

ADEX A20P Series

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

A20PS25

2-position, single solenoid

A20PD25

2-position, double solenoid

A20PD35

3-position, closed center

A20PE35

3-position, ABR connect

A20PO35

3-position, PAB connect



Specifications

Model No.			Unit	A20PS25	A20PD25	A20PD35	A20PE35	A20PO35
Fluid				Non-lubricated/lubricated air				
Port size				RC ¼, ⅜				
Effective area			mm ²	20.6		15.9		20.5
Cv value				1.13		0.87		1.13
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	300		200		
Response Time	DC	ON	s	0.018	0.010	0.015		
		OFF	s	0.028 (0.034)	—	0.060(0.066)		
	AC	ON	s	0.021	0.013	0.018		
		OFF	s	0.034	—	0.065		
Pilot air exhaust				Captured exhaust				
Manual override				Screw driver-operated locking button				
Mounting position				Free				
Shock resistance, vibration resistance			m/s ²	150/30				
Weight	Without sub-base		g	90	105	113		
	With sub-base		g	330	349	357		



- 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

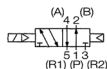
Rated voltage	DC	V	24, 12, 6, 5, 3	
	AC	V	100, 110 (50/60Hz)	
Permissible voltage fluctuation		%	+10, -10	
Power consumption	DC	W	0.6 (with indicator light and surge suppressor), 0.55 (without indicator light and surge suppressor)	
	AC	110V VA	1.4 (with indicator light and surge suppressor), 1.3 (without indicator light and surge suppressor)	
Grade of Insulation			JIS grade E	
Wiring			Plug-in connector	
Surge suppressor			Diode	
Indicator light			LED	

A20P**S25****1 P****02****E****Wiring**

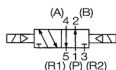
No mark: Without connector
 E : Connector with wire
 (Length: 500 mm)

Switch Form**S25**

2-position, single solenoid

**D25**

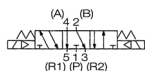
2-position, double solenoid

**D35**

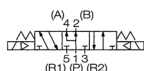
3-position, closed center

**E35**

3-position, ABR connect

**O35**

3-position, PAB connect

**Port size**

No mark : Without sub-base

02 : Rc $\frac{1}{4}$ 03 : Rc $\frac{3}{8}$ G2 : *G $\frac{1}{4}$ G3 : *G $\frac{3}{8}$ N2 : *NPT $\frac{1}{4}$ N3 : *NPT $\frac{3}{8}$ F2 : *NPTF $\frac{1}{4}$ F3 : *NPTF $\frac{3}{8}$

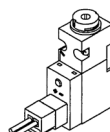
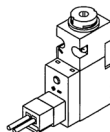
(Valve without sub-base comes with a base gasket & two mounting screws)

Wiring withdrawal direction**P:**

With indicator light and
surge suppressor

S:

Without indicator light
and surge suppressor

**Special Specification**

No mark : standard

(Internal pilot)

X : *External pilot

Voltage

1: DC24V

2: *DC12V

3: *DC6V

4: *DC5V

5: *DC3V

7: *AC100V

8: AC110V



*: Made to order

Connector with lead wire

A 0 5 P — D C — C L 5

Type

P: For PR type

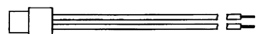
Lead wire length

5 : 500mm
10: ※1000mm

Voltage

DC: For DC
AC: For AC type

For PR type



	DC	AC
(+)	Black	Blue
(-)	Red	Blue

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

Locking cover

A 0 5 P — L A



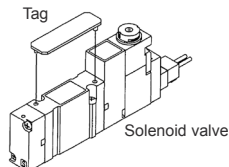
Color

A: Orange

(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 2 0 P — B — 0 2 X

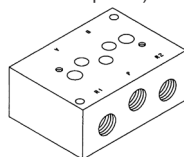
Port size

No mark: Without sub-

base
02 : Rc $\frac{1}{4}$
03 : Rc $\frac{1}{2}$
G2 : *G $\frac{1}{4}$
G3 : *G $\frac{1}{2}$
N2 : *NPT $\frac{1}{4}$
N3 : *NPT $\frac{3}{8}$
F2 : *NPTF $\frac{1}{4}$
F3 : *NPTF $\frac{3}{8}$

Special Specifications

No mark: Standard
X : For external
pilot (with
port X)



(For common use with A20G)

Base gasket

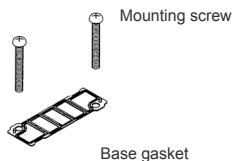
A 2 0 P X — G

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)

