



**WEBTEC PRODUCTS LIMITED**

# **Hydraulic Flow Control Valves**

**Hydraulic Flow Control Valves**

**Quality Hydraulic Components  
from the Webtec Range**









# CONTENTS

|   | <b>DESCRIPTION</b>  | <b>PAGE No.</b> |
|---|---|-----------------|
|    | <b>ILFC Series</b><br>Fixed Flow Pressure Compensated Control Valve   | 1               |
|    | <b>VFC Series</b><br>Variable Flow Pressure Compensated Control Valve | 3               |
|    | <b>WPD Series</b><br>Fixed Priority Flow Dividers                     | 5               |
|   | <b>RFC Series</b><br>Adjustable Throttle Valve                        | 7               |
|  | <b>FV 120 Series</b><br>Fixed Priority Flow Dividers                  | 9               |
|  | <b>FV 126 Series</b><br>Fixed Priority Flow Dividers                  | 11              |
|  | <b>FV 200 Series</b><br>Proportional Flow Dividers                    | 13              |
|  | <b>VFD 50 Series</b><br>Variable Priority Flow Dividers               | 15              |
|  | <b>2FV2V Series</b><br>Variable Priority Flow Dividers                | 17              |

*Continued over page*

# CONTENTS

*Continued from previous page*

|   | <b>DESCRIPTION</b>   | <b>PAGE No.</b> |
|---|--|-----------------|
|    | <b>2FV2V Series</b><br>Variable Priority Flow Divider with Motor Drive               | 21              |
|    | <b>FDM Series</b><br>Variable Priority Flow Divider with Remote Proportional Control | 23              |
|    | <b>2FV2V Series</b><br>Manifold Mounted Variable Priority Flow Divider               | 25              |
|   | <b>MM80 Series</b><br>Manifold Mounted Variable Priority Flow Divider                | 27              |
|  | <b>FVDVRV Series</b><br>Variable Priority Flow Divider with Diverter Valve           | 29              |
|  | <b>FDC 60 Series</b><br>Flow Divider Combiner  | 31              |



# ILFC Series

## Fixed Flow Pressure Compensated Control Valve

**FLOW CONTROL VALVES** maintain the flow rate of hydraulic fluid to a specified value.

Applications include hydraulic cylinders required to extend or retract at constant speeds and hydraulic motors required to rotate at constant speeds. When used with a fixed delivery pump the excess flow is bypassed across a relief valve.

### Specifications

**Maximum Pressure:**

210 bar (working)

**Maximum Flow:**

16 lpm

**Porting:**

BSP & NPT - see Table 1

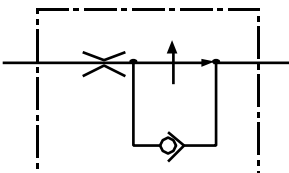
**Material:**

Exterior parts; Chemically blacked steel  
Interior parts; steel spool in aluminium sleeve

**Weight:**

see Table 1

### Symbol

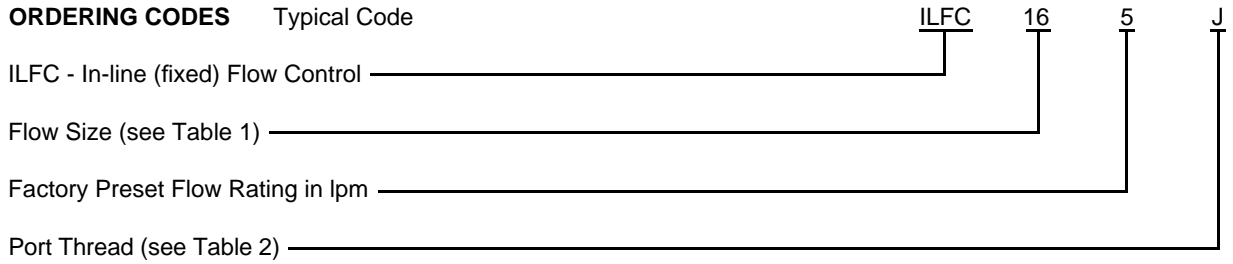


### Features

- Pressure compensated to ensure a constant flow rate under varying pressures.
- Pre-set in factory to customer requirements at any flow rate between 1.5 lpm - 16 lpm.
- Uncontrolled flow is permitted in reverse direction.
- Chemically blacked finished.

# Quality Hydraulic Components from the Webtec Range

**ORDERING CODES** Typical Code



**Table 1: Dimensions**

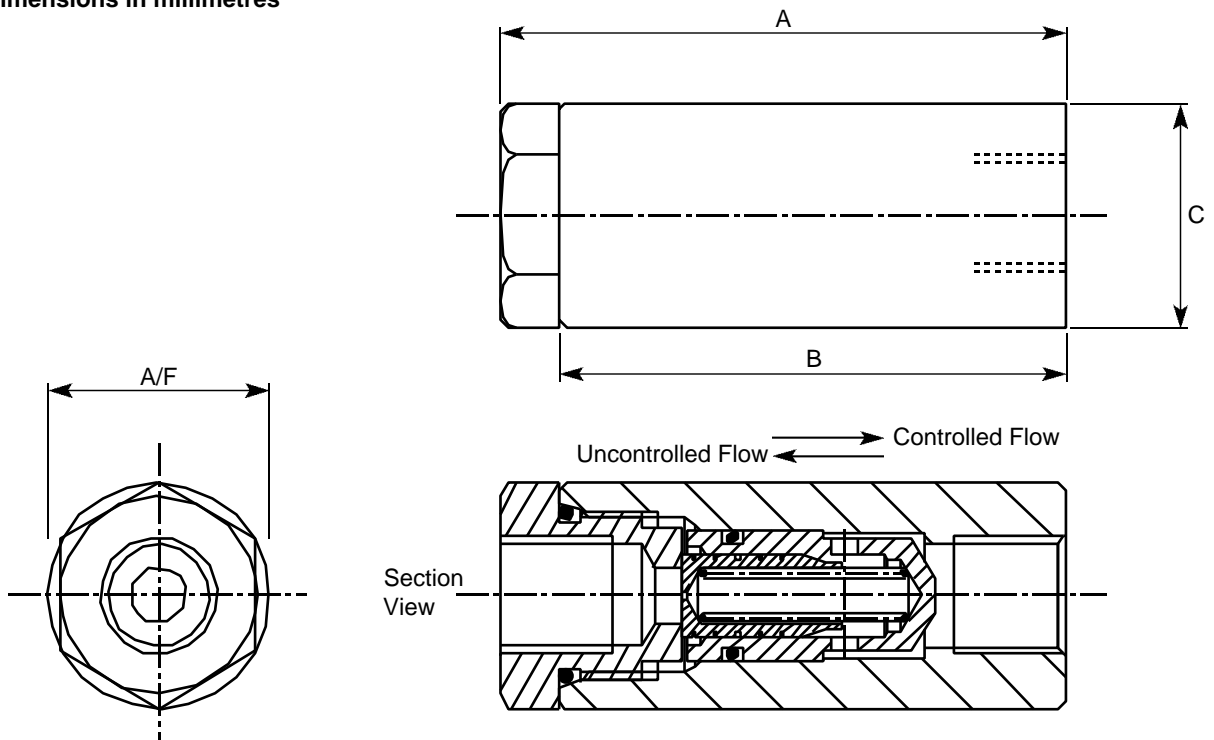
| Code | Flow Range   | Port |        | A  | B  | C  | A/F | Weight kg |
|------|--------------|------|--------|----|----|----|-----|-----------|
|      |              | Size | Thread |    |    |    |     |           |
| 14   | 1.5 - 14 lpm | 1/4" | BSP    | 64 | 57 | 25 | 22  | 0.20      |
| 16   | 1.5 - 16 lpm | 3/8" | BSP    | 77 | 57 | 25 | 22  | 0.20      |
| 16   | 1.5 - 16 lpm | 3/8" | NPT    | 77 | 57 | 25 | 22  | 0.20      |

**Table 2**

| Code | Thread |
|------|--------|
| J    | BSP    |
| A    | NPT    |

## INSTALLATION DETAILS

Dimensions in millimetres



\* Other threads available to special order.

## VFC Series

# Variable Flow Pressure Compensated Control Valve

**VARIABLE FLOW CONTROL VALVES** maintain the flow rate of hydraulic fluid to a selected value.

Applications include hydraulic cylinders requiring constant extension or retraction speeds and hydraulic motors requiring constant rotational speeds. When used with a fixed delivery pump the excess flow is by-passed across a relief valve.

### Specifications

**Maximum Pressure:**

210 bar (working)

**Maximum Flow:**

55 lpm

**Porting:**

BSP & NPT (see Table 1)

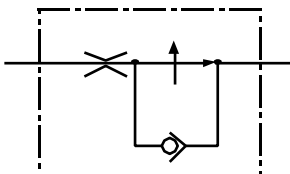
**Material:**

steel components in an aluminium body

**Weight:**

see Table 1

### Symbol



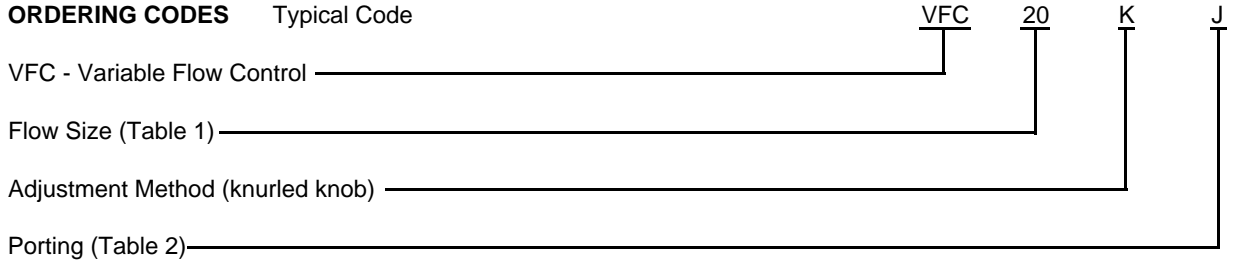
### Features

- Pressure compensated to ensure a constant flow rate under varying pressures.
- Knurled knob enables fast, accurate adjustment of flow rate in one direction (under pressure) from 1.5 lpm to 55 lpm.
- Knurled knob can be locked in position by a grub (set) screw and provides weatherproof sealing to prevent the adjusting screw from corroding or seizing.
- Free (uncontrolled) flow is permitted in reverse direction.



# Quality Hydraulic Components from the Webtec Range

**ORDERING CODES** Typical Code



**Table 1: Dimensions**

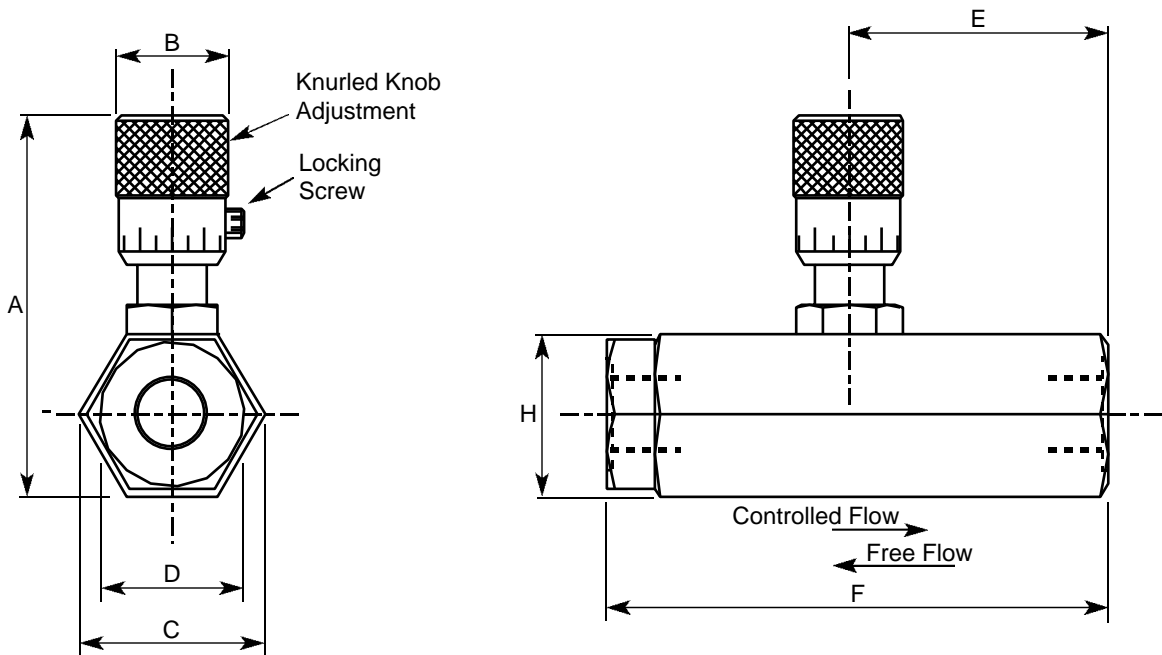
| Code | Flow Range<br>(lpm) | Porting |        | A    | B    | C    | D    | E    | F     | H    | Weight<br>(kg) |
|------|---------------------|---------|--------|------|------|------|------|------|-------|------|----------------|
|      |                     | Size    | Thread |      |      |      |      |      |       |      |                |
| 20   | 1.5 - 20            | 1/4"    | BSP    | 59.9 | 17.5 | 32.8 | 25.4 | 44.4 | 84.8  | 28.4 | 0.2            |
| 40   | 2.0 - 40            | 3/8"    | BSP    | 74.6 | 23.8 | 43.9 | 35.1 | 57.1 | 107.1 | 38.1 | 0.4            |
| 55   | 2.0 - 55            | 1/2"    | BSP    | 77.7 | 23.8 | 47.5 | 38.1 | 63.5 | 119.1 | 41.1 | 0.5            |
| 20   | 1.5 - 20            | 1/4"    | NPT    | 59.9 | 17.5 | 32.8 | 25.4 | 44.4 | 84.8  | 28.4 | 0.2            |
| 40   | 2.0 - 40            | 3/8"    | NPT    | 74.6 | 23.8 | 43.9 | 35.1 | 57.1 | 107.1 | 38.1 | 0.4            |
| 55   | 2.0 - 55            | 1/2"    | NPT    | 77.7 | 23.8 | 47.5 | 38.1 | 63.5 | 119.1 | 41.1 | 0.5            |

**Table 2**

| Code | Thread |
|------|--------|
| J    | BSP    |
| A    | NPT    |

## INSTALLATION DETAILS

Dimensions in millimetres



\* Other threads available to special order.

