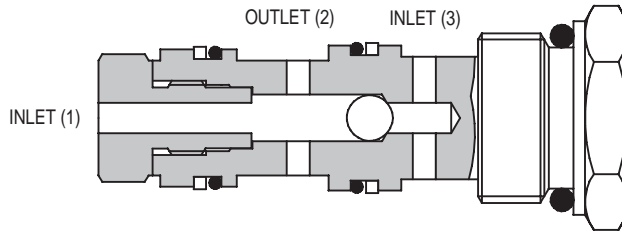
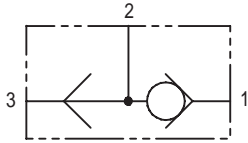




1SH20 SHUTTLE VALVE

BALL TYPE

1SH20



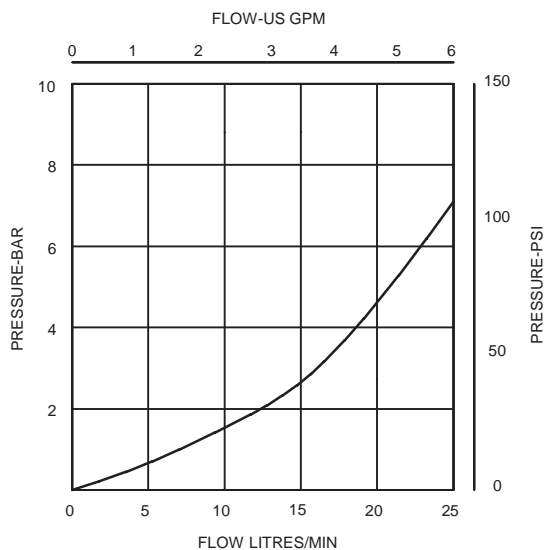
APPLICATION

This valve provides a means of sensing the higher pressures between two lines on a hydraulic circuit allowing this line to be used for an auxiliary function such as the removal of a mechanically applied brake, the operation of a gauge or to give a remote pressure sensing line for the control of a separate valve.

OPERATION

When a higher pressure is sensed at inlet (1) than at inlet (3) the ball within the cartridge is forced against a seat opening the higher pressure to outlet (2). When the higher pressure appears at inlet (3) the ball is forced against another seat which blocks inlet (1) and opens up inlet (3) to outlet (2).

PRESSURE DROP



FEATURES

Cartridge design enabling speedy servicing when mounted in a body or in a composite manifold.

SPECIFICATIONS

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

Rated Flow	20 litres/min (5 US GPM)	
Max Working Pressure	350 bar (5000 psi)	
Cartridge Material	All working parts hardened and ground steel. External surfaces zinc plated	
Body Material	Standard steel	
Mounting Position	Unrestricted	
Cavity Number	A893 (See Section 17)	
Torque Cartridge into Cavity	60 Nm (44 lbs ft)	
Weight	1SH20	0.12 kg (0.26 lbs)
	1SH25	1.40 kg (3.08 lbs)
Seal Kit Number	SK182 (Nitrile)	SK182V (Viton)
Recommended Filtration Level	BS5540/4 Class 18/13 (25 micron nominal)	
Operating Temp	-20°C to +90°C	
Leakage	0.6 millilitres/min nominal	
Nominal Viscosity Range	5 to 500 cSt	

Integrated Hydraulics Ltd

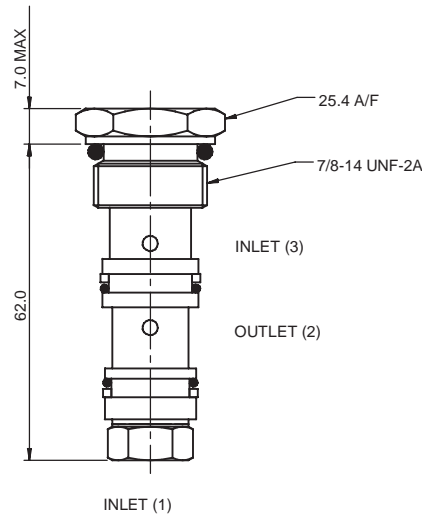
Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729
Website: www.integratedhydraulics.com

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: 1SH20

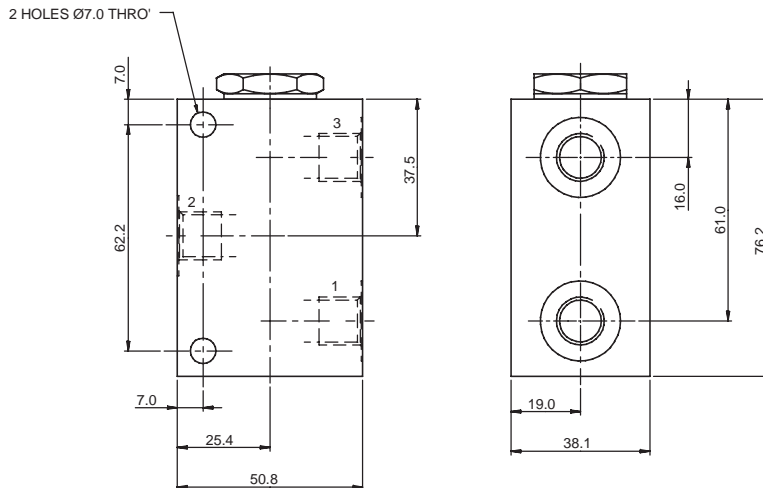


COMPLETE VALVE 1/4" 3/8" PORTS

BASIC CODE: 1SH25

Body ONLY part numbers

SAE, aluminium	BSP, steel	SAE, steel
3/8" A10715	1/4" A1882 3/8" A1883	3/8" A7371



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

1SH**

3W

S

377

Basic Code

1SH20 = Cartridge Only
1SH25 = Cartridge and Body

Port Sizes - Bodied Valves Only

2W = 1/4" BSP Valve & Cyl Port.
3W = 3/8" BSP Valve & Cyl Port.
6T = 3/8" SAE Valve & Cyl Port.

Body Material

377 = Steel
Omit for aluminium (up to 210 bar)

Seals

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

We reserve the right to change specifications without notice