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2FV2V Series

Variable Priority Flow Dividers

Priority Type Flow Dividers split a single input flow into a 'Priority' (regulated) flow and a 'By-Pass' (excess) 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:

250 bar (working)

Total flow capacity:

114 lpm

Regulated flow capacity:

See Table 2, ordering codes

Porting:

See Table 3, ordering codes

Material

Steel components in cast iron body; aluminium knob (steel knob optional)

Weight:

2.10 to 3.50 Kg

Mounting:

two bolt

Relief valve (optional):

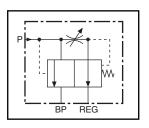
Adjustable between 35 - 207 bar Max. Priority flow - 50 lpm

Check valve (optional):

250 bar working pressure

(Anti-cavitation check valve available)

Symbol





Features

- Clearly marked single-turn hand dial permits fast visual adjustments to pre-determined 'Priority' flow and fast easy adjustments of 'Priority' circuit to meet varying requirements.
- Pressure compensated permitting both 'Priority' and 'By-Pass' to be used simultaneously at varying pressures without affecting the 'Priority' flow rate.
- Can be used as unidirectional two port in line flow control by plugging the 'By-Pass' flow port. (Note: in this configuration a relief valve must be used on the inlet line).
- All models (except manifold mount) can be supplied with an adjustable pressure relief valve or check valve on 'Priority' flow. Anti-cavitation check valve can be routed between the 'By-Pass' and 'Priority' flows.

Another quality product from the Webtec Range

08/09 2FV2V-BU-ENG-2377.pdf

Ordering Codes Typical Code M 2FV2V 125 J () Manifold mounting available on 2FV2V model only Valve Type (Table 1) Regulated Flow Capacity (Table 2) Porting (Table 3) Pressure Setting (bar, if Relief Valve required)

Table 1: Valve Type

Code	Description	
2FV2V	No Relief Valve	
RV2FV2V	Relief Valve between Priority and By Pass Flow Port	
RVXD2FV2V	Externally Drained Relief Valve	
CK2FV2V	Check Valve between Priority and Inlet Flow Port	
AC2FV2V	Anti-cavitation Check Valve between By-Pass and Priority Flow Port	

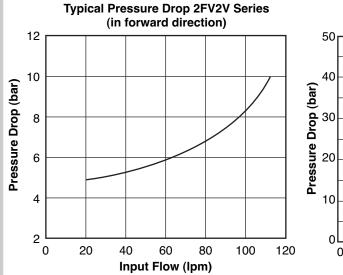
Table 2: Regulated Flow

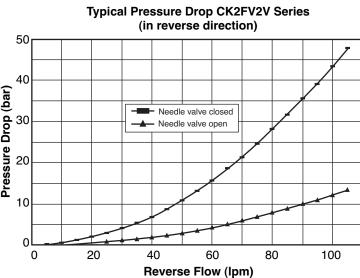
Code	Regulated Flow
030	0 - 11 lpm
050	0 - 19 lpm
080	0 - 30 lpm
125	0 - 47 lpm
200	0 - 76 lpm
250	0 - 95 lpm
300	0 - 114 lpm

Table 3: Porting*

Code	Port Threads Inlet Regulated Flow and Excess Flow	Relief Valve External Drain where fitted
J	³ / ₄ " BSP	¹ / ₄ " BSP
Α	³ / ₄ " NPT	¹ / ₄ " NPT
М	M22 x 1.5	M14 x 1.5
G	1.1/16" - 12 SAE	⁹ / ₁₆ - 20 SAE
Н	1/2" BSP	1/ ₄ " BSP
Т	³ / ₈ " BSP	¹ / ₄ " BSP

^{*} Other threads available to special order.



