5.7

50F12-45 TYPE

Flow Divider/Combiner

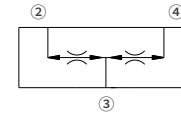
Maximum pressure (bar / psi)	350 / 5000
Peak flow (L/min / gpm)	120 / 31

Features

- Hardened parts for long life
- Quiet, modulated response
- Synchronizing in dividing and combining modes
- Industry common cavity

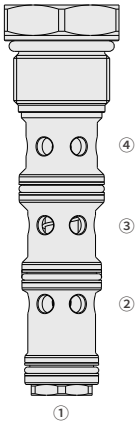
Contents

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

50F12-45 □ - □ - □ - □

Option:
None Blank

Cartridge only 0

Seals:

Polyurethane (Std.)	P
Buna N	N
Fluorocarbon	V

Flow range (L/min)	Dividing ratio (%)	
21.69-68.59	76-24	= 62
32.54-102.89	50-50	= 66

Materials

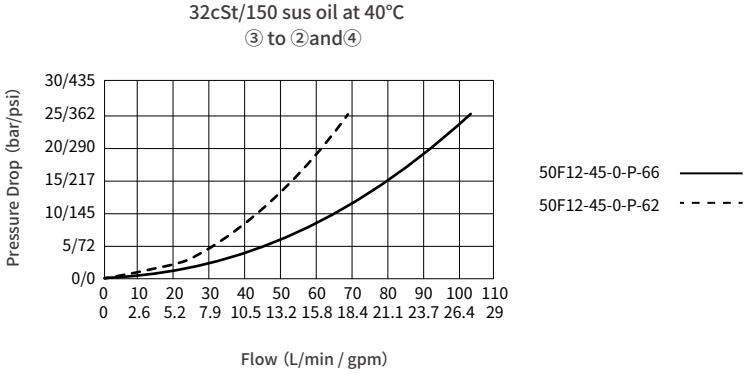
Cartridge:
Weight: 0.30 kg; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane (Std.) seal.

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

Maximum pressure	350 bar (5075 psi)
Peak flow	120 L/min (31 gpm)
Dividing ratio	See ordering code
Torque	81~95 Nm
Cavity	VC12-4 (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)



Dimensions

(Dimensions in mm)