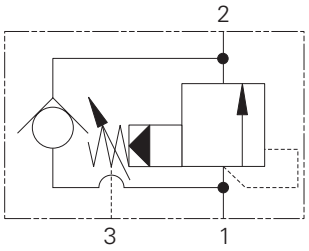
1PSC100 - Pressure Sequence Valve

Poppet, pilot operated, normally closed, internal pilot, external drain, reverse flow check
150 L/min (40 USgpm) • 350 bar (5000 psi)



Operation

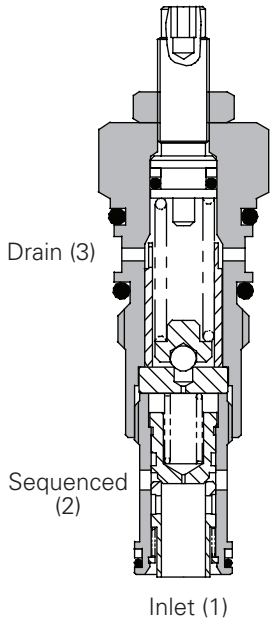
As in the pilot operated relief, when the setting of the valve is exceeded the pilot section opens. This pilot flow causes a pressure imbalance opening the main section and allowing flow to a secondary circuit (sequenced line).

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. Steel valve bodies available on request.

Sectional View



Performance Data

Ratings and Specifications

Figures based on: Oil Temp = 40° C Viscosity = 32 cSt (150 SUS)		
Rated flow		150 L/min (40 USgpm)
Max setting		350 bar (5000 psi)
Cartridge material		Working parts hardened and ground steel. External surfaces electroless nickel plated.
Body material		Standard aluminium (up to 210 bar*). Add suffix "377" for steel option.
Mounting position		Unrestricted
Cavity number		A880 (See Section M)
Torque cartridge into cavity		60 Nm (44 lbs ft)
Weight	1PSC100 1PSC145	0.17 kg (0.37 lbs) 0.78 kg (1.72 lbs)
Seal kit number		SK177 (Nitrile) SK177V (Viton®)
Recommended filtration level		BS5540/4 Class 18/13 (25 micron nominal)
Operating temp		-30°C to +90°C (-22°C to 194°F)
Leakage		35 milliliters/min @ 280 bar
Nominal viscosity range		5 to 500 cSt

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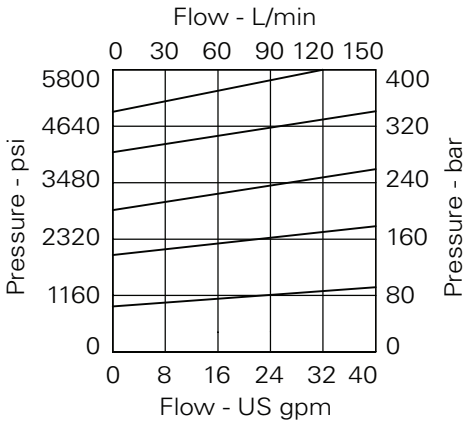
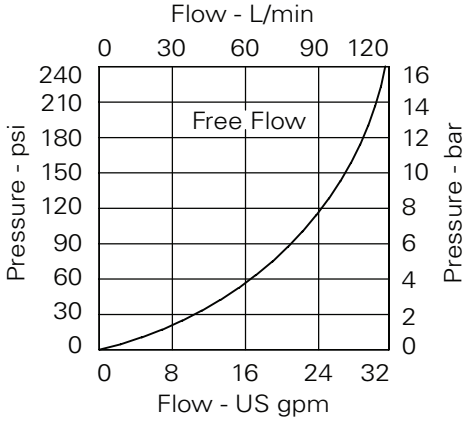
Description

Sequence valves 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.

