# **Flow Control Valves**

700 BAR Rated



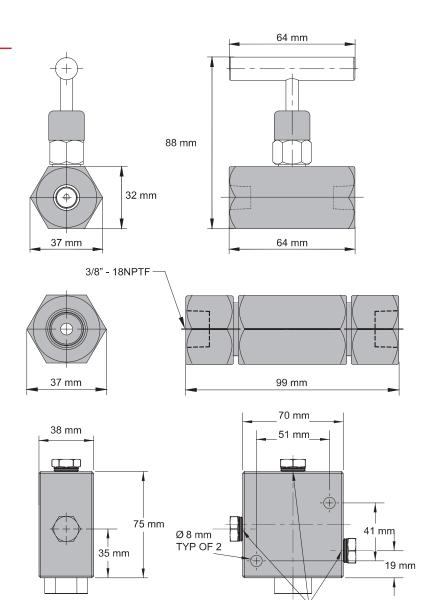
CVN1 and CVN3



CVC3

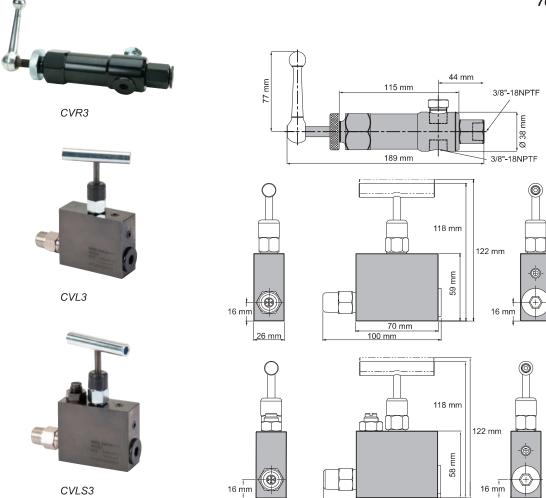


CVP3



3/8"-18 NPTF

Valve Type	Model Number	Ports	Applications	Hydraulic Symbol
Needle Valve	CVN1	1⁄4"-18NPTF		
	CVN3	%"-18NPTF	Controls cylinder speed and acts as temporary shut- off valve for load holding.	
Check Valve	CVC3	%"-18NPTF	Allows flow in one direction only.	
Pilot Operated Check Valve	CVP3	%"-18NPTF	Mounted in line with a cylinder which will hold pressure in the event of pressure loss in the system. Most often used on double-acting cylinders with pilot port, receiving pressure from a tee off of the cylinder retracting line. Pilot pressure ratio 15% or 6.5:1	



Valve Type	Model Number	Ports	Applications	Hydraulic Symbol
Pressure Relief Valve	CVR3	%"-18NPTF	Controls pressure developed by the pump in hydraulic loop. By-pass occurs when preset pressure reaches 0-10,000 PSI. Turn clockwise to increase pressure, counter-clockwise to decrease.	
	CVR3/H	%"-18NPTF	Same as CVR3, but return line hose / 1 meter length is included.	
Manual Operated Check Valve	CVL3	%"-18NPTF	Mounted in line with a cylinder and will hold pressure in the cylinder in the event of pressure loss in the system.  Pressure is manually released.	
	CVLS3	%"-18NPTF	Mounted in line with a cylinder and will hold pressure in the cylinder in the event of pressure loss in the system. This model is equipped with high-pressure bypass. Pressure is manually released.	

70 mm 100 mm



## **Solenoid Valves**

### **Pump Mounted**

Pump mounted solenoid kits convert your manual pump to an electrically controlled pump.



Use With Cylinder	Model Number	Valve Type	Valve Function	Hydraulic Symbol	Schematic Flow path	Weight (kg)
Single	PWS3	Solenoid 24 VDC	Advance/ Hold/Re- turn	A P T		3.4
Acting	PWS3L	-	Locking Plate	A P TIS		4.7
Double	PWS4	Solenoid 24 VDC	Advance/ Hold/Re- turn	A B PT	AB A	3.9
Acting	PWS4L	-	Locking Plate	A P T B	PT PT PT PT	5.2

## **Pressure Control Valve**

### PPC-1/PPC-2

- Modular valve with one or two cartridges.
- Excellent pressure adjustment over the entire operating range.