## WPD Series

### Fixed 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. This often dispenses with the need for another pump to operate a second system.

A typical application on mobile machinery is to use the 'Priority' (regulated) flow for power steering and the 'By-Pass' (excess) flow for an implement or lift circuit. This ensures the power steering is satisfied first to keep the steering speed constant.

#### Specifications

**Maximum Pressure:**

140 bar

**Total Flow Capacity:**

113 lpm

**Regulated Flow Capacity:**

See Table 1

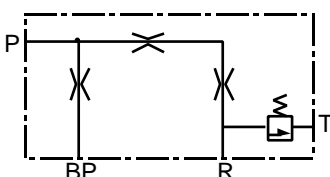
**Porting:**

Inlet and By-Pass 3/4" BSP  
Priority and Relief 3/8" BSP

**Material:**

Steel components in Cast Iron Body

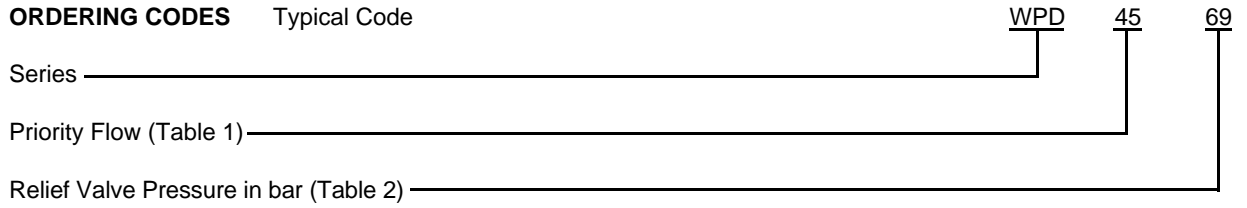
#### Symbol



#### Features

- 'Priority' flow rate is pre-set in factory. Flow through the 'Priority' port will remain constant at the pre-set value as long as input flow equals or exceeds the Priority flow value.
- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without affecting the 'Priority' flow rate.
- Built-in pressure relief valve protects the 'Priority' circuit from excess pressure.

# Quality Hydraulic Components from the Webtec Range



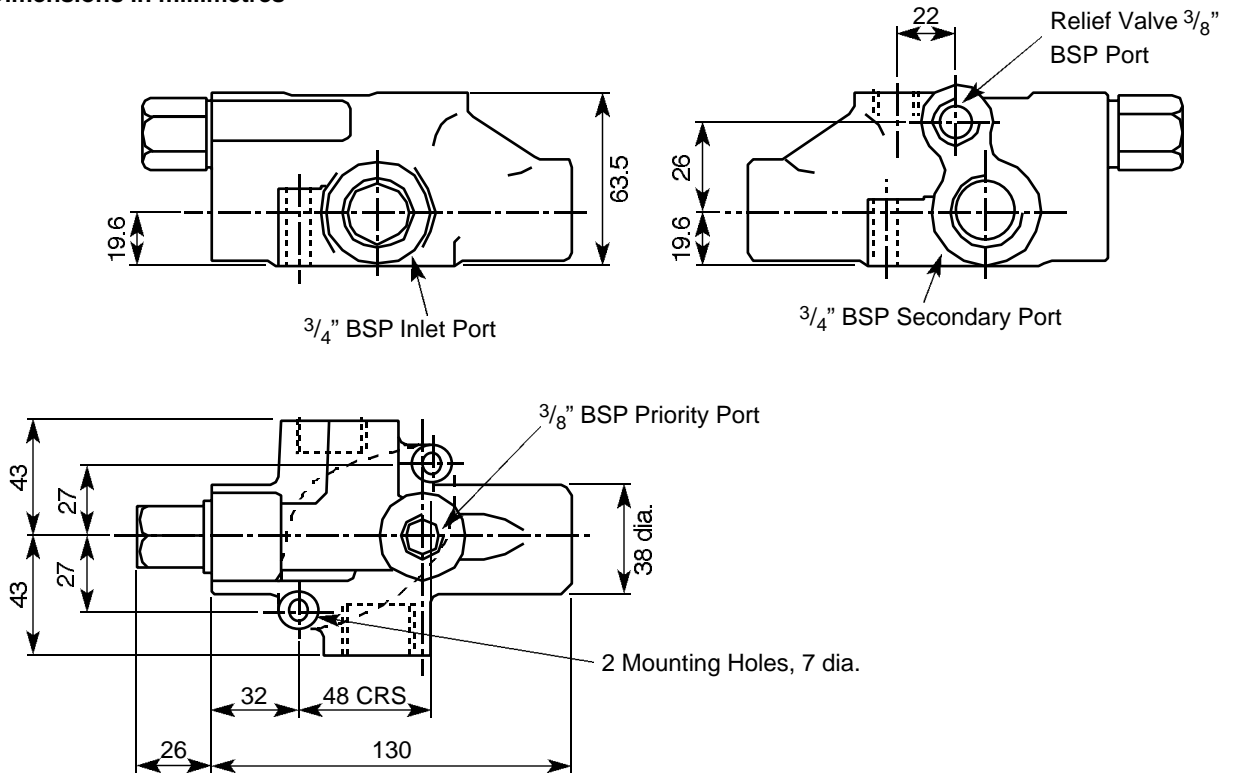
**Table 1: Priority Flow**

| Code | Priority Flow |
|------|---------------|
| 05   | 2.3 lpm       |
| 10   | 4.5 lpm       |
| 17   | 7.73 lpm      |
| 20   | 9.1 lpm       |
| 30   | 13.6 lpm      |
| 35   | 15.9 lpm      |
| 40   | 18.2 lpm      |
| 45   | 20.5 lpm      |

**Table 2: R/V Settings**

| Settings | Flow Code |
|----------|-----------|
| 62 bar   | 30        |
| 69 bar   | 17        |
|          | 30        |
|          | 35        |
| 103 bar  | 45        |
|          | 05        |
|          | 10        |
|          | 20        |
|          | 30        |
|          | 40        |

**INSTALLATION DETAILS**  
Dimensions in millimetres



# RFC Series

## Adjustable Throttle Valve

**THROTTLE VALVES** provide fine adjustment of flow rates and are particularly useful when accurate metering is required at low flow. Because these valves are not pressure compensated they should be used in systems where pressure fluctuations are minimal.

### Specifications

**Maximum Pressure:**

320 bar (working)

**Maximum Flow:**

120 lpm

**Porting:**

see Table 2

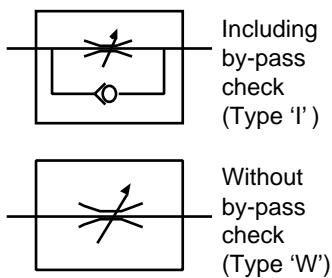
**Material:**

chemically blacked steel ('free reverse flow' valve includes an aluminium poppet)

**Weight:**

see Table 2

### Symbol

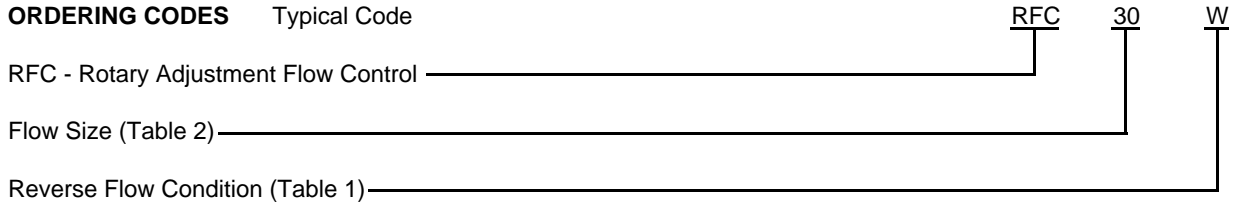


### Features

- Neat 'in-line' mounting.
- Fine adjustment at low flow rates is easily accomplished by rotating the valve body with respect to the valve stem.
- Models are available giving either restricted flow in both directions or restricted flow in one direction with full flow in reverse.
- Chemically blacked finish.

# Quality Hydraulic Components from the Webtec Range

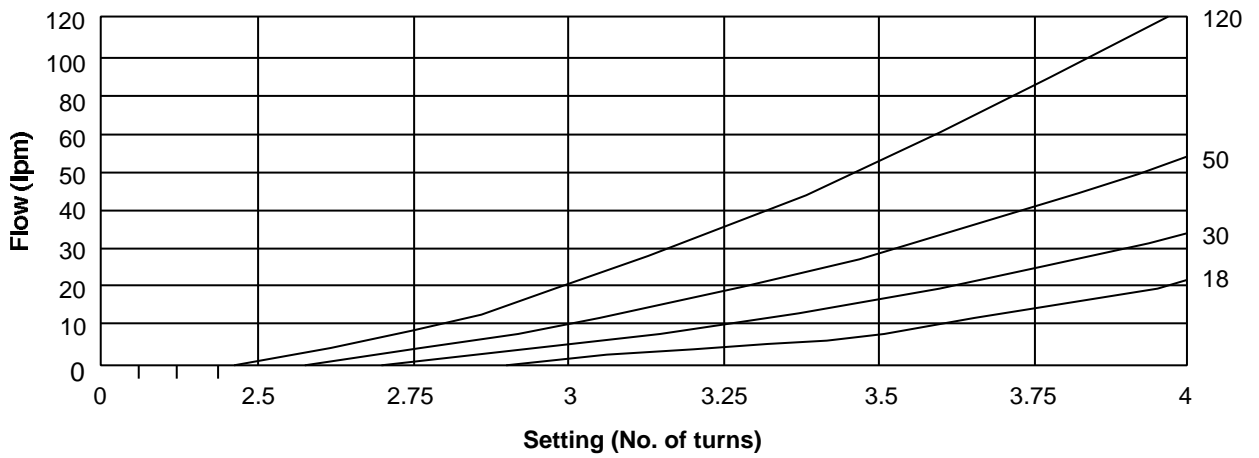
**ORDERING CODES** Typical Code



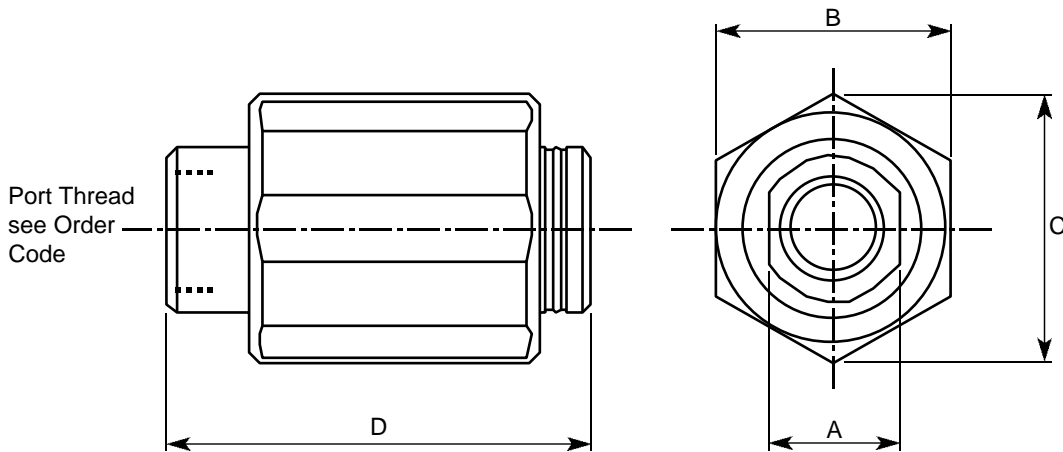
**Table 1: Reverse Flow Control**

| Code | Description             |
|------|-------------------------|
| I    | Including by-pass Check |
| W    | Without by-pass Check   |

**Throttle Characteristics at 7 bar**



**INSTALLATION DETAILS**  
Dimensions in millimetres



**Table 2**

| Code | Flow Size | Porting (BSP) | A  | B  | C  | D   | Weight kg |
|------|-----------|---------------|----|----|----|-----|-----------|
| 18   | 18 lpm    | 1/4"          | 19 | 32 | 34 | 65  | 0.28      |
| 30   | 30 lpm    | 3/8"          | 22 | 41 | 43 | 75  | 0.53      |
| 50   | 50 lpm    | 1/2"          | 27 | 46 | 48 | 80  | 0.69      |
| 120  | 120 lpm   | 3/4"          | 32 | 55 | 58 | 100 | 1.15      |

## FV 120 Series

### Fixed 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. This often dispenses with the need for another pump to operate a second system.

