

# 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: Rc⅝    port 1,3,5: Rc⅜				
Effective area			mm <sup>2</sup>	8.8		8.5		12
Cv value				0.48		0.47		0.66
Operating ambient temperature			℃	-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 <sup>2</sup>	150/30				
Weight			g	89	99	103		



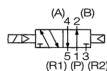
- Service kit not available
- Supply complete-dry air to avoid freezing when temperature of valve site falls below 5°C
- Pressure range of external pilot supply: 0.25~0.7MPa
- Response time in bracket ( ) is displayed with surge suppressor
- Response time shown above is in accordance with JIB B 8375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

## Electrical Specifications

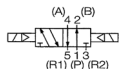
Rated voltage	V	DC24, 12, 6, 5, 3
Permissible voltage fluctuation	%	+10, -10
Power consumption	W	0.6 (with indicator light and surge suppressor), 0.55 (without indicator light and surge suppressor)
Grade of Insulation		JIS grade E
Wiring		Plug-in connector
Surge suppressor		Diode
Indicator light		LED

**A12F****S25****1 P****01****S****Switch Form****S25**

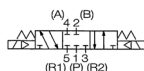
2-position, single solenoid

**D25**

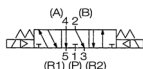
2-position, double solenoid

**D35**

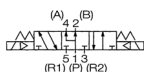
3-position, closed center

**E35**

3-position, ABR connect

**O35**

3-position, PAB connect

**Voltage**

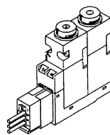
- 1: DC24V
- 2: \*DC12V
- 3: \*DC6V
- 4: \*DC5V
- 5: \*DC3V

**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**

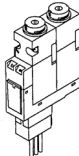
01: Rc½  
 (Note) when using G, NPT, NPTF, please consult FONTAL first

**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)

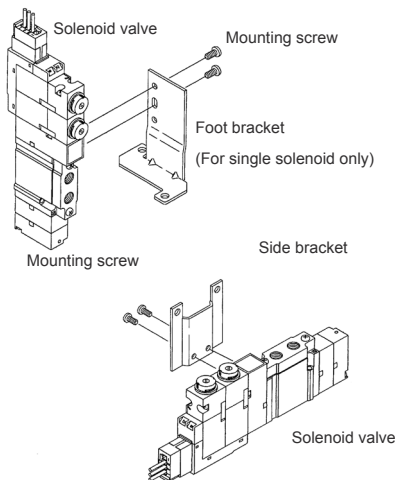
B: Green  
(For solenoid B side)

## Bracket

**A 1 2 R - B F**

**Bracket**

F: Foot Bracket  
S: Side bracket

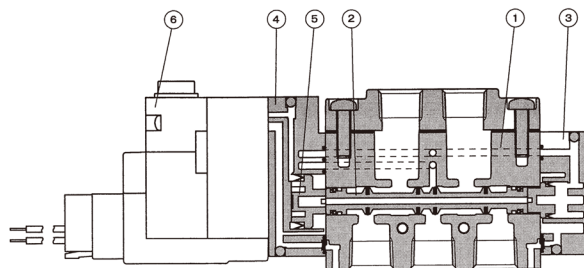


Note: Gasket(s) and mounting screws are provided  
(For common use with A12R)

