

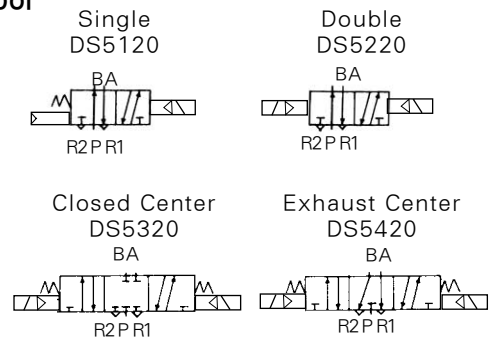
Series DS5000

Rubber Seal 5 Port Pilot Type/Body Ported Type

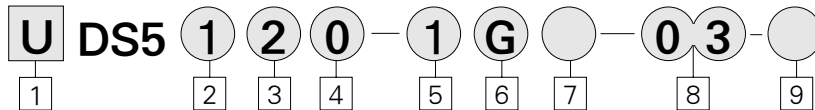


- COMPACT SIZE AND LIGHT WEIGHT
- LARGE FLOW CAPACITY
- LOW POWER CONSUMPTION
- DESIGNED FOR NON-LUBRICATED SERVICE

Symbol



How to Order



1 DS5000 Series

Blank : Metric (PT)
U : NPT (UNF)

2 Type of Actuation

1 : 2 Position Single Solenoid
2 : 2 Position Double Solenoid
3 : 3 Position Closed Center
4 : 3 Position Exhaust Center

3 Body Type

2 : For 20 Type Manifold,
Body Ported

4 Body Option

0 : Standard
3 : Common Exhaust for
Main valve and Pilot valve

5 Voltage

1 : AC100V, 50/60Hz
2 : AC200V, 50/60Hz
3 : AC120V, 50/60Hz
4 : AC240V, 50/60Hz
5 : DC24V
6 : DC12V
7 : DC6V

8 : AC24V, 50/60Hz
9 : Other

6 Electrical Entry/Indicator Light and Surge Suppressor

G : Grommet (Lead wire length 12 inch)
DZ : DIN Connector
With Indicator light and Surge suppressor
D : DIN Type Terminal

7 Manual Override

Blank : Non-locking Push type
C : Knob locking type

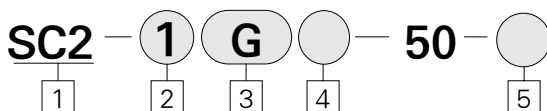
8 Port Size (SUP., CYL')

03 : 3/8"
04 : 1/2"
(Exhaust Port 3/8")

9 Special Option

Blank : Standard type
XC16 : Copper-free

Pilot Valve Assembly



1 For DS5000 series Valve Ass'y

2 Voltage

1 : AC100V, 50/60Hz
2 : AC200V, 50/60Hz
3 : AC120V, 50/60Hz
4 : AC240V, 50/60Hz
5 : DC24V
6 : DC12V
7 : DC6V
8 : AC24V, 50/60Hz
9 : Other

3 Electrical Entry/Indicator Light and Surge Suppression

G : Grommet (Lead wire length 12 inch)
DZ : DIN Connector
With Indicator light and Surge suppressor

4 Manual Override

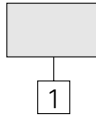
Blank : Non-locking Push type
C : Knob locking type

5 Special Option

Blank : Standard type
XC16 : Copper-free

Din Terminal Box How to Order

TVF3130-61-2005-



1 Symbol

Symbol	Voltage
1	AC 100V
2	AC 200V
3	AC 120V
4	AC 240V
5	DC 24V
6	DC 12V
7	DC 6V
8	AC 24V
9	Other

Specifications

Fluid		Air	
Operating Pressure Range	2 Position Single/3 Position	21~128 PSI {0.15~0.9 MPa}	
	2 Position Double	14~128 PSI {0.1~0.9 MPa}	
Ambient and Fluid Temperature		Max. 122°F (50℃)	
Response Time	2 Position Single/Double	40ms or less {0.5 MPa}	
	3 Position	50ms or less {0.5 MPa}	
Max. Operating Frequency	2 Position Single/Double	5 Hz	
	3 Position	3 Hz	
Lubrication		If required	
Manual Override		Non-Locking Push Type, Knob locking type	
Mounting Position		Free	
Impact/Vibration Resistance		30G/5G(8.3~2000Hz)	
Enclosure		Dust Proof (IP67)	
Electrical entry		Grommet, DIN Connector	
Coil Voltages	AC 50/60Hz	100 VAC, 200 VAC, 120 VAC, 240 VAC, AC24V	
	DC	6 VDC, 12 VDC, 24 VDC	
Allowable Voltage		-15~+10% of Rated Voltage	
Power consumption	AC	Inrush	5.6VA(50Hz), 5.0VA(60Hz)
		Holding	3.4VA(50Hz), 2.3VA(60Hz)
	DC	1.8W/2W(With LED)	
Indicator Light/Surge Suppressor Circuit	AC	LED, Varistor	
	DC	LED, Varistor	

