

# ADEX A12G Series

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

## A12GS25

2-position, single solenoid

## A12GD25

2-position, double solenoid

## A12GD35

3-position, closed center

## A12GE35

3-position, ABR connect

## A12GO35

3-position, PAB connect



## Specifications

Model No.		Unit	A12GS25	A12GD25	A12GD35	A12GE35	A12GO35
Fluid			Non-lubricated/lubricated air				
Port size			RC ¼				
Effective area		mm <sup>2</sup>	11.1		7.6		14.1
Cv value			0.61		0.42		0.78
Operating ambient temperature		°C	-5~50				
Pressure range		MPa	0.15~0.7	0.1~0.7	0.2~0.7		
			-0.1~0.7 For external pilot operation				
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			Captured exhaust				
Manual override			Screw driver-operated locking button				
Mounting position			Free				
Shock resistance, vibration resistance		m/s <sup>2</sup>	150/30				
Weight	Without sub-base	g	65	74	78		
	With sub-base	g	149	159	163		



- 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

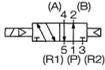
## Electrical Specifications

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

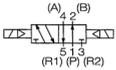
**A12G** **S25** **1 P** **02** **S**

Switch Form

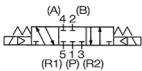
**S25**  
2-position, single solenoid



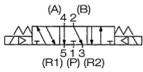
**D25**  
2-position, double solenoid



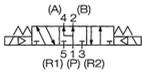
**D35**  
3-position, closed center



**E35**  
3-position, ABR connect



**O35**  
3-position, PAB connect



Special Specification

No mark : standard  
(Internal pilot)  
X : ※External pilot

Voltage

1: DC24V  
2: ※DC12V  
3: ※DC6V  
4: ※DC5V  
5: ※DC3V

Wiring

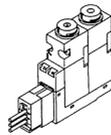
No mark : Without connector  
S : Connector with lead wire for single solenoid (Length: 500 mm)  
D : Connector with lead wire for double solenoid (Length: 500 mm)

Port size

No mark : Without sub-base  
02 : Rc $\frac{1}{4}$   
G2 : ※G $\frac{1}{4}$   
N2 : ※NPT $\frac{1}{4}$   
F2 : ※NPTF $\frac{1}{4}$

(Valve without sub-base comes with a base gasket & two mounting screws)

Wiring withdrawal direction



NPN type

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

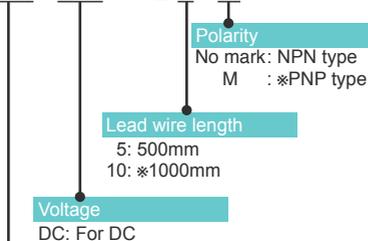
PNP type

※M: With indicator light and surge suppressor  
※J: Without indicator light and surge suppressor

☰ ※ : Made to order

### Connector with lead wire

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



**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**

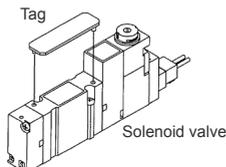


- Color**
- A: Orange (For solenoid A side)
  - B: Green (For solenoid B side)

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

### Tag for solenoid valve

**A 0 5 P - N (Pack of 10)**

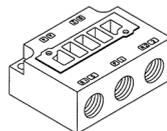


(For common use with sub-base mounting type of A05, A12, and A20)

### Sub-base

**A 1 2 P - B - 0 2 X**

- Port size**
- O2: Rc $\frac{1}{4}$
  - G2: \*G $\frac{1}{4}$
  - N2: \*NPT $\frac{1}{4}$
  - F2: \*NPT $\frac{1}{4}$
- (For common use with A05P)
- Special Specifications**
- No mark: Standard
  - X : For external pilot (with port X)

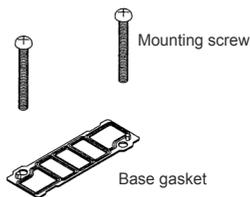


(For common use with A12P)

