



# Logic Elements Technical Information

## Poppet Type VLP 12/A5

### OPERATION

The VLP 12/A5 is a metric 12-size, normally-closed, pilot-to-close, poppet-type, spring biased differential-sensing logic element. It will provide on/off flow control from 1 to 2 based on the spring control pressure, inlet pressure at port 1, and pilot pressure at port 3.

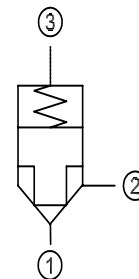
### APPLICATION

The valve provides on/off, leakage-free control, suitable for use as a high flow check valve when piloted with a small check valve; or a high flow directional valve when piloted with a directional solenoid valve, using four VLP 12/A5 valves. Effective use of logic elements is a key to designing cost-effective circuits, and is limited only by the imagination of the designer.

### SPECIFICATION

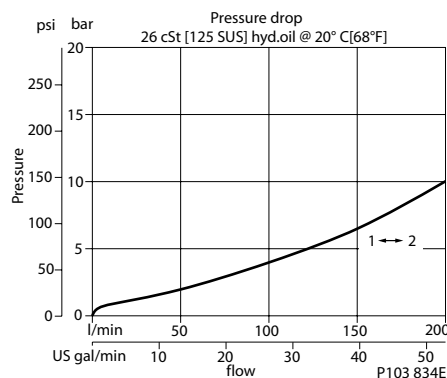
Rated pressure	315 bar [4500 psi]
Rated flow at 7 bar [100 psi]	160 l/min [42 US gal/min]
Weight	0.30 kg [0.66 lb]
Cavity	<b>NCS12/3</b>
Bias spring	2 bar [29 psi]

### SCHEMATIC



### PERFORMANCE CURVE

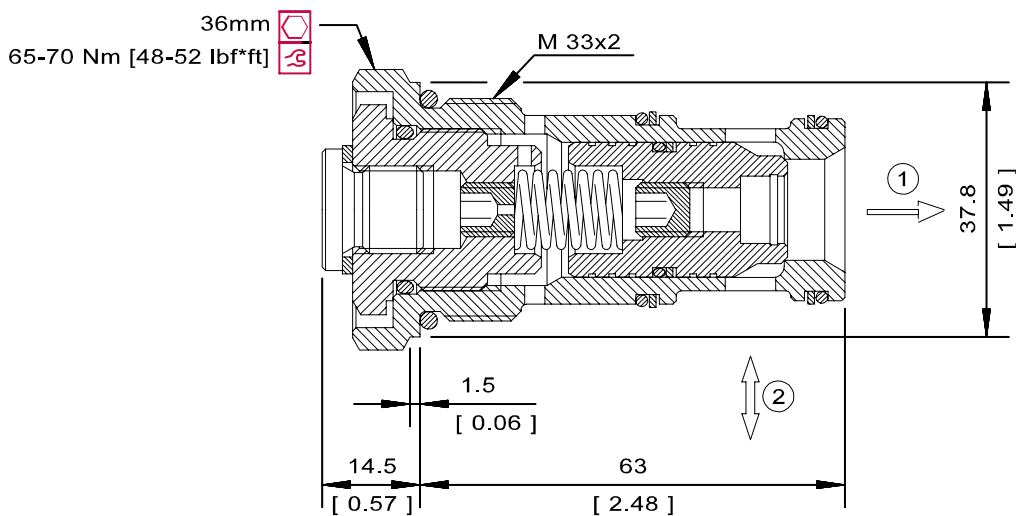
#### Theoretical performance



### DIMENSION

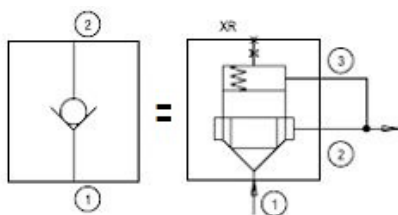
mm [in]

### Cross-sectional view

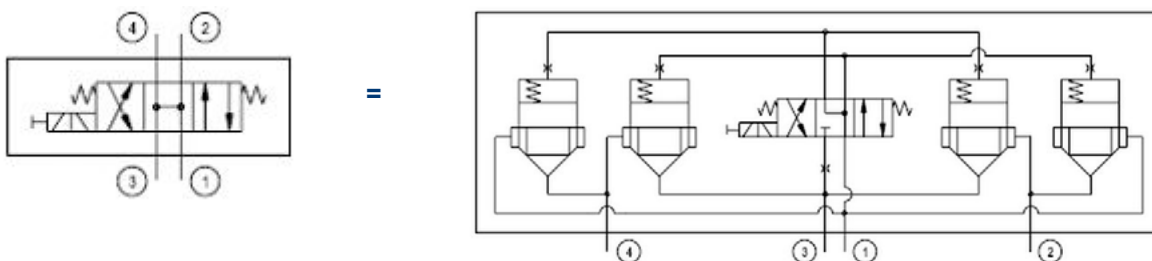


### EXAMPLE CIRCUITS

#### Check Valve



#### 4-3 Way On-Off Valve



### ORDERING INFORMATION

VLP 12/A5 - B - SE8S - V

#### Seals

V = Viton  
Omit = Buna-N

#### Seal kit

230000360  
230000130

#### Housing and ports

00 = No Housing  
SE1/2 = AL, 1/2 BSP  
SE3/4 = AL, 3/4 BSP  
SE8S = AL, #8 SAE  
SE12S = AL, #12SAE  
Other housings available

#### Housing P/N

No Housing  
NCS12/3-SE-1/2  
NCS12/3-SE-3/4  
NCS12/3-SE-8S  
NCS12/3-SE-12S