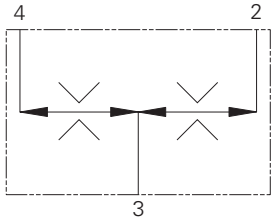


2CFD200 - Flow Divider/Combiner

Pressure compensated, spool type

Up to 220 L/min (58 USgpm) • 280 bar (4000 psi)



Operation

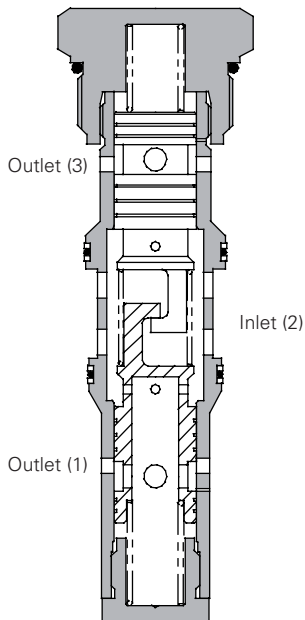
Inlet flow passes through the two matched orifices in the spools, through the spools and out of the radial holes in the sleeve. The matched orifices and the compensating springs ensure that the flow is divided equally, excess flow

in either direction causes the spool to move and close the radial holes in the sleeve until equilibrium is restored. In the reverse direction the spools close together and regulate the flow in through the radial ports.

Features

One valve synchronizes in both directions. Matched spools give high accuracy under load and pressure imbalance conditions. Cartridge construction gives versatility of application. A valve may be fitted into a line body, a custom designed Hydraulic Integrated Circuit or other hydraulic equipment.

Sectional View



Performance Data

Ratings and Specifications

Figures based on an oil temp at 40°C and of 32 cSt (150 SUS)

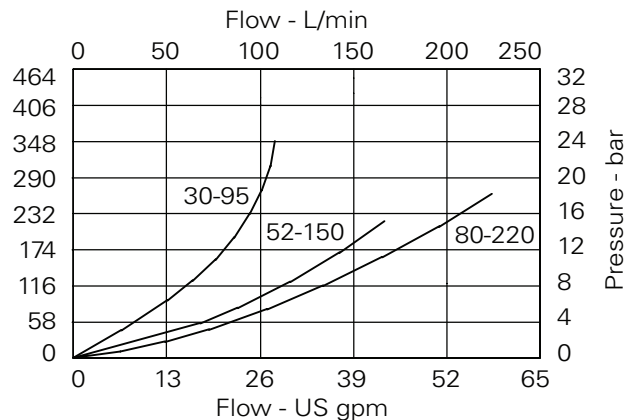
Rated Flow	Up to 220 liters/min (58 USgpm)
Ratio division	50/50 standard
Maximum pressure	280 bar (4000 psi)
Cartridge material	Working parts hardened & ground steel. Zinc plated external steel body
Body material	Aluminum (up to 210 bar*) Add suffix "377" for steel option
Mounting position	Unrestricted
Cavity Number	CVB-42-04-0 (See Section M)
Torque cartridge into cavity	150 Nm (110 ft lbs)
Weight	2CFD200: 0,78 kg (1.72 lbs) 2CFD250: 2,50 kg (5.50 lbs)
Seal kit number	SK597 (Nitrile), SK597V (Viton®)
Recommended Filtration Level	BS5540/4 Class 18/13
Temperature range	-30° to +90° C (-22° to 194° F)
Nominal range	5 to 500 cSt

Viton is a registered trademark of E.I. DuPont

Description

This range of flow divider/combiner valves gives division of input flow into two equal parts and re-combination of flow in the reverse direction. Pressure compensation ensures that whether dividing or combining, equal flow is maintained over a wide range of pressure variation. A typical use of these valves is to divide a pump flow to operate two actuators (which may be under different load conditions and at different pressures) and to re-combine the return flows to synchronize actuator movement. Flow variation is within $\pm 10\%$ with the maximum variation of pressure and inlet flow and under normal conditions will be significantly less.

Pressure Drop



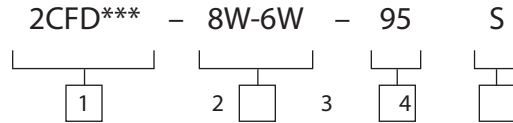
Note: When used on cylinders, size to suit the return flow rate.