### Base gasket

**A 1 2 P X - G**

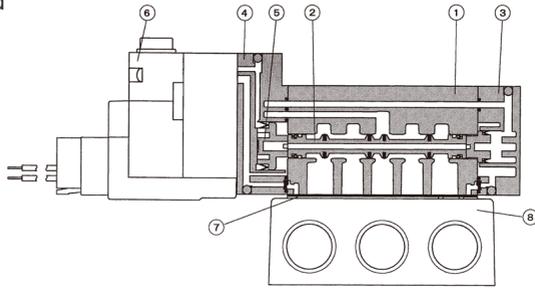
- Special Specifications**
- No mark: Standard
  - X : For external pilot (with port X)
- Content of kit**
- SG: Gasket & mounting screws
  - G : Only gasket (Pack of 10)
  - S : Only mounting screw (Pack of 20)



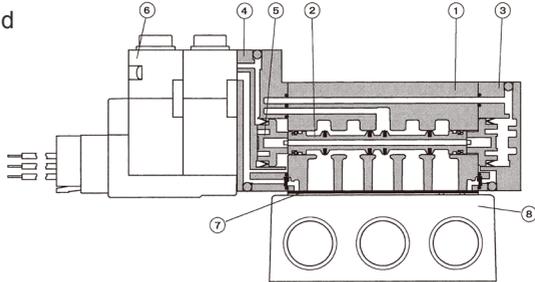
(For common use with A12P)

\* : Made to order

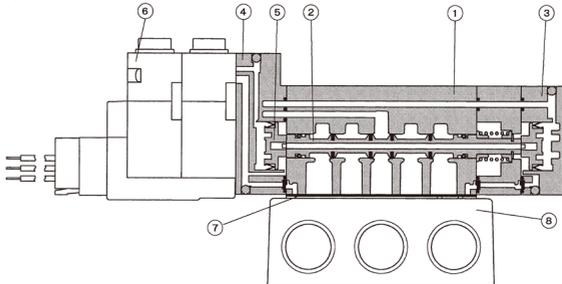
☉ 2-position Single solenoid



☉ 2-position Double solenoid



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



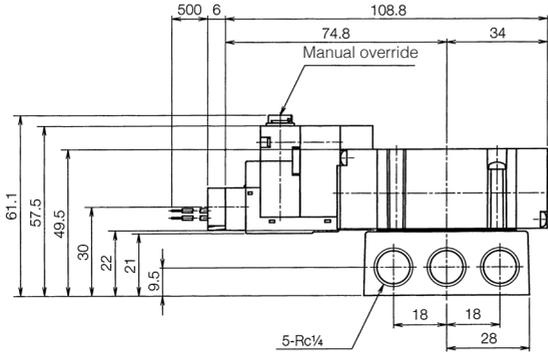
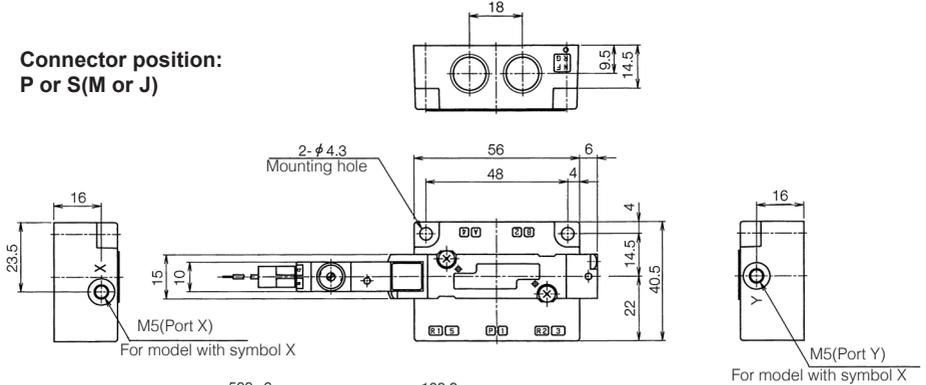
Main Component

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
7	Base gasket	NBR
8	Sub-base	Alluminium die-casting

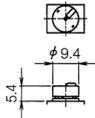
A12GS25

(Unit: mm)

