

## Solenoid Controlled Relief Valves

These valves are a combination of a pilot operated relief valve and a solenoid operated directional valve. Piping between the two is eliminated as the solenoid valve is directly mounted on the relief valve and connected with the relief valve vent. Pump pressure may be unloaded remotely by an electrical signal to the solenoid, or by connecting pilot relief valves to the solenoid valve ports.



### Specifications

Model Numbers		Max. Operating Pressure MPa (PSI)	Pressure Adj. Range MPa (PSI)	Max. Flow L/min (U.S.GPM)	Approx. Mass kg (lbs.)		
					Double Sol.	Single Sol.	With Vent Restrictor
Threaded Connection	BST-03-*-**-48*	25 (3630)	Note) ★-25 (★-3630)	100 (26.4)	7.1 (15.7)	6.6 (14.6)	7.6 (16.8)
	BST-06-*-**-48*			200 (52.8)	7.1 (15.7)	6.6 (14.6)	7.6 (16.8)
	BST-10-*-**-48*			400 (106)	10.8 (23.8)	10.3 (22.7)	11.3 (24.9)
Sub-plate Mounting	BSG-03-*-**-48*	25 (3630)	Note) ★-25 (★-3630)	100 (26.4)	6.8 (15.0)	6.3 (13.9)	7.3 (16.1)
	BSG-06-*-**-48*			200 (52.8)	7.7 (17.0)	7.2 (15.9)	8.2 (18.1)
	BSG-10-*-**-48*			400 (106)	11.0 (24.3)	10.5 (23.2)	11.5 (25.4)

Note: For relief valves, standard pilot operated relief valves are used.  
For minimum adjustment pressures and other characteristics, see page 214.

### Model Number Designation

F-	A-	BS	T	-03	-V	-2B3A	-A100	-N	-48	*
Special Seals	With Vent Restrictor	Series Number	Type of Mounting	Valve Size	High Venting Pres. Feature	Vent Type	Coil Type <sup>★1</sup>	Type of Electrical Con.	Design Number	Design Standards
<b>F:</b> Special Seals for Phosphate Ester Type Fluids (Omit if not required)	<b>A:</b> With Vent Restrictor (Option-Omit if not required) <sup>★1</sup>	<b>BS:</b> Solenoid Controlled Relief Valves	<b>T:</b> Threaded Connection  <b>G:</b> Sub-plate Mounting	<b>03</b>  <b>06</b>  <b>10</b>	<b>V:</b> For High <sup>★2</sup> Venting Pressure Feature (Omit if not required)	<b>2B3A</b> <sup>★3</sup> <b>2B3B</b> <b>2B2B</b> <b>2B2</b> <b>3C2</b> <b>3C3</b>	AC: <b>A100, A120</b> <b>A200, A240</b>  DC: <b>D12, D24</b> <b>D48</b>  AC→DC: <b>R100, R200</b>	<b>None:</b> Terminal Box Type  <b>N:</b> With Plug-in Connector (DIN)  <b>N:</b> With Plug-in Connector (DIN)	<b>48</b>	<b>None:</b> Japanese Std. "JIS"  <b>90:</b> N. American Design Std.  <b>80:</b> European Design Std.

- ★1. Models with vent restrictor are applicable only for the vent type 2B3A and 2B3B. For details, see page 222.
- ★2. Use high venting pressure types to reduce response time from unloading to onloading.
- ★3. For the details of the vent types, see the following page.
- ★4. The coil codes are the same as for solenoid operated directional valve DSG-01. See the Solenoid Ratings on page 345.

The coil type numbers in the shaded column are handled as optional extras. In case these coils are required to be chosen, please confirm the time of delivery with us before ordering.

## Vent Types

Vent Type	Graphic Symbols	Solenoid Operated Directional Valve Model Number	Operation		
			SOL "a"	SOL "b"	Vent Connecting
2B3A		DSG-01-2B3A	—	OFF	Connected to port "A".
				ON	Connected to tank (no-load)
2B3B		DSG-01-2B3B	—	OFF	Connected to tank (no-load)
				ON	Connected to port "B".
2B2B		DSG-01-2B2B	—	OFF	Closed state (relief valve setting pressure)
				ON	Connected to port "B".
2B2		DSG-01-2B2	—	OFF	Connected to port "A".
				ON	Connected to port "B".
3C2		DSG-01-3C2	OFF	OFF	Closed state (relief valve setting pressure)
				ON	Connected to port "A".
				OFF	ON
3C3		DSG-01-3C3	OFF	OFF	Connected to tank (no-load)
				ON	Connected to port "A".
				OFF	ON

