

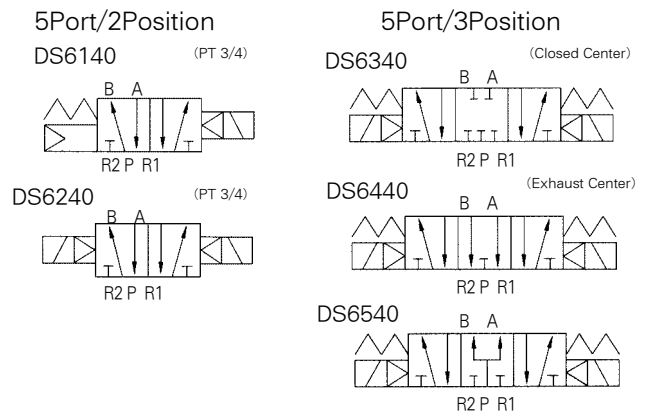
Series **DS 6000**

Elastic Seal 5 Port Pilot Type



- COMPACT SIZE AND LIGHT FLOW CAPACITY
EFFECTIVE ORIFICE 90mm²(Cv 5.0)
- LOW POWER CONSUMPTION -1.8w(DC)
- MANY VARIATIONS AVAILABLE

Symbol



How To Order



1 Series

Blank : Rc(PT)Port
U : NPT

2 Type of Actuation

1 : 2 Position Single
2 : 2 Position Double
3 : 3 Position Closed Center
4 : 3 Position Exhaust Center
5 : 3 Position Pressure Center

3 Voltage

1 : AC 110V(50/60Hz)
2 : AC 220V(50/60Hz)
3 : AC 120V(50/60Hz)

4 : AC 240V(50/60Hz)

5 : DC 24V

6 : DC 12V

4 Electrical Entry/ Indicator Light and Surge Suppressor

G : Grommet

DZ : DIN Connector(With indicator Light and surge suppressor)

5 Port Size

06 : 3/4

Specifications

Model	DS6140	DS6240	DS6340	DS6440	DS6540
Fluid	Air				
Operating Pressure Range(kgf/cm ²)	1.5~9.9	1~9.9	1.5~9.9		
Effective Orifice mm ² (Cv)	90(5.0)		70(3.89)		
Ambient and Fluid Temperature	Max. 50°C				
Response Time(5kgf/cm ²)	40ms or less		60ms or less		
Max. Operating frequency	5c/s		3c/s		
Lubrication	Not required				
Manual Override	Non-locking Push Type				
Impact/Vibration Resistance	30G/5G(8.3~2000HZ)				
Enclosure	Dust Proof				
Coil Voltage	AC 50/60HZ 110V, 120V, 220V, 240V, DC12V, 24V				
Allowable Voltage	-15%~+10% of Rated Voltage				
Coil Insulation	Class B or equivalent(130°C)				
Apparent Power	AC	Inrush	5.6VA(50HZ), 5.0VA(60HZ)		
		Holding	4.5VA(50HZ), 3.8VA(60HZ)		
Power Consumption	DC	1.8W/2W(With LED)			
Weight(gf)	1,170	1,200	1,220	1,220	1,220
Surge suppressor circuit	AC, DC : Varistor				
Indicator Light	LED				

