HPVR-6 AXIAL PISTON PUMPS

The HPVR series of inline axial piston variable displacement pumps, are available in five displacements and three compact frame sizes.
These pumps feature medium-high working pressure capabilities that will meet most applications.
The output flow and pressure is controlled by a variety of control options, and can easily work in conjunction with external control components making them the perfect choice for almost any application.
The HPVR series pumps are available in both SAE and ISO mounting 2 bolt patterns. Porting is available in rear and side locations as well as thru-drive configurations.

TYPICAL PERFORMANCE SPECIFICATIONS			
VOLUMETRIC DISPLACEMENT		cu. In./rev.	0.88
		ml/rev.	14.4
PUMP DELIVERY @ 1750 RPM	Theoretical	GPM	6.67
		LPM	25.2
OPERATING PRESSURES	Intermittent*	PSI	4500
		BAR	310
	Continuous	PSI	4000
		BAR	276
	Minimum**	PSI	200
		BAR	14
OPERATING SPEEDS		Maximum RPM	See Below
		Rated RPM	1750
		Minimum RPM	500
INPUT POWER @ 1750 RPM (Rated Flow and Pressure)		HP	18
		Kw	13.4
CASE DRAIN FLOW @ Deadhead & Rated Pressure		GPM	0.3
		LPM	1.1
MOUNTING FLANGE		SAE Type	A 2 Bolt
DRIVE SHAFT		Keyed Shaft SAE J744 A	0.75
		Spline Shaft SAE B	.8125 13 TOOTH
SHIPPING WEIGHTS	REAR PORTS	lbs	27
		kg	12.4
	SIDE PORTS	lbs	35
		kg	15.9

* This pressure should not exceed 10% of the duty cycle and not exceed 6 consecutive seconds.

** Pumps operating at less than 150 PSI (10 Bar) may overheat and shorten pump life.

CASE AND INLET PORT SPECIFICATIONS

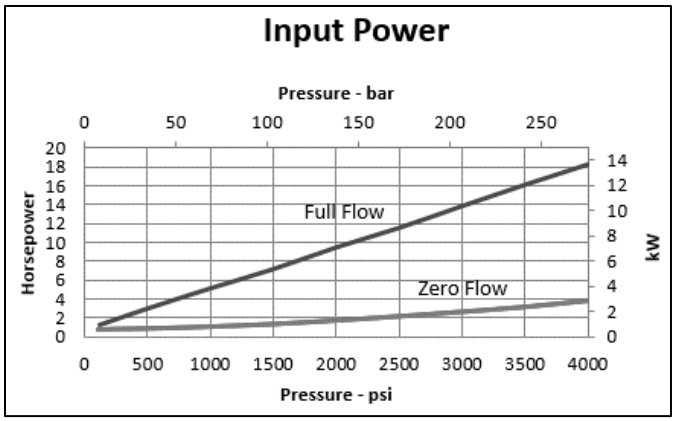
SPEED	Minimum Inlet Pressure						Maximum Case Pressure	
	Pressure Gauge				Absolute Pressure			
rpm	psi	bar	in.-Hg	mm-Hg	psi	bar	psi	bar
1800	-3	-0.21	-6.12	-155.46	11.7	0.81	10	0.69
2050	-3	-0.21	-6.12	-155.46	11.7	0.81	7	0.48
2100	-3	-0.21	-6.12	-155.46	11.7	0.81	5	0.34
2750	-2.53	-0.17	-4.79	-121.67	12.35	0.8	5	0.34
2900	-0.96	-0.07	-1.97	-49.94	13.74	0.9	5	0.34
3000	0.00	0.00	0.00	0.00	14.7	1.01	5	0.34

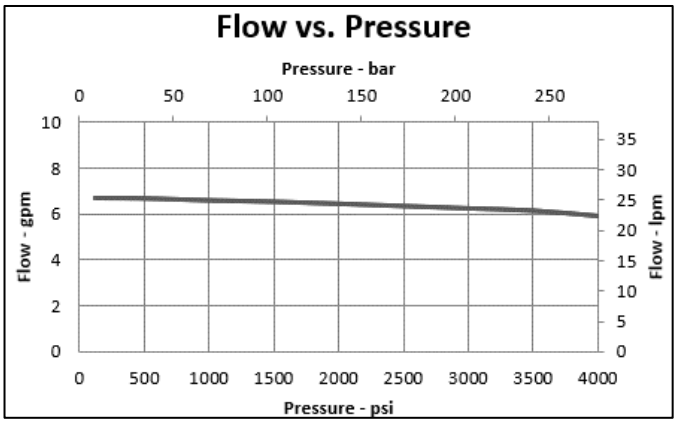
PRESSURE AND VOLUME ADJUSTMENT SENSITIVITY

