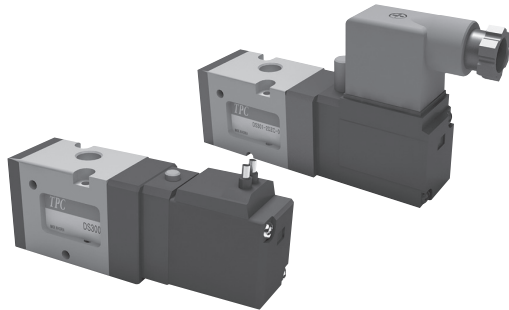


Series DS300

Rubber Seal 3 Port Pilot Solenoid Type



DS301-OG-00

DS301-ODZ-00

- 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

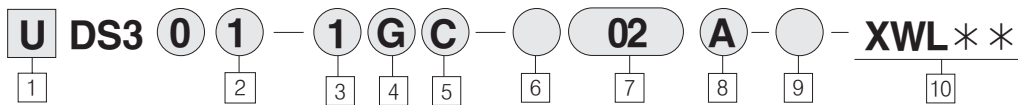
DS300-0000-
00A(N.C)



DS300-0000-
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 : AC110V, 50/60Hz
- 2 : AC220V, 50/60Hz
- 3 : AC120V, 50/60Hz
- 4 : AC240V, 50/60Hz
- 5 : DC24V
- 6 : DC12V

7 DC6V

- 8 : AC24V, 50/60Hz
- 9 : DC100V

4 Electrical Entry

- G : Grommet (Lead wire length 12 inch (300 mm))
- DZ : DIN Connector with Indicator Light and Surge Suppressor
- D : DIN Connector
- N : Without DIN Connector

5 Manual Override

Blank : Non-lock push type
C : Knob locking type

6 Port Thread

Blank : Rc (PT)
U : NPT

7 Port Size (P, A, R Port)

- 01 : 1/8"
- 02 : 1/4" (Standard)

8 Action

A : Normally Closed

B : Normally Open

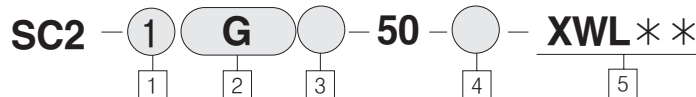
9 Special Option

Blank : Standard type
XC16 : Copper-free

10 Length of lead wire

Blank : 300mm (standard)
XWL01 : 100mm
XWL02 : 200mm
:
XWL20 : 2000mm
Other length : Contact us

Pilot Valve Assembly



1 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 : DC100V

2 Electrical Entry

- G : Grommet (Lead wire length 12 inch)
- DZ : DIN Connector With Indicator light and Surge suppressor
- D : DIN Connector
- N : Without DIN connector

3 Manual override

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

4 Special Option

Blank : Standard type
XC16 : Copper-free

5 Length of lead wire

Blank : 300mm (standard)
XWL01 : 100mm
XWL02 : 200mm
:
XWL20 : 2000mm
Other length : Contact us

Series DS300

Din Terminal Box How to Order

DS3130-61-2005- **Code**
1

Voltage Coding

Code	Voltage
1	AC 110V
2	AC 220V
3	AC 120V
4	AC 240V
5	DC 24V
6	DC 12V
7	DC 6V
8	Others(AC24V)
9	DC100V

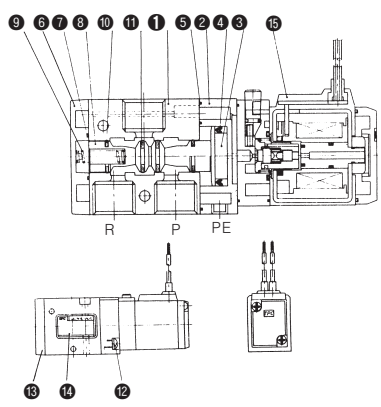
Specifications

Model	DS300	
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(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)	110VAC, 220VAC, 120VAC, 240VAC, 24VAC	
	DC	6VDC, 12VDC, 24VDC, 100VDC	
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	

