



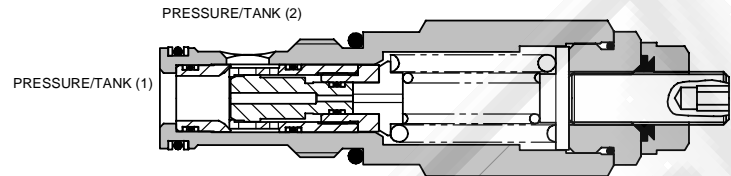
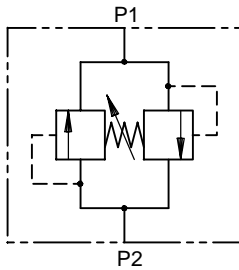
1CLLR SERIES DUAL RELIEF VALVE

DIRECT ACTING DIFFERENTIAL AREA

1CLLR100

POPPET TYPE

3



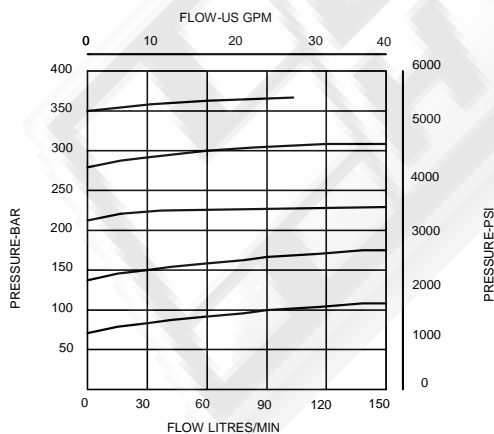
APPLICATION

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	150 litres/min (40 US GPM)
Max Setting	350 bar (5000 psi)
Cartridge Material	Working parts hardened and ground steel. External steel surfaces black oxide
Body Material	Standard aluminium (up to 210 bar*) Add Suffix '377' for steel option
Mounting Position	Unrestricted
Cavity Number	A878 (See Section 17)
Torque Cartridge into Cavity	60 Nm (44 lbs ft)
Weight	1CLLR100 0.23 kg (0.5 lbs) 1CLLR150 0.8 kg (1.8 lbs) 1CLLR155 1.1 kg (2.4 lbs)
Seal Kit Number	SK614 (Nitrile) SK614V (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

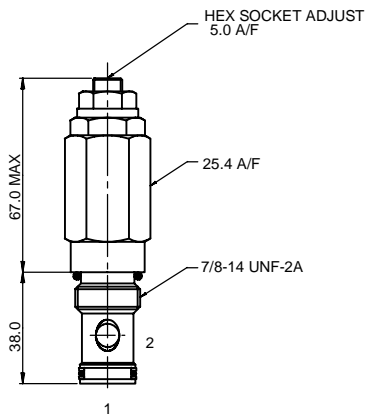
Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729
Website: www.integratedhydraulics.com

Integrated Hydraulics Inc

7047 Spinach Drive, Mentor, Ohio 44060, USA
Tel: (440) 974 3171 Fax: (440) 974 3170
Website: www.integratedhydraulics.com

CARTRIDGE ONLY

BASIC CODE: 1CLLR100

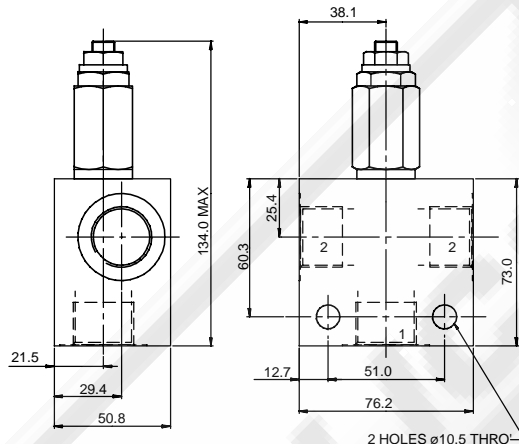


COMPLETE VALVE 3/4" 1" PORTS

BASIC CODE: 1CLLR150

Body ONLY part numbers

BSP, aluminium		SAE, aluminium		BSP, steel		SAE, steel	
3/4"	B1067	3/4"	B4409	3/4"	B5614	3/4"	B11552
1"	B1069	1"	B10827	1"	B542	1"	B11801

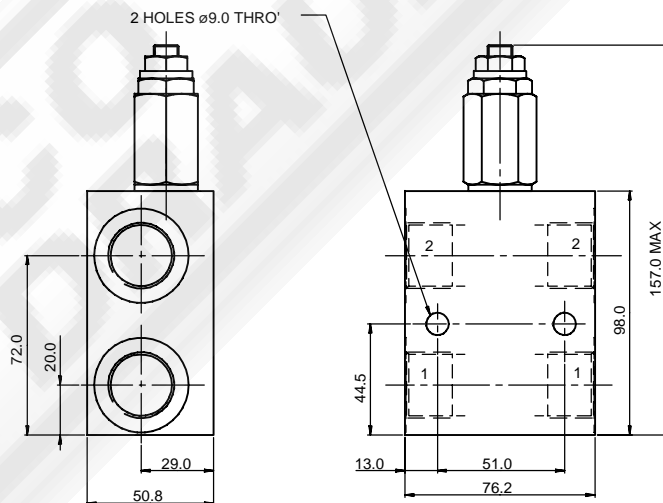


COMPLETE VALVE 3/4" PORTS

BASIC CODE: 1CLLR155

Body ONLY part numbers

BSP, aluminium		SAE, aluminium		BSP, steel	
3/4"	B2216	3/4"	B10623	3/4"	B7147



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

1CLLR* F 6W 35 S**

Basic Code

- 1CLLR100 = Cartridge Only
- 1CLLR150 = Cartridge and Body
- 1CLLR155 = Cartridge and Body through ported

Adjustment Means

- F = Screw Adjustment

Port Sizes - Bodied Valves Only

- 6W = 3/4" BSP 12T = 3/4" SAE
- 8W = 1" BSP 16T = 1" SAE

Seals

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

Pressure Range @ 14 l/min

- 35 = 114-350 bar. Std setting 280 bar
- Std setting made at 14 litres/min