



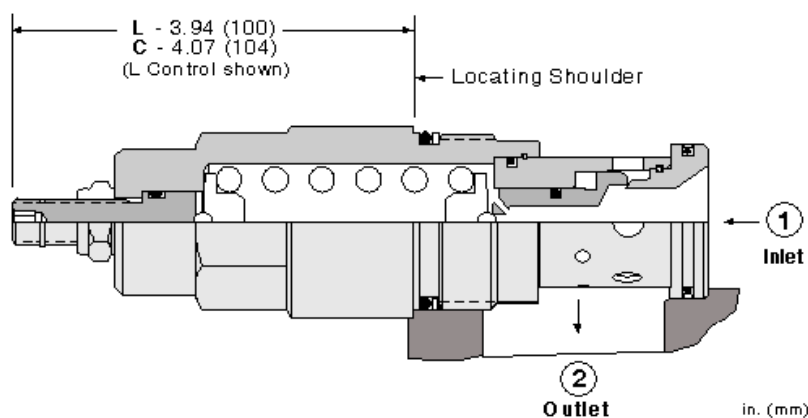
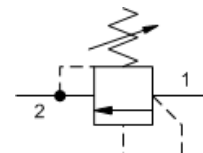
Direct-acting relief valve

Capacity:
200 gpm (760 L/min.)

Model:
RDJA

Product Description

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 Features

- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- Suitable for use in load holding applications.
- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- 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.
- 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.
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- 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.

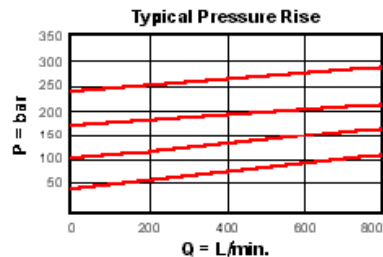
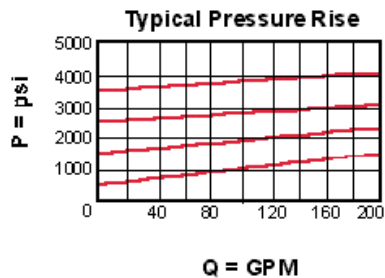
Special Notes

- U.S. Patent #4,742,846; European Patent Pending

Technical Data

	U.S. Units	Metric Units
Cavity	T-18A	
Capacity	200 gpm	760 L/min.
Factory Pressure Settings Established at	4 gpm	15 L/min.
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at Reseat	10 drops/min.	0,7 cc/min.
Response Time - Typical	2 ms	
Series (from Cavity)	Series 4	
U.S. Patent #	4,742,846	

Reseat	>90 % of Set Pressure	
Adjustment - Number of Clockwise Turns to Increase Setting	5	
Valve Hex Size	1 5/8 in.	41,3 mm
Valve Installation Torque	350 - 375 lbf ft	475 - 500 Nm
Adjustment Screw Internal Hex Size	5/32 in.	4 mm
Adjustment Locknut/Cap Hex Size	9/16 in.	15 mm
Adjustment Nut Torque	80 - 90 lbf in.	9 - 10 Nm
Seal Kits - Cartridge	Buna: 990-318-007	
Seal Kits - Cartridge	Viton: 990-318-006	
Model Weight	3.30 lb.	1.50 kg.



RDJA-LAN

Control
Preferred Options

L Standard Screw Adjustment
Standard Options

C* Tamper Resistant - Factory
Set

Adjustment Range

Preferred Options

A 500 - 3000 psi (35 - 210 bar), 1000 psi (70 bar)
Standard Setting

W 800 - 4500 psi (55 - 315 bar), 1000 psi (70 bar)
Standard Setting

Standard Options

B 300 - 1500 psi (20 - 105 bar),
1000 psi (70 bar) Standard
Setting

C 1000 - 6000 psi (70 - 420 bar),
1000 psi (70 bar) Standard
Setting

D 200 - 800 psi (14 - 55 bar),
400 psi (28 bar) Standard
Setting

E 150 - 400 psi (10 - 28 bar),
200 psi (14 bar) Standard
Setting

S 50 - 200 psi (3,5 - 14 bar),
100 psi (7 bar) Standard
Setting

Seal Material

Preferred Options

N Buna-N
Standard Options

V Viton

* Special Setting required, specify at time of order
Customer specified setting stamped on hex.