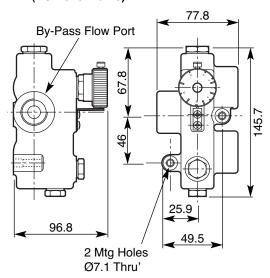


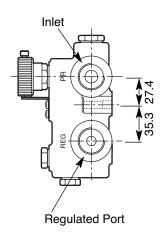
Curve established using hydraulic mineral oil ISO 32 with viscosity of 21 centistokes at 50°C

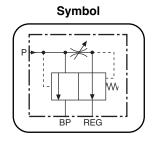
Installation Details

Dimensions in millimetres

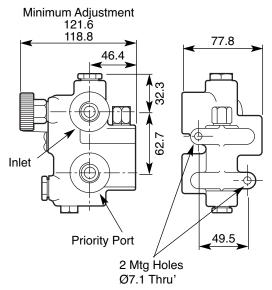
2FV2V (No Relief Valve)

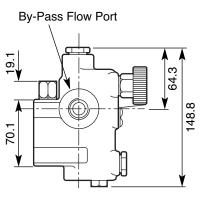


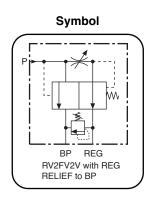




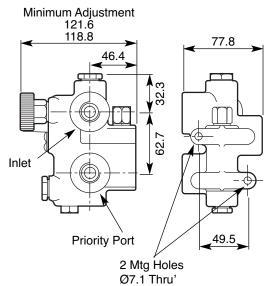
RV2FV2V (Internal Relief Valve between Priority and By-Pass Flow Ports)

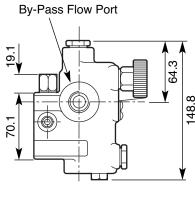


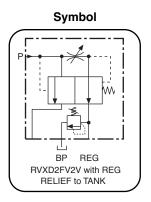




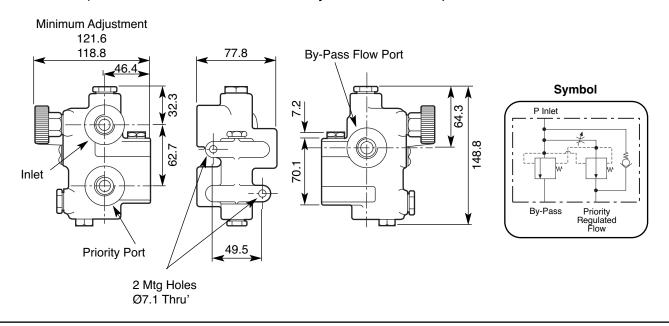
RVXD2FV2V (Externally drained Relief Valve)



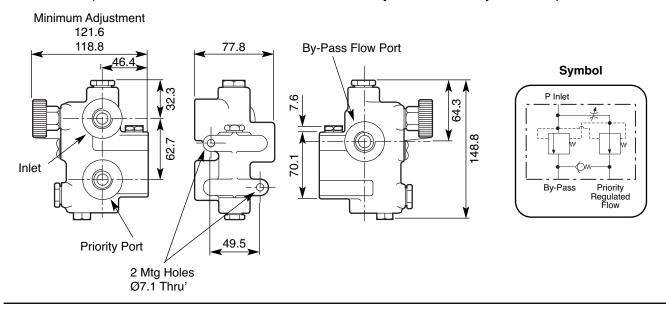




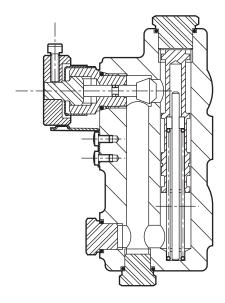
CK2FV2V (Internal Check Valve between the Priority and Inlet Flow Ports)

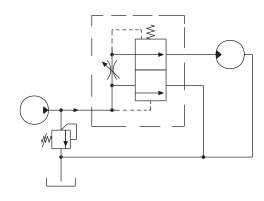


AC2FV2V (Internal Anti-cavitation Check Valve between the By-Pass and Priority Flow Ports)



Sectioned View Circuit 1





Circuit 2

Circuit Suggestions

1 Variable Speed of Hydraulic Motor Drive on Agricultural Tractor

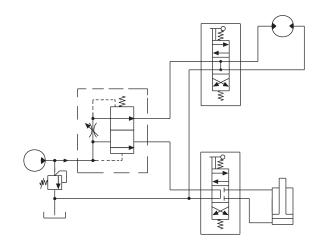
This circuit gives the capability to vary the speed of a hydraulic motor as required. Also, for a given control knob setting, the hydraulic motor speed stays constant regardless of the tractor speed.

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 regulated and By-Pass flows do not effect the flow on the regulated circuit.

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

