

VFD 50 Series

Variable Priority Flow Dividers

Priority Type Flow Dividers split a single input (IN) flow into a 'Priority' (REG) flow and an excess or 'By-Pass' (BP) flow which can be returned directly to the oil reservoir or used to power a second system. In many instances this dispenses with the need for another pump to operate a second system.

Specifications

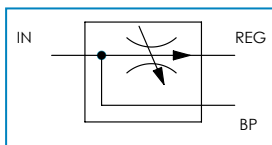
Maximum Pressure:	Up to 250 bar, 3,625 psi
Total Flow:	Up to 50 L/min, 13.2 US gpm
Maximum Priority (REG) Flow:	Up to 30 L/min, 7.9 US gpm
Fluid Temperature Range:	-30 to 120 °C, -22 to 248 °F
Ambient Temperature Range:	-30 to 50 °C, -22 to 122 °F
Porting:	BSPP, NPT, Manifold Mount
Material:	Steel components in cast SG Iron body. Aluminium knob
Weight:	Typically 0.75 kg, 1.65 lb
Mounting:	2 Bolts - M5 or 10-32
Thread Ports:	3 Bolts - M5 or 10-32
Manifold:	

Make it **BLUE**®

Features

- Clearly marked single turn hand-dial permits fast visual adjustments to predetermined 'Priority' flow and fast easy adjustment of 'Priority' circuit to meet varying requirements.
- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without effecting the Priority flow rate.

Symbol:



Sales Order Code

Please contact our technical sales team to discuss any special order requirements.

TYPICAL CODE	DESCRIPTION	SEE TABLE	YOUR CODE
VFD50	Valve Type	-	
15	Priority (REG) Flow Capacity	Table 1	
T	Porting	Table 2	

Table 1: Priority (REG) Flow Capacity*

CODE	FLOW SIZE	
	L/min	US GPM
15	0 - 15	0 - 3.9
30	0 - 30	0 - 7.9

Note:

* Input flow will affect the maximum seen priority flow capacity. To achieve the given flow capacity, the input flow needs to be greater.