A common application on mobile machinery is to use the 'Priority' (regulated) flow for power steering and the 'By-Pass' (excess) flow for an implement or lift circuit. This ensures the power steering is satisfied first to keep the steering speed constant.

#### Specifications

**Maximum Pressure:**

210 bar (working)

**Total Flow Capacity:**

76 lpm

**Regulated Flow Capacity:**

see Table 1, ordering codes

**Porting:**

see Table 3, ordering codes

**Material:**

steel components in cast iron body

**Weight:**

1.50 kg

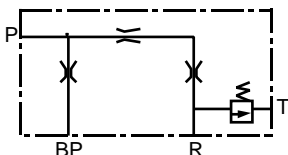
**Mounting:**

two bolt

**Relief Valve:**

see Table 2, ordering code

#### Symbol

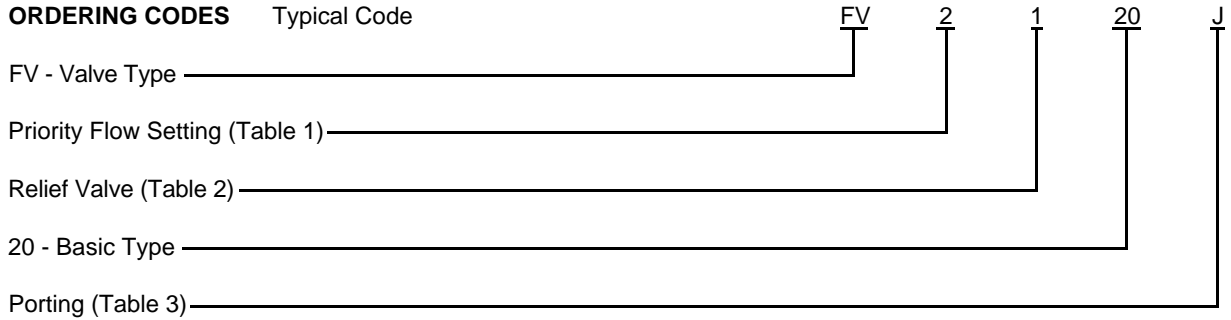


#### Features

- 'Priority' flow rate is pre-set in factory to customer specifications at any value between 3.78 lpm and 34.1 lpm in increments of 3.78 lpm. Flow through the 'Priority' port will remain constant at the pre-set value as long as input flow equals or exceeds the Priority flow value.
- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without effecting the 'Priority' flow rate.
- Built-in pressure relief valve protects the 'Priority' circuit from excess pressure and is adjustable from 34.5 bar to 210 bar (Factory set 82.7 bar unless otherwise specified).
- Can be used as unidirectional two port in-line flow control by plugging the 'By-Pass' flow port (NB: In this configuration a relief valve must be used on the inlet line).

# Quality Hydraulic Components from the Webtec Range

## ORDERING CODES Typical Code



**Table 1: Priority Flow**

| Code | Flow at Priority Port |
|------|-----------------------|
| 1    | 3.78 lpm              |
| 2    | 7.57 lpm              |
| 3    | 11.4 lpm              |
| 4    | 15.1 lpm              |
| 5    | 18.9 lpm              |
| 6    | 22.7 lpm              |
| 7    | 26.5 lpm              |
| 8    | 30.3 lpm              |
| 9    | 34.1 lpm              |

**Table 2: Relief Valve**

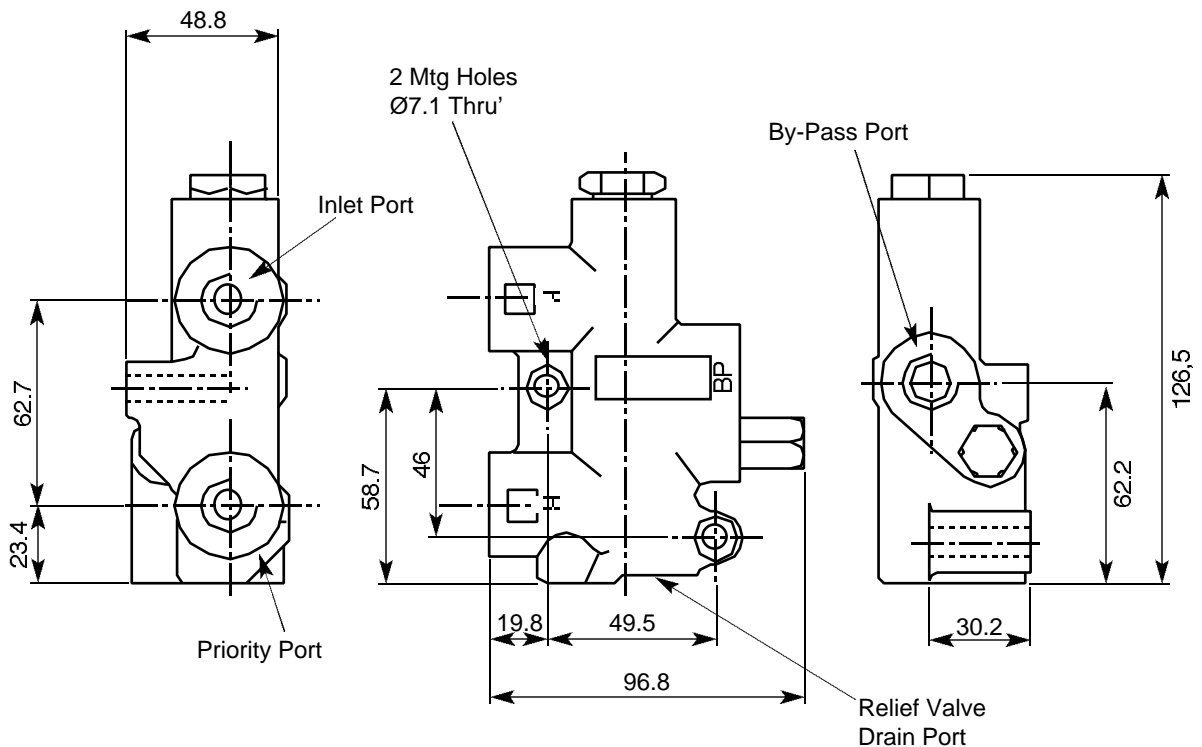
| Code | Description          |
|------|----------------------|
| 0    | Without Relief Valve |
| 1    | With Relief Valve    |

**Table 3: Porting**

| Code | Inlet and By-Pass Port | Priority and Relief Port |
|------|------------------------|--------------------------|
| J    | 1/2" BSP               | 3/8" BSP                 |
| G    | 7/8" - 14 SAE          | 9/16" - 18 SAE           |

**Note:** Relief Valve can be adjusted between 34.5 bar and 210 bar.  
Please specify required setting when ordering otherwise setting will be 82.7 bar.

## INSTALLATION DETAILS Dimensions in millimetres



\* Other threads available to special order.

## FV 126 Series

### Fixed 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. This often dispenses with the need for another pump to operate a second system.

A common application on mobile machinery is to use the 'Priority' (regulated) flow for power steering and the 'By-Pass' (excess) flow for an implement or lift circuit. This ensures the power steering is satisfied first to keep the steering speed constant.

#### Specifications

**Maximum Pressure:**

172 bar (working)

**Total Flow Capacity:**

227 lpm

**Regulated Flow Capacity:**

see Table 1, ordering codes

**Porting:**

see Table 3, ordering codes

**Material:**

steel components in cast iron body

**Weight:**

5.22 kg

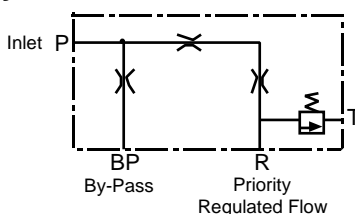
**Mounting:**

two bolts

**Relief Valve:**

see Table 2, ordering codes

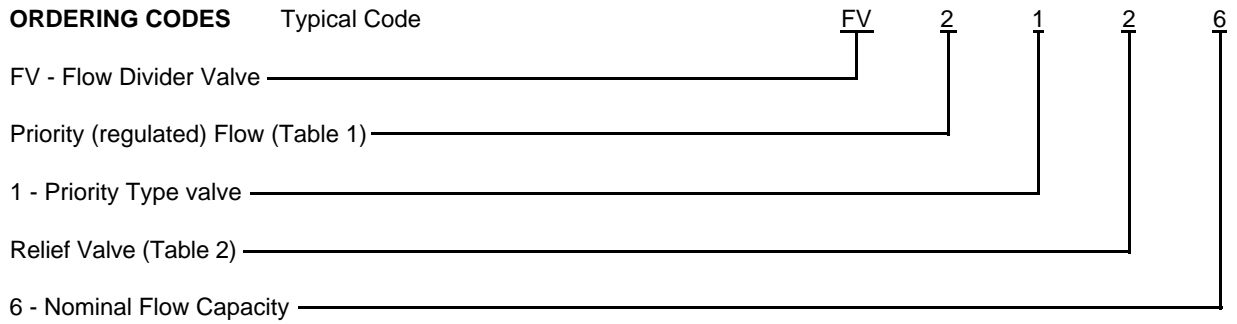
#### Symbol



#### Features

- 'Priority' flow rate is pre-set in factory to customer specification between 7.57 lpm and 121 lpm in increments of 7.57 lpm. Flow through the 'Priority' port will remain constant at the pre-set value as long as input flow equals or exceeds the 'Priority' flow value.
- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without effecting the 'Priority' flow rate.
- Cartridge type relief valve protects the 'Priority' circuit from excess pressure and is adjustable from 34.5 bar to 172 bar. (Factory set at 68.9 bar unless otherwise specified).
- Can be used as unidirectional two port in-line flow control by plugging the 'By-Pass' flow port (NB: In this configuration a relief valve must be used on the inlet line).
- Choice of two 'Priority' port connections.





**Table 1: Priority (regulated) Flow**

| Code | Priority Flow | Code | Priority Flow |
|------|---------------|------|---------------|
| 1    | 7.5 lpm       | 9    | 68.13 lpm     |
| 2    | 15.14 lpm     | 10   | 75.70 lpm     |
| 3    | 22.71 lpm     | 11   | 83.27 lpm     |
| 4    | 30.28 lpm     | 12   | 90.84 lpm     |
| 5    | 37.85 lpm     | 13   | 98.41 lpm     |
| 6    | 45.42 lpm     | 14   | 105.98 lpm    |
| 7    | 53.00 lpm     | 15   | 113.55 lpm    |
| 8    | 60.56 lpm     | 16   | 121.12 lpm    |

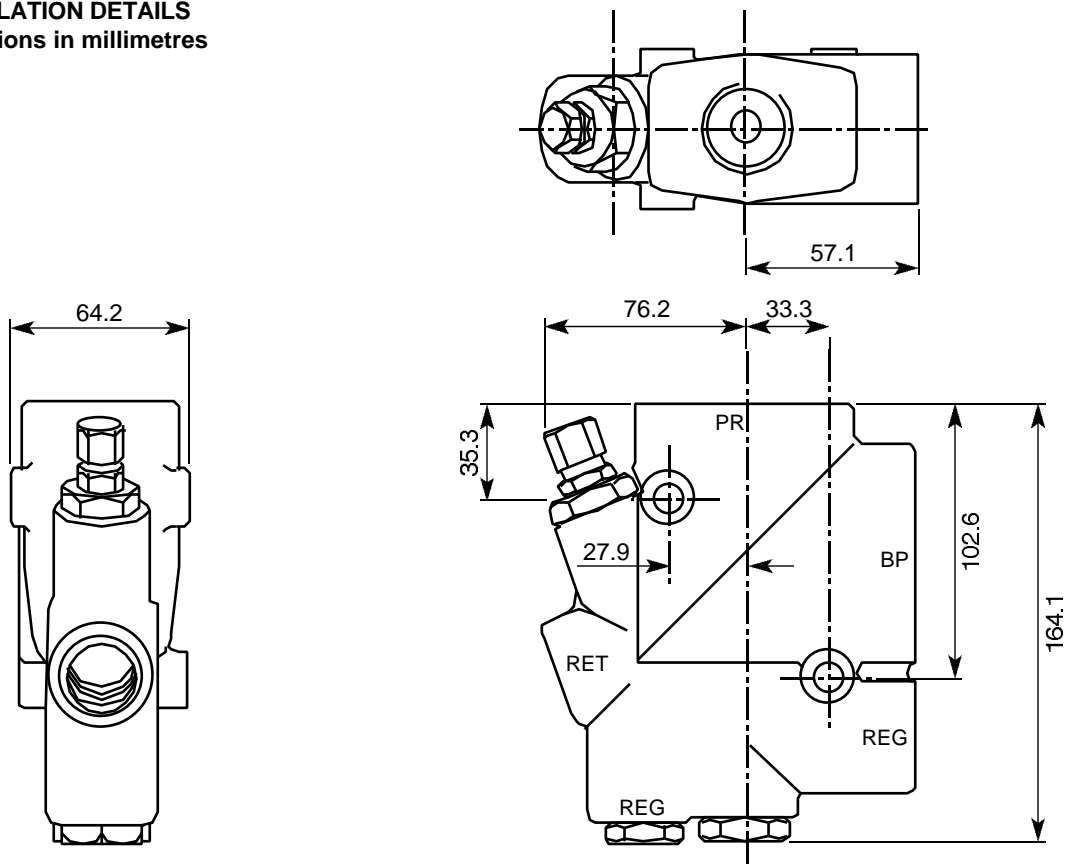
**Table 2: Relief Valve**

| Code | Description                            |
|------|--|
| 0    | No Relief Valve                        |
| 1    | Adjustable Brute Force (Direct acting) |
| 2    | Adjustable Pilot Operated              |

**Table 3: Porting**

| Port Description                                      | Thread                                 |
|---|--|
| Inlet and by-pass                                     | 1 <sup>5</sup> / <sub>8</sub> - 12 UNF |
| Regulated, Alternate Regulated and Relief Valve Drain | 7/ <sub>8</sub> - 14 UNF               |

**INSTALLATION DETAILS**  
Dimensions in millimetres



# FV 200 Series

## Proportional Flow Dividers

**PROPORTIONAL FLOW DIVIDERS** split a single input flow into two output flows, each output being a fixed proportion of the input. For example, a 50/50 flow divider will always split a single input flow into two equal output flows which could be used to operate two motors at equal speeds. The actual rate of flow from each output is not fixed but will vary as the input flow rate varies.

