

Series DS300

Rubber Seal 3 Port Pilot Solenoid Type



- COMPACT SIZE AND LIGHT WEIGHT
- LARGE FLOW CAPACITY
- LOW POWER CONSUMPTION
- DESIGNED FOR NON-LUBRICATED SERVICE
- EASY MODIFICATION FROM N.C TO N.O.

Symbol

Single Solenoid

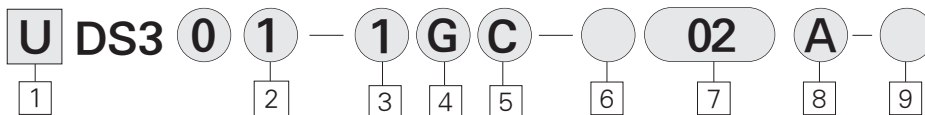
DS300-000-00A(N.C)



DS300-000-00B(N.O)



How to Order



1 Series DS300

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

2 Body Option

1 : Body Ported Type

3 Voltage

1 : AC100V, 50/60Hz
2 : AC200V, 50/60Hz
3 : AC120V, 50/60Hz
4 : AC240V, 50/60Hz

5 : DC24V

6 : DC12V

7 : DC6V

8 : Others (DC100V/AC24V)

4 Electrical Entry/Indicator Light and Surge Suppressor

G : Grommet [Lead wire length 12 inch (300 mm)]

DZ : DIN Connector with Indicator Light and

Surge Suppressor

D : DIN Connector

5 Manual Override

Blank : Non-lock push type

C : Knob locking type

6 Blank : Rc(PT)

U : Rc(PF)

7 Port Size (P, A, R Port)

01 : 1/8"

02 : 1/4" (Standard)

8 Type of Actuation

A : Normally Closed

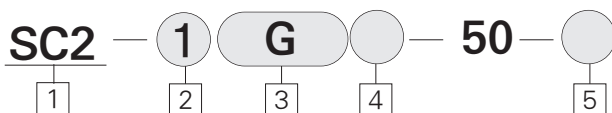
B : Normally Open

9 Special Option

Blank : Standard type

XC16 : Copper-free

Pilot Valve Assembly



1 For DS300 series Valve Ass'y

2 Voltage

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

3 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 Connector

4 Manual override

Blank : Non-locking Push type

C : Knob locking type

5 Special Option

Blank : Standard type

XC16 : Copper-free

Series DS300

Din Terminal Box How to Order

TVF3130-61-2005-**Symbol**

1

1 Voltage Coding

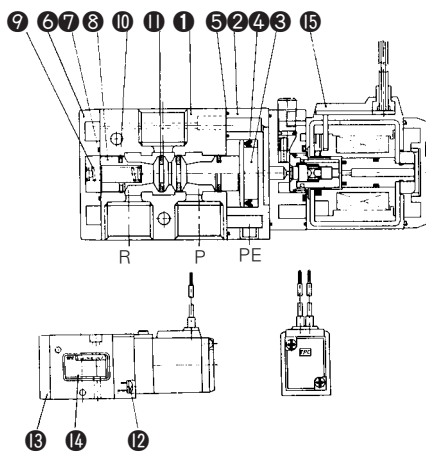
Code	Voltage
1	AC 100V
2	AC 200V
3	AC 120V
4	AC 240V
5	DC 24V
6	DC 12V
7	DC 6V
8	Others(DV100V/AC24V)

Specifications

Model	UDS300	
Action	Pilot Type	
Position, Port	2 Position 3 Port	
Body Options	Body Ported Type	
Fluid	Air	
Port Size Rc(PT)/NPT	1/8"	1/4"
Effective Orifice mm ² (Cv)	19.2 (1.07)	22 (1.2)
Operating Pressure Range	0.15~0.9 MPa(21~128 PSI)	
Ambient and Fluid Temperature	MAX. 50°C (122°F)	
Response Time	30ms or less(at 0.5Mpa (72psi))	
MAX. Operating Frequency	5 C/S	
Lubrication	Not required	
Manual Override	Non-Lock Push Type, Knob Locking Type	
Mounting Position	Free	
Impact/Vibration Resistance	30 G/5 G (8.3~2000 Hz)	