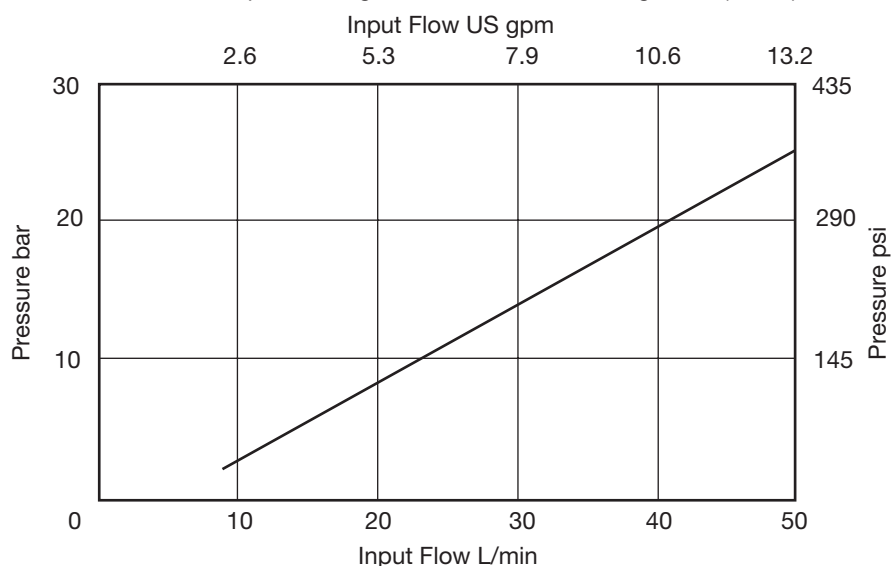
Table 2: Porting**

CODE	PORT THREAD TYPE
T	3/8" BSPP
M	Manifold Mount
A	3/8" NPTF

** Other threads available to special order

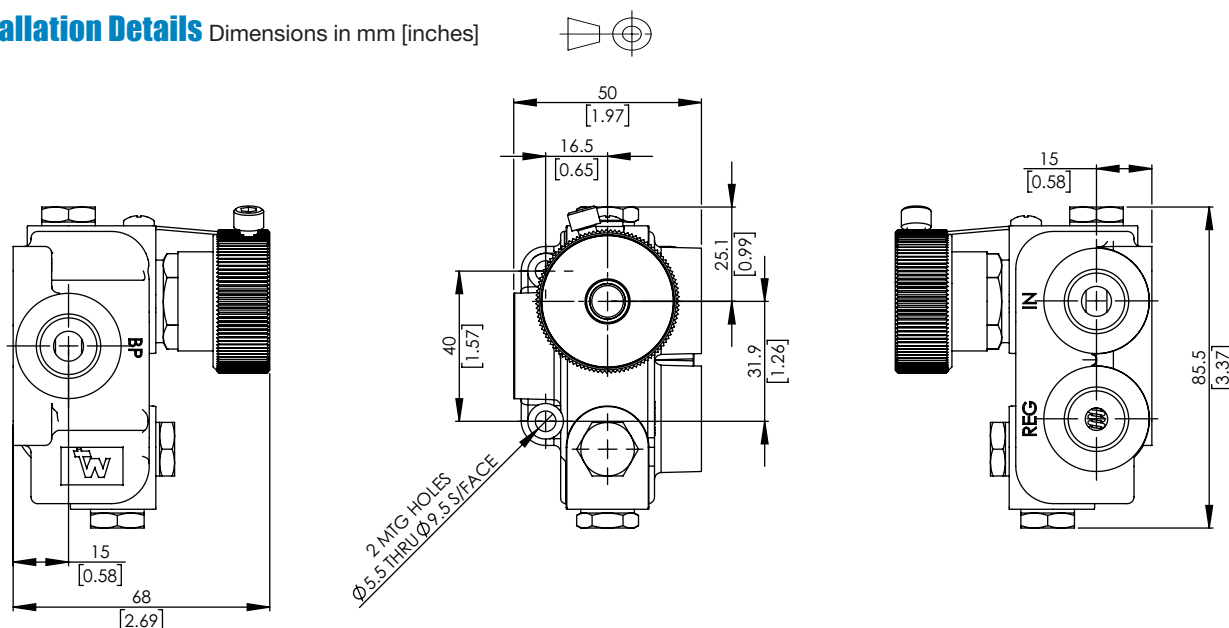
Typical Pressure Drop

All tests completed using ISO32 Mineral oil at 50 degrees C (21 cSt)

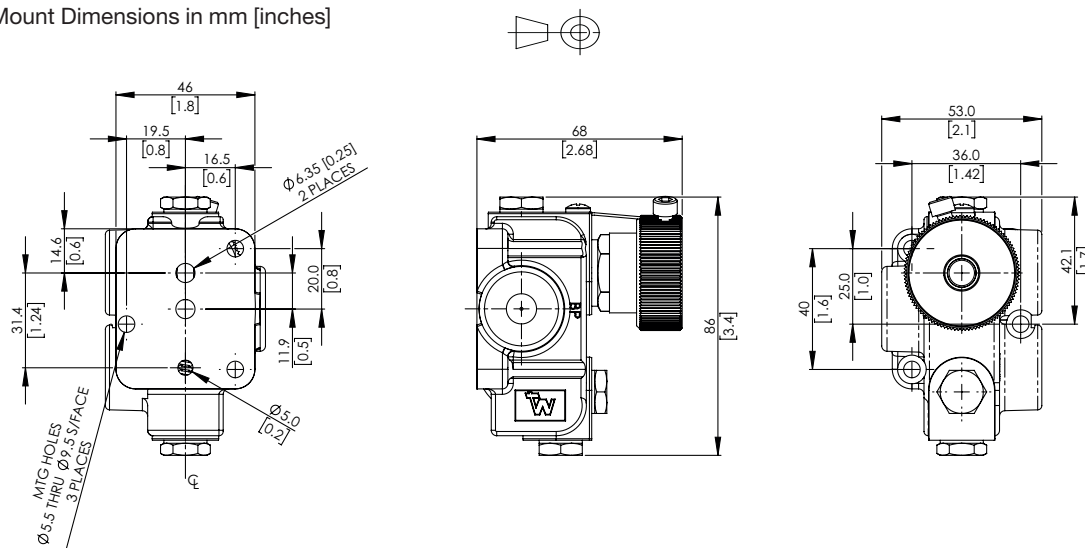


Installation Details

Dimensions in mm [inches]



Manifold Mount Dimensions in mm [inches]

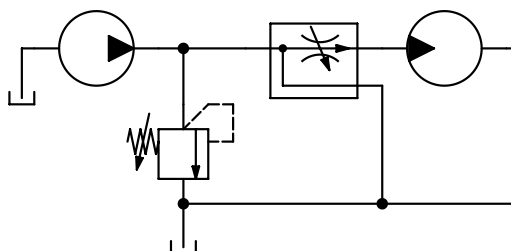


Circuit Suggestions

1. Variable Speed of Hydraulic Motor Drive on Agricultural Tractor

This circuit gives the capability to vary the speed of a hydraulic motor as required. Also, for a given control knob setting, the hydraulic motor speed stays constant regardless of the tractor speed.

Circuit 1

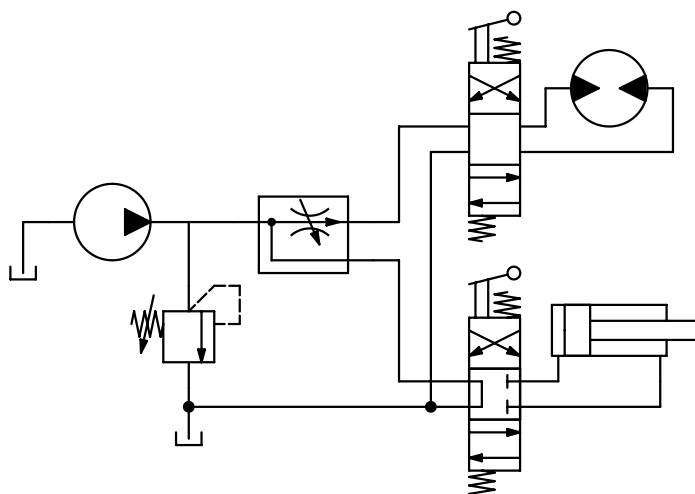


Circuit Suggestions

2. Two Circuits From a Single Pump

Using only one pump, this circuit gives speed control of the hydraulic motor and powers a hydraulic cylinder. Each function can be used either simultaneously or independently because pressure variations between priority (REG) and By-Pass (BP) flows do not effect the flow on the priority (REG) circuit.

Circuit 2



Circuit Suggestions

3. Multiple Circuits From a Single Pump

Using one pump, this circuit gives independently variable speed drive from three hydraulic motors. Motors can be used simultaneously or independently.

Circuit 3