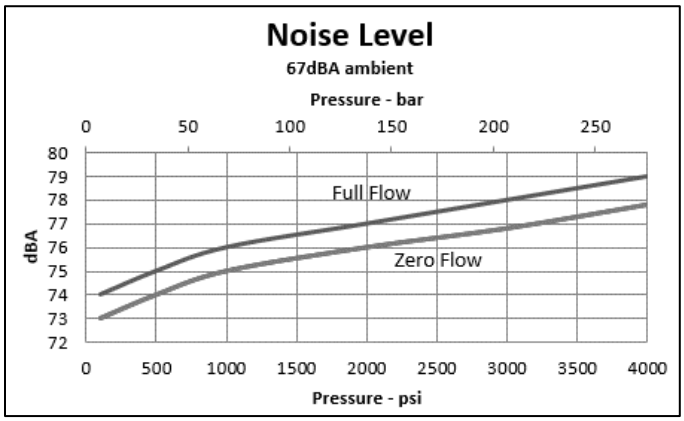
Pressure Adjustment	Pressure Change / Turn	650 PSI	44.8 Bar
Volume Adjustment	Flow Change / Turn	0.7 GPM	2.6 LPM
	Maximum Torque	28 in.-lbs	3.2 Nm

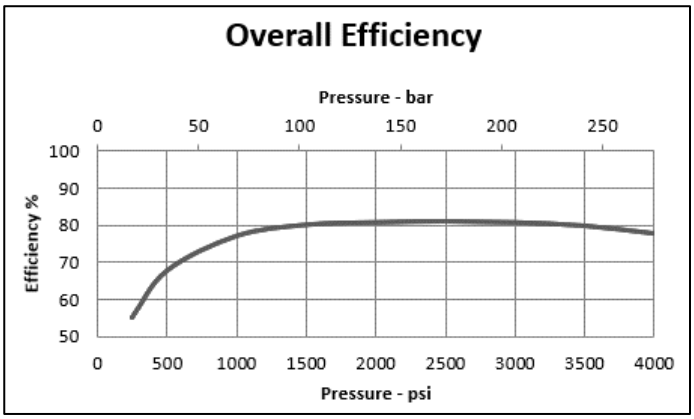
4895 12TH Avenue East, Shakopee MN 55379 / PH: 952.895.6400 / WWW.CONTINENTALHYDRAULICS.COM