DV1000 ·
3000 · 4000

DV2000

DS2000

DS3000

DS5000

DS6000

DX2

DV100

DS300

DW

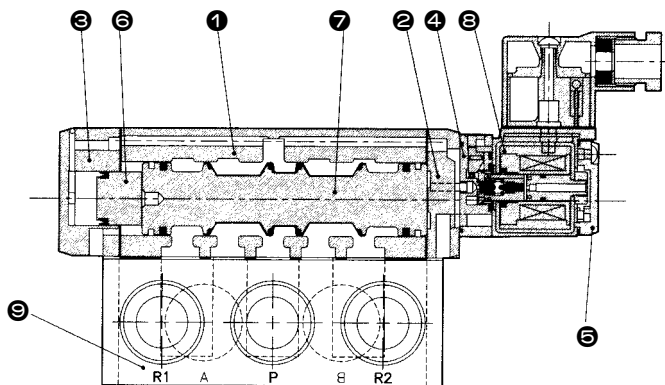
DP300 ·
3000 · 5000

DM

DH

Construction/Parts List

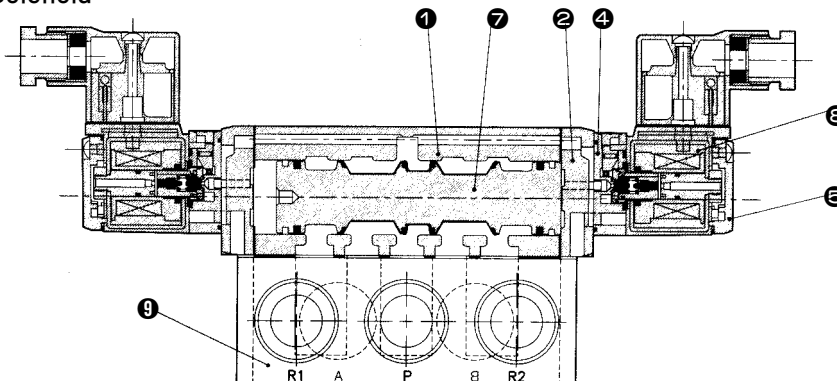
Single Solenoid



Main Parts

No.	Description	Material
①	Body	Aluminum
②	Adapter Plate	Aluminum
③	End Cover	Aluminum
④	Pilot Body	Polyacetal
⑤	Pilot Cover	Polyacetal
⑥	Piston	Polyacetal
⑦	Spool	Aluminum · NBR
⑧	Coil Ass'y	-
⑨	Base	Aluminum

Double Solenoid



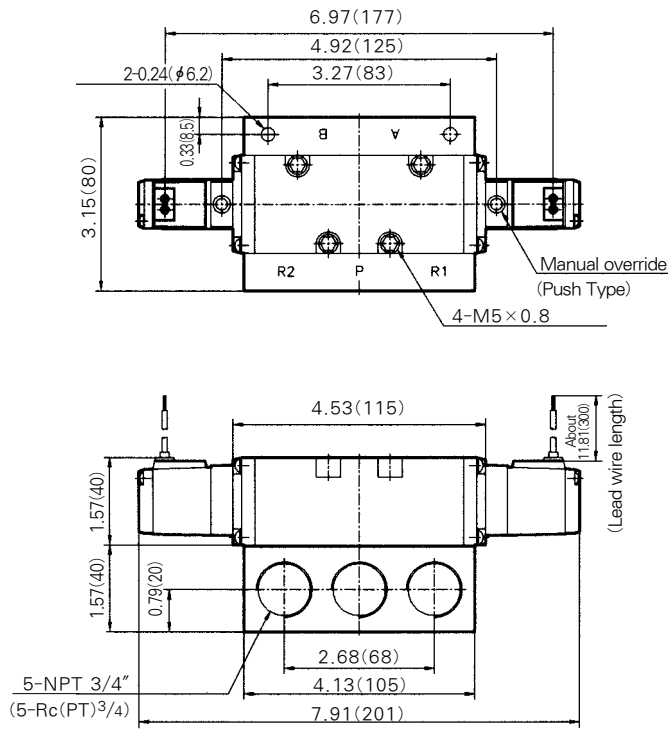
3 Position Closed Center · Exhaust Center · Pressure Center

inch(mm)

Grommet(G)