### Specifications

**Maximum Pressure:**  
207 bar (workings)

**Total Flow Capacity:**  
76 lpm

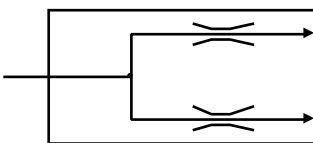
**Porting:**  
see Table 3, ordering codes

**Materials:**  
steel components in cast iron body

**Weight:**  
1.47 kg

**Mounting:**  
two bolt

### Symbol

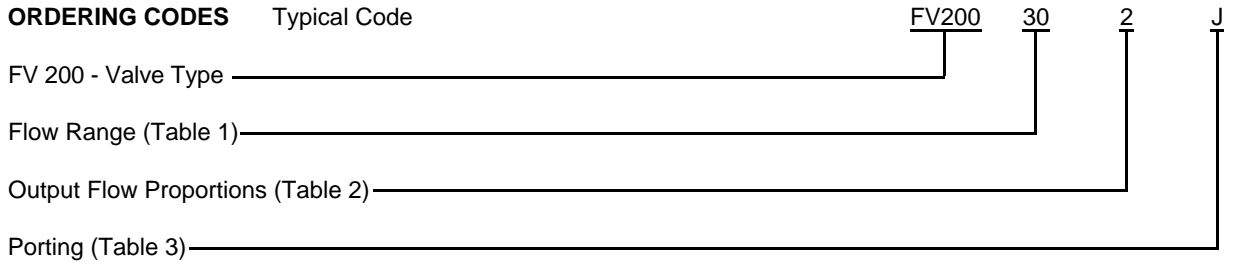


### Features

- Pressure compensated to keep each output flow at a fixed percentage of the input flow, regardless of pressure variations between the output ports.
- Three standard models are available giving proportional splits of 25%/75%, 50%/50% and 40% / 60%. Other proportional splits are available up to 10%/90% (see ordering codes).
- Three flow ranges are available; 10 - 30 lpm, 20 - 50 lpm, 40 - 76 lpm (see ordering codes).

# Quality Hydraulic Components from the Webtec Range

**ORDERING CODES** Typical Code



**Table 1: Flow Range**

| Code | Recommended Flow Range |
|------|------------------------|
| 30   | 10 - 30 lpm            |
| 50   | 20 - 50 lpm            |
| 70   | 40 - 76 lpm            |

**Table 2: Flow Rates**

| Code                              | A/B Ratio % |
|-----------------------------------|-------------|
| 1                                 | 25/75       |
| 2                                 | 50/50       |
| 3                                 | 40/60       |
| other ratio available up to 10/90 |             |

**Table 3: Porting**

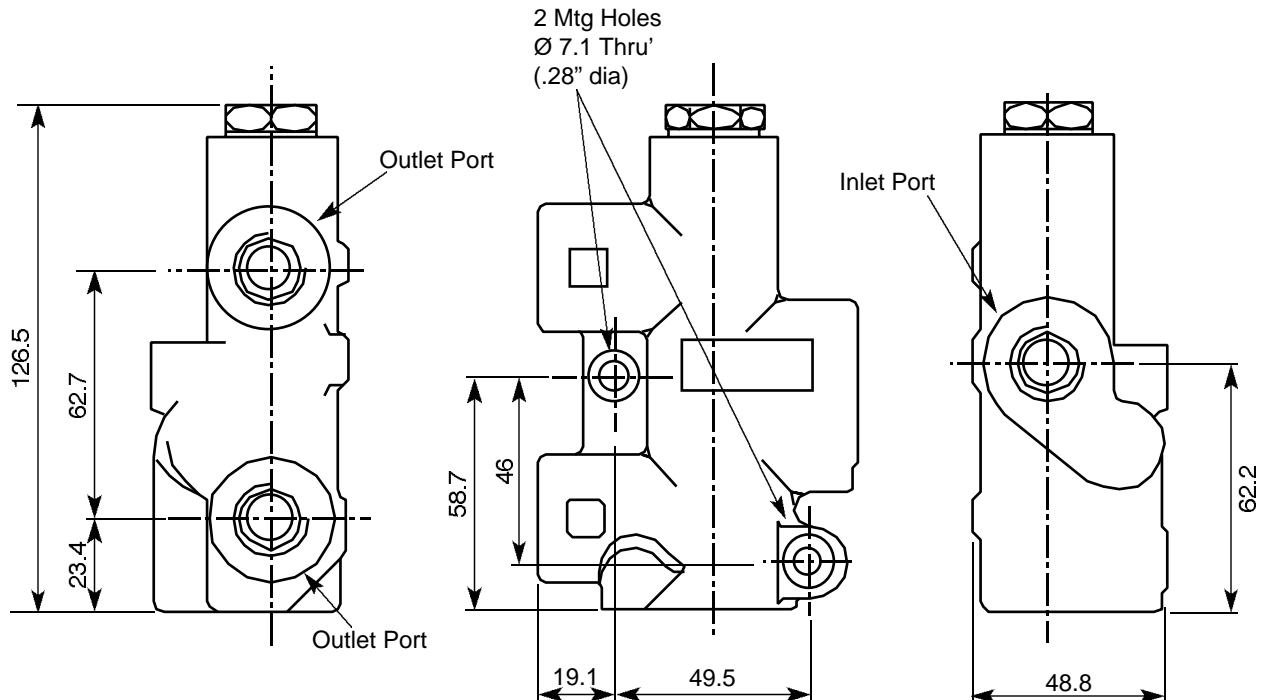
| Code | Inlet Port | Outlet Ports |
|------|------------|--------------|
| J    | 1/2" BSP   | 3/8" BSP     |
| S    | 3/4" BSP   | 3/4" BSP     |

**NOTE:** 'S' Ported Valve

This valve is produced from a 2FV2V body casting.  
For installation details see page 17

## INSTALLATION DETAILS

Dimensions in millimetres



\* Other threads available to special order.

# VFD 50 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:**

50 lpm

**Regulated Flow Capacity:**

see Table 1, ordering codes

**Porting:**

see Table 2 ordering codes

**Material:**

steel components in cast iron body: aluminium knob.

**Weight:**

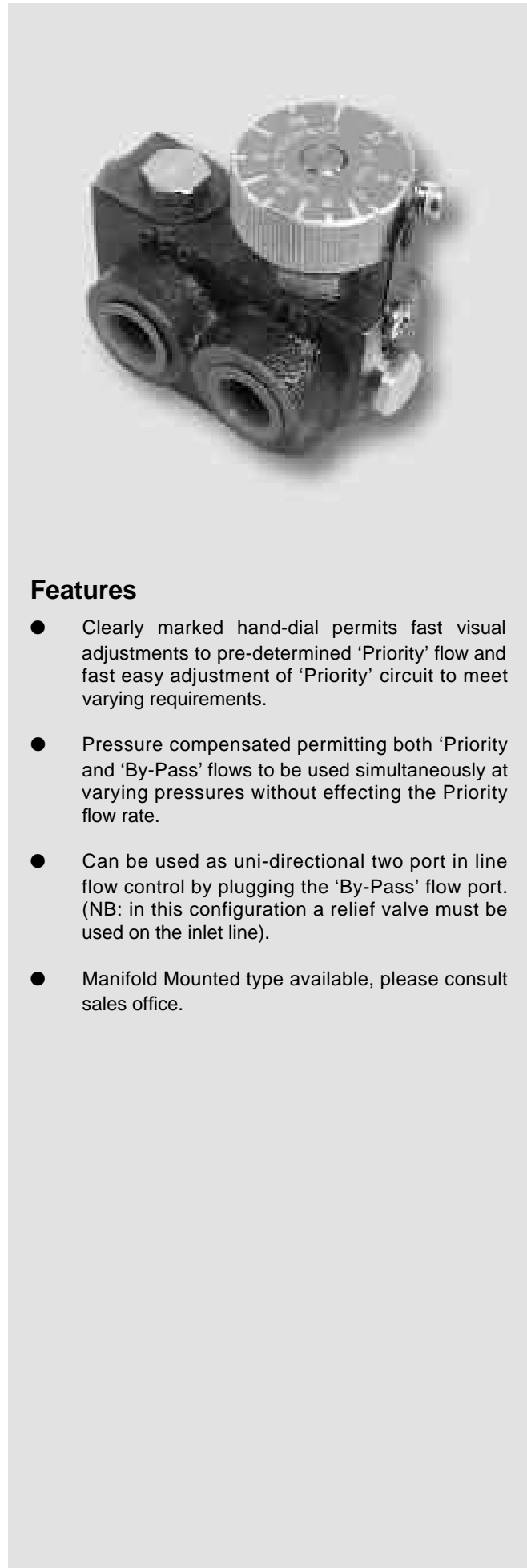
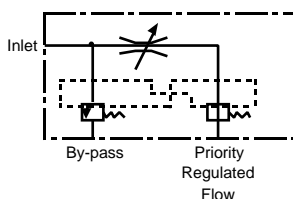
0.75 kg

**Mounting:**

2 Bolt - BSP Ported

4 Bolt - Manifold

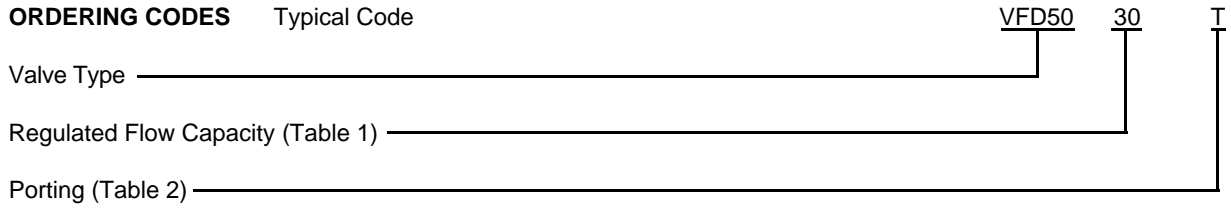
### Symbol



### Features

- Clearly marked hand-dial permits fast visual adjustments to pre-determined '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.
- Can be used as uni-directional two port in line flow control by plugging the 'By-Pass' flow port. (NB: in this configuration a relief valve must be used on the inlet line).
- Manifold Mounted type available, please consult sales office.

