

## Solenoid Operated Directional Valves Max. Pressure 31.5 MPa

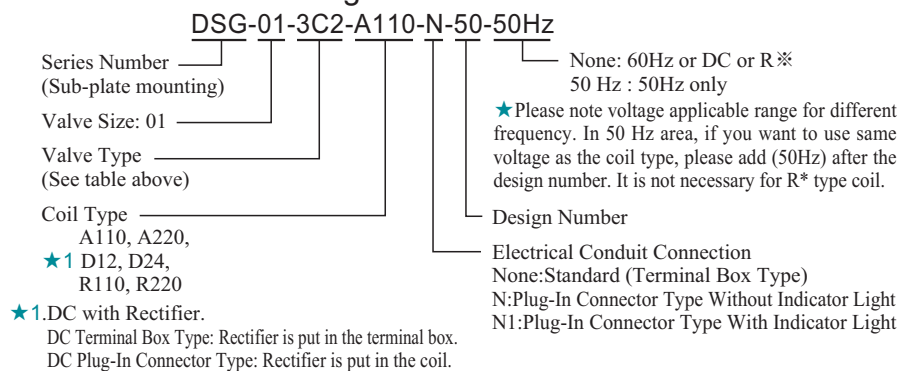
### DSG-01 Series

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/cm <sup>2</sup> )    | Max. T-Line Back Pressure MPa (kgf/cm <sup>2</sup> ) | Max. Changeover Frequency Cycle/min | Mass kg |
|------------|-----------------|-----------------|---|--|-------------------------------------|---------|
| 1/8        | DSG-01-3C※-※-50 | 63              | 31.5 ( 315 )<br>( Spool Type<br>60 only 250 | 16<br>( 160 )  | 300<br>( R Type<br>only 120         | 2.2     |
|            | DSG-01-2D2-※-50 |                 |   |  |                                     | 2.2     |
|            | DSG-01-2B※-※-50 |                 |   |  |                                     | 1.6     |

### Model Number Designation

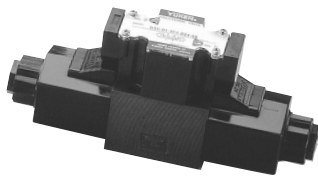


### Valve Type

| Valve Type     | 3C2 | 3C3 | 3C4 | 3C40 | 3C60 | 3C12 |
|----------------|-----|-----|-----|------|------|------|
| Graphic Symbol |     |     |     |      |      |      |
| Valve Type     | 2B2 | 2B3 | 2B8 | 2B2B | 2D2  | 3C9  |
| Graphic Symbol |     |     |     |      |      |      |

- 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.

D



### Mounting Bolts (Attachment)

| Socket Head Cap Screw | Tightening Torque   |
|-----------------------|---|
| M5 x 45Lg 4pcs        | 5 ~ 7 N•m<br>(Applicable to working pressure higher than 25 MPa)<br>6 ~ 7 N•m |

### Sub-plate

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

\* Sub-plates are available. When ordering, please specify sub-plate model no. from the table above.  
 \* Please refer to page 88 for dimension details,

### Solenoid Rating

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

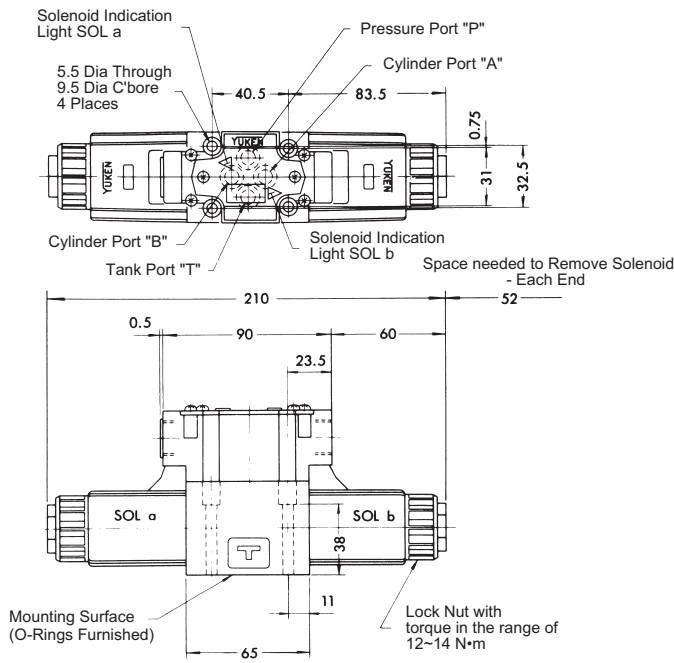
There are other coil types available, please contact our sales engineers for your requirement.

