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*Global Suppliers of Premium Hydraulic Components*

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# PVR-1 SERIES VANE PUMPS

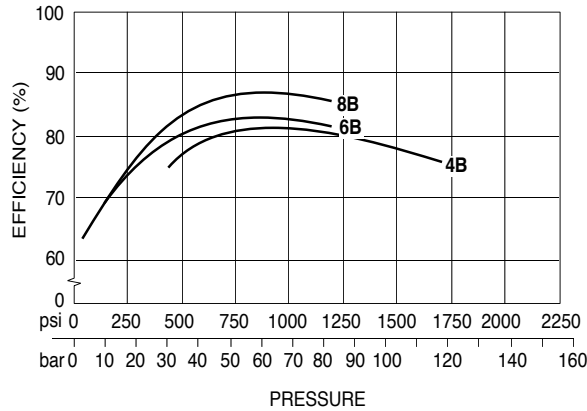
VARIABLE DISPLACEMENT, PRESSURE COMPENSATED



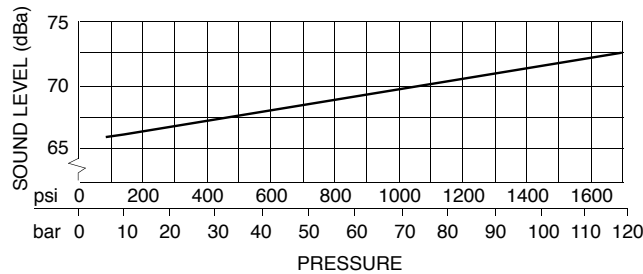
**Manifold Mounted**

## OVERALL EFFICIENCY

1750 rpm at Full Displacement



## TYPICAL SOUND LEVEL @ 1750 rpm



## TYPICAL PERFORMANCE SPECIFICATIONS

		PUMP SIZE			
		4B	6B	8B	
VOLUMETRIC DISPLACEMENT*	cu. in./rev.	0.7	0.9	1.2	
	ml/rev.	11.5	14.8	19.7	
PUMP DELIVERY AT 1750 RPM*	91.5 psi	gpm	5	7	9.5
	6.3 bar	lpm	19	26.5	36
	rated	gpm	4	6	8
	pressure	lpm	15.1	22.8	30.5
COMPENSATED PRESSURE RANGES	Max.	psi	1500	1000	1000
		bar	103	69	69
	Rated	psi	1500	1000	1000
		bar	103	69	69
	Min.	psi	400	100	100
		bar	28	7	7
OPERATING SPEEDS**	Min. rpm	800			
	Rated rpm	1750			
	Max. rpm	3600			
POWER INPUT AT RATED FLOW & PRESSURE (1750 rpm)	hp	5	5	6	
	kW	3.7	3.7	4.4	
SUCTION	PRESSURE	Max. psi	10		
		bar	0.7		
		Min. in./Hg	7		
	Specific Gravity < 1	bar	-0.25		
		Min. in./Hg	5		
		Specific Gravity > 1	bar	-0.17	
FLUID VELOCITY	Max. ft./sec.	5			
	m/sec.	1.5			
CASE DRAIN	NOMINAL FLOW AT DEADHEAD PRESSURE	Max. cipm	65	36	55
		mlpm	1065	600	900
	Min. PRESSURE	cipm	25	10	24
		mlpm	410	170	390
MAXIMUM CASE PRESSURE	psi	10			
	bar	0.7			
WEIGHT	lbs.	20			
	kg	9			

**NOTES:**

- \* Volumetric displacement is measured displacement at 91.5 psi (6.3 bar) and rated rpm. Volumetric displacement varies with both pressure and rpm. Flow rates at any rpm other than the rated rpm may be approximated as follows:  
 $Q_2 = Q_1 (N-142)/1667$  where  $Q_1$  = Flow (gpm) at rated rpm at 91.5 psi (6.3 bar).  
 $Q_2$  = Flow (gpm) at N rpm.  
 N = rpm at which  $Q_2$  is to be determined.
- \*\* **6B** - Maximum rpm at full displacement - 2800 rpm. For higher rpms up to 3600 rpm, pump displacement must be reduced to limit flow to 9.5 gpm (36 lpm) maximum.  
**8B** - Maximum rpm at full displacement - 2100 rpm. For higher rpms up to 3600 rpm, pump displacement must be reduced to limit flow to 9.5 gpm (36 lpm) maximum.

