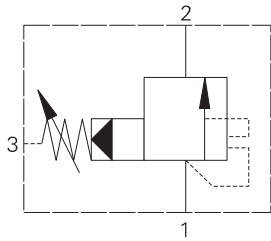


# IUPS100 - Pressure sequence valve

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



## Operation

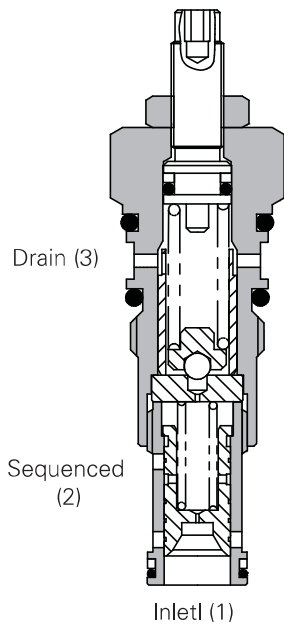
Inlet pressure acts on the pilot section of the valve. When the valve setting is reached, the pilot section opens and pilot flow causes the spool to move back uncovering the radial vent port.

The main section then opens fully with pilot flow passing through the vent. The valve remains open until flow to the sequenced port ceases and inlet pressure drops to zero.

## 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 = 32 cSt (150 SUS)

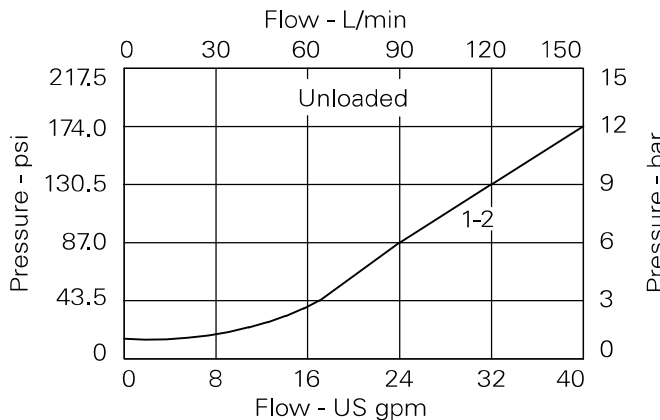
Rated flow	150 L/min (40 USgpm)	
Max setting	350 bar (5000 psi)	
Cartridge material	Working parts hardened and ground steel. External surfaces zinc plated.	
Body material	Standard aluminium (up to 210 bar*). Add suffix "377" for steel option.	
Mounting position	Unrestricted	
Cavity number	A880 (See Section M)	
Torque cartridge into cavity	60 Nm (44 lbs ft)	
Weight	1PSC100	0.17 kg (0.37 lbs)
	1PSC145	0.56 kg (1.23 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	100 milliliters/min nominal	
Nominal viscosity range	5 to 500 cSt	

Viton is a registered trademark of E.I. DuPont

## Description

An off-loading (kick down) sequence valve opens fully to pass flow to a secondary circuit when the valve pressure setting is reached. This allows flow to the secondary circuit with a minimal pressure drop.

## Pressure drop curves

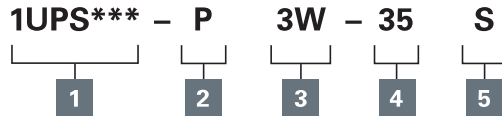


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# 1UPS100 - Pressure sequence valve

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

## Model code



### 1 Function

**1UPS100** - Cartridge Only  
**1UPS145** - Cartridge in body  
**1UPS155** - Cartridges in dual body

### 2 Adjustment means

**P** - Leakproof screw adjustment  
**R** - Handknob adjustment  
**G** - Tamperproof Cap

(See page 4-102 for dimensions)

### 3 Port sizes

Code	Port size	Housing number - body only	
		Aluminium	Steel
<b>4W</b>	1/2" BSP 1/4" BSP Drain Ports	B4821	B4527
<b>6W</b>	3/4" BSP 1/4" BSP Drain Ports	B5466	B4403
<b>6T</b>	3/8" SAE 1/4" SAE Drain Ports	B10793	
<b>8T</b>	1/2" SAE 1/4" SAE Drain Ports	B6584	
<b>12T</b>	3/4" SAE 1/4" SAE Drain Ports	B7883	B11379

### 4 Pressure range @ 14 l/min

**Note:** Code based on pressure in bar.  
**20** - 10-210 bar.  
Std. setting 100 bar  
**35** - 30-350 bar.  
Std setting 210 bar  
Std setting made at 14 L/min

### 5 Seals

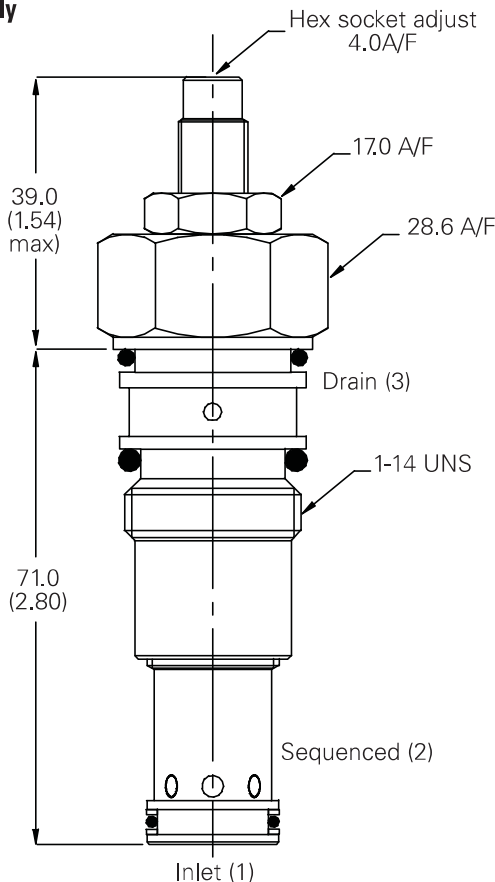
**S** - Nitrile (For use with most industrial hydraulic oils)  
**SV** - (For high temperature and most special fluid applications)

## Dimensions

mm (inch)

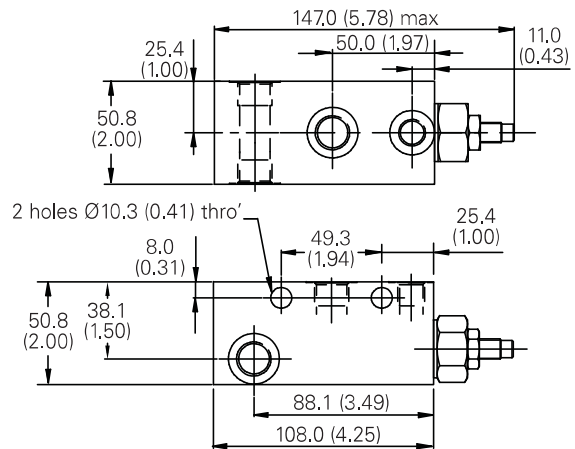
### Cartridge only

Basic Code  
**1UPS100**



### Complete valve

3/8", 1/2", 3/4" Ports  
Basic Code  
**1UPS145**



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

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