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

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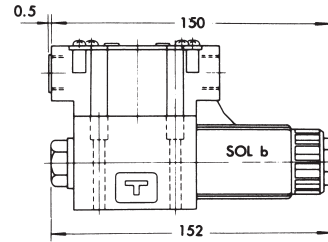
**Model with AC solenoids : DSG-01-\*\*\*-A\*\***

- Spring Centered
- No Spring Detented

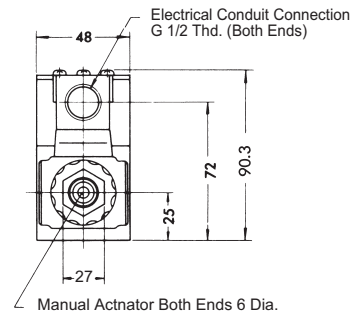


Mounting Surface : ISO 4401-AB-03-4-A

- Spring Offset

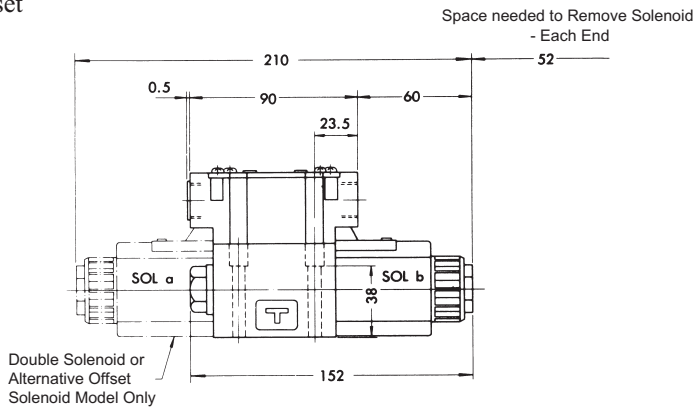


For other dimensions, please refer to left diagram. Alternative models using solenoid "a" are also available.

