

ADEX A12F Series

5 Port Pilot Operated Solenoid Valve
Rubber Seal/ Mounting type

A12FS25

2-position, single solenoid

A12FD25

2-position, double solenoid

A12FD35

3-position, closed center

A12FE35

3-position, ABR connect

A12FO35

3-position, PAB connect



Specifications

Model No.		Unit	A12FS25	A12FD25	A12FD35	A12FE35	A12FO35
Fluid			Non-lubricated/lubricated air				
Port size			port 2,4: Rc%		port 1,3,5: Rc%		
Effective area		mm ²	8.8		8.5		12
Cv value			0.48		0.47		0.66
Operating ambient temperature		°C	-5~50				
Pressure range		MPa	0.15~0.7	0.1~0.7	0.2~0.7		
Maximum Frequency		cycle/min	600		500		
Response Time	DC	ON	s	0.015	0.012	0.017	
		OFF	s	0.020 (0.026)	—	0.065 (0.071)	
Pilot air exhaust			Individual exhaust				
Manual override			Screw driver-operated locking button				
Mounting position			Free				
Shock resistance, vibration resistance		m/s ²	150/30				
Weight		g	89	99	103		



- Service kit not available
- Supply complete-dry air to avoid freezing when temperature of valve site falls below 5°C
- Pressure range of external pilot supply: 0.25~0.7MPa
- Response time in bracket () is displayed with surge suppressor
- Response time shown above is in accordance with JIB B 8375
- Effective area shown above is a value between ports 1 and 2, 4

Electrical Specifications

Rated voltage	V	DC24, 12, 6, 5, 3
Permissible voltage fluctuation	%	+10, -10
Power consumption	W	0.6 (with indicator light and surge suppressor), 0.55 (without indicator light and surge suppressor)
Grade of Insulation		JIS grade E
Wiring		Plug-in connector
Surge suppressor		Diode
Indicator light		LED

A12F

S25

1 P

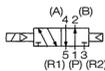
01

S

Switch Form

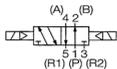
S25

2-position, single solenoid



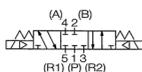
D25

2-position, double solenoid



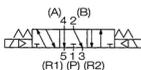
D35

3-position, closed center



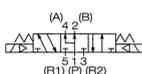
E35

3-position, ABR connect



O35

3-position, PAB connect



Voltage

- 1: DC24V
- 2: *DC12V
- 3: *DC6V
- 4: *DC5V
- 5: *DC3V

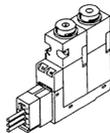
Wiring

- No mark: Without connector
- S : Connector with lead wire for single solenoid (Length: 500 mm)
- D : Connector with lead wire for double solenoid (Length: 500 mm)

Port 2 & 4 size

01: Rc1/8
(Note) when using G, NPT, NPTF, please consult FONTAL first

Wiring withdrawal direction

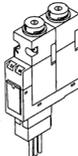


NPN type

- P: With indicator light and surge suppressor
- S: Without indicator light and surge suppressor

PNP type

- *M: With indicator light and surge suppressor
- *J: Without indicator light and surge suppressor



NPN type

- Q: With indicator light and surge suppressor
- B: Without indicator light and surge suppressor

PNP type

- *N: With indicator light and surge suppressor
- *K: Without indicator light and surge suppressor

 **: Made to order

Connector with lead wire

A 0 5 G S - D C - C L 5 - M

Polarity
 No mark: NPN type
 M : *PNP type

Lead wire length
 5 : 500mm
 10: *1000mm

Voltage
 DC: For DC

Type
 GS : For GF type
 single solenoid
 GD : For GF type
 double solenoid

For GF type single solenoid



For GF type double solenoid



(For common use with GF type of A05, A12, and A20)

Locking cover

A 0 5 P - L A



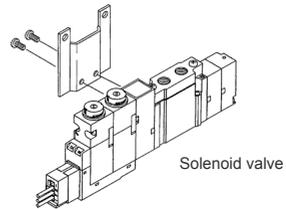
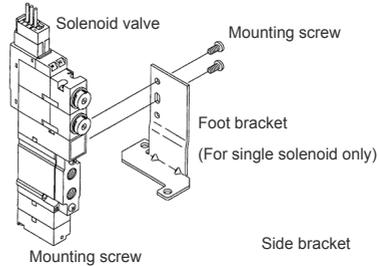
(For common use with all A05, A12, and A20)

Color
 A: Orange
 (For solenoid A side)
 B: Green
 (For solenoid B side)

