

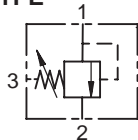


1DS SERIES SEQUENCE VALVE

DIRECT ACTING

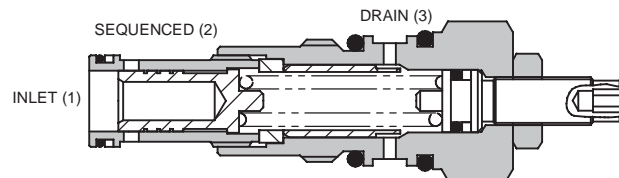
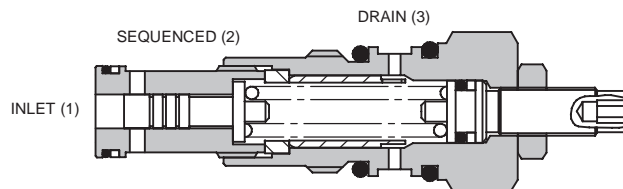
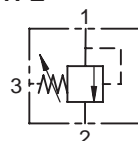
1DS30

SLIDING SPOOL TYPE



1DS100

SLIDING SPOOL TYPE



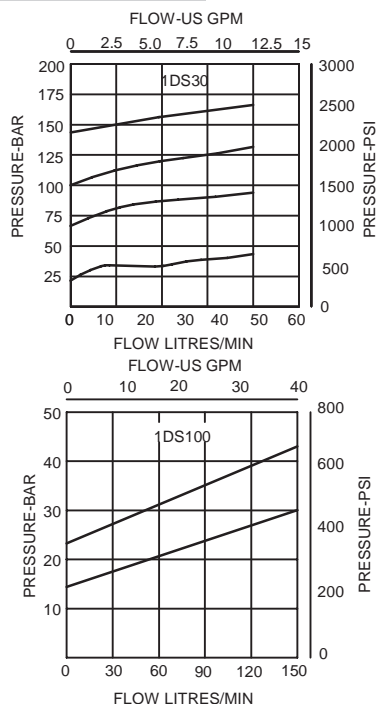
APPLICATION

Direct acting sequence valves are ideal for diverting oil to a second circuit at a predetermined pressure as in clamp and drill circuits, or as a relief where the back pressure varies. By taking the drain line directly to tank, back pressure effects are negated.

OPERATION

As with the direct acting relief valves, when the pressure exceeds the spring force, the spool moves back, opening the inlet to outlet.

PRESSURE DROP



FEATURES

Stable, quiet operation. Cartridge construction gives maximum flexibility in mounting. Offering good repeatability and reset.

SPECIFICATIONS

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

Rated Flow	1DS30	30 litres/min (8 US GPM)
	1DS100	150 litres/min (40 US GPM)
Max Setting	1DS30	140 bar (2000 psi)
	1DS100	40 bar (600 psi)
Cartridge Material	Working parts hardened and ground steel. External steel surfaces zinc plated	
Body Material	Standard aluminium (up to 210 bar*) Add Suffix '377' for steel option	
Mounting Position	Unrestricted	
Cavity Number	A880 (See Section 17)	
Torque Cartridge into Cavity	60 Nm (44 lbs ft)	
Weight	1DS30/1DS100	0.28 kg (0.62 lbs)
	1DS35/1DS145	0.88 kg (1.94 lbs)
	1DS36/1DS150	0.71 kg (1.57 lbs)
	1DS155	1.17 kg (2.60 lbs)
Seal Kit Number	SK177 (Nitrile)	SK177V (Viton)
Filtration	BS5540/4 Class 18/13 (25 micron nominal)	
Operating Temp	-20°C to +90°C	
Leakage	25 millilitres/min nominal 15 millilitres/min nominal	
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

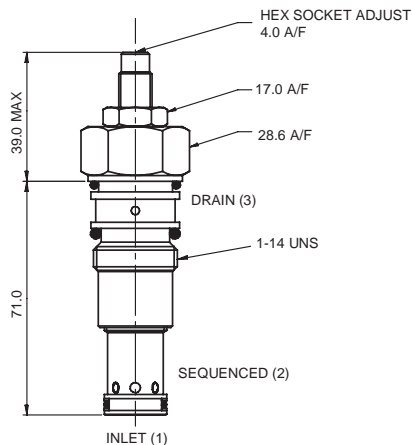
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CARTRIDGE ONLY

BASIC CODE: 1DS30
1DS100



COMPLETE VALVE

BASIC CODE: 1DS35 3/8" 1/2" PORTS
1DS145 3/8" 1/2" 3/4" PORTS

Body ONLY part numbers

BSP, aluminium

1/2" B4821
3/4" B5466

SAE, aluminium

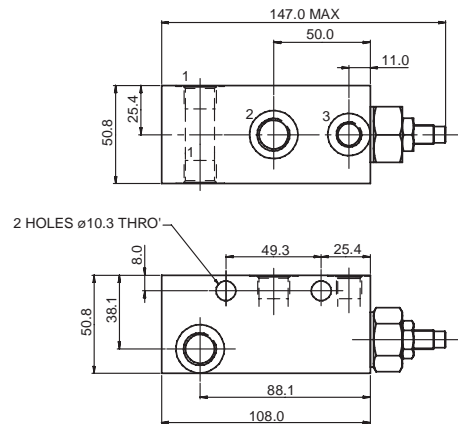
3/8" B10793
1/2" B6584
3/4" B7883

BSP, steel

1/2" B4527
3/4" B4403

SAE, steel

3/4" B11379



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COMPLETE VALVE

(WITH BUILT-IN CHECK)

BASIC CODE: 1DS155 3/4" PORTS

Sub-assembly part numbers

BSP, aluminium

3/4" BXP23867-6W-S

SAE, aluminium

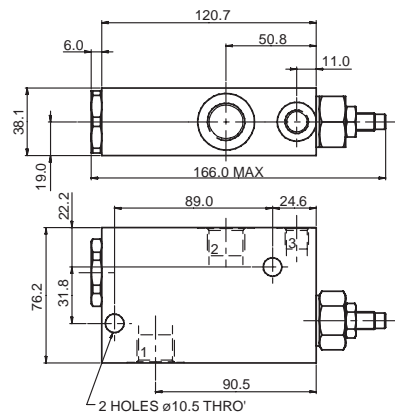
3/4" BXP23867-12T-S

BSP, steel

3/4" BXP23867-6W-S-377

SAE, steel

3/4" BXP23867-12T-S-377



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

1DS P 3W 14 S**

Basic Code

1DS30 / 1DS100

1DS35 / 1DS145

1DS155

= Cartridge Only

= Cartridge and Body

= Cartridge, Body and Check

Adjustment Means

P = Leakproof Screw Adjustment

R = Handknob Adjustment

G = Tamperproof Cap

(See page 4-102 for dimensions)

Port Sizes - Bodied Valves Only

4W = 1/2" BSP 6T = 3/8" SAE

6W = 3/4" BSP 8T = 1/2" SAE

1/4" BSP Drain Ports 12T = 3/4" SAE

1/4" SAE Drain Ports

Seals

S = Nitrile (For use with most industrial hydraulic oils)

SV = Viton (For high temperature and most special fluid applications)

Pressure Range @ 4.8 l/min

1DS30:

7 = 7- 70 bar. Std setting 35 bar

14 = 7-140 bar. Std setting 70 bar

1DS100:

2 = 2- 25 bar. Std setting 20 bar

4 = 5- 40 bar. Std setting 28 bar

Std setting made at 4.8 litres/min

We reserve the right to change specifications without notice