

Flow Control Valves

CP342-3

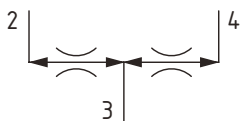
Flow Divider/Combiner, Fixed Ratio

450 bar [6500 psi] • 150 l/min [40 US gpm]

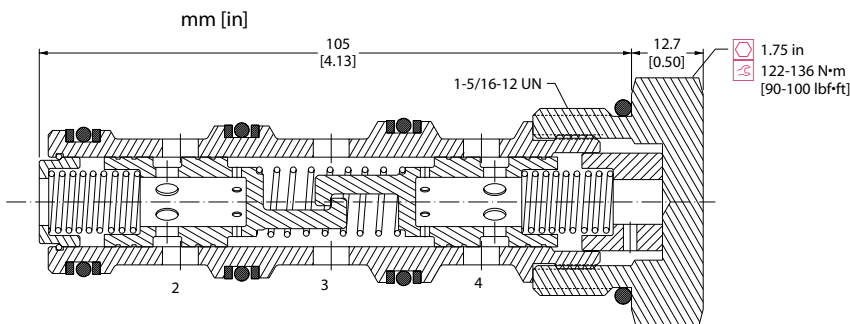
DESCRIPTION AND OPERATION

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.

SCHEMATIC



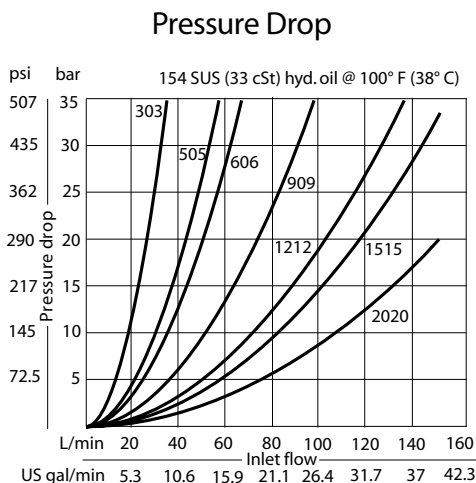
DIMENSIONS



PERFORMANCE DATA

Rated pressure	450 bar [6500 psi]
Rated flow	150 l/min [40 US gpm]
Weight	0.37 kg [0.81 lb]
Cavity	SDC16-4

PERFORMANCE CURVES



MODEL CODE

CP342 - 3 - U - S16S - 0505

Seal Option

Code	Seal Kit
U-Urethane	120677

Housing

Code	Ports&Material	Housing Model Code
0	No Housing	No Housing
S6B	Steel, 3/4 BSP	CP16-4-S6B-X1
S8B	Steel, 1 BSP	CP16-4-S8B-X1
S12S	Steel, #12 SAE	CP16-4-S12S-X1
S16S	Steel, #16 SAE	CP16-4-S16S-X1

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

* Additional housings available

Flow Setting

Flow Ratio		
Code	Port 2: Port 4	Total Inlet Flow
0303	1:1	23 l/min [6 US gpm]
0505	1:1	38 l/min [10 US gpm]
0606	1:1	45 l/min [12 US gpm]
0909	1:1	68 l/min [18 US gpm]
1212	1:1	91 l/min [24 US gpm]
1515	1:1	114 l/min [30 US gpm]
2020	1:1	151 l/min [40 US gpm]
1220	3:5	121 l/min [32 US gpm]
1215	4:5	102 l/min [27 US gpm]
1520	3:4	132 l/min [35 US gpm]
2012	5:3	121 l/min [32 US gpm]
1512	5:4	102 l/min [27 US gpm]
2015	4:3	132 l/min [35 US gpm]
1020	1:2	114 l/min [30 US gpm]