

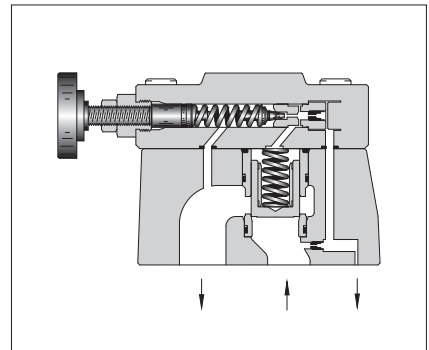
# Relief Valves (High Pressure Type)

Relief valves here have been particularly developed those be able to adjust pressure to high level of 35 MPa. Able to protect pumps and control valves against excessive pressures, they are used to control the pressure in the hydraulic system to a constant level. Remote control and unloading are permitted by using vent circuits.

## Specifications

Model Numbers	Max. Operating Pres. MPa	Pres. Adj. Range MPa	Max. Flow L/min	Approx. Mass kg
B3G-03- *-10	35	★ - 35	250	4.1
B3G-06- *-10			500	5.1

★ See minimum adjustment pressure characteristics on page C-15.

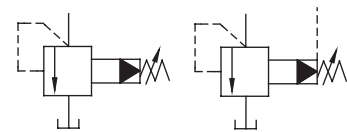


## Model Number Designation

B3	G	-03	-V	-10
Series Number	Type of Mounting	Valve Size	High Venting* Pres. Feature	Design Number
B3 : Relief Valves (High Pressure Type)	G : Sub-plate Mounting	03	V : For High Venting Pressure Feature (Omit if not required)	10
		06		10

★ Use the high venting pressure type where it is necessary to reduce the changeover time from unloading to onloading.

Graphic Symbols



Vent Connection

## Accessories

### Mounting Bolts

Valve Model Numbers	Socket Head Cap Screw
B3G-03	M12x40L ..... 4 Pcs.
B3G-06	M16x50L ..... 4 Pcs.

## Instructions

- When control in the vent circuit, if the internal volume of the vent line is too large, chattering is likely to occur. Thus, as far as possible reduce the inside diameter and the length of the pipe.
- To adjust the pressure, loosen the lock nut and turn the handle slowly clockwise for higher pressures or anti-clockwise for lower pressures. After adjustments, do not forget to tighten the lock nut.
- Piping of the tank line should not be connected to any tank line of the other valves, but connected directly to the reservoir.
- With a small flow, the setting pressure may be unstable. Use with the minimum flow rate as the below chart.

Valve Size	Min. Flow
03	5 L/min
06	

## Sub-plates

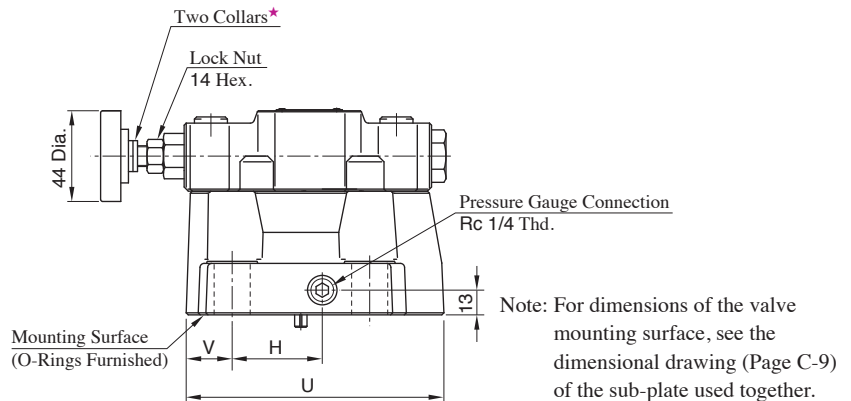
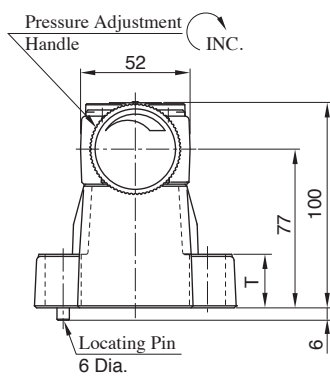
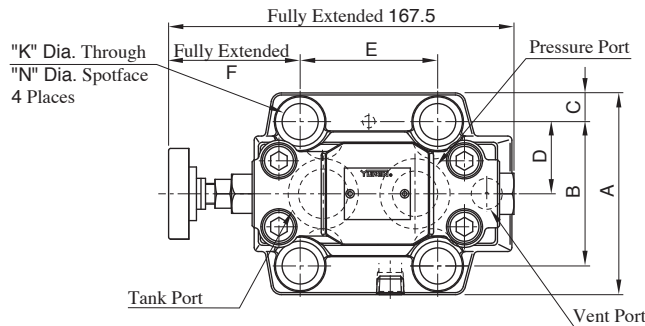
Valve Model Numbers	Sub-plate Model Numbers	Thread Size Rc	Approx. Mass kg
B3G-03	BGM-03-20	3/8	2.4
	BGM-03X-20	1/2	3.1
B3G-06	BGM-06-20	3/4	4.7
	BGM-06X-20	1	5.7

- Sub-plates are available. Specify the sub-plate model number from the table above. When sub-plates are not used, the mounting surface should have a good machined finish. (1/67)
- The sub-plates are those for pilot operated relief valves. For dimensions, see page C-9.

