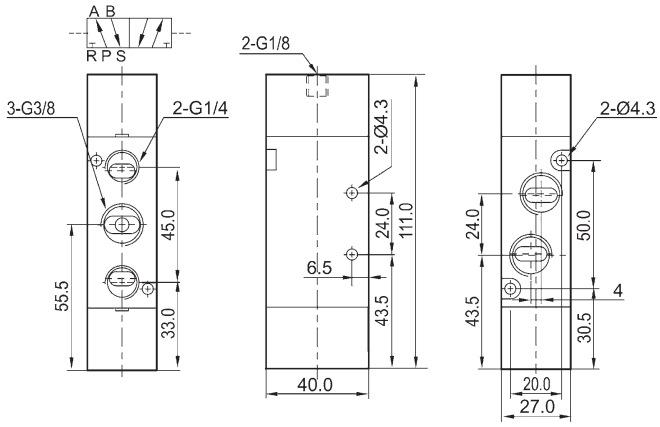

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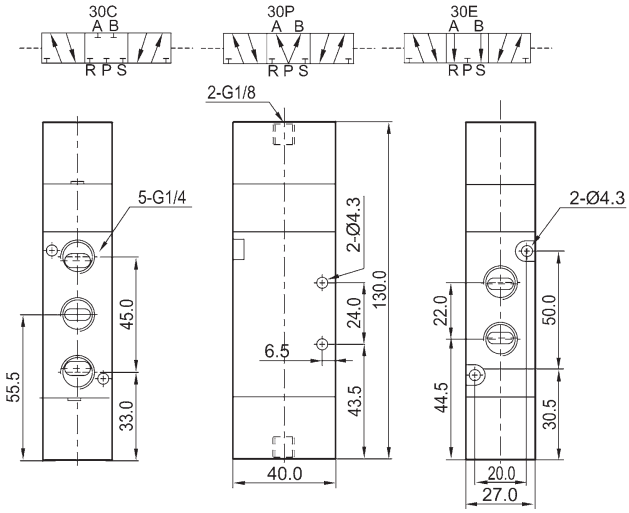

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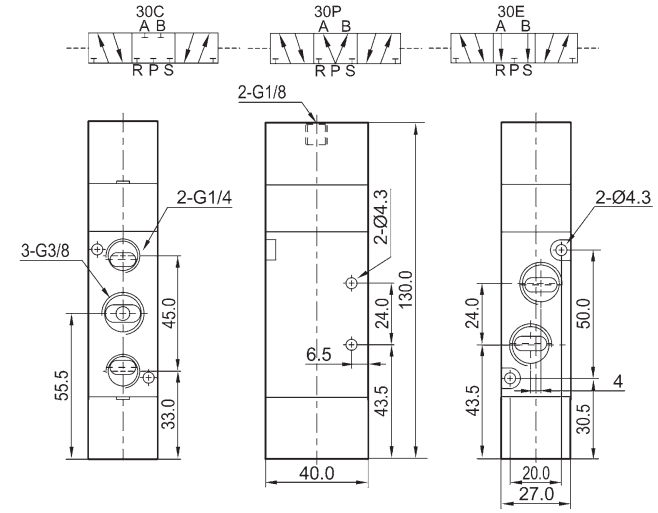
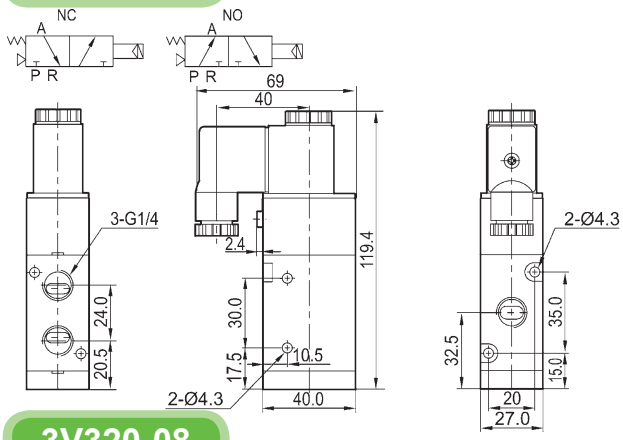


外觀尺寸 Overall Dimension

3V310-08



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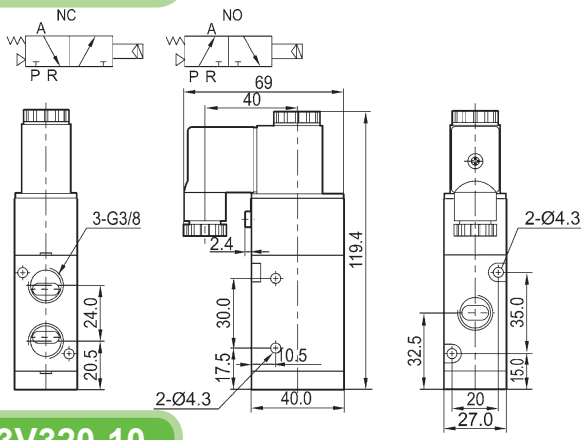

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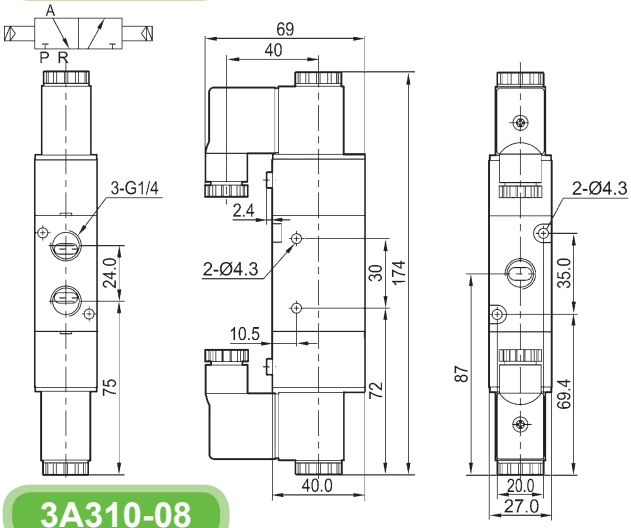

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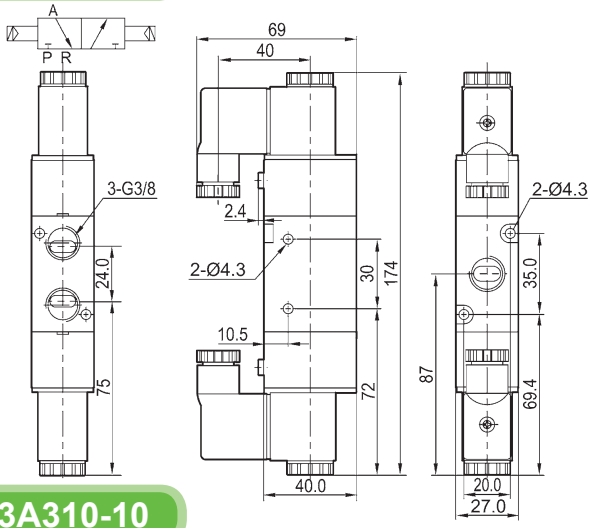

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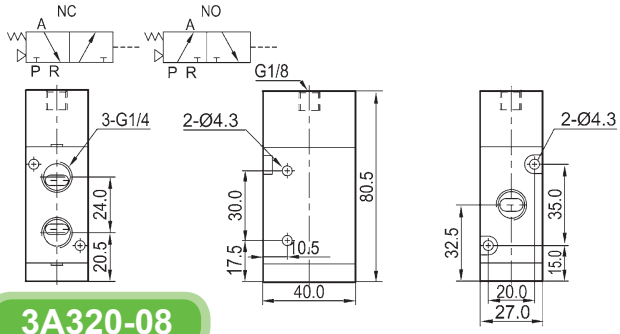

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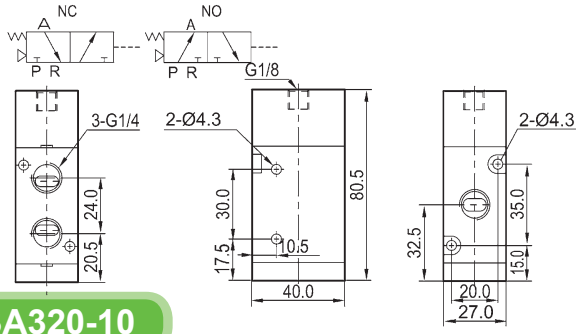

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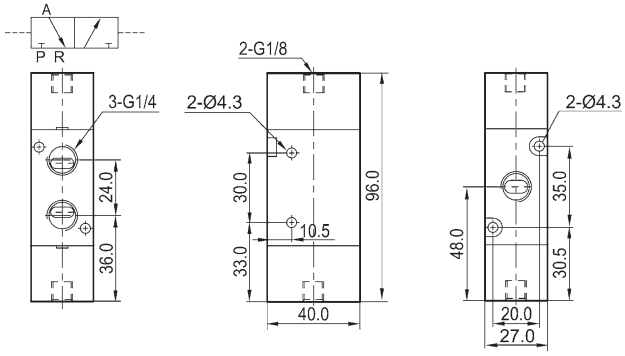

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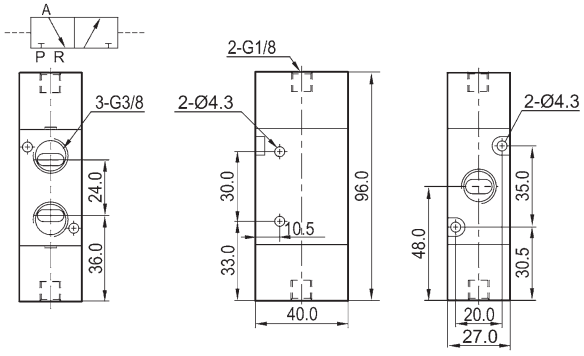


訂購代碼 Ordering Code

4V 4 10 – 15 NC – F – AC220V – W

規格代碼
4V: 五口二（三）位電磁閥
4A: 五口二（三）位氣動閥
3V: 三口二位電磁閥
3A: 三口二位氣動閥
Specification
4V: 5/2 (3) way solenoid valve
4A: 5/2 (3) way pneumatic control valve
3V: 3/2 way solenoid valve
3A: 3/2 way pneumatic control valve

系列代碼
Series Code
400 系列
400 Series

線圈及位數
10：單頭雙位置
20：雙頭雙位置
30C: 雙頭三位置封閉型
30E: 雙頭三位置排氣型
30P: 雙頭三位置壓力型
Coil and Type
10: Single coil
20: Double coil
30C: Mid–position closed
30E: Mid–position exhausted
30P: Mid–position pressed

接管口徑
Port Size
15：1/2″

接管形式及初始狀態
空白：管接式
NC: 三口二位常閉型
NO: 三口二位常開型
Connection and Initial status
Blank: Threaded
NC: 3/2 way normal close
NO: 3/2 way normal open

本體形式
空白：壓鑄型
F：平板型
BK: 黑色本體
G: 灰色本體
AH: 金屬前導體
E: 硬氧
H: 耐磨型
B: 面板式
Valve Body
Blank: Die casting type
F : Flat type
BK: Black body
G: Grey body
AH: In front of the metal conductor
E: Hard oxygen
H: Wear resistant type
B: Sub–plated mounted (for 5/2,5/3 way only)

標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

線圈形式
空白：帶燈
EX: 防爆線圈
W: 出線
Coil type
Blank: With light
EX: Explosion proof coil
W: Lead wire

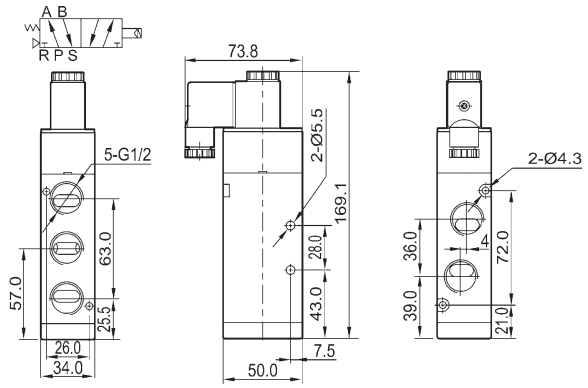
規格 Specification

型 號 Model	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
	4A410-15	4A420-15	4A430C-15	4A430E-15	4A430P-15
位置數 Valve Type	五口二位 5/2 way		五口三位 5/3 way		
有效截面積 Effective Cross Section Area	50mm²(CV=2.79)		30mm²(CV=1.68)		

型 號 Model	3V410-15	3V420-15	3A410-15	3A420-15
位置數 Valve Type	三口二位 3/2 way			
有效截面積 Effective Cross Section Area	50mm²(CV=2.79)			
接管口徑 Port Size	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G 1/2″			
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air			
動作方式 Operation	內部引導式 Internal Piloted			
使用壓力 Working–pressure	0.15 ~ 0.8MPa			
最大耐壓力 Max. Test Pressure	1.2MPa			
工作溫度 Ambient Temperature	5 ~ 50℃			
電壓範圍 Operating Voltage Tolerance	± 10%			
耗電量 Power Consumption	AC: 5.5VA DC: 4.8W			
絕緣性及防護等級 Connector Protection	F級 / F Class. IP65			
接線形式 Wiring / Connector	出線式或端子式 Cable / Lead Wire or DIN Connector			
最高動作頻率 Switching Frequency	每秒五次 5 Cycles / Sec.			
最短勵磁時間 Response Time	0.05秒 Sec.			

外觀尺寸 Overall Dimension

4V410-15



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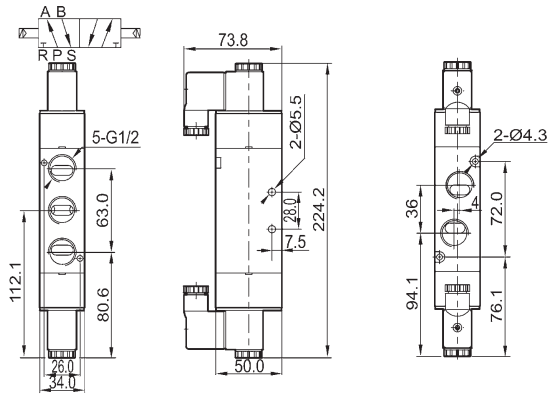

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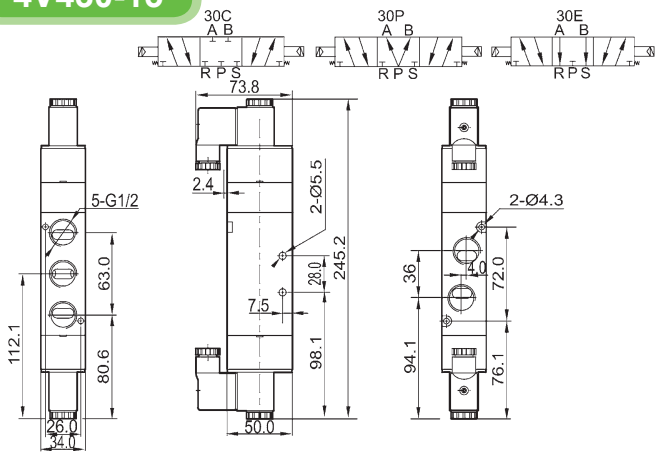

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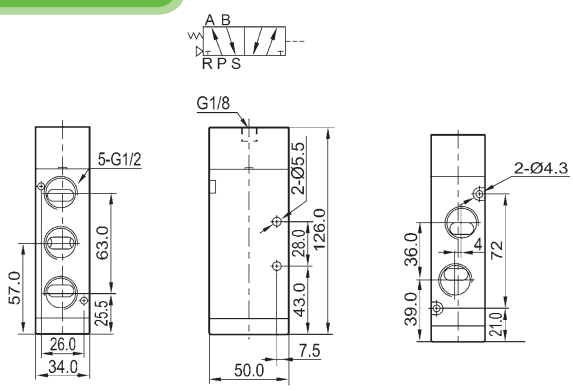

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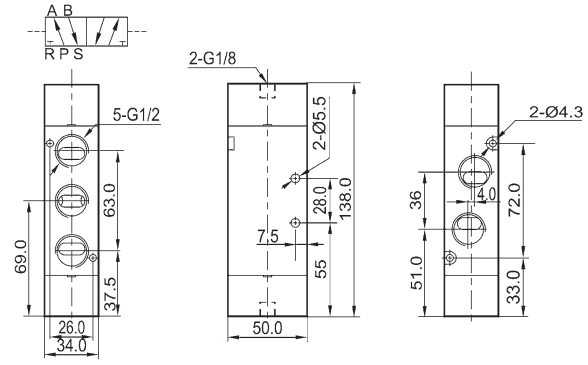

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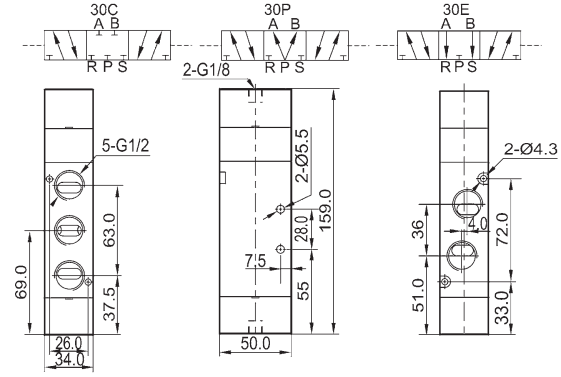

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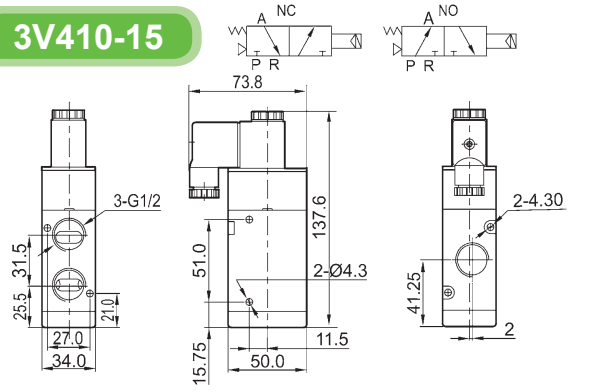

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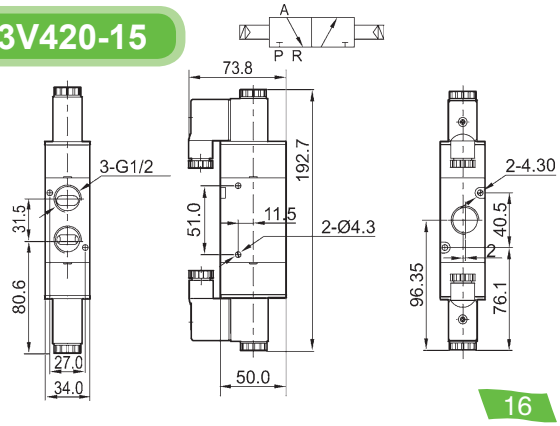
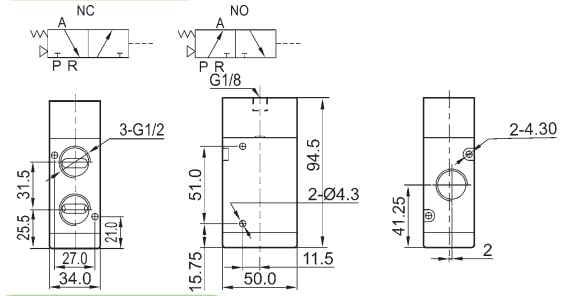


外觀尺寸 Overall Dimension

3A410-15



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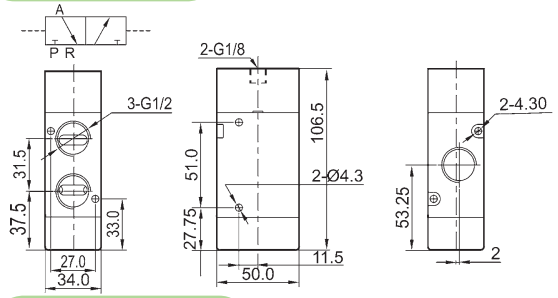

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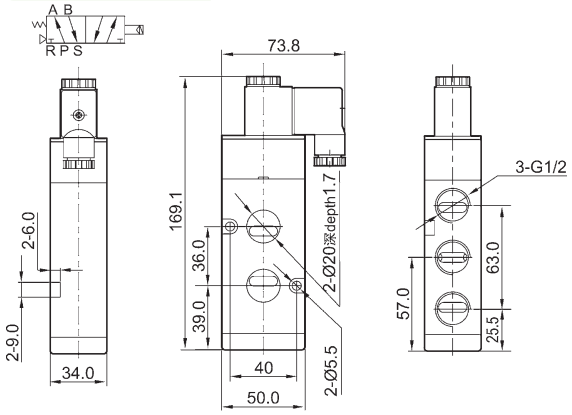

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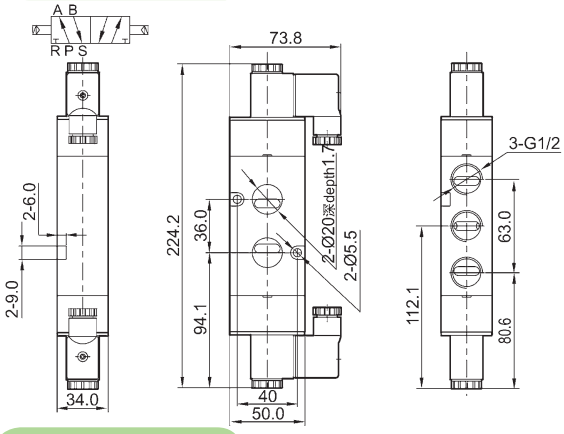

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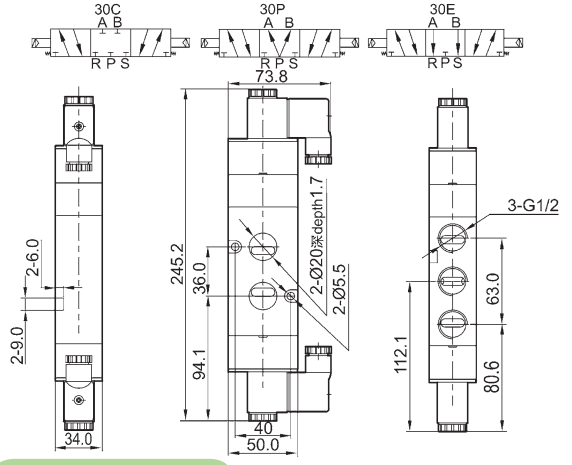

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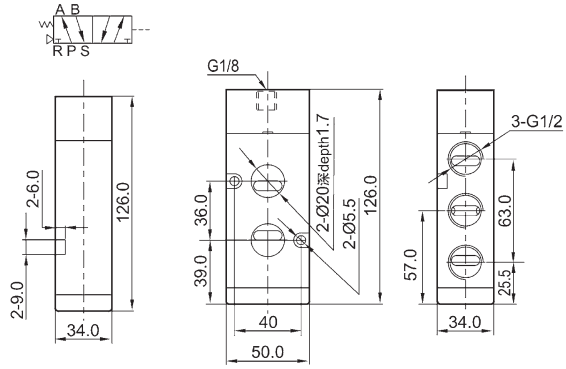

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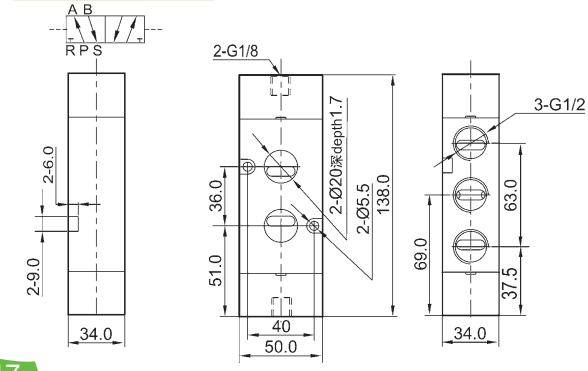

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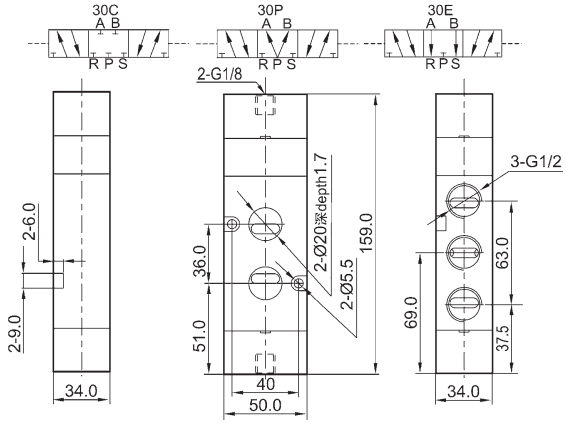
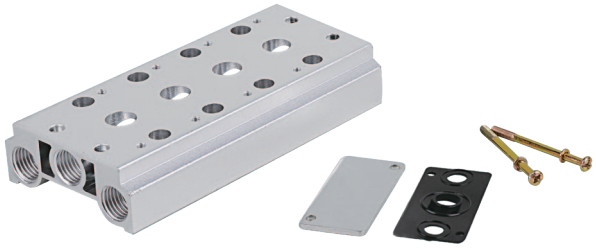




底座訂購碼 Base Ordering Code

100M – □ F

系列代碼
100M:100 系列用底座
200M:200 系列用底座
300M:300 系列用底座
400M:400 系列用底座
Series Code
100M: Sub–plate for 100 series valves
200M: Sub–plate for 200 series valves
300M: Sub–plate for 300 series valves
400M: Sub–plate for 400 series valves

連座數目
Joint
100M: 1~20F
200M: 1~20F
300M: 1~20F
400M: 1~20F

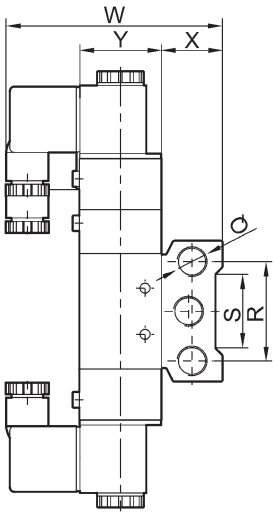
配件訂購碼 Accessary Ordering Code

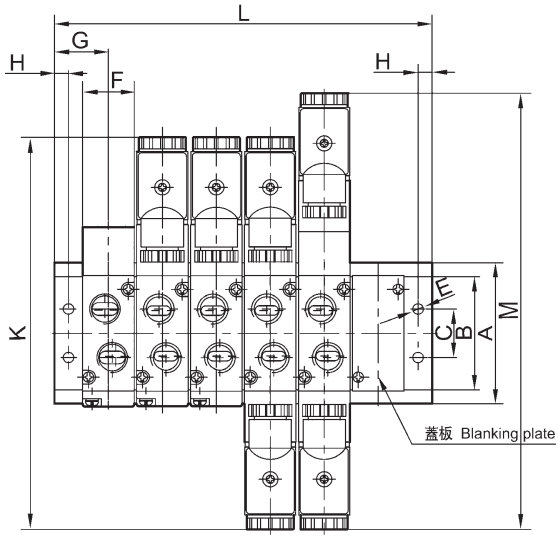
200M – B

系列代碼
100M:100 系列用
200M:200 系列用
300M:300 系列用
400M:400 系列用
Series Code
100M: Sub–plate for 100 series valves
200M: Sub–plate for 200 series valves
300M: Sub–plate for 300 series valves
400M: Sub–plate for 400 series valves

蓋板代號
B: 底座用蓋板
C: 密封墊片
D: 連接螺釘
Manifold
B : Blanking plate
C: Sealing pad
D: Screw

外觀尺寸 Overall Dimension





尺寸表 Dimension

符號 Symbol / 內徑 Inside Diameter	A	B	C	E	F	G	H	K	L	M	Q	R	S	W	X	Y
100M-□F	58	43	20	4.2	18.3	19	5	140	(n–1)*19+38	155	G1/4	40	30	78.5	25	27
200M-□F	59	50	21	4.3	22.2	23	6	170	(n–1)*23+46	189	G1/4	43	32	92.5	26	35
300M-□F	75	64	26	4.5	27.3	27	6	189	(n–1)*28+54	208	G3/8	53	48	99	30	40
400M-□F	98	94	32	5.5	34.3	31.5	7	222	(n–1)*35+63	243	G1/2	68	67	112	38	50

訂購代碼 Ordering Code

3V 1 – 06 B – AC220V – W – F

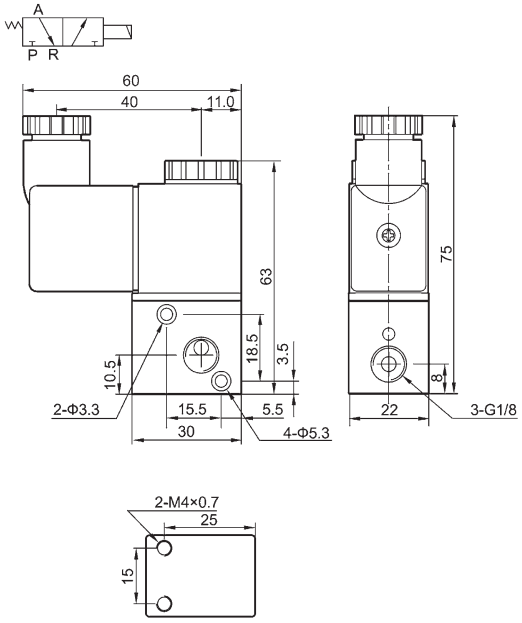
- 3V：規格代碼
  3V: 三口二位電磁閥
  Specification
  3V: 3/2 way solenoid valve
- 1：系列代碼
  1：100 系列
  Series Code
  1：100 Series
- 06：接管口徑
  Port Size
  M5: M5
  06: 1/8″
- B：接管形式及初始狀態
  空白：管接式
  B: 板接式
  A: 壓鑄體
  Connection Type
  Blank: Pipe type
  B: Plate type
  A：Diecast body
- AC220V：標準電壓
  Standard Voltage
  DC12V
  DC24V
  AC24V 50Hz/60Hz
  AC110V 50Hz/60Hz
  AC220V 50Hz/60Hz
  AC380V 50Hz/60Hz
- W：接線形式
  空白 : 標準端子式
  LD: 茶色帶燈端子式
  LD1: 白色帶燈端子式
  W: 出線式
  Wiring
  Blank: Without light terminal
  LD: Brown with light terminal
  LD1: White with light terminal
  W: Lead wire
- F：連座數
  Manifold number
  1F–20F

規格 Specification

型 號 Model	3V1-M5	3V1-06(B/A)
工作介質 Working Medium	經40微米濾網過濾的空氣 40 Micron Filtered Air	
動作方式 Operation	直動式 Direct	
接管口徑 Port Size	M5	1/8″ (無螺紋/G1/8″ Without or 1/8″)
周圍溫度 Ambient Temperature	–10 ~ +60℃	
氣體溫度 Gas Temperature	5 ~ 60℃	
出風口直徑 Air Outlet Diameter	1.0mm	
潤滑 Lubrication	不需要 Not required	
使用壓力 Working–pressure	0 ~ 0.8 MPa	
最大耐壓力 Max. Test Pressure	1.2 MPa	
耗電量 Power Consumption	AC: 5.5VA DC: 4.8W	
保護等級 Protect Class	IP65	
接線形式 Wiring / Connector	出線式或端子式 Cable / Lead Wire or DIN Connector	
本體材質 Material of Body	鋁合金 Aluminum Alloy	
最高動作頻率 Switching Frequency	每秒十次 10 Cycles / Sec.	
絕緣性 Insulation	F級 / F Class	
電壓範圍 Operating Voltage Tolerance	± 10%	
最短勵磁時間 Response Time	0.05 秒 Sec.	
流量孔徑 Flow Aperture	Φ1mm	

外觀尺寸 Overall Dimension

3V1-06



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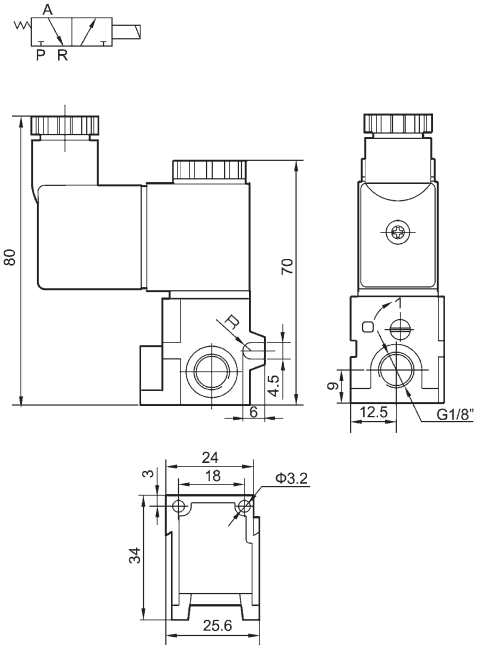