Pressure Drop Curves





1PSC100 - Pressure Sequence Valve

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150 L/min (40 USgpm) • 350 bar (5000 psi)

Model Code

1PSC*** – P 3W – 35 S

1 2 3 4 5

1 Function

1PSC100 - Cartridge Only
1PSC145 - Cartridge and body

2 Adjustment Means

P - Leakproof screw adjustment
R - Handknob adjustment
G - Tamperproof Cap (Seepage4-102fordimensions)

3 Port Sizes

Code	Port Size	Housing Number - Body Only	
		Aluminium	Steel
3W	3/8" BSP 1/4" BSP Drain Ports		
4W	1/2" BSP 1/4" BSP Drain Ports	B4821	B4527
6W	3/4" BSP 1/4" BSP Drain Ports	B5466	B4403
6T	3/8" SAE 1/4" SAE Drain Ports	B10793	
8T	1/2" SAE 1/4" SAE Drain Ports	B6584	
12T	3/4" SAE 1/4" SAE Drain Ports	B7883	B11379

4 Pressure Range @ 14 L/min

Note: Code based on pressure in bar.
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 L/min

5 Seals

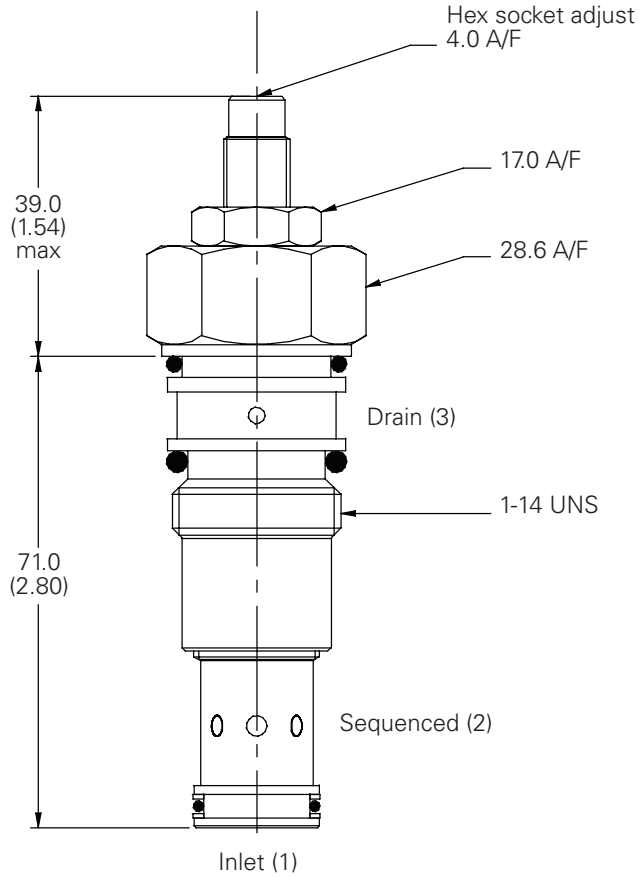
S - Nitrile (For use with most industrial hydraulic oils)
SV - Viton (For high temperature and most special fluid applications)

E

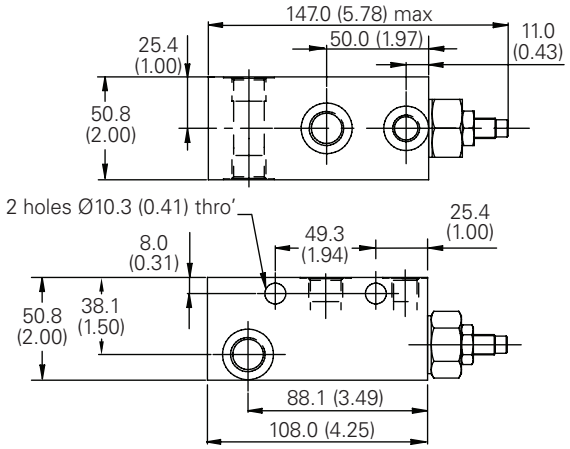
Dimensions

mm (inch)

Cartridge Only
Basic Code
1PSC145



Complete Valve
3/8", 1/2", 3/4" Ports
Basic Code
1PSC145



Note: For applications above 210 bar please consult our technical department or use the steel body option.