

Series RP Pilot-Operated Relief Valves

When system pressure reaches the selected adjustable setting on this Series RP Valve, the valve opens the system to tank.

Three pressure ranges are available:

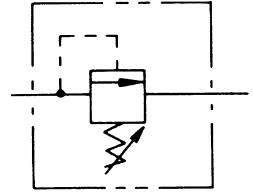
- 50 to 1000 PSI (3 to 70 Bar)
- 150 to 2000 PSI (10 to 140 Bar)
- 150 to 3000 PSI (10 to 210 Bar)

By adding a remote pilot valve to the vent port of a main pilot relief valve, pressure can be controlled by remote control. With this arrangement, the main relief valve setting should be 150 PSI (10 Bar) higher than the remote pilot setting.

For venting flow at minimum pressure, the vent port of the main relief valve can be connected directly to the tank.

Operating pressure, max.:
 3000 PSI (210 Bar)

Override: any relief valve is subject to override, or a change in relief pressure when a change in flow occurs. For the override characteristics of Series RP Relief Valves, see chart on next page.

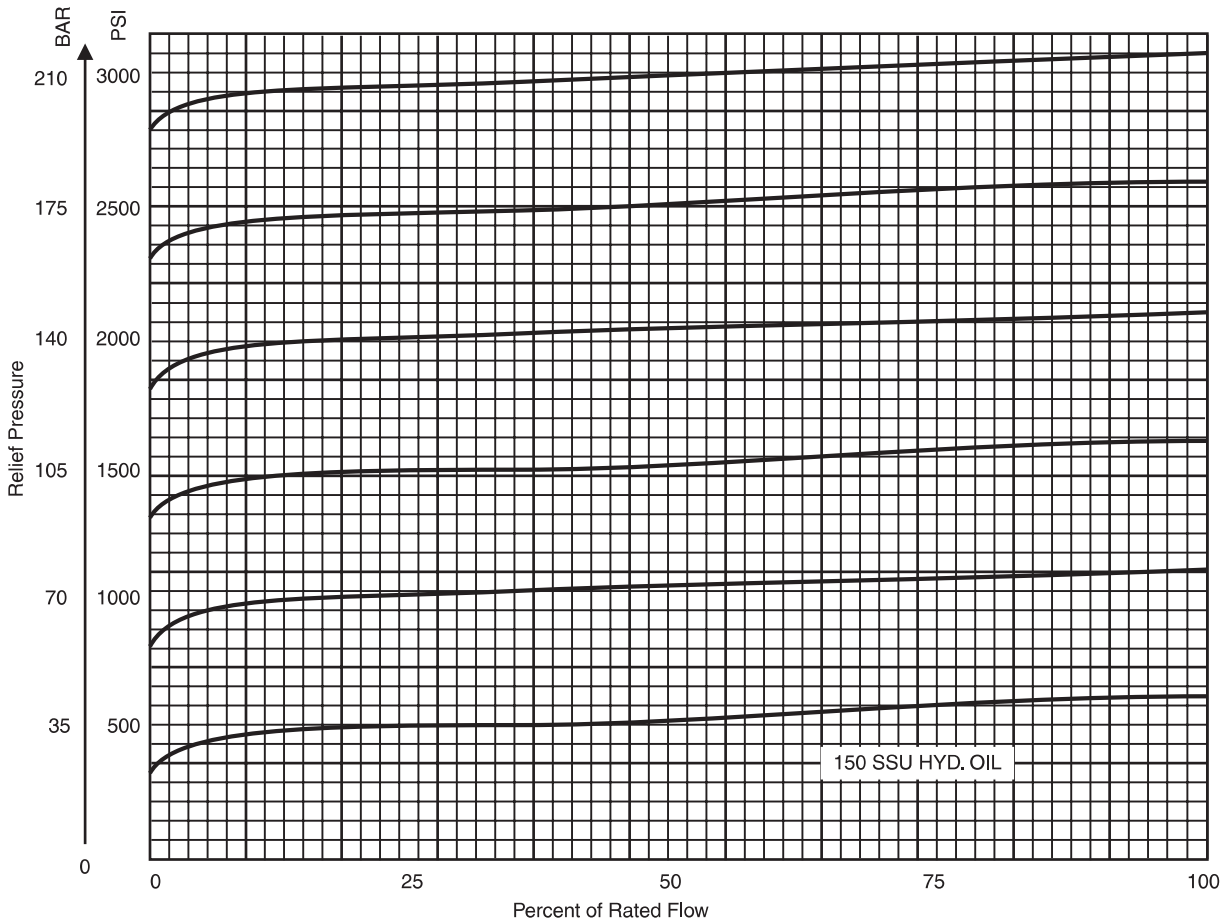


Quick Reference Data Chart

Valve Model	Port Size	Flow, max. GPM (L/M)	Vent Pressure PSI (Bar)
RP400	1/4 NPTF	6 (25)	60 (4)
RP600	3/8 NPTF	10 (40)	80 (5)
RP800	1/2 NPTF	15 (60)	50 (3)

