

# CV120 Series

## Combination Valve - Variable Priority flow divider with Directional Control

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The CV120 valve is a very compact valve where a variable priority flow divider is combined with a directional control valve in one body. This reduces both cost and size by reducing the required number of hoses and fittings and allows for a more compact installation.

The CV120 flow control utilises the design and components from the established VFD120 series. This results in good flow to pressure characteristics allowing a consistent flow independent of load pressure.

The directional control element uses a hardened alloy steel spool with a number of control options and types available.

The valve has two pump inlets and two tank outlets which allow the plumbing to be connected either from the side or top of the valve. It also features a full flow pilot operated relief valve which protects the A and B regulated ports.

There is also an option available to have full inlet flow from the A port and regulated flow from the B port. This is useful when using one port to feed a track motor requiring full pump flow and a regulated port to control the speed of a second motor.

It is also possible to connect valves in series using a HPCO coupling.

If a HPCO (fitted to T1) is installed for the use of downstream valves, a second pressure relief valve is required to control the pressure out from the HPCO.

In this instance the two relief valves work independent of each other.

### Features

- **Clearly** marked single-turn hand dial permits fast visual adjustments to pre-determined 'Priority' flow
- **Pressure** compensated permitting both 'Priority' and 'By-Pass' to be used simultaneously at varying pressures without affecting the 'Priority' flow rate
- **Easy** installation allowing side or top connections
- **Bankable** using a HPCO coupling & standard fittings
- **Adjustable** relief valve factory setting 220 bar (3200 psi)

### Specifications

**Maximum Operating Pressure:** 250 bar (3600 psi)

**Total Flow Capacity:** 120 lpm (32 USgpm)

**Regulated Flow Capacity:** 0 - 95 lpm (0 - 25 USgpm)

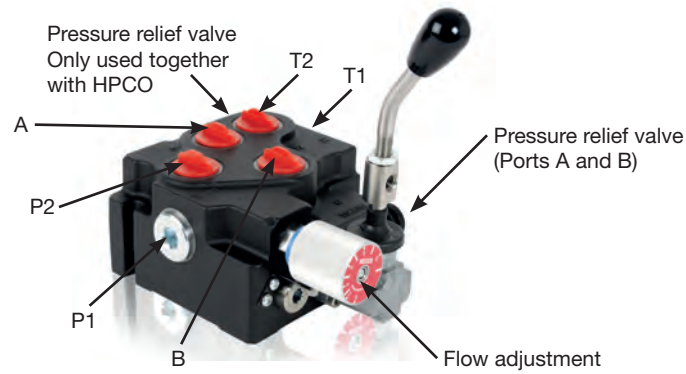
**Porting:** See table 4, ordering codes

**Material:** Steel components in cast. Iron body: aluminium knob.

**Weight:** 8.9 kg (19.5 lbs)

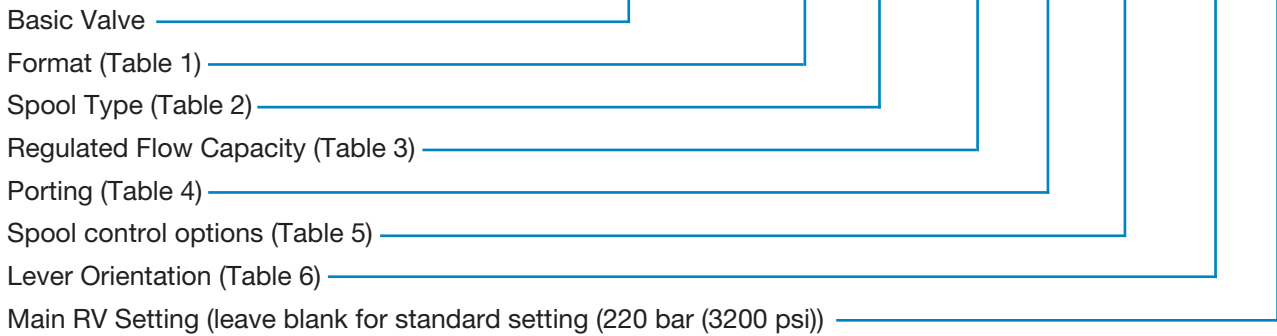
**Mounting:** 2 Bolt M8 or 5/16" fixings





### Ordering Codes

Typical Code: CV120      AA   BB   (CCC(C)   D   E   F   (aaa)



**Table 1 (AA):** Format

Code	Feature
SV	Single Relief Valve

**Table 2 (BB):** Spool Type

Spool Type	
	DA - Double Acting
	MR - Motor Spool

**Table 3 (CCC(C):** Regulated Flow Capacity

Code	Regulated flow on A&B	Regulated flow on B. Full flow on A
160	0 - 60 lpm (16 US gpm)	N/A
250	0 - 95 lpm (25 US gpm)	N/A
160B	N/A	0 - 60 lpm (16 US gpm)
250B	N/A	0 - 95 lpm (25 US gpm)