## PRESSURE and VOLUME ADJUSTMENT SENSITIVITY

		PUMP SIZE		4B			6B		8B		
		PRESSURE CODE		10	15	03	06	10	03	06	10
PRESSURE ADJUSTMENT	Press Change/Turn	psi (bar)		255 (17.8)	270 (18.6)	115 (7.9)	210 (14.5)	240 (16.5)	115 (7.9)	210 (14.5)	240 (16.6)
	Max. Torque	ft./lbs. (kg/m)		4.0 (0.55)	6.0 (0.83)	1.4 (0.19)	2.6 (0.36)	4.0 (0.55)	1.4 (0.19)	2.6 (0.36)	4.0 (0.55)
VOLUME ADJUSTMENT	Flow Change/Turn	gpm (lpm)		3.4 (12.5)			4.6 (17.4)		4.6 (17.4)		
	Min. Flow Adjust.	gpm (lpm)		1.25 (4.7)			1.25 (4.7)		1.25 (4.7)		
	Max. Torque	ft./lbs. (kg/m)		2.5 (0.34)			1.0 (0.14)		1.0 (0.14)		

**CAUTION:** Turning the Maximum Volume Control in too far can force the cam ring over-center, causing damage.

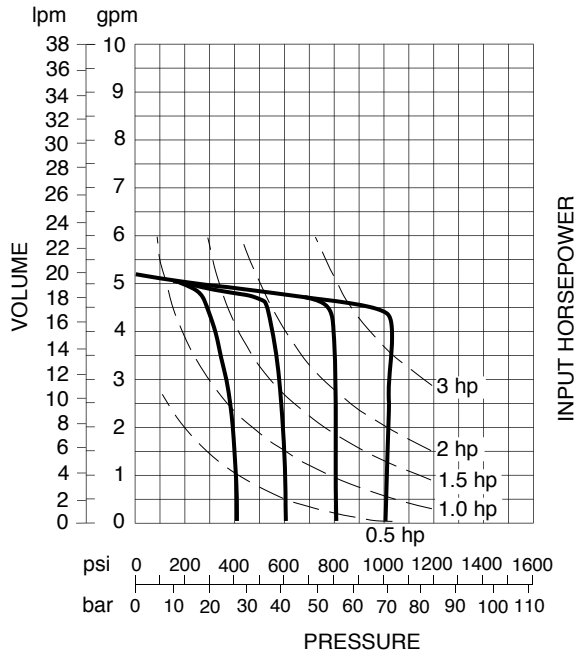
# PVR-1 SERIES VANE PUMPS

VARIABLE DISPLACEMENT, PRESSURE COMPENSATED

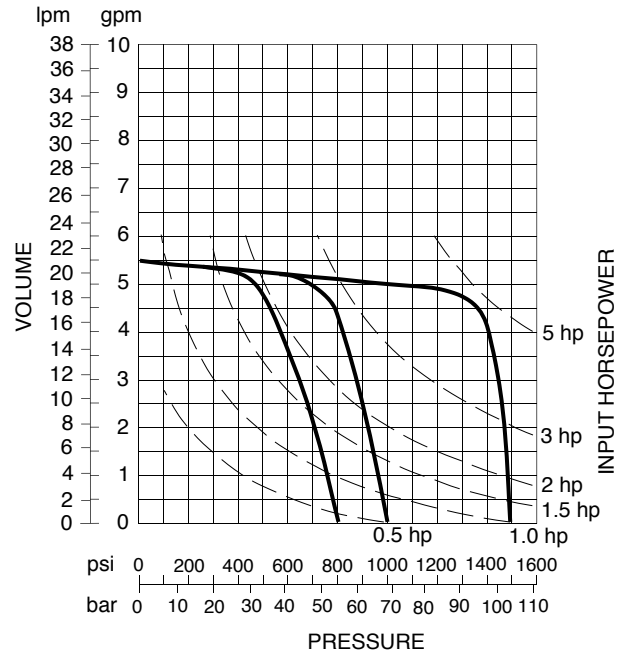
**NOTE:** Typical performance curves are based on ISO VG46 oil at 120° F. (49° C.). Above 400 SUS (84 CS), add 2% hp/100 SUS.