2CFD200 - Flow Divider/Combiner

Pressure compensated, spool type

Up to 220 L/min (58 USgpm) • 280 bar (4000 psi)

Model Code

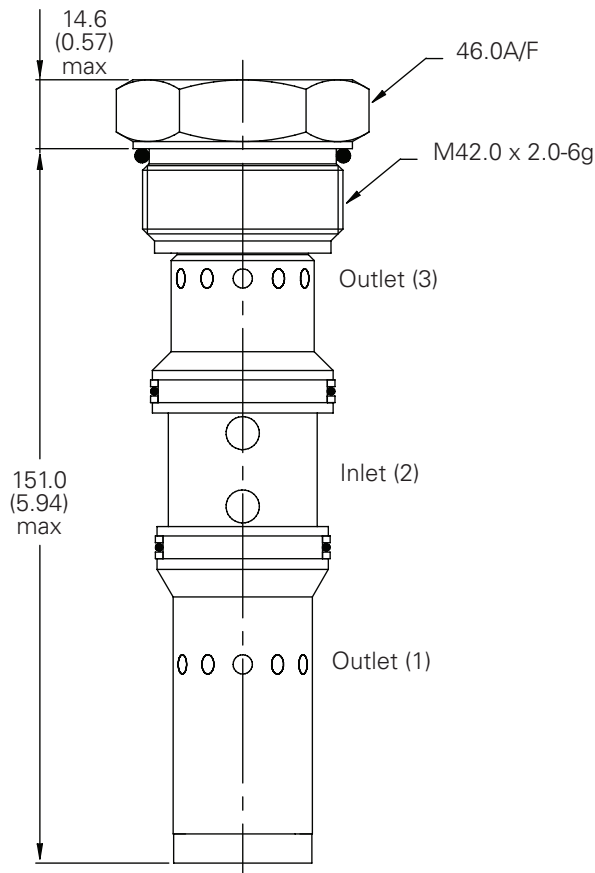


1 Function	2 Port Size	3 Capacity (input)	4 Seals																												
2CFD200 - Cartridge only 2CFD250 - Cartridge & body	<table border="1"> <thead> <tr> <th>Code</th><th>Port Size</th><th colspan="2">Housing Number - Body Only</th></tr> <tr> <th></th><th></th><th>Aluminium</th><th>Steel</th></tr> </thead> <tbody> <tr> <td>Omit</td><td>Cartridge only</td><td></td><td></td></tr> <tr> <td>8W-6W</td><td>1" BSP inlet, 3/4" BSP outlet</td><td>C12320</td><td></td></tr> <tr> <td>10W-8W</td><td>1 1/4" BSP inlet, 1" BSP outlet</td><td>B7666</td><td>B9075</td></tr> <tr> <td>16T-12T</td><td>1" SAE inlet and 3/4" SAE outlet</td><td>B10710</td><td></td></tr> <tr> <td>20T-16T</td><td>1-1/4" SAE inlet and 1" SAE outlet</td><td>B10711</td><td>B11819</td></tr> </tbody> </table> <p>See section J for housing details.</p>	Code	Port Size	Housing Number - Body Only				Aluminium	Steel	Omit	Cartridge only			8W-6W	1" BSP inlet, 3/4" BSP outlet	C12320		10W-8W	1 1/4" BSP inlet, 1" BSP outlet	B7666	B9075	16T-12T	1" SAE inlet and 3/4" SAE outlet	B10710		20T-16T	1-1/4" SAE inlet and 1" SAE outlet	B10711	B11819	95 - 30-95 L/min (7.9-25 USgpm) 150 - 52-150 L/min (13.7-40 USgpm) 220 - 80-220 L/min (21-58 USgpm)	S - Nitrile (for use with most industrial hydraulic oils) SV - Viton (for high temperature & most special fluid applications)
Code	Port Size	Housing Number - Body Only																													
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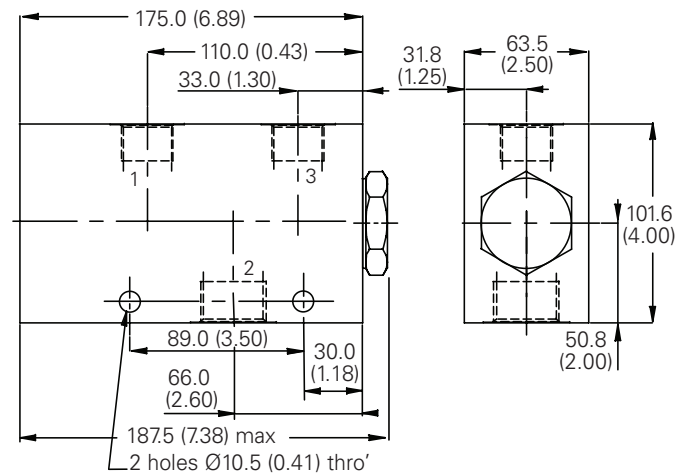
Dimensions

mm (inch)

Cartridge Only
Basic Code
2CFD200



Complete Valve
3/4", 1", 1 1/4" Ports
Basic Code
2CFD250



Note: Blocking one leg will result in a large reduction in flow from the other. Valves with higher working pressures are available. Contact factory for details.

Note: For applications above 210 bar (3000 psi) please consult our technical department or use the steel body option