



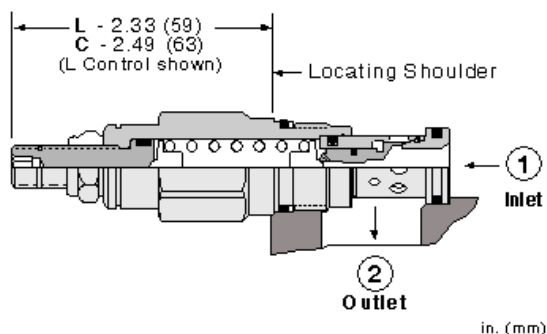
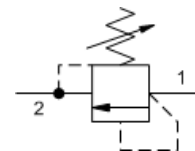
Direct-acting relief valve

Capacity:
25 gpm (95 L/min.)

Model:
RDDA

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.

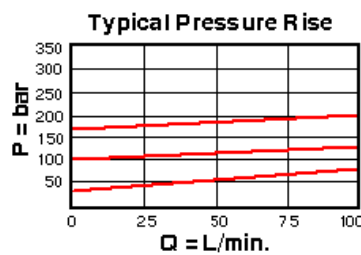
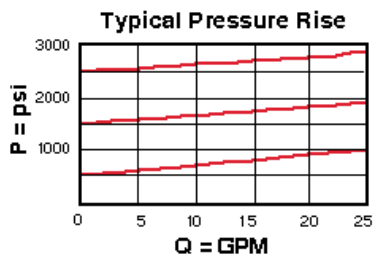
Special Notes

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

Technical Data

	U.S. Units	Metric Units
Cavity		T-10A
Capacity	25 gpm	95 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 1
U.S. Patent #		4,742,846
Reseat		>90 % of Set Pressure
Adjustment - Number of Clockwise Turns to Increase Setting		6
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	30 - 35 lbf ft	40 - 50 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: 990-310-007	
Seal Kits - Cartridge	Viton: 990-310-006	
Model Weight	0.37 lb.	0.17 kg.



RDDA-LAN

Control	Adjustment Range	Seal Material	Material/Coating Modifier
Preferred Options	Preferred Options	Preferred Options	Preferred Options
L Standard Screw Adjustment Standard Options	A 500 - 3000 psi (35 - 210 bar), 1000 psi (70 bar) Standard Setting	N Buna-N Standard Options	No modifier (standard material with no special coating) Special Options
C* Tamper Resistant - Factory Set	W 800 - 4500 psi (55 - 315 bar), 1000 psi (70 bar) Standard Setting	V Viton	/AP Stainless Steel, Passivated
R* Capped Screw Adjustment with Lockwire Holes	Standard Options		Control: C Control: L Control: R
	B 300 - 1500 psi (20 - 105 bar), 1000 psi (70 bar) Standard Setting		<i>Our stainless product line is growing! If you are interested in a stainless option for this model which is not shown please contact Sun.</i>
	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		

Additional Options

Control	Adjustment Range	Seal Material
F Hex Head Screw with Locknut		
J Capped Screw Adjustment		
K Handknob		
M Capped Screw Adjustment with Lockwire Holes		
Q* Capped and Lockwired		
W* Max. Setting Limiter		

If the control is K, the range must be B,D,E or S
 If the control is J, the range must be A,C or D
 When the control is F, the range must be A
 When the modifier is /AP, the control must be C, L or R

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