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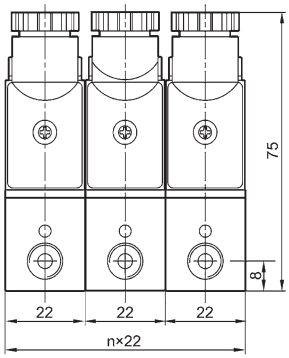

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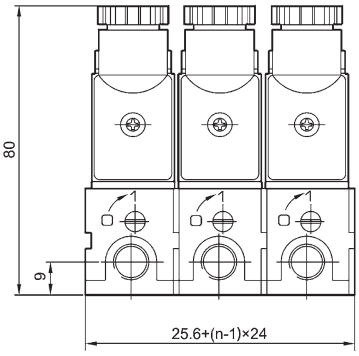

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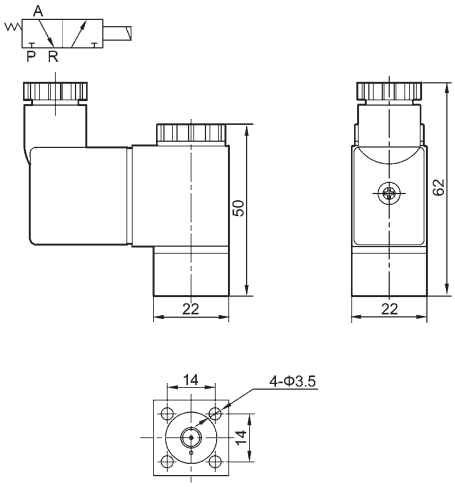

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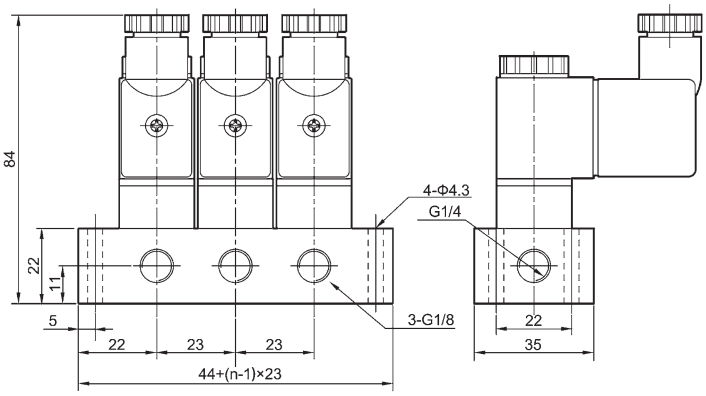


訂購代碼 Ordering Code

F3V – JZF – 15 – AS – AC110V – W

規格代碼
F3V: 三口二位電磁閥
F3A: 三口二位氣動閥
Specification
F3V: 3/2 way solenoid valve
F3A: 3/2 way pneumatic control valve

截止型
V: 電磁閥
A: 氣動閥
Stop Type
V: Solenoid valve
A: Pneumatic control valve

接管口徑
Port Size
10: G3/8″
15: G1/2″
20: G3/4″
25: G1″

動作方式
空白：內部引導式
AS：外部引導式
Operation
Blank: Internal Piloted
AS: External Piloted

標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

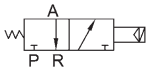
接線形式
空白 : 標準端子式
LD: 茶色帶燈端子式
LD1: 白色帶燈端子式
W: 出線式
Wiring
Blank: Without light terminal
LD: Brown with light terminal
LD1: White with light terminal
W: Lead wire

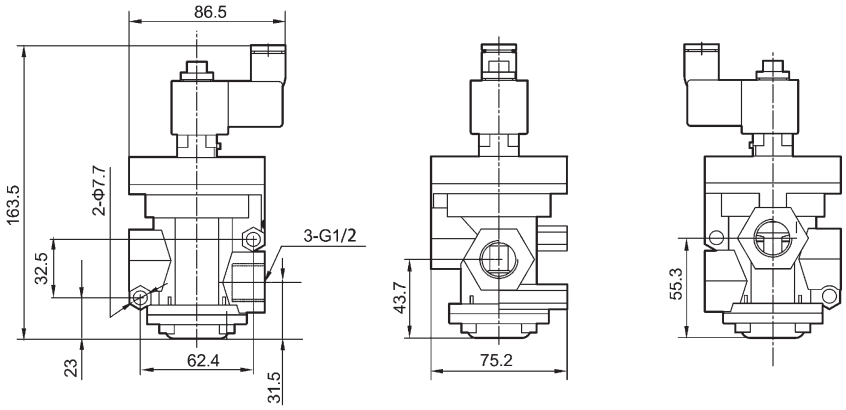
規格 Specification

型號 Model	F3VJZF-15/10	F3VJZF-25/20	F3AJZF-15/10	F3AJZF-25/20
工作介質 Working Medium	空氣 Air			
動作方式 Operation	截止式 Stop Type			
流量孔徑 Orifice	16mm	25mm	16mm	25mm
接管口徑 Port Size	G1/2″ / G3/8″	G1″ / G3/4″	G1/2″ / G3/8″	G1″ / G3/4″
使用壓力 Working–pressure	0 ~ 1.0MPa			
最大耐壓力 Max. Test Pressure	1.5MPa			
電壓範圍 Operating Voltage Tolerance	± 10%			
本體材質 Material of Body	鋁 Aluminum			

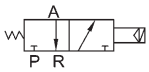
外觀尺寸 Overall Dimension

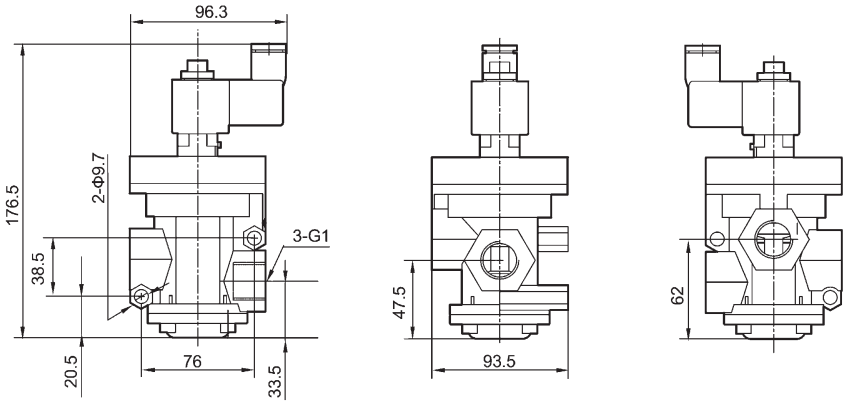
F3VJZF-15





F3VJZF-25





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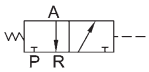

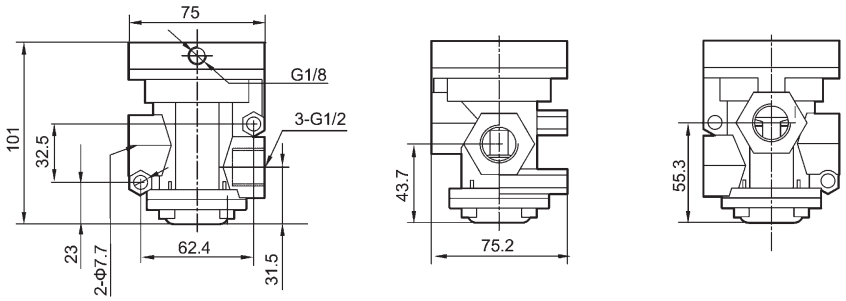

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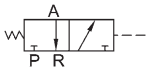
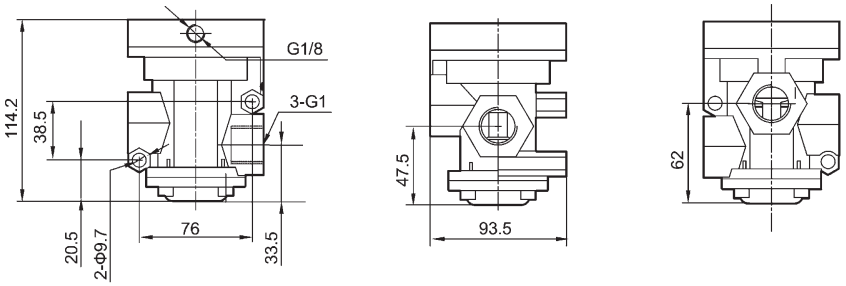




MVSC–180 系列 MVSC-180 Series

規格 Specification

型號 Model	MVSC-180-3E1,E2		MVSC-180-4E1,E2		MVSC-180-4E2C.P.R
配管口徑代號 Bore No.	6A				
配管口徑尺寸 Port Size	PT1/8				
方口數 No.of Port	3口 Port		5口 Port		
位置數 No.of Position	2位置 Position		2位置 Position		3位置 Position
使用流體 Medium	空氣 Air				
使用壓力範圍 Operating Pressure Range	1.5 ~ 8kgf/cm^2				2 ~ 7kgf/cm^2
耐壓力 Proof Pressure	10kgf/cm^2				
有效截面積 Effective Cross Section Area	12mm^2		12mm^2		9mm^2
周圍溫度 Ambient Temperature	–5 ~ +50℃ (不凍結 No Freezing)				
應答時間 Response Time	30ms				
定格電壓 Voltage	AC110V, 220V(50/60Hz), DC24V				
電力消耗 power Consumption	AC=3.7/3.1VA DC=2.9W				
電壓容許範圍 Available Voltage Range	± 10%				
絕緣等級 Insulation Class	F級 / F Class				
重量 Weight	120g	172g	124g	176g	190g

訂購代碼 Ordering Code

MVSC – 180 – 4E2C – NC – AC110V – L – BSP

- MVSC: 型號 Model
- 180: 本體寬度 Body width
- 4: 3：3 方向 / 4：4 方向 / 3：3 way / 4：4 way
- E: E1：單線圈 / E2：雙線圈 / E1：Single coil / E2：Double coil
- C: C：中間位置關閉 / P：中間位置通氣 / R：中間位置排氣 (僅適用 4E2) / C：Closed center / P：Pressure center / R：Exhaust center (Only for 4E2 type)
- NC: NC: 常閉型 / NO: 常開型 (僅適用 3E1) / NC:Normally closed type / NO:Normally open type (Only for 3E1 type)
- AC110V: 電壓種類 Voltage / AC110V(50/60)Hz / AC220V(50/60)Hz / DC24V
- L: 無：DIN 端子型 / L：DIN 端子附燈型 / LP: 外部引導型 / Blank: DIN connector / L: DIN connector with LED indicator / LP: External pilot
- BSP: 配管口螺牙 / 無：PT 牙 / BSP：BSP 牙 / NPT：NPT 牙 / Port thread / Blank: PT thread / BSP：BSP thread / NPT：NPT thread

連座訂購代碼 Ordering Code of Manifold

3 方口 Port

MVSC – 180 – 3B3 – BSP

- MVSC: 型號 Model
- 3B: 連座 Manifold
- 3: 連座數 Manifold number 1,2,3…
- BSP: 配管口螺牙 / 無：PT 牙 / BSP：BSP 牙 / NPT：NPT 牙 / Port thread / Blank: PT thread / BSP：BSP thread / NPT：NPT thread

5 方口 Port

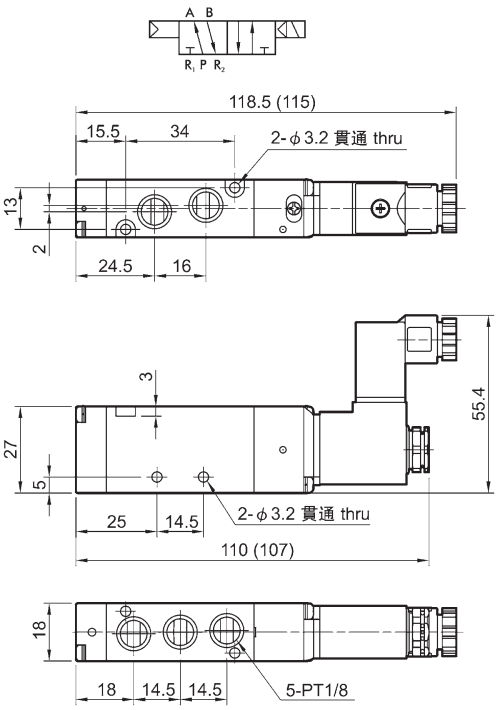
MVSC – 180 – 5B3 – BSP

- MVSC: 型號 Model
- 5B: 連座 Manifold
- 3: 連座數 Manifold number 1,2,3…
- BSP: 配管口螺牙 / 無：PT 牙 / BSP：BSP 牙 / NPT：NPT 牙 / Port thread / Blank: PT thread / BSP：BSP thread / NPT：NPT thread

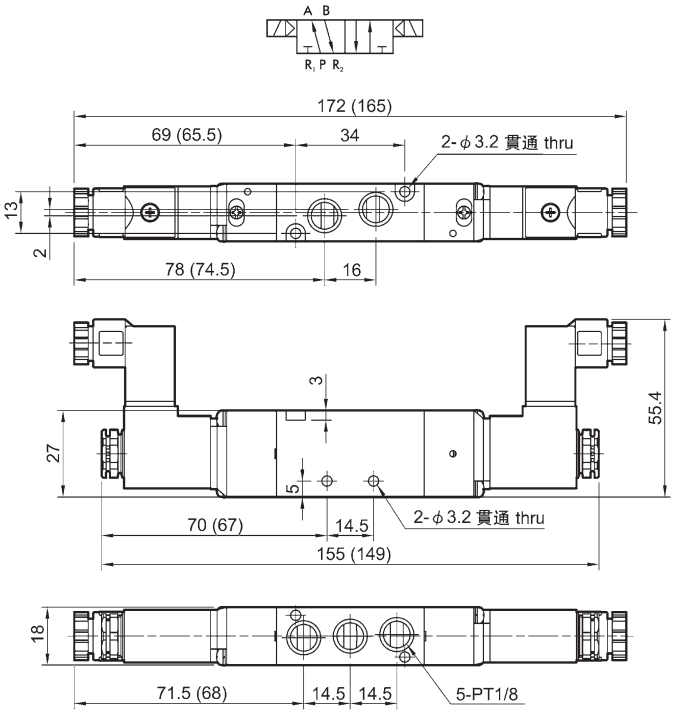
MVSC–180 系列 MVSC-180 Series

外觀尺寸 Overall Dimension

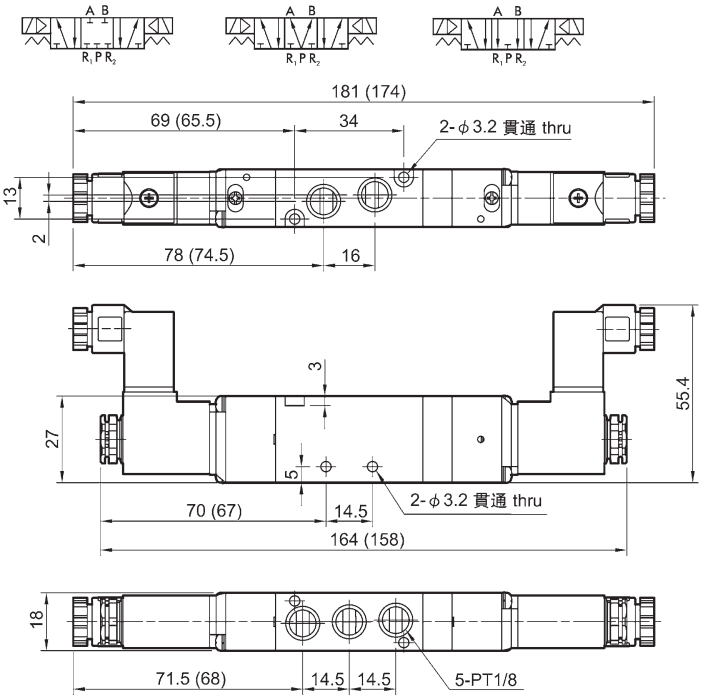
MVSC-180-4E1



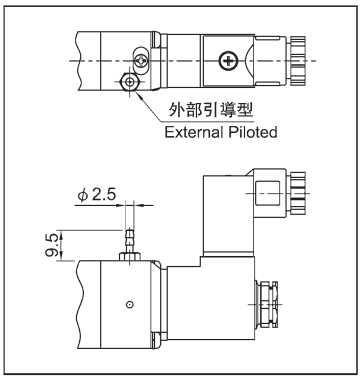
MVSC-180-4E2



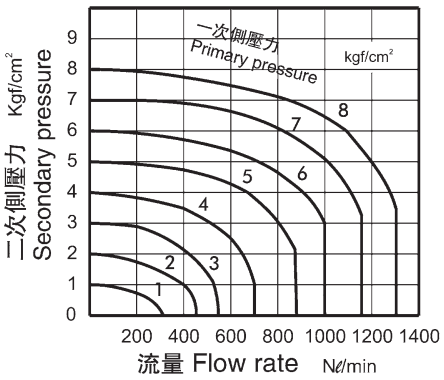
MVSC-180-4E2C.P.R



LP



流量特性圖 Flow Features

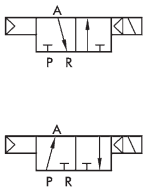


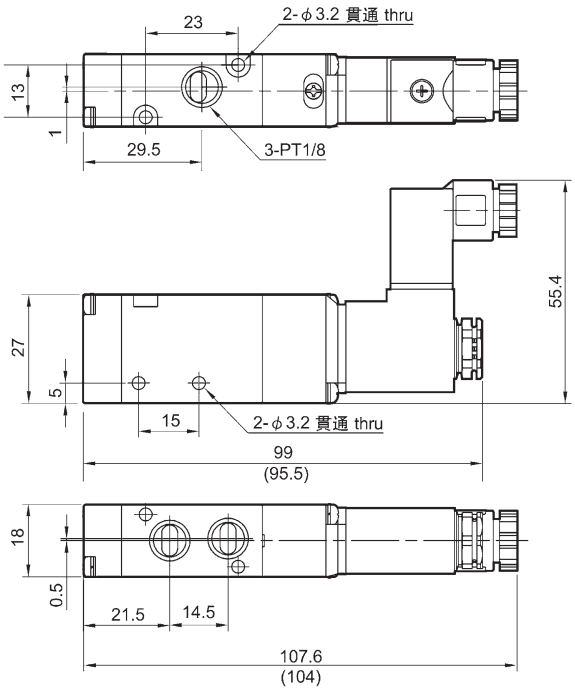
外觀尺寸 Overall Dimension

MVSC-180-3E1-NC/NO

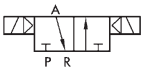
NC

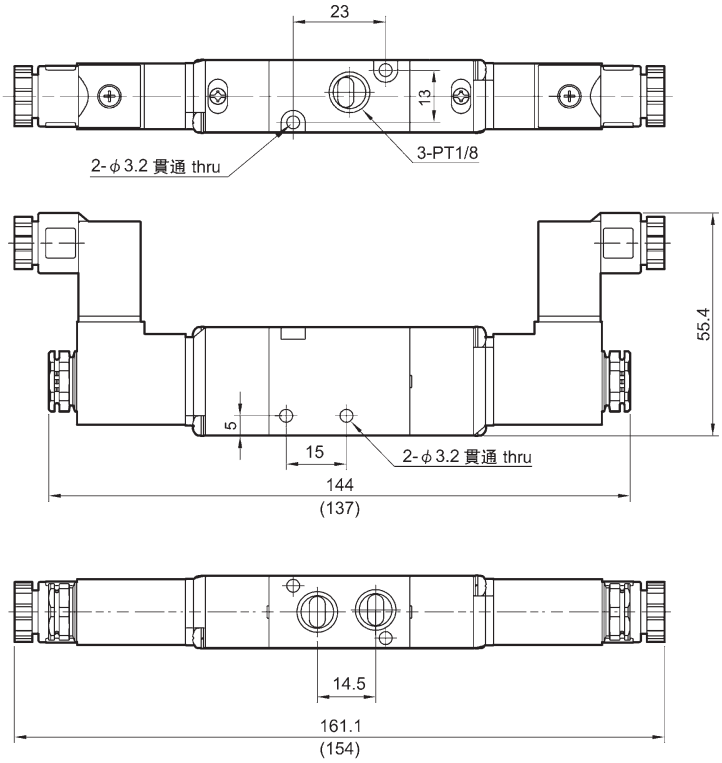
NO





MVSC-180-3E2



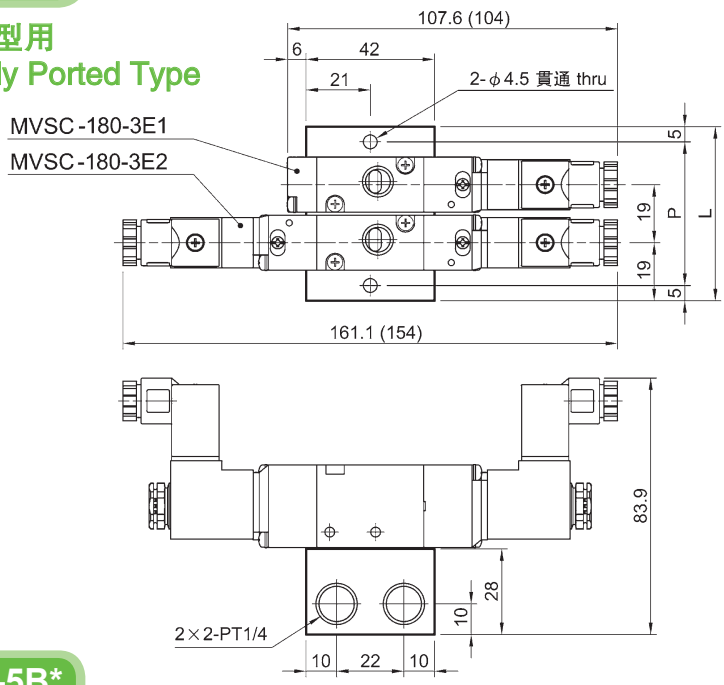


FONRAY®

連座外觀尺寸 Manifold Overall Dimension

MVSC-180-3B*

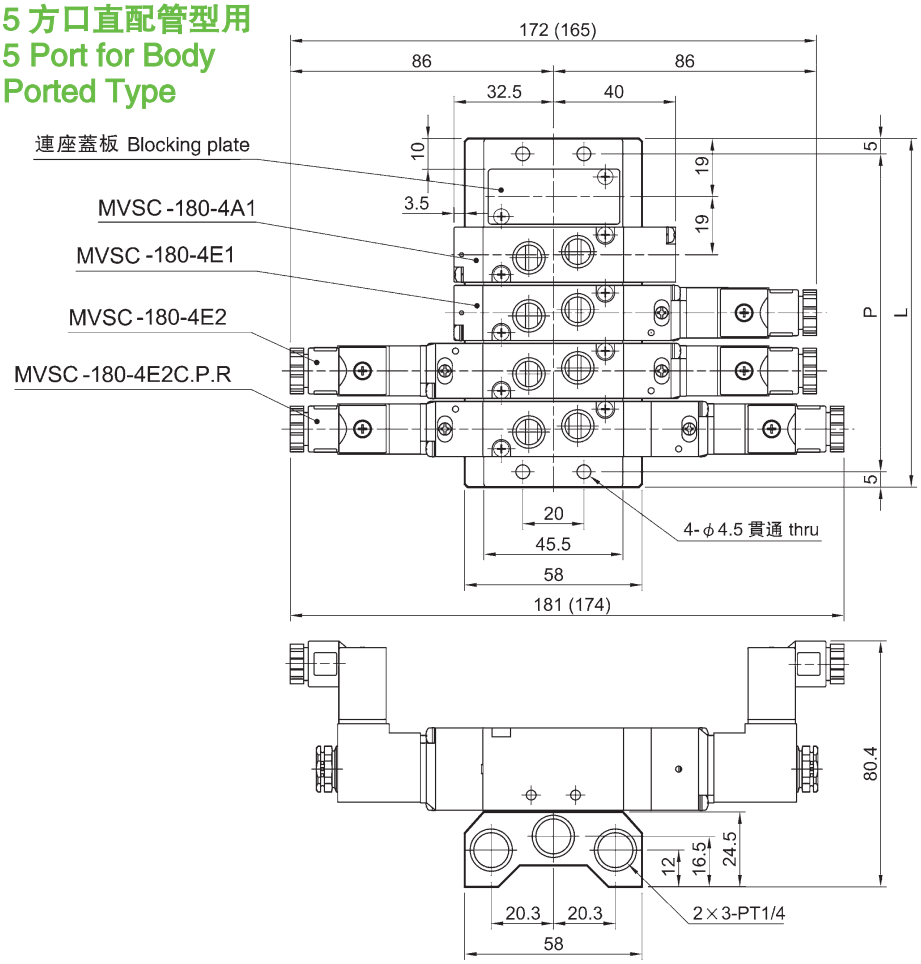
3 方口直配管型用
3 Port for Body Ported Type



連座數(N) No.of stations	P	L
2	47	57
3	66	76
4	85	95
5	104	114
6	123	133
7	142	152
8	161	171
9	180	190
10	199	209

MVSC-180-5B*

5 方口直配管型用
5 Port for Body Ported Type



連座數(N) No.of stations	P	L
2	47	57
3	66	76
4	85	95
5	104	114
6	123	133
7	142	152
8	161	171
9	180	190
10	199	209

MVSC–260 系列 MVSC-260 Series

訂購碼 Ordering Code

MVSC – 260 – 4E2C – AC110V – W – F

- MVSC: 型 號 Model
- 260: 閥體寬度 Body Width
  - 260: 26mm
  - 300: 30mm
  - 600: 68mm
- 4: 4:5 通閥 4:5 Way
- E: E1: 單線圈 E1: Single coil; E2: 雙線圈 E2: Double coil
- 2:
- C: C：中間位置關閉 C：Closed center; P：中間位置通氣 P：Pressure center; R：中間位置排氣（僅適用 4E2） R：Exhaust center (Only for 4E2 type)
- AC110V: 標準電壓 Standard Voltage
  - DC12V
  - DC24V
  - AC24V 50Hz/60Hz
  - AC110V 50Hz/60Hz
  - AC220V 50Hz/60Hz
  - AC380V 50Hz/60Hz
- W: 接線形式 Wiring
  - 空白：標準端子式 Blank: Without light terminal
  - LD: 茶色帶燈端子式 LD: Brown with light terminal
  - LD1: 白色帶燈端子式 LD1: White with light terminal
  - W: 出線式 W: Lead wire
- F: 連座數 Manifold number 1F–20F

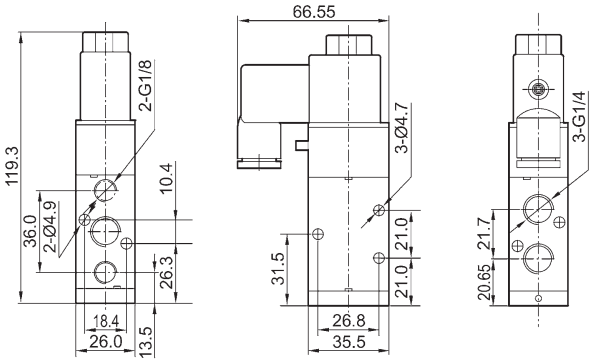
規格 Specification

型 號 Model	MVSC-260-4E1	MVSC-260-4E2	MVSC-260-4E2 (C.P.E)	MVSC-300-4E1	MVSC-300-4E2	MVSC-300-4E2 (C.P.E)	MVSC-600-4E1	MVSC-600-4E2
位置數 No. of Position	2	2	3	2	2	3	2	
接口數 No. of Port	5			3	5		5	
接口尺寸 Port Size	G1/4″			G3/8″			G3/4″	G1″
工作介質 Working Medium	空氣 Air							
工作壓力範圍 Working Pressure	0.2 ~ 0.7MPa		0.3 ~ 0.7MPa	0.2 ~ 0.7MPa		0.3 ~ 0.7MPa	0.2 ~ 0.7MPa	
最大耐壓力 Max. Test Pressure	10kgf/cm^2							
有效截面積 Effective Cross Section Area	18mm^2		16mm^2	35mm^2		25mm^2	20: 115mm^2 25: 135mm^2	
環境溫度 Ambient Temperature	–5 ~ 50℃(無冰凍No Freezing)							
功率 Power Consumption	AC:5.5VA DC:4.8W						AC:13VA DC:10W	
有效電壓範圍 Operating Voltage Tolerance	± 10%							
絕緣等級 Insulation Class	IP65 F級 / F Class							

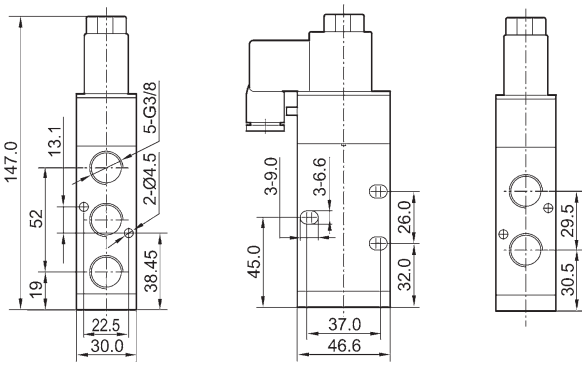
MVSC–260 系列 MVSC-260 Series

外觀尺寸 Overall Dimension

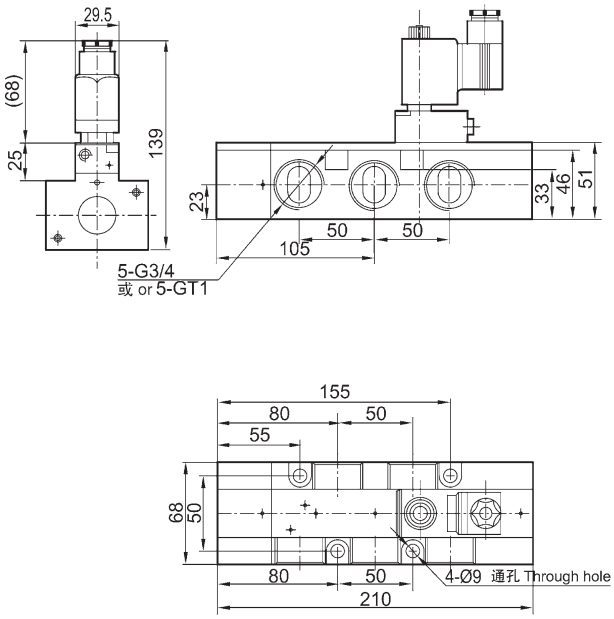
MVSC-260-4E1



MVSC-300-4E1



MVSC-600-4E1



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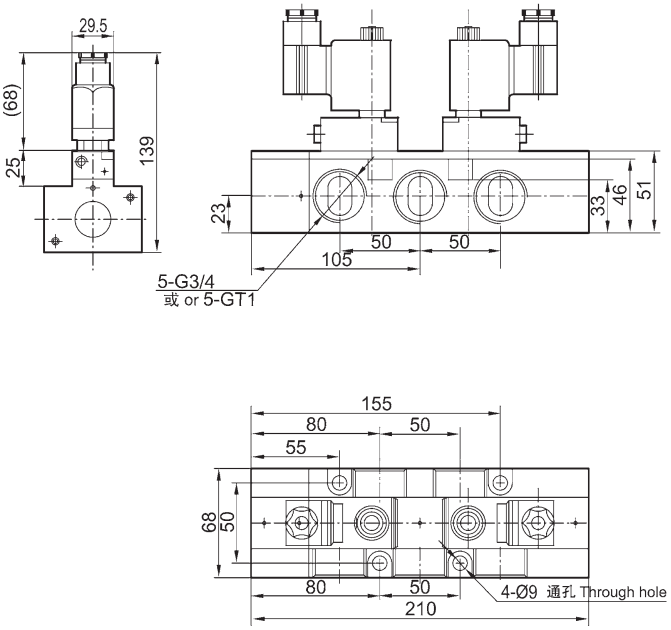
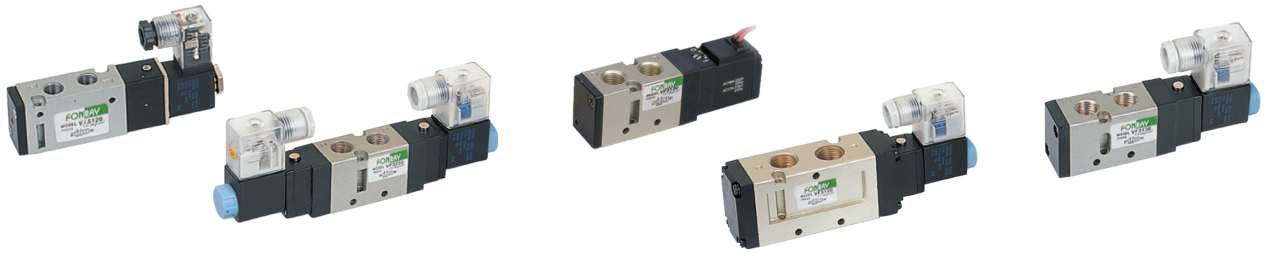




訂購代碼 Ordering Code

FMC3 1 08 C – AC220V – L

- FMC3：系列號 Series
  - FMC3 系列 Series
  - FMC5 系列 Series
  - FMZ5 系列 Series
- 1：
  - 1: 單头
  - 2: 雙头
  - 1: Single coil
  - 2: Double coil
- 08：接管口徑 Port Size
  - 06：1/8"
  - 08：1/4"
  - 10：3/8"
- C：
  - C: 中間停止
  - P: 排氣型
  - E: 壓力型
  - C: Center stop
  - P: Pressed
  - E: Exhausted
- AC220V：標準電壓 Standard Voltage
  - DC12V
  - DC24V
  - AC24V 50Hz/60Hz
  - AC110V 50Hz/60Hz
  - AC220V 50Hz/60Hz
  - AC380V 50Hz/60Hz
- L：接線形式
  - L：帶燈插座式
  - W: 出線式
  - Wiring Form
  - L: DIN Terminal With Light
  - W: Lead wire

規格 Specification

型 號 Model	FMC3108	FMC3208	FMC33(4/5)30	FMC5110	FMC5210	FMC53(4/5)50	FMZ5106	FMZ5206	FMZ53(4/5)50
位置數 Valve Type	五口二位 5/2 way		五口三位 5/3 way	五口二位 5/2 way		五口三位 5/3 way	五口二位 5/2 way		五口三位 5/3 way
有效截面積 Effective Cross Section Area	16mm²(CV=0.89)		12mm²(CV=0.67)	25mm²(CV=1.40)		18mm²(CV=1.00)	12mm²(CV=0.67)		9mm²(CV=0.50)
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air								
動作方式 Operation	內部引導式 Internal Piloted								
使用壓力 Working–pressure	0.15 ~ 0.8MPa								
最大耐壓力 Max. Test Pressure	1.2MPa								
工作溫度 Ambient Temperature	5 ~ 50℃								
電壓範圍 Operating Voltage Tolerance	± 10%								
耗電量 Power Consumption	AC: 5.5VA DC: 4.8W								
絶緣性及防護等級 Protect Class	F級 / F Class. IP65								
接線形式 Wiring / Connector	出線式或端子式 Cable / Lead Wire or DIN Connector								
最高動作頻率 Switching Frequency	每秒五次 5 Cycles / Sec.								
最短勵磁時間 Response Time	0.05秒 Sec.								

