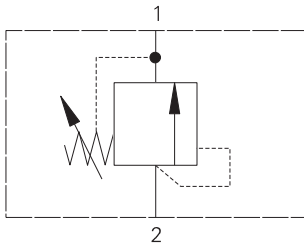


# 1LR300 - Relief valve

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



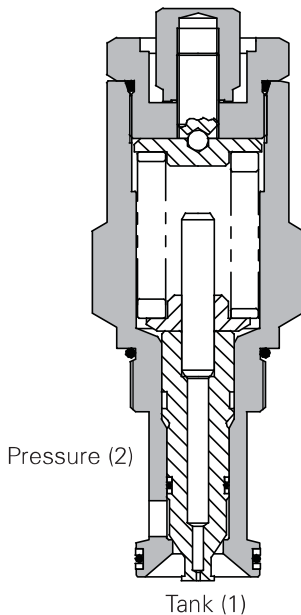
## Operation

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)

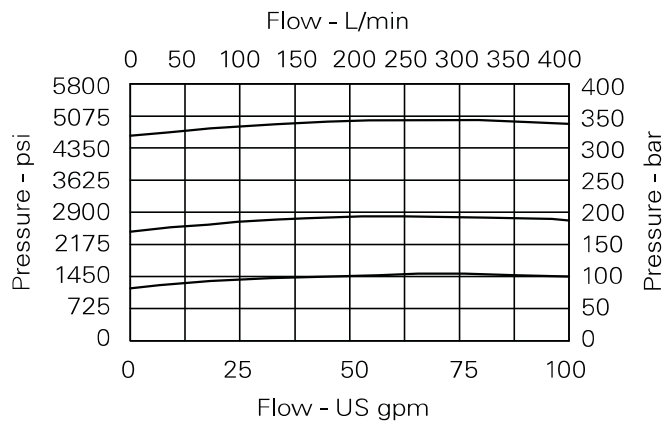
Rated flow	380 L/min (100 USgpm)
Max setting	350 bar (5000 psi)
Cartridge material	Working parts hardened and ground steel. External surfaces zinc plated.
Body material	Standard aluminium (up to 210 bar*). Add suffix "377" for steel option.
Mounting position	Unrestricted
Cavity	A1126 (See Section M)
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

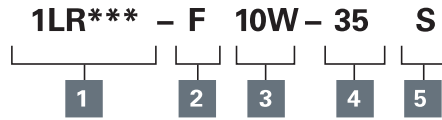


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# 1LR300 - Relief valve

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

## Model code



### 1 Function

**1LR300** - Cartridge Only  
**1LR350** - Cartridge and Body

### 2 Adjustment means

**F** - Screw Adjustment

### 3 Port size

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

### 4 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

### 5 Seals

**S** - Nitrile (For use with most industrial hydraulic oils)

**SV** - Viton® (For high temperature and most special fluid applications)

## Dimensions

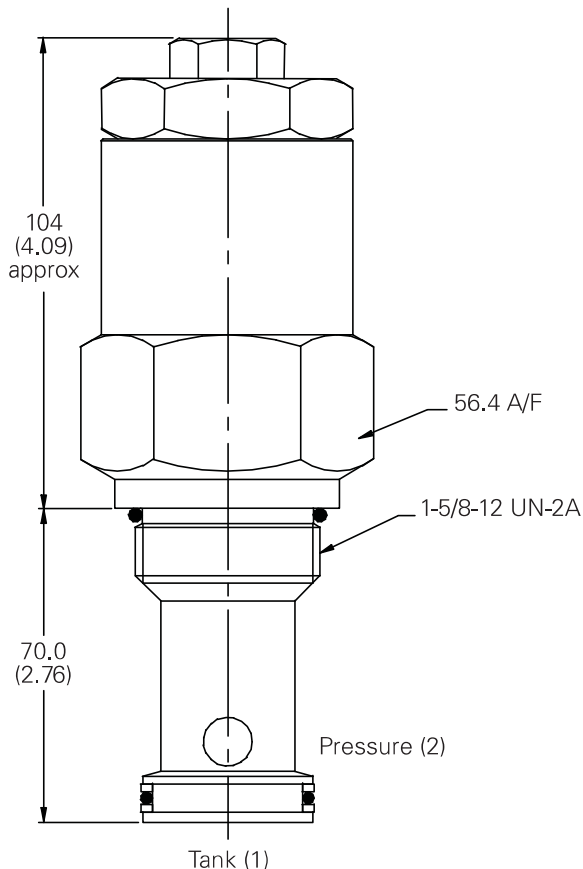
mm (inch)

**Note:** Tightening torque of "F" adjuster locknut - 20 to 25 Nm.

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

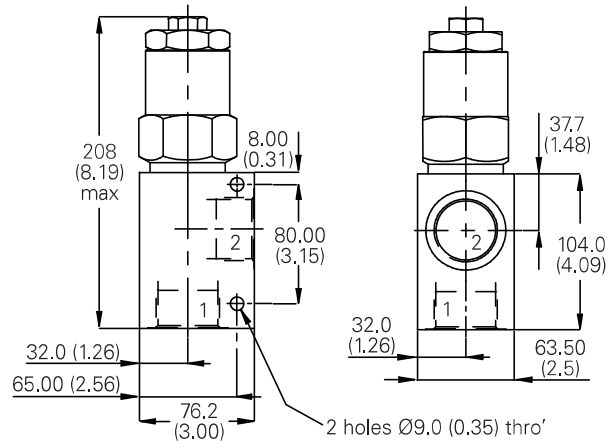
## Cartridge only

Basic Code  
**1LR300**



## 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.