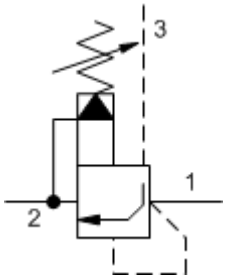
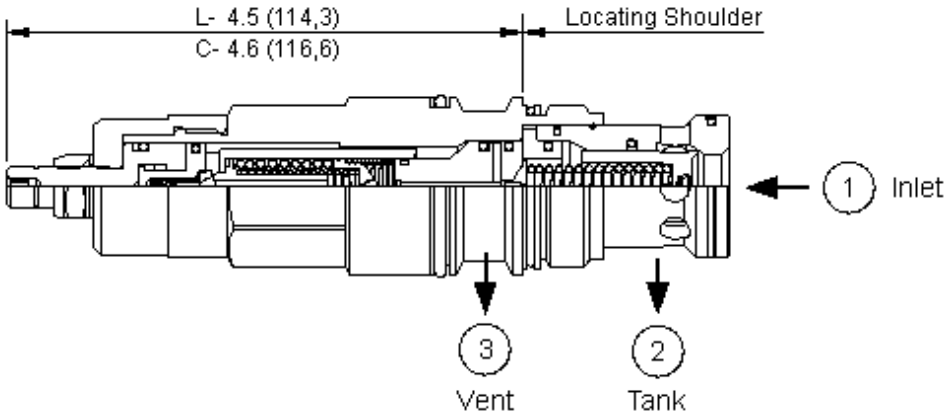
Anti-Shock, ventable, pilot-operated, balanced poppet relief valve

CAPACITY: 60 gpm / CAVITY: T-17A

sunhydraulics.com/model/RVGT





Ventable, pilot-operated, anti shock relief cartridges limit maximum system pressure and also limit the rate of pressure rise. The valve opens and then ramps closed at a constant speed, independent of settings and flows. These 3 port valves include a vent port (port 3) that connects between the main piston and the pilot stage to provide for remote control by other pilot or 2-way valves. The adjust screw determines the maximum (relief) setting and the minimum (threshold) setting.

TECHNICAL DATA

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

Cavity	T-17A
Series	3
Capacity	60 gpm
Maximum Operating Pressure	5000 psi
Control Pilot Flow	15 - 20 in³/min.
Factory Pressure Settings Established at	4 gpm
Pressure Ramp Up Time	300 - 500 ms
Response Time - Typical	2 ms
Adjustment - No. of CW Turns from Min. to Max. setting	4.5
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Model Weight	1.60 lb
Seal kit - Cartridge	Buna: 990-217-007
Seal kit - Cartridge	Polyurethane: 990-217-002
Seal kit - Cartridge	Viton: 990-217-006
U.S. Patent #	6,039,070

NOTES: • Patents are pending for this product.

OPTION SELECTION EXAMPLE: RVGTLACN

CONTROL	(L)
L	Standard Screw Adjustment
C	Tamper Resistant - Factory Set

ADJUSTMENT RANGE	(A)
A	500 - 3000 psi (35 - 210 bar), 1000 psi (70 bar) Standard Setting
B	500 - 1500 psi (35 - 105 bar), 1000 psi (70 bar) Standard Setting
C	1000 - 6000 psi (70 - 420 bar), 1000 psi (70 bar) Standard Setting
W	1000 - 4500 psi (70 - 315 bar), 1000 psi (70 bar) Standard Setting

SEAL MATERIAL	(N)
N	Buna-N
V	Viton

MATERIAL/COATING	
	Standard Material/Coating
/AP	Stainless Steel, Passivated

TECHNICAL FEATURES

- Because the modulating occurs inside the cartridge, these valves are immune to most of the problems associated with cavitation, namely noise and manifold erosion.
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- A remote pilot relief on port 3 (vent) will control the valve below its own setting.
- Not suitable for use in load holding applications.
- When pressure at the inlet (port 1) exceeds the threshold setting, the valve opens to tank (port 2). The pilot section moves forward at a steady rate, increasing the setting by compressing the pilot spring. Maximum setting is achieved when the pilot section reaches a mechanical stop.
- Valve provides protection for hydrostatic drives by reducing the jerk caused by sudden reversals. The valve is suitable for cross-port applications.
- When used with a switching device, the valve can provide the ramp characteristic typically provided by proportional valves.
- Small power units can be started against an anti shock relief to provide longer pump life.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- The main stage orifice is protected against contamination.
- 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