**NOTE:** Deadhead horsepower is read from curves at 0 gpm flow and pressure compensator setting psi.

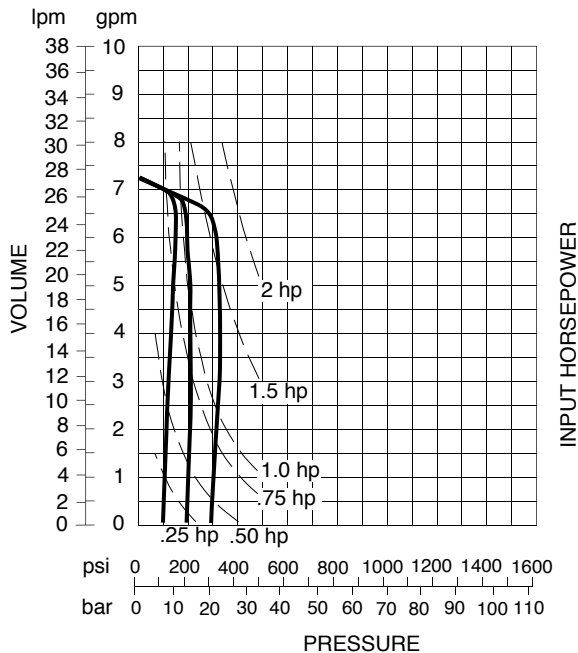
**4B10 (at 1750 rpm)**



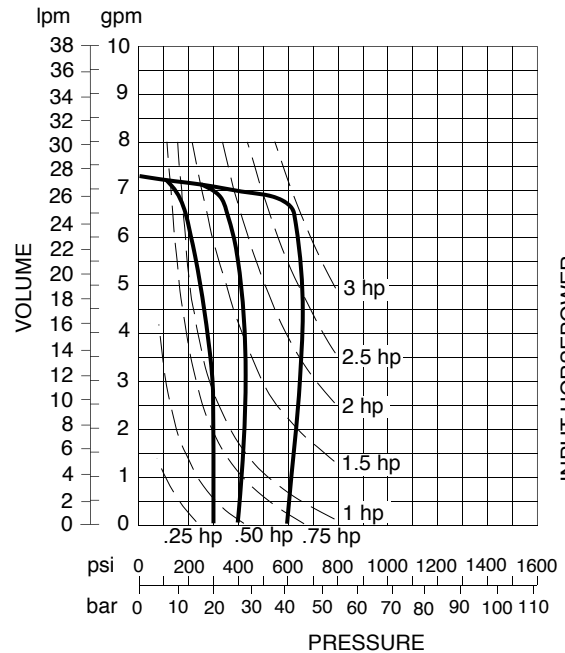
**4B15 (at 1750 rpm)**



**6B03 (at 1750 rpm)**



**6B06 (at 1750 rpm)**