* If provided, use Turbine Oil 0.1(ISO VG #32)

Model

Piping	Type	Position Solenoid	(1)Port size (SUP,CYL.)	Effective orifice inch ² (Cv factor)		(2)Weight (lbs)	
				3/8"	1/2"	3/8"	1/2"
Body ported	DS5120-○○- ⁰³ / ₀₄	2/Single	3/8"	0.08(2.8)	0.09(3.2)	0.84	0.82
	DS5220-○○- ⁰³ / ₀₄	2/Double		0.08(2.8)	0.09(3.2)	0.84	1.04
	DS5320-○○- ⁰³ / ₀₄	3/Closed Center	1/2"	0.06(2.2)	0.07(2.5)	1.06	1.28
	DS5420-○○- ⁰³ / ₀₄	3/Exhaust Center		0.07(2.4)	0.08(2.7)	1.30	1.28

(1) Body Ported Valve can be mounted directly on (Manifold, type/B, Common exhaust)

(2) Exhaust Port is only 3/8"

Model for Manifold

Model	Type	Exhaust	A, B(CYL) Port
DS5020-○○- ⁰³ / ₀₄	B Mount 20	Common	Valve

Series DS5000

Manifold



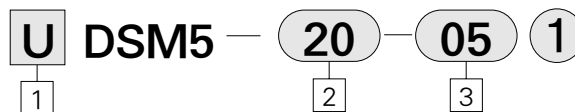
DSM5-20-051

Manifold Specifications

Manifold type	B Mount
Exhaust	Common Exhaust
Maximum Stations	10 Stations

Manifold Type	Model	Exhaust Port	Piping/Port location			Port Size(NPT)			Applicable Valve
			P	R	A,B	P	R	A,B	
B Mount	DSM5-20	Common	Side	Side	Top	3/8"	3/8"	3/8",	UDS5○20
			Base	Base	Valve	1/2"	3/8"	1/2"	

How to Order Manifold Base



1 Manifold for DS5000 series
 Blank : Metric(PT)
 U : NPT(UNF)

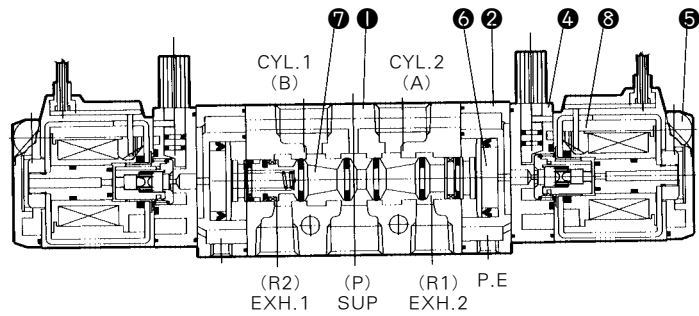
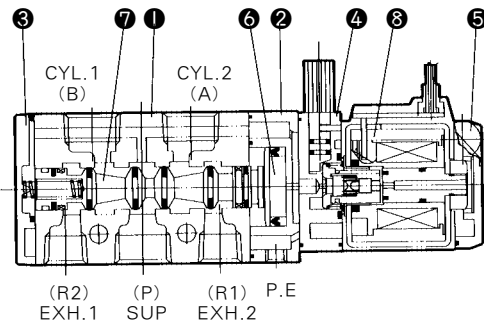
2 Manifold Specifications
 Code : 20
 Port location for CYL' port : Valve
 Port size for EXH.
 P : 1/2"
 R : 3/8"
 Applicable : DS5○20