Valve	Model Number	Hydraulic Symbol		
Pressure Control Valve	PPC-1			
Flow Control Valve	PFC	*		

## **Flow Control Valve**

#### PFC

· Throttle check valves

# **Pump Mounted Manifold Block**

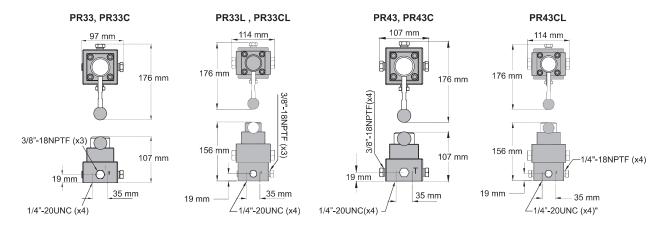
### CMR2

- Converts BVA pumps with mounted valves for use with remote mounted valves
- · 4 mounting bolts



## **Remote Mounted Directional Control Valves**

Not to be used with Hand Pumps



Valve Operation	Valve Type	Use w/ Cylinder		Model Number	Hydraulic Symbol	So	chematic Flow pa	ith	Weight (kg)
	3-Way, 3 Position, Tandem center	Single Acting	PR33		A P T	T A P	A P	A A P A	1.59
	3-Way, 3 Position, Closed center		PR33C		A P T	A P A	A P A	A A P A	1.59
	3-Way, 3 Position, Tandem center, Locking		PR33L		A P T	T A P	A P	A P A	2.59
	3-Way, 3 Position, Closed center, Locking		PR33CL		A P T	A P A	A P A	A P A	2.59
Manual	4-Way, 3 Position, Tandem center	Double Acting	PR43	-	A B P T	A B B	A B B	A B B	1.59
	4-Way, 3 Position, Tandem center, Locking		PR43L	*	A B P T	A B B P A	A B B	A B B P A	2.59
	4-Way, 3 Position, Closed center		PR43C	*	A B P T	A B B	T B B ← P ♠	A B B	1.59
	4-Way, 3 Position, Closed center, Locking		PR43CL		A B P T	A B B	A B B P A	A B B	2.59

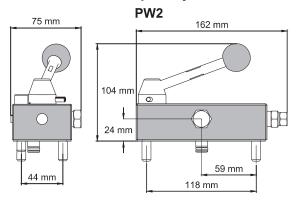
All valves have a detent in the center position.

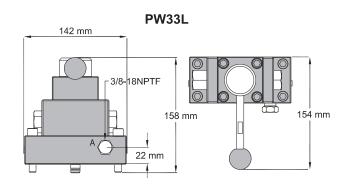




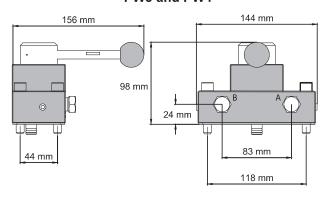
# **Pump Mounted Valves**

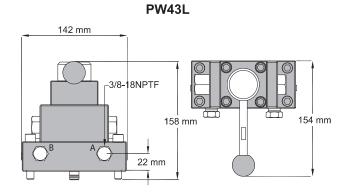
## For PE, PG and PD Pumps Only





#### PW3 and PW4





Valve Operation	Valve Type	Use w/ Cylinder		Model Number	Hydraulic Symbol Schematic Flow path		Weight (kg)
	3-Way, 2-Position	Single Acting	PW2		A P T	A T T	1.81
	3-way, 3-Position, Tandem center	Single Acting	PW3		A B P T	A T P T P T T	1.81
Manual	4-Way, 3-Position, Tandem center	Double Acting	PW4		A B P T	A D B A D B A D T T	1.36
	3-Way, 3-Position, Tandem center, Locking	Single Acting	PW33L		A P T	A T P T T T	2.72
	4-Way, 3-Position, Tandem center, Locking	Double Acting	PW43L		A B P T	A B A D T P T T	2.72