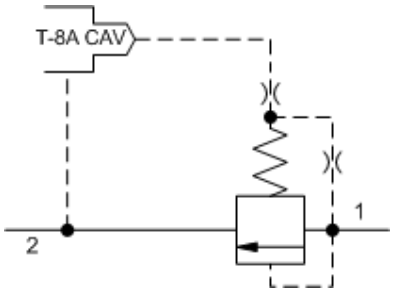
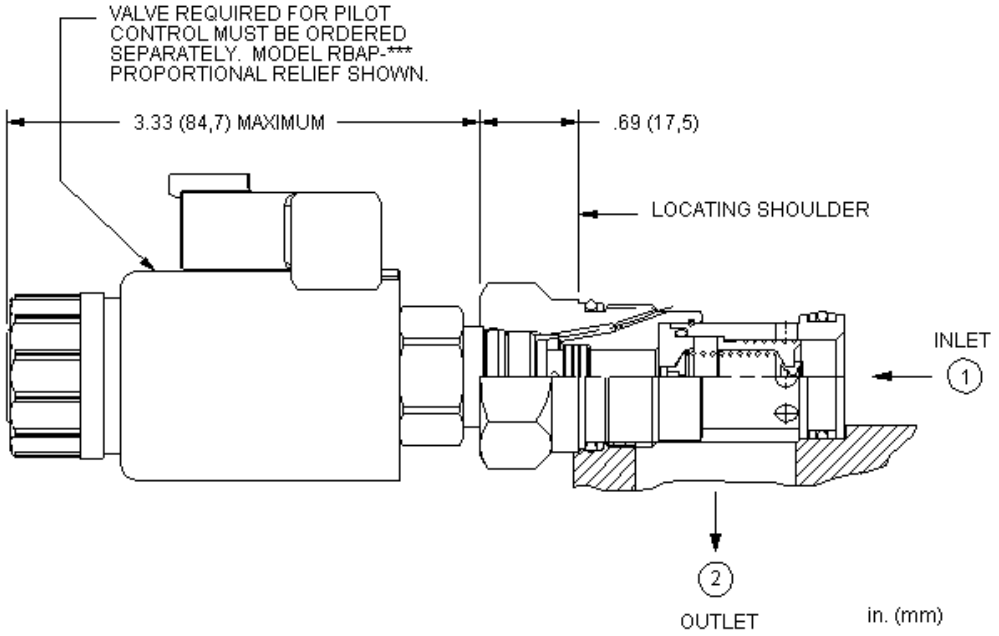
Pilot-operated, balanced piston relief main stage with integral T-8A control cavity

SERIES 2 / CAPACITY: 50 gpm / CAVITY: T-3A

sunhydraulics.com/model/RPGC8





CONFIGURATION

W	Adjustment Range	100 - 5000 psi (7 - 350 bar)
N	Seal Material	Buna-N

This valve is a normally closed modulating element that incorporates an integral pilot control cavity. It is a balanced piston design. The pilot control cavity will accept any T-8A pressure control cartridge. When the pressure at the inlet (port 1) reaches the pilot control cartridge's setting, the modulating element starts to open to tank (port 2), throttling flow to regulate the pressure. The pilot cartridge's setting determines the difference in pressure between port 1 and port 2.

TECHNICAL DATA

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

Cavity	T-3A
Series	2
Capacity	50 gpm
Maximum Operating Pressure	5000 psi
Control Pilot Flow	10 - 15 in³/min.
Pilot Control Cavity	T-8A
Main stage leakage at 110 SUS (24 cSt)	3 in³/min.@1000 psi
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	EPDM: 990203014
Seal kit - Cartridge	Polyurethane: 990003002
Seal kit - Cartridge	Viton: 990203006
Model Weight	0.38 lb.

NOTES

Compound cartridge (pilot and main stage) assembly information is provided for reference only. Cartridges must be ordered separately and assembled at point of use.

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CONFIGURATION OPTIONS

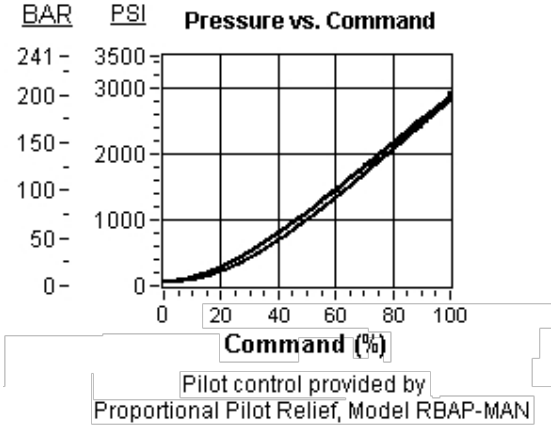
Model Code Example: RPGC8WN

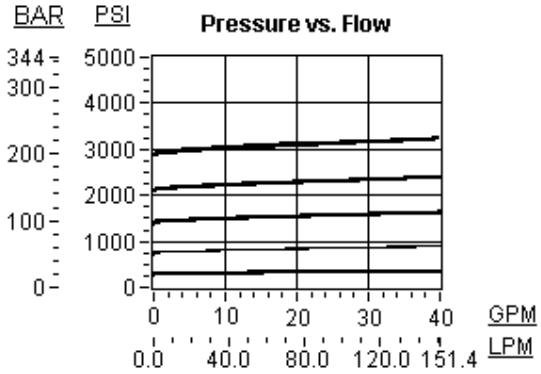
ADJUSTMENT RANGE (W)	SEAL MATERIAL (N)
W 100 - 5000 psi (7 - 350 bar)	**N** Buna-N
D 25 - 3000 psi (1,7 - 210 bar)	**E** EPDM
	V Viton

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.
- 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.
- NOTE: With the -8 control option, the main stage valve should first be installed to the correct torque value. The T-8A pilot control valve should then be installed into the main stage valve to its required torque value.
- The -8 control option allows the pilot control valve to be incorporated directly into the end of the relief cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional, solenoid, air pilot, and hydraulic pilot operation. See Pilot Control Cartridges.
- 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





RELATED MODELS

- RPGC Pilot-operated, balanced piston relief valve
- RPGC3 Non-adjustable pilot-operated, balanced piston relief valve

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