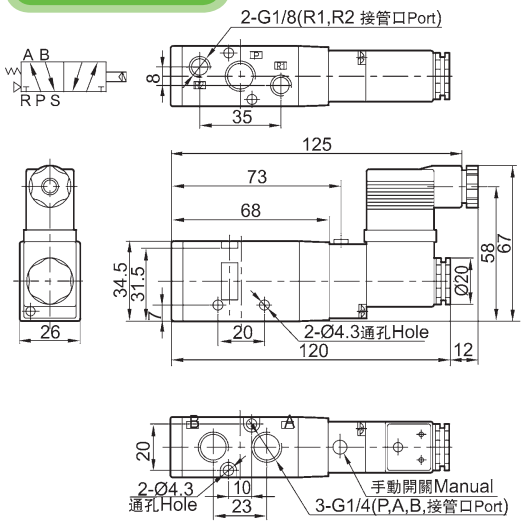
底座訂購碼 Base Ordering Code

FMC3000M – □ F

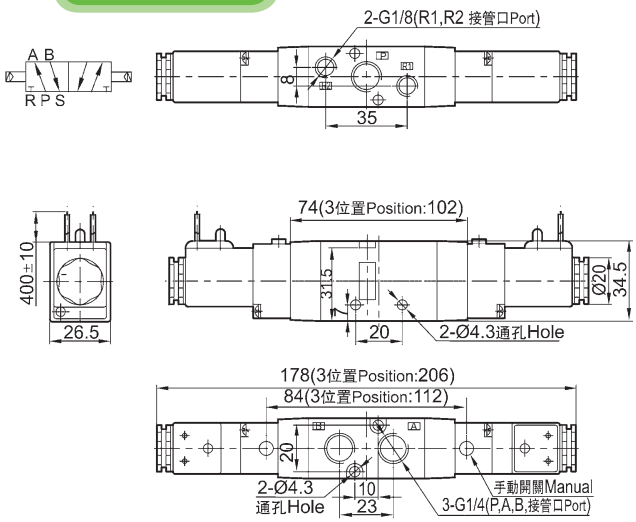
- FMC3000M：系列碼 Series
  - FMC3000M：FMC3 系列用 Series
  - FMC5000M：FMC5 系列用 Series
  - FMZ5000M：FMZ5 系列用 Series
- □：連座數目 Manifold Number
  - FMC3000M：1~20F
  - FMC5000M：1~20F
  - FMZ5000M： 1~20F

外觀尺寸 Overall Dimension

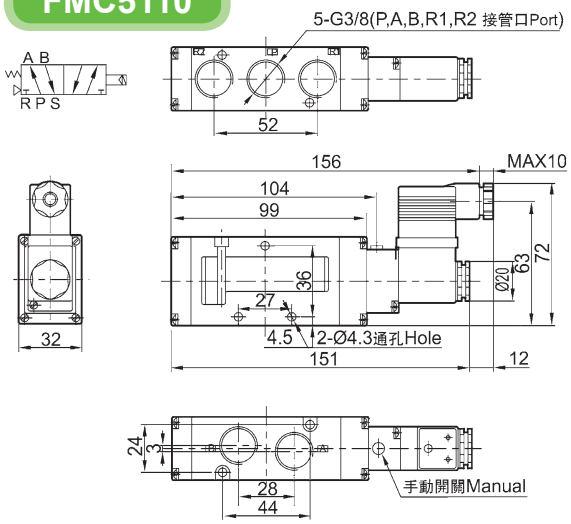
FMC3108



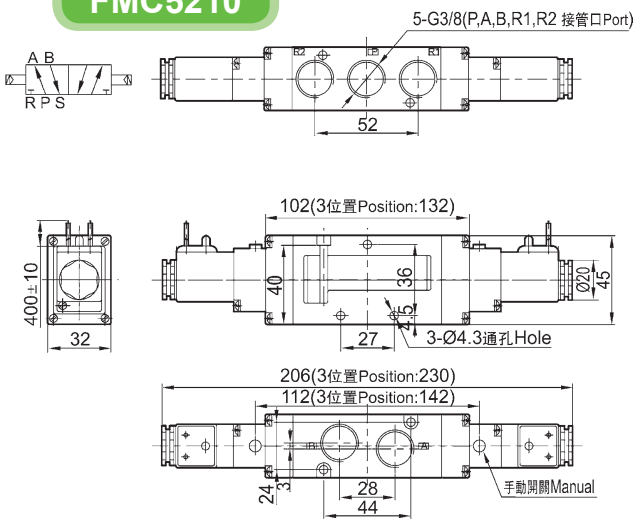
FMC3208



FMC5110



FMC5210



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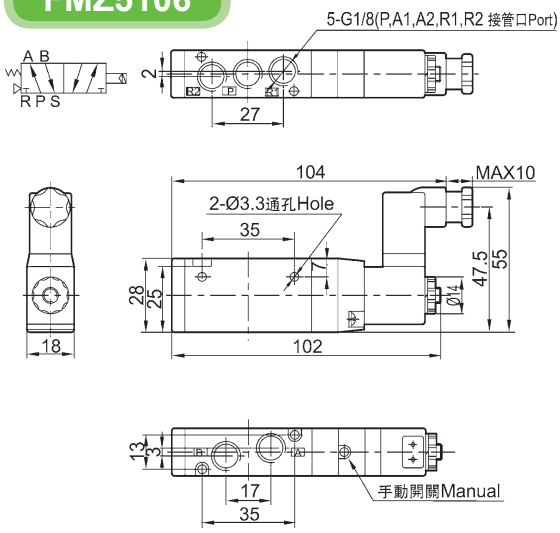

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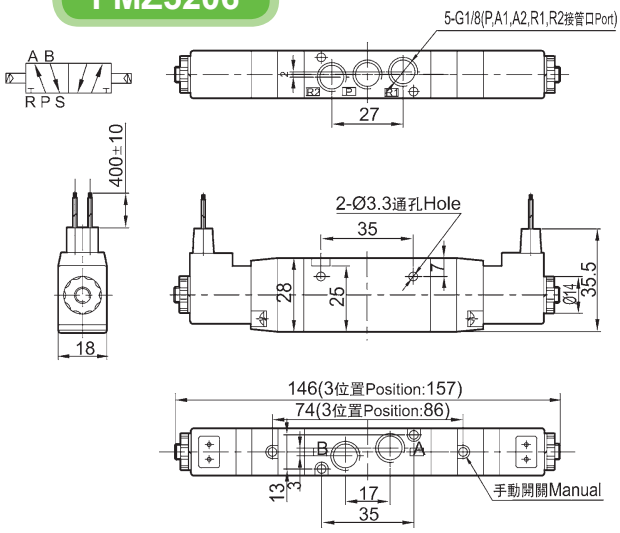
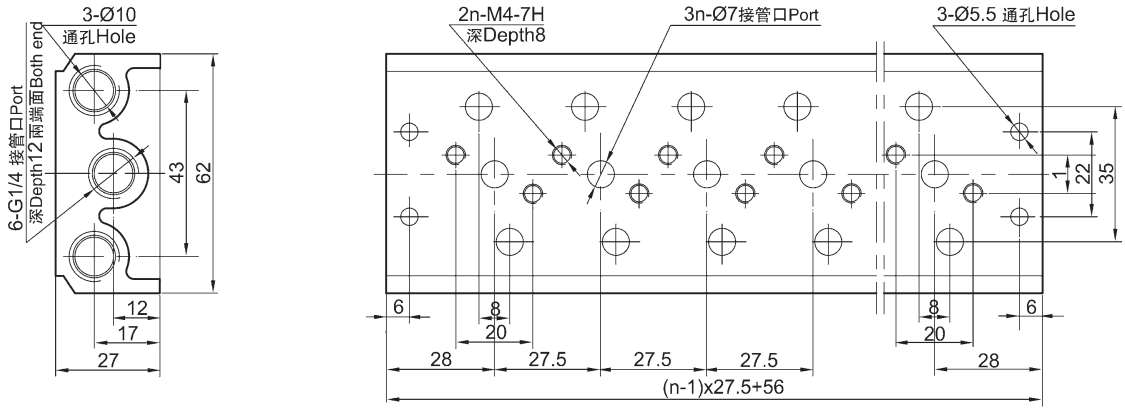
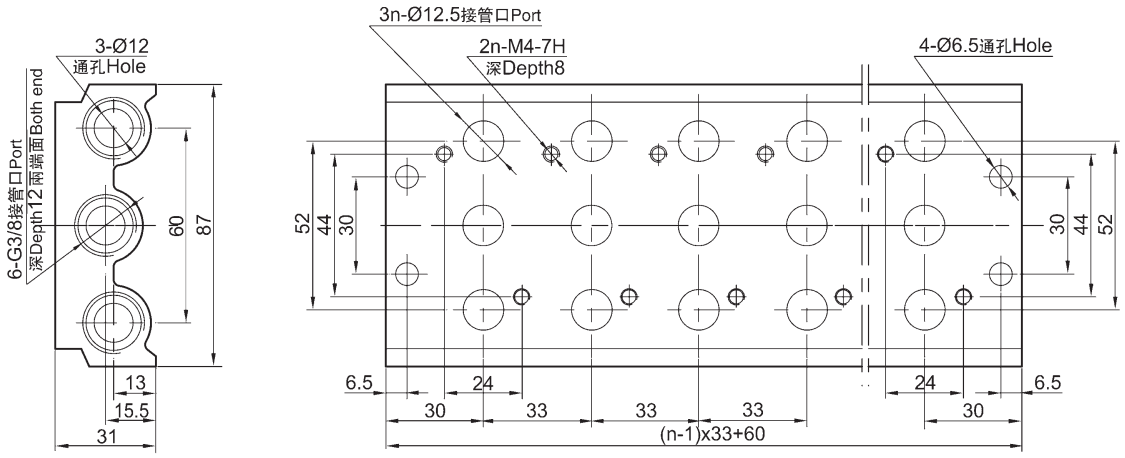


外觀尺寸 Overall Dimension

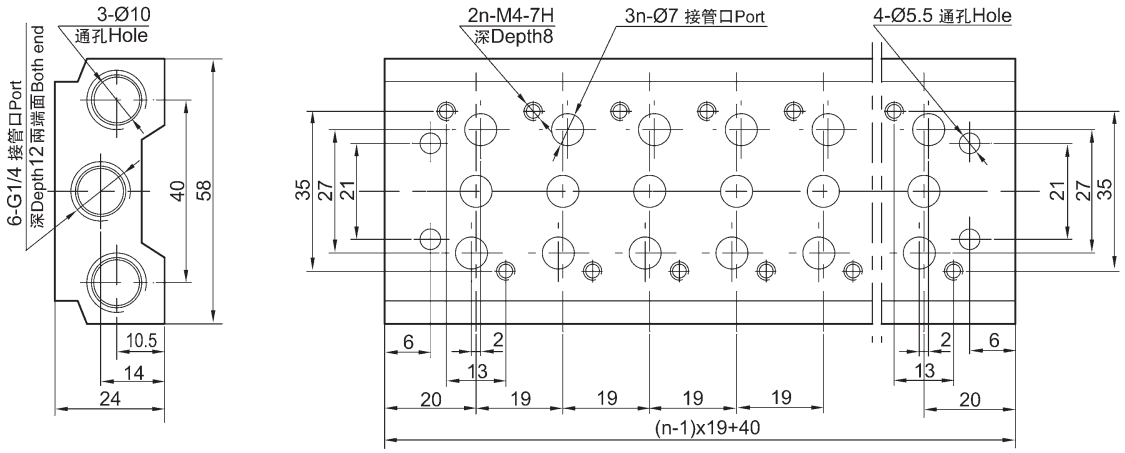
FMC3000M



FMC5000M



FMZ5000M



電磁線圈規格 /Magnet Coil Specification

容許電壓變動範圍 Allowable Voltage Range		±10%
絶緣等級 Insulation & Protection Class		B 級或相同等級 / Class B or Equivalent
勵磁時間 Excitation Time		0.05 秒 / 0.05 Sec.
功率消耗 Power Consumption	交流 /AC	起動 :5.6VA, 持續 :5.4VA / Start: 5.6VA, Keep on: 5.4VA
	直流 /DC	4W
過壓抑制器 Surge Voltage Suppressor		交流 : 壓敏電阻 , 直流 : 二極管 / AC:Varistor, DC:Diode
提示燈 Indictor Light		氖燈 , 發光二極管 / Neon Light, LED

訂購代號 Ordering Code

BFG 25 4 1 – 15 – AC220V – L

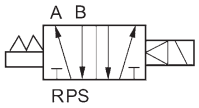
- BFG: 系列 Series
- 25: 結構類型 25: 五口二位 Valve Type 25: 5/2 way
- 4: 接口代號 Connection Code 4: 1/2
- 1: 控制形式 1: 單電控 2: 雙電控 Control Type 1:Single Solenoid Operated 2:Double Solenoid Operated
- 15: 接管口徑 Port Size 08: 1/2″
- AC220V: 標準電壓 Standard Voltage DC24V AC110V AC220V
- L: 接線形式 無記號：引出線 L：帶燈插座式 Wiring Form Blank: Lead Wire L: DIN Terminal With Light

規格 Specification

型 號 Model	BFG2541-15	BFG2541-15L	BFG2542-15	BFG2542-15L
結構類型 Valve Type	五口二位 5/2 way			
接管口徑 Port Size	G1/2	G1/2	G1/2	G1/2
通徑 (mm) Norminal Diameter	15	15	15	15
工作介質 Applicable Medium	空氣 / Air			
使用壓力範圍 Pressure Range	0.15 ~ 0.9MPa			
動作方式 Operating Method	內部引導式 / Internal Piloted			
最大動作頻率 Max. Action Frequency	5 次 / 秒 5 Cycles/Sec.			
潤滑 Lubrication	無油 / Needless			
使用溫度 Applicable Temperature	–5 ~ 50℃			

外觀尺寸 Overall Dimension

BFG2541-15



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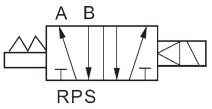
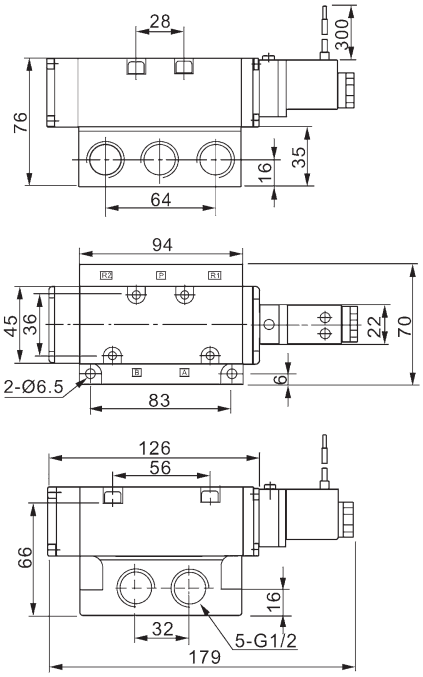
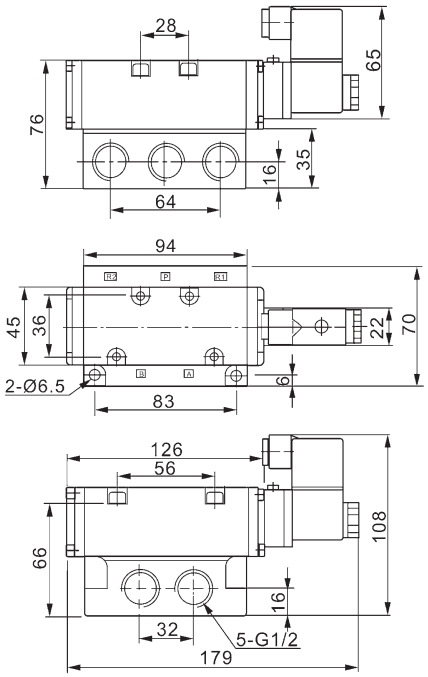


BFG2541-15L





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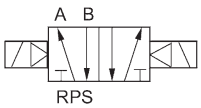

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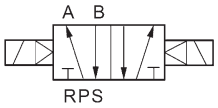

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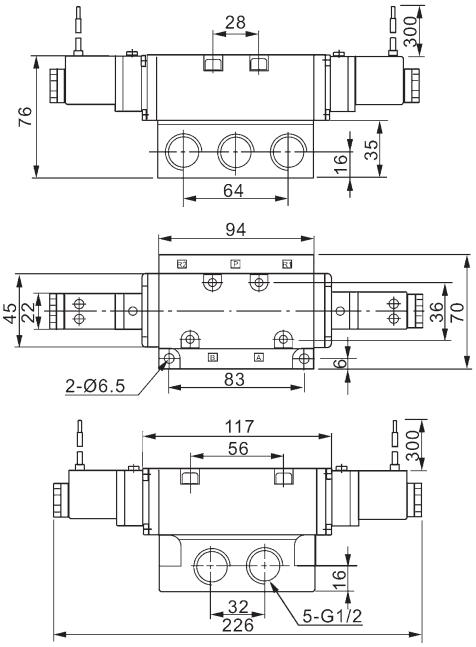
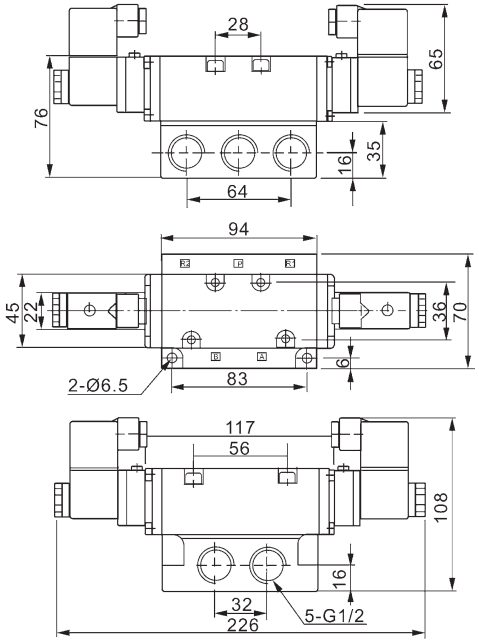




FSY3120 系列 FSY3120 Series

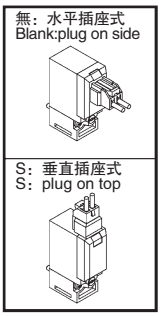
規格 Specification

型 號 Model	FSY3120-4E1	FSY3120-4E2	FSY3120-4E2C,P.R
配管口徑代號 Bore No.	M5		
配管口徑尺寸 Port Size	M5 × 0.8		
方口數 No.of Port	5口 Port		
位置數 No.of Position	2位置 Position		3位置 Position
使用流體 Medium	空氣 Air		
使用壓力範圍 Operating Pressure Range	2 ~ 7 kgf/cm^2		
耐壓力 Proof Pressure	10 kgf/cm^2		
有效截面積 Effective Cross Section Area	4mm^2		4mm^2
應答時間 Response Time	12 ms		15 ms
周圍溫度 Ambient Temperature	+ 5 ~ + 50℃		
定格電壓 Voltage	AC=110V, AC220V(50/60)Hz, DC6/12/24V		
電力消耗 Power Consumption	AC=1.6/2.5VA, DC=1.2W (附燈型LED indicator)		
電壓容許範圍 Available Voltage Range	± 10%		
絕緣等級 Insulation Class	F級 / F Class		
重量 Weight	30 g	43 g	55 g

閥訂購代碼 Ordering Code of Valve

FSY – 3120M – 4E2C – AC110V – S

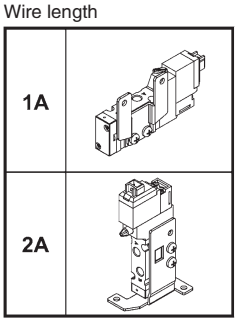
- FSY: 型號 Model
- 3120: 本體寬度 Body width
- M: 無：直配管型 / M：連座型 / Blank: Body ported type / M: Manifold type
- 4: 4：4 方向 / 4：4 way
- E: E1：單線圈 / E2：雙線圈 / E1：Single coil / E2：Double coil
- C: C：中間位置關閉 / P：中間位置通氣 / R：中間位置排氣 (僅適用 4E2) / C：Closed center / P：Pressure center / R：Exhaust center (Only for 4E2 type)
- AC110V: 電壓種類 Voltage — AC110V(50/60)Hz, AC220V(50/60)Hz, DC6V, DC12V, DC24V
- S: 出線型式 Plug type — 無：水平插座式 Blank:plug on side; S：垂直插座式 S：plug on top



支架訂購代碼 Ordering Code of Wire

FSY – 3120 – 1A

- 1A / 2A: 安裝配件 Wire length

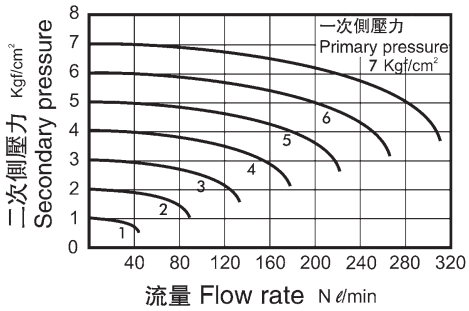


連座訂購代碼 Ordering Code of Manifold

FSY – 3120M – 5M3

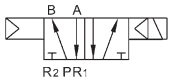
- FSY: 型號 Model
- M: 無：直配管型 / M：連座型 / Blank:Body ported type / M：Manifold type
- 5M: 連座 5B：直配管型用 / 5M：連座型用 Manifold / 5B : for body ported type / 5M : for manifold type
- 3: 連座數 Manifold Number 1,2,3…

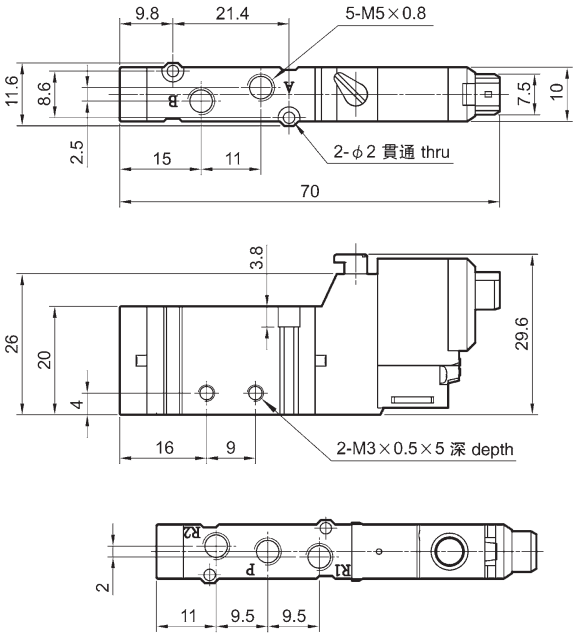
流量特性圖 Flow Features



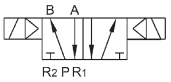
外觀尺寸 Overall Dimension

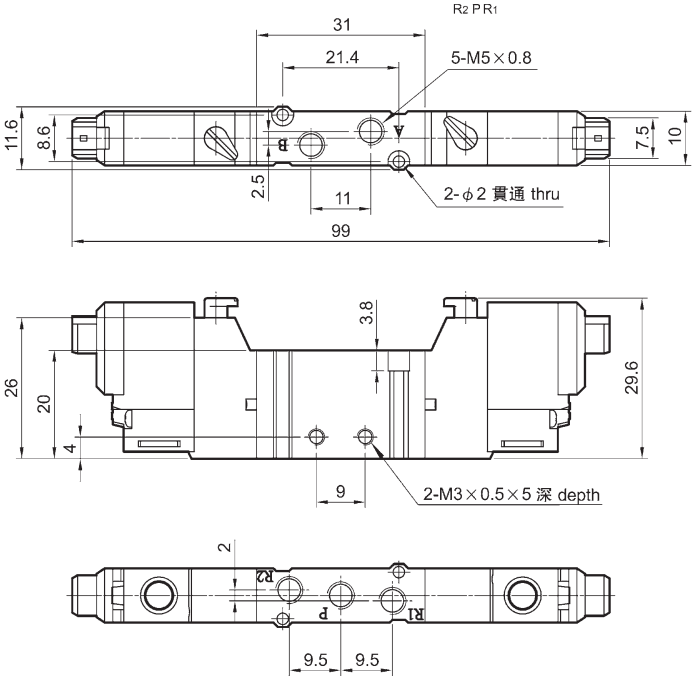
FSY3120-4E1





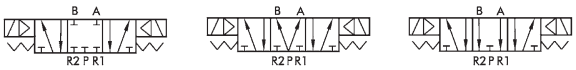
FSY3120-4E2

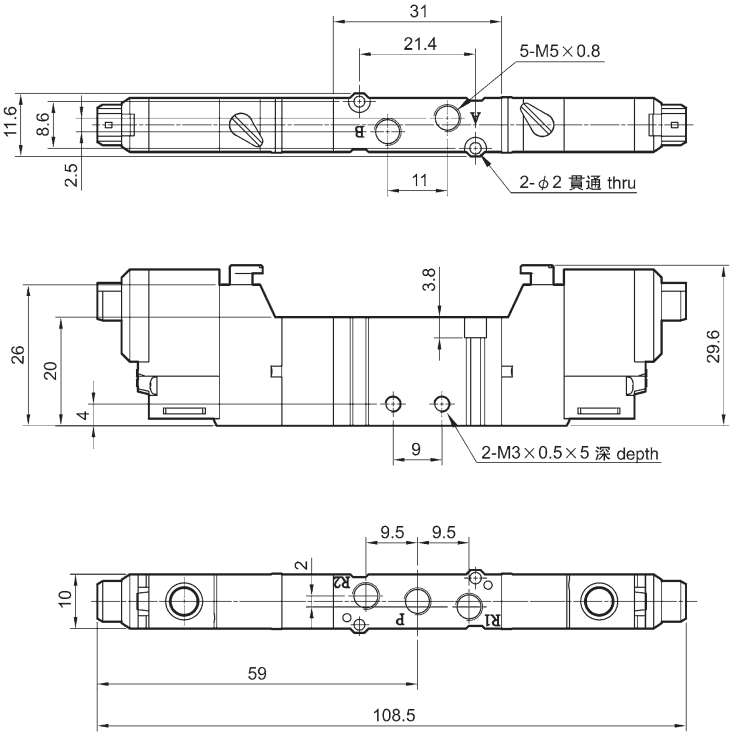




FSY3120-4E2C.P.R

FSY3120-4E2C FSY3120-4E2P FSY3120-4E2R

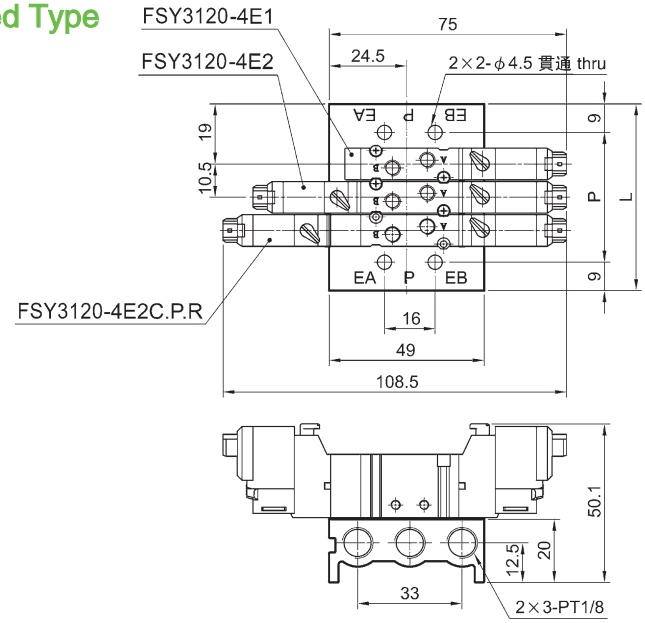




外觀尺寸 Overall Dimension

5B*

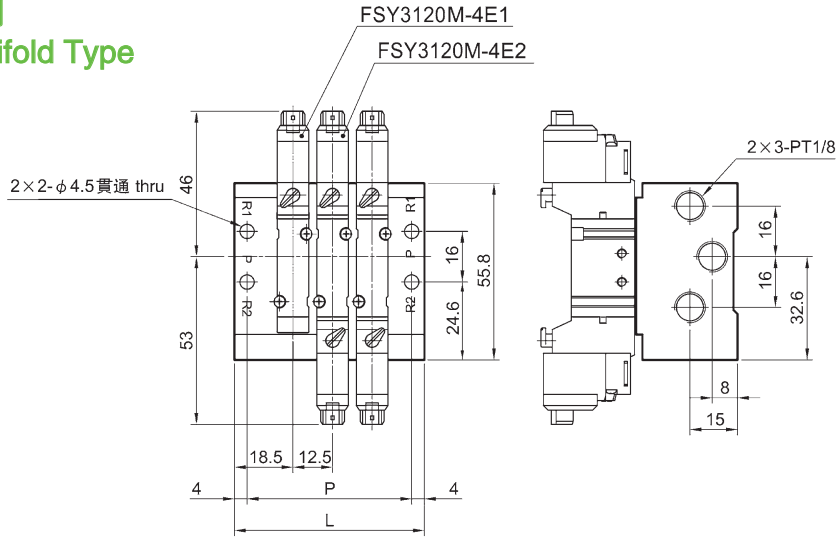
直配管型用
For Body Ported Type

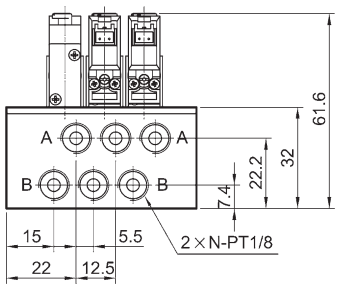


連座數(N) No.of stations	P	L
2	30.5	48.5
3	41	59
4	51.5	69.5
5	62	80
6	72.5	90.5
7	83	101
8	93.5	111.5
9	104	122
10	114.5	132.5