## B3G-03-06- \*-10

Mounting Surface  
 B3G-03 : ISO 6264-06-09-1-97  
 B3G-06 : ISO 6264-08-13-1-97

★ Pressure is limited by collars fitted. If a working pressure cannot be attained, remove some collars. One collar is equivalent to 14 MPa.

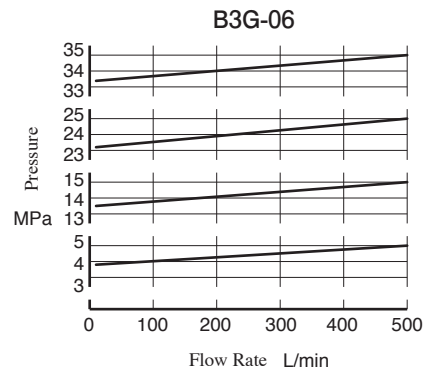
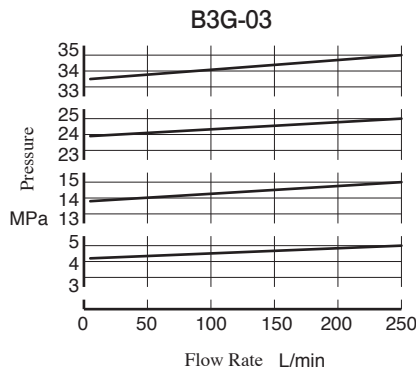


Model Numbers	A	B	C	D	E	F	H	K	N	T	U	V
B3G-03	76	53.8	11.1	26.9	53.8	74.6	29.3	13.5	21	21.5	111	31.2
B3G-06	100	70	15	35	66.7	63.8	43.7	17.5	27	26	125	22.3

High Pressure Type

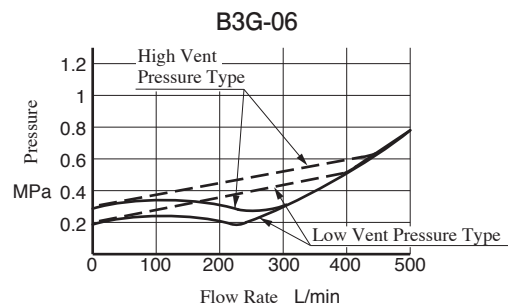
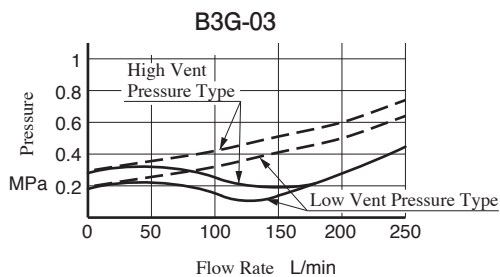
### Nominal Override Characteristics

Hydraulic Fluid: Viscosity : 35 mm<sup>2</sup>/s  
 Specific Gravity : 0.850



### Min. Adj. Pressure and Vent Pressure vs. Flow

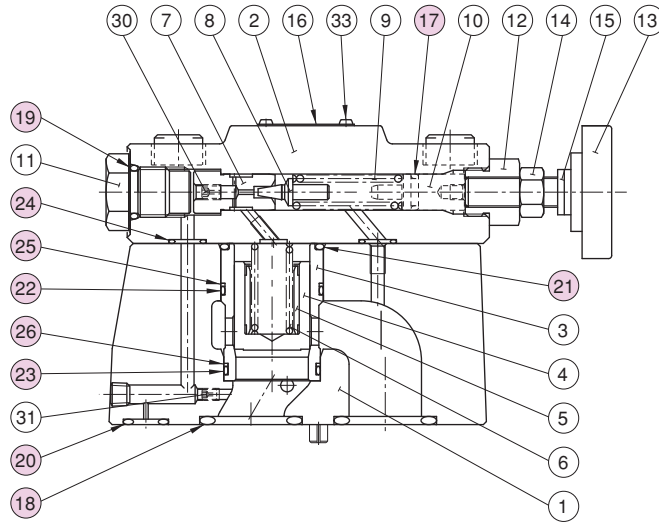
Hydraulic Fluid: Viscosity : 35 mm<sup>2</sup>/s  
 Specific Gravity : 0.850



Note: Vent Pressure means the relief pressure when the vent part open to the tank line.

■ List of Seals

**B3G-03, 06**



Item	Name of Parts	Part Numbers		Qty.
		B3G-03	B3G-06	
17	O-Ring	OR NBR-70-1 P9-N	OR NBR-70-1 P9-N	1
18	O-Ring	OR NBR-90 P18-N	OR NBR-90 P28-N	2
19	O-Ring	OR NBR-90 P14-N	OR NBR-90 P14-N	1
20	O-Ring	OR NBR-90 P9-N	OR NBR-90 P11-N	1
21	O-Ring	AS568-123 (NBR-90)	AS568-123 (NBR-90)	1
22	O-Ring	AS568-025 (NBR-90)	AS568-025 (NBR-90)	1
23	O-Ring	AS568-024 (NBR-90)	AS568-024 (NBR-90)	1
24	O-Ring	AS568-012 (NBR-90)	AS568-012 (NBR-90)	2
25	Back-up Ring	SO-BRB-34	SO-BRB-34	1
26	Back-up Ring	SO-BRB-32	SO-BRB-32	1