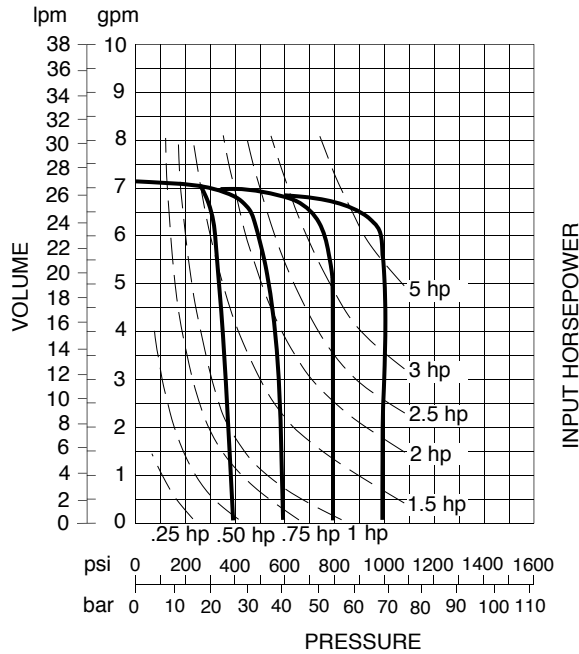
# PVR-1 SERIES VANE PUMPS

VARIABLE DISPLACEMENT, PRESSURE COMPENSATED

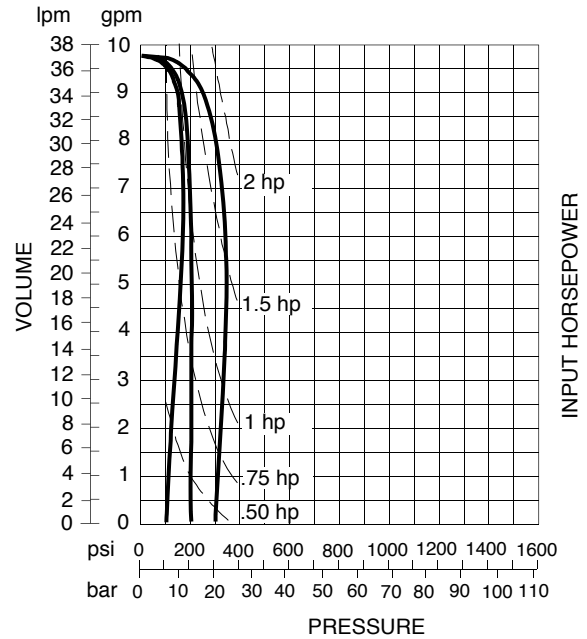
**NOTE:** Typical performance curves are based on ISO VG46 oil at 120° F. (49° C.). Above 400 SUS (84 CS), add 2% hp/100 SUS.

