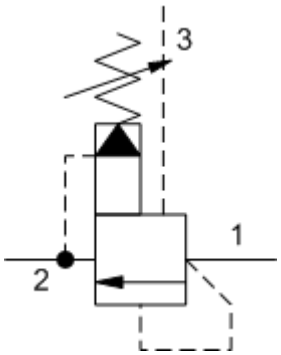

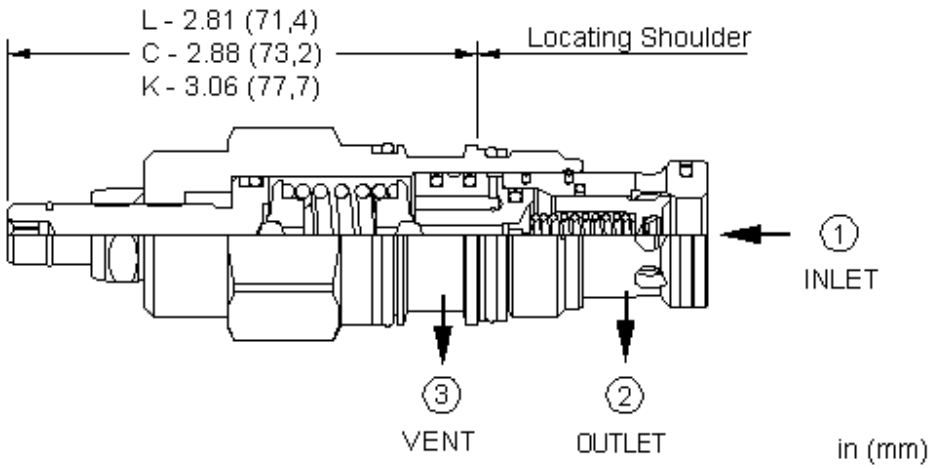

Ventable, pilot-operated, balanced-poppet relief cartridges are normally closed pressure regulating valves. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to regulate the pressure. They provide a vent port (port 3) that connects between the main piston and pilot stage to provide for remote control by other pilot or 2-way valves. These valves are accurate, have low pressure rise vs. flow, they are smooth and quiet, and are moderately fast.

TECHNICAL DATA

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

Cavity	T-2A
Series	2
Capacity	25 gpm
Maximum Operating Pressure	5000 psi
Control Pilot Flow	15 - 20 in³/min.
Factory Pressure Settings Established at	4 gpm
Maximum Valve Leakage at Reseat	10 drops/min.
Response Time - Typical	2 ms
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 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: 990-402-007
Seal kit - Cartridge	Polyurethane: 990-002-002
Seal kit - Cartridge	Viton: 990-402-006

OPTION SELECTION EXAMPLE: RVESLANV

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

ADJUSTMENT RANGE	(A)
A	100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting
B	50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting
C	150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting
Q	60 - 400 psi (4 - 28 bar), 200 psi (14 bar) Standard Setting
W	150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting

SEAL MATERIAL	(V)
V	Viton
E	EPDM
N	Buna-N

MATERIAL/COATING	
	Standard Material/Coating
/AP	Stainless Steel, Passivated
/LH	Mild Steel, Zinc-Nickel

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.
- Suitable for use in load holding applications, providing that any valving on the vent port (port 3) is zero leak.
- 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.
- Valve is relatively insensitive to varying oil temperatures and oil borne contamination.
- 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.
- 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