**Connector position:  
P or S(M or J)**



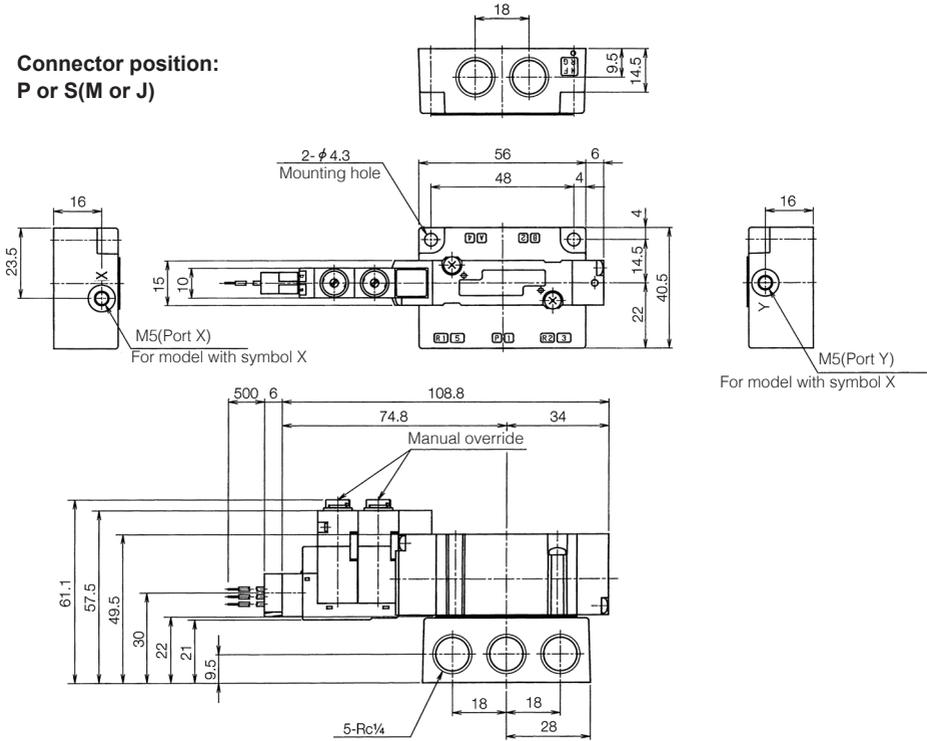
**Manual locking cover**



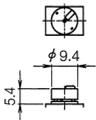
A12GD25

(Unit: mm)

**Connector position:  
P or S(M or J)**

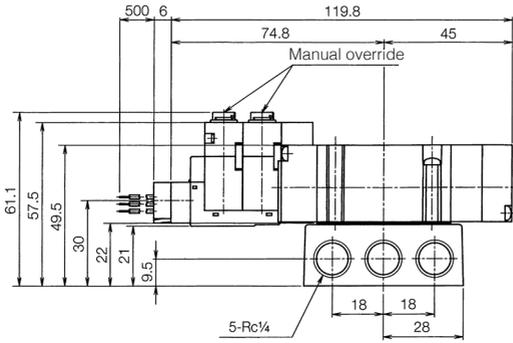
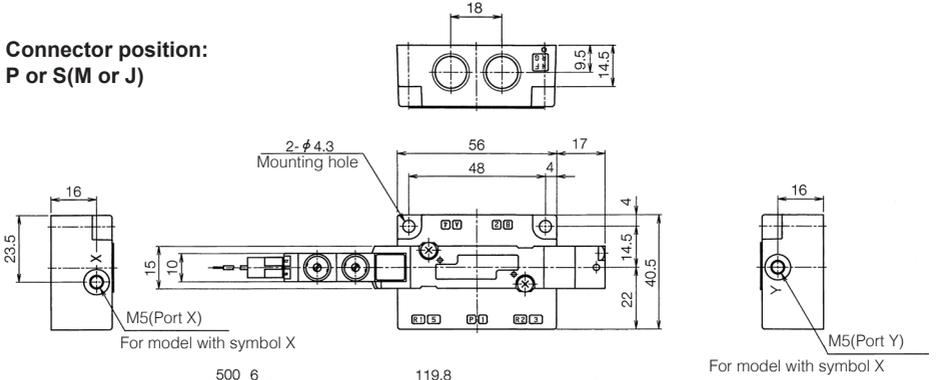


**Manual locking cover**



A12GD35, A12GE35, A12GO35

**Connector position:  
P or S(M or J)**



**Manual locking cover**

