Flow Control Valves

CP341-1

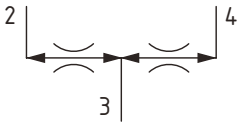
Flow Divider/Combiner, Fixed Ratio

210 bar [3000 psi] • 76 l/min [20 US gpm]

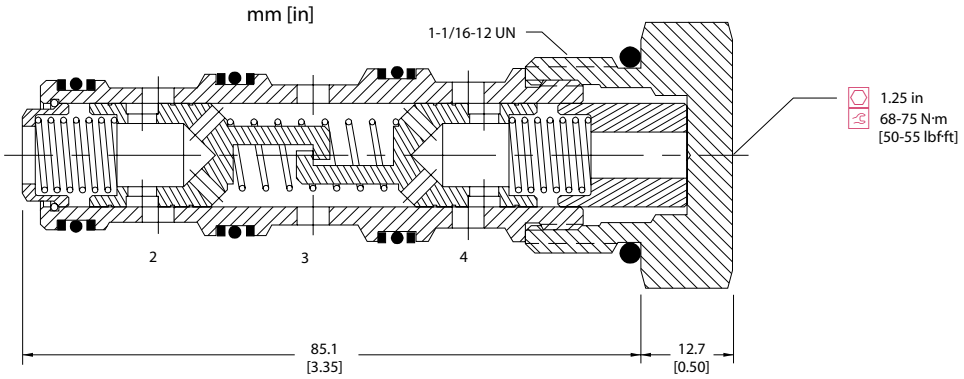
DESCRIPTION AND OPERATION

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.

SCHEMATIC



DIMENSIONS



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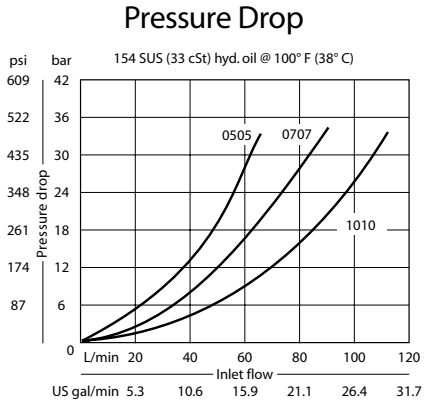
PERFORMANCE DATA

Rated pressure	**210 bar [3000 psi]**
Rated flow	**76 l/min [20 US gpm]**
Weight	0.23 kg [0.50 lb]
Cavity	CP12-4

PERFORMANCE CURVES



MODEL CODE

CP341 - 1 - B - 10S - 0707

Seal Option

Code	Seal Kit
B-Buna-N	120262
V-Viton	120263

Housing

Code	Ports&Material	Housing Model Code
0	No Housing	No Housing
4B	AL, 1/2 BSP	CP12-4-4B-X1
6B	AL, 3/4 BSP	CP12-4-6B-X1
10S	AL, #10 SAE	CP12-4-10S-X1
12S	AL, #12 SAE	CP12-4-12S-X1

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

Flow Setting

Code	Flow Ratio Port 2: Port 4	Total Inlet Flow
0505	1:1	38 l/min [10 US gpm]
0507	5:7	45 l/min [12 US gpm]
0510	1:2	57 l/min [15 US gpm]
0707	1:1	53 l/min [14 US gpm]
0710	7:10	64 l/min [17 US gpm]
1010	1:1	76 l/min [20 US gpm]