**ORDERING CODES** Typical Code



**Table 1: Regulated Flow**

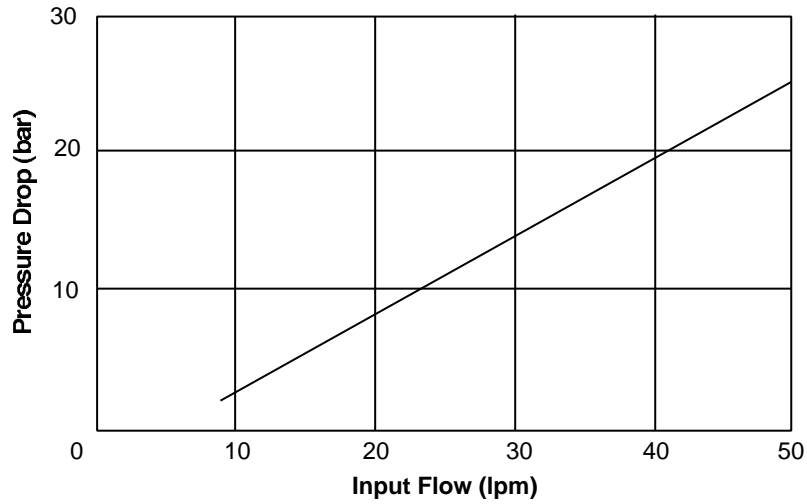
| Code | Regulated Flow |
|------|----------------|
| 15   | 0 - 15 lpm     |
| 30   | 0 - 30 lpm     |

**Table 2: Porting**

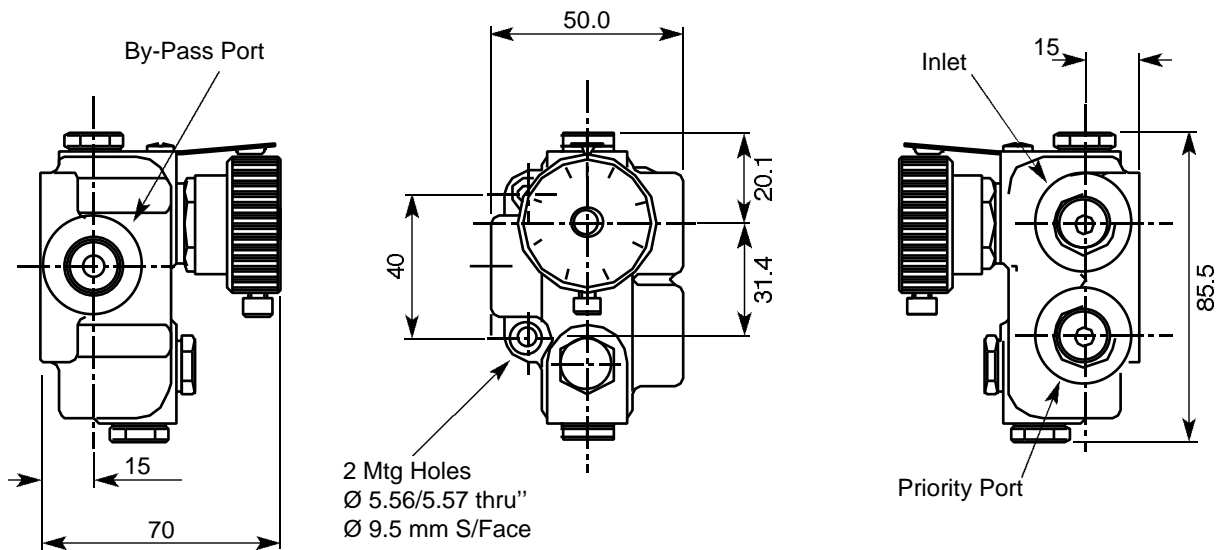
| Code | Port Type          |
|------|--------------------|
| T    | 3/8" BSP x 3 Ports |
| M    | Manifold Mounted   |
| A    | 3/8" NPT x 3 Ports |

**TYPICAL PRESSURE DROP VFD 50 SERIES**

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



**INSTALLATION DETAILS**  
Dimensions in millimetres



\* Other threads available to special order.

## 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 Kg

**Mounting:**

two bolt

**Relief valve:**

(optional) adjustable between 35 - 207 bar - Max.  
Priority flow : 50 lpm

#### Symbol

See Installation Details

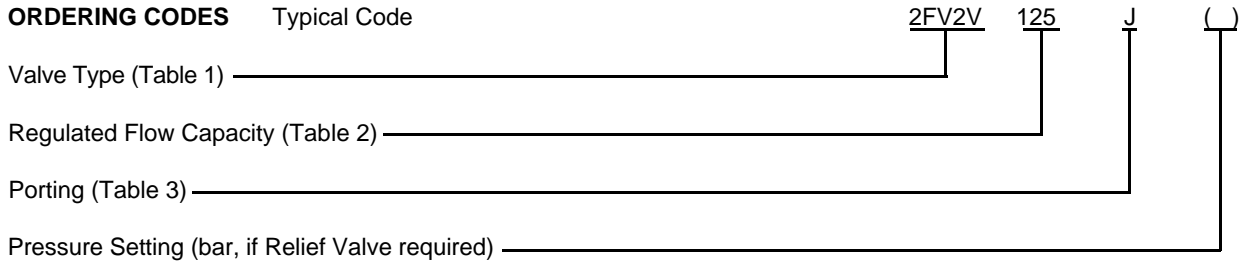


#### Features

- Clearly marked 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' flows 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. (NB: in this configuration a relief valve must be used on the inlet line).
- All models can be supplied with an adjustable Pressure Relief Valve on 'Priority' flow.

# Quality Hydraulic Components from the Webtec Range

**ORDERING CODES** Typical Code



**Table 1: Valve Type**

| Code      | Description  |
|-----------|--|
| 2FV2V     | No Relief Valve                                    |
| RV2FV2V   | Relief Valve between Priority and Excess Flow Port |
| RVXD2FV2V | Externally Drained Relief Valve                    |

**Table 2: Regulated Flow**

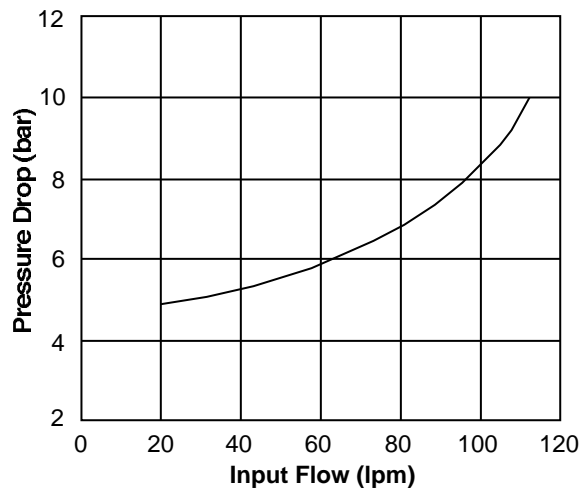
| Code | Regulated Flow |
|------|----------------|
| 030  | 0 - 11 lpm     |
| 050  | 0 - 19 lpm     |
| 080  | 0 - 30 lpm     |
| 125  | 0 - 47 lpm     |
| 200  | 0 - 76 lpm     |
| 250  | 0 - 95 lpm     |
| 300  | 0 - 114 lpm    |

**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                                 |
| A    | 3/4" NPT  | 1/4" NPT                                 |
| M    | M22 x 1.5   | M14 x 1.5                                |
| G    | 1.1/16" - 12 SAE                                  | 9/16" - 20 SAE                           |
| H    | 1/2" BSP  | 1/4" BSP                                 |
| T    | 3/8" BSP  | 1/4" BSP                                 |

## TYPICAL PRESSURE DROP 2FV2V SERIES

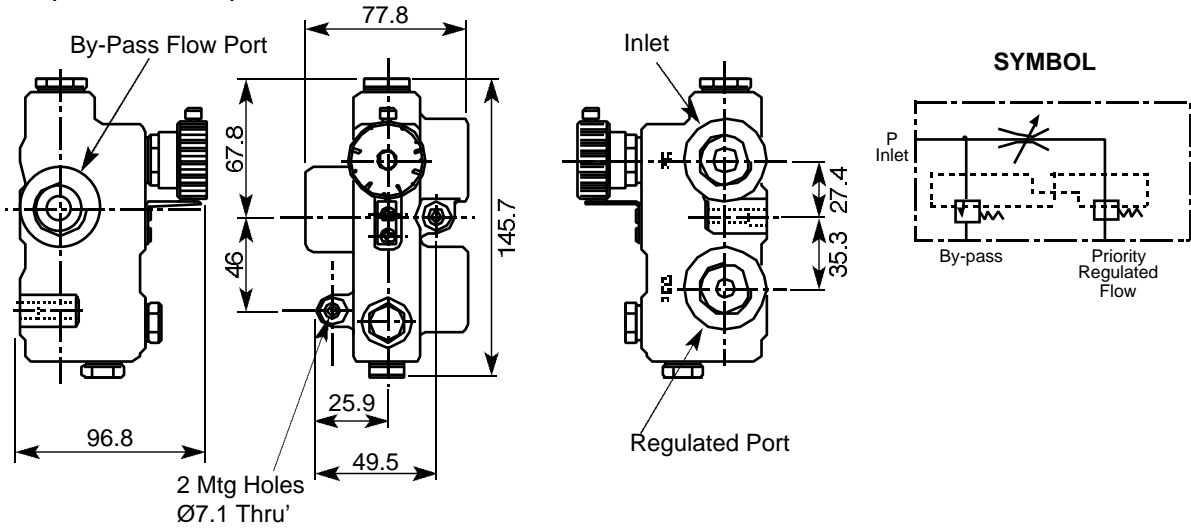
Curve established using hydraulic mineral oil ISO 32 with viscosity of 21 centistokes at 50°C



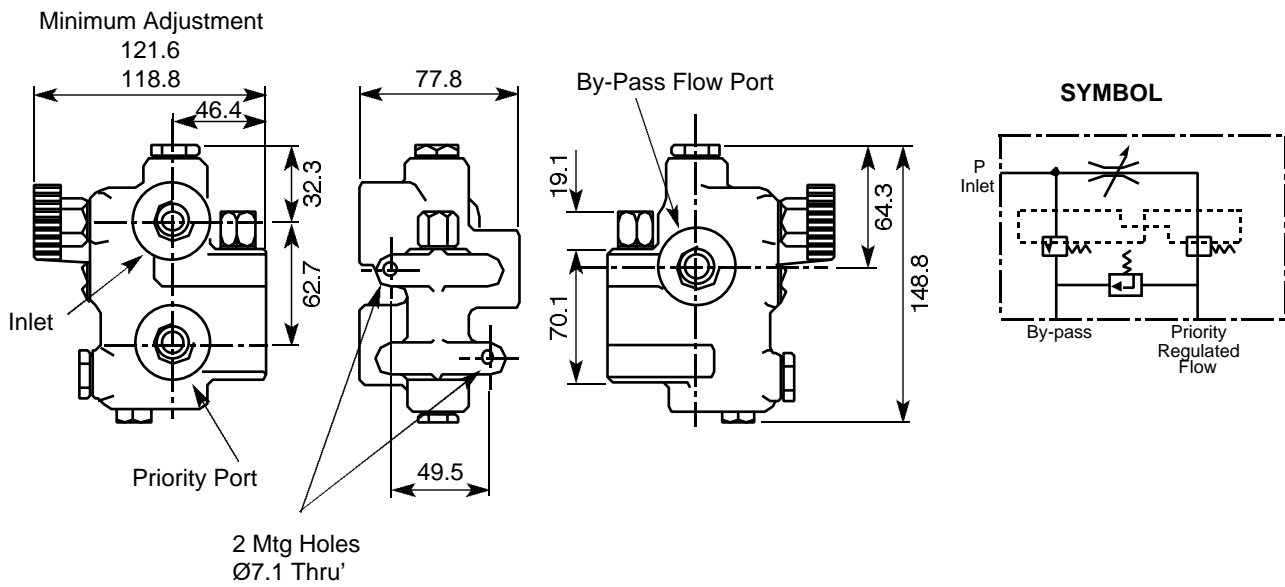
\* Other threads available to special order.

# Quality Hydraulic Components from the Webtec Range

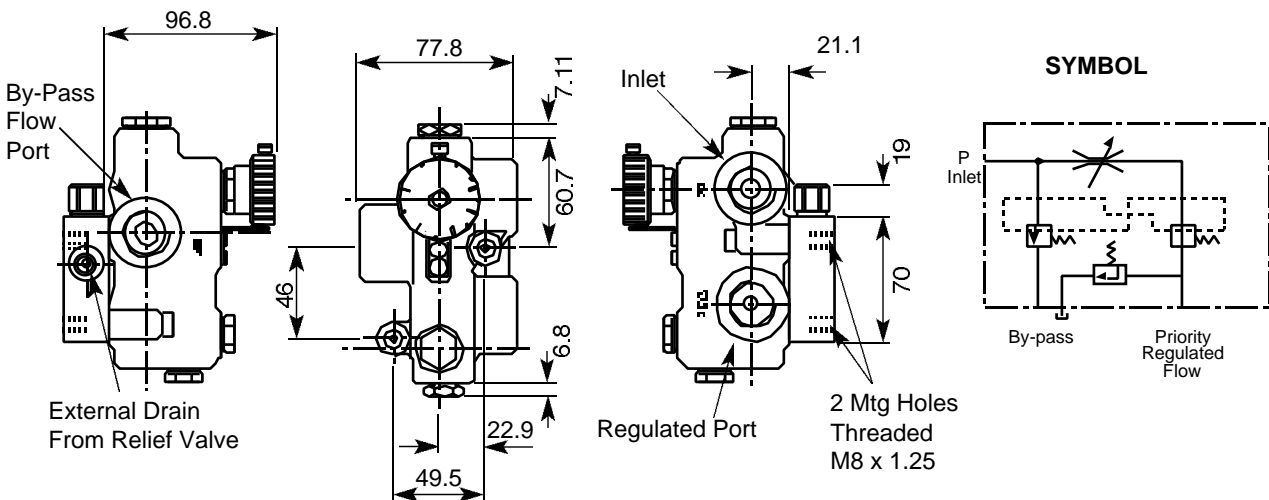
## INSTALLATION DETAILS Dimensions in millimetres 2FV2V (No Relief Valve)



