

# Fast-acting, pilot operated, balanced piston relief valve

Capacity: 50 gpm (200 L/min.)

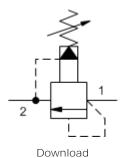
Functional Group:

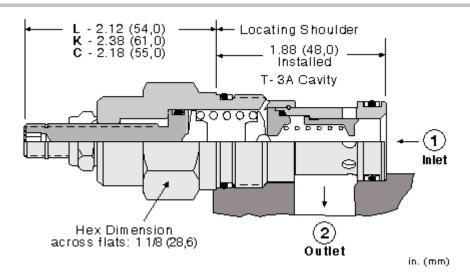
Products: Cartridges: Relief: 2 Port: Pilot Operated, Balanced Piston, Fast Acting

Model: RPGE-FAN

### Product Description

Fast-acting, pilot-operated, balanced piston relief cartridges are normally closed, pressure-limiting valves used to protect hydraulics components from pressure transients. Fast opening and closing is gained at the expense of smoothness. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to limit the pressure rise. These valves have low pressure rise vs. flow and are very fast.





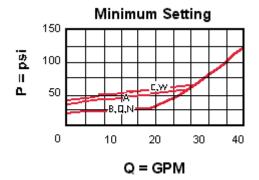
#### Technical Features

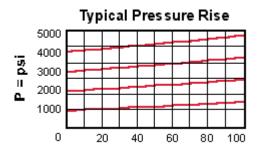
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits. If used in cross port relief circuits, consider spool leakage.
- Main stage orifice is protected by a 150 micron stainless steel screen.
- Not suitable for use in load holding applications due to spool leakage.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- 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.

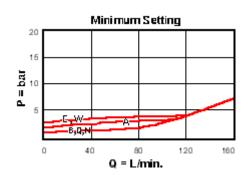
#### Technical Data

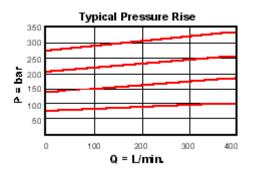
	U.S. Units	Metric Units
Cavity	T-3A	
Capacity	50 gpm	200 L/min.
Adjustment - Number of Clockwise Turns to Increase Setting		5

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	2 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 Internal Hex Size	5/32 in.	4 mm	
Adjustment Nut Hex Size	9/16 in.	15 mm	
Adjustment Nut Torque	108 lbf in.	12 Nm	
Model Weight	0.44 lb.	0.20 kg.	
Seal Kits - Cartridge	Buna: 990	Buna: 990-203-007	
Seal Kits - Cartridge	Viton: 990-203-006		









## RPGE-FAN

Control

Adjustment Range

External Material/Seal Material

F Hex Head Screw with Locknut

100 - 3000 psi (7 - 210 A bar), 1000 psi (70 bar) +0.00 N Buna-N +0.00 Standard Setting

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