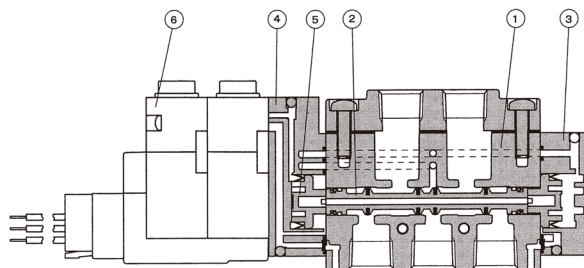


※: Made to order

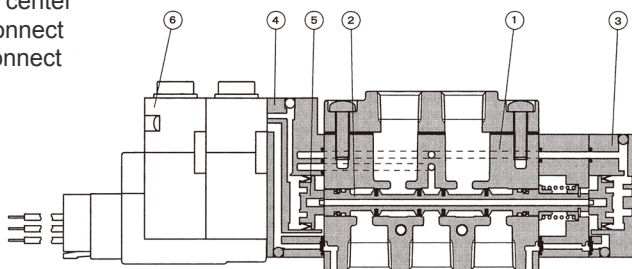
⊙ 2-position Single solenoid



⊙ 2-position Double solenoid



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

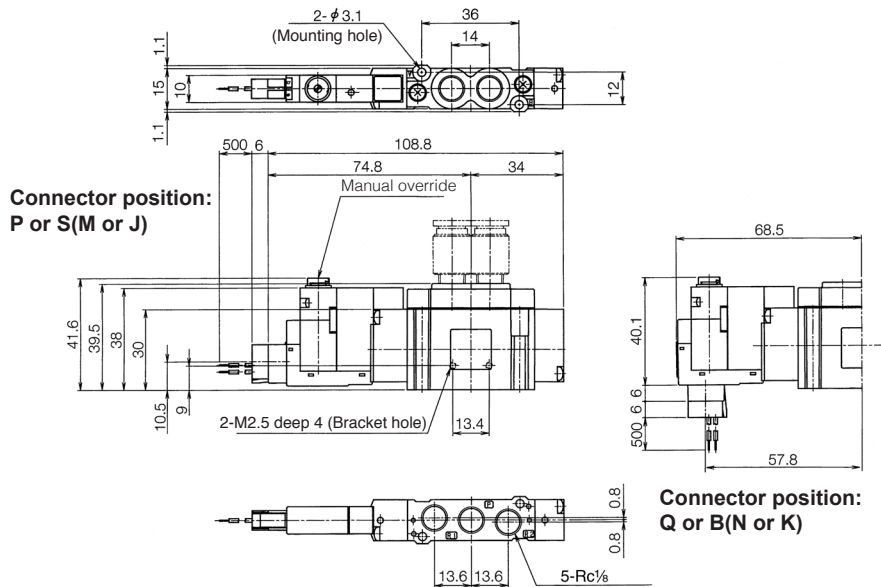


### Main Component

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

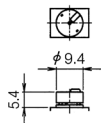
(Unit: mm)



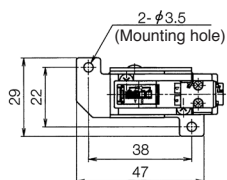
Connector position:  
P or S(M or J)

Connector position:  
Q or B(N or K)

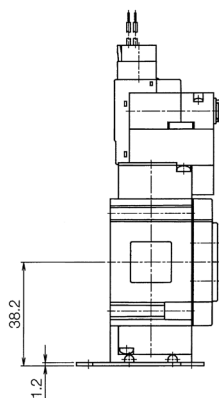
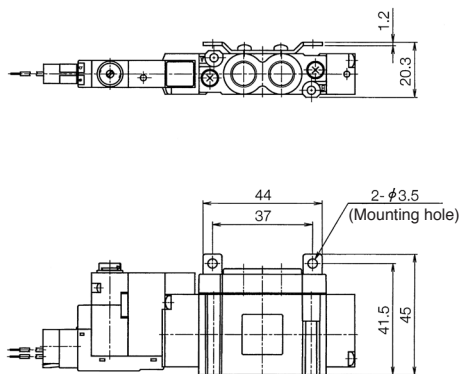
Manual locking cover