3 Stations
 02 : 2 Stations
 : :
 10 : 10 Stations

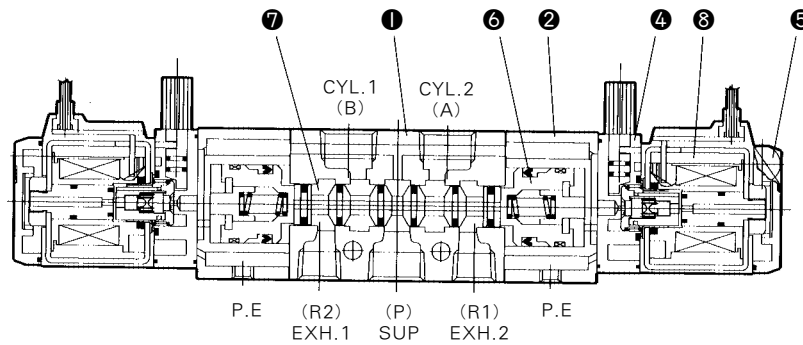
Construction/Parts List

Single Solenoid

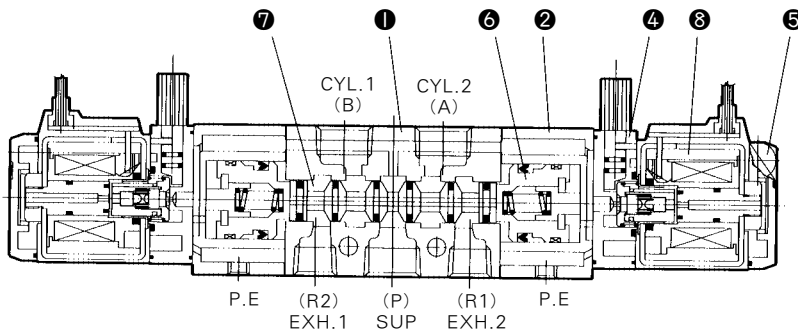
Double Solenoid



3 Position Closed Center



3 Position Exhaust Center



- DV1000 · 3000 · 4000
- DV2000
- DS2000
- DS3000
- DS5000**
- DS6000
- DX2
- DV100
- DS300
- DW
- DP300 · 3000 · 5000
- DM
- DH

Main Parts

No.	Description	Material	Notes
①	Body	Aluminum Die Casting	Metallic Paint
②	Adapter Plate	Aluminum Die Casting	Black Paint
③	End Cover	Aluminum Die Casting	Black Paint
④	Pilot Body	Polyacetal	
⑤	Pilot Cover	Polyacetal	
⑥	Piston	(*)Polyacetal	
⑦	Spool	Aluminum · NBR	

※ 3 Position : Aluminum

Spare Parts

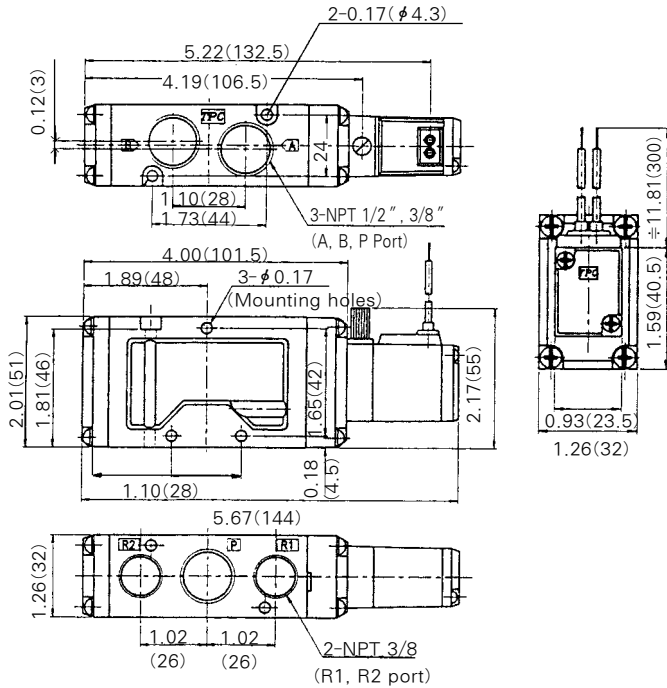
No.	Description	Material	Notes
⑧	Pilot Valve Ass'y	—	

