

## Pilot operated, balanced piston relief valve

Capacity:  
50 gpm (200 L/min.)

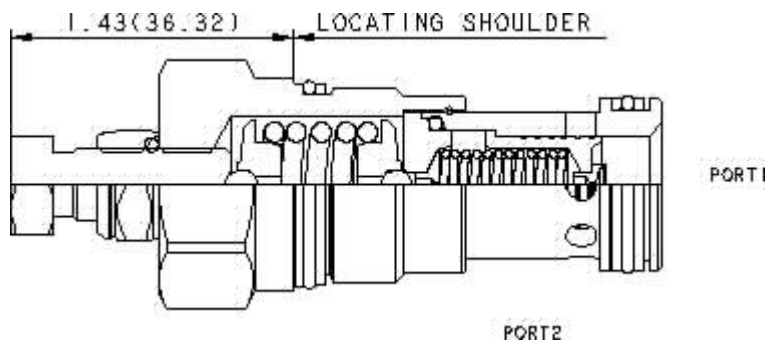
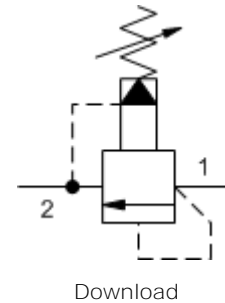
Functional Group:

Products : Cartridges : Relief : 2 Port : Pilot Operated, Balanced Piston

Model:  
RPGC-FCN

### Product Description

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.



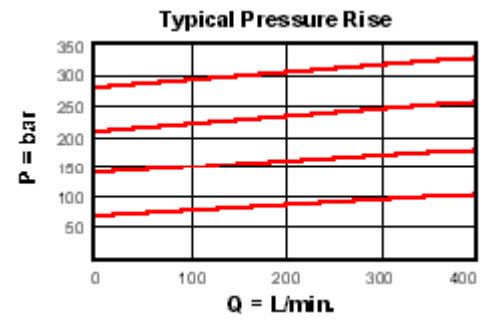
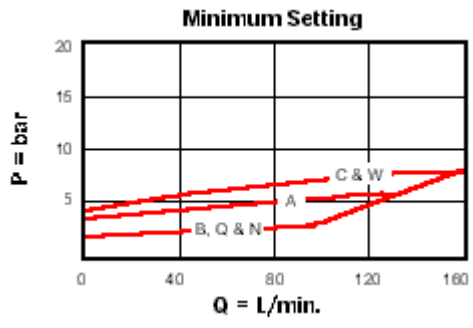
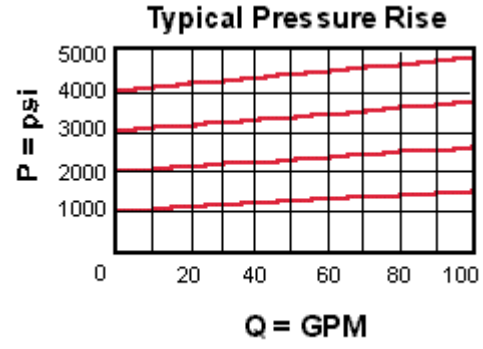
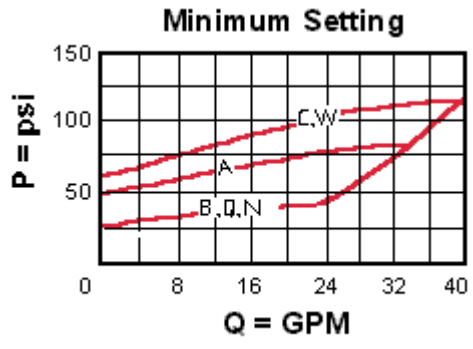
### Technical Features

- 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.
- Not suitable for use in load holding applications due to spool leakage.
- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- 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.
- Main stage orifice is protected by a 150 micron stainless steel screen.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- Stainless steel cartridge options P or W are intended for use within corrosive environments with all external components manufactured in stainless steel or titanium. Internal working components remain the same as the standard valves.

### Technical Data

	U.S. Units	Metric Units
Model Weight	0.44 lb.	0.20 kg.
Cavity	T-3A	
Capacity	50 gpm	200 L/min.
Adjustment - Number of Clockwise Turns to Increase Setting	5	
Factory Pressure Settings Established at	4 gpm	15 L/min.

Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	3 in <sup>3</sup> /min.@1000 psi	50 cc/min.@70 bar
Response Time - Typical	10 ms	
Series (from Cavity)	Series 2	
Valve Hex Size	1 1/8 in.	28,6 mm
Valve Installation Torque	45 - 50 lbf ft	60 - 70 Nm
Adjustment Screw Hex Socket Size	5/32 in.	4 mm
Adjustment Nut Hex Size	9/16 in.	15 mm
Adjustment Nut Torque	108 lbf in.	12 Nm
Seal Kits	Buna: 990-203-007	
Seal Kits	Viton: 990-203-006	



### RPGC-FCN

Control

Adjustment Range

External Material/Seal Material

F Hex Head Screw with Locknut	- 4.00	150 - 6000 psi (10,5 - C 420 bar), 1000 psi (70 bar) Standard Setting	+2.00	N Buna-N +0.00
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If the material/seal is P, the control must be L or C  
 If the material/seal is W, the control must be L or C  
 If the control is 3, the range must be A, C or D

\* Special Setting required, specify at time of order

Customer specified setting stamped on hex \$1.10

Related Models

RPGC8

- Explanation of Sun cartridge control options - US units.
- Explanation of Sun cartridge control options - metric units.
- Two-piece, floating cartridge construction.

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