Foot bracket

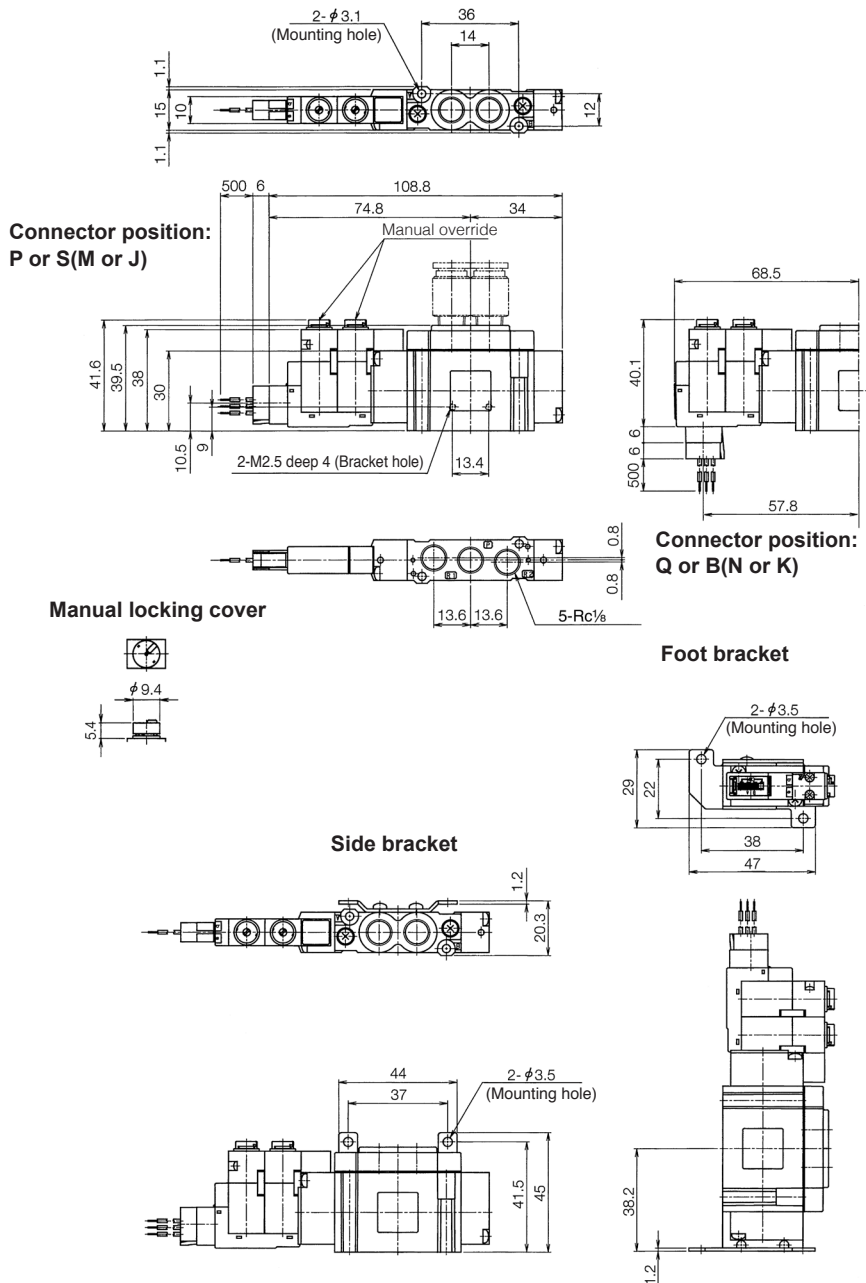


Side bracket

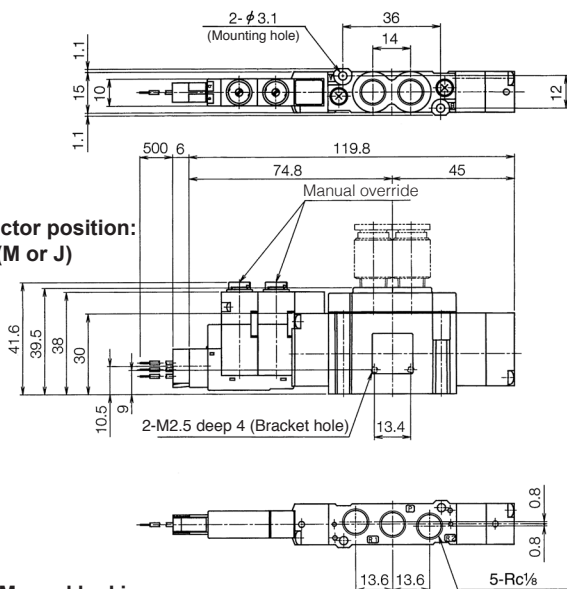


A12FD25

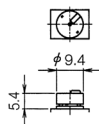
(Unit: mm)



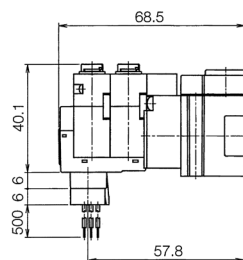
Connector position:  
P or S(M or J)



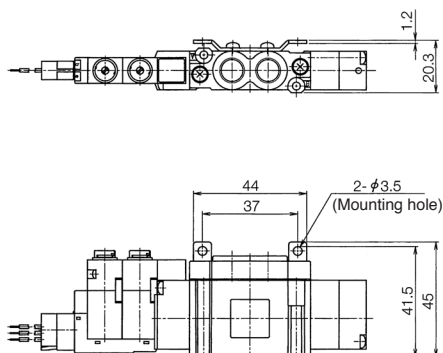
Manual locking cover



Connector position:  
Q or B(N or K)



Side bracket



Foot bracket