## RV2FV2V (Internal Relief Valve between Priority and Excess Flow Ports)



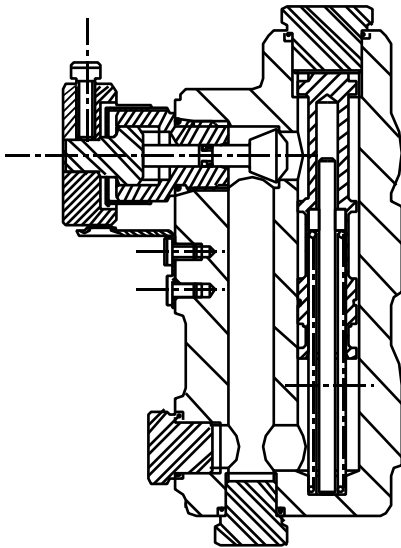
## RVXD2FV2V (Externally drained Relief Valve)



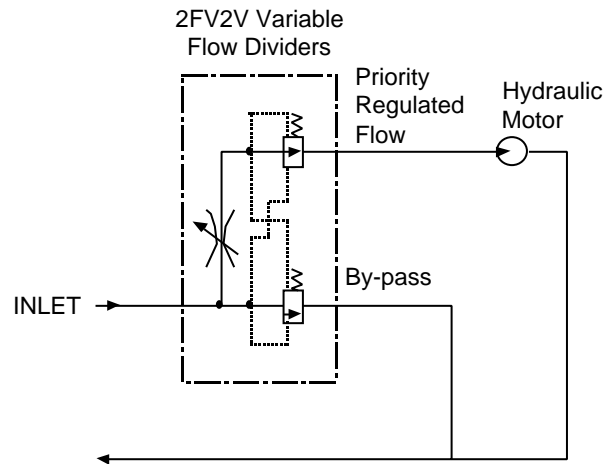


# Quality Hydraulic Components from the Webtec Range

## SECTIONED VIEW



## Circuit 1



## 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.

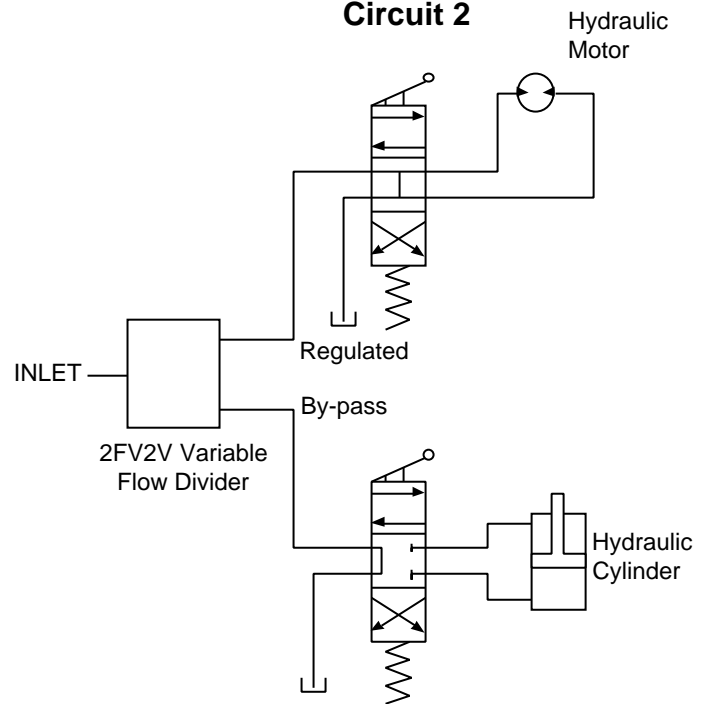
### 2 Two Circuits From a Single Pump

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.

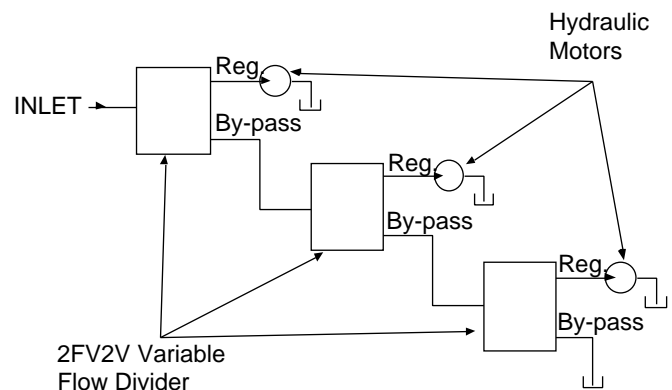
### 3 Multiple Circuits From a Single Pump

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

## Circuit 2



## Circuit 3



## 2FV2V Series

### Variable Priority Flow Divider with Motor Drive

**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

**Total Flow Capacity:**  
114 lpm

**Regulated Flow Capacity:**  
see Table 2, ordering codes

**Porting:**  
see Table 1

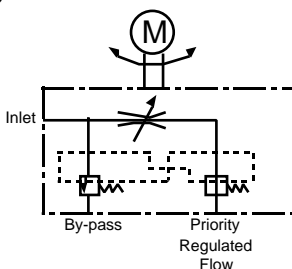
**Material:**  
Steel components in cast iron body

**Weight:**  
2.75 kg

**Power Supply:**  
12V

**Peak Current:**  
1.0 Amp

#### Symbol

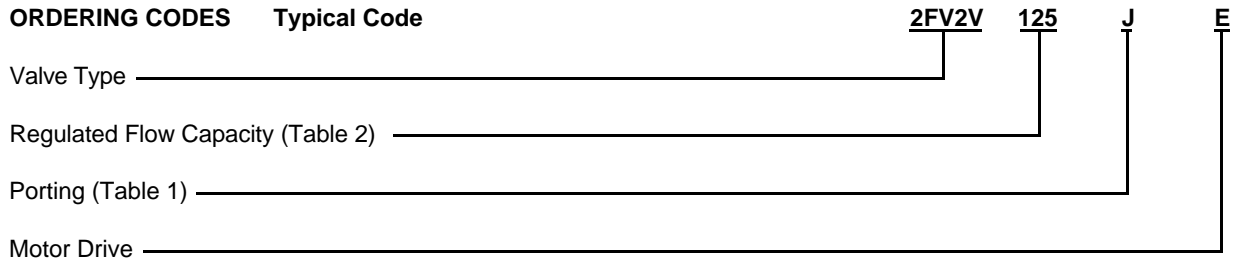


#### Features

- Min. to full Priority flow in 15 seconds.
- Powered from Nom. 12 VDC (12 - 16 VDC).
- Electric motor drive permits adjustment from a position away from the valve such as a cab or a control panel.
- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without effecting the 'Priority' flow rate.
- Can be used as unidirectional two port in line flow control by plugging the 'By-Pass' flow port . (NB: in this configuration a relief valve must be used on the inlet line).

# Quality Hydraulic Components from the Webtec Range

ORDERING CODES Typical Code



**Table 1: Porting**

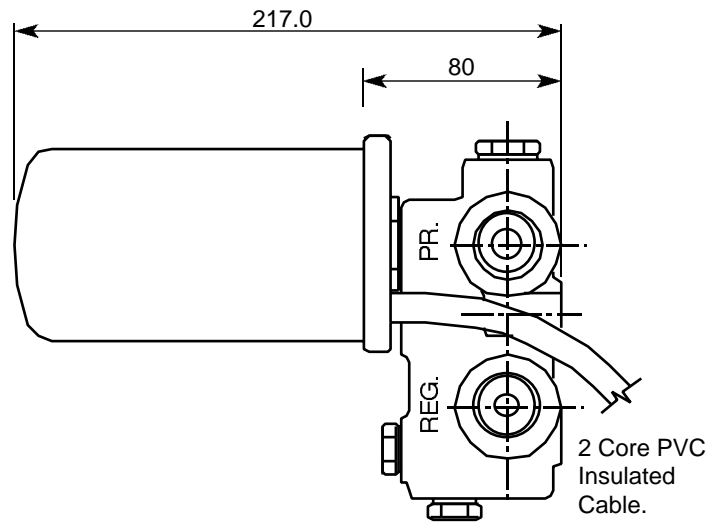
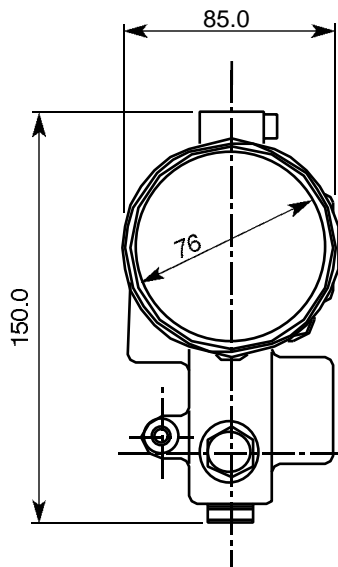
| Code | Port Threads |
|------|--------------|
| J    | 3/4" BSP     |
| M    | M22 x 1.5    |
| T    | 3/8" BSP     |

**Table 2: Regulated Flow**

| Code | Regulated Flow |
|------|----------------|
| 030  | 1/2 - 11 lpm   |
| 050  | 1/2 - 19 lpm   |
| 080  | 1/2 - 30 lpm   |
| 125  | 1/2 - 47 lpm   |
| 200  | 1/2 - 76 lpm   |
| 250  | 1/2 - 95 lpm   |
| 300  | 1/2 - 114 lpm  |

## INSTALLATION DETAILS

Dimensions in millimetres



| Power supply to |             |              |
|-----------------|-------------|--------------|
| Blue Cable      | Brown Cable | Function     |
| -ve             | +ve         | Valve opens  |
| +ve             | -ve         | Valve closes |

\* Other threads available to special order.

## FDM Series

# Variable Priority Flow Divider with Remote Proportional Control

THE FDM REMOTE CONTROL FLOW DIVIDER is ideally suited for the agricultural and industrial user seeking a cost-effective method of controlling hydraulic motor speed. The priority flow port gives an output independent of load pressure while the bypass port can be used to power a secondary circuit.

### Specifications

**Maximum pressure:**  
250 bar

**Total flow capacity:**  
114 lpm

**Regulated flow capacity:**  
see Table 2

**Porting:**  
see Table 1

**Material:**  
Steel components in a cast iron body.  
Drive mechanism mounted on aluminium supports

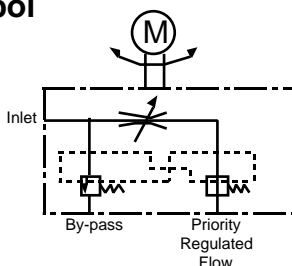
**Weight:**  
2.75 kg

**Power supply:**  
9 - 28 V

**Peak current:**  
2.5 A

**Average current:**  
< 100 mA

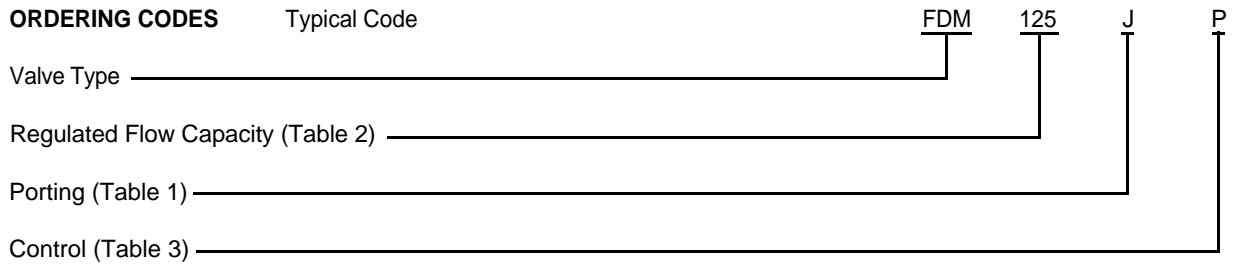
### Symbol



### Features

- Minimum to maximum priority flow in less than 3 seconds (at full pressure)
- 9 - 28 V D.C. supply enables unit to be powered from a vehicle supply
- Remote control using:  
Potentiometer  
4 - 20 mA Loop  
CAN Bus
- Remote operating distance: up to 40 m
- Pressure compensated permitting both 'priority' and 'bypass' flow to be used simultaneously at varying pressures without affecting the 'priority' flow rate
- Automatic current limiting to prevent overheating and motor overload
- Valve settings immune to power failure
- Tolerant to vibration and oil contamination
- Valve cover zinc plated and Teflon® coated for corrosion resistance  
*Teflon® is a Registered Trademark of DuPont*
- Dust / water protected to IP 675
- CE Marked

# Quality Hydraulic Components from the Webtec Range



**Table 1: Porting**

| Code | Port Threads |
|------|--------------|
| T    | 3/8" BSP     |
| H    | 1/2" BSP     |
| J    | 3/4" BSP     |