Series DS5000

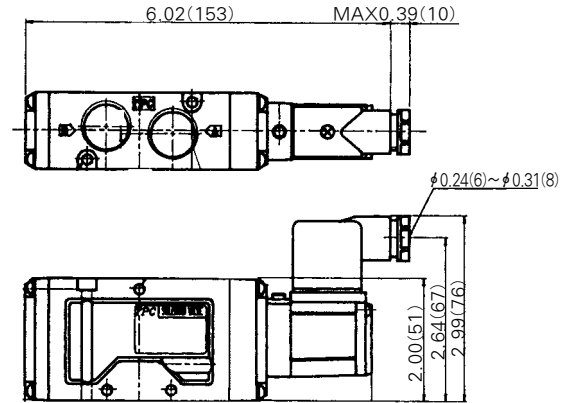
Body ported/2 Position Single Solenoid

inch(mm)

Grommet/DS512 ○ - ○ GC



DIN Connector/UDS512 ○ - ○ DZ

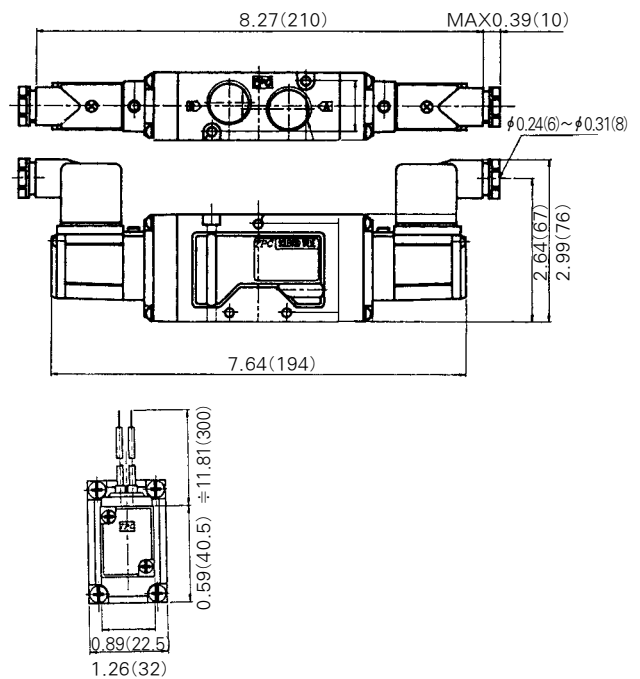
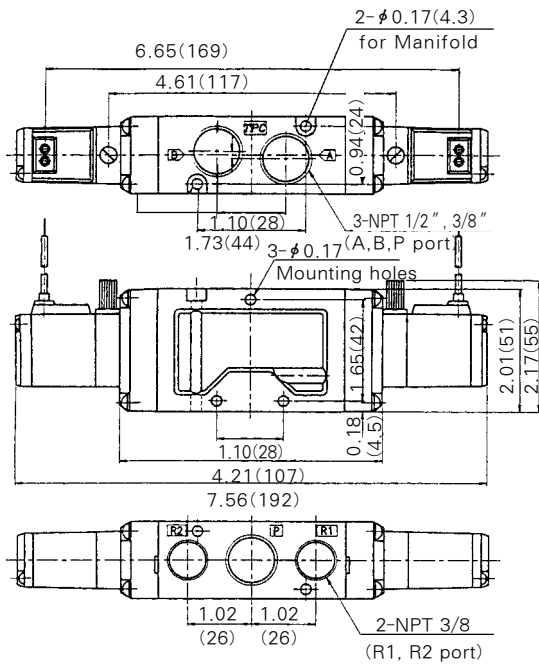


Body ported/2 Position Double Solenoid

inch(mm)

