



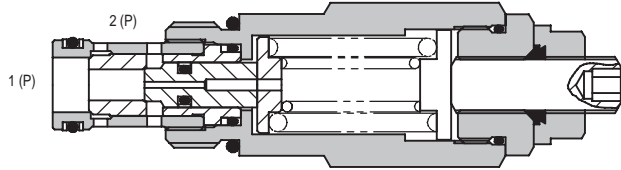
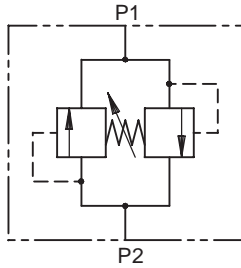
1CLLR SERIES DUAL RELIEF VALVE

DIRECT ACTING DIFFERENTIAL AREA

1CLLR50

POPPET TYPE

3



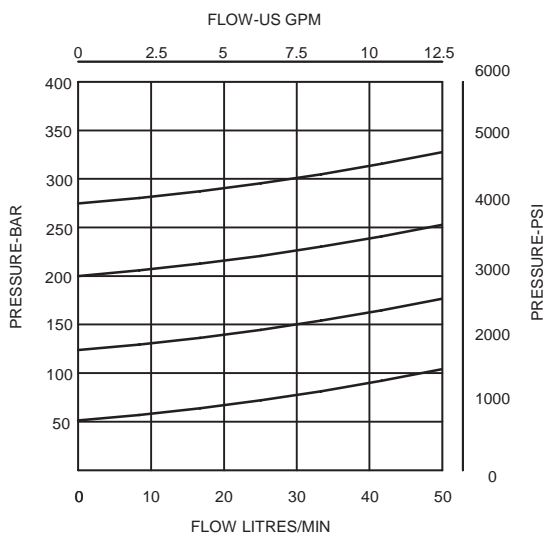
APPLICATION

To protect both lines in a circuit from over pressurisation by relieving oil to the other line. Ideal for use with motors or directional valves as a safety relief. Differential area, fast acting, poppet valve.

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 the motor in a special housing.

PRESSURE DROP



FEATURES

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

SPECIFICATIONS

Figures based on: Oil Temp = 40°C Viscosity = 40 cSt

Rated Flow	50 litres/min (12 US GPM)
Max Setting	350 bar (5000 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	A12370 (See Section 17)
Torque Cartridge into Cavity	30 Nm (22 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	-20°C to +90°C
Leakage	5 millilitres/min
Nominal Viscosity Range	5 to 500 cSt

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

Integrated Hydraulics Ltd

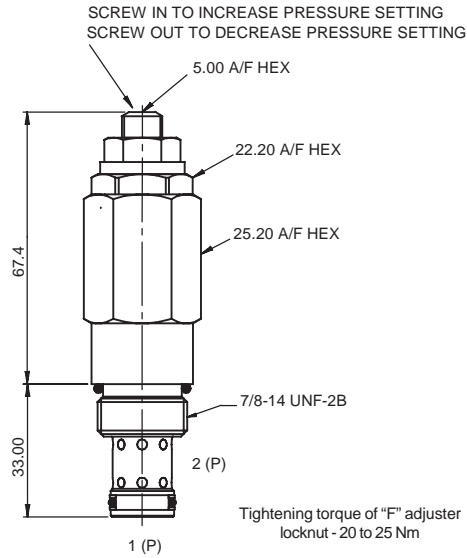
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CARTRIDGE ONLY

BASIC CODE: 1CLLR50

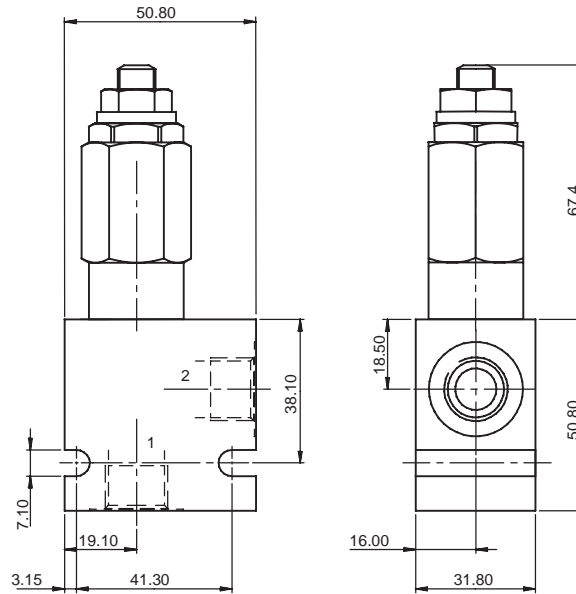


COMPLETE VALVE 3/8" 1/2" PORTS

BASIC CODE: 1CLLR55

Body ONLY part numbers

BSP, aluminium	SAE, aluminium	SAE, steel
3/8" B19053		
1/2" B19356	1/2" B19402	1/2" B20601



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

1CLLR* F 3W 35 S**

Basic Code

1CLLR50 = Cartridge Only
1CLLR55 = Cartridge and Body

Adjustment Means

F = Screw Adjustment

Port Sizes - Bodied Valves Only

3W = 3/8" BSP
4W = 1/2" BSP
8T = 1/2" SAE

Seals

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

Pressure Range @ 4.5 l/min

17 = 35-175 bar. Std setting 105 bar
35 = 114-350 bar. Std setting 280 bar
Std setting made at 4.5 litres/min