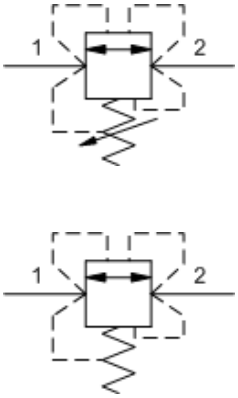
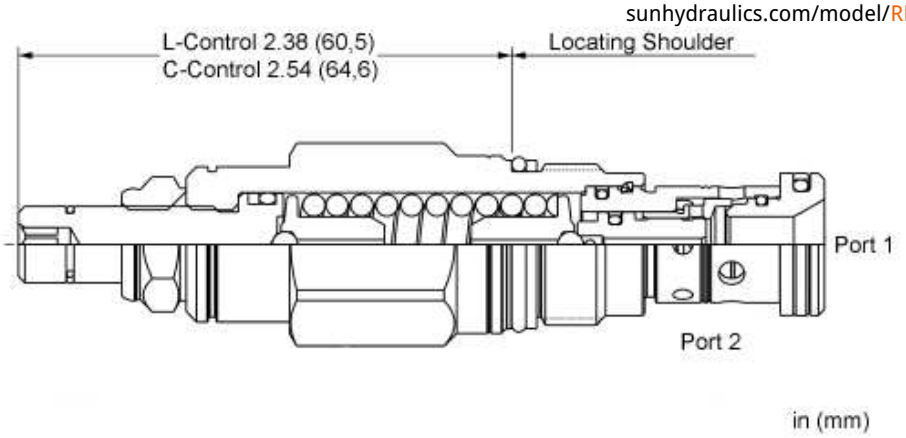




The bi-directional, direct-acting relief cartridge is a normally closed, pressure-limiting valve used to protect hydraulic components from pressure transients. When the pressure differential between ports 1 and 2 exceeds the valve setting, the valve starts to open, throttling flow to limit the pressure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

TECHNICAL DATA

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

Cavity	T-10A
Series	1
Capacity	95 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	15 L/min.
Maximum Valve Leakage at Reseat	0,7 cc/min.
Response Time - Typical	2 ms
Reseat	>85% of setting
Hysteresis	≤ 3 %
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
U.S. Patent #	11,384,857
Seal kit - Cartridge	Buna: 990310007
Seal kit - Cartridge	Viton: 990310006
Model Weight	0.17 kg.

CONFIGURATION OPTIONS

Model Code Example: RBDALAN

CONTROL (L)

- **L** Standard Screw Adjustment
- **C** Tamper Resistant - Factory Set

ADJUSTMENT RANGE (A)

- **A** 1200 - 3000 psi (85-210 bar), 1500 psi (105 bar) Standard Setting
- **W** 3000 - 5000 psi (210 - 350 bar), 4000 psi (280 bar) Standard Setting

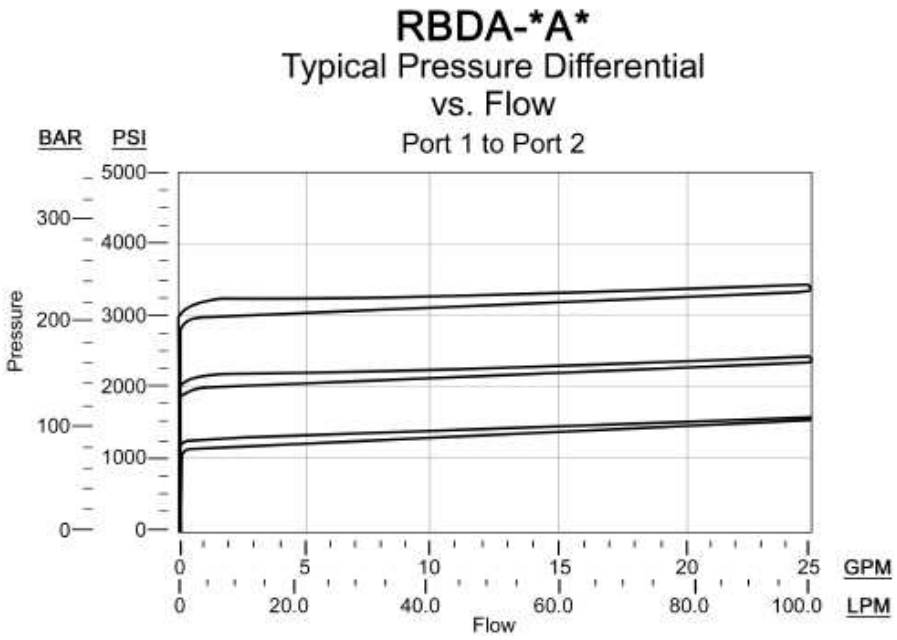
SEAL MATERIAL (N)

