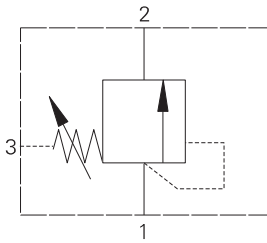


# IDS30 - Pressure sequence valve

Spool, direct acting, normally closed, internal pilot, external drain  
 30 L/min (8 USgpm) • 140 bar (2000 psi)



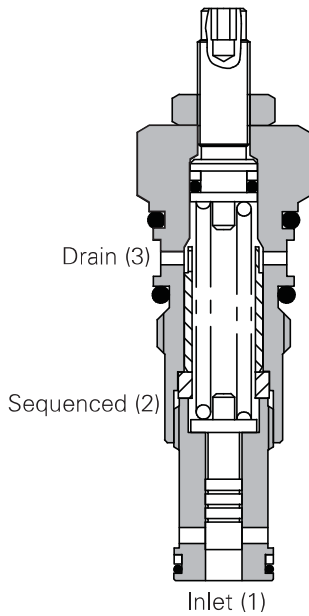
## Operation

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

## Features

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

## Sectional view



## Performance data

### Ratings and specifications

Figures based on: Oil Temp = 40° C Viscosity = 32 cSt (150 SUS)

|                              |  |                    |
|------------------------------|--|--------------------|
| Rated flow                   | 30 L/min (8 USgpm)   |                    |
| Max setting                  | 140 bar (2000 psi)   |                    |
| Cartridge material           | Working parts hardened and ground steel.<br>External steel surfaces zinc plated. |                    |
| Body material                | Standard aluminium (up to 210 bar*).<br>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                       | 1DS30  | 0.28 kg (0.62 lbs) |
|                              | 1DS35  | 0.88 kg (1.94 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 to 194°F)  |                    |
| Leakage                      | 25 milliliters/min nominal<br>15 milliliters/min nominal                         |                    |
| Nominal viscosity range      | 5 to 500 cSt   |                    |

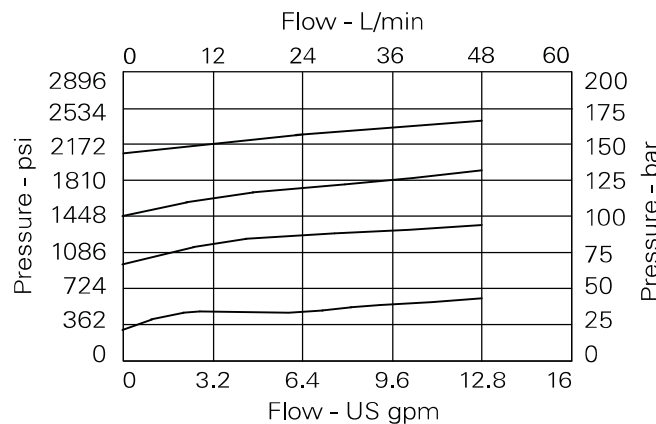
Viton is a registered trademark of E.I. DuPont

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

## Description

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.

## Pressure drop curves

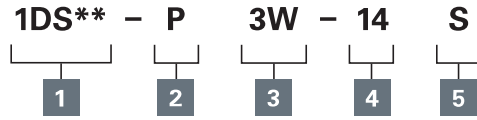


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# IDS30 - Pressure sequence valve

Spool, direct acting, normally closed, internal pilot, external drain  
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## Model code



### 1 Basic code

**1DS30** - Cartridge Only  
**1DS35** - Cartridge and Body

### 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      | Steel |
| <b>4W</b> | 1/2" BSP, 1/4" BSP Drain Port | B4821          | B4527 |
| <b>6T</b> | 3/8" SAE, 1/4" SAE Drain Port | B10793         |       |
| <b>8T</b> | 1/2" SAE, 1/4" SAE Drain Port | B6584          |       |

### 4 Pressure range @ 4.8 l/min

**Note:** Code based on pressure in bar.  
**7** - 7-70 bar Std setting 35 bar  
**14** - 7-140 bar Std setting 70 bar

### 5 Seals

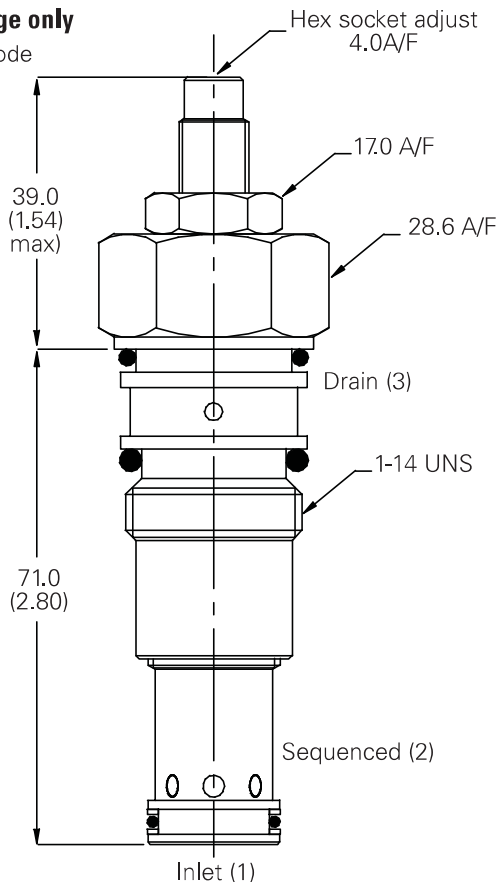
**S** - Nitrile (For use with most industrial hydraulic oils)  
**SV** - Viton (For high temperature and most special fluid applications)

## Dimensions

mm (inch)

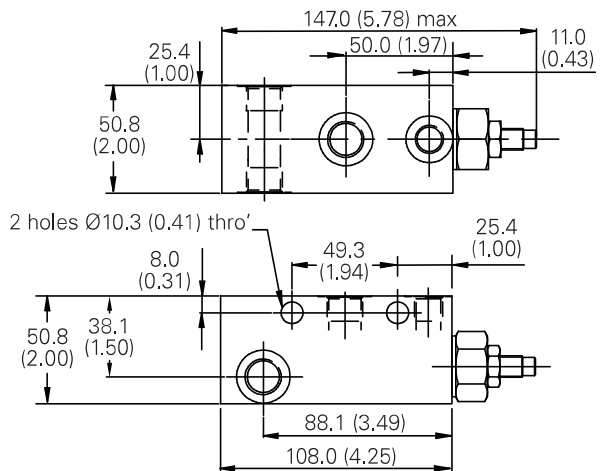
### Cartridge only

Basic Code  
**1DS30**



### Complete valve

3/8", 1/2" Ports  
Basic Code  
**1DS35**



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