



Ventable, pilot-operated, balanced piston 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.

Maximum Operating Pressure	5000 psi
Control Pilot Flow	7 - 10 in ³ /min.
Factory Pressure Settings Established at	4 gpm
Maximum Valve Leakage at 110 SUS (24 cSt)	2 in ³ /min. @1000 psi
Response Time - Typical	10 ms
Adjustment - No. of CW Turns from Min. to Max. setting	5
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990-163-007
Seal kit - Cartridge	EPDM: 990-163-014
Seal kit - Cartridge	Polyurethane: 990-163-002
Seal kit - Cartridge	Viton: 990-163-006

CONFIGURATION OPTIONS

Model Code Example: RVBALAN

CONTROL	(L)	ADJUSTMENT RANGE	(A)	SEAL MATERIAL	(N)	MATERIAL/COATING
L Standard Screw Adjustment		A 75 - 3000 psi (5 - 210 bar), 1000 psi (70 bar) Standard Setting		N Buna-N		Standard Material/Coating
C Tamper Resistant - Factory Set		B 75 - 1500 psi (5 - 105 bar), 1000 psi (70 bar) Standard Setting		E EPDM		JAP Stainless Steel, Passivated
K Handknob		C 75 - 6000 psi (5 - 420 bar), 1000 psi (70 bar) Standard Setting		V Viton		
		N 75 - 800 psi (5 - 55 bar), 400 psi (28 bar) Standard Setting				
		Q 75 - 400 psi (5 - 28 bar), 200 psi (14 bar) Standard Setting				
		W 75 - 4500 psi (5 - 315 bar), 1000 psi (70 bar) Standard Setting				