



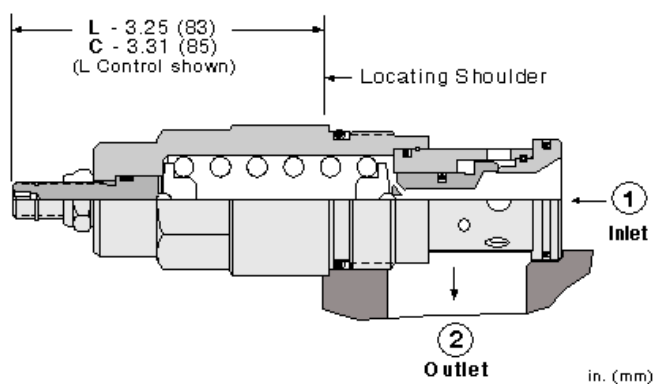
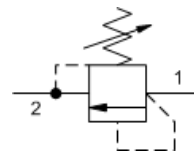
## Direct-acting relief valve

Capacity:  
100 gpm (380 L/min.)

Model:  
RDHA

### 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-16A                 |              |
| Capacity                                                   | 100 gpm               | 380 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 3              |              |
| U.S. Patent #                                              | 4,742,846             |              |
| Reseat                                                     | >90 % of Set Pressure |              |
| Adjustment - Number of Clockwise Turns to Increase Setting | 5                     |              |
| Valve Hex Size                                             | 1 1/4 in.             | 31,8 mm      |

