



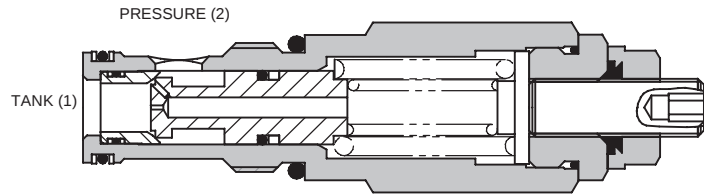
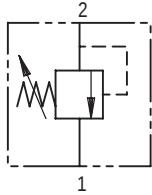
1LR SERIES RELIEF VALVE

DIRECT ACTING DIFFERENTIAL AREA

1LR100

POPPET TYPE

2



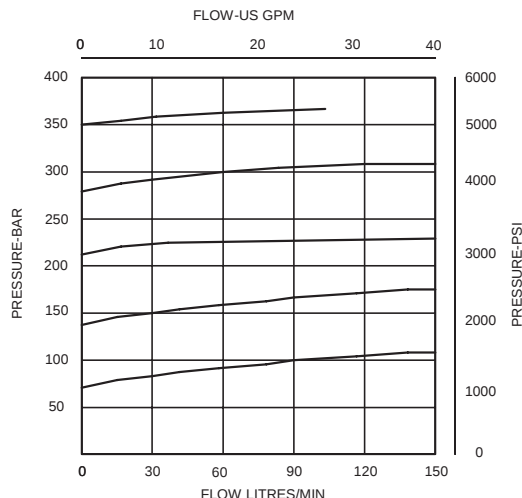
APPLICATION

Ideal for intermittent duty as protection against overload or surge conditions for all types of actuators. Very fast acting and extremely dirt tolerant.

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.

PRESSURE DROP



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.

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 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	1LR100	0.23 kg (0.5 lbs)
	1LR150	0.45 kg (1.0 lbs)
	1LR155	1.06 kg (2.3 lbs)
Seal Kit Number	SK170 (Nitrile) SK170V (Viton)	
Recommended Filtration Level	BS5540/4 Class 18/13 (25 micron nominal)	
Operation Temp	-20°C to +90°C	
Leakage	0.3 millilitres/min nominal (5 dpm)	
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

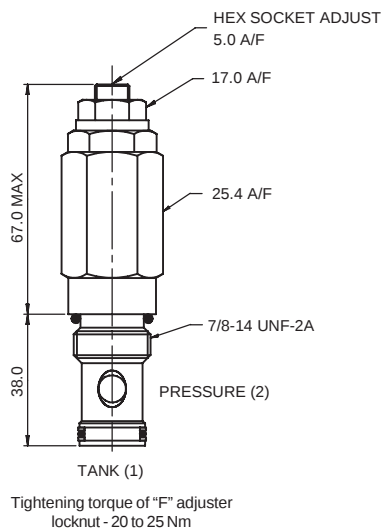
Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729
Website: www.integratedhydraulics.com

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: 1LR100



COMPLETE VALVE

3/4" 1" PORTS

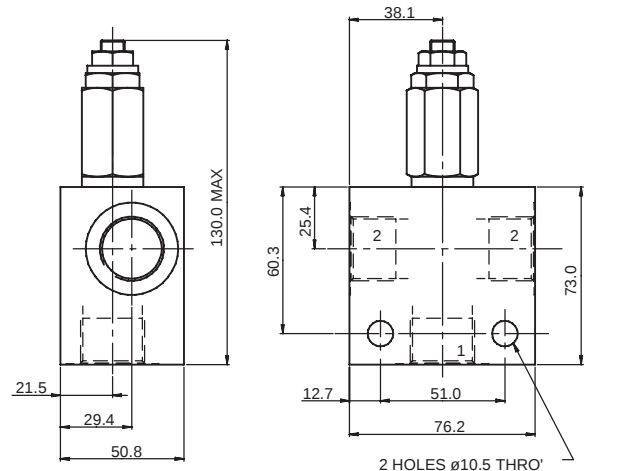
BASIC CODE: 1LR150

Body ONLY part numbers

BSP, aluminium	3/4"	B1067	SAE, aluminium	3/4"	B4409
1"	B1069	1"	B10827		

BSP, steel	3/4"	B5614
1"	B542	

SAE, steel	1"	B11801
------------	----	--------



2

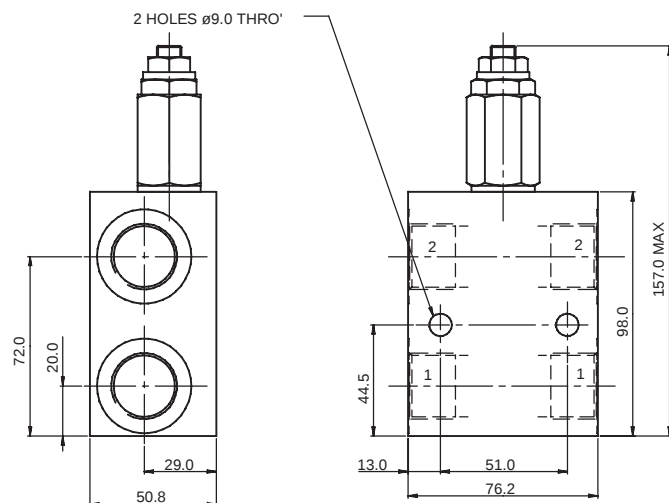
COMPLETE VALVE

3/4" PORTS

BASIC CODE: 1LR155

Body ONLY part numbers

BSP, aluminium	3/4"	B2216	SAE, aluminium	3/4"	B10623
----------------	------	-------	----------------	------	--------



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

1LR* F 6W 35 S**

Basic Code

1LR100 = Cartridge Only

1LR150 = Cartridge and Body

1LR155 = 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

17 = 35-175 bar. Std setting 105 bar

28 = 75-285 bar. Std setting 175 bar

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

We reserve the right to change specifications without notice