## DIRECTIONAL CONTROL VALVES





### Solenoid Operated Directional Valves Max. Pressure 31.5 MPa

#### **DSG-01 Series**

These valves are adapted with strong wet-type solenoid and circuit designs to accomplish high pressure, large volume flow and lower pressure drop. The optimum valve for any system can be utilized since many spool types and various solenoids are all available, along with other optional function.

#### Ratings

Valve Size	Model Number	Max. Flow L/min	Max. Pressure MPa (kgf/cm²)	Back Pressure	Max. Changeover Frequency Cycle/min	Mass kg
	DSG-01-3C**-**-50	63	/ 31.5 ( 315 ) \	1.6	300 ( R Type only 120	2.2
1/8	DSG-01-2D2- ※ -50		Spool Type	16 (160)		2.2
	DSG-01-2B ** - ** -50		60 only 250	(100)		1.6

### Model Number Designation

### DSG-01-3C2-A110-N-50-50Hz

Series Number -(Sub-plate mounting) Valve Size: 01 Valve Type -(See table above) Coil Type A110, A220. **★1** D12, D24, R110, R220 ★1.DC with Rectifier.

50 Hz: 50Hz only

★Please note voltage applicable range for different frequency. In 50 Hz area, if you want to use same voltage as the coil type, please add (50Hz) after the design number. It is not necessary for R\* type coil.

None: 60Hz or DC or R \*\*

Design Number

Electrical Conduit Connection None:Standard (Terminal Box Type) N:Plug-In Connector Type Without Indicator Light N1:Plug-In Connector Type With Indicator Light

DC Terminal Box Type: Rectifier is put in the terminal box. DC Plug-In Connector Type: Rectifier is put in the coil.

### Valve Type

Valve Type	3C2	3C3	3C4	3C40	3C60	3C12
Graphic Symbol						
Valve Type	2B2	2B3	2B8	2B2B	2D2	3C9
Graphic Symbol		MÎHŒ,	wit in			

- Valves, other than the types above are available, please contact our sales engineer for your requirement.
- 2B2,2B3,2B8 & 2D2 type valves have no center position.

### Mounting Bolts (Attachment)

Socket Head Cap Screw	Tightening Torque
M5 x 45Lg 4pcs	$\left( \begin{array}{c} 5 \sim 7 \ N \bullet m \\ \text{Applicable to working pressure} \\ \text{higher than 25 MPa} \\ 6 \sim 7 \ N \bullet m \end{array} \right)$

#### Sub-plate

Valve		Piping Size	Mass
Model No.	Model No.	Rc	kg
	DSGM-01-30	1/8	
DSG-01	DSGM-01X-30	1/4	0.8
	DSGM-01Y-30	3/8	

<sup>\*</sup> Sub-plates are available. When ordering, please specify sub-plate model no. from the table above

#### Solenoid Rating

Electric	Coil Truma	Serviceable Voltage Range		Current & Power at Rated Voltage		
Source	Coil Type	Frequency (Hz)	Voltage (V)	Inrush (A)	Holding (A)	Power (W)
	A110/50Hz	50	100-120	1.68	0.35	18
AC	A110/60Hz	60	100-120	1.79	0.35	20
AC	A220/50Hz	50	200-240	0.89	0.20	19
	A220/60Hz	60	200-240	0.90	0.18	21
D.C.	D12	-	10.8-13.2	-	2.00	24
DC	D24	-	21.6-26.4	-	1.10	26
AC→DC	R110	50/60	100-120	-	0.33	29
AC >DC	R220	50/60	200-240	-	0.15	29

There are other coil types available, please contact our sales engineers for your requirement.

<sup>\*</sup> Please refer to page 88 for dimension details,



## DIRECTIONAL CONTROL VALVES

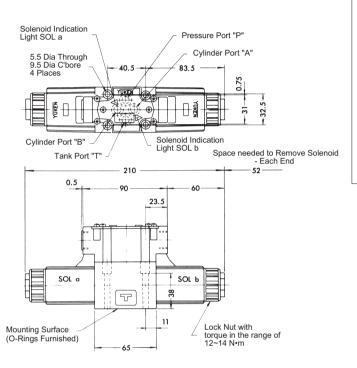


Mounting Surface: ISO 4401-AB-03-4-A

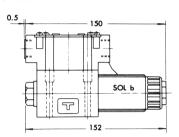
# Solenoid Operated Directional Valves Max. Pressure 31.5 MPa

Model with AC solenoids : DSG-01- \* \* \* -A \*

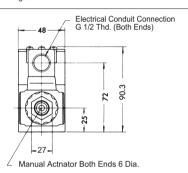
- Spring Centered
- No Spring Detented



• Spring Offset



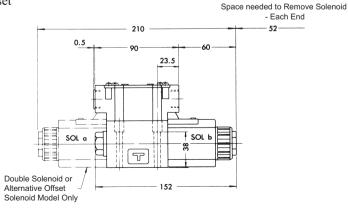
For other dimensions, please refer to left diagram. Alternative models using solenoid \*a\* are also available.

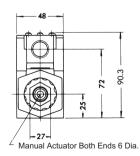


Mounting Surface: ISO 4401-AB-03-4-A

Model with DC solenoids: DSG-01-\*\*\*-D\*
Model with R solenoids: DSG-01-\*\*\*-R\*

- Spring Centered
- No Spring Detented
- · Spring Offset





• For other dimensions, please refer to above model with AC solenoid.



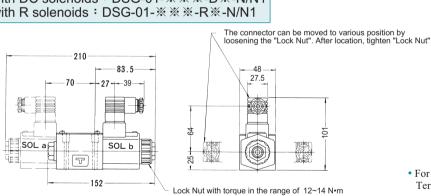
### DIRECTIONAL CONTROL VALVES





## Solenoid Operated Directional Valves Max. Pressure 31.5 MPa

### DIN Connector type, DIN Connector Type with Indicator Light Model with AC Solenoids: DSG-01- \* \* \* -A \* -N/N1 Pressure Port "P" 5.5 Dia Through 9.5 Dia C'bore 4 Places 4 positions of cable departure are available in 90° increments. 75 Cable Applicable Outside Dia.···8~10mm Conductor Area···1.5mm² Cylinder Port "B" Three positions of cable departures are available by loosening "Lock Nut" as shown. After location, tighten "Lock Nut ' Tank Port "T" 83.5 27.5 - 27----39 53 SOL a SOL Œ Double Solenoid Type 11 Lock Nut with torque in the range of 12~14 N•m Manual Actuator Both Ends 6 Dia. 152 Mounting Surface (O-Rings Furnished) Model with DC solenoids: DSG-01- \* \* \* -D \* -N/N1 Model with R solenoids : DSG-01- \*\* \*\* \*\* -R \*\* -N/N1 The connector can be moved to various position by loosening the "Lock Nut". After location, tighten "Lock Nut".



• For other dimensions, please refer to Terminal Box Type (page87).

