

Series **DS 6000**

Elastic Seal 5 Port Pilot Type

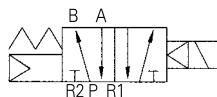


- COMPACT SIZE AND WEIGHT
- FLOW CAPACITY AND EFFECTIVE ORIFICE
90mm²(Cv 5.0)
- LOW POWER CONSUMPTION -1.8w(DC)
- MANY VARIATIONS AVAILABLE

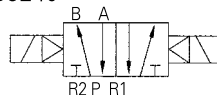
Symbol

5Port/2Position

DS6140 (PT 3/4)

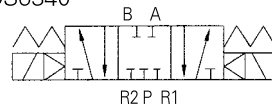


DS6240 (PT 3/4)

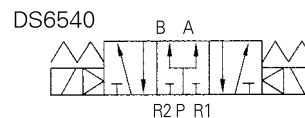
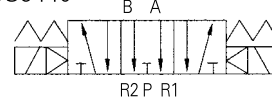


5Port/3Position

DS6340 (Closed Center)



DS6440 (Exhaust Center)



How To Order

DS 6 1 4 0 — 1 G — 06

1 2 3 4 5 6 7

1 Series

DS6000/UDS6000 Series

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 Body Type

- 4 : Base mounted type

4 Body Option

- 0 : Standard

5 Voltage

- 1 : AC 110V(50/60Hz)
- 2 : AC 220V(50/60Hz)
- 3 : AC 120V(50/60Hz)
- 5 : DC 24V
- 6 : DC 12V

6 Electrical Entry/ Indicator Light and Surge Suppressor

G : Grommet

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

7 Port Size

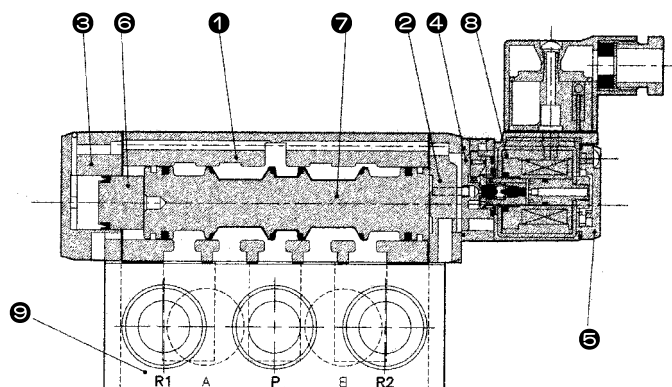
- 06 : 3/4

Specifications

Model			DS6140	DS6240	DS6340	DS6440	DS6540
Fluid			Air				
Operating Pressure Range(kgf/㎠)			1.5~9.9	1~9.9	1.5~9.9		
Effective Orifice ㎠(Cv)			90(5.0)		70(3.89)		
Ambient and Fluid Temperature			Max. 50℃				
Response Time(5kgf/㎠)			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℃)				
Apparent Power	AC	Lnrush	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				

