

# Flow Control Valves

## CP312-1

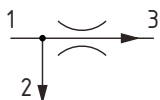
Flow Control, Fixed, Pressure Compensated, Priority Type

210 bar [3000 psi] • 65 l/min [17 US gpm]

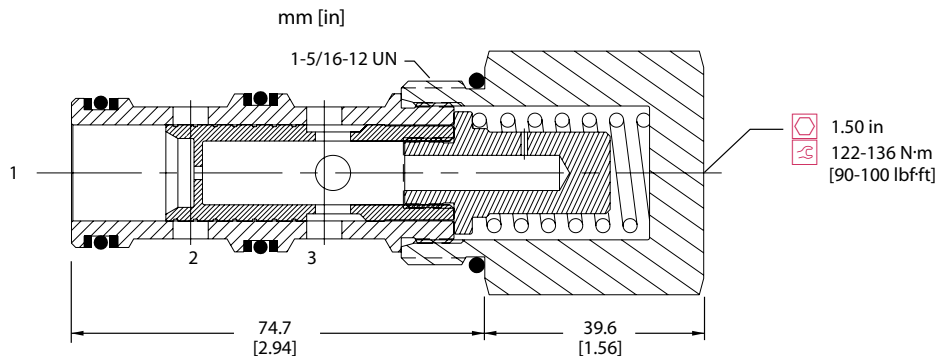
### DESCRIPTION AND OPERATION

This is a fixed, priority type, pressure compensated flow control valve, where the flow from port 3 will remain constant regardless of the pressure difference across the valve, while excess flow passes from port 1 to 2. Flow enters at port 1 and passes across a fixed orifice in the spool, which creates a pressure drop. This causes the spool to move back against the spring, which then restricts the outlet flow. Port 1 then opens to port 2 to allow excess flow to pass. The regulated flow will always take priority and remains constant if the working pressure is higher in either port 2 or port 3.

### SCHEMATIC



### DIMENSIONS

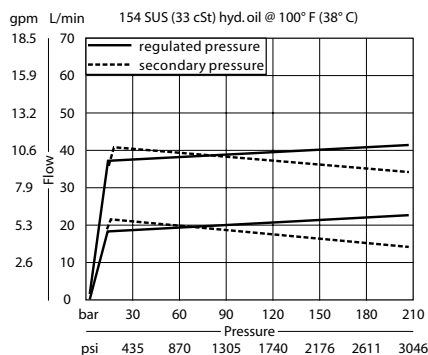


### PERFORMANCE DATA

Rated pressure	210 bar [3000 psi]
Rated flow	65 l/min [17 US gpm]
Max inlet flow	130 l/min [34 US gpm]
Flow range	1.9-64.3 l/min [0.5-17 US gpm]
Flow accuracy	1.9-7.5 l/min [0.5-2 US gpm] ± 15% 7.6-64.3 l/min [2-17 US gpm] ± 10%
Weight	0.53 kg [1.17 lb]
Cavity	SDC16-3

### PERFORMANCE CURVES

#### Flow Compensation



### MODEL CODE

**CP312 - 1 - B - 16S - 10.0**

#### Seal Option

Code	Seal Kit
B-Buna-N	120202
V-Viton	120203

#### Housing

Code	Ports&Material	Housing Model Code
0	No housing	No Housing
HE6B	3/4 BSP, AL	SDC16-3-HE-6B
HE8B	1 BSP, AL	SDC16-3-HE-8B
12S	#12 SAE, AL	CP16-3-12S
16S	#16 SAE, AL	CP16-3-16S

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

\* Additional housings available

#### Flow Setting

Code - Flow in US gpm  
Specify in 0.1 gpm increments within flow range  
Example

Code	l/min	[US gpm]
10.0	40	10.0