

ADEX A05F Series

5 Port Pilot Operated Solenoid Valve
Rubber Seal/Sub-base Mounting type

A05FS25

2-position, single solenoid

A05FD25

2-position, double solenoid

A05FD35

3-position, closed center

A05FE35

3-position, ABR connect

A05FO35

3-position, PAB connect



Specifications

| | | | | | | | | |
|--|----|-----|------------------|--------------------------------------|---------|---------------|---------|---------|
| Model No. | | | Unit | A05FS25 | A05FD25 | A05FD35 | A05FE35 | A05FO35 |
| Fluid | | | | Non-lubricated/lubricated air | | | | |
| Port size | | | | port 2,4: M5 port 1,3,5: M5 | | | | |
| Effective area | | | mm ² | 4 | | 3.7 | | 4.5 |
| Cv value | | | | 0.22 | | 0.20 | | 0.25 |
| 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 | 0.011 | 0.010 | 0.012 | | |
| | | OFF | s | 0.011 (0.017) | — | 0.032 (0.038) | | |
| 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 | 64 | 74 | 76 | | |



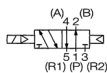
- Service kit not available
- Supply complete-dry air to avoid freezing when temperature of valve site falls below 5°C
- Pressure range of external pilot supply: 0.25~0.7MPa
- Response time in bracket () is displayed with surge suppressor
- Response time shown above is in accordance with JIB B 8375
-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

Electrical Specifications

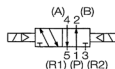
| | | |
|---------------------------------|---|---|
| Rated voltage | V | DC24, 12, 6, 5, 3 |
| Permissible voltage fluctuation | % | +10, -10 |
| Power consumption | W | 0.6 (with indicator light and surge suppressor), 0.55 (without indicator light and surge suppressor) |
| Grade of Insulation | | JIS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

A05F**S25****1****P****M5****S****Switch Form****S25**

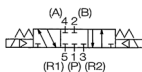
2-position, single solenoid

**D25**

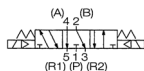
2-position, double solenoid

**D35**

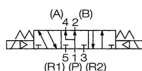
3-position, closed center

**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)

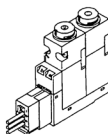
Port 2 & 4 size

M5: M5

Wiring withdrawal direction**NPN type**

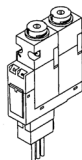
P: With indicator light and surge suppressor

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)

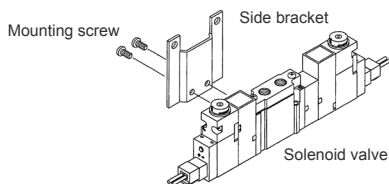
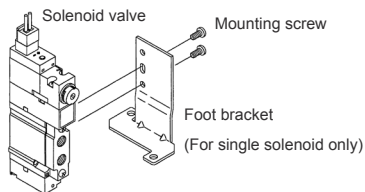
B: Green
(For solenoid B side)

Bracket

A 0 5 R - B F

Bracket

F: Foot Bracket
S: Side bracket

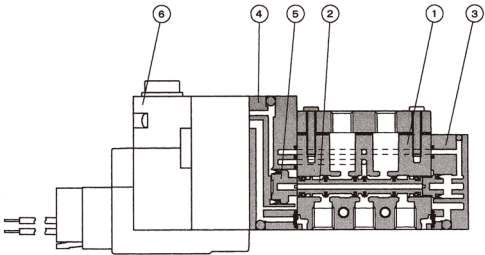


Note: Gasket(s) and mounting screws are provided
(For common use with A05R)

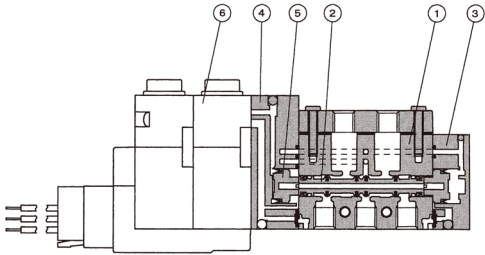


※ : Made to order

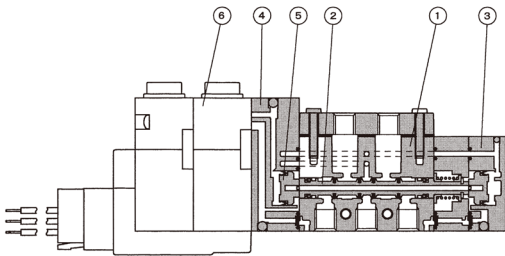
⊙ 2-position Single solenoid



⊙ 2-position Double solenoid



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

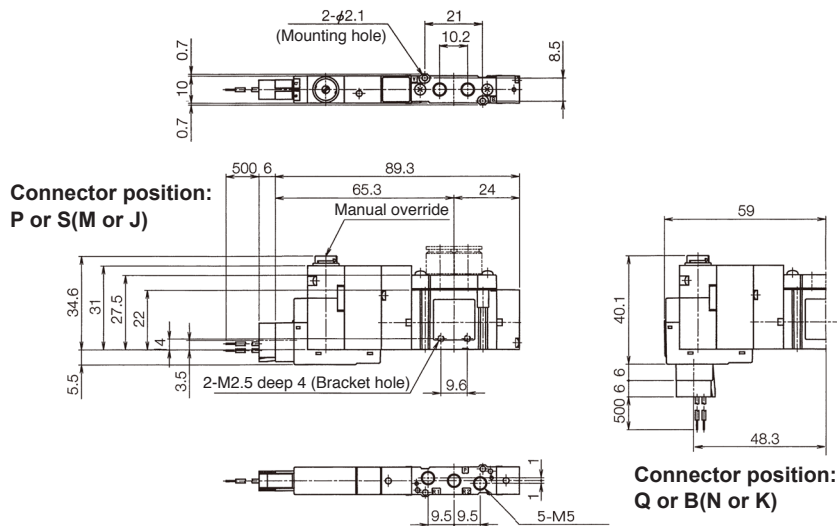


Main Component

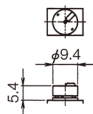
| No. | Description | Material |
|-----|----------------|---------------------|
| 1 | Body | Zinc die-casting |
| 2 | Spool assembly | Aluminium alloy/NBR |
| 3 | End cover | Resin |
| 4 | Piston head | Resin |
| 5 | Piston | Resin |
| 6 | Pilot valve | Refer to A00 Series |