- DW
- DR100
- DR200
- RS1000, 2000
- RS4000
- SI UNIT
- DV1000, DV3000, DV4000
- DS300**
- DS3000
- DS5000
- DS2000
- DS6000
- DX1,DX2
- DX1(2)R
- DH
- DP300, DP3000, DP5000
- DM
- DT220

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	Tetron	
15	Pilot Valve Ass'y	-	

Series DS300

inch(mm)

Body Ported/2 Position

Grommet DS300-OG

Technical drawings for Grommet DS300-OG include a front view with dimensions: 0.83(21), 0.63(16), 2.28(58), 3.31(84), 2-φ0.13 (φ3.2), 0.14(3.5), 1.38(35), 1.22(31), 1.06(27), 0.93(23.5), 0.49(12.5), 2.09(53), 3.76(95.5), 0.14(3.5), 0.93(23.5), 0.49(12.5), 2.09(53), 3.76(95.5). A side view shows dimensions: 0.20(5), 0.55(14), 0.75(19), 3-Rc(PT)/NPT 1/8", 1/4", M5×0.8 (PE Port) With Filter. A detail view shows a lead wire length of ±11.81(300), 1.28(32.5), 0.87(22.5), 10.39(26.4), and a cross-section with dimensions 1.38(35) and 1.83(46.5). A note indicates "A" Knob Locking Type (USC2-OGC-50).

DIN Connector DS300-ODZ

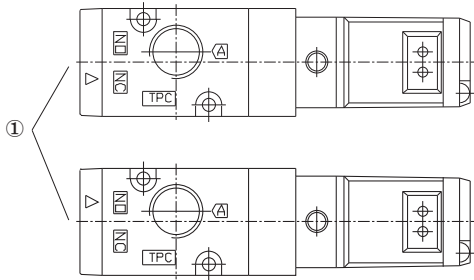
Technical drawings for DIN Connector DS300-ODZ include a front view with dimensions: 4.11(104.5), MAX.0.39(10), 0.83(21), 0.63(16), 2.28(58), φ0.24(6)-φ0.31(8), 2-φ0.13 (φ3.2). A side view shows dimensions: 0.2(5), 0.55(14), 0.75(19), 3-Rc(PT)/NPT 1/8", 1/4", M5×0.8 With Filter(PE port). A detail view shows a lead wire length of 1.28(32.5), 0.89(22.5), 10.39(26.4), and a cross-section with dimensions 1.38(35) and 1.83(46.5). A note indicates "A" Knob Locking Type (USC2-ODZC-50).

Series	Position				Body Type	A · Bport 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		

Series DS300

DS 300 Series

Change of Actuation



As shown in the figure above, in event that it is needed to change the actuation from normally closed style to normally open style, it is preferred to remove the body from the sub plate and reset the "▲" mark on the body corresponding to the "NO" mark on the sub plate.

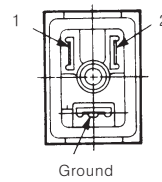
For piping, it is preferred to check the following table.

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

Electronical Connection

Be sure to check the inner connections are as follows for the DIN connection and Terminal connection (with surge protection circuit).

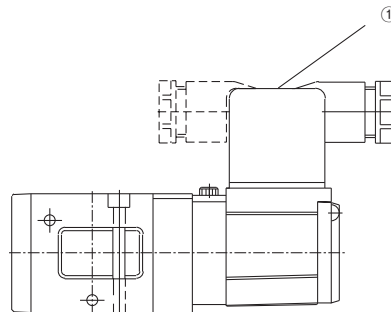
DIN Connection



Terminal NO.	1	2
DIN Connection	+	-

Change of Electrical Entry

Be sure to push out the body of DIN terminal from the cover, and turn it at 180° and then insert it.



- DW
- DR100
- DR200
- RS1000, 2000
- RS4000
- SI UNIT
- DV1000, DV3000, DV4000
- DS300**
- DS3000
- DS5000
- DS2000
- DS6000
- DX1,DX2
- DX1(2)R
- DH
- DP300, DP3000, DP5000
- DM
- DT220