MODEL
RPGE

Fast-acting, pilot-operated, balanced piston relief valve
SERIES 2 / CAPACITY: 200 L/min. / CAVITY: T-3A

sunhydraulics.com/model/RPGE

CONFIGURATION

C	Control	Tamper Resistant - Factory Set
C	Adjustment Range	150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting
V	Seal Material	Viton
(none)	Material/Coating	

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 DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-3A
Series	2
Capacity	200 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	15 L/min.
Maximum Valve Leakage at 110 SUS (24 cSt)	50 cc/min.@70 bar
Response Time - Typical	2 ms
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	28,6 mm
Valve Installation Torque	61 - 68 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	EPDM: 990203014
Seal kit - Cartridge	Polyurethane: 990003002
Seal kit - Cartridge	Viton: 990203006
Model Weight	0.28 kg.

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.

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CONFIGURATION OPTIONS

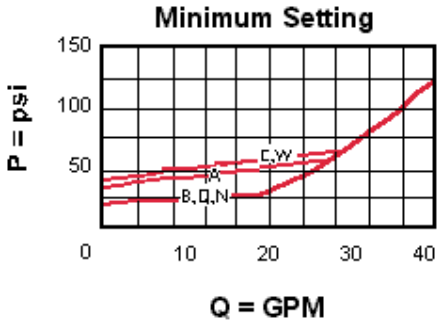
Model Code Example: RPGEArray

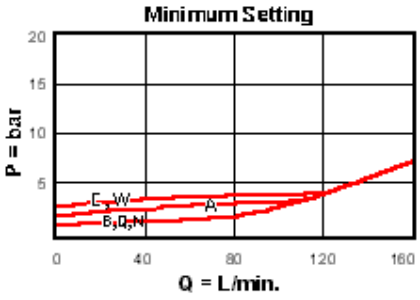
CONTROL (C)	ADJUSTMENT RANGE (C)	SEAL MATERIAL (V)	MATERIAL/COATING
C Tamper Resistant - Factory Set	**C** 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting	**V** Viton	Standard Material/Coating
K Handknob	**A** 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting	**E** EPDM	**/AP** Stainless Steel, Passivated
L Standard Screw Adjustment	**B** 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting	**N** Buna-N	**/LH** Mild Steel, Zinc-Nickel
O Handknob with Panel Mount	**D** 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting		
	E 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting		
	W 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting		

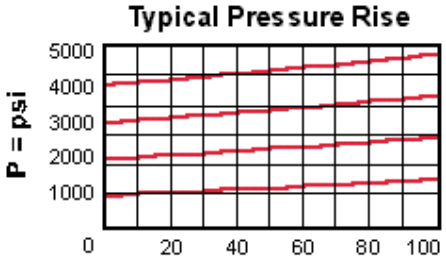
TECHNICAL FEATURES

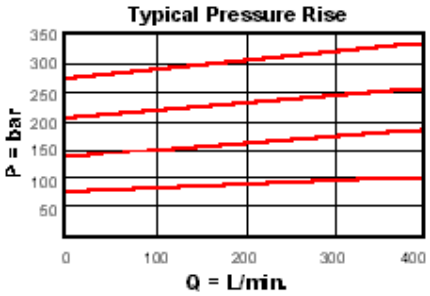
- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits. If used in cross port relief circuits, consider spool leakage.
- 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 configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- 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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