Electrical Entry		Grommet(G)	DIN Connector(DZ)
Coil Voltage	AC(50/60Hz)	100VAC, 200VAC, 120VAC, 240VAC	
	DC	6VDC, 12VDC, 24VDC	
Allowable Voltage		-15~ +10% of Rated Voltage	
Power Consumption	AC	Inrush	5.6 VA(50Hz), 5VA(60Hz)
		Holding	3.4 VA(50Hz), 2.3VA(60Hz)
	DC	1.8W/2.0W (With LED)	
Indicator light and Surge	AC	LED, Varistor	
Voltage suppressor Circuit	DC	LED, Varistor	

Construction/Parts List

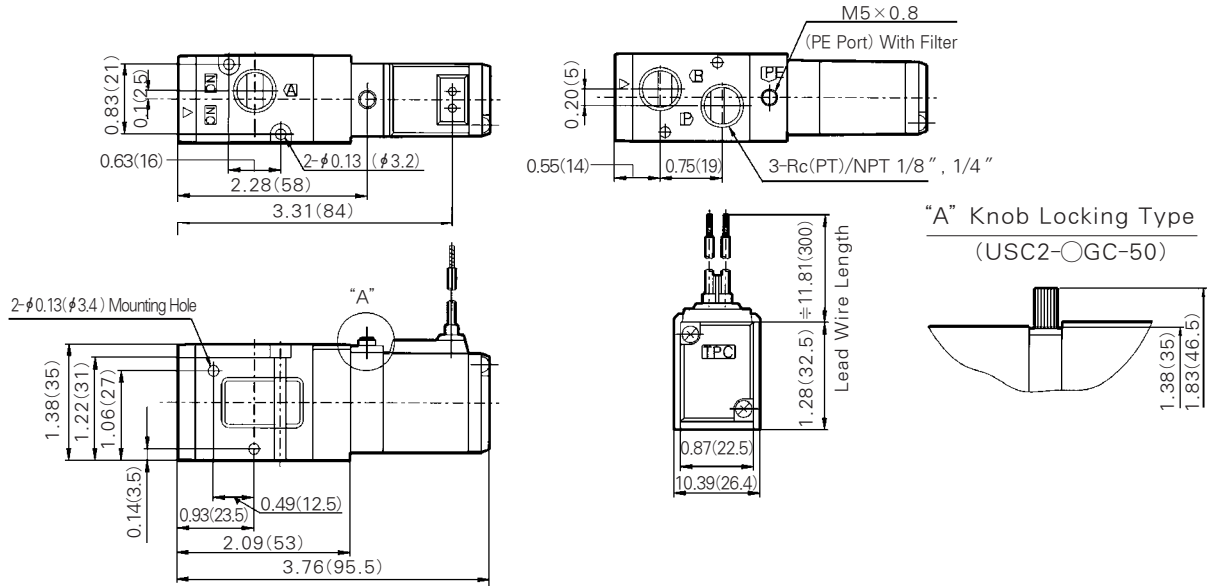


No.	Description	Material	Notes
1	Body	Aluminum Diecasting	Metallic Paint
2	Adapter Plate	Resin	
3	Piston Plate	Resin	
4	Piston Packing	NBR	
5	Adapter Plate Gasket	NBR	
6	End Cover	Zinc Diecasting	Black Paint
7	End Cover Gasket	NBR	
8	Spool	Aluminum NBR	
9	Spool Spring	Spring Steel	
10	Spool Packing	NBR	
11	Quad Ring	NBR	
12	+Pan Headed Screw	Carbon Steel	M4×0.7×12 l
13	+Flush Headed Screw	Carbon Steel	M3×0.5×8 l
14	Name Plate		
15	Pilot Valve Ass'y	-	

