

FDC1-10

Flow divider/combiner

Description

The FDC1-10 is a pressure compensated, spool type, screw-in, flow divider/combiner cartridge.

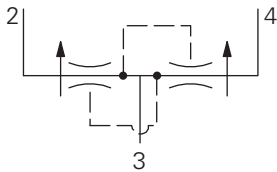
Operation

This valve is used in the dividing mode. It will take the inlet flow (port 3) and split the flow according to the ratio specified,

regardless of system pressure 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.

Functional Symbol



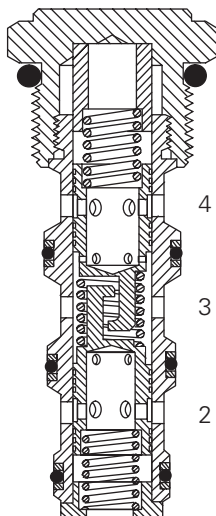
RATINGS AND SPECIFICATIONS

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
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-10-4
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	0,10 kg. (0.22 lbs.)
Seal Kits	889625 Buna-N 566080 Viton®

Viton is a registered trademark of E.I. DuPont

Sectional View



Note

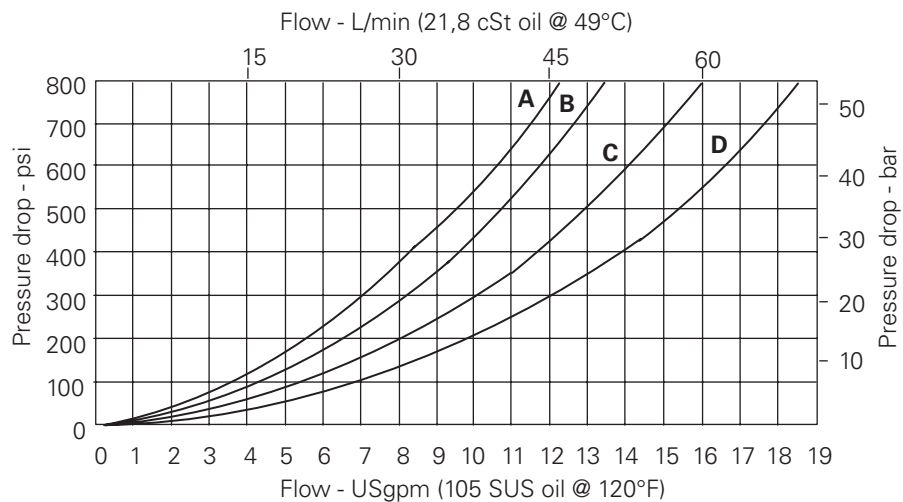
Port 1 unused, blocked by blind cavity

Typical Flow Regulation

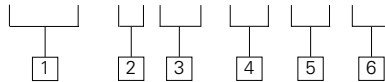
Cartridge only

Flow Division
(See model code position 5)

- A - 3* spool
- B - 4* spool
- C - 6* spool
- D - 8* spool



FDC1 – 10 (V) – ** – ** – 00



1 Function

FDC1 – Flow divider/
combiner

2 Size

10 – 10 Size

3 Seals

Blank– Buna-N
V – Viton®

4 Port size

0 – Cartridge only

CODE	PORT SIZE	HOUSING NUMBER
Aluminum		
3B	3/8" BSPP	02-175467*
6T	SAE 6	566234*
2G	1/4" BSPP	02-185804
3G	3/8" BSPP	02-185805
6H	SAE 6	02-185802
8H	SAE 8	02-185803

*Light duty housing
See section J for housing details.

5 Flow divisions (ratios)

CODE	FLOW DIVISION%		RATED INLET FLOW	
	Port 4	Port 2	L/min	(USgpm)
5.1	33	67	5,7	(1.5)
5.5	50	50	3,8	(1)
11	50	50	7,6	(2)
21	67	33	11,4	(3)
22	50	50	15,2	(4)
33	50	50	22,8	(6)
34	43	57	26,6	(7)
36	33	67	34,2	(9)
43	57	43	26,6	(7)
44	50	50	30,4	(8)
46	40	60	38,0	(10)
62	75	25	30,4	(8)
63	67	33	34,2	(9)
64	60	40	38,0	(10)
66	50	50	45,6	(12)
88	50	50	60,8	(16)

7 Special features

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

SS - 316 Stainless Steel
external components

Dimensions

mm (inch)

Torque cartridge in
aluminum housing to
47–54 Nm (35–40 ft.lbs)

Notes

Port 1, unused, blocked by
blind cavity.

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

