



DIRECTIONAL CONTROL VALVES



Solenoid Operated Directional Valves Max. Pressure 31.5 MPa



DSG-03 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.

- The pressure drop caused by the passing of pressurized oil is reduced to approx. 1/2 of the conventional Yuken model.
- Good Light Weight design has accomplished to reduce body weight.

Rating

	Valve Size	Model No	Max. Flow L/min	Max. Pressure MPa (kgf/cm²)	Max. T-Line Back Pressure MPa (kgf/cm²)	Max Changeover Frequency Cycle/min	Mas Type of	
		DSG-03-2B ** - ** -50	120	31.5 (315) Spool Type 60 only 25 (250)	16 (160)	240 (R Type Only 120)	2.9	3.6
	3/8	DSG-03-2D2-※-50					3.6	5
		DSG-03-3C*-*-50					3.6	5

Model Number Designation

DSG-03-3C2-A110-N1-50-50Hz None: 60Hz or DC or R * Series Number 50 Hz: 50Hz only (Sub-plate mounting) ★Please note voltage applicable range for different frequency. In 50 Hz area, if you want to use same voltage Valve Size as the coil type, please add (50Hz) after the design Valve Type number. It is not necessary for R * type coil. (See table above) Design Number Coil Type -**Electrical Conduit Connection** A110, A220, **★1** D12, D24, None:Standard (Terminal Box Type) N: Plug-In Connector Type Without Indicator Light R110, R220 N1: Plug-In Connector Type With Indicator Light

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

Sub-plate

Valve Model No.	Sub-plate Model No.	Piping Size Rc	Mass kg	
	DSGM-03-40 Rc		3	
DSG-03	DSGM-03X-40	3/8	3	
	DSGM-03Y-40	1/2	4.7	

[·]Sub-plates are available. When ordering, please specify sub-plate model no. from the table above.

Mounting Bolts (Attachment)

	·
Socket Head Cap Screw	Tightening Torque
M6 x 35Lg 4pcs	12~15 N•m

Valve Type

Valve Type	Valve Type 3C2 3		3C4	3C40	3C60	3C12	
Graphic Symbol	^ AMITHATIVENA AND						
Valve Type	Valve Type 2B2 2B3		2B8	2B2B	2D2	3C9	
Graphic Symbol	₩ ٳڷؾ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ ٳ	₩ÎŢÎHIXES.	wji ize	MÎT ÎNE.			

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

Solenoid Rating

- Colonia rating										
Electric	C-:1 T	Serviceable Vo	ltage Range	Current & Power at Rated Voltage						
Source	Coil Type	Frequency (Hz)	Voltage (V)	Inrush (A)	Holding (A)	Power (W)				
	A110/50Hz	50	100-120	3.90	0.78	39				
A.C.	A110/60Hz	60	100-120	3.86	0.71	39				
AC	A220/50Hz	50	200-240	1.82	0.34	37				
	A220/60Hz	60	200-240	1.85	0.34	39				
DC	D12	-	10.8-13.2	-	2.75	33				
DC	D24	-	21.6-26.4	-	1.41	34				
A.C. > D.C.	R110	50/60	100-120	-	0.42	38				
AC→DC	R220	60/60	200-240	-	0.20	38				

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

[•]Please refer to page 91 for dimension details.



DIRECTIONAL CONTROL VALVES



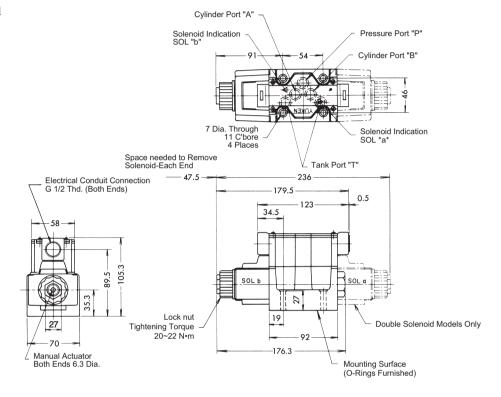


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Model with AC solenoids : DSG-03- * * * -A *

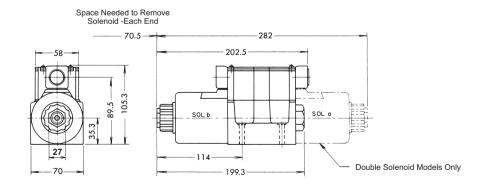
Mounting Surface:ISO 4401-AC-05-4-A-80

- Spring Centered
- · No Spring Detented
- · Spring Offset



Model with DC solenoids: DSG-03- ** ** -D **

Model with R solenoids: DSG-03-% % %-R%



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

Note: For dimensions of mounting surface, please refer to DSGM-03 type sub-plate on page 91.



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DIN type Connector, DIN Type Connector with Indicator Light

Model with AC Solenoids: DSG-03 - * * * -A * -N/N1

Three positions of cable departures are available by loosening "Lock Nut" as shown.

After location, tighten "Lock Nut".

Cable Departure
Cable Applicable
Outside Dia. ...8~10mm
Conductor Area...Not exceeding 1.5mm²

236

91

176.3

Double Solenoid Model only
Lock Nut with torque in the range of 20~22 N•m

Model with DC solenoids: DSG-03-% ** **-D**-N/N1 Model with R solenoids: DSG-03-** ** **-R**-N/N1

Three positions of cable departures are available by loosening "Lock Nut" as shown. After location, tighten "Lock Nut".

282

114

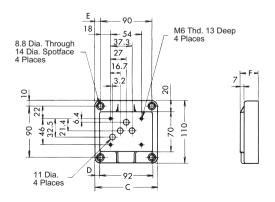
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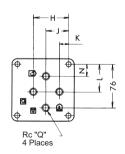
sol b

sol colored a sol

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

Sub-plate DSGM-03, 03X, 03Y-40





Model No.	С	D	Е	F	Н	J	K	L	N	Q
DSGM-03-40	110	0	10	32	62	40	16	48	21	3/8
DSGM-03X-40	110	9	10	32	02	40	10	40	21	1/2
DSGM-03Y-40	120	14	15	50	80	45	10	47	16	3/4