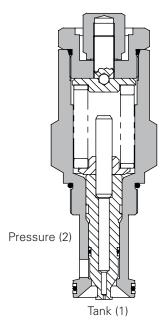
Operation

Pressure acts over the differential area between the seat and seal on the poppet. When the pressure exceeds the setting, the valve opens, allowing relief flow to tank, washing contaminant away from the seat.

Features

Dirt tolerant, robust and consistent with good pressure rise to increase in flow characteristics for a direct acting valve. Cartridge construction provides for maximum flexibility in mounting.

Sectional view



Performance data

Ratings and specifications

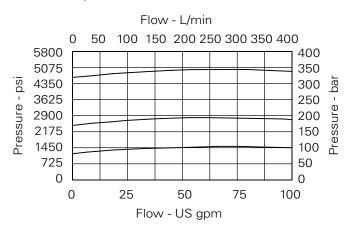
·			
Figures based on: Oil Temp = 40°C Viscosity = 32 cSt (150 SUS)			
Rated flow	380 L/min (100 USgpm)		
Max setting	350 bar (5000 psi)		
Cartridge material	Working parts hardened and ground steel.		
	External surfaces zinc plated.		
Body material	Standard aluminium (up to 210 bar*).		
	Add suffix "377" for steel option.		
Mounting position	Unrestricted		
Cavity	A1126 (See Section M)		
Torque cartridge into cavity	150 Nm (110 lbs ft)		
Weight	1LR300 1.04 kg (2.3 lbs)		
	1LR350 2.08 kg (4.6 lbs)		
Seal kit	SK207 (Nitrile)		
	SK207V (Viton®)		
Recommended filtration level	BS5540/4 Class 18/13 (25 micron nominal)		
Operating temp	-30°C to +90°C (-22°C to 194°F		
Leakage	1 millilitre/min nominal (15 dpm)		
Nominal viscosity range	5 to 500 cSt		

Viton is a registered trademark of E.I. DuPont

Description

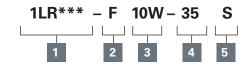
This is a fast, direct acting differential area screw-in cartridge relief valve. Ideal for intermittent duty as protection against overload or surge conditions for all types of actuators. Very fast acting and extremely dirt tolerant.

Pressure drop curves



Poppet, direct acting, differential area 380 L/min (100 USgpm) • 350 bar (5000 psi)

Model code



Function

1LR300 - Cartridge Only 1LR350 - Cartridge and Body

Adjustment means

F - Screw Adjustment

Port size

Note: Tightening torque of "F"

adjuster locknut - 20 to 25 Nm.

Code	Port size	Housing number	
		Aluminium	Steel
10W	1 1/4" BSP	B5134	B882
20T	1 1/4" SAE	B7783	B11553

Pressure range

Note: Code based on pressure in bar.

20 - 35-210 bar. Std setting 100 bar

35 - 70-350 bar. Std setting 280 bar Std setting made at 30 L/min

Seals

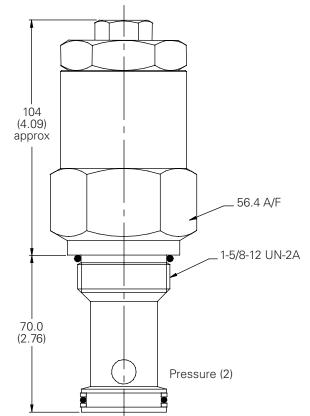
- S Nitrile (For use with most industrial hydraulic oils)
- SV Viton® (For high temperature and most special fluid applications)

Dimensions

mm (inch)

Cartridge only

Basic Code 1LR300

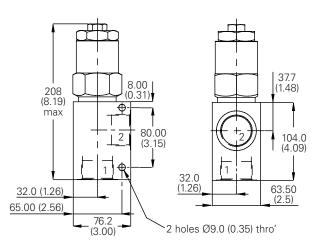


Tank (1)

Note: For applications above 210 bar please consult our technical department or use the steel body option.

Installation drawing

1 1/4" Ports Basic Code 1LR350



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.