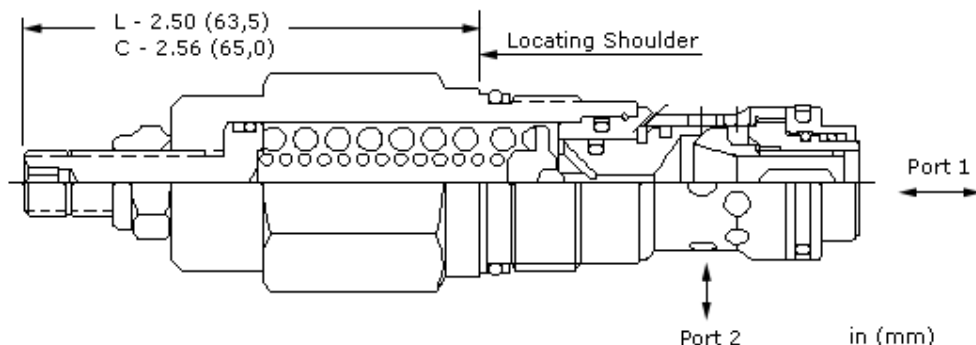
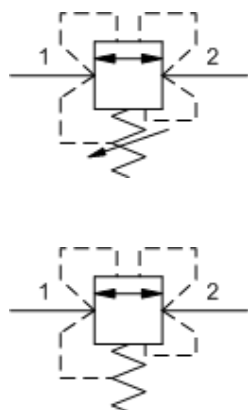




The bi-directional, direct-acting relief cartridge is a normally closed, pressure-limiting valve used to protect hydraulic components from pressure transients. When the pressure differential between ports 1 and 2 exceeds the valve setting, the valve starts to open, throttling flow to limit the pressure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

Both directions have very similar setting and performance.

## TECHNICAL DATA

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

|                                                        |                         |
|--------------------------------------------------------|-------------------------|
| Cavity                                                 | T-3A                    |
| Series                                                 | 2                       |
| Capacity                                               | 120 L/min.              |
| Factory Pressure Settings Established at               | 15 L/min.               |
| Maximum Operating Pressure                             | 350 bar                 |
| Response Time - Typical                                | 2 ms                    |
| Maximum Valve Leakage at Reseat                        | 30 drops/min.           |
| Reseat                                                 | >85% of setting         |
| Hysteresis                                             | ≤ 3 %                   |
| Adjustment - No. of CW Turns from Min. to Max. Setting | 5                       |
| Valve Hex Size                                         | 28,6 mm                 |
| Valve Installation Torque                              | 61 - 68 Nm              |
| Seal kit - Cartridge                                   | Buna: 990303007         |
| Seal kit - Cartridge                                   | Polyurethane: 990303002 |
| Seal kit - Cartridge                                   | Viton: 990303006        |
| Model Weight                                           | 0.31 kg.                |

## CONFIGURATION OPTIONS

### Model Code Example: RBFALWN

| CONTROL                                 | (L) ADJUSTMENT RANGE                                                          | (W) SEAL MATERIAL | (N) |
|-----------------------------------------|-------------------------------------------------------------------------------|-------------------|-----|
| <b>L</b> Standard Screw Adjustment      | <b>W</b> 800 - 4500 psi (55 - 315 bar), 1000 psi (70 bar) Standard Setting    | <b>N</b> Buna-N   |     |
| <b>C</b> Tamper Resistant - Factory Set | <b>C</b> 1500 - 6000 psi (105 - 420 bar), 1500 psi (105 bar) Standard Setting | <b>E</b> EPDM     |     |
|                                         |                                                                               | <b>V</b> Viton    |     |

## 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.
- The seals on the adjust screw are exposed to pressure at port 1 which means this valve can only be adjusted when the pressure is removed or port 2 is used to set the valve. The setting procedure at port 1 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.
- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- 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