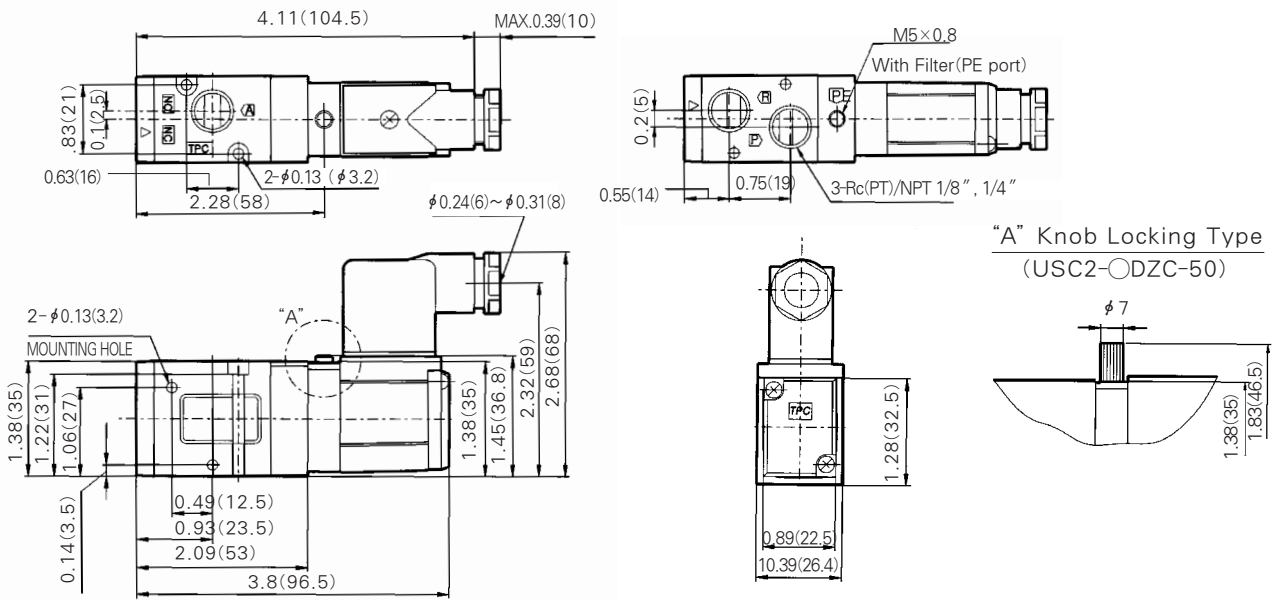
Body Ported/2 Position

inch(mm)

Grommet DS300-OG



DIN Connector DS300-ODZ

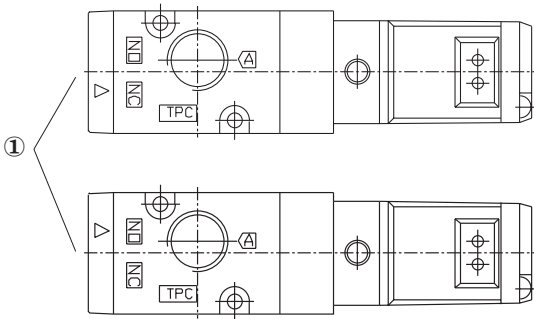


Series	Position				Body Type	A · B port size, effective area mm ² (Cv factor)				Valve size (mm)	Power consumption (DC) W	operating Pressure range Mpa.(psi)	
	2position		3position			Body ported type	Rc(PT)/NPT 1/8"	Rc(PT)/NPT 1/4"	Rc(PT)/NPT 3/8"				Rc(PT)/NPT 1/2"
	single	Double	CLOSED CENTER	EXHAUST CENTER									
DS300	●	-	-	-	●	19.2 (1.07)	22 (1.2)	-	-	26.4	1.8/2.0	0.15~0.9 (21.3~128)	
DS3000	●	●	●	●	●	14.4 (0.8)	18 (1.0)	-	-	26.4	1.8/2.0		
DS5000	●	●	●	●	●	-	-	50 (2.8)	58 (3.2)	32	1.8/2.0		

- DW
- DV100
- DV1000 · 3000 · 4000
- DS300
- DS3000
- DS5000
- DS2000
- DX2R
- DP300 · 3000 · 5000
- DS6000
- DX2
- DM
- DH
- DT220
- DC

DS 300 Series

Change of Actuation



When changing the actuation from normally closed style to normally open style, remove the body from the sub plate and reset the “▲” mark on the body corresponding to the “NO” mark on the sub plate as shown in the figure above.

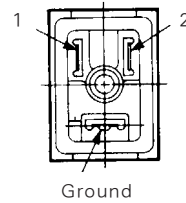
Refer to the following table for piping.

Post	P	A	R
N · C	Upstream	Downstream	Exhaust side
N · O	Exhaust side	Downstream	Upstream

Electronical Connection

For the DIN connection and Terminal connection (with surge protection circuit), inner connections are as follow.

DIN Connection



Terminal NO.	1	2
DIN Connection	+	-

Change of Electrical Entry

Push out the body of DIN terminal from the cover, turn it at 180° and then insert it.