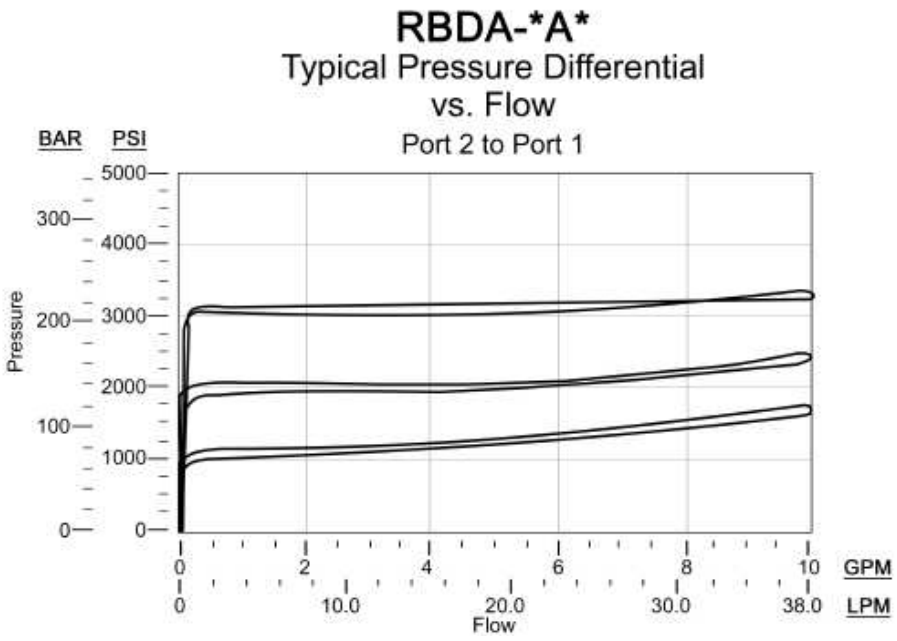
- **N** Buna-N
- **V** Viton

TECHNICAL FEATURES

- Capacity from port 1 to port 2 is 25 GPM (95 L/min). Flow from port 2 to port 1 is rated at 10 GPM (40 L/min).
- Recommended minimum setting is 1200 psi (85 bar). Note: At settings below 1200 psi (85 bar), the valve is rated for maximum transient flows of 25 GPM (95 L/min) only.
- Because the modulating occurs inside the cartridge, these valves are immune to most of the problems associated with cavitation, namely noise and manifold erosion.
- 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.
- 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

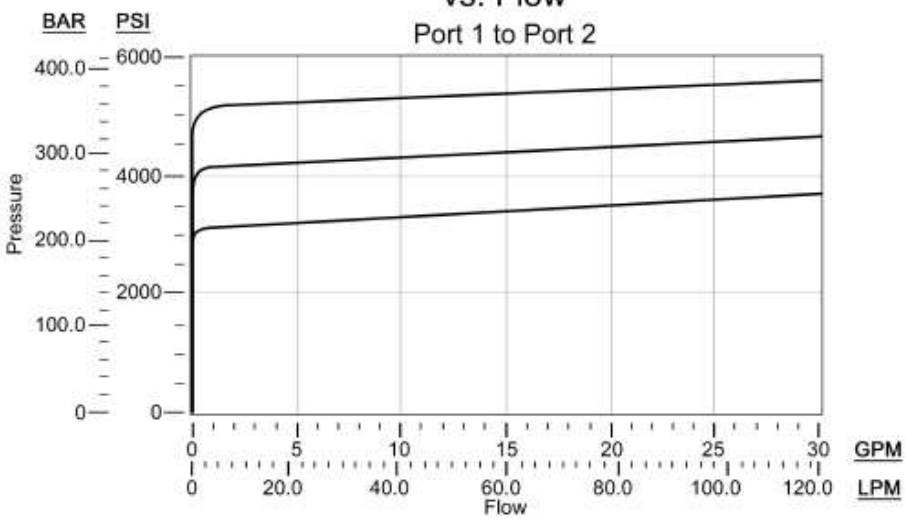




RBDA-*W*

Typical Pressure Differential vs. Flow

Port 1 to Port 2



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Typical Pressure Differential vs. Flow

Port 2 to Port 1