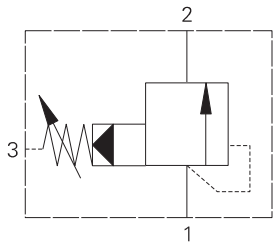


# 1PS100 - Pressure sequence valve

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



## Operation

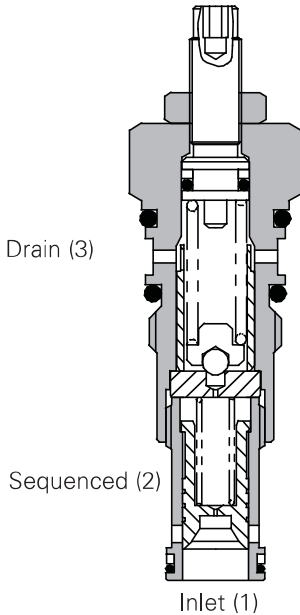
As in the pilot operated relief, when the setting of the valve is exceeded the pilot section opens.

This pilot flow causes a pressure imbalance opening the main section and allowing flow to a secondary circuit (sequenced line).

## Features

Hardened steel working parts give long, trouble-free life. Selectively matched honed assemblies give accurate performance.

## Sectional view



## Performance data

### Ratings and specifications

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

Rated flow	150 L/min (40 USgpm)
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 M)
Torque cartridge into cavity	60 Nm (44 lbs ft)
Weight	1PS100 0.17 kg (0.37 lbs) 1PS145 0.56 kg (1.23 lbs)
Seal kit number	SK177 (Nitrile) SK177V (Viton®)
Filtration	BS5540/4 Class 18/13 (25 micron nominal)
Operating temp	-30°C to +90°C (-22° to +194°F)
Leakage	35 milliliters/min @ 280 bar
Nominal viscosity range	5 to 500 cSt

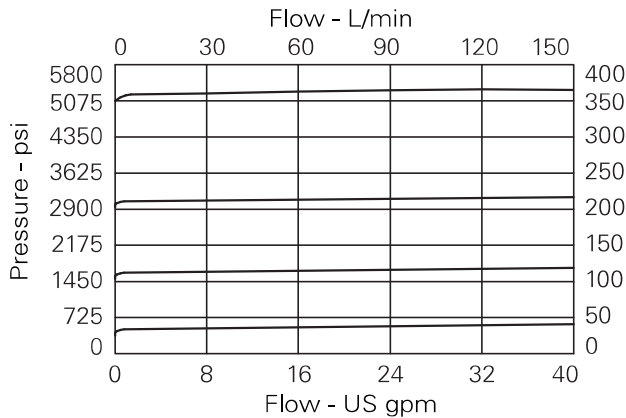
Viton is a registered trademark of E.I. DuPont

## Description

Pilot operated models are best suited for higher flows which may vary widely to:

1. Provide ordered or sequenced series of operations as in a clamp and drill circuit.
2. Serve as a relief valve where oil viscosity or restrictions in the downstream line would cause excessive back pressure. The separate spring chamber drain makes the sequence valve insensitive to this back pressure.

## Pressure drop curves

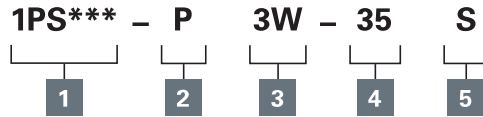


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# 1PS100 - Pressure sequence valve

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

## Model code



### 1 Basic code

**1PS100** - Cartridge Only  
**1PS145** - Cartridge and Body  
**1PS155** - Cartridge, Body and Check

### 2 Adjustment means

**P** - Leakproof Screw Adjustment  
**R** - Handknob Adjustment  
**G** - Tamperproof Cap (See page E-7 for dimensions)

### 3 Port sizes - bodied valves only

Code	Port size	Housing number	
		Aluminium Single	Steel Single
1PS145			
<b>4W</b>	1/2" BSP. 1/4" BSP Drain Port	B4821	B4527
<b>6W</b>	3/4" BSP. 1/4" BSP Drain Port	B5466	B4403
<b>6T</b>	3/8" SAE. 1/4" SAE Drain Port	B10793	
<b>8T</b>	1/2" SAE. 1/4" SAE Drain Port	B6584	
<b>12T</b>	3/4" SAE. 1/4" SAE Drain Port	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

### 5 Seals

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

## Dimensions

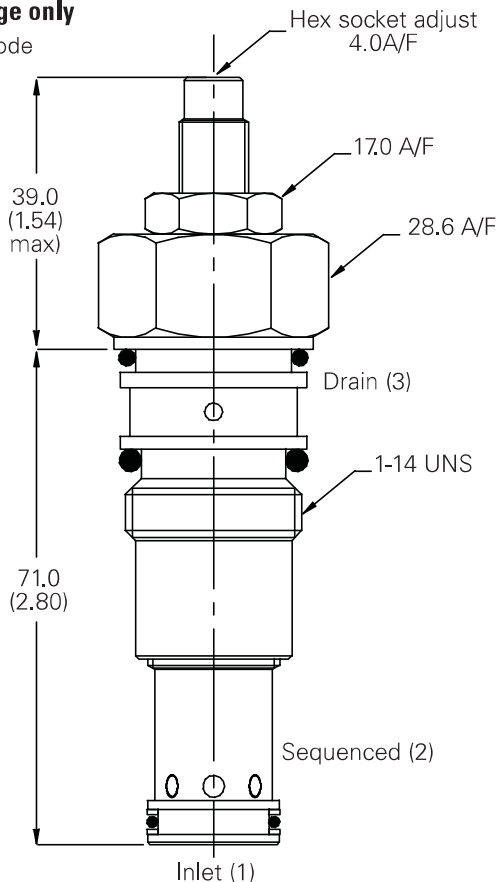
mm (inch)

**Note:** Tightening torque of "F" adjuster locknut - 20 to 25 Nm

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

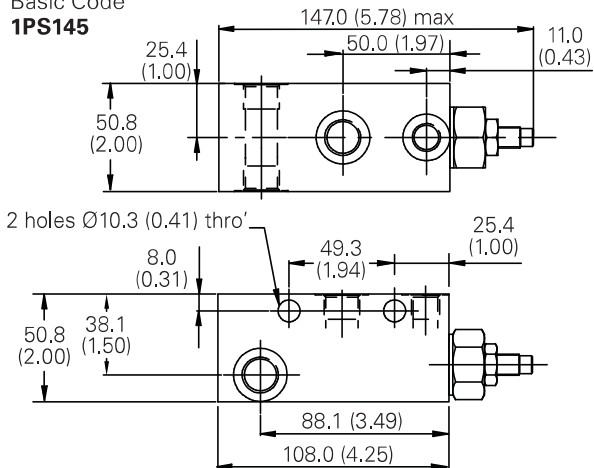
### Cartridge only

Basic Code  
**1PS100**



### Complete valve

3/8", 1/2", 3/4" Ports  
Basic Code  
**1PS145**



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