

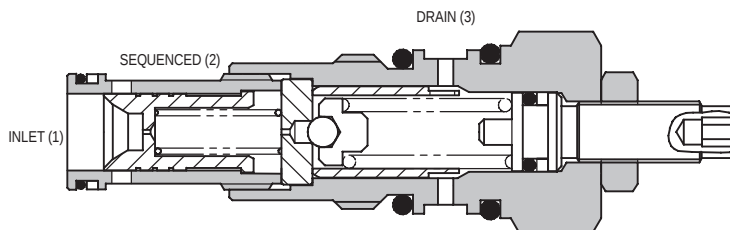
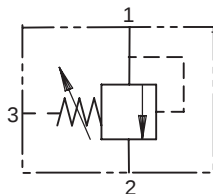


1PS SERIES SEQUENCE VALVE

PILOT OPERATED

1PS100

SLIDING SPOOL TYPE



4

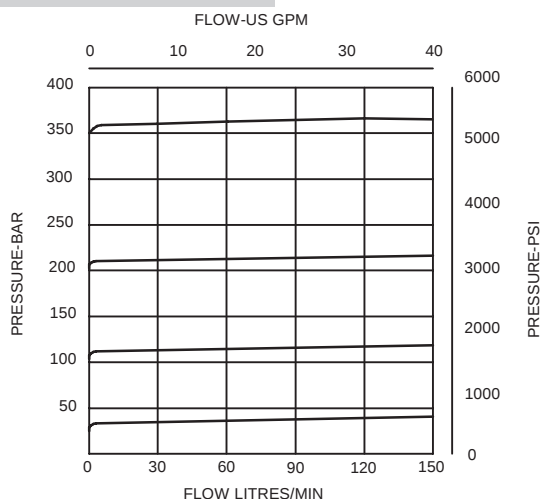
APPLICATION

Pilot operated sequence valves are ideal for systems where flows vary or the sequencing pressure is high. They provide ordered sequencing of two or more operations as with clamp and drill circuits. They can also be used as relief valves where the downstream pressure is high or changes during operation. By taking the drain line directly to tank, back pressure effects are negated.

OPERATION

As in the pilot operated relief valves, when the inlet pressure exceeds the valve setting, the pilot section opens causing a flow across the main spool orifice unbalancing it and subsequently moving it back against a light spring opening up the inlet to the outlet.

PRESSURE DROP



FEATURES

Match ground and honed hardened working parts give long, trouble-free life. Consistent stable operation providing low pressure rise due to increasing flow. Cartridge construction gives maximum flexibility in mounting. Available in bodies with or without free flow checks. Steel valve bodies available on request.

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 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	1PS100 0.17 kg (0.37 lbs) 1PS145 0.56 kg (1.23 lbs) 1PS150 0.78 kg (1.72 lbs) 1PS155 1.05 kg (2.30 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	35 millilitres/min @ 280 bar	
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

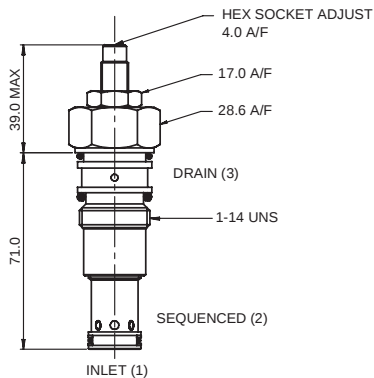
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CARTRIDGE ONLY

BASIC CODE: 1PS100



COMPLETE VALVE

3/8" 1/2" 3/4" PORTS

BASIC CODE: 1PS145

(WITHOUT BUILT-IN CHECK)

Body ONLY part numbers

BSP, aluminium

SAE, aluminium

BSP, steel

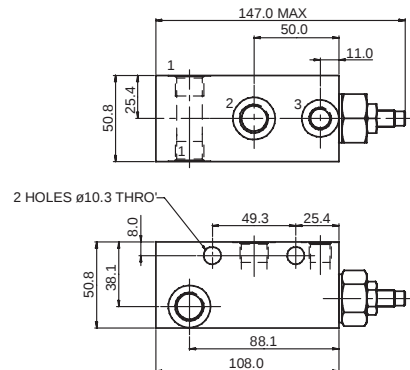
SAE, steel

1/2" B4821
3/4" B5466

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

1/2" B4527
3/4" B4403

3/4" B11379



4

COMPLETE VALVE

3/4" PORTS

BASIC CODE: 1PS155

(WITH BUILT-IN CHECK)

Sub-assembly part numbers

BSP, aluminium

SAE, aluminium

BSP, steel

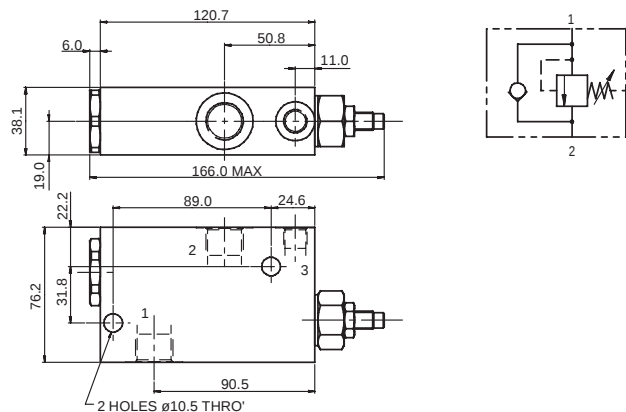
SAE, steel

3/4" BXP23867-6W-S

3/4" BXP23867-12T-S

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

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



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

1PS***

P

3W

35

S

Basic Code

1PS100

= Cartridge Only

1PS145

= Cartridge and Body

1PS155

= 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

6T = 3/8" SAE

8T = 1/2" SAE

12T = 3/4" SAE

4W = 1/2" BSP

6W = 3/4" BSP

1/4" BSP Drain Ports

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 @ 14 l/min

7 = 2-70 bar. Std setting 35 bar

20 = 10-210 bar. Std setting 100 bar

35 = 50-350 bar. Std setting 280 bar

Std setting made at 14 litres/min

We reserve the right to change specifications without notice