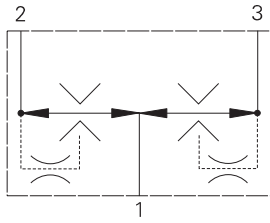


# FDC3-20 - Flow divider/combiner

Pressure compensated, spool type, posi-traction  
Up to 570 L/min (150 USgpm) • 210 bar (3000 psi)



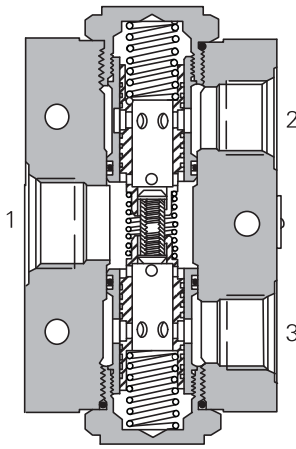
## Operation

This valve is used in the dividing mode. It will take the inlet flow (port 3) and split the flow to ports 2 and 4. In the combining mode this valve will take the inlet flows from ports 2 and 4 and combine them into port 3 according to the ratio specified.

## Features

One valve synchronizes in both directions. Matched spools give high accuracy under load and pressure imbalance conditions.

## Sectional view



## Performance data

### Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

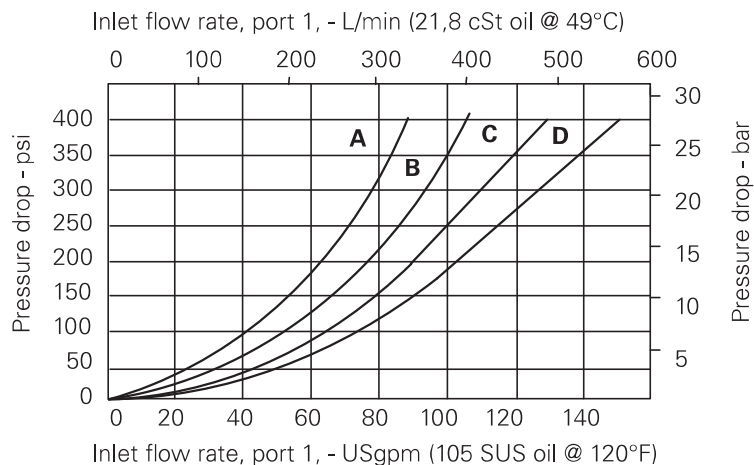
Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated inlet flow	See model code, item
Temperature range	-40° to 120° C (-40° to 248° F)
Fluids	All general purpose hydraulic fluids such as MIL-H-5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness code 18/16/13
Standard housing materials	Aluminum
Weight cartridge only	0,35 kg. (0.78 lbs)
Seal kits	889634 (Nitrile) 889638 (Viton®)

Viton is a registered trademark of E.I. DuPont

## Description

This is a pressure compensated flow divider / combiner posi-traction valve. This is ideal for use in transmission systems where the turning circle requires one wheel to go faster than the other or where rapid make up is required between cylinders at the end of stroke.

## Pressure drop



## Flow division

(See model code position 5)

**A** - 33 spool  
**B** - 44 spool

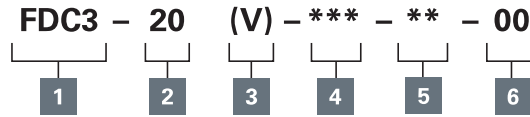
**C** - 66 spool  
**D** - 88 spool

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

# FDC3-20 - Flow divider/combiner

Pressure compensated, spool type, posi-traction  
Up to 570 L/min (150 USgpm) • 210 bar (3000 psi)

## Model code



### 1 Function

**FDC3** - Posi-traction valve

### 2 Size

**20** - 20 size

### 3 Seal material

**Blank** - Buna-N  
**V** - Viton®

### 4 Port size

**16T** - SAE 16 (light duty)  
**20T** - SAE 20 (light duty)  
(Available as a complete assembly only.)

### 5 Flow divisions (Ratios)

Code	Flow division %		Rated L/min	Inlet flow (USgpm)
	Port 4	Port 2		
<b>33</b>	50	50	190,0	(50)
<b>44</b>	50	50	266,0	(70)
<b>66</b>	50	50	380,0	(100)
<b>88</b>	50	50	570,0	(150)

### 6 Special features

**00** - None  
(Only required if valve has special features, omitted if "00".)

## Dimensions

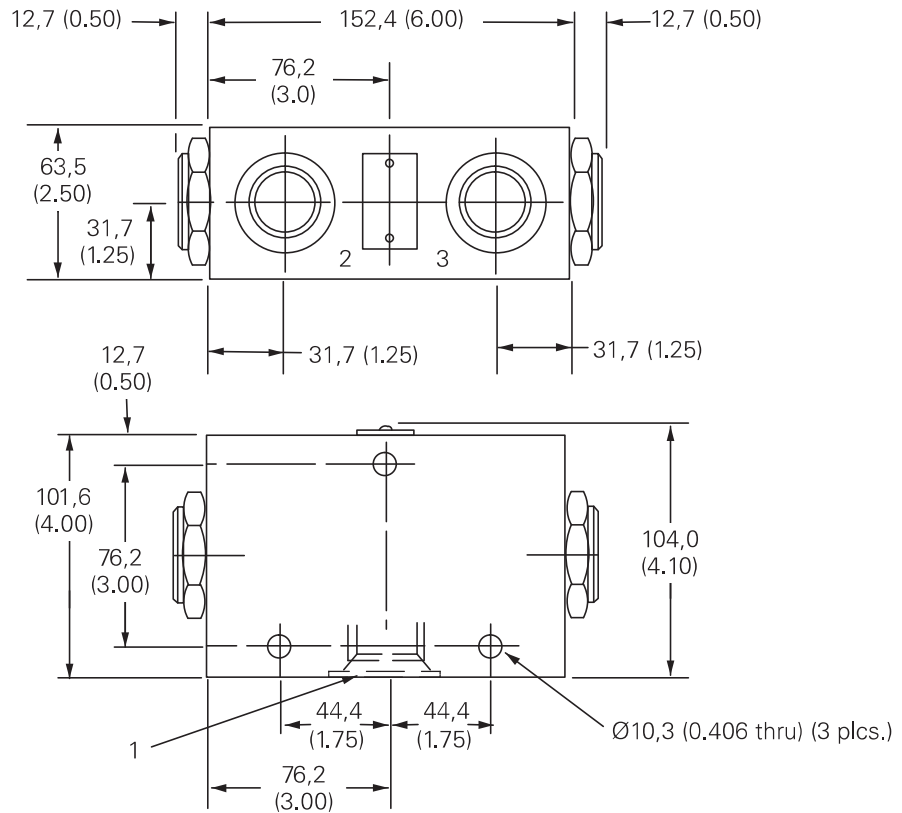
mm (inch)

### Complete valve

Basic code  
FDC3-20

Torque cartridge in housing to  
128–155 Nm (95–115 ft lbs)

**Note:** Minimum inlet flow should  
not be less than 1/4 of maximum  
inlet flow for a given code.



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