

# Flow Control Valves

## CP342-1 / 1S



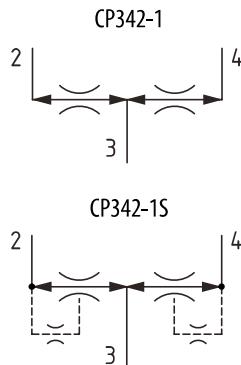
Flow Divider/Combiner, Fixed Ratio, Flow Synchronizing Option

210 bar [3000 psi] • 150 l/min [40 US gpm]

### ■ DESCRIPTION AND OPERATION

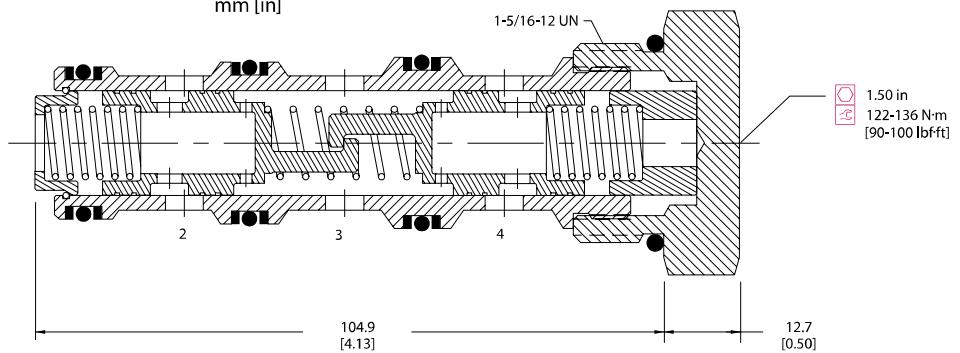
This is a fixed ratio flow divider/combiner valve. In dividing mode, flow enters port 3 and passes across two fixed orifices in linked spools. If the pressure drop through one orifice is higher than the other, then the spools will move together to restrict the flow in the lower pressure outlet port. This maintains equal pressure drops across the spools, thus maintaining the flow division in the outlet ports. In combining mode, flow will enter ports 2 and 4 pass through the orifices, which causes the spools to move to restrict the higher-pressure inlet and maintain equal pressure drops and equal flow into the valve. The CP342-1S provides synchronizing flow to the opposite port in the event that one port is completely blocked.

### ■ SCHEMATIC



### ■ DIMENSIONS

mm [in]

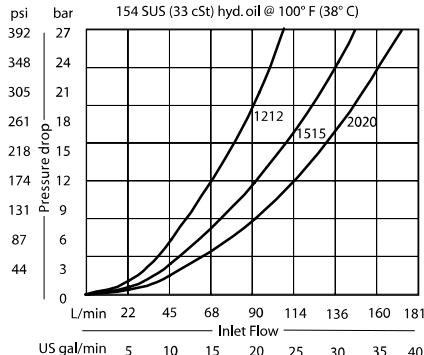


### ■ PERFORMANCE DATA

Rated pressure	210 bar [3000 psi]
Rated flow	150 l/min [40 US gpm]
Weight	0.37 kg [0.81 lb]
Cavity	SDC16-4

### ■ PERFORMANCE CURVES

#### Pressure Drop



### ■ MODEL CODE

CP342 - 1 - B - 16S - 1515		
<b>Flow Synchronization Option</b>		
1 - Without synchronization		
1S - With synchronization		
<b>Seal Option</b>		
Code	Seal Kit	
B-Buna-N	120025	
V-Viton	120026	
<b>Housing</b>		
Code	Ports & Material	Housing Model Code
0	No Housing	No Housing
6B	AL, 3/4 BSP	CP16-4-6B-X1
8B	AL, 1 BSP	CP16-4-8B-X1
12S	AL, #12 SAE	CP16-4-12S-X1
16S	AL, #16 SAE	CP16-4-16S-X1
* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].		
* Additional housings available		
<b>Flow Setting</b>		
<b>Flow Ratio</b>		
Code	Port 2: Port 4	Total Inlet Flow
1020	1:2	114 l/min [30 US gpm]
1212	1:1	91 l/min [24 US gpm]
1215	4:5	102 l/min [27 US gpm]
1220	3:5	121 l/min [32 US gpm]
1512	5:4	102 l/min [27 US gpm]
1515	1:1	114 l/min [30 US gpm]
1520	3:4	132 l/min [35 US gpm]
2012	5:3	121 l/min [32 US gpm]
2015	4:3	132 l/min [35 US gpm]
2020	1:1	151 l/min [40 US gpm]