**Table 4 (D):** Porting \*

Code	Port thread size
J	3/4" BSPP
G	1-1/16" -12UN #12 SAE ORB

\* Other threads are available for special order

**Table 5 (E):** Spool control options

Spool Control		
	Spring centred. 3 position	4
	Detent. 3 position	3

**Table 6 (F):** Lever orientation

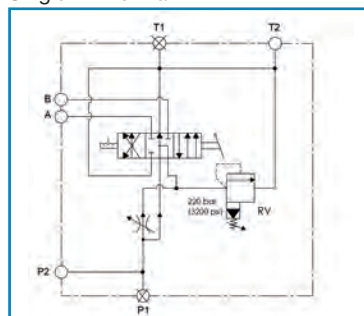
Code	Orientation
B	Down - Facing away from service ports
E	Up - Same direction as service ports (as shown)

**The following options are available:**

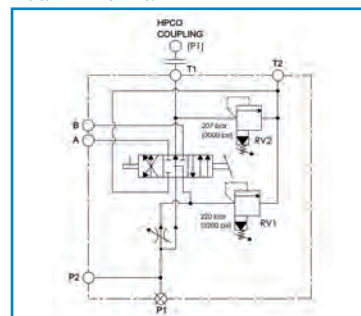
- HPCO-C-J HPCO Coupling 3/4"BSPP
- HPCO-A-J HPCO Adaptor 3/4"BSPP
- HPCO-C-G HPCO Coupling 1-1/16" UN #12SAE
- HPCO-A-G HPCO Adaptor 1-1/16" UN #12SAE
- RV120-PO
- 2nd Relief valve - Factory set to 207 bar (3000 psi)
- This is required only if an HPCO is fitted.