DS 6300 - OG

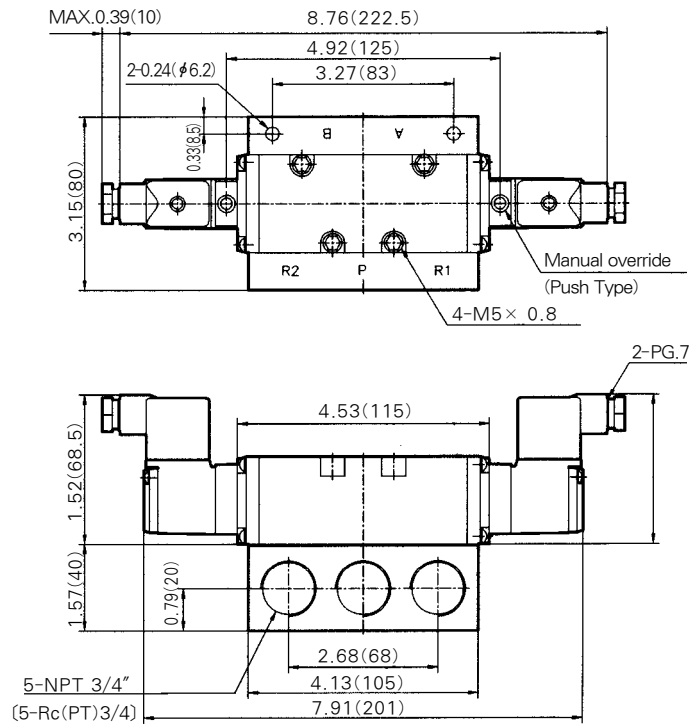
4
5



DIN Connector Type(D, DZ)

DS 6300 - O D

4 DZ
5



DV1000 ·
3000 · 4000

DV2000

DS2000

DS3000

DS5000

DS6000

DX2

DV100

DS300

DW

DP300 ·
3000 · 5000

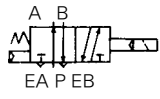
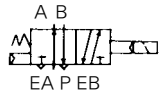
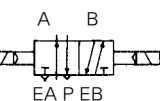
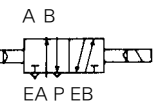
DM

DH

Precautions

Use as a 3 Port Valve

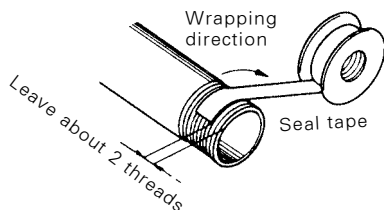
Plugging one of the Cylinder Ports (A or B) enables use as a 3 Port Valve. It should not be used in special applications such as a Non-leakage Valve. Make sure the Exhaust port is open if used as a 3 Port Valve.

Plug		A Port (CYL.1 Port)	B Port (CYL.2 Port)
Function		N.C	N.O
Sole-noid	Single	(X)Plug 	(X)Plug 
	Double	(X)Plug 	(X)Plug 

Mounting

1. Make sure that Chips, Cutting Oil, Dust, etc. are cleaned up before mounting.
2. When screwing the pipe or fitting into a port, ensure that Chips or Sealing material will not get in.
3. A Filter has already been installed to the Pilot Exhaust(P.E.) Port, so if a Silencer is to be added, first remove the Filter.

Thread	Appropriate Clamping Torque kgf · cm(N · m)
1/8"	70~90(7~9)
1/4"	120~140(12~14)



Use at Low Temperature

Available for use under -10°C , however care should be taken to protect against freezing moisture.

Quality Of Fluid

1. Filtration to 10 Microns is sufficient.

Lubricant

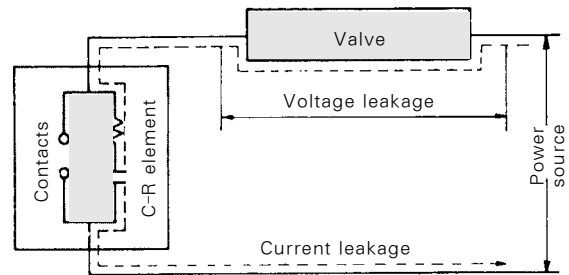
1. Valves are pre-lubricated - no further lubrication is necessary.
2. If a lubricant is used, please use Turbine Oil (ISO VG32).

Momentary Energizing

When using a Double Solenoid type with momentary energizing, make sure the energizing time is more than 0.05 seconds.

Leakage Voltage

1. For the leakage current, residual leakage voltage of AC coil must be less than 20% of the rated voltage, and leakage voltage of DC coil must be less than 3% of the rated voltage when the switch is off.
2. When using a C-R element, it will increase the leakage voltage.



Remarks

Port	DS6000
Supply	P(SUP)
Cylinder	A(CYL.2), B(CYL.1)
Exhaust	R1(EXH2), R2(EXH1)
Symbol (Single solenoid)	<p>P : SUP. B : CYL.1 A : CYL.2 R1 : EXH.1 R2 : EXH.2</p> 