Override Characteristics

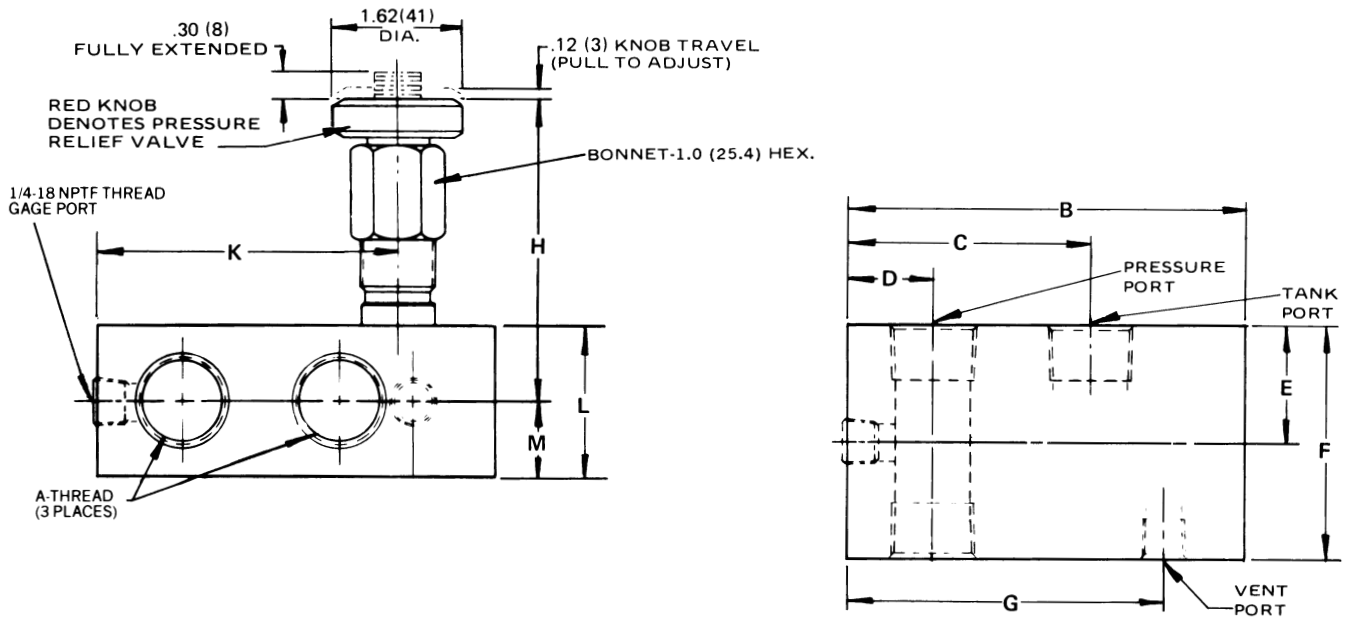
All relief valves are subject to override. For a given valve setting and flow, any changes in flow will cause a change in relief pressure. For example, a valve set at 2000 PSI at 25% flow will read 2100 PSI at 100 percent flow.



Relief Pressure vs. Flow

Dimensions

Pilot-Operated, Inline-Mounted
Pressure Relief Valves



Valve Size	A-Thread	B	C	D	E	F	G	H	J	K	L	M	Weight Lb. (Kg)
RP400S	1/4-18 NPTF	3.00 (76.2)	1.60 (41)	.67 (17)	.88 (22.3)	1.75 (44.4)	2.25 (57.1)	3.16 (80.2)	4.02 (102.1)	2.04 (52)	1.12 (28.4)	.56 (14.2)	1.9 (0.8)
RP600S	3/8-18 NPTF	3.53 (90)	2.00 (51)	.75 (19)	1.00 (25.4)	2.00 (51)	2.77 (70.3)	3.22 (82)	4.14 (105.1)	2.62 (66.5)	1.25 (32)	.62 (16)	2.6 (1.2)
RP800S	1/2-14 NPTF	4.10 (104.1)	2.40 (61)	.91 (23.1)	1.12 (28.4)	2.25 (57.1)	3.17 (81)	3.34 (85)	4.39 (115)	3.03 (77)	1.50 (38.1)	.75 (19)	3.7 (1.7)



Ordering Information

Example: "RP400SFV" means RP relief valve, 1/4" size, steel, 150-2000 PSI pressure range, optional Fluorocarbon seal.

