



5.6

50F10-45 TYPE

Flow Divider/Combiner

Rated pressure (bar / psi)	345 / 5000
Peak flow (L/min / gpm)	45.4 / 12

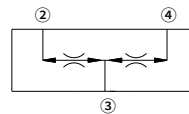
Features

- Hardened parts for long life
- Quiet, modulated response
- Synchronizing in dividing and combining modes
- Floating cage — High installation torque
- Industry common cavity

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Symbol

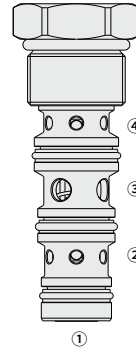


Description

A heavy duty, multifunction, screw-in, cartridge-style, spool-type flow divider/combiner.

Operation

In the dividing mode, the valve will divert input flow from ③ to ② and ④, based on the ratio specified, regardless of operating pressure. When the flow direction is reversed the valve will combine flows from ② and ④ to port ③. Synchronizing flow is provided in both the dividing and combining modes at bottomed conditions in cylinder applications and at stalled conditions in motor applications.



Ordering Code

50F10-45	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>	
Option:	Blank							
None								
Cartridge only	0							
Seals:								
Polyurethane (Std.)				P				
Buna N				N				
Fluorocarbon				V				
					Flow range	Dividing ratio		
					(L/min)	(%)		
					4-19	50-50	= 22	
					11.3-45.4	50-50	= 66	

Materials

Cartridge:

Weight: 0.11 kg; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane (Std.) seal.

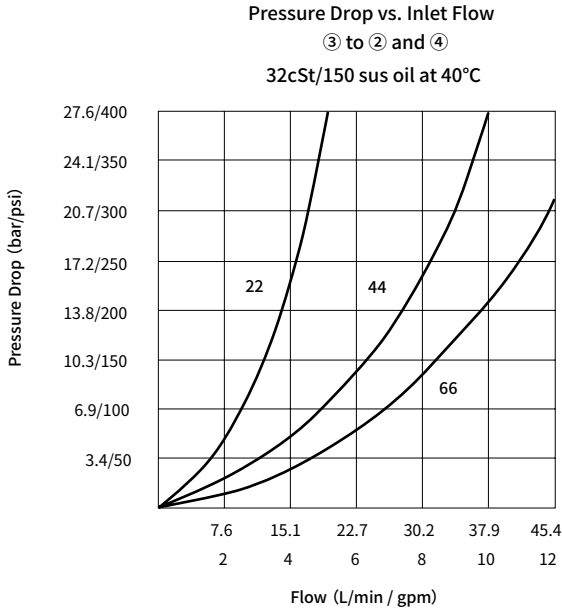
Standard Ported Body:

Anodized high-strength aluminum alloy, rated to 240 bar; Ductile iron and steel bodies available; Dimensions may differ, consult factory.

Technical Data

Rated pressure	345 bar (5000 psi)
Peak flow	45.4 L/min (12 gpm)
Dividing ratio	50%-50%
Flow accuracy	10% from 25-100% of maximum rated flow
Torque	55-65 Nm
Cavity	VC10-4 (See technical reference)
Fluid	Mineral-based or synthetics with lubricating properties
Viscosity range	7.4 to 420 mm ² /s
Temperature range	-54 to 107 °C (Polyurethane seals)
	-40 to 100 °C (Buna N seals)
	-26 to 204 °C (Fluorocarbon seals)
Degree of fluid contamination	The minimum pollution level is ISO4406 level 18/16/13, and level 15/13/11 is recommended to prolong the service life

Performance (Cartridge Only)



05

Dimensions

(Dimensions in mm)