5M*

連座型用
For Manifold Type



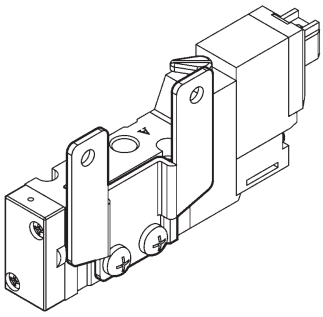


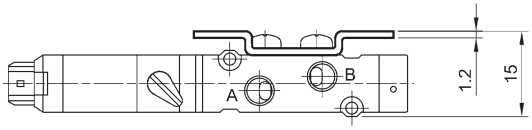
連座數(N) No.of stations	P	L
2	39.5	47.5
3	52	60
4	64.5	72.5
5	77	85
6	89.5	97.5
7	102	110
8	114.5	122.5
9	127	135
10	139.5	147.5

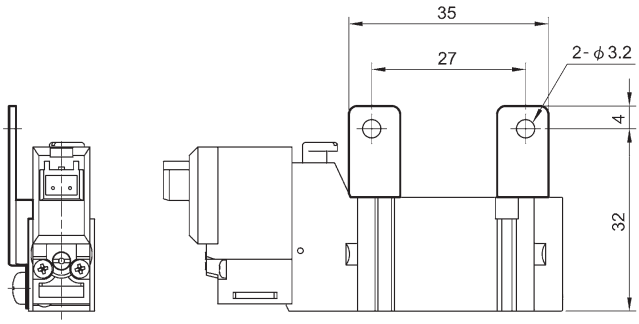
外觀尺寸 Overall Dimension

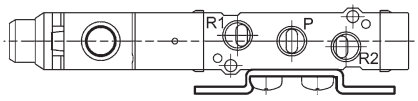
1A

支架 Bracket



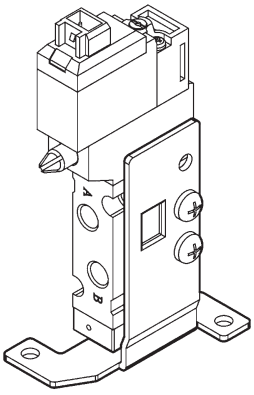


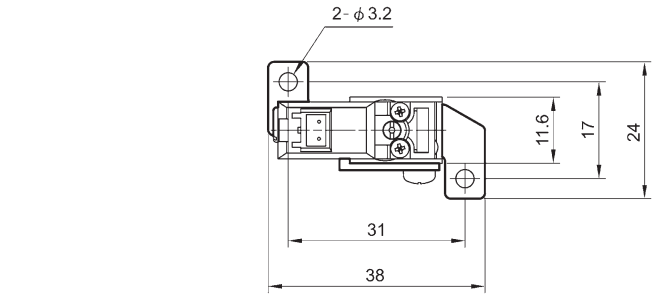


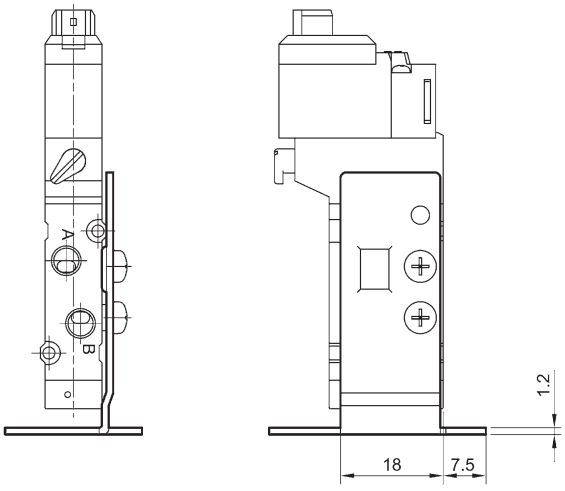


2A

脚架 Foot







FONRAY®

規格 Specification

型 號 Model	FSY5120-4E1	FSY5120-4E2	FSY5120-4E2C,P.R
配管口徑代號 Bore No.	6A		
配管口徑尺寸 Port Size	PT1/8		
方口數 No.of Port	5口 Port		
位置數 No.of Position	2位置 Pisition		3位置 Position
使用流體 Medium	空氣 Air		
使用壓力範圍 Operating Pressure Range	1.5 ~ 7 kgf/cm^2		2 ~ 7 kgf/cm^2
耐壓力 Proof Pressure	10 kgf/cm^2		
有效截面積 Effective Cross Section Area	11mm^2		9.5mm^2
應答時間 Response Time	19 ms		20 ms
周圍溫度 Ambient Temperature	+ 5 ~ + 50℃		
定格電壓 Voltage	AC=110V,AC220V(50/60)Hz,DC6/12/24V		
電力消耗 power Consumption	AC=1.6/2.5VA,DC=1.2W (附燈型LED indicator)		
電壓容許範圍 Available Voltage Range	± 10%		
絕緣等級 Insulation Class	F級 / F Class		
重量 Weight	68 g	87 g	96 g

閥訂購代碼 Ordering Code of Valve

FSY – 5120M – 4E2C – AC110V – S – BSP

- FSY: 型號 Model
- 5120: 本體寬度 Body width
- M: 無：直配管型 / M：連座型 / Blank: Body ported type / M: Manifold type
- 4: 4：4 方向 / 4：4 way
- E2: E1：單線圈 / E2：雙線圈 / E1：Single coil / E2：Double coil
- C: C：中間位置關閉 / P：中間位置通氣 / R：中間位置排氣 (僅適用 4E2) / C：Closed center / P：Pressure center / R：Exhaust center (Only for 4E2 type)
- AC110V: 電壓種類 Voltage — AC110V(50/60)Hz / AC220V(50/60)Hz / DC6V / DC12V / DC24V
- S: 出線型式 Plug type
  - 無：水平插座式 Blank:plug on side
  - S：垂直插座式 S：plug on top
- BSP: 配管口螺牙 無：PT 牙 / BSP：BSP 牙 / NPT：NPT 牙 (僅適用直配管型) Port thread / BSP：BSP thread / NPT：NPT thread (Only for body ported type)

支架訂購代碼 Ordering Code of Wire

FSY – 5120 – 1A

安裝配件 Wire length

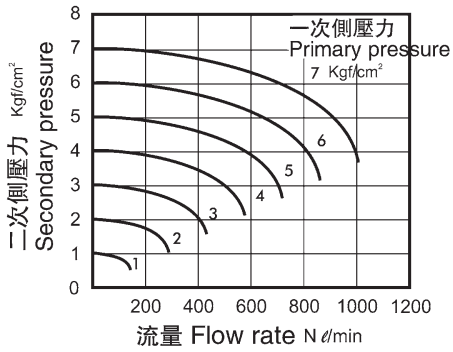
1A	
2A	

連座訂購代碼 Ordering Code of Manifold

FSY – 5120M – 5M3 – BSP

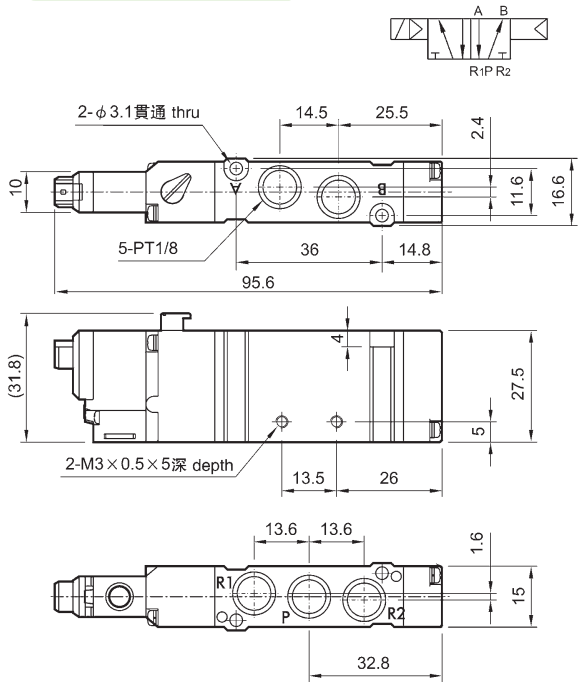
- FSY: 型號 Model
- 5120M: 無：直配管型 / M：連座型 / Blank: Body ported type / M: Manifold type
- 5M: 連座 5B : 直配管型用 / 5M : 連座型用 Manifold / 5B : for body ported type / 5M : for manifold type
- 3: 連座數 Manifold number 1,2,3…
- BSP: 配管口螺牙 無：PT 牙 / BSP：BSP 牙 / NPT：NPT 牙 Port thread / BSP：BSP thread / NPT：NPT thread

流量特性圖 Flow Features

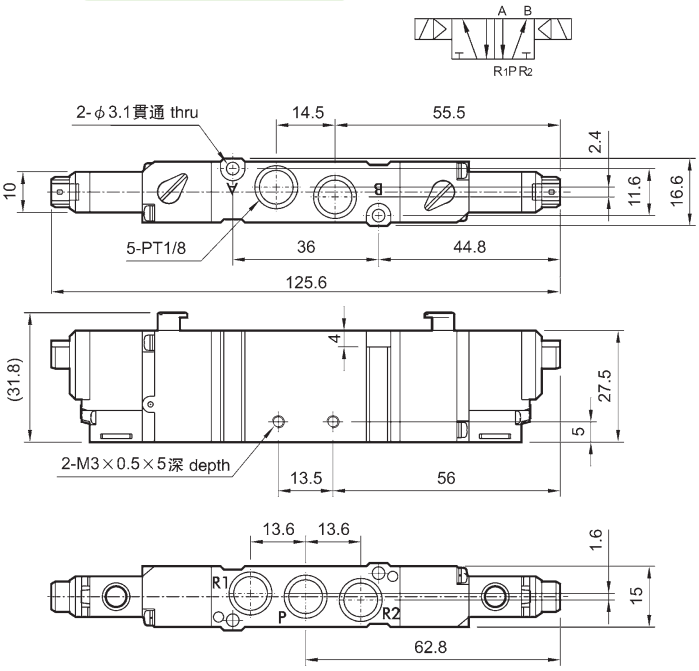


外觀尺寸 Overall Dimension

FSY5120-4E1

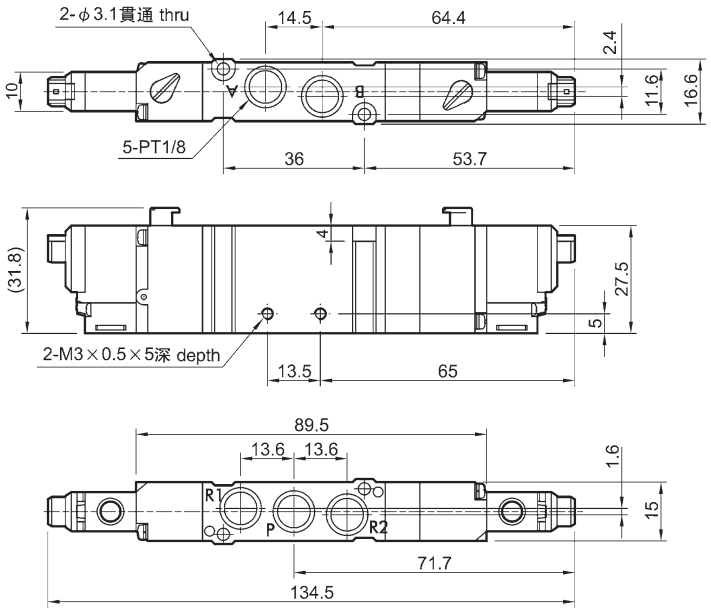


FSY5120-4E2



FSY5120-4E2C.P.R

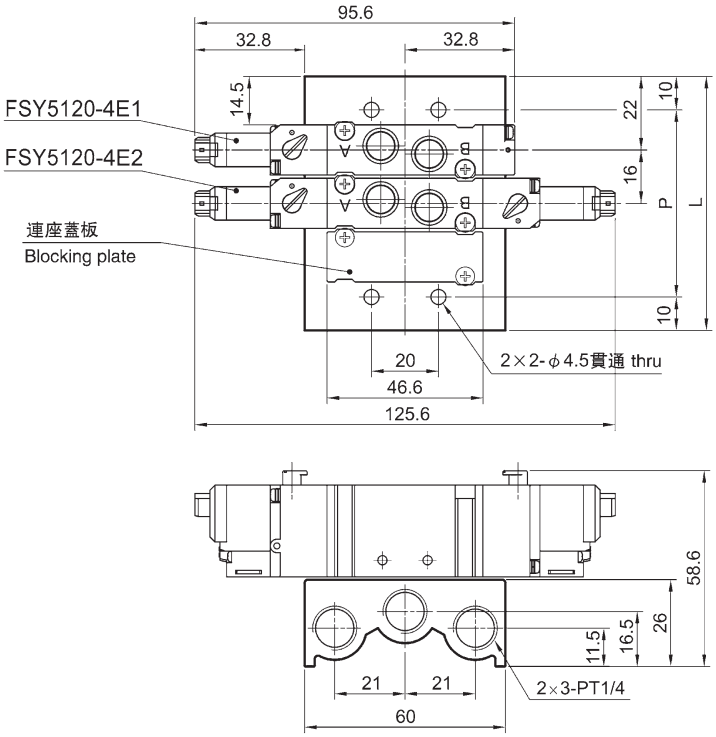
FSY5120-4E2C **FSY5120-4E2P** **FSY5120-4E2R**



外觀尺寸 Overall Dimension

5B*

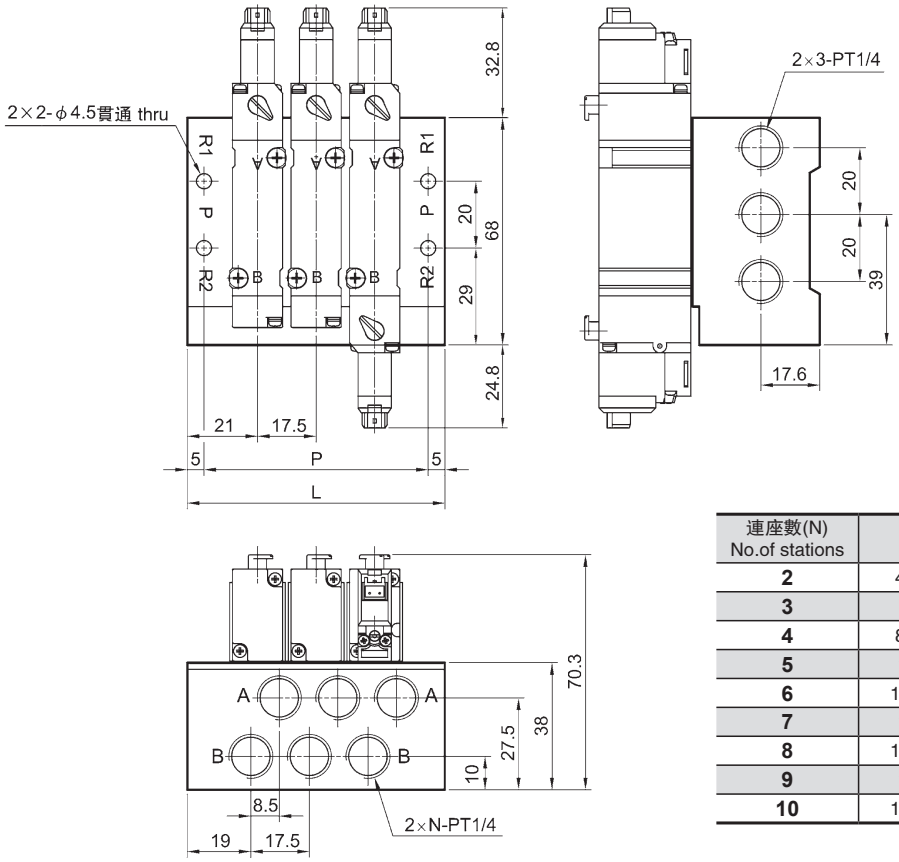
直配管型用 For Body Ported Type



連座數(N) No.of stations	P	L
2	40	60
3	56	76
4	72	92
5	88	108
6	104	124
7	120	140
8	136	156
9	152	172
10	168	188

5M*

連座型用 For Manifold Type

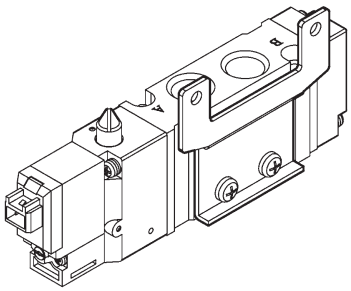


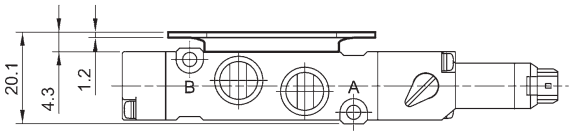
連座數(N) No.of stations	P	L
2	49.5	59.5
3	67	77
4	84.5	94.5
5	102	112
6	119.5	129.5
7	137	147
8	154.5	164.5
9	172	182
10	189.5	199.5

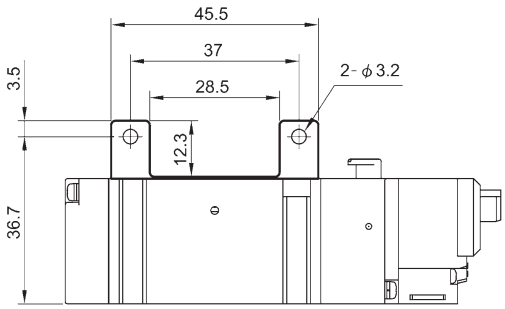
外觀尺寸 Overall Dimension

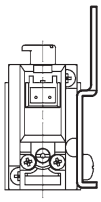
1A

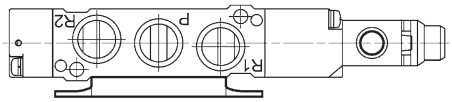
支架 Bracket





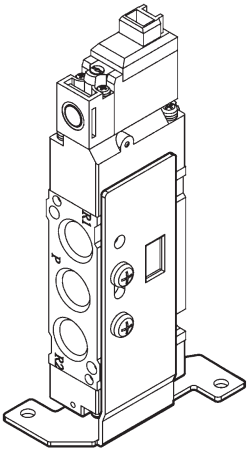


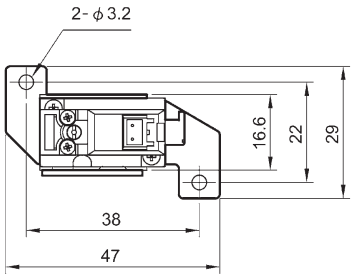


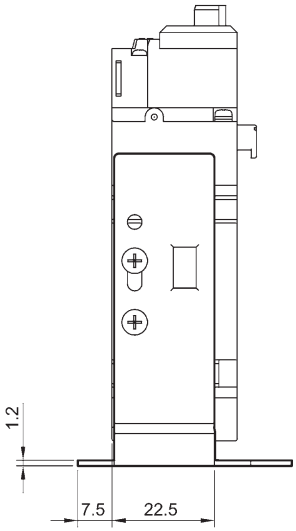


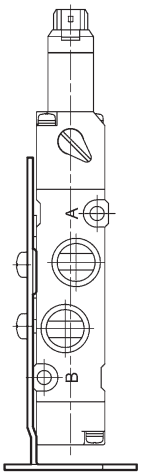
2A

脚架 Foot









FSY7120 系列 FSY7120 Series

規格 Specification

型 號 Model	FSY7120-4E1	FSY7120-4E2	FSY7120-4E2C,P.R
配管口徑代號 Bore No.	8A		
配管口徑尺寸 Port Size	PT1/4		
方口數 No.of Port	5口 Port		
位置數 No.of Position	2位置 Position		3位置 Position
使用流體 Medium	空氣 Air		
使用壓力範圍 Operating Pressure Range	1.5 ~ 7 kgf/cm^2		2 ~ 7 kgf/cm^2
耐壓力 Proof Pressure	10 kgf/cm^2		
有效截面積 Effective Cross Section Area	15mm^2		12mm^2
應答時間 Response Time	23 ms		50 ms
周圍溫度 Ambient Temperature	+ 5 ~ + 50℃		
定格電壓 Voltage	AC=110V,AC220V(50/60)Hz,DC6/12/24V		
電力消耗 Power Consumption	AC=1.6/2.5VA,DC=1.2W (附燈型LED indicator)		
電壓容許範圍 Available Voltage Range	± 10%		
絕緣等級 Insulation Class	F級 / F Class		
重量 Weight	84 g	106 g	116 g

閥訂購代碼 Ordering Code of Valve

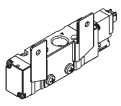
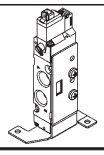
FSY – 7120M – 4E2C – AC110V – S – BSP

- FSY: 型號 Model
- 7120: 本體寬度 Body width
- M: 無：直配管型 / M：連座型 / Blank: Body ported type / M: Manifold type
- 4: 4：4 方向 / 4：4 way
- E: E1：單線圈 / E2：雙線圈 / E1：Single coil / E2：Double coil
- C: C：中間位置關閉 / P：中間位置通氣 / R：中間位置排氣 (僅適用 4E2) / C：Closed center / P：Pressure center / R：Exhaust center (Only for 4E2 type)
- AC110V: 電壓種類 Voltage — AC110V(50/60)Hz, AC220V(50/60)Hz, DC6V, DC12V, DC24V
- S: 出線型式 Plug type — 無：水平插座式 Blank:plug on side; S：垂直插座式 S：plug on top
- BSP: 配管口螺牙 無：PT 牙 / BSP：BSP 牙 / NPT：NPT 牙 (僅適用直配管型) Port thread / BSP：BSP thread / NPT：NPT thread (Only for body ported type)

支架訂購代碼 Ordering Code of Wire

FSY – 7120 – 1A

安裝配件 Wire length

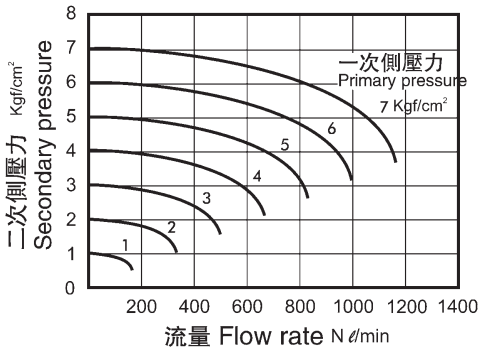
1A	
2A	

連座訂購代碼 Ordering Code of Manifold

FSY – 7120M – 5M3 – BSP

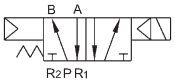
- FSY: 型號 Model
- M: 無：直配管型 / M：連座型 / Blank: Body ported type / M: Manifold type
- 5B/5M: 連座 5B：直配管型用 / 5M：連座型用 Manifold / 5B : for body ported type / 5M : for manifold type
- 3: 連座數 Manifold number 1,2,3…
- BSP: 配管口螺牙 無：PT 牙 / BSP：BSP 牙 / NPT：NPT 牙 Port thread / BSP：BSP thread / NPT：NPT thread

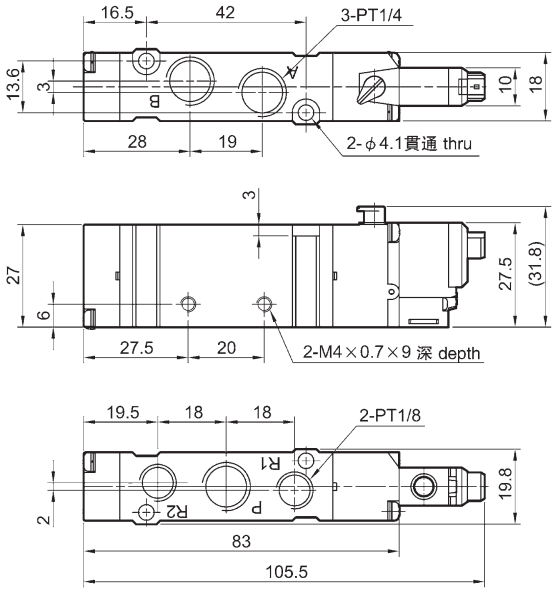
流量特性圖 Flow Features



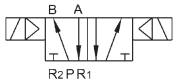
外觀尺寸 Overall Dimension

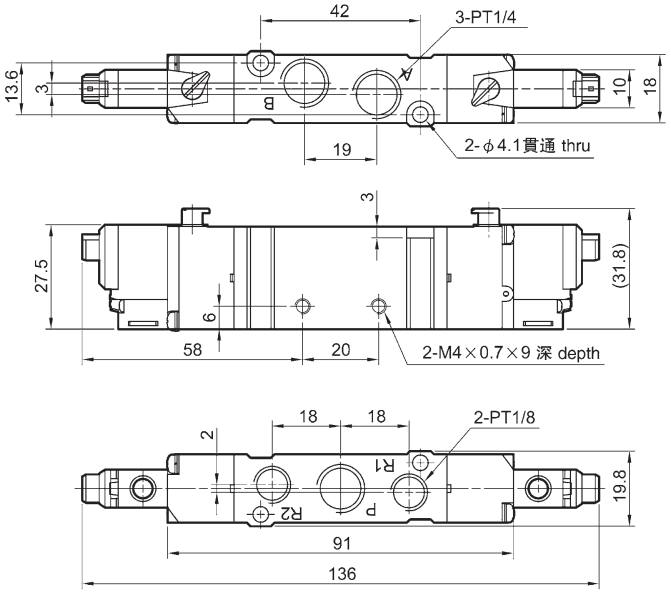
FSY7120-4E1





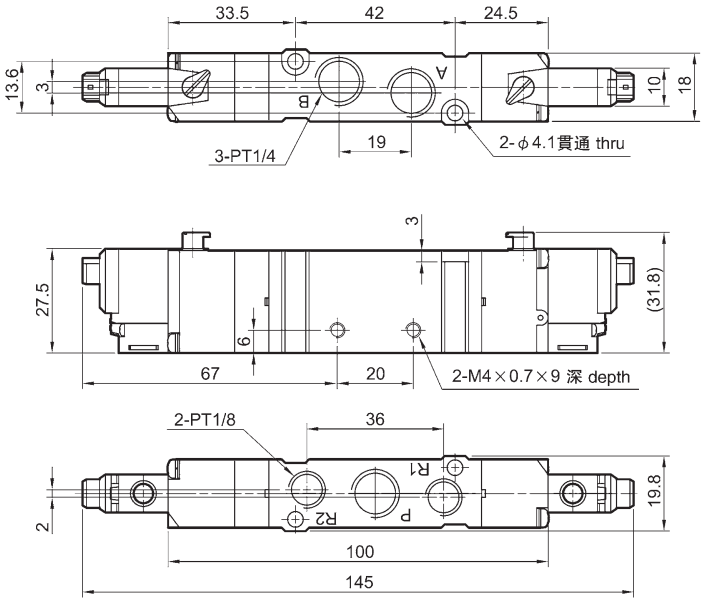
FSY7120-4E2





FSY7120-4E2C.P.R

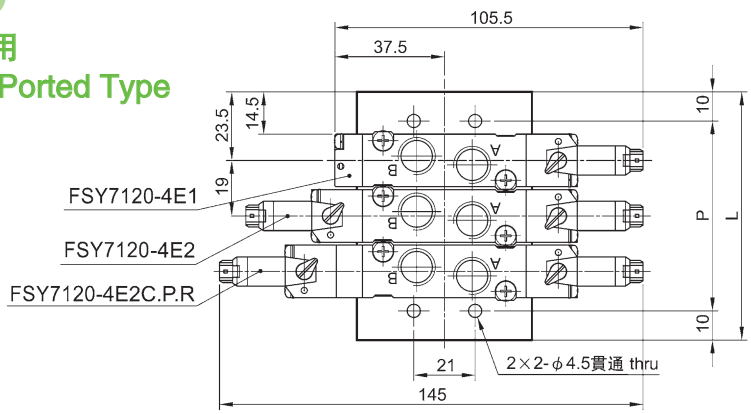
FSY7120-4E2C **FSY7120-4E2P** **FSY7120-4E2R**

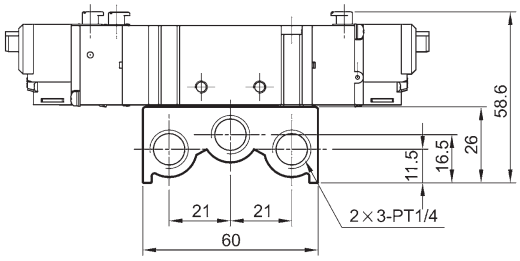


外觀尺寸 Overall Dimension

5B*

直配管型用
For Body Ported Type

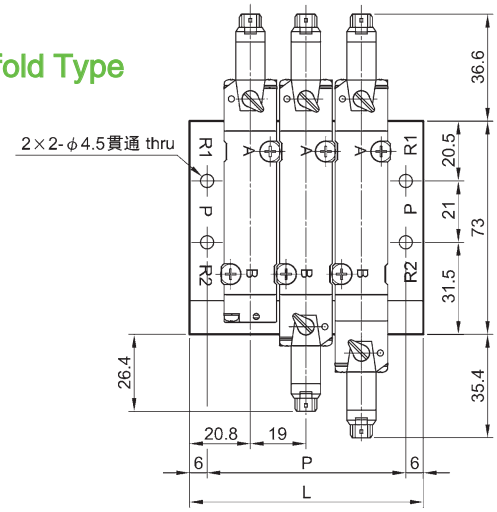


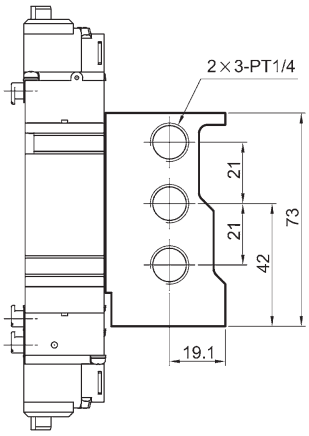


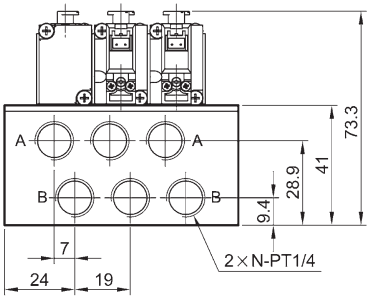
連座數(N) No.of stations	P	L
2	46	66
3	65	85
4	84	104
5	103	123
6	122	142
7	141	161
8	160	180
9	179	199
10	198	218

5M*

連座型用
For Manifold Type





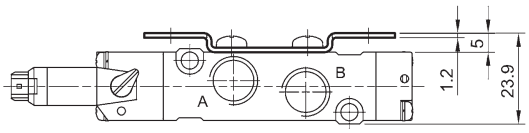


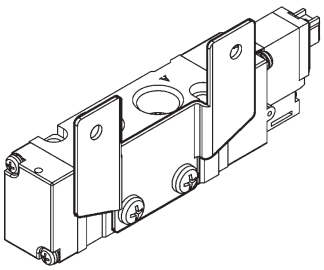
連座數(N) No.of stations	P	L
2	49	61
3	68	80
4	87	99
5	106	118
6	125	137
7	144	156
8	163	175
9	182	194
10	201	213

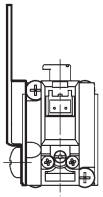
外觀尺寸 Overall Dimension

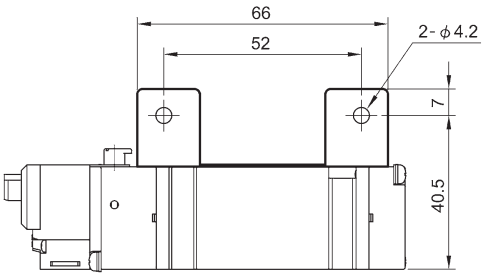
1A

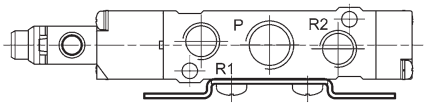
支架 Bracket





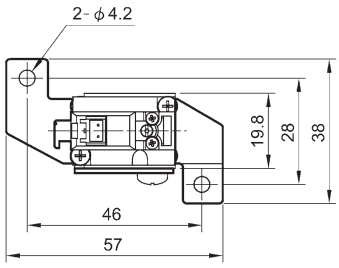


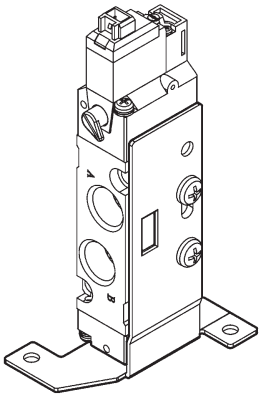


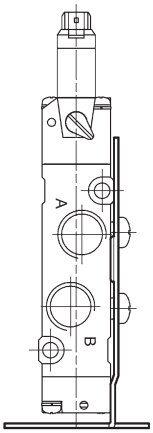


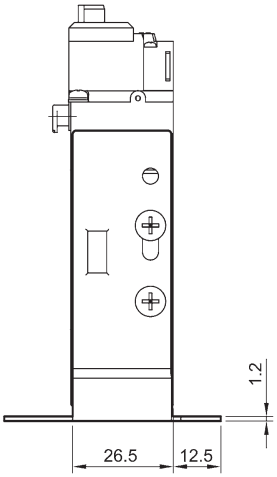
2A

脚架 Foot









FDH3102 系列 FDH3102 Series

FDH3102

規格 Specification

使用介質 Working Medium	壓縮空氣、惰性氣體、真空 /Compress air, inert gases,vacuum
切換方式 註 Note 2 Switch Style	常閉、常開通用 / NC or NO common
環境及介質溫度 Ambient And Fluid Temperature	–5~+50℃
反應時間 Reaction Time	≤ 5ms
最高操作頻率 Highest Operating Frequency	在 DC24V 情況下： 150 次 / 秒（電磁線圈功率 5.6W） 200 次 / 秒（電磁線圈功率 8.5W）
* 潤滑 Lubrication	出廠已潤滑 / Have lubricate
手動操作 Manual Operation	不鎖定型 / Button type without lock
抗衝擊 / 振動能力 Anti–impact / Vibration Ability	15G/5G(40~1000Hz)
密封 Seal	防塵 / Guards against the dust

* 若需要潤滑請用透平 1 號油 ISOVG32。
Like needs to lubricate, please use turbine 1 oil ISOVG32.