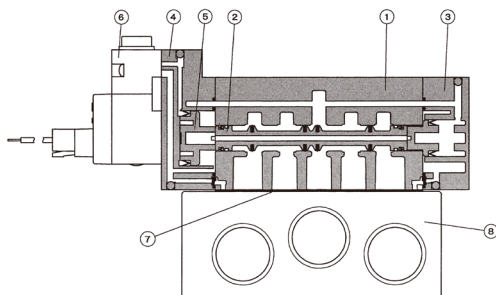


(For common use with A20P)

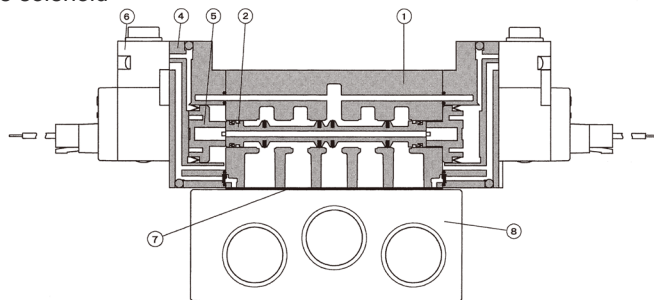


※: Made to order

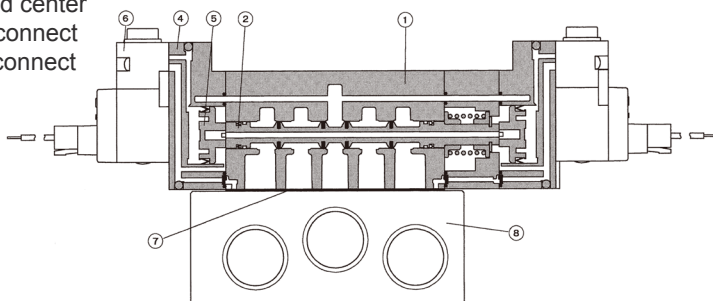
◎ 2-position Single solenoid



◎ 2-position Double solenoid



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

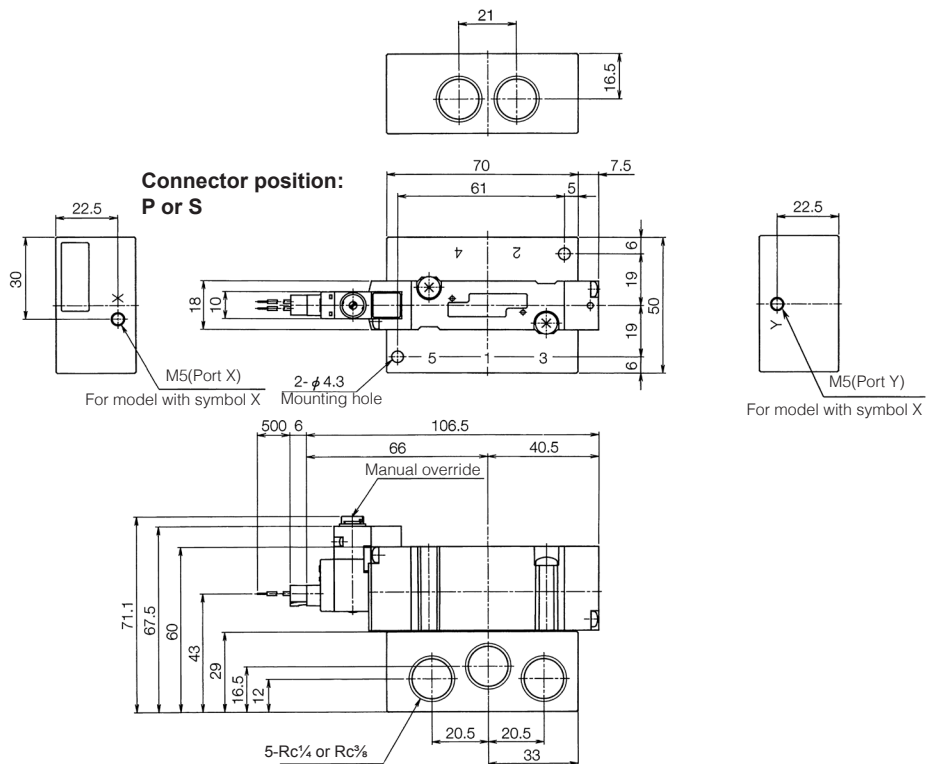
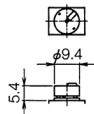