Construction/Parts List

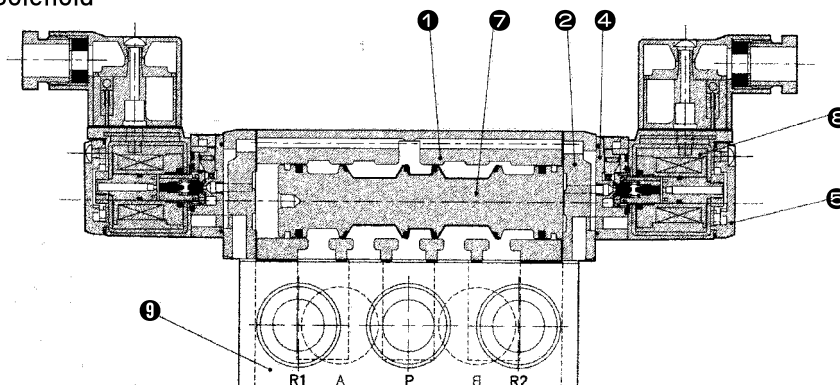
Single Solenoid



Main Parts

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

Double Solenoid

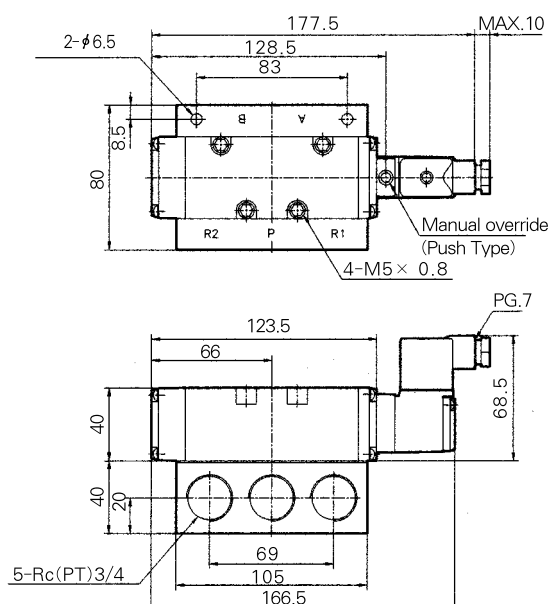
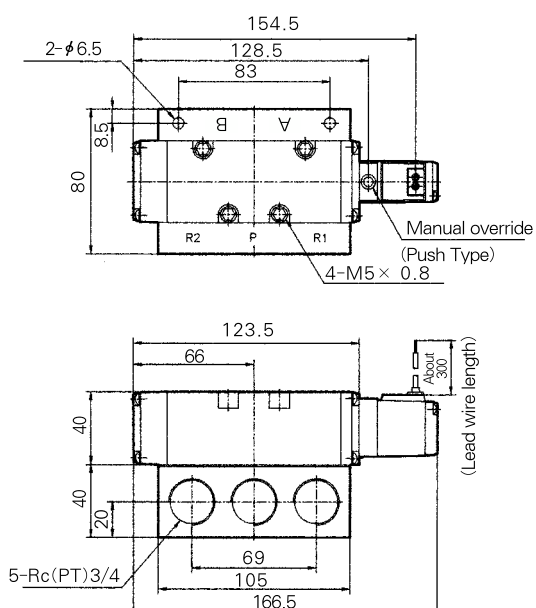


2 Position Single Solenoid

(mm)

Grommet(G)/DS 6140-OG

DIN Connector Type (D, DZ) DS6140-○ D
DZ

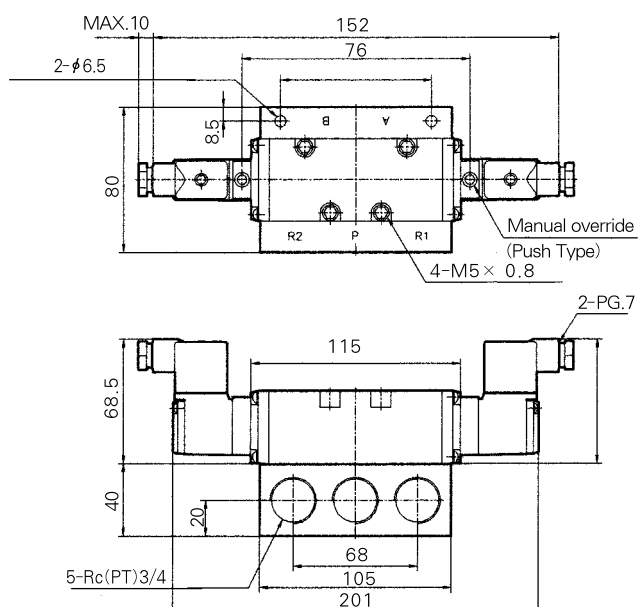
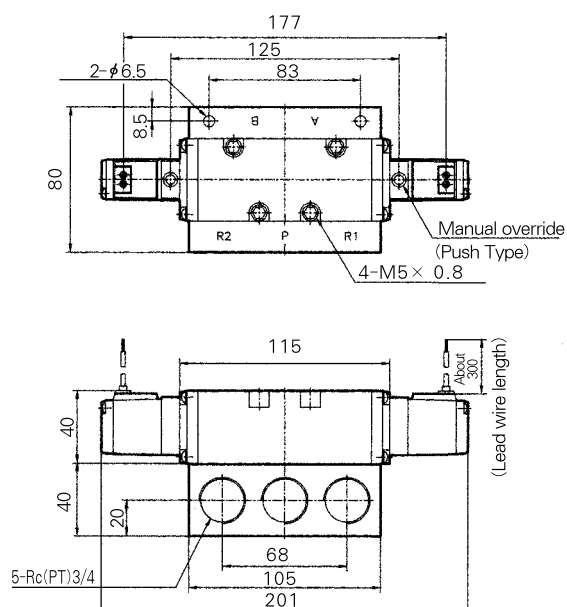


2 Position Double Solenoid

(mm)

