CV120-BU-ENG-3552.pdf - 10/24 - ISSUE 4.0

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CV120 Series

Combination Valve - Variable Priority flow divider with Directional Control

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.

Specifications

Maximum Rated Pressure:	Up to 250 bar, 3600 psi	
Total Flow Capacity:	120 L/min, 32 US gpm	
Regulated Flow Capacity:	Up to 95 L/min, 25 US gpm	
Fluid Temperature Range:	-30 to 120 °C, -22 to 248 °F,	
Ambient Temperature Range:	-30/to 50 °C, -22 to 122 °F	
Compatible Fluids:	Mineral oils to ISO 11158. Other fluids consult sales office.	
Porting:	BSPP. SAE	
Material:	Steel components in cast Ductile Iron body painted black	
	Aluminium knob	
Weight:	8.9 kg, 19.5 lb	
Mounting:	2 Bolts - M8 or 5/16"	
/		
Symbol: Single RV Format /Symbo	DI: Dual RV Format	



Features

- Clearly marked single-turn hand dial permits fast visual adjustments to predetermined '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).





Sales Order Code

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

TYPICAL CODE	DESCRIPTION	SEE TABLE	YOUR CODE
CV120	Basic Valve	-	CV120
SV	Format	Table 1	
DA	Spool Type	Table 2	
250B	Regulated Flow Capacity	Table 3	
J	Porting	Table 4	
3	Spool Control Options	Table 5	
В	B Lever		
	Main RV Setting*	-	

*Unless otherwise stated, factory set to 220 bar, 3200 psi.

Table 1: Format

CODE	DESCRIPTION
SV	Single Relief Valve

Table	2:	Spool	Туре
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CODE	SYMBOL	DESCRIPTION
DA		Double Acting
MR		Motor Spool

Table 3: Regulated Flow Capacity

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CODE	REGULATED FLOW ON A & B		REGULATED FULL FL	
	L/min	US gpm	L/min	US gpm
160	0 - 60	0 - 16	N.	/A
250	0 - 95	0 - 25	N	/A
160B	N/A		0 - 60	0 - 16
250B	N/A		0 - 95	0 - 25

Table 4: Porting**

CODE	DESCRIPTION
J	3/4" BSPP
G	1-1/16" -12UN #12 SAE ORB

**Other threads available for special order

Table 5: Spool Control Options				
CODE	SYMBOL	DESCRIPTION		
3		Detent. 3 position		

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Table 6: Lever Orientation

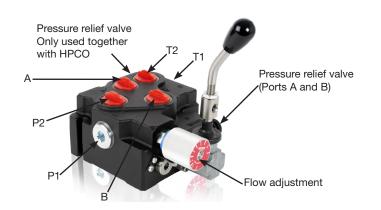
DESCRIPTION
Down - Facing away from service ports
Up - Same direction as service ports***

*** As shown in image

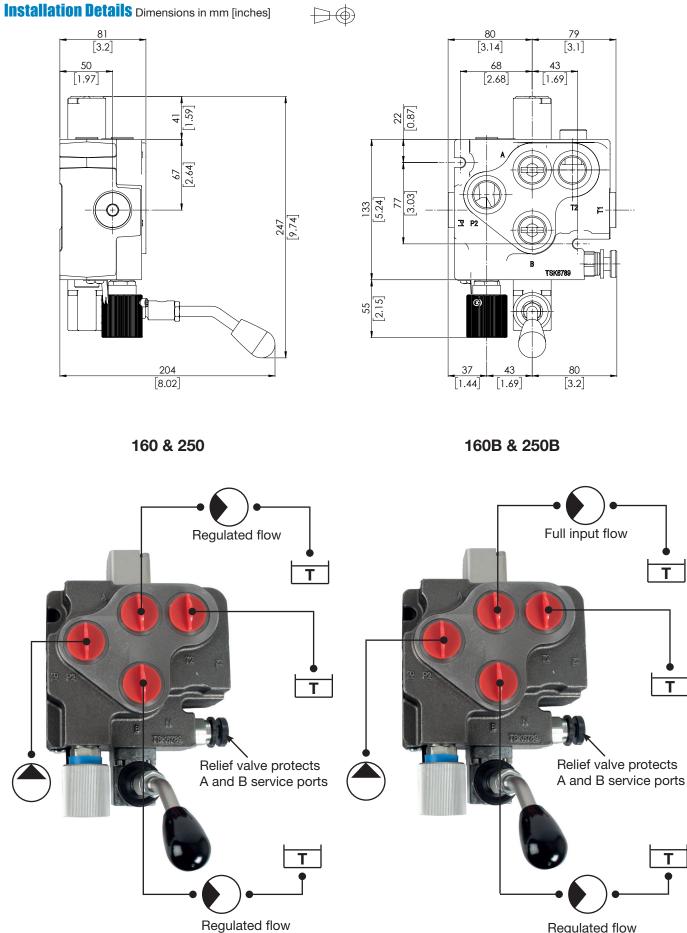
Options Vailable			
MODEL NUMBER	DESCRIPTION		
HPCO-C-J	HPCO Coupling 3/4"BSPP		
HPCO-A-J	HPCO Adaptor 3/4"BSPP		
HPCO-C-G	HPCO Coupling 1-1/16" UN #12SAE		
HPCO-A-G	HPCO Adaptor 1-1/16" UN #12SAE		
RV120-PO	2nd Relief Valve****		

****Factory set to 207 bar, 3000 psi. This is required only if an HPCO is fitted.

Spring centred. 3 position

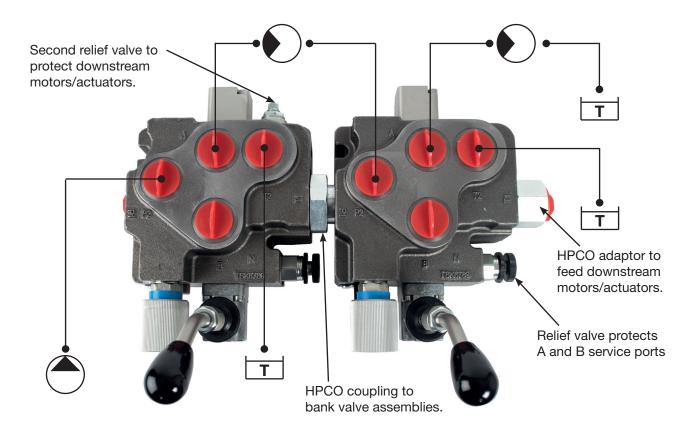






Regulated flow





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