Bracket

A 1 2 R - B F

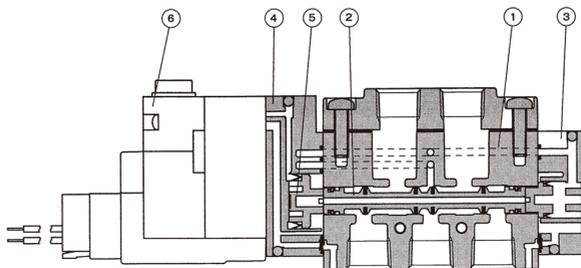
Bracket
 F: Foot Bracket
 S: Side bracket



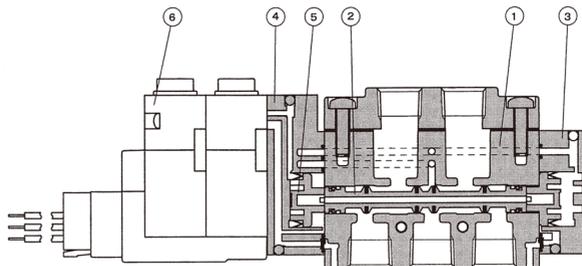
Note: Gasket(s) and mounting screws are provided
 (For common use with A12R)

* : Made to order

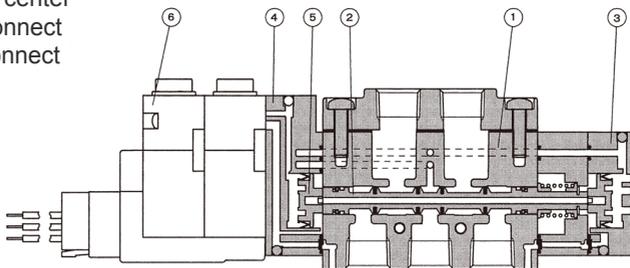
⊙ 2-position Single solenoid



⊙ 2-position Double solenoid



⊙ 3-position Closed center
3-position ABR connect
3-position PAB connect

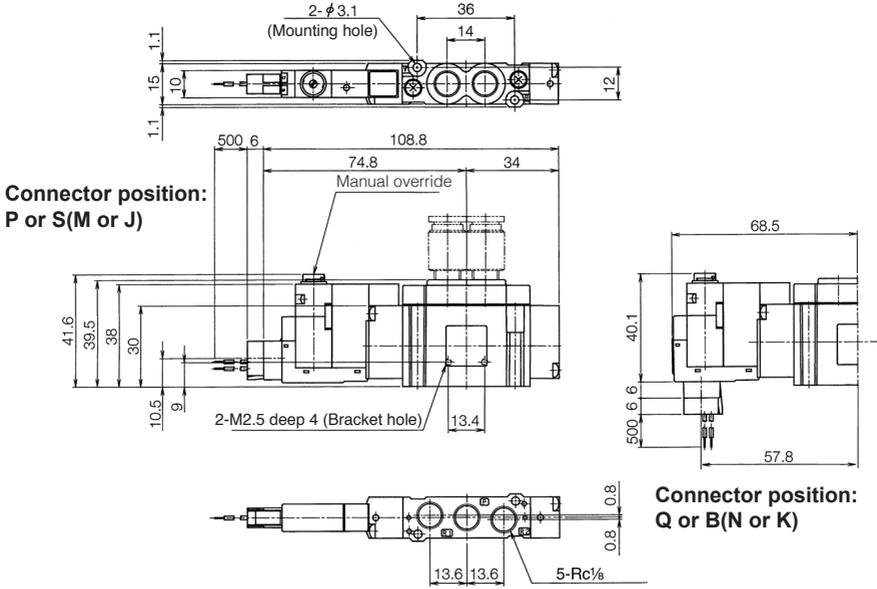


Main Component

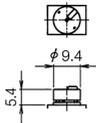
No.	Description	Material
1	Body	Zinc die-casting
2	Spool assembly	Aluminium alloy/NBR
3	End cover	Resin
4	Piston head	Resin
5	Piston	Resin
6	Pilot valve	Refer to A00 Series

A12FS25

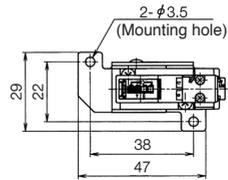
(Unit: mm)