特點 Features

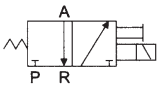
- 高頻率；
- 流通量大；
- 使用壽命長；
- 無油潤滑；
- 鋁型材閥體；
- 設有手動換向裝置；
- 可多功能變換；
- 可用于壓縮空氣、惰性氣體、真空。

- High Frequency;
- Great flux;
- Long Work life;
- Not need lubricate;
- Aluminium valve body;
- Manual exchange set;
- Multifunctional transform;
- Use for compress air, inert gases,vacuum.

電磁線圈規格 Magnet Coil Specification

接電方式 Receives A Telegram The Way	直接出線式 Grommet type (G)， 插座式 DIN Terminal (D)
標準電壓 Standard Voltage	DC 24V
容許電壓變動範圍 The Allowable Voltage Change Range	額定電壓的 –15~+10% / Rating pressure –15~+10%
線圈絶緣等級 Coil Insulation Class	B 級或相同等級 (130℃) / B class or the same
保護等級（帶插座） Protection Class	IP65
功率消耗 Power Pissipation	8.5W

圖形符號 Graphic Symbol



註1 Note 1 型 號 Model	規 格 Sprcifications				配件 Fittings
	操作壓力範圍 Operation pressure range	接管螺紋 (G) Port Size	有效截面積 Effective Sectional Area	重量 Weight (kgf)	脚架 Bracket
FDH3102–□△–F **FDH3102–□△–◇–F**	0~0.9MPa 1Torr~0.1MPa	1/4	4.5mm^2 (Cv=0.25)	0.17	DXT152–25–1A

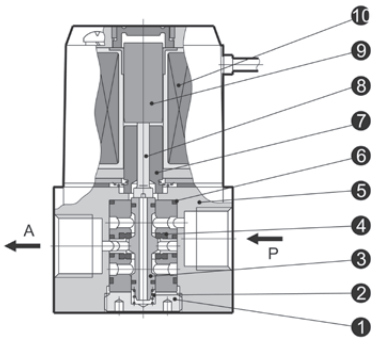
註：1 □代表使用電壓
4=220VAC 5=24VDC
△代表接電方式
G= 直接出線式（線長 300mm)
D= 插座式
F: 帶有安裝脚架
出線顏色與使用電壓識別：
DC 24V: 紅黑色線

◇ 接線插座與 LED（發光二極管）
Nil: 黑色插殼（無電路）
SB3: 黑色插殼（無 LED）
TB3: 透明插殼（無電路）
TB3Y5: 透明插殼（帶 LED/24V DC）
TB3VY4: 透明插殼
⋮ （帶壓敏電阻 +LED/220V AC）

訂貨舉例：
1) 需要：直接出線式、電壓 :24V/DC、G1/4 接管口徑、三口二位直動型高頻電控換向閥、帶脚架、黑色插殼。
正確型號 : FDH3102–5G–SB3–F
2) 需要：插座式、電壓 :24V/DC、G1/4 接管口徑、三口二位直動型高頻電控換向閥、不帶脚架、透明插殼。
正確型號 : FDH3102–5D–TB3

註：2 若作常閉型使用，衹要把 R 孔爲供氣孔，P 孔爲排氣孔。

結構圖 Structure Chart



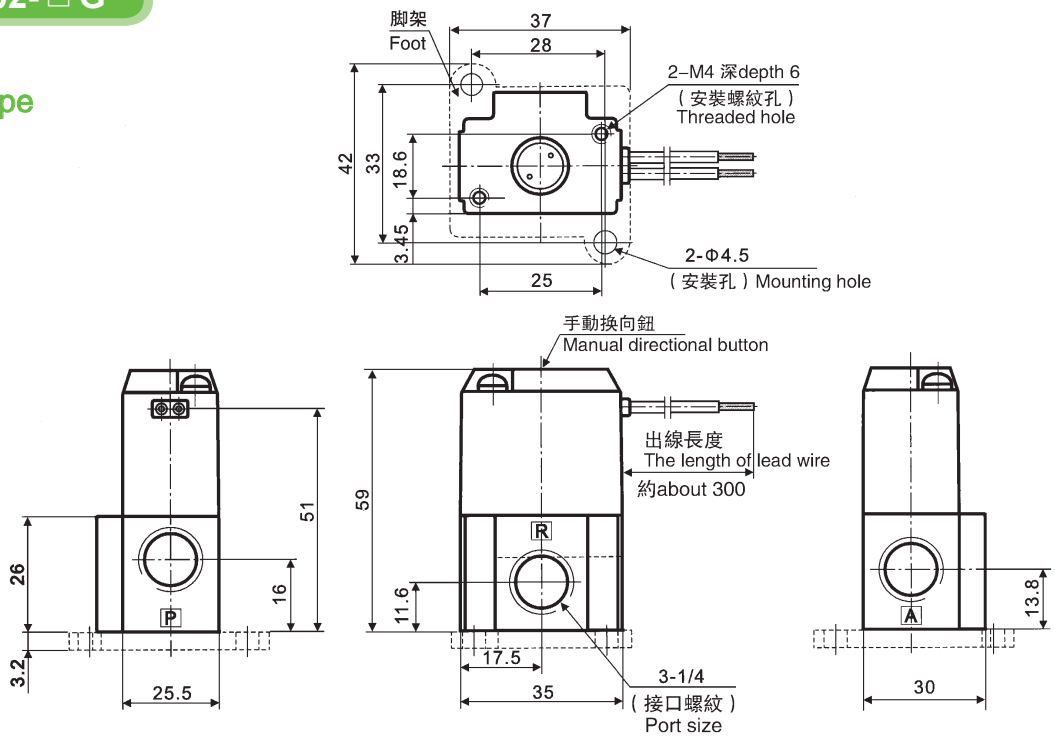
零件表 Part List

序號 NO.	名稱 Name	材料 Material
1	閥蓋 Valve cover	黃銅 Brass
2	彈簧 Spring	不銹鋼絲 Stainless steel wire
3	閥芯 Valve core	不銹鋼 Stainless steel
4	密封圈 Seal ring	PU
5	閥體 Valve body	鋁合金 Aluminium alloy
6	O 型圈 O–ring	NBR
7	靜鐵心 Whisht iron core	純鐵 Iron
8	頂杆 Top pole	不銹鋼 Stainless steel
9	動鐵心 Move iron core	純鐵 Iron
10	線圈 Coil	電磁材料 Electromagnetism material

外觀尺寸 Overall Dimension

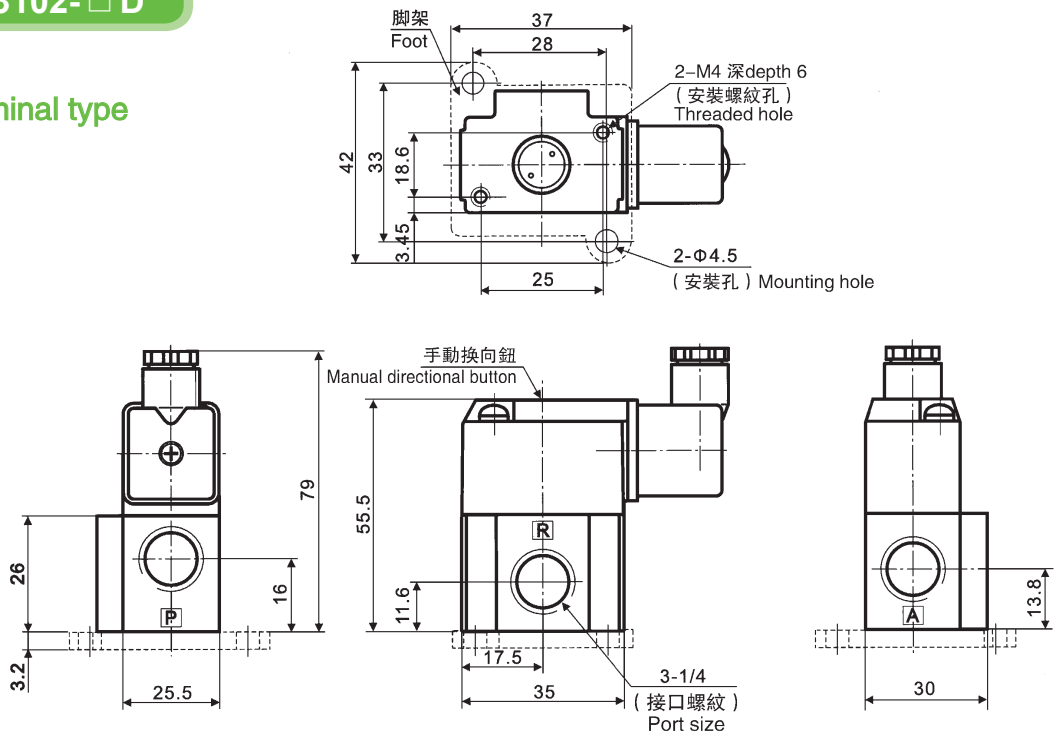
FDH3102-□G

直接出線式
Grommet type



FDH3102-□D

插座式
DIN Terminal type



特點 Features

本系列閥爲引導式電控換向閥，截止式結構、高壓、性能穩定。

This series valve is the direction–changer valve, type stop structure, stable performance, safety reliable comprehensively used all kinds of blower.

規格 Specification

型 號 Model	FQS23JD-08	FQS23JD-15
位置數 Position Number	三口二位 3/2 Way	
動作方式 Acting Type	內部引導式 Internal Piloted	
工作介質 Working Medium	經40μm過濾的壓縮空氣 Compressed Air	
配管口徑 G Port Size	1/4"	1/2"
使用壓力範圍 MPa Operating Pressure Range	0.2 ~ 1.6	
使用溫度範圍 Ambient Temperature	–5 ~ 60℃	
使用電壓範圍 Voltage Range	± 10%	

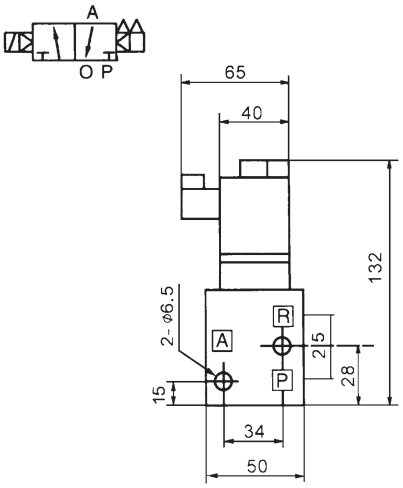
訂購代碼 Ordering Code

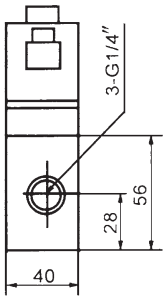
FQS – 23 – JD – 8 – AC110V

- FQS: 系列 高壓電磁閥 Series High pressure solenoid valve
- 23: 位置數 三口二位 Position Number 3/2 way
- JD: 結構形式 截止型 Struction Stop type
- 8: 通徑 Port Size 08: G1/4" 15: G1/2"
- AC110V: 標準電壓 Standard Voltage
  - DC12V
  - DC24V
  - AC24V 50Hz/60Hz
  - AC110V 50Hz/60Hz
  - AC220V 50Hz/60Hz
  - AC380V 50Hz/60Hz

外觀尺寸 Overall Dimension

FQS23JD-08





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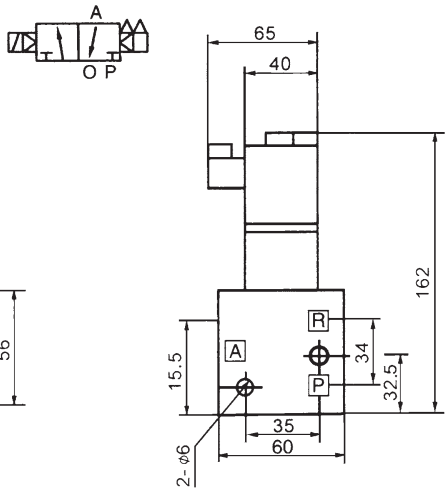
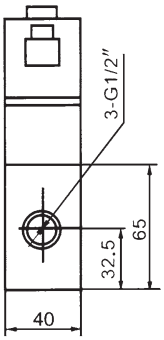




訂購代碼 Ordering Code

2V – 025 – 06 – AC110V – V

2V — 規格代碼
2V: 二口二位電磁閥
Specification
2V: 2/2 way solenoid valve

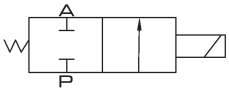
025 — 流量孔徑
Orifice Size
010: 1.0mm
025: 2.5mm
130: 13mm
250: 25mm

06 — 接管口徑
Port Size
M4: M4 × 0.7
06: 1/8″
08: 1/4″
10: 3/8″
15: 1/2″
20: 3/4″
25: 1″

AC110V — 標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

V — 油封代號
空白：NBR
V：VITON(高溫用)
Sealing
Blank: NBR
V: Viton (for high temperature gas)

圖形符號 Symbol

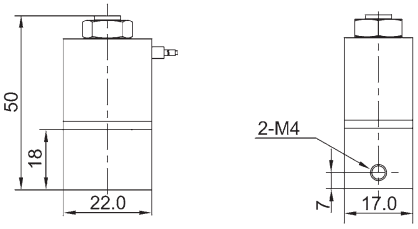


規格 Specification

型 號 Model	2V010-M4	2V025-06	2V025-08	2V130-10	2V130-15	2V250-20	2V250-25
工作介質 Working Medium	空氣、水、油 Air, Water, Oil						
動作方式 Operation	直動式 Direct			引導式 Internal piloted			
型式 Type	常閉型 Normal Close						
流量孔徑 Orifice	1.0mm	2.5mm		13mm		25mm	
CV 值 CV Value	0.04	0.23		6.2		23	
接管口徑 Port Size	M4 × 0.7	1/8″	1/4″	3/8″	1/2″	3/4″	1″
使用流體粘滯度 Operation Fluid Viscosity	20 CST以下 Below 20 CST						
使用壓力 Working–pressure	空氣、水、油 Air, Water, Oil 0.05 ~ 0.7MPa						
最大耐壓力 Max. Test Pressure	1.2MPa	1.6MPa		1.0MPa			
工作溫度 Max. Ambient Temperature	–10 ~ 80℃						
使用電壓範圍 Operating Voltage Tolerance	± 10%						
保護等級 Protect Class	IP65						
耗電量 Power Consumption	AC:6.5VA DC:6.5W						
絶緣性 Insulation	F級 / F Class						
本體材質 Material of Body	鋁或銅(鍍鎳處理) Aluminum or Brass (Nickel Plated)			黃 銅 Brass			
油封材質 Material of Oil Seal	NBR 或 or VITON			NBR 或 or VITON			
最短勵磁時間 Response Time	0.05秒 Sec.						

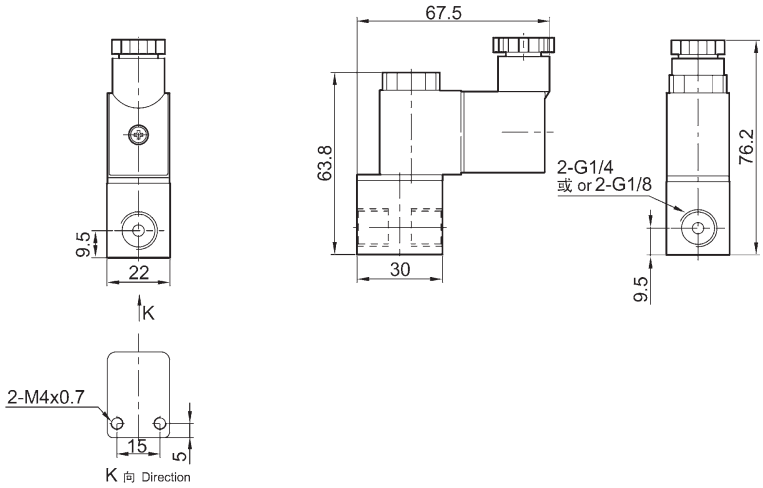
外觀尺寸 Overall Dimension

2V010-M4



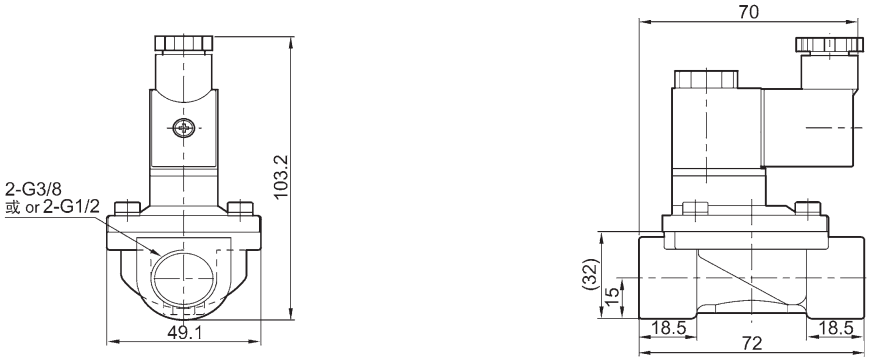
2V025-06

2V025-08



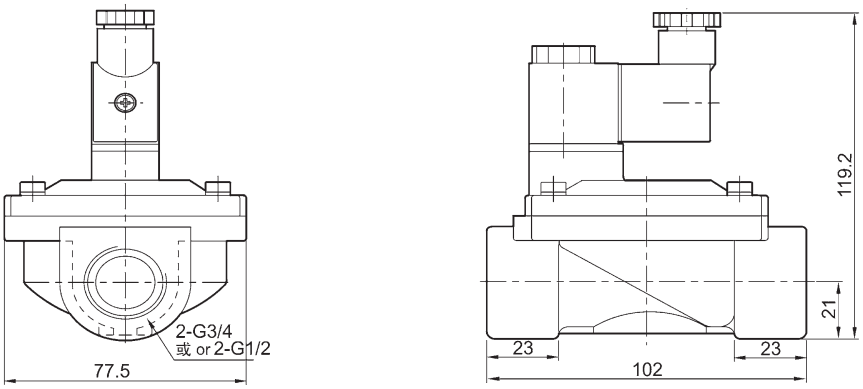
2V130-10

2V130-15



2V250-20

2V250-25



訂購代碼 Ordering Code

2W – 025 – 08 – AC110V – E

規格代碼
2W: 二口二位電磁閥 – 直動式
2WH: 二口二位電磁閥 – 直動式 (高壓型)
2S: 不銹鋼二口二位電磁閥 – 直動式
2SH: 不銹鋼二口二位電磁閥 – 直動式 (高壓型)
Specification
2W: 2/2 way brass body
2WH: 2/2 way brass body high pressure
2S: 2/2 way stainless steel body
2SH: 2/2 way stainless steel body high pressure

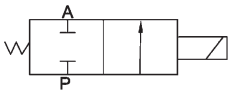
流量孔徑 Orifice Size
012: 1.2mm
020: 2mm
025: 2.5mm
040: 4mm

接管口徑 Port Size
M4: M4 × 0.7
06: 1/8″
08: 1/4″
10: 3/8″

標準電壓 Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

油封代號
空白：NBR
E：EPDM (微酸微鹼)
V：VITON (高溫、瓦斯及真空用)
Sealing
Blank: NBR
E: EPDM (for steam)
V: VITON (for high temperature gas and vacuum)

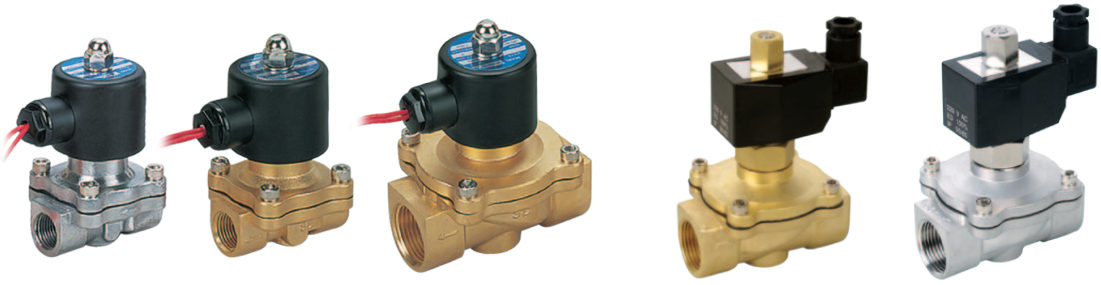
圖形符號 Symbol



規格 Specification

型 號 Model	2W025-06	2W025-08	2W040-10	2WH012-06	2WH012-08	2WH020-10
	2S025-06	2S025-08	2S040-10	2SH012-06	2SH012-08	2SH020-10
工作介質 Working Medium	空氣、水、油、瓦斯 Air, Water, Oil, Gas			空氣、水、油 Air, Water, Oil		
動作方式 Operation	直動式 Direct					
型式 Type	常閉型 Normal Close					
流量孔徑 Orifice	2.5mm		4mm	1.2mm		2mm
CV 值 CV Value	0.23		0.60	0.05		0.15
接管口徑 Port Size	1/8″	1/4″	3/8″	1/8″	1/4″	3/8″
使用流體粘滯度 Operation Fluid Viscosity	20 CST以下 Below 20 CST					
使用壓力 Working–pressure	0 ~ 0.7MPa			0 ~ 2.0MPa		
最大耐壓力 Max. Test Pressure	1.0MPa			3.5MPa		
工作溫度 Max. Ambient Temperature	–5 ~ 80℃					
使用電壓範圍 Operating Voltage Tolerance	± 10%					
本體材質 Material of Body	2W: 黃 銅 / Brass 2S: 不銹鋼 / Stainless Steel					
油封材質 Material of Oil Seal	NBR, EPDM 或 (or) VITON					

2W(大口徑) 系列 2W Series (Large Port)



訂購代碼 Ordering Code

2W – 160 – 15 – AC110V – V

規格代碼
2W: 二口二位電磁閥 – 直動式
2S: 不銹鋼二口二位電磁閥 – 直動式
Specification
2W: 2/2 Way Solenoid Valve (Direct Operated)
2S: 2/2 Way Stainless Steel Solenoid Valve (Direct Operated)

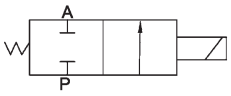
流量孔徑
Orifice size
160: 16mm
200: 20mm
250: 25mm
350: 35mm
400: 40mm
500: 50mm

接管口徑
Port Size
10: 3/8″
15: 1/2″
20: 3/4″
25: 1″
35: 1 1/4″
40: 1 1/2″
50: 2″

標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

油封代號
空白：NBR
V：VITON
(高溫、瓦斯及真空用)
Sealing
Blank：NBR
V：VITON
(for high temperature gas and vacuum)

圖形符號 Symbol

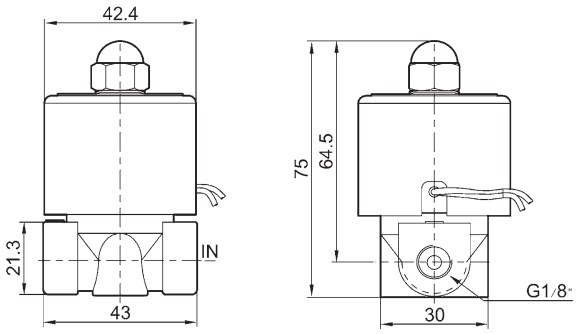


規格 Specification

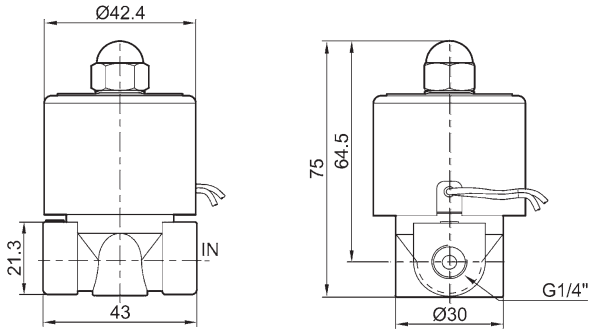
型 號 Model	2W160-10	2W160-15	2W200-20	2W250-25	2W350-35	2W400-40	2W500-50
	2S160-10	2S160-15	2S200-20	2S250-25	2S350-35	2S400-40	2S500-50
工作介質 Working Medium	空氣、水、油 Air, Water, Oil						
動作方式 Operation	直動式 Direct						
型式 Type	常閉型 Normal Close						
流量孔徑 Orifice	16 mm		20 mm	25 mm	35 mm	40 mm	50 mm
CV 值 CV Value	4.8		7.6	12	24	29	48
接管口徑 Port Size	3/8″	1/2″	3/4″	1″	1 1/4″	1 1/2″	2″
使用流體粘滯度 Operation Fluid Viscosity	20 CST以下 Below 20 CST						
使用壓力 Working–pressure	空氣 Air 0 ~ 0.7MPa; 水 Water 0 ~ 0.5MPa; 油 Oil 0 ~ 0.5MPa						
最大耐壓力 Max. Test Pressure	1.0MPa						
工作溫度 Max. Ambient Temperature	–5 ~ 80℃						
使用電壓範圍 Operating Voltage Tolerance	± 10%						
本體材質 Material of Body	2W: 黃 銅 / Brass 2S: 不銹鋼 / Stainless Steel						
油封材質 Material of Oil Seal	NBR 或 (or) VITON						

外觀尺寸 Overall Dimension

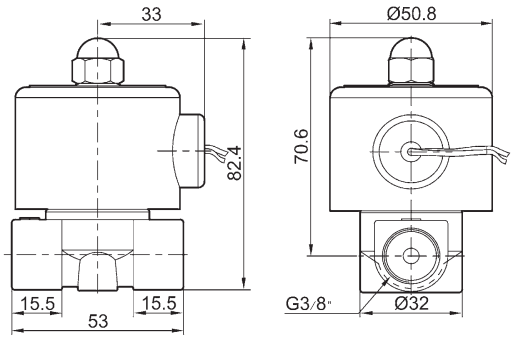
2W025-06 & 2WH012-06



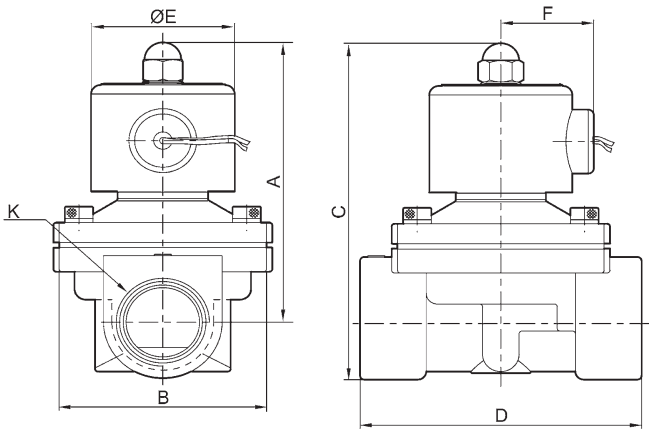
2W025-08 & 2WH012-08



2W040-10 & 2WH20-10

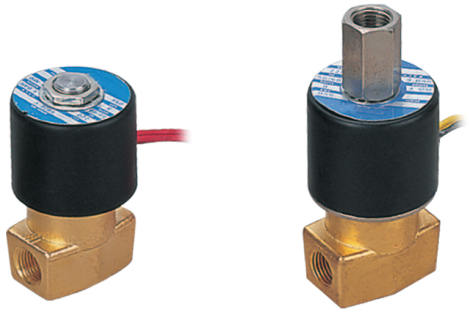


2W 大口徑 Large Port



尺寸表 Dimension

型 號 Model	A	B	C	D	E	F	K
2W160-10	101.5	57	117	69	50	36	G3/8
2W160-15	101.5	57	117	69	50	36	G1/2
2W200-20	107	57	123.5	73	50	36	G3/4
2W250-25	111.5	73.5	134.5	99	50	36	G1
2W350-35	142	95	172	123	70.5	56	G1 1/4
2W400-40	142	95	172	123	70.5	56	G1 1/2
2W500-50	172	123	209	168	70.5	56	G2

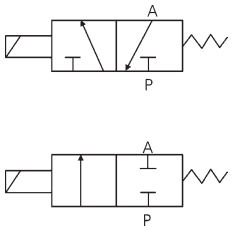


訂購代碼 Ordering Code

FG 23 – 06 – AC220V

- FG: 芳銳品牌 Fonray
- 23: 位置數 Valve Type
  - 22：三口二位
  - 23：三口二位
  - 22：3/2 way
  - 23：3/2 way
- 06: 接管口徑 Port Size
  - 06: 1/8″
  - 08: 1/4″
- AC220V: 標準電壓 Standard Voltage
  - DC12V
  - DC24V
  - AC24V 50Hz/60Hz
  - AC36V 50Hz/60Hz
  - AC110V 50Hz/60Hz
  - AC220V 50Hz/60Hz
  - AC380V 50Hz/60Hz

圖形符號 Symbol

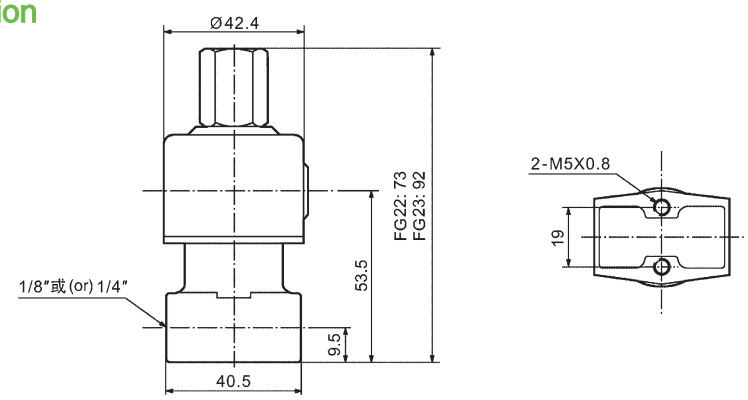


規格 Specification

型 號 Model	FG22-06		FG22-08		FG23-06	FG23-08
工作介質 Working Medium	空氣、水、油、 Air, Water, Oil,				空氣、 Air	
流量孔徑 Aperture of Flow Rate (mm)	1.6	2.4	3.2	4.0	1.6	
CV 值 CV Value	0.10	0.21	0.33	0.43	0.10	
接管口徑 Port Size	1/8″		1/4″		1/8″	1/4″
使用壓力範圍 Working–pressure Range (Kgf/cm^2)	0~15	0~10	0~7	0~5	0~9	
電壓範圍 Voltage Range	± 10%					
油封材質 Material of Oil Seal	NBR 或(or) VITON					