A05FS25

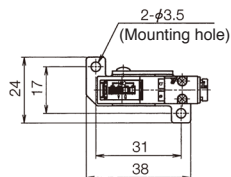
(Unit: mm)



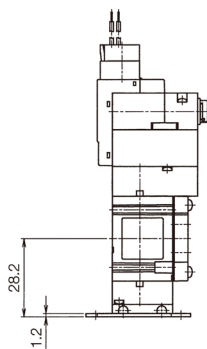
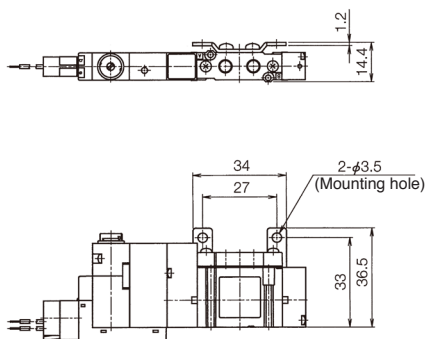
Manual locking cover

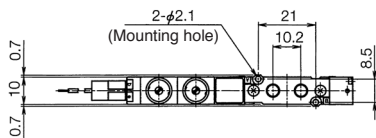


Foot bracket

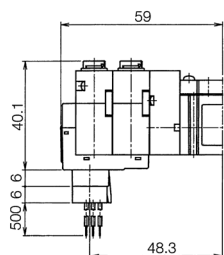
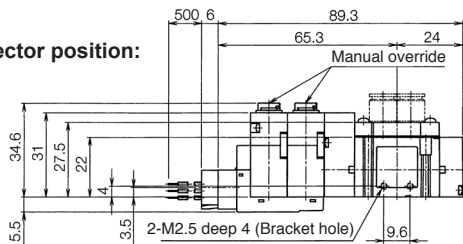


Side bracket



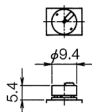


**Connector position:
P or S**

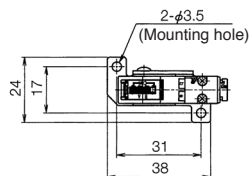


**Connector position:
Q or B(N or K)**

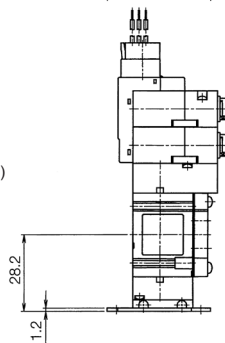
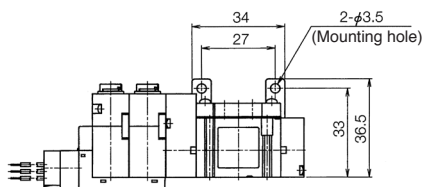
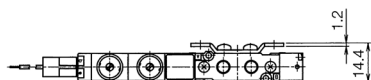
Manual locking cover



Foot bracket

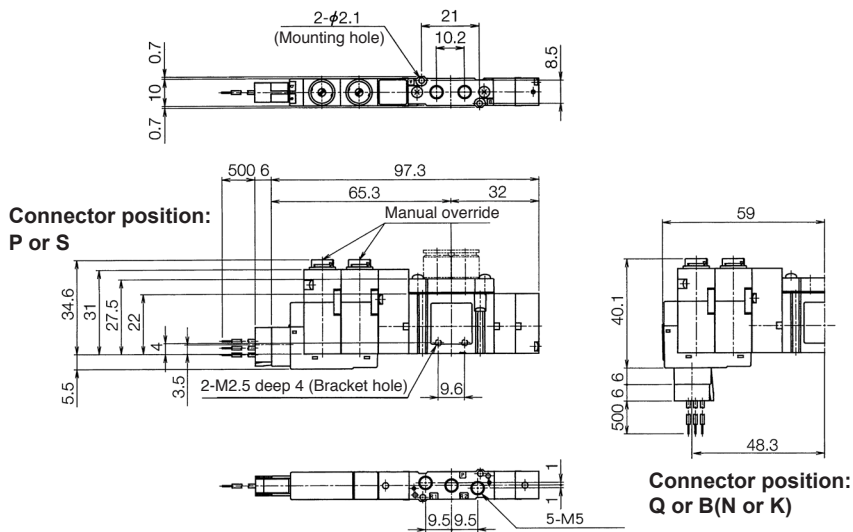
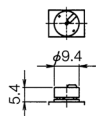
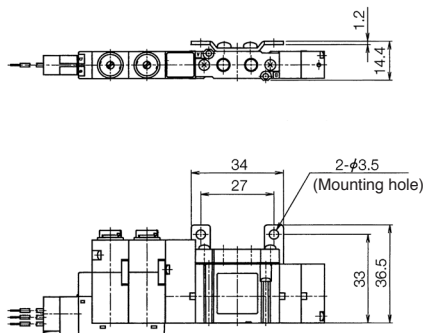


Side bracket



A05FD35, A05FE35, A05FO35

(Unit: mm)

**Manual locking cover****Side bracket****Foot bracket**