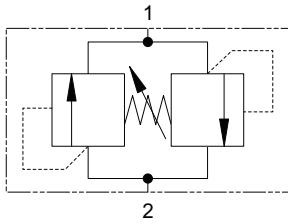


# 1CLLR50 - Dual Relief Valve

Poppet, direct acting, differential area  
 50 L/min (12 USgpm) • 250 bar (3500 psi)



## Operation

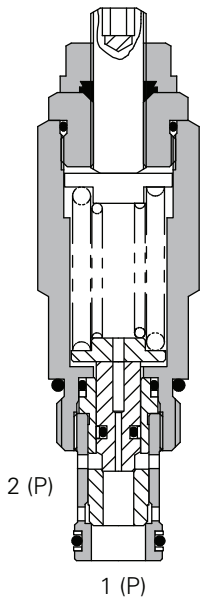
Pressure acts over one of two differential areas forcing the poppet back allowing relief flow to the other port.

This being a single cartridge is ideal for mounting on to a motor in a special housing.

## Features

Single cartridge relieving in both directions cutting down space requirements, giving full adjustment through its range on both pressures at the same time.

## Sectional View



## Performance Data

### Ratings and Specifications

Figures based on: Oil Temp = 40° C Viscosity = 32 cSt (150 SUS)

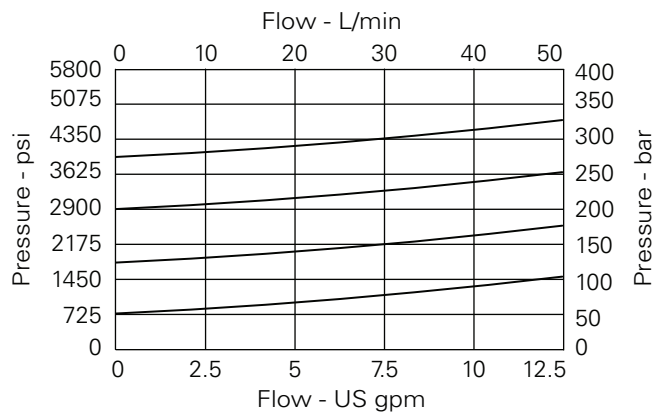
Rated flow	50 L/min (12 USgpm)
Max pressure	250 bar (3500 psi)
Cartridge material	Working parts hardened and ground steel. External steel surfaces zinc plate.
Body material	Standard aluminium (up to 210 bar*). Add suffix "377" for steel option.
Mounting position	Unrestricted
Cavity number	C-10-2 (See Section M)
Torque cartridge into cavity	60 Nm (44 lbs ft)
Weight	1CLLR50 0.23 kg (0.5 lbs) 1CLLR55 0.8 kg (1.8 lbs)
Seal kit number	SK1028 (Nitrile) SK1028V (Viton®)
Recommended filtration level	BS5540/4 Class 18/13 (25 micron nominal)
Operating temp	-30° to +90°C (-22° to +194°F)
Leakage	5 milliliters/min
Nominal viscosity range	5 to 500 cSt

Viton is a registered trademark of E.I. DuPont

## Description

This is a direct acting bi-directional relief valve designed to protect both lines in a circuit from over pressurization by relieving oil to the other line. Ideal for use with motors or directional valves as an emergency relief. Differential area, fast acting, poppet valve.

## Pressure Drop Curves

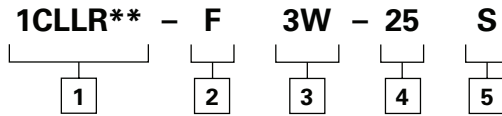


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# 1CLLR50 - Dual Relief Valve

Poppet, direct acting, differential area  
50 L/min (1.2 USgpm) • 250 bar (3500 psi)

## Model Code



**1 Function**  
**1CLLR50** - Cartridge Only  
**1CLLR55** - Cartridge and Body

**2 Adjustment Means**  
**F** - Screw Adjustment

**3 Port Sizes**

Code	Port Size	Housing Number - Body Only	
		Aluminium Single	Steel Single
<b>3W</b>	3/8" BSP	B19053	B20598
<b>4W</b>	1/2" BSP	B19356	B20599
<b>6T</b>	3/8" BSP	B19401	B20600
<b>8T</b>	1/2" SAE	B19402	B20601

**4 Pressure Range**  
**Note:** Code based on pressure in bar.  
**25** - 75-200 bar.  
 Std setting 120 bar

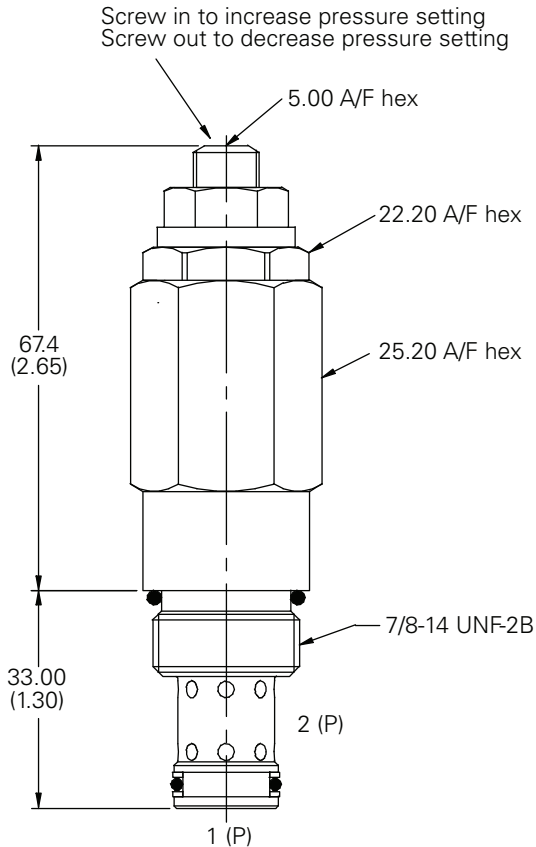
**5 Seals**  
**S** - Nitrile (For use with most industrial hydraulic oils)  
**SV** - Viton® (For high temperature and most special fluid applications)



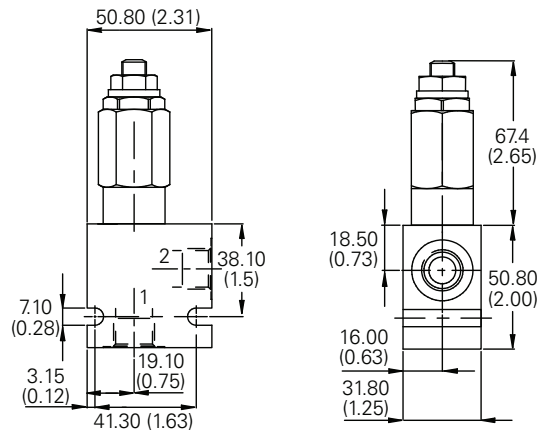
## Dimensions

mm (inch)

**Cartridge Only**  
 Basic Code  
**1CLLR50**



**Complete Valve**  
 3/8", 1/2" Ports  
 Basic Code  
**1CLLR55**



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