外觀尺寸 Overall Dimension

FG 系列 Series



訂購代碼 Ordering Code

2P – 025 – 06 – AC110V – W

規格代碼
2P：二口二位電磁閥（塑鋼型）
Specification
2P: 2/2 way

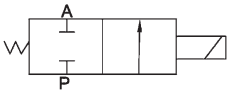
流量孔徑
Orifice Size
025: 2.5 mm

接管口徑
Port Size
06: 1/8″
08: 1/4″

標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

接線形式
空白：標準端子式
LD: 茶色帶燈端子式
LD_1: 白色帶燈端子式
W: 出線式
Wiring
Blank: Without light terminal
LD: Brown with light terminal
LD_1: White with light terminal
W: Lead wire

圖形符號 Symbol

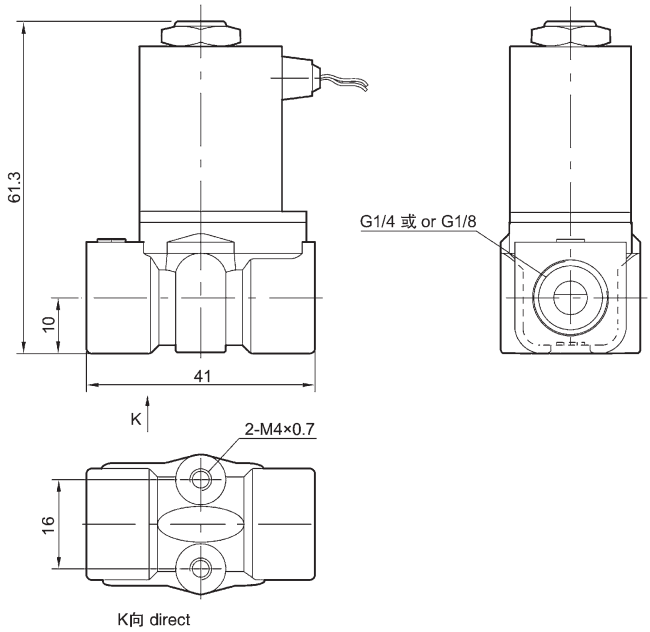


規格 Specification

型 號 Model	2P025-06	2P025-08
工作介質 Working Medium	空氣、水、油、瓦斯 Air, Water, Oil, Gas	
動作方式 Operation	直動式 Direct	
型式 Type	常閉型 Normal Close	
流量孔徑 Orifice	2.5mm	
CV 值 CV Value	0.23	
接管口徑 Port Size	1/8″	1/4″
使用流體粘滯度 Operation Fluid Viscosity	20 CST以下 Below 20 CST	
使用壓力 Working–pressure	0 ~ 0.7MPa	
最大耐壓力 Max. Test Pressure	1.0MPa	
工作溫度 Max. Ambient Temperature	–5 ~ 80℃	
使用電壓範圍 Operating Voltage Tolerance	± 10%	
本體材質 Material of Body	工程塑料 Engineering Plastic	
油封材質 Material of Oil Seal	NBR 或(or) VITON	

外觀尺寸 Overall Dimension

2P 系列 Series

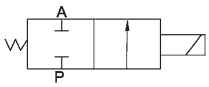


訂購代碼 Ordering Code

2L – 170 – 15 – AC110V

- 2L：規格代碼 Specification
  2L: 2/2 Way for steam
- 170：流量孔徑 Orifice Size
  170: 17mm
  200: 22mm
  300: 30mm
  500: 50mm
- 15：接管口徑 Port Size
  10: 3/8″
  15: 1/2″
  20: 3/4″
  25: 1″
  35: 1 1/4″
  40: 1 1/2″
  50: 2″
- AC110V：標準電壓 Standard Voltage
  DC12V
  DC24V
  AC24V 50Hz/60Hz
  AC110V 50Hz/60Hz
  AC220V 50Hz/60Hz
  AC380V 50Hz/60Hz

圖形符號 Symbol

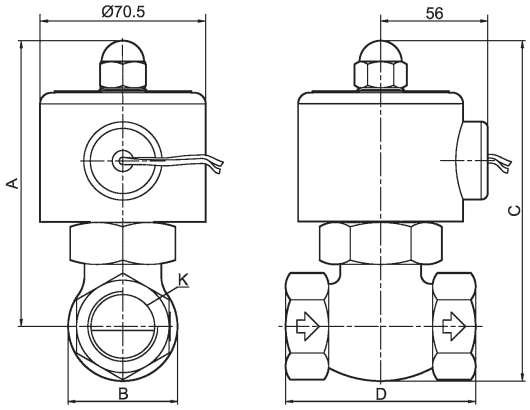


規格 Specification

型 號 Model	2L170-10	2L170-15	2L170-20	2L200-25	2L300-35	2L300-40	2L500-50
工作介質 Working Medium	空氣、水、蒸汽 Air, Water, Steam						
動作方式 Operation	引導式 Internal Piloted						
型式 Type	常閉型 Normal Close						
流量孔徑 Orifice	17mm			22mm	30mm		50mm
CV 值 CV Value	4.8			12	20		48
接管口徑 Port Size	3/8″	1/2″	3/4″	1″	1 1/4″	1 1/2″	2″
使用流體粘滯度 Operation Fluid Viscosity	20 CST以下 Below 20 CST						
使用壓力 Working–Pressure	0.1 ~ 1.5 MPa						
最大耐壓力 Max. Test Pressure	2.25MPa						
工作溫度 Max. Ambient Temperature	–5 ~ 180 ℃						
使用電壓範圍 Operating Voltage Tolerance	± 10%						
本體材質 Material of Body	黃 銅 Brass						
油封材質 Material of Oil Seal	PTFE						

外觀尺寸 Overall Dimension

2L 系列 Series



尺寸表 Dimension

型 號 Model	A	B	C	D	K
2L170-10	125	42	146	82	G3/8
2L170-15	125	42	146	82	G1/2
2L170-20	125	42	146	82	G3/4
2L200-25	136	52	162	90.5	G1
2L300-35	148	74	185	111	G1 1/4
2L300-40	148	74	185	111	G1 1/2
2L500-50	176	86	223	163	G2

訂購代碼 Ordering Code

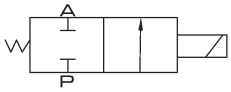
FVX2120 – 08 – AC220V

規格代碼
Specification

流量孔徑
Orifice Size
06: 1/8″
08: 1/4″
10: 3/8″
15: 1/2″

標準電壓
Standard Voltage
DC12V
DC24V
AC24V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

圖形符號 Symbol

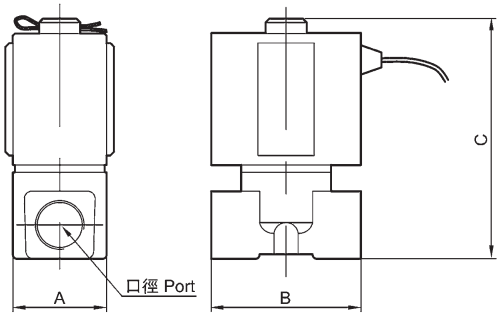


規格 Specification

型 號 Model	FVX2120-06	FVX2120-08	FVX2120-10	FVX2120-15
工作介質 Working Medium	空氣、水、蒸汽 Air, Water, Steam			
動作方式 Operation	直動式 Direct			
型式 Type	常閉型 Normal Close			
最大耐壓力 Max. Test Pressure	1.05MPa			
使用壓力 Working–pressure	0 ~ 1.0MPa			
流量孔徑 Orifice	3mm		13mm	
接管口徑 Port Size	1/8″	1/4″	3/8″	1/2″
使用溫度範圍 Max. Ambient Temperature	–5 ~ 150℃		–5 ~ 150℃	
油封材質 Material of Oil Seal	VITON		NBR	

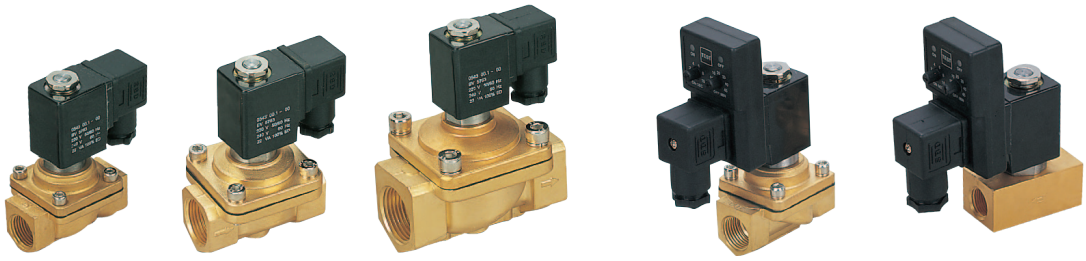
外觀尺寸 Overall Dimension

FVX 系列 Series



尺寸表 Dimension

型 號 Model	口徑 Bore	A	B	C
FVX2120–06	1/8	25	40	64
FVX2120–08	1/4	25	40	64
FVX2120–10	3/8	48	68	110
FVX2120–15	1/2	48	68	110

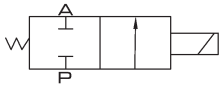


訂購代碼 Ordering Code

PU – 220 – 01 – AC110V – E

- **PU** — 規格代碼 PU 二口二位電磁閥 Specification PU 2/2 Way
- **220** — 動作方式 220: 直動式 Operation 220: Direct
- **01** — 接管口徑 Port Size
  - 01:1/8″
  - 02:1/4″
  - 03: 3/8″
  - 04: 1/2″
  - 06: 3/4″
  - 08: 1″
- **AC110V** — 標準電壓 Standard Voltage
  - DC12V
  - DC24V
  - AC24V 50Hz/60Hz
  - AC110V 50Hz/60Hz
  - AC220V 50Hz/60Hz
  - AC380V 50Hz/60Hz
- **E** — 油封代號
  - 空白：NBR
  - E：EPDM(蒸汽用)
  - V：VITON
  - (高溫、瓦斯及真空用)
  - Sealing
  - Blank: NBR
  - E: EPDM for steam
  - V: VITON (for high temperature, gas, vacuum)

圖形符號 Symbol

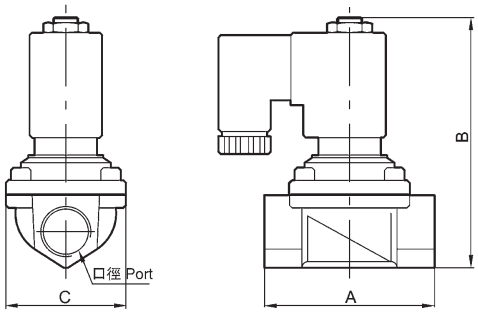


規格 Specification

型 號 Model	PU220-01	PU220-02	PU220-03	PU220-04	PU220-06	PU220-08
工作介質 Working Medium	空氣、水、油 Air, Water, Oil					
動作方式 Operation	直動式 Direct					
型式 Type	常閉型 Normal Close					
流量孔徑 Orifice	1.5mm	2.3mm	8.0mm	13mm	20mm	25mm
CV 值 CV Value	0.10	0.18	1.00	4.00	8.60	11.00
接管口徑 Port Size	1/8″	1/4″	3/8″	1/2″	3/4″	1″
使用介質粘滯度 Operation Fluid Viscosity	50 CST 以下 Below					
使用壓力 Working–pressure	0 ~ 0.7MPa					
最大耐壓力 Max. Test Pressure	1.05MPa					
工作溫度 Max. Ambient Temperature	–5 ~ 80℃					

外觀尺寸 Overall Dimension

PU



尺寸表 Dimension

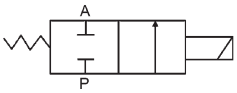
型 號 Model	口徑 Bore	A	B	C
PU220-01	1/8	22	72	22
PU220-02	1/4	35	75.5	25.4
PU220-03	3/8	55	79.5	30
PU220-04	1/2	66.5	101	48
PU220-06	3/4	71	107	48
PU220-08	1	96	120	70

訂購代碼 Ordering Code

PU – 225 – 03 – S – AC220V

- PU：規格代碼 PU 二口二位電磁閥 Specification PU 2/2 Way
- 225：動作方式 225: 引導式 Operation 225: Internal pilot
- 03：接管口徑 Port Size 03:3/8″ 04:1/2″ 06:3/4″ 08:1″
- S：安裝形式 S: 蒸汽型 Fix Form S: Steam
- AC220V：標準電壓 Standard Voltage AC220V AC110V DC12V DC24V

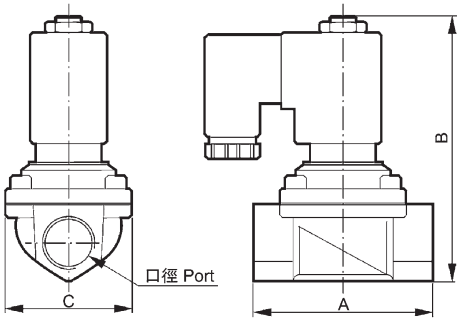
圖形符號 Symbol



規格 Specification

型 號 Model	PU225-03S	PU225-04S	PU225-06S	PU225-08S
工作介質 Working Medium	空氣、水、油、瓦斯 Air, Water, Oil, Gas			
動作方式 Operation	引導式 Internal Piloted			
型式 Type	常閉型 Normal Close			
流量孔徑 Orifice	13mm	13mm	25mm	25mm
CV 值 CV Value	4.50	4.50	12.00	12.00
接管口徑 Port Size	3/8″	1/2″	3/4″	1″
使用介質粘滯度 Operation Fluid Viscosity	50 CST			
使用壓力 Working–pressure	0.05 ~ 1.0MPa			
最大耐壓力 Max. Test Pressure	1.5MPa			
工作溫度 Ambient Temperature	–10 ~ 185℃			

外觀尺寸 Overall Dimension



尺寸表 Dimension

型 號 Model	口徑 Bore	A	B	C
PU225-03S	3/8″	66.5	122.7	48.0
PU225-04S	1/2″	66.5	122.7	48.0
PU225-06S	3/4″	100.0	152.0	70.0
PU225-08S	1″	100.0	152.0	70.0

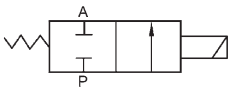
PU225 系列 PU225 Series

訂購代碼 Ordering Code

PU – 225 – 03 – A – AC220V – T

- **PU** — 規格代碼
  PU：二口二位電磁閥
  SPU：不銹鋼二口二位電磁閥
  Specification
  PU：2/2 way
  SPU：2/2 way stainless steel
- **225** — 動作方式
  225: 引導式
  Operation
  225: Internal piloted
- **03** — 接管口徑
  Port Size
  03:3/8″
  04:1/2″
  06:3/4″
  08:1″
  12:1 1/4″
  14:1 1/2″
  20:2″
- **A** — 安裝形式
  A: 標準型
  F: 法蘭安裝型
  Fix Form
  A: Standard type
  F: Flange install
- **AC220V** — 標準電壓
  Standard Voltage
  AC220V
  AC110V
  DC12V
  DC24V
- **T** — 線圈形式
  空白：標準線圈
  T: 帶定時線圈
  Coil Form
  Blank: Standard coil
  T: Coil with time

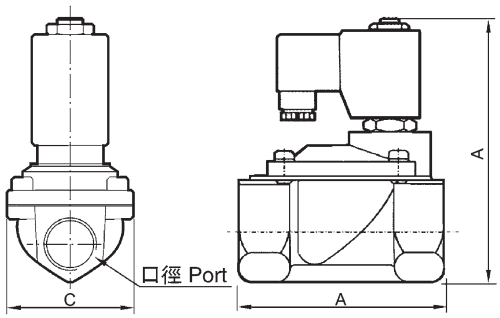
圖形符號 Symbol



規格 Specification

型 號 Model	PU225-03A / SPU225-03A	PU225-04A / SPU225-04A	PU225-06A / SPU225-06A	PU225-08A / SPU225-08A	PU225-12A / SPU225-12A	PU225-14A / SPU225-14A	PU225-20A
工作介質 Working Medium	空氣、水、油 Air, Water, Oil						
動作方式 Operation	引導式 Internal Piloted						
型式 Type	常闭型 Normal Close						
流量孔徑 Orifice	13mm	13mm	25mm	25mm	38mm	38mm	50mm
CV 值 CV Value	4.50	4.50	12.00	12.00	22.00	30.00	48
接管口徑 Port Size	3/8″	1/2″	3/4″	3/4″	1 1/4″	1 1/2″	2″
本體介質 Medium of Body	黃铜或钢 Brass or Steel						
使用介質粘滞度 Operation Fluid Viscosity	50 CST以下 Below						
使用壓力 Working–pressure	0.05 ~ 1.0MPa						
最大耐壓力 Max. Test Pressure	1.5MPa						
工作溫度 Ambient Temperature	–5 ~ 80℃						

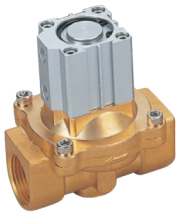
外觀尺寸 Overall Dimension



尺寸表 Dimension

型 號 Model	口徑 Bore	A	B	C
PU225-03A	3/8″	66.5	106.5	48. 0
SPU225-03A				
PU225-04A	1/2″	66.5	106.5	48.0
SPU225-04A				
PU225-06A	3/4″	96.0	126.0	70.0
SPU225-06A				
PU225-08A	1″	96.0	126.0	70.0
SPU225-08A				

型 號 Model	口徑 Bore	A	B	C
PU225-12 A	1 1/4″	131.0	145.5	96.0
SPU225-12A				
PU225-14A	1 1/2″	131.0	145.5	96.0
SPU225-14A				
PU225-20A	2″	160.0	160.5	112



訂購代碼 Ordering Code

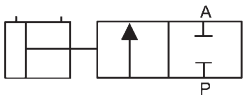
2Q – 200 – 25

規格代碼
2Q: 二口二位氣動閥
Specification
2Q: 2/2 Way Air Control

流量孔徑
Orifice Size
160: 16mm　200: 20mm
250: 25mm　350: 35mm
400: 40mm　500: 50mm

接管口徑
Port Size
10: 1/4″　15: 1/2″
20: 3/4″　25: 1″
35: 1 1/4″　40: 1 1/2″
50: 2″

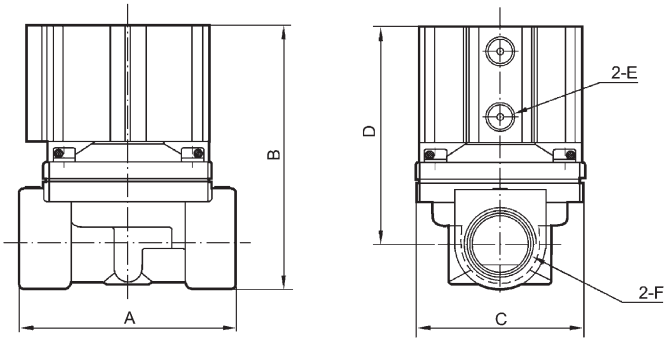
圖形符號 Symbol



規格 Specification

型 號 Model	2Q160-10/15	2Q200-20	2Q250-25	2Q350-35	2Q400-40	2Q500-50
使用介質 Working Medium	空氣、水、油、瓦斯 Air, Water, Oil, Gas					
動作方式 Operation	直動式 Direct					
流量孔徑 Orifice	16mm	20mm	25mm	35mm	40mm	50mm
CV 值 CV Value	4.8	12	7.6	24	29	48
接管口徑 Port Size	1/4″ / 1/2″	3/4″	1″	1 1/4″	1 1/2″	2″
使用介質粘滯度 Operation Fluid Viscosity	50 CST以下 Below					
使用壓力範圍 Applied Pressure Range	0~0.7MPa					
最大耐壓力 Max. Test Pressure	1.05MPa					
控制壓力範圍 Control Pressure Range	0.3~0.6MPa					
工作溫度範圍 Ambient Temperature Range	–5~100℃					
本體材質 Material of Body	黃 銅 Brass					
油封材質 Material of Oil Seal	聚四氟乙烯(PTFE)					
控制接管口徑 Control Port Size	2–M5	2–G1/8″	2–G1/8″	2–G1/4″	2–G1/4″	2–G1/4″

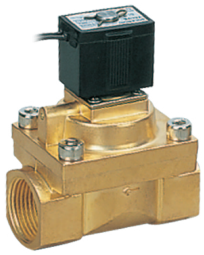
外觀尺寸 Overall Dimension



尺寸表 Dimension

型 號 Model	A	B	C	D	E	F
2Q160-10	66	83	57	70.5	M5	1/4″
2Q160-15	66	83	57	70.5	M5	1/2″
2Q200-20	92	108	78	87.5	1/8″	3/4″
2Q250-25	92	108	78	87.5	1/8″	1″
2Q350-35	124	125	95	100.5	1/4″	1 1/4″
2Q400-40	126	131	95	102.5	1/4″	1 1/2″
2Q500-50	168	152	125	117	1/4″	2″

FSG5404 系列 FSG5404 Series

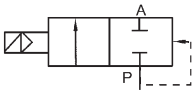


訂購代碼 Ordering Code

FSG – 5404 – 04 – AC220V – D

- FSG: 芳銳品牌 Fonray
- 5404: 型 號 Model
- 04: 接管口徑 Port Size
  - 04: 1/2″
  - 06: 3/4″
  - 08: 1″
- AC220V: 標準電壓 Standard Voltage
  - DC12V
  - DC24V
  - AC24V 50/60Hz
  - AC110V 50/60Hz
  - AC220V 50/60Hz
  - AC380V 50/60Hz
- D: 接線形式 Wiring
  - 空白 : 表示出線式鐵殼線圈
  - D: 接線盒式封塑線圈
  - Blank: Lead wire with steel covered coil
  - D: DIN terminal

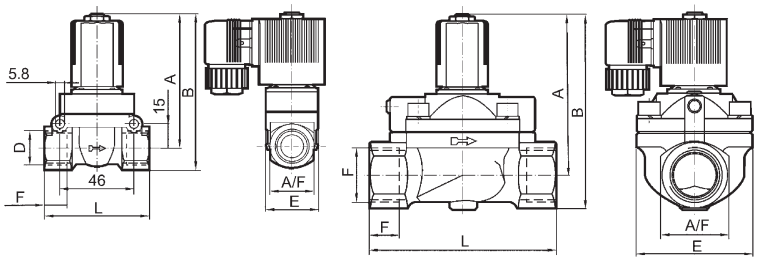
圖形符號 Symbol



規格 Specification

型 號 Model	FSG5404-04	FSG5404-06	FSG5404-08
使用介質 Working Medium	空氣、水、油 Air, Water, Oil		
動作方式 Operation	引導式 Internal Piloted		
型式 Type	常閉型 Normal Colse		
流量孔徑 Orifice	12mm	20mm	25mm
KV 值 KV Value	2.0	5.0	10.0
接管口徑 Port Size	1/2″	3/4″	1″
使用壓力 Applied Pressure Range	氣體 / 液體 Gas / Liquid: 0.1 ~ 5.0MPa	氣體 Gas: 0.1 ~ 4.0MPa 液體 Liquid: 0.1 ~ 2.5MPa	氣體 Gas: 0.1 ~ 4.0MPa 液體 Liquid: 0.1 ~ 2.5MPa
最大耐壓力 Max. Test Pressure	7.5MPa	6.0MPa	
工作溫度範圍 Ambient Temperature Range	–5~150℃		
使用電壓範圍 Applied Voltage Range	± 10%		
保護等級 Protection	IP65		
耗電量 Power Consumption	AC: 5.5VA DC: 9W		
絶緣性 Insulation	F 級 Class		
本體介質 Material of Body	黃 銅 Brass		
油封材質 Material of Oil Seal	聚四氟乙烯 (PTFE)		

外觀尺寸 Overall Dimension



尺寸表 Dimension

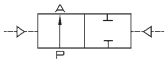
型 號 Model	內孔 Orifice mm	連接 接口 Port Size	A	B	F	D	L	A/F
FSG5404-04	12.0	1/2″	83.0	95.5	14	32	65	27
FSG5404-06	20.0	3/4″	99.5	119	16	60	92	40
FSG5404-08	25.0	1″	99.5	119	16	60	92	40

訂購代碼 Ordering Code

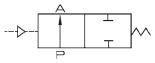
FL – JZE – 15 – D – 1 – NC

- FL: 芳銳品牌 Fonray FLJZE
- JZE: 規格代碼 JZE：角座閥 Specification JZE: Angle Valve
- 15: 公稱通徑 Orifice 15, 20, 25, 32, 40, 50
- D: 閥體材料 D：錫青銅 空白：不銹鋼 Material of Body D: Bronze Blank: S. Steel
- 1: 動作 F: 法蘭連接 1 爲單作用 2 爲雙作用 Mountings F: Flange 1: Single Acting 2: Double Acting
- NC: 常閉 NC：爲常閉 NO：爲常開 Normal Close NC: Normal Close NO: Normal Open

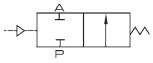
圖形符號 Symbol



雙作用型
Double function type



常閉型
Normal close type



常開型
Normal open type

規格 Specification

公稱通徑 Orifice size (mm)	接管螺紋 Port Thread (G)	Kv值 Kv (m^3/h)	最大工作壓力 Max.Working Pressure (MPa)	要求最小控制壓力 Required Min. Control Pressure (MPa)	聚酰胺 PA	介質溫度 Medium Tanperature	流向 Direction
15	G1/2″	4.2	0~1.6	0.39	50	–10~+180℃	A向或B向 Direction A or B
20	G3/4″	8	0~1.1	0.39	50		
25	G1″	19	0~1.1	0.42	63		
32	G1 1/4″	27.5	0~1.5	0.5	63		
40	G1 1/2″	42	0~1.25	0.44	63		
50	G2″	55	0~1.0	0.4	80		
65	G2 1/2″	65	0~1.0	0.4	100		

安裝與維修 Fix and Maintain

必須遵守適用的安全規範:

- 管道必須清潔無污染。
- 根據需要安裝，但最好使執行機構朝上。注意流向。
- 連接閥門注意對準管道，衹有在用户特殊要求時才取下執行機構。
- 打開或維修該角座閥之前先切斷流體和控制氣源并降低管道系統中的壓力。

- Clean the pipes carefully from any residue, dribble or welding residue, to avoid any damage to the seal.
- To be installed as required, preferably with actuator in upright position.
- Connect the pipes according to the reference points (flow direction) found on the valve body.
  Only disassemble actuator if required by customer.
- Before taking the valve apart, depressurize the medium supply and piloted air supply from piping system.

訂購代碼 Ordering Code

4H – 2 – 10 – C – 06 – N

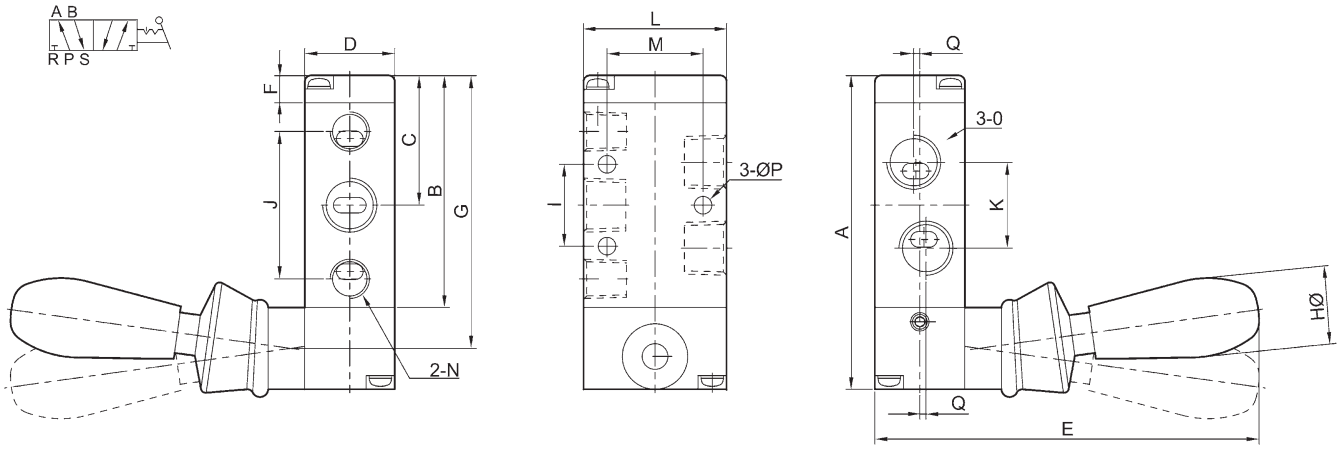
- **4H** — 規格代碼
  4H: 五口二（三）位
  Specification
  4H: 5/2(3) Way
- **2** — 系列代號
  Series Code
  2: 200 系列 Series
  3: 300 系列 Series
  4: 400 系列 Series
- **10** — 位置數
  10: 單頭雙位置
  30: 單頭三位置
  Position Number
  10: Single head two position
  30: Single head three position
- **C** — 中央位置符號
  C：中央封閉
  E：中央排氣
  P：中央壓力
  Middle Position
  C: Mid–position closed
  E: Mid–position exhausted
  P: Mid–position pressured
- **06** — 接口口徑
  Port Size
  06: G1/8″
  08: G1/4″
  10: G3/8″
  15: G1/2″
- **N** — 形式代號
  空白：五口二位鎖定型
  N：螺帽型
  Type
  Blank: 5/2 way lock type
  N: With nut

規格 Specification

型 號 Model	4H210-06	4H210-08	4H230-08	4H310-08	4H310-10	4H330-10	4H410-15	4H430-15
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air							
動作方式 Operation	直動式 Direct							
有效截面積 Effective Cross Section Area	14mm² (CV=0.78)	16mm² (CV=0.89)	12mm² (CV=0.67)	25mm² (CV=1.4)	30mm² (CV=1.68)	18mm² (CV=1.00)	50mm² (CV=2.79)	30mm² (CV=1.68)
接管口徑 Port Size	進氣＝出氣＝排氣 Inlet, Outlet, Exhaust Port ＝ G1/8″	進氣＝出氣 Inlet, Outlet ＝ G1/4″ 排氣 Exhaust Port ＝ G1/8″	進氣＝排氣＝出氣 Inlet, Outlet, Exhaust Port ＝ G1/4″	進氣＝排氣＝出氣 Inlet, Outlet, Exhaust Port ＝ G1/4″	進氣＝出氣 ＝ G3/8″ Inlet, Outlet ＝ G3/8″ 排氣 Exhaust Port ＝ G1/4″		進氣＝出氣＝排氣＝ G1/2″ Inlet, Outlet, Exhaust Port ＝ G1/2″	
使用壓力範圍 Working Pressure	0～0.8MPa							
使用溫度範圍 Working Temperature	0～60℃							

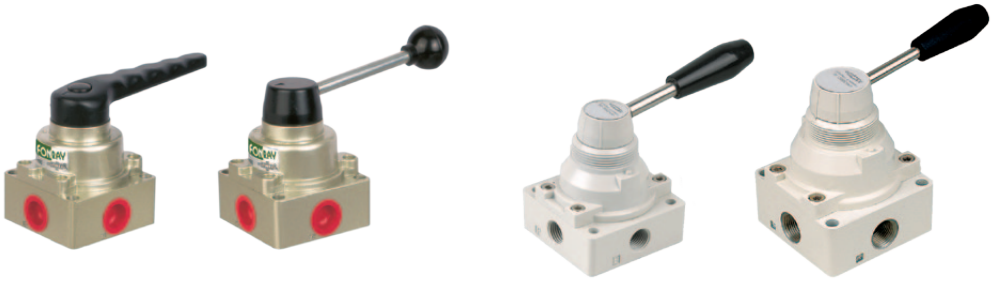
外觀尺寸 Overall Dimension

4H 系列 Series



尺寸表 Dimension

型號 Model / 符號 Symbol	4H210-08(06) / 4H230-08(06)-L	4H230-08(06)-S（自動復位）(Automatic Rebound)	4H310-10(08) / 4H330-10(08)-L	4H330-10(08)-S（自動復位）(Automatic Rebound)	4H410-15 / 4H430-15-L	4H430-15-S（自動復位）(Automatic Rebound)
A	76	95	96	115	126	147
B	56.5	75.5	72	91	102	123
C	31.5	31.5	40	60	55.5	76.5
D	22	22	27	27	34	34
E	95	95	100	100	110	110
F	6.5	6.5	7.5	7.5	7.5	7.5
G	66.5	85.5	84	103	114	135
H	18	18	18	18	18	18
I	20	20	24	24	28	28
J	36	36	45	45	63	63
K	21	21	24	24	36	36
L	35	35	40	40	50	50
M	21	21	27	27	35	35
N	G1/8	G1/8	G3/8	G3/8	G1/2	G1/2
O	G1/4(G1/8)	G1/4(G1/8)	G3/8(G1/4)	G3/8(G1/4)	G1/2	G1/2
P	4.3	4.3	4.3	4.3	5.5	5.5
Q	1.5(–)	1.5(–)	2(–)	2(–)	–	–



