Flow Control Valves

CP343-1

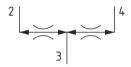
Flow Divider/Combiner, Fixed Ratio

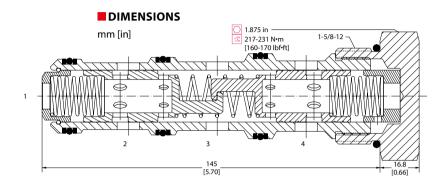
210 bar [3000 psi] • 340 l/min [90 US gpm]

■ 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





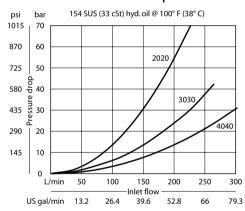
■ PERFORMANCE DATA

Rated pressure	210 bar [3000 psi]	
Rated flow	340 l/min [90 US gpm]	
Weight	1.13 kg [2.50 lb]	
Cavity	SDC20-4	

PERFORMANCE CURVES

Pressure Drop

Danfoss



■ MODEL CODE

CP343 - 1 - <u>B</u> - <u>16S</u> - <u>4545</u>

Seal Option

Code	Seal Kit
B -Buna-N	120181
V -Viton	120182

Housing

Code	Ports&Material	Housing Model Code
0	No Housing	No Housing
8B	AL, 1 BSP	SDC20-4-8B-X1
10B	AL, 1-1/4 BSP	SDC20-4-10B-X1
16S	AL, #16 SAE	SDC20-4-16S-X1
205	AL, #20 SAE	SDC20-4-20S-X1

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

Flow Setting

	FIOW RALIO	
Code	Port 2: Port 4	Total Flow
2020	1:1	151 I/min [40 US gpm]
2525	1:1	189 I/min [50 US gpm]
3030	1:1	227 l/min [60 US gpm]
3535	1:1	265 l/min [70 US gpm]
4020	2:1	227 l/min [60 US gpm]
4040	1:1	303 I/min [80 US gpm]
4530	3:2	284 I/min [75 US gpm]
4545	1:1	341 l/min [90 US gpm]

^{*} Additional housings available