Grommet/DS5 22 ○ - ○ G

DIN Connector/UDS 5220 - ○ DZ

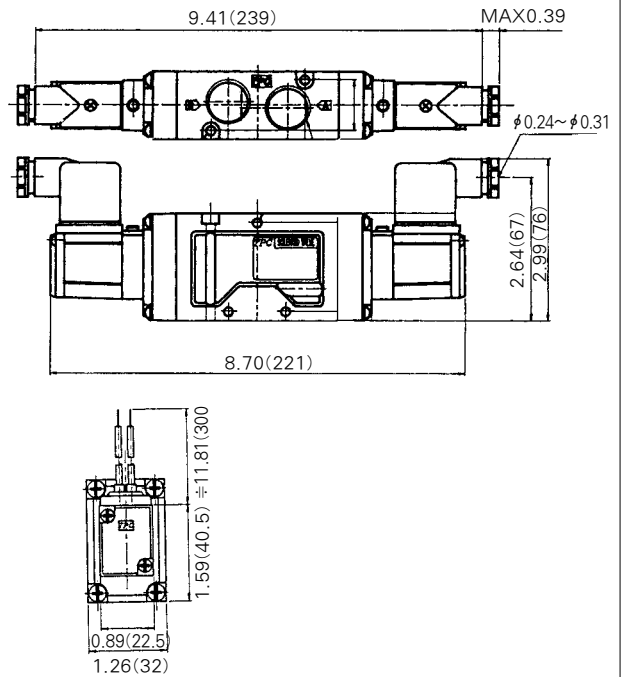
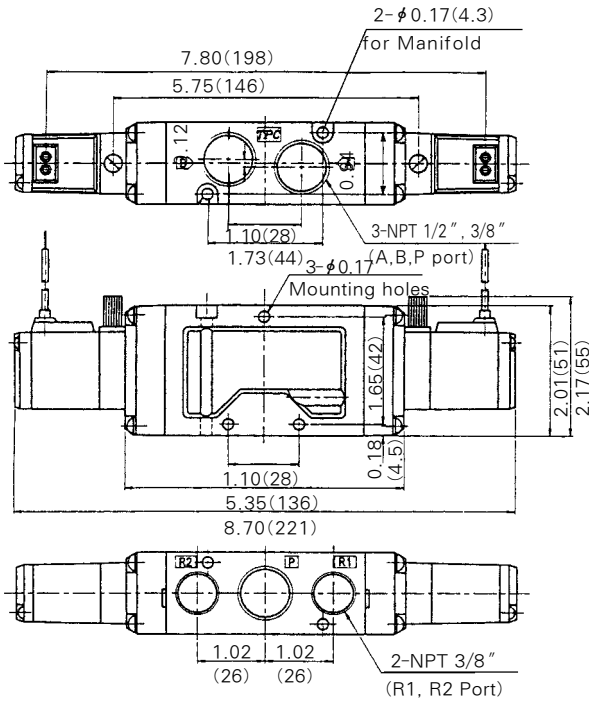


Body ported/3 Position Double Solenoid

inch(mm)

Grommet/DS 5320 - \bigcirc G, UDS5420- \bigcirc G

Din Connector / DS5320 - \bigcirc DZ
DS5420 - \bigcirc DZ

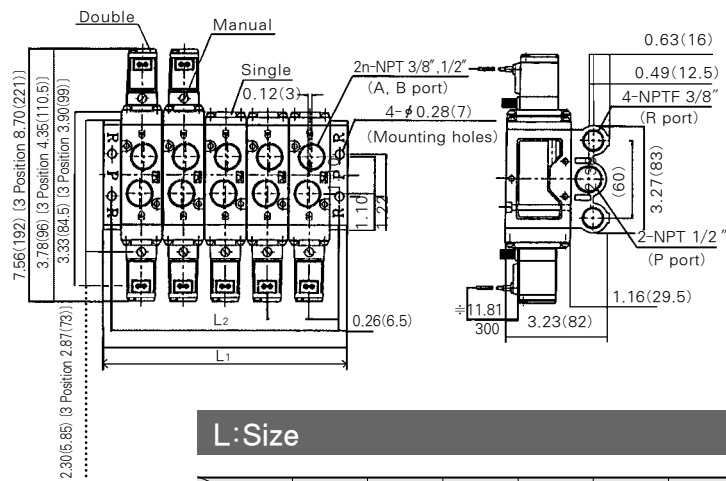


- DV1000 · 3000 · 4000
- DV2000
- DS2000
- DS3000
- DS5000**
- DS6000
- DX2
- DV100
- DS300
- DW
- DP300 · 3000 · 5000
- DM
- DH

B Mount Type/Dimensions DSM5-30

inch(mm)

Common Exhaust/DSM5 - 20 - \bigcirc \bigcirc 1



L: Size

inch(mm)
n : station NO.

L \ n	2	3	4	5	6	7	8	9	10
L1	3.66(93)	4.96(126)	6.26(159)	7.56(192)	8.86(225)	10.16(258)	11.46(291)	12.76(324)	14.06(357)
L2	3.15(80)	4.65(118)	5.75(146)	7.05(179)	8.35(212)	9.65(245)	10.94(278)	12.24(311)	13.54(344)