訂購代碼 Ordering Code

4HV – 2 – 30 – C – 06 – TC – S

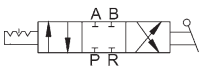
- 4HV: 規格代碼 4HV: 手動閥 Specification 4HV: Manual valve
- 2: 系列代號 Series 2: 2 系列 Series 3: 3 系列 Series 4: 4 系列 Series
- 30: 位置數 10: 四口二位 30: 四口三位 Position Number 10: 4/2 way 30: 4/3 way
- C: 中央位置符號 C：中央封閉 E：中央排氣 P：中央壓力 Middle Position C: Mid–position closed E: Mid–position exhausted P: Mid–position pressed
- 06: 接口口徑 Port Size 06: G1/8 08: G1/4 10: G3/8 15: G1/2 20: G3/4
- TC: 密封形式 空白 : NBR 陶瓷 : TC Seal Form Blank: NBR Ceramic: TC
- S: 螺母形式 空白 : 不帶螺母 S: 帶螺母 Nut Blank: Without nut S: With nut

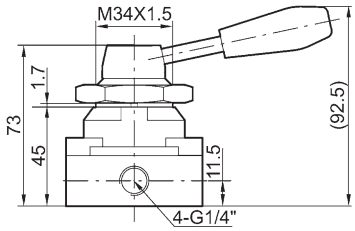
規格 Specification

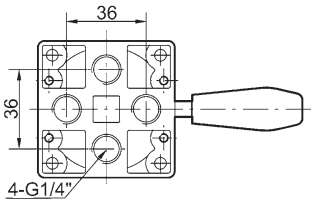
型 號 Model	4HV2□□□-06	4HV2□□□-08	4HV3□□□-08	4HV3□□□-10	4HV4□□□-15	4HV4□□□-20
工作介質 Working Medium	經 40 微米過濾的空氣 40 Micron Filtered Air					
接口口徑 Port Size	G1/8	G1/4	G1/4	G3/8	G1/2	G3/4
最高使用壓力 Working Pressure	1.0 MPa					
保證耐壓力 Max. Test Pressure	1.2 MPa					
使用溫度範圍 Max. Ambient Temperature	–5 ~ +60℃					
工作角度 Working Angle	90					

外觀尺寸 Overall Dimension

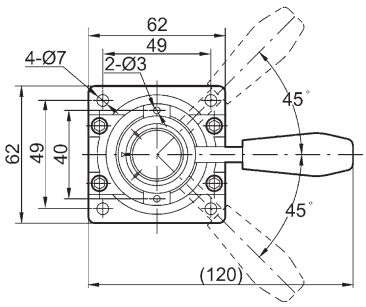
4HV230C-08





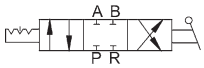


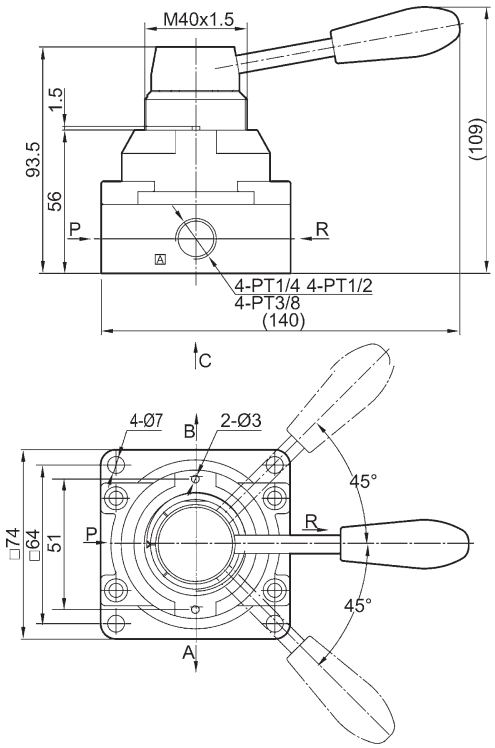
底面安裝 Base installation

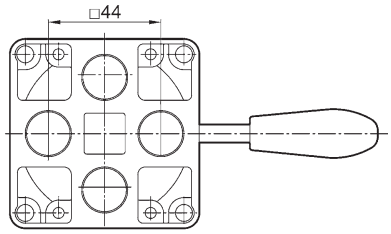


外觀尺寸 Overall Dimension

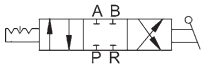
4HV330C-10

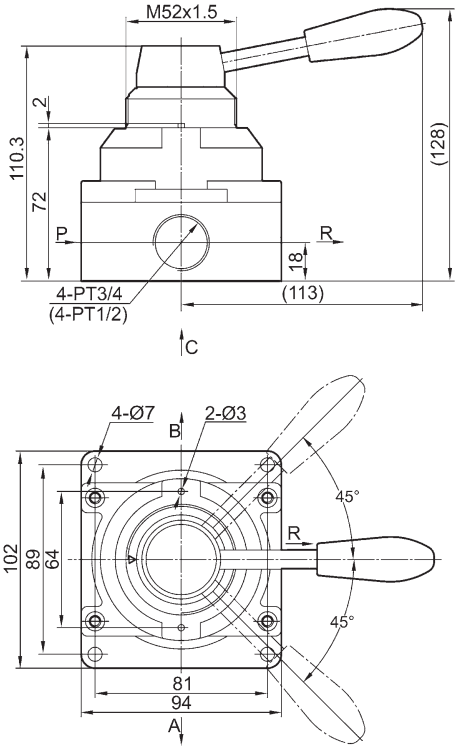


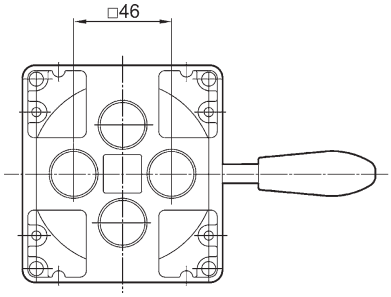




4HV430C-15







訂購代碼 Ordering Code

HV – 400 – 02 – B

- HV: 規格代碼 手動閥 Specification Manual valve
- 400: 系列號 Series
- 02: 接管口徑 Port Size 02: G1/4″ 03: G3/8″ 04: G1/2″
- B: 接管形式 空白：管接式 B：板接式 Connection type Blank: Threaded B: Sub–plated

K – 34 – R8 – L8

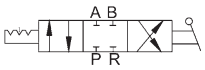
- K: 規格代碼 手動閥 Specification Manual valve
- 34: 系列號 Series 24: 四口二位 34: 四口三位 24: 4/2 Way 34: 4/3 Way
- R8: 接口代號 R8: 手動閥 Port Size R8: Manual valve
- L8: 接管形式 Connection Type L6: G1/8″ L8: G1/4″

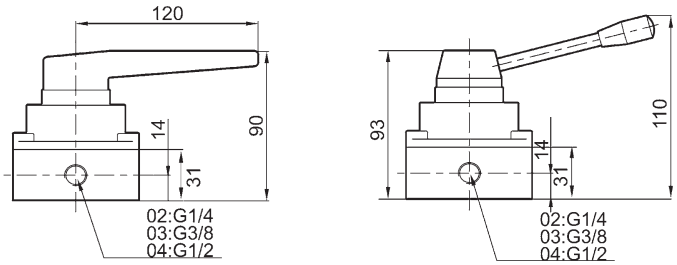
規格 Specification

型 號 Model	HV400-02	HV400-03	HV400-04	K34R8-L6	K34R8-L8
工作介質 Working Medium	經 40 微米過濾的空氣 40 Micron Filtered Air				
接口口徑 Port Size	G1/4″	G3/8″	G1/2″	G1/8″	G1/4″
有效截面積 Effective Cross Section Area	30 mm^2(CV=1.68)			18 mm^2(CV=1.00)	
使用壓力範圍 Working Pressure	0 ~ 0.8 MPa				
使用溫度範圍 Max. Ambient Temperature	0 ~ 60℃				

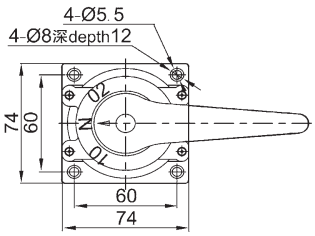
外觀尺寸 Overall Dimension

HV400

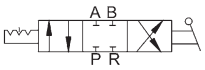


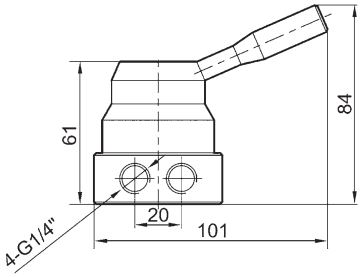


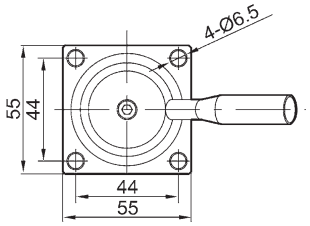
铁手柄时主视图



K34R8-L8







訂購代碼 Ordering Code

4L/3L – 2 – 10 – 06

規格代碼
4L: 五口二位手拉閥
3L: 三口二位手拉閥
Specification
4L: 5/2 Way Hand Draw Valve
3L: 3/2 Way Hand Draw Valve

系列號
Series
100 系列 Series
200 系列 Series
300 系列 Series

位置數
10: 單頭雙位置
Valve Type
10: Single head Double Position

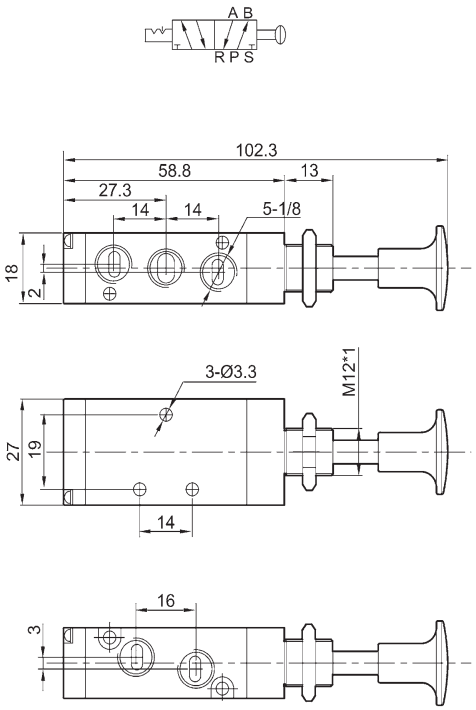
接口口徑
Port Size
06：G1/8″
08：G1/4″
10：G3/8″

規格 Specification

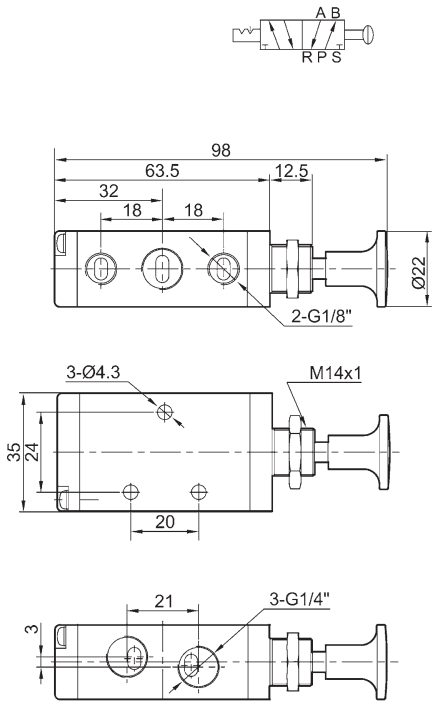
型 號 Model	4L110-06	4L210-06	4L210-08	3L210-06	3L110-06	4L310-08	4L310-10	3L310-08	3L310-10
工作介質 Working Medium	經 40 微米過濾的空氣 40 Micron Filtered Air								
接管口徑 Port Size	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G1/8″		進氣 = 出氣 Inlet, Outlet = G1/4″ 排氣 Exhaust Port = G1/8″	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G1/8″	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G1/4″	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G1/4″	進氣 = 出氣 Inlet, Outlet = G3/8″ 排氣 Exhaust Port = G1/4″	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G1/4″	進氣 = 出氣 = 排氣 Inlet, Outlet, Exhaust Port = G3/8″
有效截面積 Effective Cross Section Area	$10mm^2$ (CV=0.56)	$14mm^2$ (CV=0.78)	$16mm^2$ (CV=0.89)	$14mm^2$ (CV=0.78)	$16mm^2$ (CV=0.89)	$25mm^2$ (CV=1.40)	$30mm^2$ (CV=1.68)	$25mm^2$ (CV=1.40)	$30mm^2$ (CV=1.68)
使用壓力範圍 Working Pressure	0 ~ 0.8MPa								
使用溫度範圍 Working Temperature	0 ~ 60℃								
位置數 Position Number	五口二位 5/2 way			三口二位 3/2 way		五口二位 5/2 way		三口二位 3/2 way	

外觀尺寸 Overall Dimension

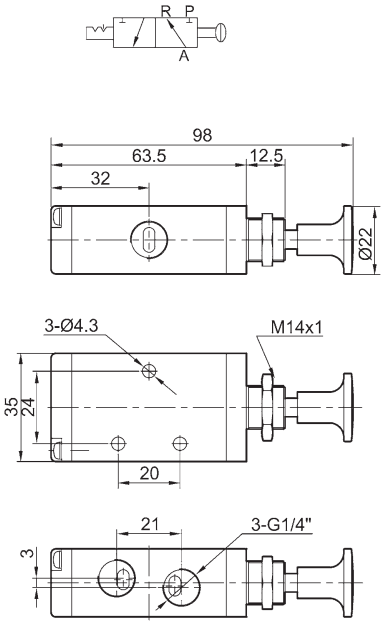
4L110-06



4L210-08



3L210-08



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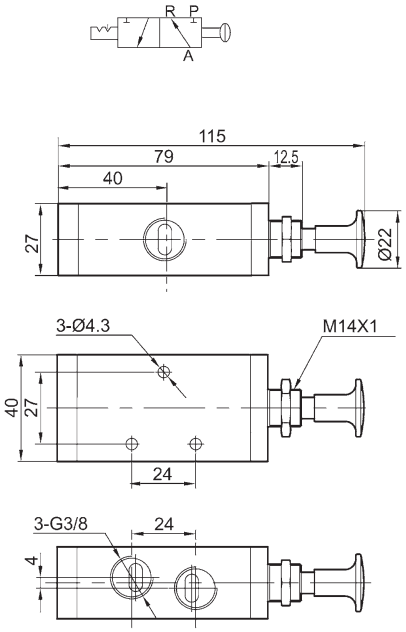

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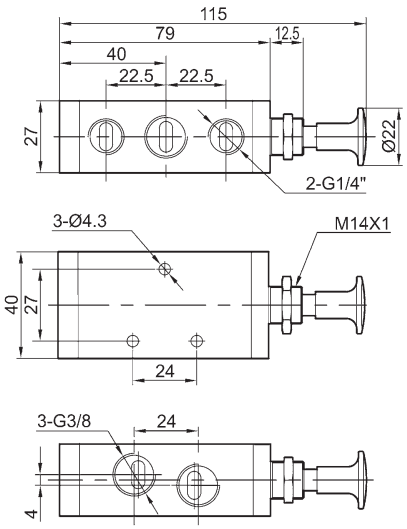
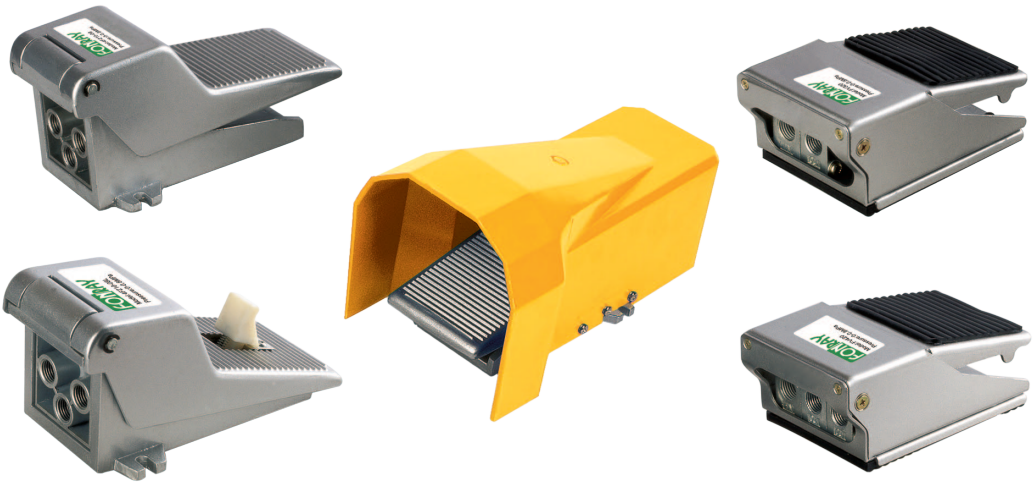




訂購代碼 Ordering Code

4F – 2 – 10 – 08 – L　　FV – 320

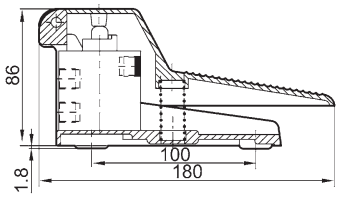
- 4F：規格代碼 4F: 五口二位脚踏閥 Specification 4F: 5/2 way foot valve
- 2：系列代號 Series Code 2: 200 系列 Series
- 10：位置數 10: 單頭雙位置 Position Number 10: Single head double position
- 08：接口口徑 Port Size 08: G1/4″
- L：形式代號 空白：標準型 L：附鎖型 G：附罩型 LG：附鎖及罩型 Type Blank: Standard type L: With lock G：With protecting cover LG：With lock and protecting cover
- FV：規格代碼 脚踏閥 Specification Foot Valve
- 320：位置數 320：三口二位 420：四口二位 Valve Type 320：3/2 way 420：4/2 way

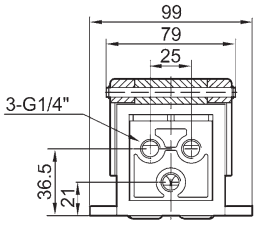
規格 Specification

型 號 Model	4F210-08	4F210-08L	4F210-08G	4F210-08LG	FV420	FV320
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air					
位置數 Valve Type	五口二位 5/2 way				四口二位 4/2 way	三口二位 3/2 way
接口口徑 Port Size	進氣＝排氣＝出氣 Inlet, Outlet, Exhaust Port＝G1/4″				進氣＝出氣 Inlet, Outlet ＝G1/4″ 排氣 Exhaust Port ＝G1/8″	
動作形式 Port Size	直動式 Direct					
使用壓力範圍 Working Pressure	0～0.8MPa					
使用溫度範圍 Working Temperature	0～60℃					

外觀尺寸 Overall Dimension

4F210-08





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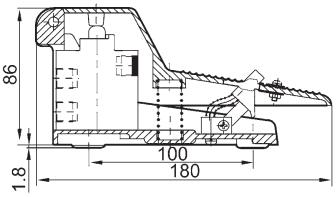
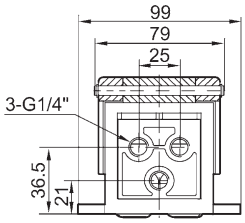
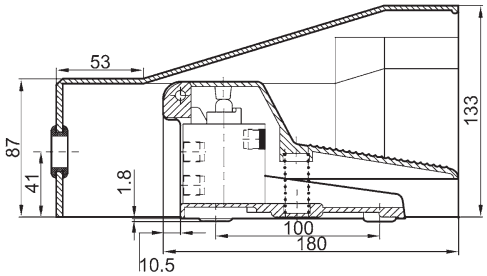
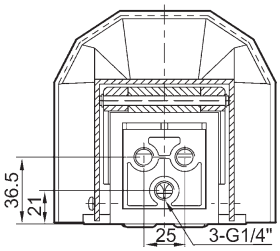
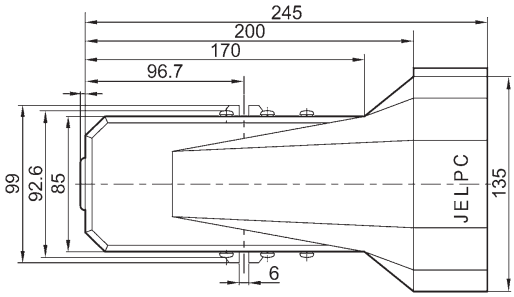




4F210-08G







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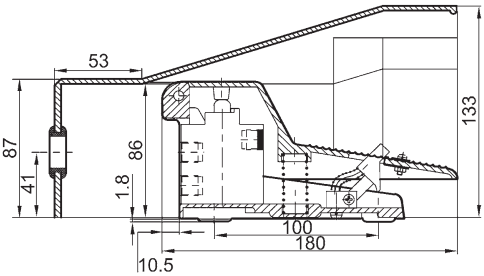
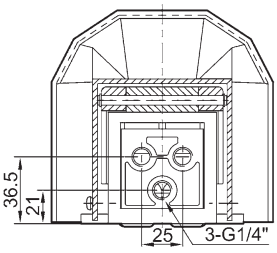
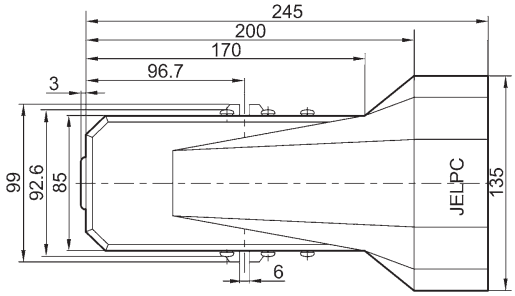
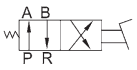


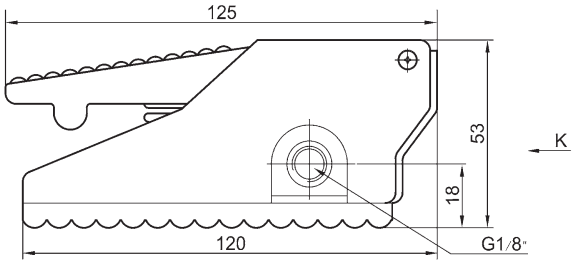


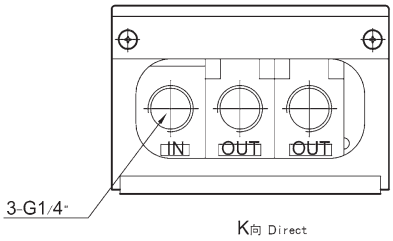


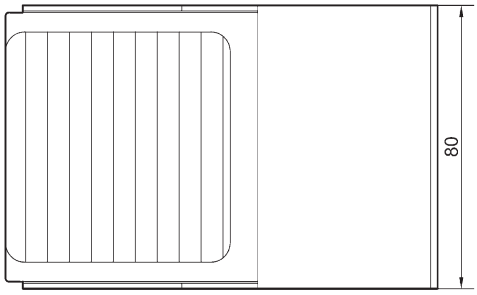
外觀尺寸 Overall Dimension

FV420

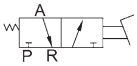


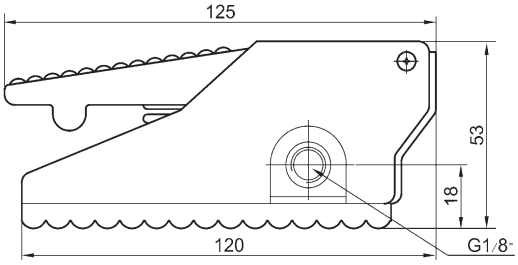


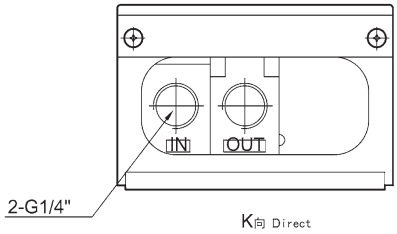


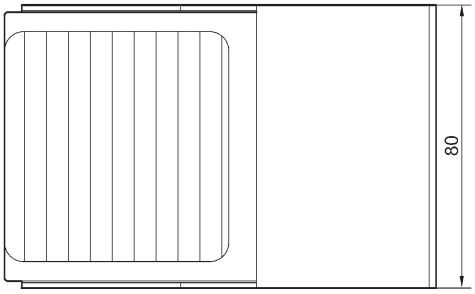


FV320









手動閥 Manual Valve

型 號 Model	配管口徑 Port Size
SH410-02A	1/4
SH410-03A	3/8

手拉閥 Hand–pull Valve

型 號 Model	配管口徑 Port Size
402-02	1/4
402-03	3/8

脚踏閥 Foot Valve

型 號 Model	配管口徑 Port Size
ST411-02	1/4
ST411-03	3/8

手動閥 Manual Valve

型 號 Model	配管口徑 Port Size
SH410-02	1/4
SH410-03	3/8

手拉閥 Hand–pull Valve

型 號 Model	配管口徑 Port Size
412-02	1/4
412-03	3/8

脚踏閥 Foot Valve

型 號 Model	配管口徑 Port Size
ST303-02	1/4

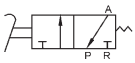
手動閥 Manual Valve

型 號 Model	配管口徑 Port Size
301-02	1/4

手拉閥 Hand–pull Valve

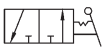
型 號 Model	配管口徑 Port Size
302-02	1/4

脚踏閥 Foot Valve



型 號 Model	配管口徑 Port Size
FV-302	1/4

手動閥 Manual Valve



型 號 Model	配管口徑 Port Size
310-02	1/4

脚踏閥 Foot Valve

型 號 Model	配管口徑 Port Size
ST403-02A	1/4
ST403-03A	3/8

脚踏閥 Foot Valve

型 號 Model	配管口徑 Port Size
HCF-502	1/4

訂購代碼 Ordering Code

MSV – 86 – 32 – 1 – R

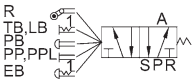
- MSV: 規格代碼 機械閥 Specification Mechanical Valve
- 86: 系列代號 Series
  - 98 系列 Series
  - 86 系列 Series
- 32: 位置數 Position Number
  - 32: 三口二位 3/2 way
  - 52: 五口二位 5/2 way
- 1: 接管口徑 Port Size
  - 1: G1/8″
  - 2: G1/4″
- R: 按鈕形式 Button
  - 空白 : 基本型 Blank: Plunger
  - R: 滾輪型 R: Roller
  - TB: 選擇型旋鈕 TB: Selector knob
  - LB: 加長型旋鈕 LB: Long selector knob
  - PB: 大圓型按鈕 PB: Mushroom head button
  - PP: 平圓型按鈕 PP: Push button
  - PPL: 凸圓型按鈕 PPL: Raised push button
  - EB: 帶鎖型按鈕 EB: Emergency push button with lock

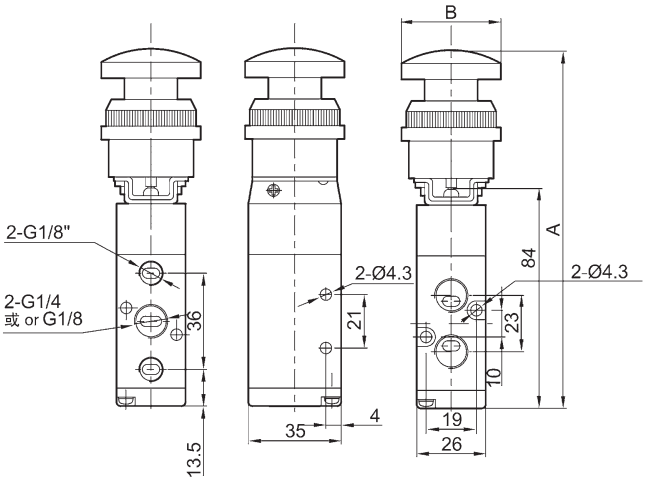
規格 Specification

型 號 Model	MSV86321	MSV86522	MSV98322
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air		
位置數 Valve Type	三口二位 3/2 way	五口二位 5/2 way	三口二位 3/2 way
壓力範圍 Working Pressure	0 ~ 0.8MPa	0 ~ 0.8MPa	0 ~ 0.8MPa
溫度範圍 Ambient Temperature	0 ~ 60℃		
有效截面積 Effective Cross Section Area	12mm^2(CV=0.67)	16mm^2(CV=0.89)	16mm^2(CV=0.89)
接管口徑 Port Size	G1/8″	G1/4″	G1/4″

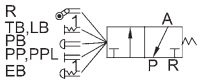
外觀尺寸 Overall Dimension

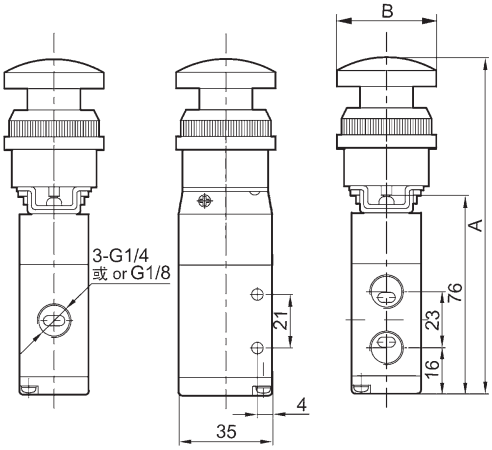
MSV86522



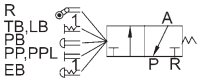


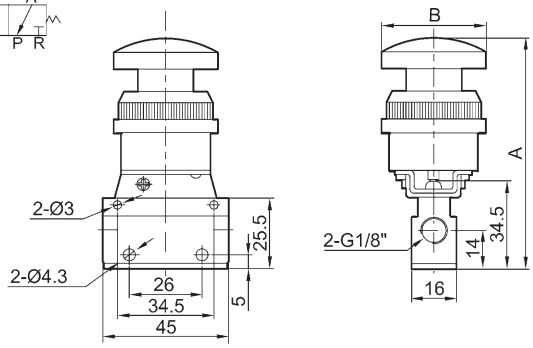
MSV98322





MSV86321

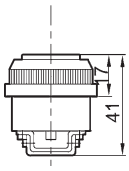




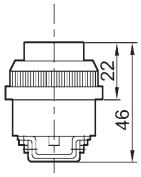
尺寸表 Dimension

系 列 Series	型號 Model / 符號 Symbol	PP	PPL	LB	TB	EB	PB	R
MSV86522	A	114	119	133	136.5	134	131	107.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5
MSV98322	A	106	111	125	129.5	126	123	99.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	425.5
MSV86321	A	66	71	85	88.5	86	83	59.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5

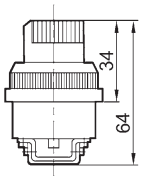
PP



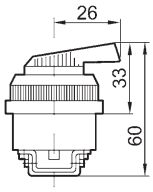
PPL



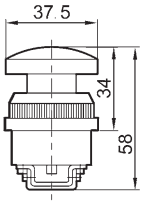
TB



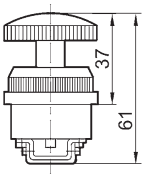
LB



PB



EB



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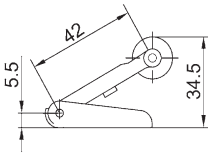


MV301/302 系列 MV301/302 Series

規格 Specification

型 號 Model	MV301-H	MV301-P	MV301-F	MV301-R
	MV302-H	MV302-P	MV302-F	MV302-R
工作介質 Working Medium	經40微米過濾的空氣 40 Micron Filtered Air			
使用壓力範圍 Working Pressure	0 ~ 0.8MPa			
使用溫度範圍 Ambient Temperature	0 ~ 60℃			
位置數 Valve Type	三口二位 3/2 way			
接管口徑 Port Size	G1/8″ ， G1/4″			