**NOTE:** Deadhead horsepower is read from curves at 0 gpm flow and pressure compensator setting psi.

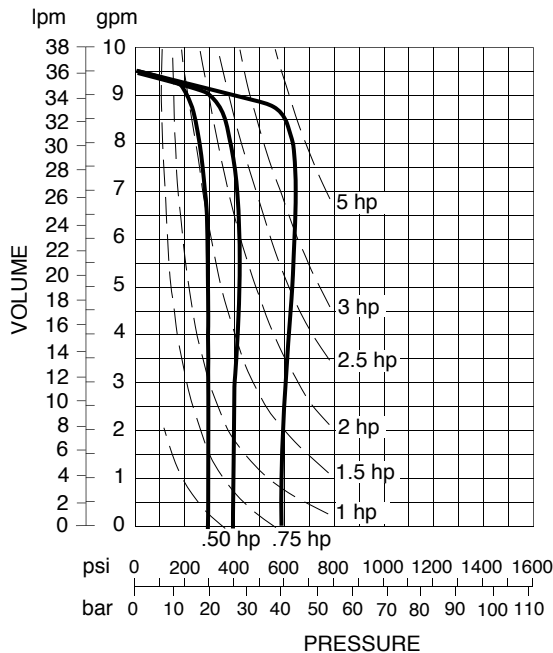
**6B10 (at 1750 rpm)**



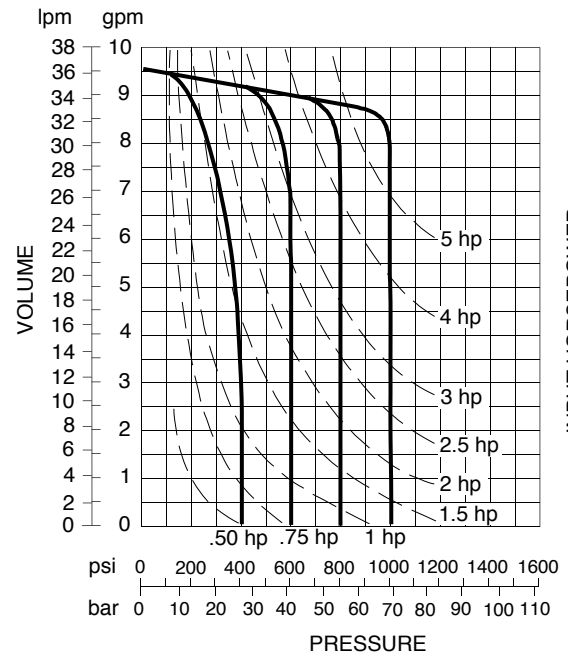
**8B03 (at 1750 rpm)**



**8B06 (at 1750 rpm)**



**8B10 (at 1750 rpm)**

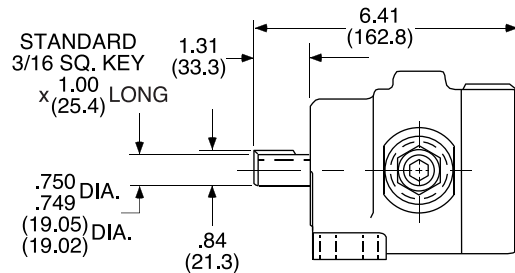
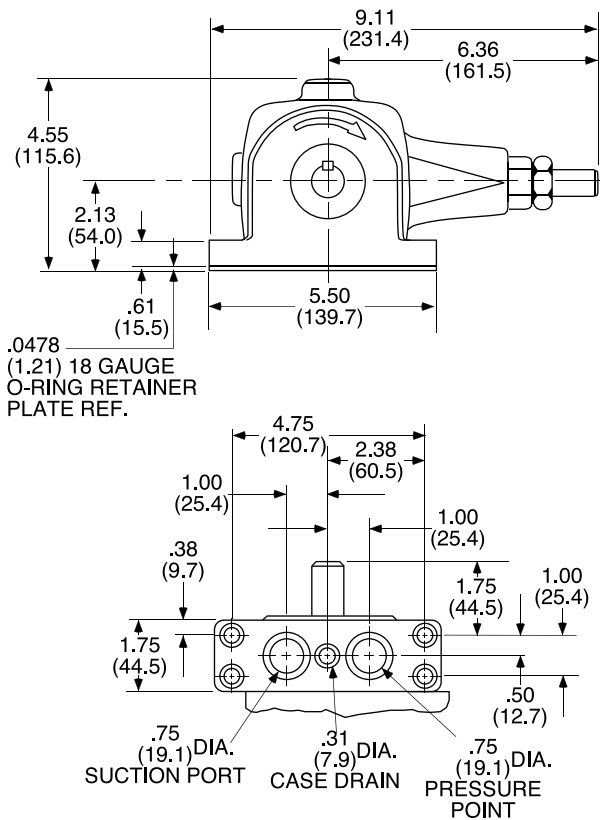


