

# Flow Control Valves

## 2CFD50 / A2X

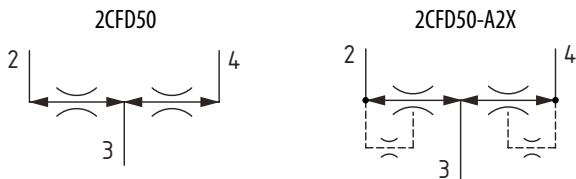
Flow Divider/Combiner, Fixed Ratio, Flow Synchronizing Option

350 bar [5000 psi] • 40 l/min [11 US gpm]

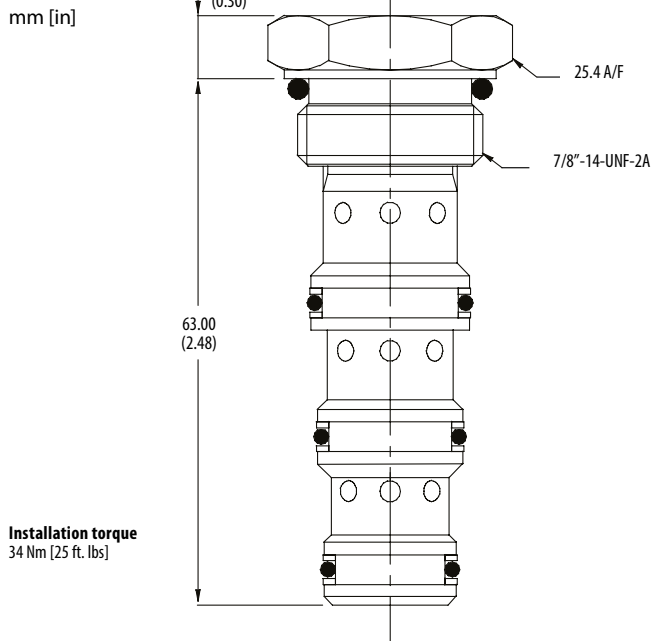
### DESCRIPTION AND OPERATION

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 A2X version has extra orifice in the sleeve to allow make up flow when needed in transmission circuits.

### SCHEMATIC



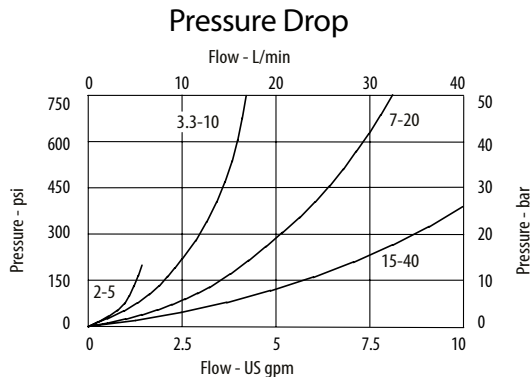
### DIMENSIONS



### PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	40 l/min [11 US gpm]
Weight	0.11 kg [0.24 lb]
Cavity	SDC10-4

### PERFORMANCE CURVES



### MODEL CODE

#### 2CFD50 - 4W - 40 - S - 377 - A2X

**Basic Code**  
 2CFD50 - No housing  
 2CFD55 - Cartridge and housing

#### Housing

Code	Ports	Aluminium	Steel
Omit	No Housing		
3W	3/8" BSP inlet and outlet	B19187	
4W	1/2" BSP inlet and outlet	B20816	
8T-6T	1/2" SAE inlet and 3/8" SAE outlet	B19185	B21935

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

**Flow Synchronization Option**  
 Omit - Without synchronization  
 A2X - With synchronization

#### Housing Material

Omit - Aluminium/No housing  
 377 - Steel

#### Seal Option

Code	Seal Kit
S	Buna-N SK1065
SV	Viton SK1065V

#### Inlet Flow Range

Code	Inlet Flow	
	l/min	[US gpm]
5	2-5	0.5-1.3
10	3.3 - 10	0.9-2.6
20	7-20	1.8-5.3
40	15-40	4.0-10.5

Flow ratio is 1:1. Additional flow ratios available.