訂購代碼 Ordering Code

MV301/302 – H A

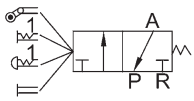
規格代碼
機械閥
Specification
Mechanical valve

按鈕形式
H: 選擇型旋鈕
P: 連鎖型按鈕
F: 平圓型按鈕
R: 滾輪型
Button
H: Selector knob
P: Emergency push button with lock
F: Push button
R: Roller

空白：固定式
A: 彈簧復位時
Blank: Standard type
A: Spring return type

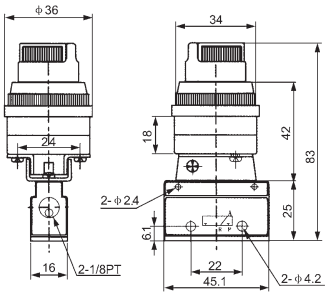
圖形符號 Symbol

MV302–R
MV302–H
MV302–P
MV302–F

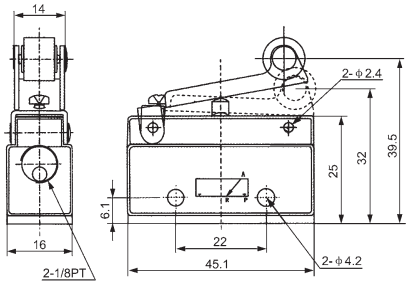


外觀尺寸 Overall Dimension

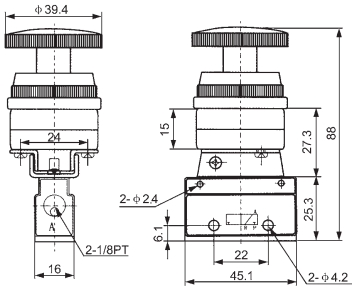
MV301-H



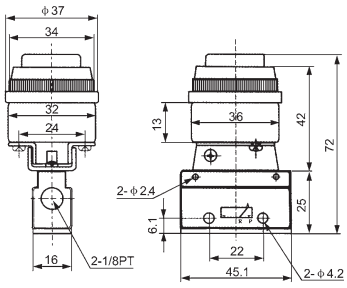
MV301-R



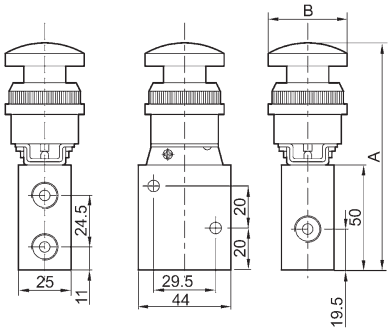
MV301-P



MV301-F



MV302



尺寸表 Dimension

系 列 Model	A	B
MV302-H	114	36.5
MV302-P	111	39.5
MV302-F	96	39.5
MV302-R	84.5	42.5

訂購代碼 Ordering Code

ASC – 06

系列代號
ASC：精密型流量控制閥
Series Code
ASC: Precision flow control Valve

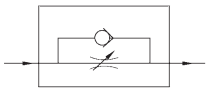
接管口徑
Port Size
06: G1/8″
08: G1/4″
10: G3/8″
15: G1/2″

RE – 01

系列代號
RE：普通型流量控制閥
Series Code
RE: Standard flow control valve

接管口徑
Port Size
01: G1/8″
02: G1/4″
03: G3/8″
04: G1/2″

圖形符號 Symbol



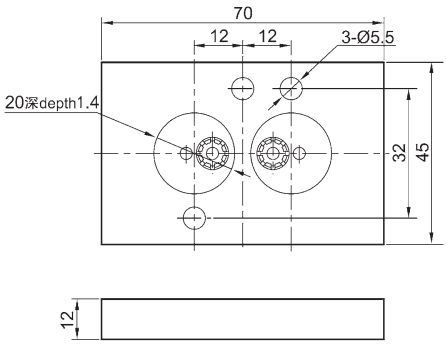
規格 Specification

型 號 Model	精 密 型 Accurate Type				普 通 型 Ordinary Type			
	ASC-06	ASC-08	ASC-10	ASC-15	RE-01	RE-02	RE-03	RE-04
接管口徑 Port Size	G1/8″	G1/4″	G3/8″	G1/2″	G1/8″	G1/4″	G3/8″	G1/2″
工作介質 Working Medium	空 氣 Air							
使用壓力範圍 Working Pressure	0 ~ 0.95MPa							
使用溫度範圍 Ambient Temperature	0 ~ 60℃							

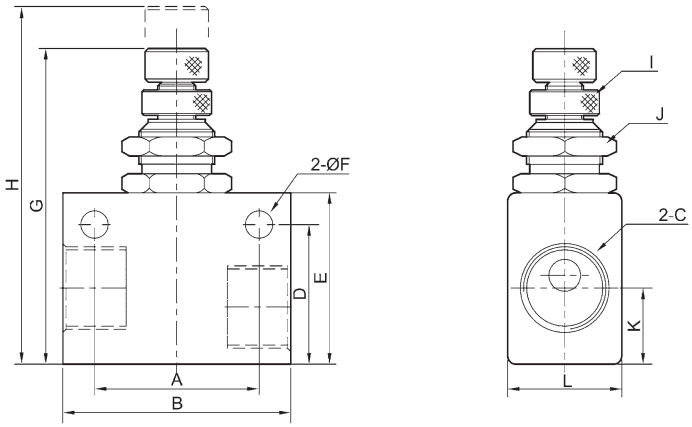
*ASC–08B安裝尺寸符合NUMAR標準，用于氣動執行器的速度控制。
* ASC–08B installation conforms to NUMAR standard to control the speed of executive unit.

外觀尺寸 Overall Dimension

ASC-08B



ASC 系列 Series

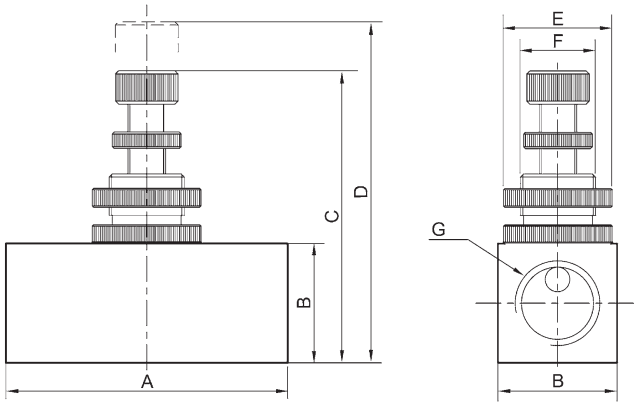


尺寸表 Dimension

符號 Symbol / 型號 Model	A	B	C	D	E	F	G	H	I	J	K	L
ASC-06	22	32	G1/8	22	27	4.3	49.7	56.5	M6X0.5	M12X0.75	12	18
ASC-08	26	36	G1/4	22	27	4.3	49.7	56.5	M6X0.5	M12X0.75	12	18
ASC-10	28	40	G3/8	25	30	4.3	52.7	59.5	M6X0.5	M12X0.75	13	22
ASC-15	28	40	G1/2	30	35	4.3	58.7	65.5	M6X0.5	M12X0.75	13.5	26

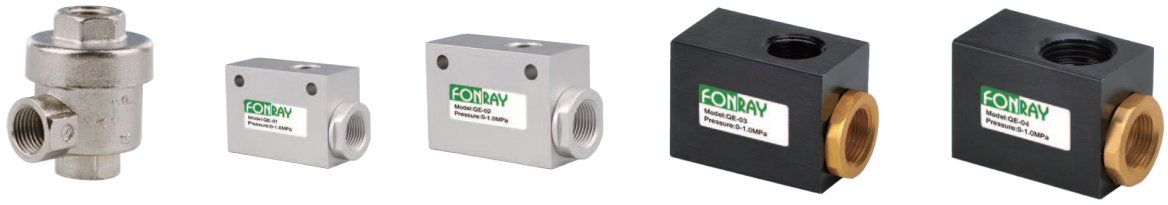
外觀尺寸 Overall Dimension

RE 系列 Series



尺寸表 Dimension

符號 Symbol / 型號 Model	A	B	C	D	E	F	G
RE-01	45	19	43	50	Φ19	M14×1	G1/8
RE-02	45	19	43	50	Φ19	M14×1	G1/4
RE-03	55	25	55	62	Φ25	M18×1	G3/8
RE-04	55	25	55	62	Φ25	M18×1	G1/2



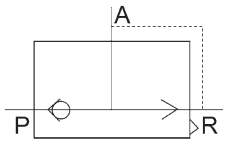
訂購代碼 Ordering code

QE – 01

系列代號
QE：快速排氣閥
QEA：快速排氣閥
Series Code
QE: Quick Exhaust Valve
QEA: Quick Exhaust Valve

接管口徑
Port Size
01: G1/8″
02: G1/4″
03: G3/8″
04: G1/2″
06: G3/4″

圖形符號 Symbol

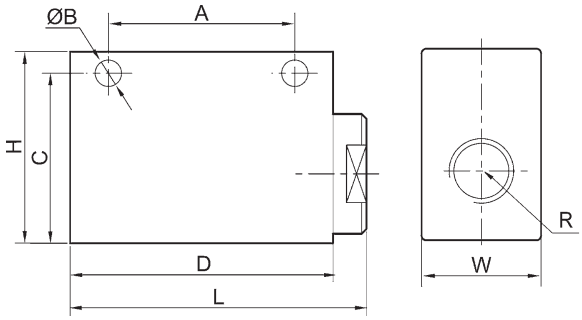


規格 Specification

型 號 Model	QE-01	QE-02	QE-03	QE-04	QE-06
接管口徑 Port Size	G1/8″	G1/4″	G3/8″	G1/2″	G3/4″
有效截面積 Effective Cross Section Area	16 mm^2	27.5 mm^2	28 mm^2	71 mm^2	72.5 mm^2
工作介質 Working Medium	空 氣 Air				
使用壓力範圍 Working Pressure	0 ~ 1.0MPa				
使用溫度範圍 Ambient Temperature	0 ~ 60℃				

外觀尺寸 Overall Dimension

QE 系列 Series



尺寸表 Dimension

型號 Model \ 符號 Symbol	R	口徑 Bore	L	W	H	A	B	C	D
QE–01	G1/8	G1/8	46	20	32	30	4.3	27	40
QE–02	G3/8	G1/4	62	25	40	39	5.6	33.5	55
QE–03	G3/8	G3/8	62	25	40	39	5.6	33.5	55
QE–04	G1/2	G1/2	98	38	64	60	8.5	51	90
QE–06	G3/4	G3/4	98	38	64	60	8.5	51	90

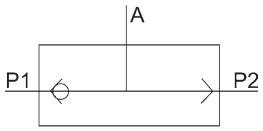
訂購代碼 Ordering code

TV – 01

系列代號
TV：梭閥
Series Code
TV：Shuttle Valve

接管口徑
Port Size
01: G1/8″
02: G1/4″
03: G3/8″
04: G1/2″
06: G3/4″
08: G1″

圖形符號 Symbol

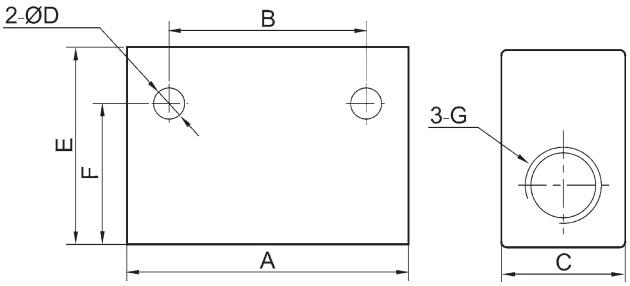


規格 Specification

型 號 Model	TV-01	TV-02	TV-03	TV-04	TV-06	TV-08
工作介質 Working Medium	空 氣 Air					
有效截面積 Effective Cross Section Area	G1/8″	G1/4″	G3/8″	G1/2″	G3/4″	G1″
接管口徑 Port Size	7.5 mm^2	21 mm^2	40mm^2	60 mm^2	110 mm^2	190mm^2
使用壓力範圍 Working Pressure	0 ~ 1.0MPa					
使用溫度範圍 Ambient Temperature	0 ~ 60℃					

外觀尺寸 Overall Dimension

TV 系列 Series



尺寸表 Dimension

型號 Model \ 符號 Symbol	A	B	C	D	E	F	G
TV-01	40	24	16	4.5	25	20.5	G1/8″
TV-02	50	35	22	5.5	35	25	G1/4″
TV-03	75	48	30	7	50	42	G3/8″
TV-04	75	48	30	7	50	42	G1/2″
TV-06	110	72	40	7	70	58	G3/4″
TV-08	110	72	40	7	70	58	G1″

訂購代碼 Ordering code

HSV – 01

系列代號
滑動閥
Series
Hand sliding series

接管口徑
Port Size
01:G1/8″
02: G1/4″
03:G3/8″
04: G1/2″

特點 Feature

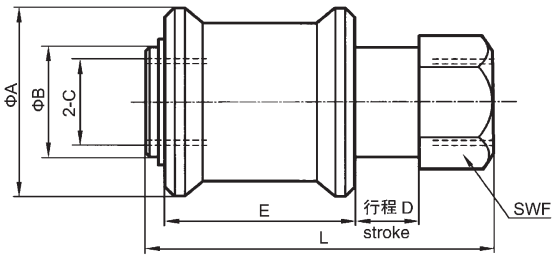
該閥是一種三口二位滑動閥，常接在管道中用作氣源開關，當氣源關閉的同時，氣動系統中的氣壓亦即排空。

3/2 way Hand sliding valve can be used as switch of air source. When air source is switched off, the remained air in system can be released.

規格 Specification

型 號 Model	HSV-01	HSV-02	HSV-03	HSV-04
接管口徑 Port Size	G1/8″	G1/4″	G3/8″	G1/2″
通徑 Orifice Size	4mm	7mm	10mm	12mm
工作介質 Working Medium	經過濾的壓縮空氣 Filtered and Compressed Air			
工作壓力 Working Pressure	0~1.0MPa			
環境溫度 Ambient Temperature	5~60℃			
操作力 Operating Force	20N			

外觀尺寸 Overall Dimension



尺寸表 Dimension

符號 Symbol / 型號 Model	A	B	C	D	E	F	L
HSV-01	25	13	G1/8	9	28	14	48
HSV-02	30	18	G1/4	11	32	19	58
HSV-03	35	21	G3/8	14	39	22	68
HSV-04	40	26	G1/2	15	45	27	80

特點 Feature

- ●壓力保持之安全迴路。
- ●防止氣缸停止後之自走現象。
- ●氣缸瞬間停止定位精確。
- ●特殊迴路設計應用。

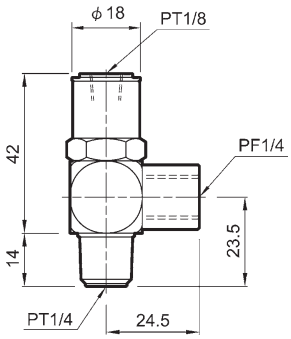
- ● Maintains pressure in event of air failure.
- ● Prevents leakage in an air system.
- ● Enable accurate holding of work–piece.

規格 Specification

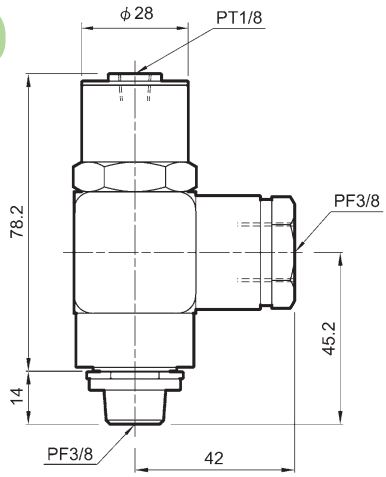
型號 Model	FPC-02	FPC-03
使用壓力範圍 Pressure (kg/cm^2)	0.5–9.5	
使用溫度範圍 Temperature (℃)	–10 ~ 70℃	
有效截面積 Effective Cross Section Area (mm^2)	24	79
操作頻率 Operation Time (times/min)	60	40
重量 Weight (g)	100	340

外觀尺寸 Overall Dimension

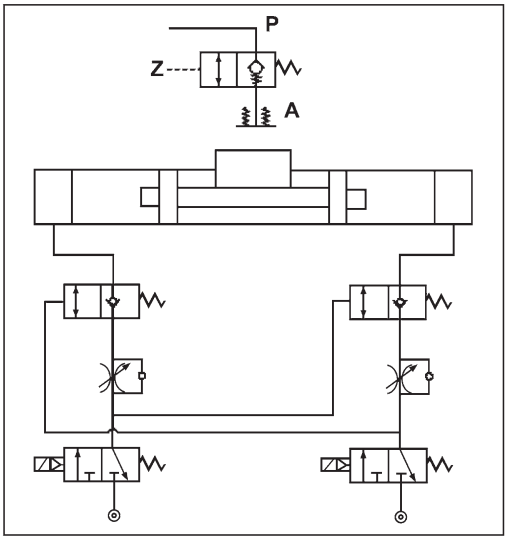
FPC-02

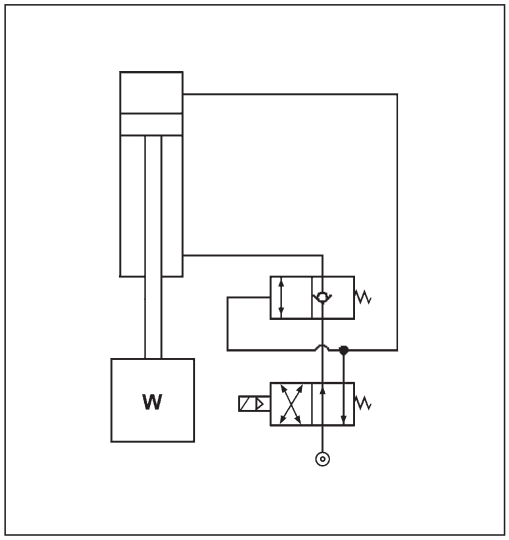


FPC-03



應用範例 Application Example





規格 Specification

型 號 Model	FVK-08	FVK-10	FVK-16	FVK-20	FVK-25	FVK-36	—
	—	—	FVGT-16	FVGT-20	FVGT-25	FVGT-36	FVGT-40
接管口徑 Port Size	G1/4"					G3/8"	
使用壓力範圍 Operating Pressure	0.15~0.8 MPa						
使用溫度範圍 Temperature Range	–5~60℃						

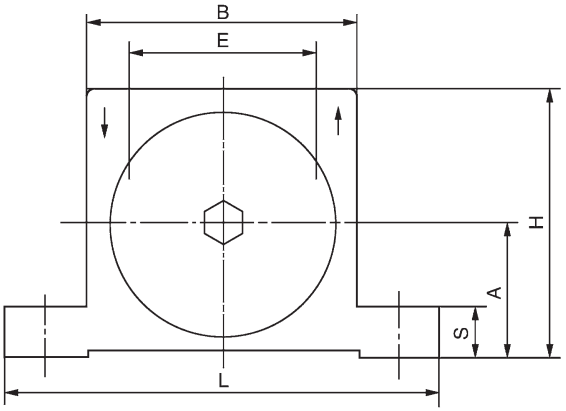
訂購代碼 Ordering code

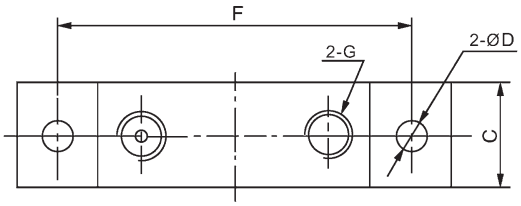
FVK – 20

系列代號
Series
FVK
FVGT

接管口徑
Port Size
08, 10, 16, 20, 25: G1/4″
36, 40: G3/8″

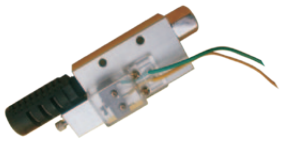
外觀尺寸 Overall Dimension





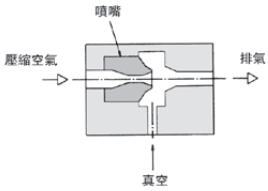
型號 Model	L	H	S	B	C	D	E	F	G
FVK-08/FVK-10	86	50	12	51	21	6.5	27	68	G1/4
FVK-16	113	60.5	17	66	28	9	40	90	G1/4
FVK-20/FVK-25	128	80	17	84	38	9	55	105	G1/4
FVK-36	161	100	21	105	50	11	72	130	G3/8
FVGT-16	113	65.5	17	66	42.5	9	40	90	G1/4
FVGT-20/FVGT-25	128	80	17	84	57	9	55	105	G1/4
FVGT-36	161	100	21	105	73	11	72	130	G3/8
FVGT-40	195	122	21	120	80	18	83	151	G3/8

真空產生器 (標準型)



真空產生器 (附檢知型)

■真空發生器定義說明



當壓縮空氣經過噴嘴，產生高速排放，經擴散產生側面吸引之作用。

規格 Specification

型 號 Model	FT-050	FT-100	FT-150	FT-200
使用流體 Operating Fluid	空氣 / Air			
使用溫度範圍 Range of Operating Temperature	0 ~ 60℃			
給油 Lubrication	不要 / No			
使用壓力範圍 Working–pressure Range	0.1 ~ 1.6 (1.0 ~ 6.0kgf/cm^2)			
噴嘴直徑 Nozzle Diameter(mm)	Φ0.5	Φ1.0	Φ1.5	Φ2.0
到達真空度 Max. Vacuum Value	–91.8kpa(–680mmHg)			
接管口徑 Port Size	M5	1/8PT	1/4PT	3/4PT

訂購代號 Ordering Code

FT 150 – C – K

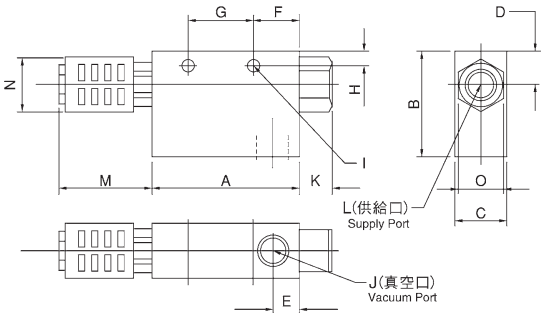
- 型號 Model
- 噴嘴口徑 Nozzle Diameter
  - 05: 0.5mm
  - 10: 1.0mm
  - 15: 1.5mm
  - 20: 2.0mm
- 附開關 With Switch
  - 空白 : 標準型
  - C: 附微動開關
  - Blank: Standard type
  - C: With micro–switch
- 附可調式 With Adjustable Type
  - 空白 : 標準型
  - K: 附可調式
  - Blank: Standard type
  - K: With adjustable type

真空信號確認裝置 (附開關及調整)
Vacuum Signal Confirmation Device (With Switch and Adjustable)

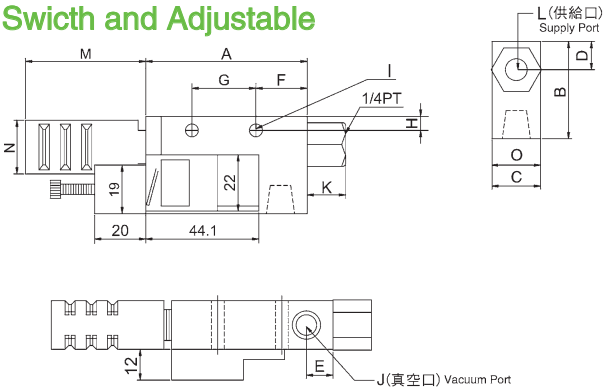
型 號 Model	C 固定型	CK 可調整型
約定範圍 Setting Range	–39.9 (–300mmHg)	–20.0~–53.2 (–150~–400mmHg)
出荷時定值 Setting Value Betore Operational (kpa)	–39.9 (–300mmHg)	–46.6(–350mmHg)
動作精度 Accuracy	± 5.3 (± –40mmHg)	
感應差 Hysteresis	4.0~13.3 (30~100mmHg)	
電器規格 Electrical Rating (When resistance is appled)	AC125V:5A, AC250V:3A	
使用溫度範圍 Range of Operating Temperature	0~60℃	

外觀尺寸 Overall Dimension

真空產生器 (標準型)
Standard Type



真空產生器 (附檢知型)
Swicth and Adjustable



型 號 Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N(Φ)	O	消音器 silencer
FT-050(CK)	50	32	16	11	12	19	20	4.5	2–Φ4.2	Rp1/8	5	Rp1/8	44	21.5	14	Rp1/8
FT-100(CK)	50	32	16	11	12	19	20	4.5	2–Φ4.2	Rp1/8	5	Rp1/8	44	21.5	14	Rp1/8
FT-150	70	38	26	13	15	23	25	5	2–Φ4.5	Rp1/4	10	Rp1/4	44	21.5	17	Rp1/4
FT-150(CK)	63	38.5	19.5	11	10.5	20	25	5.5	2–Φ6	Rp1/4	15	Rp3/8	44	21	17	Rp1/2
FT-200(CK)	96	38	30	16	22	32	32	6.5	2–Φ6	Rp3/8	10	Rp1/4	55	28	23.5	Rp1/2
FT-250	100	60	40	20	16	20	50	5.5	2–Φ6	Rp1/2	17	Rp3/8	71	40	28	Rp3/4
FT-300	118	60	40	20	20	33	50	5.5	2–Φ6	Rp3/4	20	Rp1/2	71	40	30	Rp3/4

＊型號 CK 爲附檢知真空產生器。

FAM

FAM 多級真空產生器 FAM Multi–degree Vacuum Ejector

型號 Model	最大真空度 Max. Vacuum Degree (-kPa)	最大真空流量 Max. Vacuum Flow (l/min)	空氣消耗量 Air Wasting (l/min)	噪音 Noise (dBA)	最小軟管內徑Φ（2m內） Minimum Hose Diameter Φ（Within 2m）		
					供氧 Oxygen supply	真空 Vacuum	排氧 Exhaust oxygen
FAM25L	92	430	116-185	60-65	>4	>12	>12
FAM50L		720	230-370		>6	>15	>15
FAM75L		980	365-610		>8	>19	>22
FAM100L		1180	445-720		>8	>19	>22
FAM125L		1400	545-780		>10	>25	>32
FAM150L		1500	655-810		>10	>25	>32

FAL

FAL 多級真空產生器 FAL Multi–degree Vacuum Ejector

型號 Model	最大真空度 Max. Vacuum Degree (-kPa)	最大真空流量 Max. Vacuum Flow (l/min)	空氣消耗量 Air Wasting (l/min)	噪音 Noise (dBA)	最小軟管內徑Φ（2m內） Minimum Hose Diameter Φ（Within 2m）		
					供氧 Oxygen supply	真空 Vacuum	排氧 Exhaust oxygen
FAL25	81	390	105	60-65	>4	>12	>12
FAL50		640	215		>6	>15	>15
FAL75		890	320		>8	>19	>22
FAL100		990	390		>8	>19	>22
FAL125		1170	480		>10	>25	>32
FAL150		1280	620		>10	>25	>32

FVM

FVM 迷你型真空產生器 FVM Mini Vacuum Ejector

型號 Model	最大真空度 Max. Vacuum Degree (-kPa)	最大真空流量 Max. Vacuum Flow (l/min)	空氣消耗量 Air Wasting (l/min)	噪音 Noise (dBA)	最小軟管內徑Φ（2m內） Minimum Hose Diameter Φ（Within 2m）		
					供氧 Oxygen supply	真空 Vacuum	排氧 Exhaust oxygen
FVM5	85	37	12-20	50-65	>2	>5	>8
FVM10		75	28-42	55-68	>2	>8	>10
FVM20		150	55-85	60-68	>4	>10	>12
FVM30		220	87-125	60-68	>6	>12	>15

FVX

FVX 迷你型真空產生器 FVX Mini Vacuum Ejector

型號 Model	最大真空度 Max. Vacuum Degree (-kPa)	最大真空流量 Max. Vacuum Flow (l/min)	空氣消耗量 Air Wasting (l/min)	噪音 Noise (dBA)	最小軟管內徑Φ（2m內） Minimum Hose Diameter Φ（Within 2m）		
					供氧 Oxygen supply	真空 Vacuum	排氧 Exhaust oxygen
FVX5	92	32	18-22	50-65	>2	>5	>8
FVX10		63	31-40	55-68	>2	>8	>10
FVX20		125	79-89	60-69	>4	>10	>12
FVX30		185	128-137	60-69	>6	>12	>15

FACP

FACP 輸送型真空產生器 FACP Transportation Vacuum Ejector

型號 Model	最大真空度 Max. Vacuum Degree (-kPa)	真空口 Vacuum	進氣口 Air Inlet	排氣口 Air Outlet	供氣壓力 Pressure (bar)
FACP250	84	G1/4	G1/8	G1/4	4~6 bar 最大7bar
FACP375		G1/2	G3/8	G1/2	
FACP500		G1/2	G3/8	G3/4	
FACP750		G3/4	G1/2	G1	

FCPF

FCPF 輸送型真空產生器 FCPF Transportation Vacuum Ejector

型號 Model	真空度 Vacuum Degree (-kPa)	真空口 Vacuum	進氣口 Air Inlet	排氣口 Air Outlet	空氣速度 Air Speed ft/s	供氣壓力 Pressure (bar)
FCPF2-3	26	6.5	G1/8	18.5	485	4~6 bar 最大7bar
FCPF3-3	16	8.5	G1/8	18.5	328	
FCPF5-6	35	12.5	G1/4	24	361	
FCPF7-6	28	19	G3/8	32	325	
FCPF15-3	9	38	G3/8	49.6	223	
FCPF15-6	9	38	G3/8	49.6	270	

FAZH

FAZH 基本型真空產生器 FAZH Standard Vacuum Ejector

型號 Model	最大真空度 Max. Vacuum Degree (-kPa)		最大真空流量 Max.Vacuum Flow (l/min)		最大空氣消耗量 Max. Air Wasting (l/min)	噴嘴直徑 Port Size mm	連接形式（快換接頭/螺紋擰入） Connection Type (Quick Release Coupling/Thread Screw In)		
	S型	L型	S型	L型	S型/L型		SUP	VAC	EXH
FAZH05B□	90	50	7.5	9	13.5	0.5	Φ6/Rc1/8	Φ6/Rc1/8	--
FAZH07B□			13	26	23.5	0.7			
FAZH10B□			24	34	46	1.0			
FAZH13B□			40	75	78	1.3	Φ8/Rc1/8	Φ10/Rc1/4	
FAZH05D□	90	50	7.5	9	13.5	0.5	Φ6/Rc1/8	Φ6/Rc1/8	Φ6/Rc1/8
FAZH07D□			13	26	23.5	0.7			
FAZH10D□			24	34	46	1.0	Φ6/Rc1/8	Φ6/Rc1/8	Φ8/Rc1/8
FAZH13D□			40	75	78	1.3	Φ8/Rc1/8	Φ10/Rc1/4	Φ10/Rc1/4
FAZH15D□	90	55	60	80	97	1.5	Φ10/Rc1/4	Φ12/Rc3/8	Φ12/Rc3/8
FAZH18D□			70	110	150	1.8	Φ12/Rc3/8		
FAZH20D□			85	150	185	2.0	Φ12/Rc3/8	Φ16/Rc1/2	Φ16/Rc1/2

FAZU

FAZU 基本型真空產生器 FAZU Standard Vacuum Ejector

型號 Model	最大真空度 Max. Vacuum Degree (-kPa)	最大真空流量 Max. Vacuum Flow (l/min)	最大空氣消耗量 Max. Air Wasting (l/min)	噴嘴直徑 Port Size mm
FAZU05S	85	7	10	0.5
FAZU07S	85	12	19	0.7
FAZU05L	50	12	10	0.5
FAZU07L	50	21	19	0.7

FVF

FVF 真空產生器 FVF Vacuum Ejector

型號 Model	壓力範圍 Pressure Range (bar)	溫度範圍 Temperature Range (℃)	過濾精度 Filter Precision (μm)	內部真空量 Inner Vacuum cm^3	公稱流量 Nominal Flow l/s	連接形式 Connection Type
FVF-10	-1~0	-20~80	10	45	2.5	G3/8"
FVF-15				195	15	G1/2"
FVF-20				205	15	G3/4"
FVF-25				495	42	G1
FVF-40				675	85	G1 1/2"