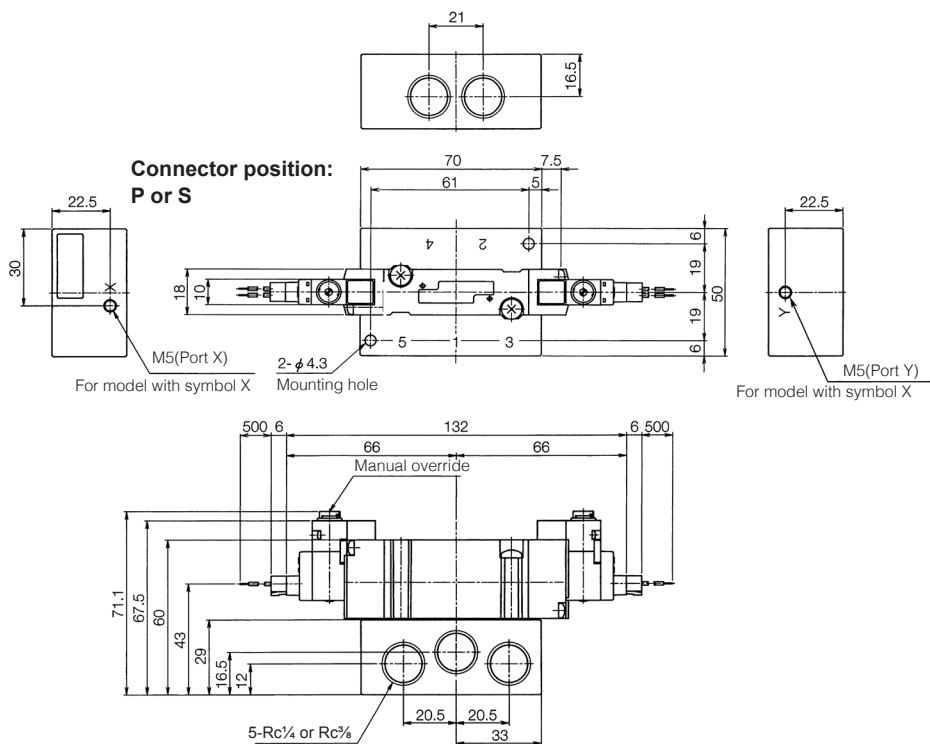
Main Component

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

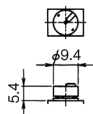
A20PS25

(Unit: mm)

**Manual locking cover**

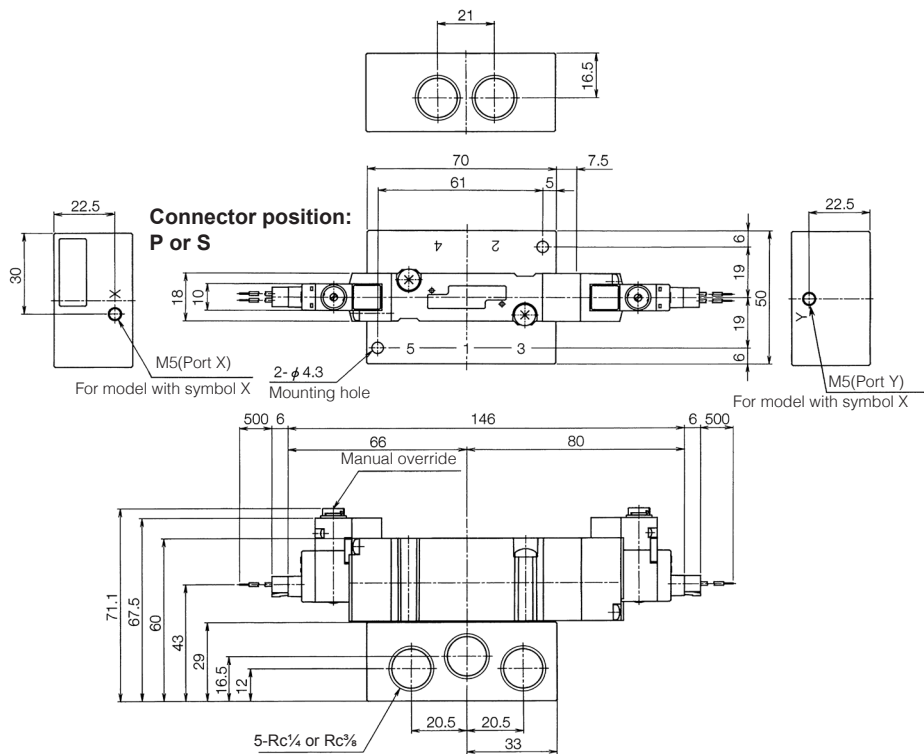


Manual locking cover



A20PD35, A20PE35, A20PO35

(Unit: mm)



Manual locking cover

