

The bi-directional, direct-acting relief cartridge is a normally closed, pressure-limiting valve used to protect hydraulic components from pressure transients. When the pressure differential between ports 1 and 2 exceeds the valve setting, the valve starts to open, throttling flow to limit the pressure rise, regardless of the direction.

**TECHNICAL DATA**

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

Cavity	SC-10-02
Series	1C
Capacity	80 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	30 cc/min.
Ratio of Setting (Flow 2 to 1 : 1 to 2)	1.8:1
Reseat	>80% of setting
Adjustment - No. of CW Turns from Min. to Max. setting	3.0
Valve Hex Size	25 mm
Valve Installation Torque	31 - 35 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	16 mm
Locknut Torque	5 - 7 lbf ft
Seal kit - Cartridge	Buna: 99C102007
Seal kit - Cartridge	Viton: 99C102006

**CONFIGURATION OPTIONS**

Model Code Example: RBUYArray

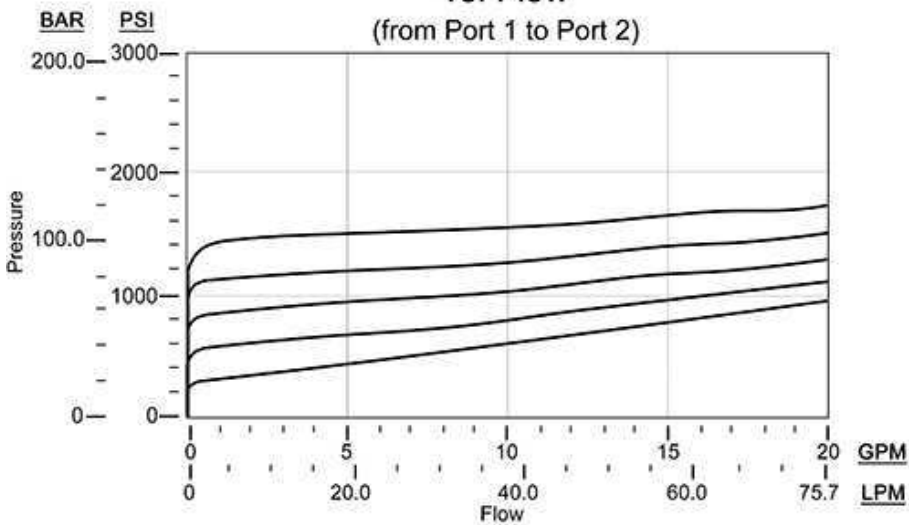
CONTROL	(L) ADJUSTMENT RANGE	(A) SEAL MATERIAL	(N)
L Standard Screw Adjustment	A 300 - 3000 psi (20 - 210 bar), 1000 psi (70 bar) Standard Setting	N Buna-N	V Viton
C Tamper Resistant - Factory Set			

## TECHNICAL FEATURES

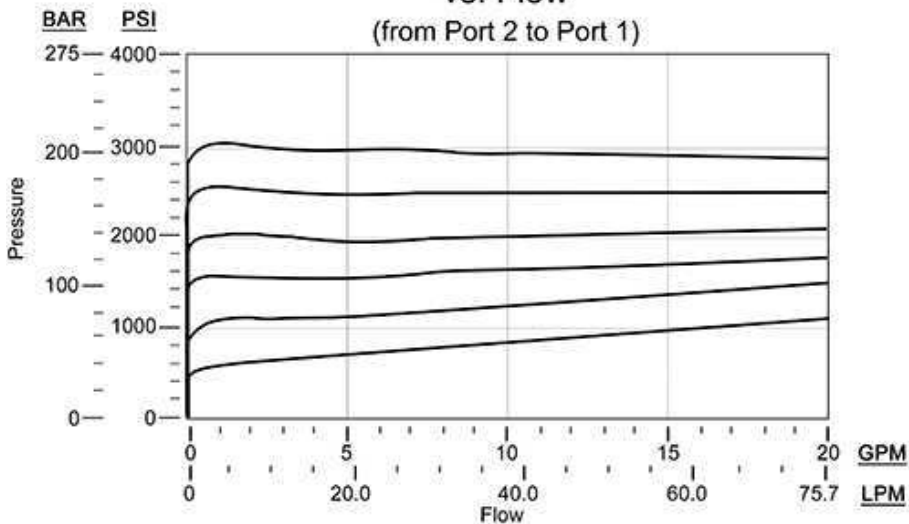
- Because the modulating occurs inside the cartridge, these valves are immune to most of the problems associated with cavitation, namely manifold erosion.
- Directional ratio: Pressure setting (2->1) = 1.8\*pressure setting (1->2).
- The seals on the adjust screw are exposed to system pressure which means this valve can only be adjusted when the pressure is removed. The setting procedure is; check the setting, remove the pressure, adjust the valve, check the new setting.
- Valve is relatively insensitive to varying oil temperatures and oil borne contamination.
- Select a spring range where the desired relief setting is approximately mid-range to high between the minimum and maximum pressure to ensure maximum valve repeatability.

## PERFORMANCE CURVES

**RBUY - \*A\***  
Typical Pressure Differential  
vs. Flow  
(from Port 1 to Port 2)



**RBUY - \*A\***  
Typical Pressure Differential  
vs. Flow  
(from Port 2 to Port 1)



# RBUY

## Typical Pressure Differential vs. Flow

