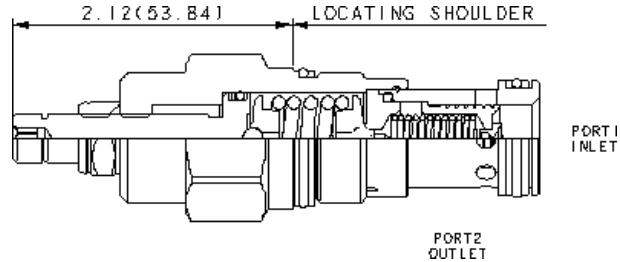
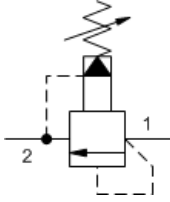


MODEL  
RPGCLCV

Pilot operated, balanced piston relief valve  
CAPACITY: 50 gpm | CAVITY: T-3A



**CONFIGURATION**

<b>L</b>	Control	Standard Screw Adjustment
<b>C</b>	Adjustment Range	150 - 6000 psi (10.5 - 420 bar), 1000 psi (70 bar) Standard Setting
<b>V</b>	Seal Material	Viton
<b>(none)</b>	Material/Coating	Standard Material/Coating

Pilot-operated, balanced-piston relief cartridges are normally closed pressure regulating valves. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to regulate the pressure. These valves are accurate, have low pressure rise vs. flow, they are smooth and quiet, and are moderately fast.

**TECHNICAL DATA**

Cavity	T-3A
Series	2
Capacity	50 gpm
Factory Pressure Settings Established at	4 gpm
Maximum Operating Pressure	5000 psi
Response Time - Typical	10 ms
Maximum Valve Leakage at 110 SUS (24 cSt)	3 in <sup>3</sup> /min.@1000 psi
Adjustment - Number of Clockwise Turns to Increase Setting	5
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990-203-007
Seal kit - Cartridge	Polyurethane: 990-003-002
Seal kit - Cartridge	Viton: 990-203-006
Model Weight	0.57 lb.

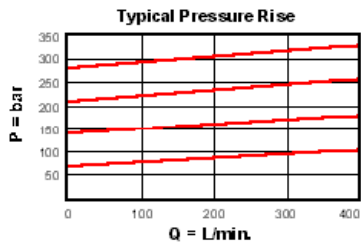
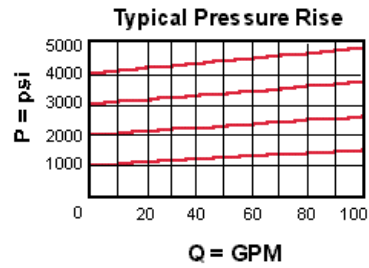
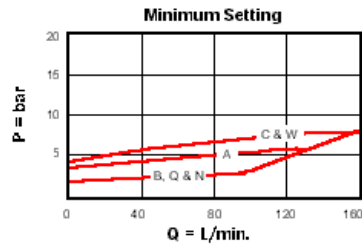
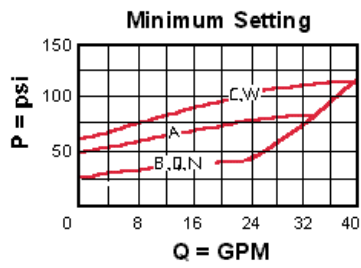
**NOTES**

For Series 1 cartridges configured with an O control (panel mount handknob), a .75 in. (19 mm) diameter hole is required in the panel.

**TECHNICAL FEATURES**

- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits. If used in cross port relief circuits, consider spool leakage.
- Main stage orifice is protected by a 150 micron stainless steel screen.
- Not suitable for use in load holding applications due to spool leakage.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- Cartridges with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- W and Y controls (where applicable) can be specified with or without a special setting. When no special setting is specified, the valve is adjustable throughout its full range using the W or Y control. When a special setting is specified, this setting represents the maximum setting of the valve.
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP for external stainless steel components, or /LH for external zinc-nickel plated components. See the CONFIGURATION section for all options. For further details, please see the Materials of Construction page located under TECH RESOURCES.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

## PERFORMANCE CURVES



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## RELATED MODELS

### RPGC3

Non-adjustable pilot operated, balanced piston relief valve

### RPGC8

Pilot operated, balanced piston relief main stage with integral T-8A control cavity

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## RELATED ACCESSORIES

### XRDM

Hot oil shuttle and relief assembly

### XRGN

Hydrostatic transmission flushing assembly with cross-port relief

### XRHB

Hydrostatic transmission flushing assembly with cross-port relief

### XRHC

Hot oil shuttle and relief assembly

### YCFC

Relief assembly with reverse flow check

### YRGD

Cross-port relief assembly

### YRHF

Fixed orifice, bypass/restrictive, priority flow control with relief assembly

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