# PVR-1 SERIES VANE PUMPS

VARIABLE DISPLACEMENT, PRESSURE COMPENSATED

## PUMP DIMENSIONS

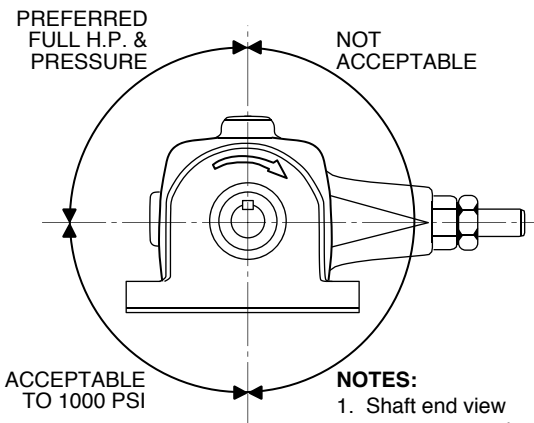
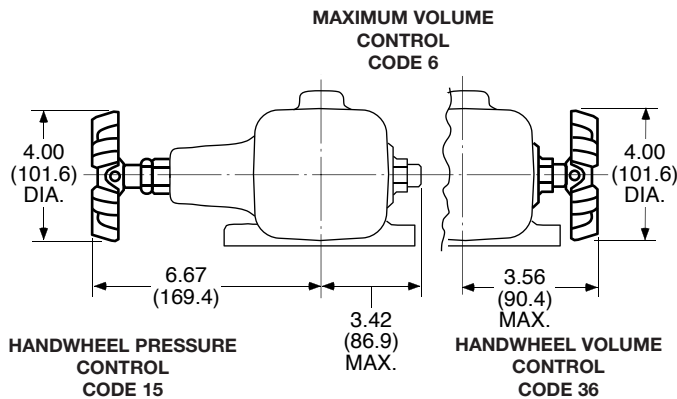
Dimensions shown in: Inches  
(millimeters)



## MECHANICAL OPTIONS

## SIDE LOAD DRIVES

i.e. Belt, Chain, Gear



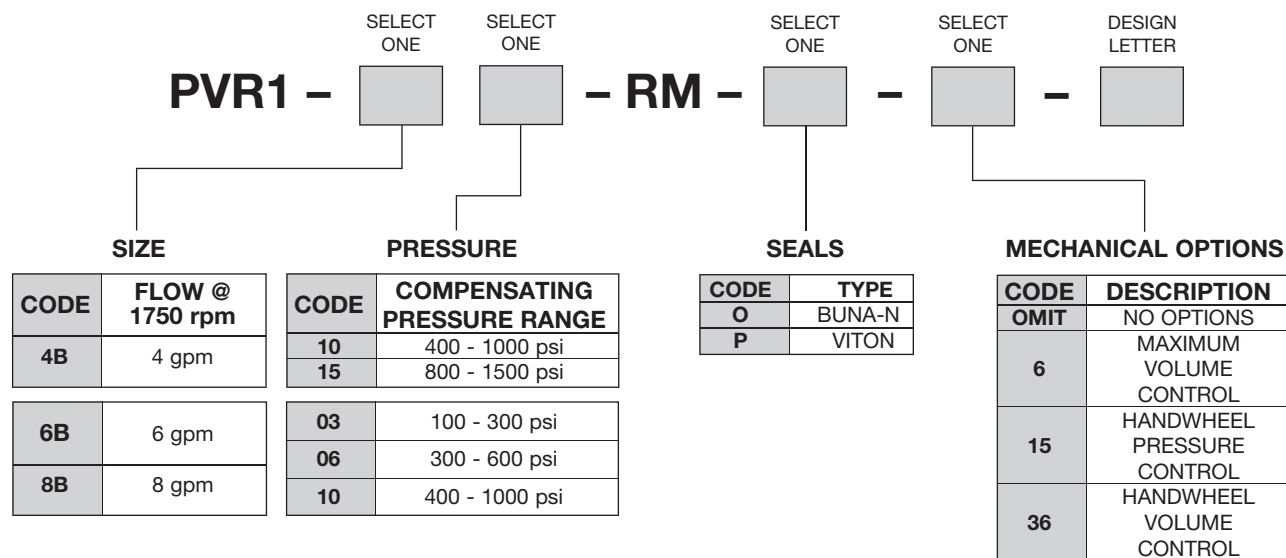
- NOTES:**
1. Shaft end view
  2. 1750 rpm rated
  3. Capable of full pump horsepower (load to radiate out from shaft)

# PVR-1 SERIES VANE PUMPS

VARIABLE DISPLACEMENT, PRESSURE COMPENSATED

## ORDERING INFORMATION

Right Hand (CW) Rotation



TYPICAL ORDERING CODE:  
**PVR1-6B10-RM-O-1-I**



Our international sales network covers every jurisdiction. Our global shipping partners mean you can be sure we're on hand whenever you need us.

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