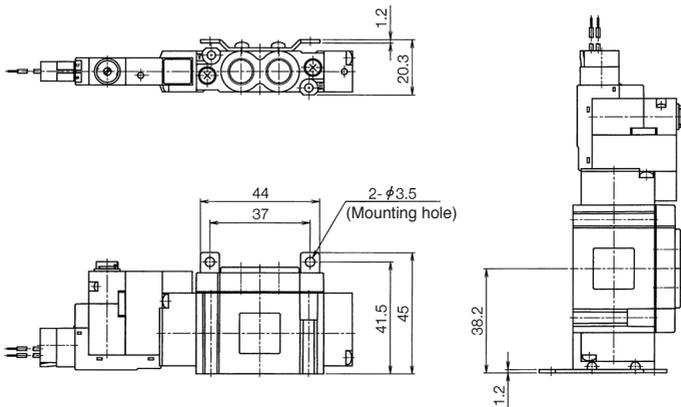
Manual locking cover



Foot bracket

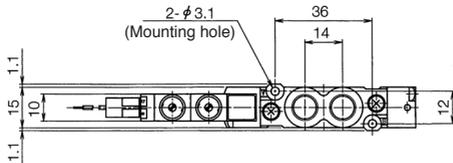


Side bracket

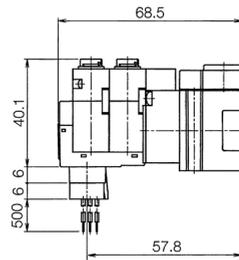
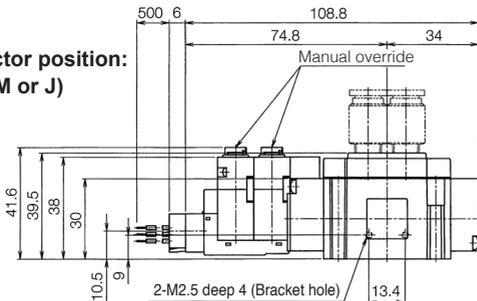


A12FD25

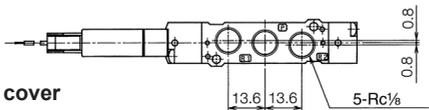
(Unit: mm)



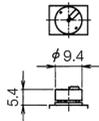
Connector position:
P or S(M or J)



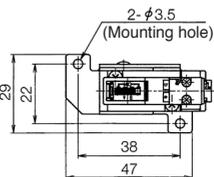
Connector position:
Q or B(N or K)



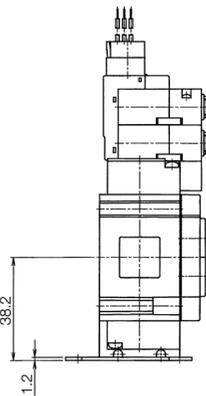
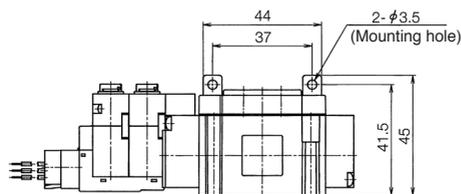
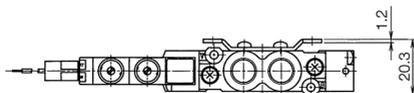
Manual locking cover

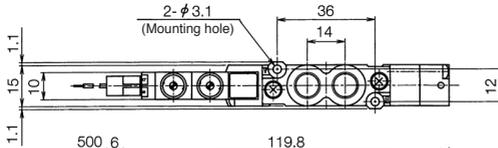


Foot bracket

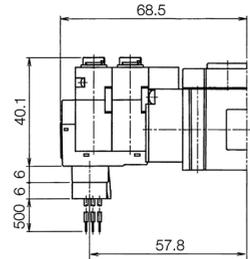
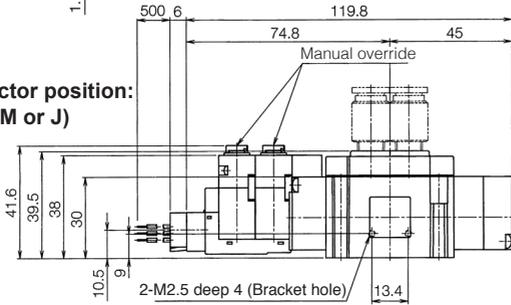


Side bracket

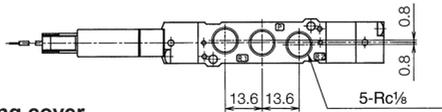




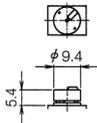
Connector position:
P or S(M or J)



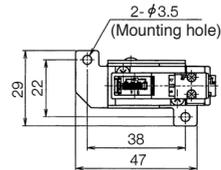
Connector position:
Q or B(N or K)



Manual locking cover



Foot bracket



Side bracket