### Symbols:

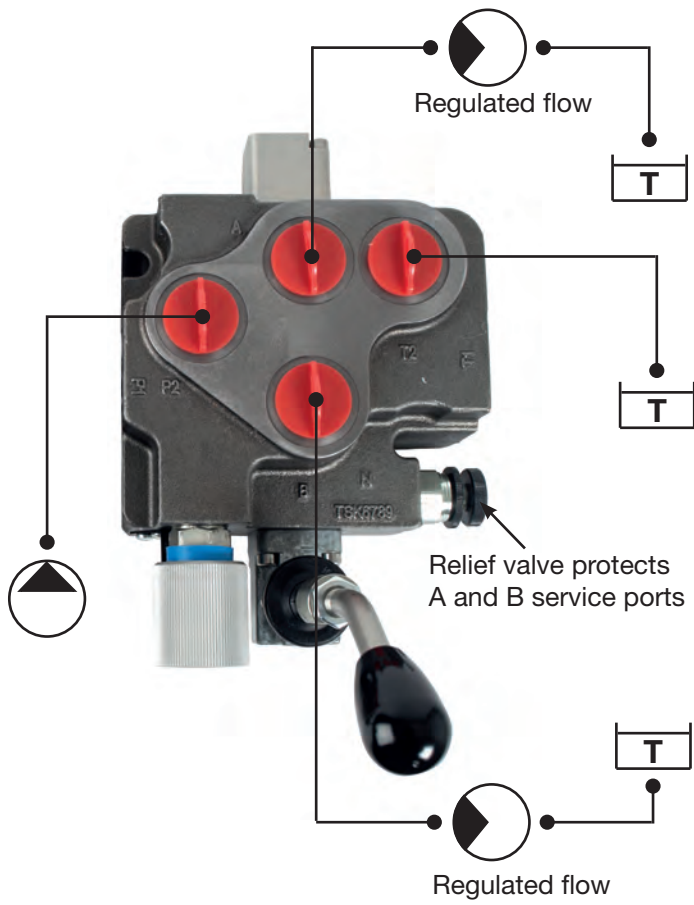
Single RV Format



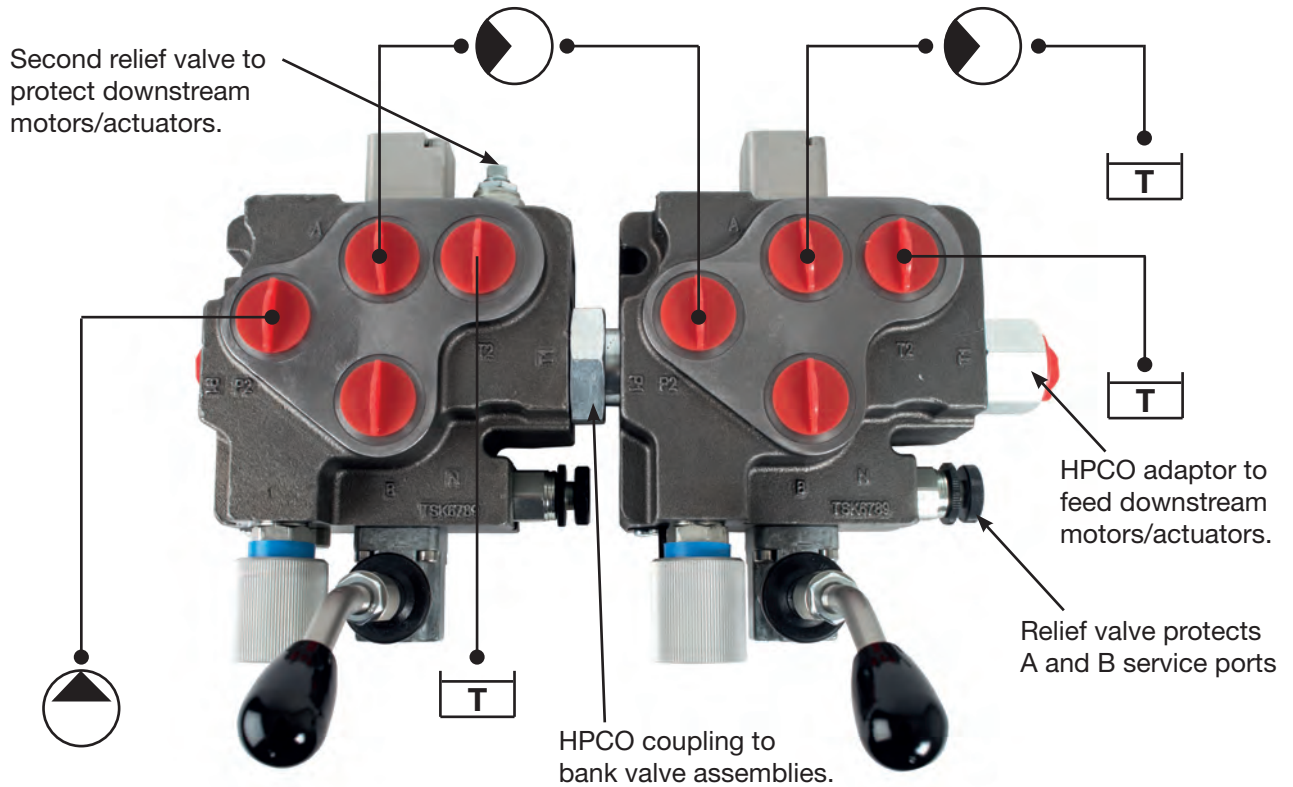
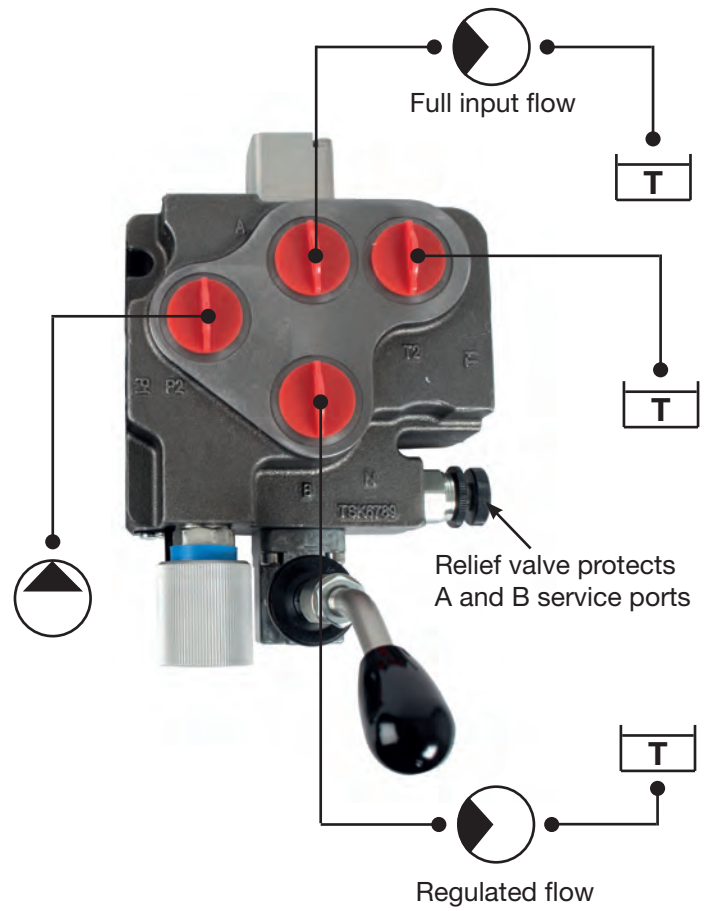
Dual RV Format



160 & 250



160B & 250B



### Dimensions in mm (Inches)

