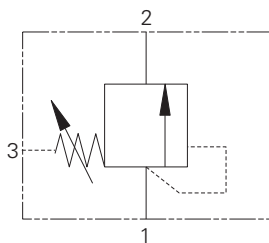


1DS100 - Pressure sequence valve

Spool, direct acting, normally closed, internal pilot, external drain
150 L/min (40 USgpm) • 40 bar (600 psi)



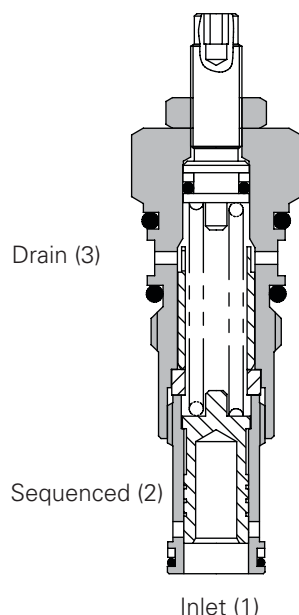
Operation

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 reseal.

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	40 bar (600 psi)	
Cartridge material	Working parts hardened and ground steel. External steel 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	1DS100	0.28 kg (0.62 lbs)
	1DS145	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 (-20° to 194°F)	
Leakage	25 milliliters/min nominal	
	15 milliliters/min nominal	
Nominal viscosity range	5 to 500 cSt	

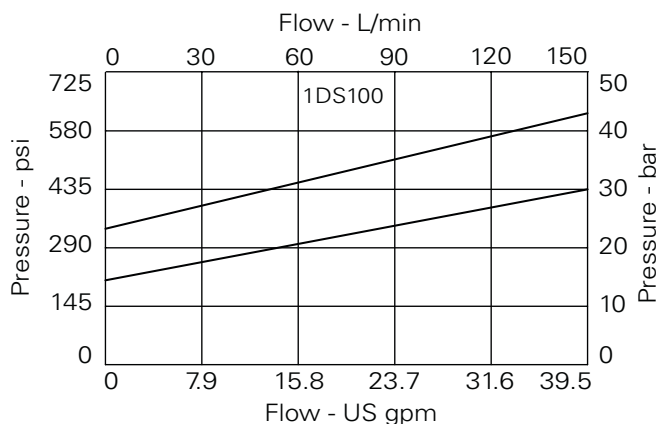
Viton is a registered trademark of E.I. DuPont

* 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

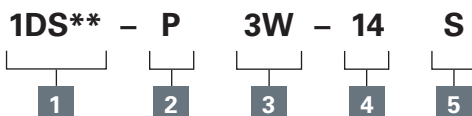


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

1DS100 - Pressure sequence valve

Spool, direct acting, normally closed, internal pilot, external drain
150 L/min (40 USgpm) • 40 bar (600 psi)

Model code



1 Basic code

1DS100 - Cartridge Only
1DS145 - 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
4W	1/2" BSP. 1/4" BSP Drain	B4821	B4527
6W	3/4" BSP. 1/4" BSP Drain	B5466	B4403
6T	3/8" SAE. 1/4" SAE Drain	B10793	
8T	1/2" SAE. 1/4" SAE Drain	B6584	
12T	3/4" SAE. 1/4" SAE Drain	B7883	B11379

4 Pressure range @ 4,8 l/min

Note: Code based on pressure in bar.
2 - 2-25 bar std setting 35 bar
4 - 5-40 bar std setting 28 bar

5 Seals

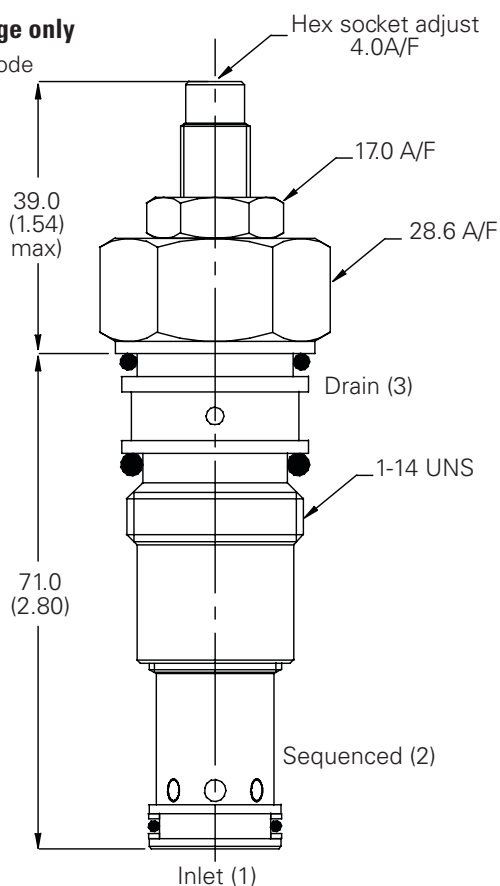
S - Nitrile (For use with most industrial hydraulic oils)
SV - Viton (For high temperature and most special fluid applications)

Dimensions

mm (inch)

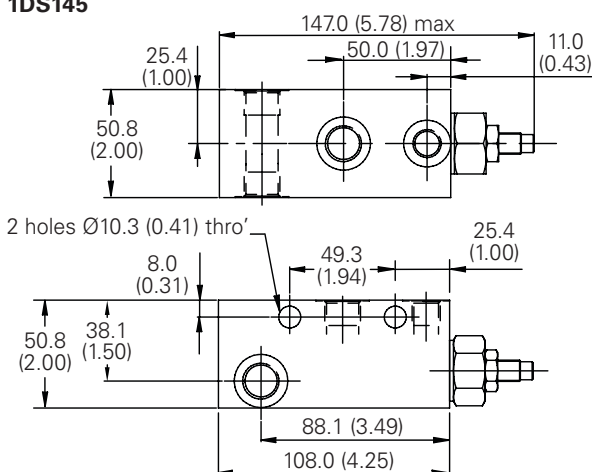
Cartridge only

Basic Code
1DS100



Complete valve

3/8", 1/2", 3/4" Ports
Basic Code
1DS145



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