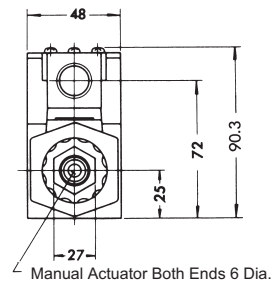


**Model with DC solenoids : DSG-01-\*\*\*-D\*\***  
**Model with R solenoids : DSG-01-\*\*\*-R\*\***

- Spring Centered
- No Spring Detented
- Spring Offset



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

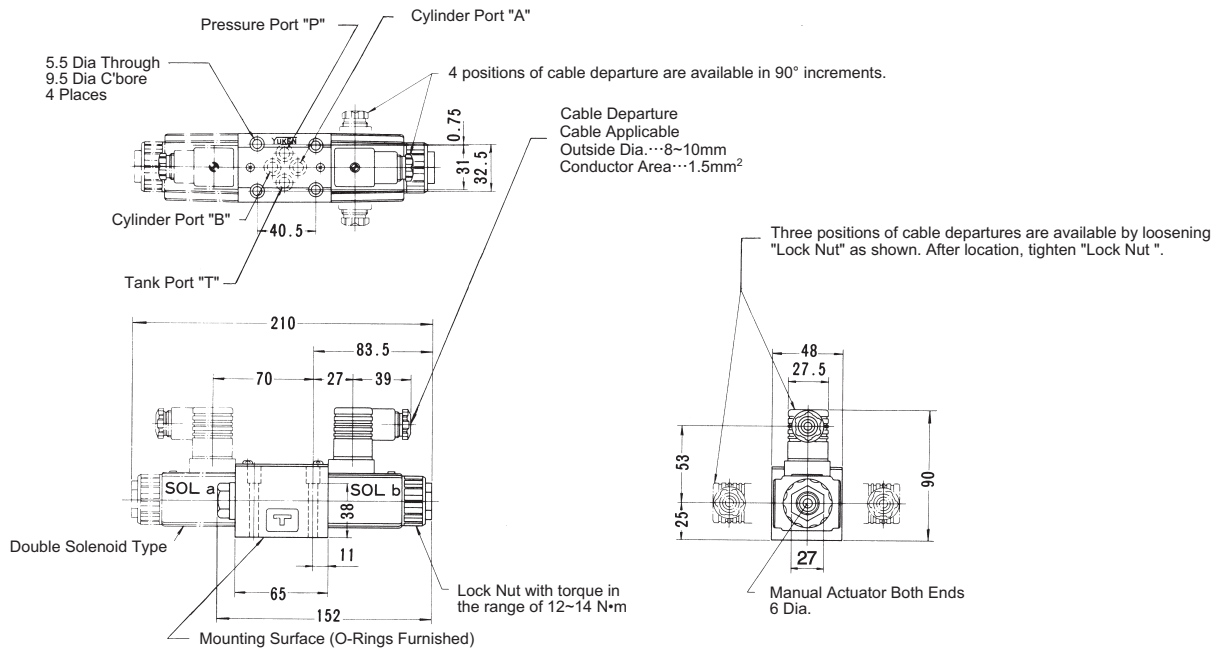


• For other dimensions, please refer to above model with AC solenoid.

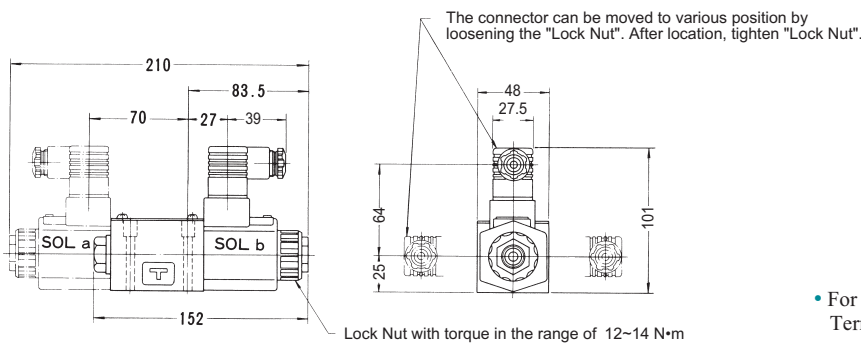
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**DIN Connector type, DIN Connector Type with Indicator Light**

Model with AC Solenoids : DSG-01-\*\*\*-A-N/N1

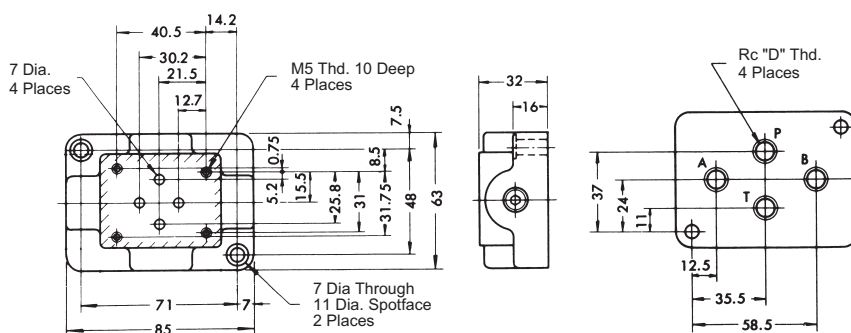


Model with DC solenoids : DSG-01-\*\*\*-D-N/N1  
Model with R solenoids : DSG-01-\*\*\*-R-N/N1



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

Sub-plate : DSGM-01, 01X, 01Y



| Model No.   | D   |
|-------------|-----|
| DSGM-01-30  | 1/8 |
| DSGM-01X-30 | 1/4 |
| DSGM-01Y-30 | 3/8 |