Grommet(G)/DS 6240 - OG

DIN Connector Type (D, DZ) DS6240-○ D
DZ



DW

DS

DV

DX2

DP

DM

DH

DT

DC

Series DS6000

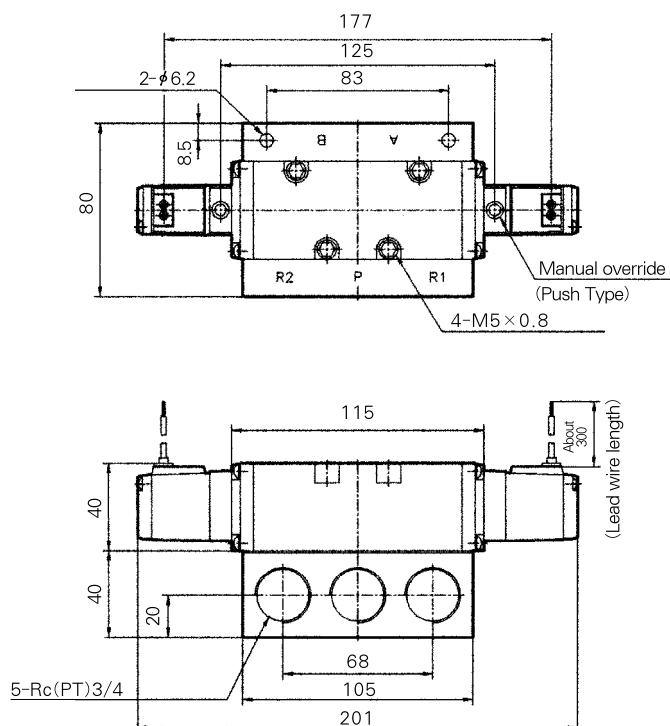
3 Position Closed Center · Exhaust Center · Pressure Center

(mm)

Grommet(G)

DS 6300 - ○G

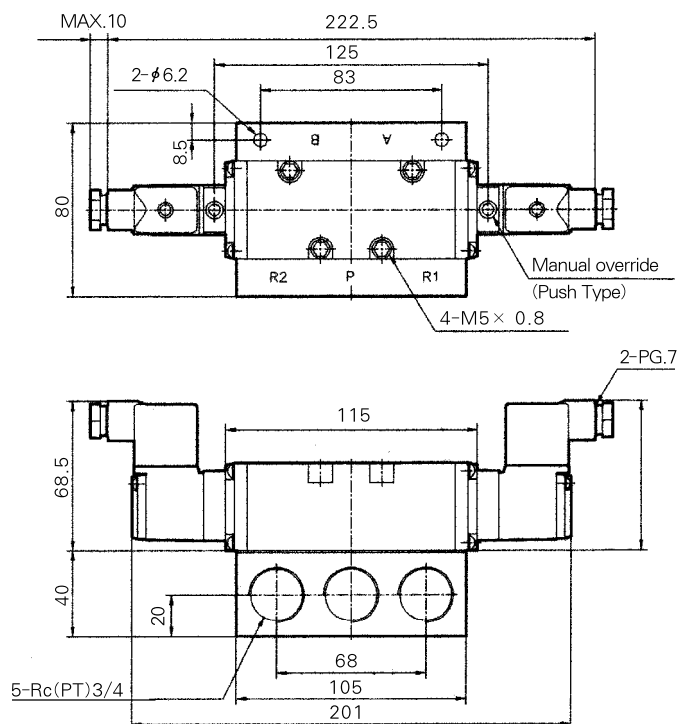
4
5



DIN Connector Type(D, DZ)

DS 6300 - ○D

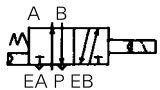
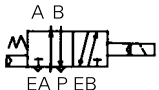
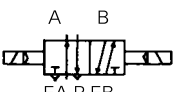
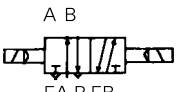
4 DZ
5



Precautions

Use as a 3 Port Valve

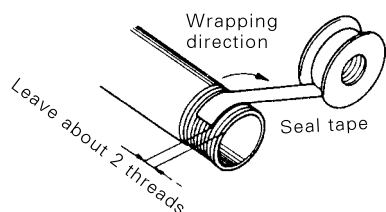
Plugging one of the Cylinder Ports (A or B) enables use as a 3 Port Valve. It should not be used in special applications such as a Non-leakage Valve. Make sure the Exhaust port is open if used as a 3 Port Valve.

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.
4. Clamp torque of piping.

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℃, however care should be taken to protect against freezing moisture.

Quality Of Fluid

1. Filtration to 5 Microns is sufficient.
2. Large quantity of drainage causes incorrect operation of pneumatic products as well as environmental contamination.
3. When there is a large amount of carbon powder from the compressor, please change the compressor oil or install a mist separator.

Lubricant

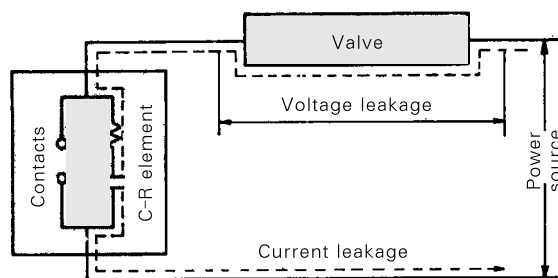
1. Valves are pre-lubricated - no further lubrication is necessary.
2. If a lubricant is used, please use Turbine Oil (ISO VG32).

Momentary Energizing

When using a Double Solenoid type with momentary energizing, make sure the energizing time 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 rake 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 : SUP. B : CYL.1 A : CYL.2 R1 : EXH.1 R2 : EXH.2 