## Attachment

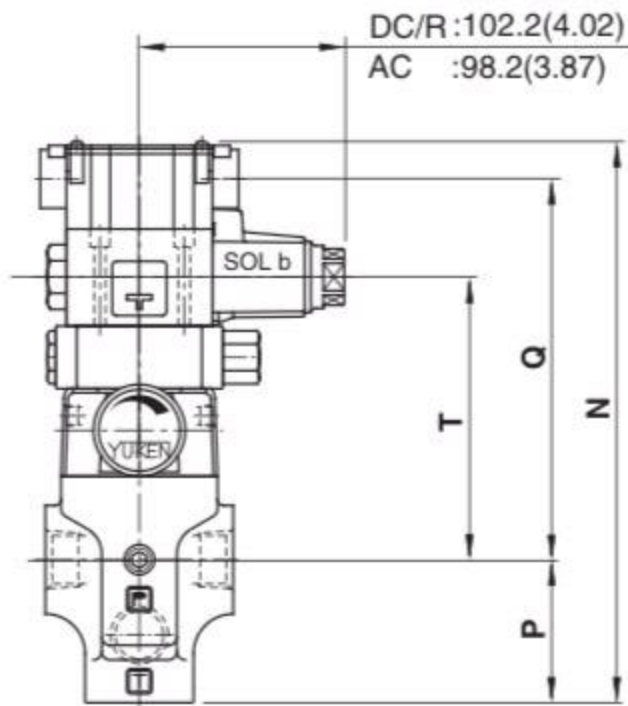
### Mounting Bolts

Valve Model Numbers	Socket Head Cap Screw	
	Japanese Std. "JIS" and European Design Std.	N. American Design Std.
BSG-03	M12 × 70 Lg. (2 pcs.), M12 × 95 Lg. (2 pcs.)	1/2-13UNC × 2-3/4 Lg. (2 pcs.), 1/2-13UNC × 3-3/4 Lg. (2 pcs.)
BSG-06	M16 × 60 Lg. (2 pcs.), M16 × 80 Lg. (2 pcs.)	5/8-11UNC × 2-1/4 Lg. (2 pcs.), 5/8-11UNC × 3-1/4 Lg. (2 pcs.)
BSG-10	M20 × 70 Lg. (2 pcs.), M20 × 90 Lg. (2 pcs.)	3/4-10UNC × 2-3/4 Lg. (2 pcs.), 3/4-10UNC × 3-1/2 Lg. (2 pcs.)

## Options - Models with Vent Restrictor

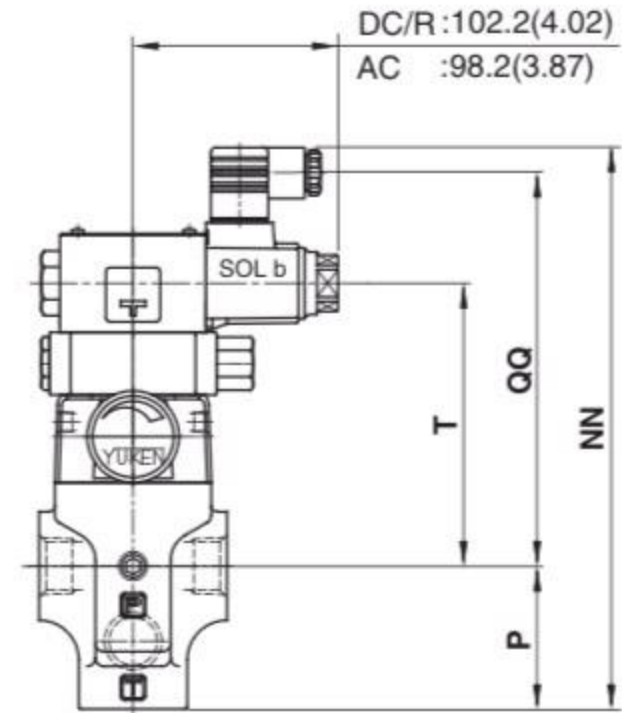
### Terminal Box Type

A-BST-06-<sup>03</sup>\*-2B3A-<sup>10</sup>\*-48/4880  
2B3B



### Plug-in Connector Type

A-BST-06-<sup>03</sup>\*-2B3A-<sup>10</sup>\*-N-48/4880/4890  
2B3B



Dimensions mm (Inches)	P	T	Terminal Box Type		Plug-in Connector Type						
			N	Q	AC Solenoid		DC Solenoid		R (AC→DC) Solenoid		
					NN	QQ	NN	QQ	NN	QQ	
Model Numbers											
A-BST-03	68.5	135.5	269.3	182.5	269	188.5	280	199.5	283	192.7	
A-BST-06	(2.70)	(5.33)	(10.60)	(7.19)	(10.59)	(7.42)	(11.02)	(7.85)	(11.14)	(7.59)	
A-BST-10	89	147.5	301.8	194.5	301.5	200.5	312.5	211.5	315.5	204.7	
	(3.50)	(5.81)	(11.88)	(7.66)	(11.87)	(7.89)	(12.30)	(8.33)	(12.42)	(8.06)	

For other dimensions, see the models without vent restrictor type on page 223 and 224.