



Direct-acting relief cartridges are normally closed, pressure-limiting valves used to protect hydraulic components from pressure transients. 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 are smooth and quiet, essentially zero leak, dirt tolerant, immune to silting and are very fast.

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

Maximum Operating Pressure	5000 psi
Factory Pressure Settings Established at	4 gpm
Maximum Valve Leakage at Reseat	10 drops/min.
Response Time - Typical	2 ms
Reseat	>85% of crack setting
Adjustment - No. of CW Turns from Min. to Max. setting	6
Locknut Hex Size	1/2 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990-162-007
Seal kit - Cartridge	EPDM: 990-162-014
Seal kit - Cartridge	Polyurethane: 990-162-002
Seal kit - Cartridge	Viton: 990-162-006

CONFIGURATION OPTIONS

Model Code Example: RDBALACN

CONTROL	(L)	ADJUSTMENT RANGE	(A)	SEAL MATERIAL	(N)	MATERIAL/COATING
L Standard Screw Adjustment		A 500 - 3000 psi (35 - 210 bar), 1000 psi (70 bar) Standard Setting		N Buna-N		Standard Material/Coating
C Tamper Resistant - Factory Set		C 1000 - 6000 psi (70 - 420 bar), 1000 psi (70 bar) Standard Setting		E EPDM		JAP Stainless Steel, Passivated
K Handknob		D 200 - 800 psi (14 - 55 bar), 400 psi (28 bar) Standard Setting		V Viton		LH Mild Steel, Zinc-Nickel
		E 100 - 400 psi (7 - 28 bar), 200 psi (14 bar) Standard Setting				
		S 50 - 200 psi (3,5 - 14 bar), 100 psi (7 bar) Standard Setting				
		W 800 - 4500 psi (55 - 315 bar), 1000 psi (70 bar) Standard Setting				