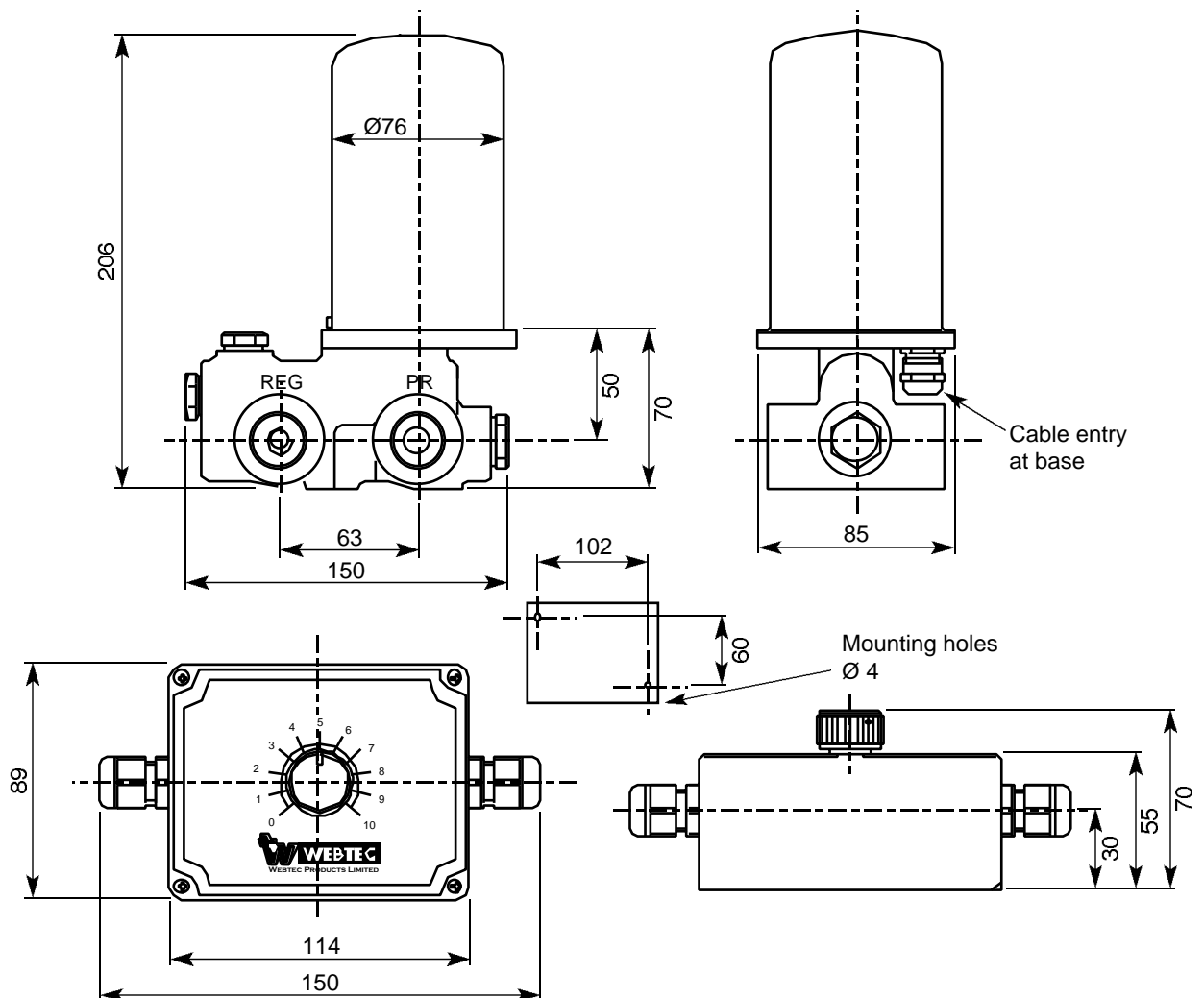
**Table 2: Regulated Flow**

| Code | Regulated Flow |
|------|----------------|
| 030  | 1/2 - 11 lpm   |
| 050  | 1/2 - 19 lpm   |
| 080  | 1/2 - 30 lpm   |
| 125  | 1/2 - 47 lpm   |
| 200  | 1/2 - 76 lpm   |
| 250  | 1/2 - 95 lpm   |
| 300  | 1/2 - 114 lpm  |

**Table 3: Control**

| Code | Control       |
|------|---------------|
| P    | Potentiometer |

**INSTALLATION DETAILS - VALUE**  
Dimensions in millimetres



\*Other threads available to special order.

## 2FV2V Series

# Manifold Mounted Variable Priority Flow Divider

**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 1  
ordering codes

**Material:**

steel components in cast iron body

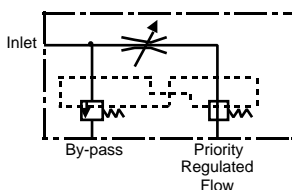
**Weight:**

2.75 kg

**Mounting:**

4 Bolt Manifold

### Symbol

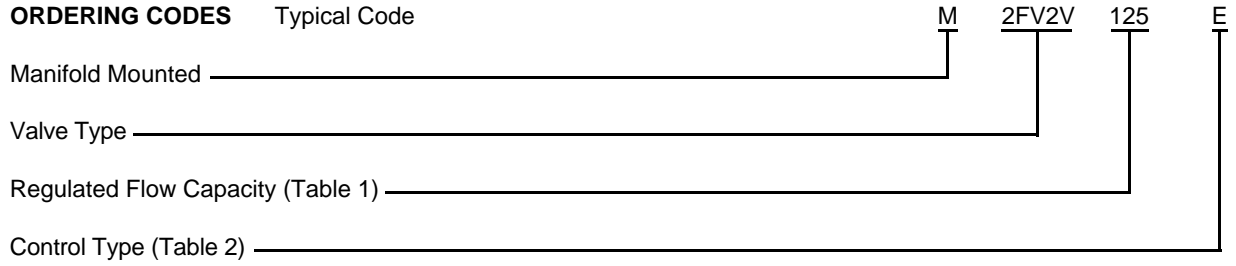


### Features

- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without affecting the 'Priority' flow rate.
- Can be used as uni-directional two port in line flow control by plugging the 'By-Pass' flow port. (NB: in this configuration a relief valve must be used on the inlet line).
- Available with:-  
Knob Adjustment (Page 17)  
Electric Motor Drive (Page 21)  
Positional control (Page 23)
- Manifold Mounted.

# Quality Hydraulic Components from the Webtec Range

## ORDERING CODES Typical Code



**Table 1: Regulated Flow**

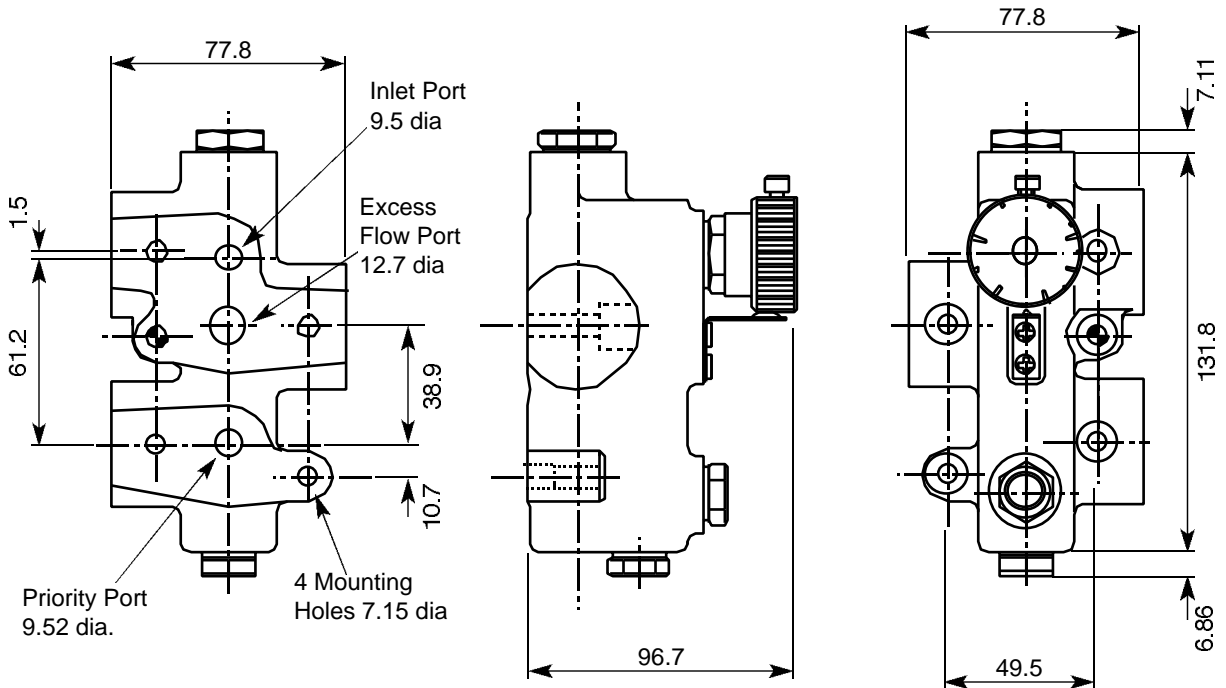
| Code | Control Type 'K' | Control Type 'Electric' |
|------|------------------|-------------------------|
| 030  | 0 - 11 lpm       | 1/2 - 11 lpm            |
| 050  | 0 - 19 lpm       | 1/2 - 19 lpm            |
| 080  | 0 - 30 lpm       | 1/2 - 30 lpm            |
| 125  | 0 - 47 lpm       | 1/2 - 47 lpm            |

**Table 2: Control Type**

| Code | Control               |
|------|-----------------------|
| K    | Knob                  |
| E    | Electric Motor Drive  |
| P    | Potentiometer         |
| mA   | 4 - 20mA Current Loop |

## INSTALLATION DETAILS ('K' TYPE)

Dimensions in millimetres



**NOTE: Other Installation Details**  
 For electric motor type see page 22  
 For potentiometer current loop type see page 24

# MM80 Series

## Manifold Mounted Variable Priority Flow Divider

**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 Working Pressure:**  
250 bar

**Total Flow Capacity:**  
80 lpm

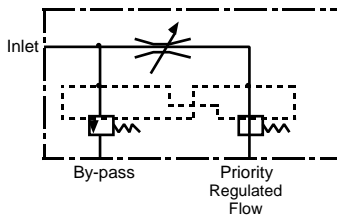
**Regulated Flow Capacity:**  
47 lpm

**Material:**  
steel components in cast iron body

**Weight:**  
3 kg

**Mounting:**  
4 bolt manifold

### Symbol



### Features

- Clear hand-dial permits fast visual adjustment to pre-determined 'Priority' flow and fast easy adjustments of 'Priority' circuit to meet varying requirements.
- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without affecting the 'Priority' flow rate.
- Manifold mounted.



# Quality Hydraulic Components from the Webtec Range

**ORDERING CODES** Typical Codes

Valve Type \_\_\_\_\_ MM 80 47

Flow Capacity \_\_\_\_\_ 80

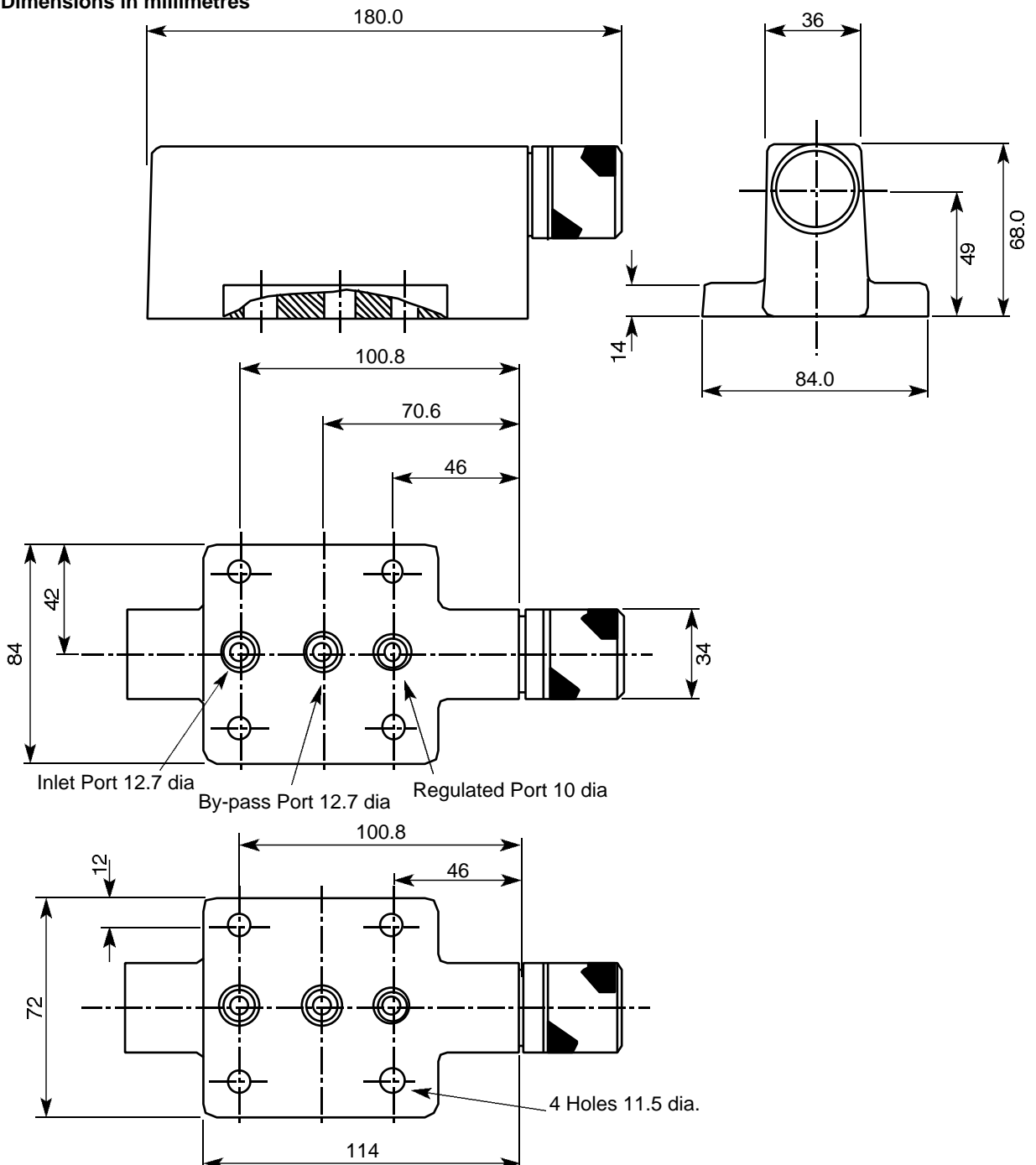
Regulated Flow (Table 1) \_\_\_\_\_ 47

**Table 1: Regulated Flow**

| Code | Regulated Flow |
|------|----------------|
| 12   | 1 - 12 lpm     |
| 30   | 1 - 30 lpm     |
| 47   | 1 - 47 lpm     |

