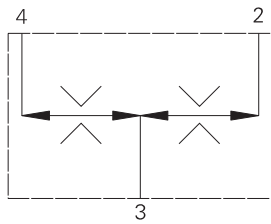


2CFD200 - Flow divider/combiner

Pressure compensated, spool type
Up to 220 L/min (58 USgpm) • 280 bar (4000 psi)



Operation

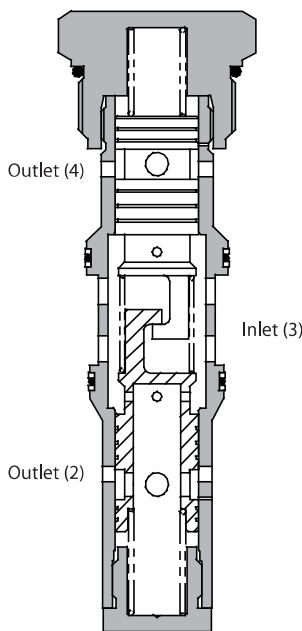
Inlet flow passes through the two matched orifices in the spools, through the spools and out of the radial holes in the sleeve. The matched orifices and the compensating springs ensure that the flow is divided equally, excess flow

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)

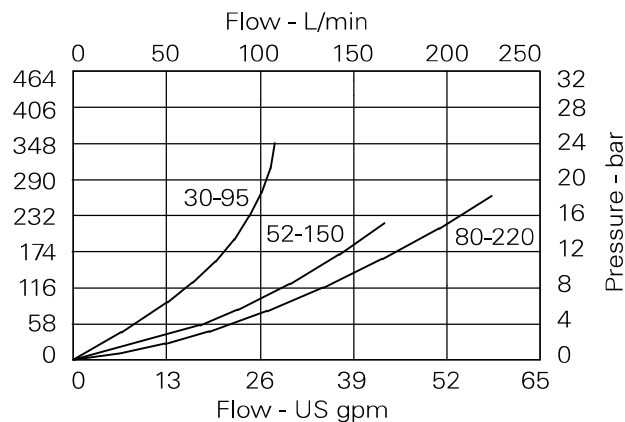
| | |
|------------------------------|---|
| Rated Flow | Up to 220 liters/min (58 USgpm) |
| Ratio division | 50/50 standard |
| Maximum pressure | 280 bar (4000 psi) |
| Cartridge material | Working parts hardened & ground steel. Zinc plated external steel body |
| Body material | Aluminum (up to 210 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



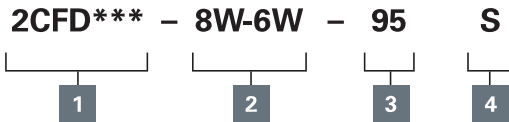
Note: When used on cylinders, size to suit the return flow rate.

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

2CFD200 - Flow divider/combiner

Pressure compensated, spool type
Up to 220 L/min (58 USgpm) • 280 bar (4000 psi)

Model code



1 Function

2CFD200 - Cartridge only
2CFD250 - Cartridge & body

2 Port size

| 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 |

See section J for housing details.

3 Capacity (input)

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)

4 Seals

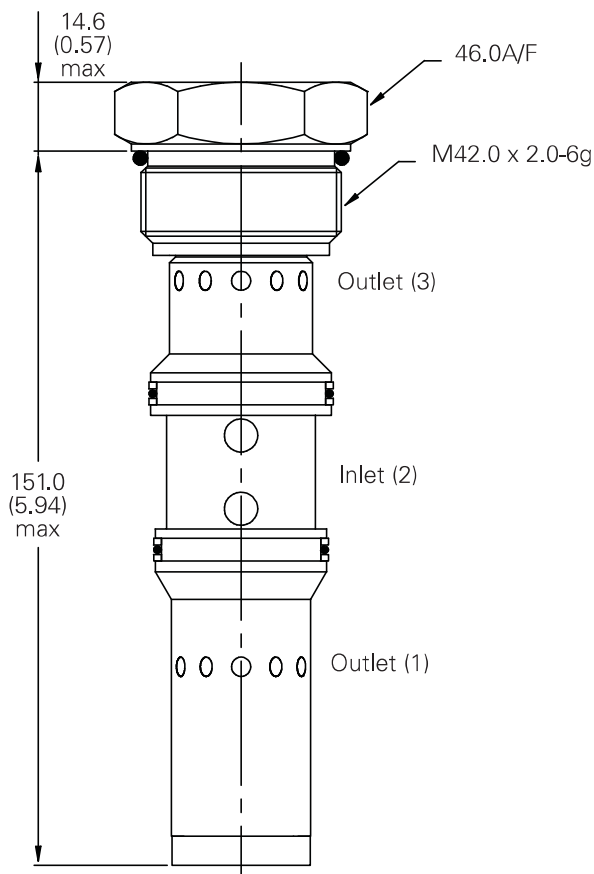
S - Nitrile (for use with most industrial hydraulic oils)
SV - Viton (for high temperature & most special fluid applications)

Dimensions

mm (inch)

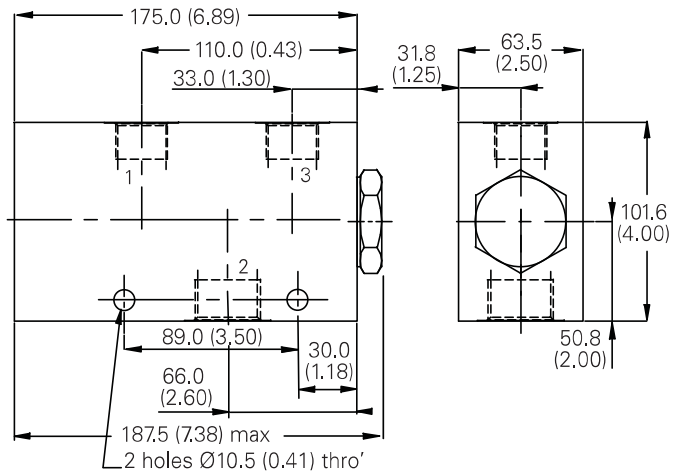
Cartridge only

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

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.