**INSTALLATION DETAILS**

Dimensions in millimetres



# FVDVRV Series

## Variable Priority Flow Divider with Diverter Valve

**PRIORITY TYPE FLOW DIVIDER** 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:**

210 bar (working)

**Total Flow Capacity:**

80 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 available)

**Weight:**

4 kg

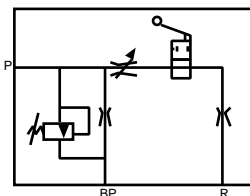
**Mounting:**

two bolt

**Relief valve:**

(optional) adjustable to 210 bar - max. flow 50 lpm.

### Symbol



### Features

- Adjusting knob permits fast easy adjustment of 'Priority' flow to meet varying requirements.
- Pressure compensated permitting both 'Priority' and 'By-Pass' flows to be used simultaneously at varying pressures without affecting the 'Priority' flow rate.
- Can be supplied with a pressure relief valve which is fitted between the 'Inlet' and 'By-Pass' ports. In this case the 'By-Pass' circuit should not be pressurised, i.e. the excess flow should be returned to tank.
- Diverter valve enables the 'Priority' flow to be switched 'on' or 'off' with the full flow being redirected through the 'By-Pass' port.

# Quality Hydraulic Components from the Webtec Range



**Table 1: Valve Type**

| Code   | Description  |
|--------|--|
| FVDV   | Variable Flow Divider with Diverter Valve                  |
| FVDVRV | Variable Flow Divider with Diverter Valve and Relief Valve |

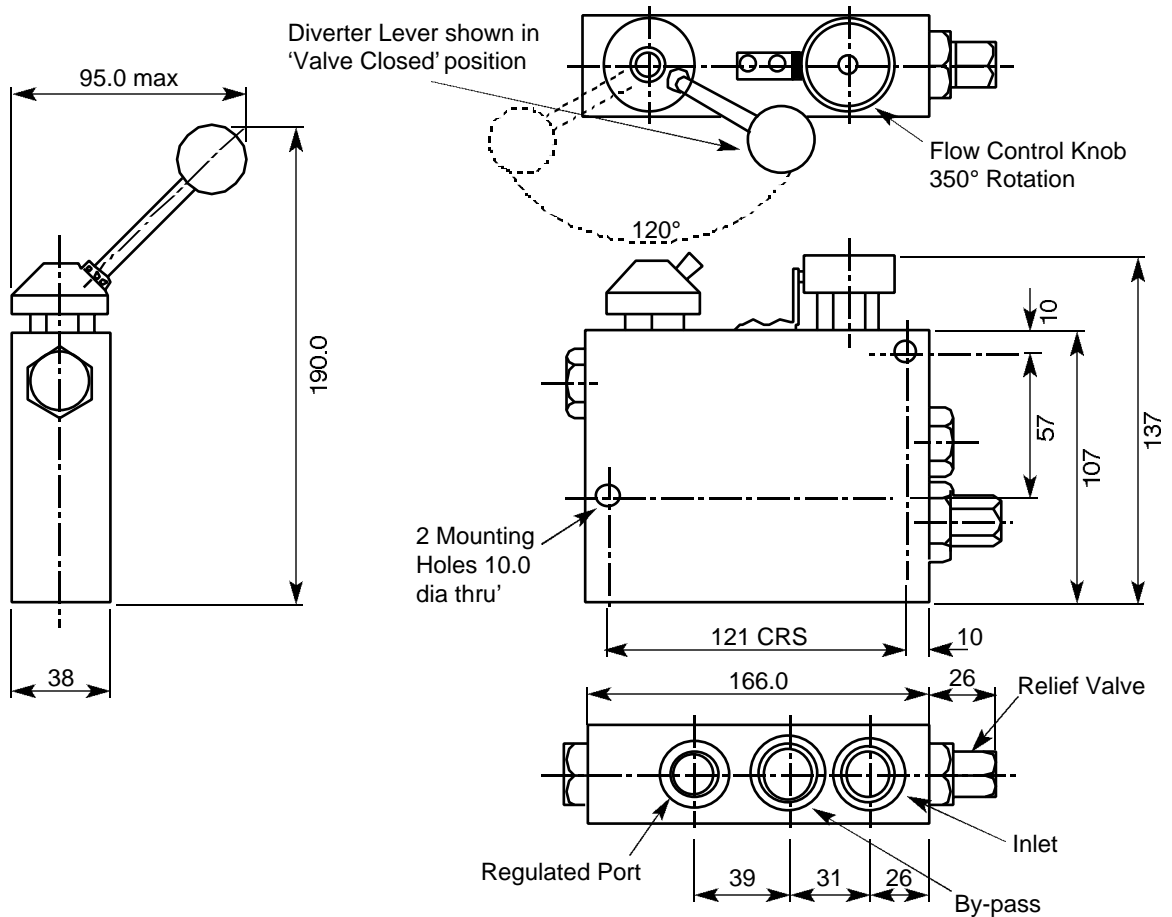
**Table 2: Regulated Flow**

| Code | Range      |
|------|------------|
| 010  | 0 - 10 lpm |
| 020  | 0 - 20 lpm |
| 030  | 0 - 30 lpm |
| 050  | 0 - 50 lpm |

**Table 3: Porting**

| Code | Inlet and by-pass | Priority |
|------|-------------------|----------|
| J    | 1/2" BSP          | 3/8" BSP |

**INSTALLATION DETAILS**  
Dimensions in millimetres



# FDC 60 Series

## Flow Divider Combiner

A **FLOW DIVIDER-COMBINER** will divide a single flow into two separate flows which will always be in the same ratio to each other regardless of any pressure differential between the two lines. If the flow is reversed (e.g. return stroke of two cylinders) the return flows are held in the same ratio to each other and combined into a single flow, regardless of individual loads on the cylinders

A common application is to keep two cylinders (or motors) in close unison when loads on them are unequal. The valves may also be used in series to operate more than two circuits.

### Specifications

**Maximum Pressure:**

310 bar (working)

**Total Flow Capacity:**

70 lpm

**Porting:**

see Table 2, ordering codes

**Materials:**

steel components in cast iron body

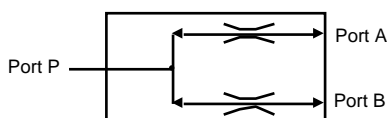
**Weight:**

2.05 kg

**Mounting:**

three bolt

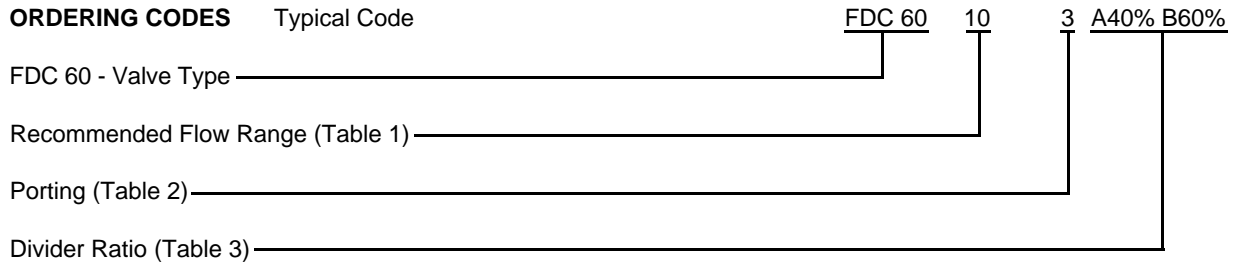
### Symbol



### Features

- Pressure compensated to keep the two divided flow rates at the same ratio regardless of pressure variations between them.
- Flow ratios are pre-set at factory from 50%/50% up to 10%/90%.
- Flow ranges are available from 5 lpm to 70 lpm.
- Cast iron/hardened steel construction (no aluminium) makes it suitable for mining applications.

# Quality Hydraulic Components from the Webtec Range



**Table 1: Recommended Flow Range**

| Code | Flow Range  |
|------|-------------|
| 05   | 2 - 5 lpm   |
| 10   | 5 - 10 lpm  |
| 20   | 8 - 20 lpm  |
| 30   | 16 - 30 lpm |
| 40   | 25 - 40 lpm |
| 50   | 35 - 50 lpm |
| 60   | 45 - 60 lpm |
| 70   | 55 - 70 lpm |

**Table 3: Divider Ratio**

| A     | B   |
|-------|-----|
| 50%   | 50% |
| thru' |     |
| 90%   | 10% |

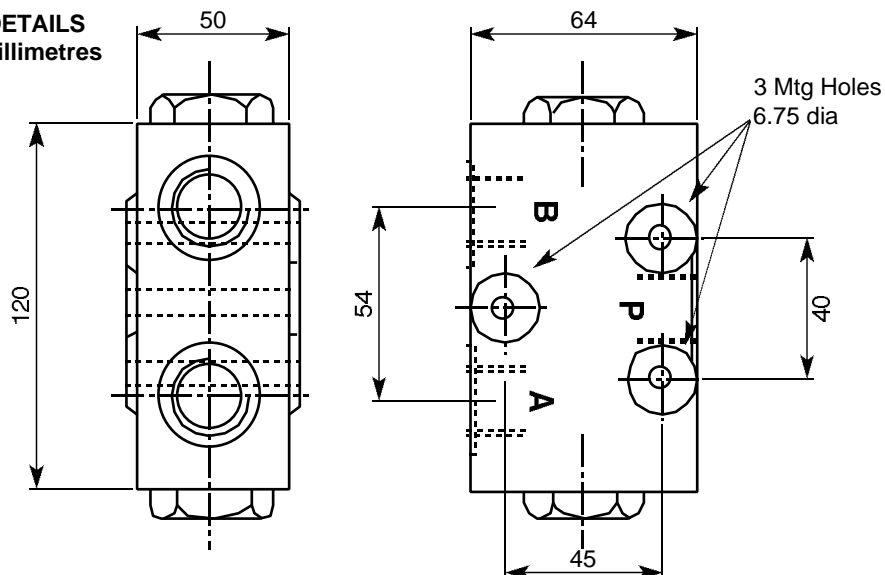
NB: Either outlet port (A or B) may be designated to take either leg of the ratios.

The example shown designates 40% at A and 60% at B. Any ratio from 50% to 90% 10% may be specified.

**Table 2: Porting** (choose from following codes)

| Code | Port P        | Port A        | Port B        |
|------|---------------|---------------|---------------|
| 1    | M18 x 1.5     | M18 x 1.5     | M18 x 1.5     |
| 2    | M22 x 1.5     | M18 x 1.5     | M18 x 1.5     |
| 3    | 3/8" BSP      | 3/8" BSP      | 3/8" BSP      |
| 4    | 1/2" BSP      | 3/8" BSP      | 3/8" BSP      |
| 5    | 1/2" BSP      | 1/2" BSP      | 1/2" BSP      |
| 6    | 7/8" - 14 SAE | 3/4" - 16 SAE | 3/4" - 16 SAE |
| 7    | M27 x 2       | M22 x 1.5     | M22 x 1.5     |
| 8    | 1/2" NPT      | 1/2" NPT      | 1/2" NPT      |

**INSTALLATION DETAILS**  
Dimensions in millimetres



\* Other threads available to special order.

# **Manufacturers of Hydraulic Components and Test Equipment for the Mobile, Industrial and Agricultural Industries**



Your Webtec Products representative:



**WEBTEC PRODUCTS LIMITED**

**Nuffield Road, St. Ives, Cambridgeshire, PE27 3LZ, UK**

**Tel: +44(0)1480 397400 Fax: +44(0)1480 466555**

**E-mail: [sales@webtec.co.uk](mailto:sales@webtec.co.uk)  
See us at: [www.webtec.co.uk](http://www.webtec.co.uk)**



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