HPVR-6 AXIAL PISTON PUMPS





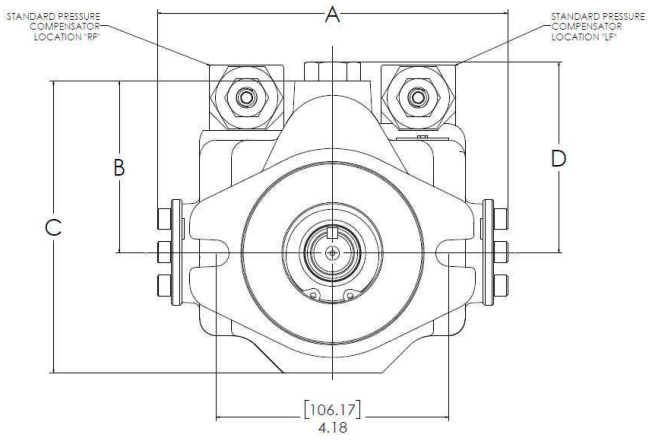


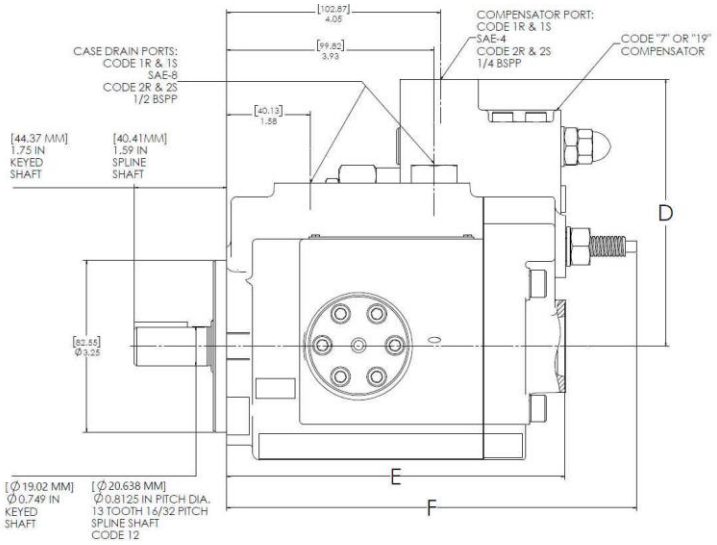


Data taken at 1750 RPM

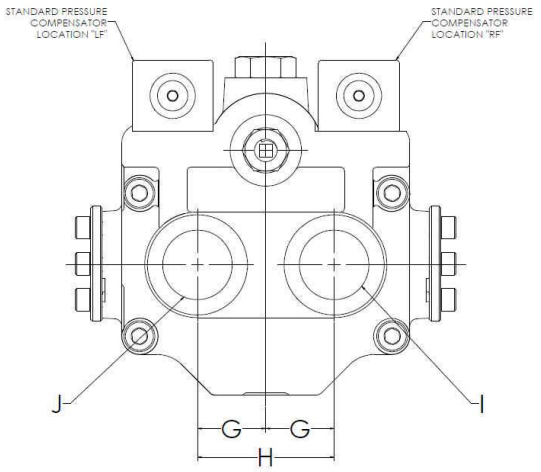
HPVR-6 AXIAL PISTON PUMPS

Rear Port Dimension Data





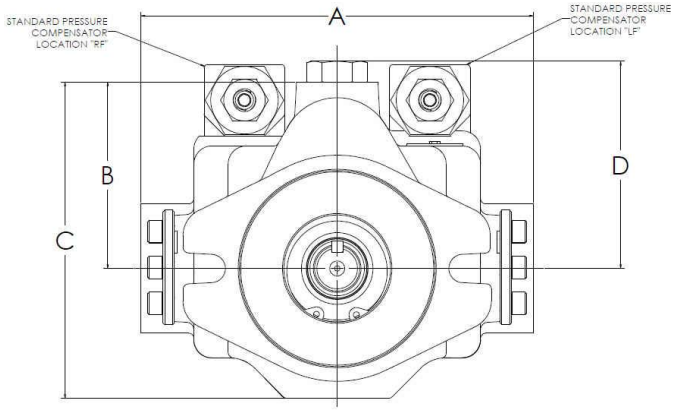
Dimensional Reference Data	Inch (mm)
A	6.29 (159.8)
B	3.09 (78.49)
C	5.24 (133.1)
D (STD Pressure Compensator)	3.43 (87.12)
D (Code 7 Remote & Code 19 Load Sense)	5.06 (128.5)
E	6.40 (162.5)
F	7.76 (197.1)

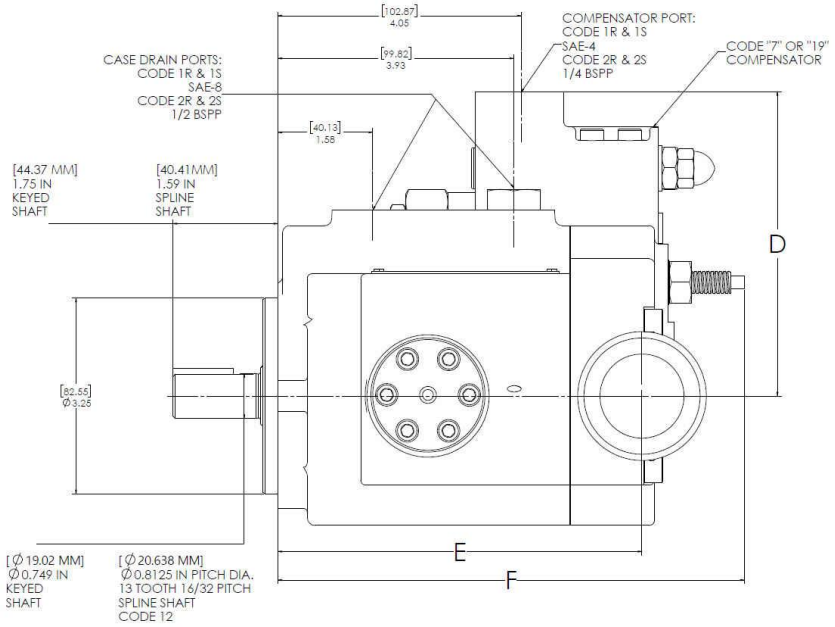


Dimensional Reference Data	Inch (mm)
G	1.13 (28.7)
H	2.26 (57.4)
I / J Code 1R - Rear SAE Porting	SAE-12
I / J Code 2R- Rear BSPP Porting	3/4 BSPP

HPVR-6 AXIAL PISTON PUMPS

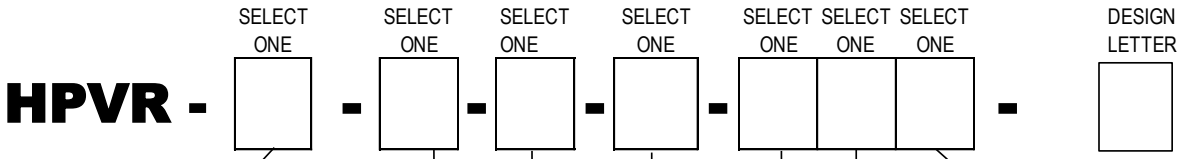
Side Port Dimension Data





Dimensional Reference Data	Inch (mm)
A	6.52 (165.6)
B	3.09 (78.49)
C	5.24 (133.1)
D (STD Pressure Compensator)	3.43 (87.12)
D (Code 7 Remote & Code 19 Load Sense)	5.06 (128.5)
E	6.06 (153.9)
F	7.76 (197.1)
I Suction Code 1S - Side SAE Porting	SAE-16
I Suction Code 2S - Side BSPP Porting	1in. BSPP
J Pressure Code 1S - Side SAE Porting	SAE-12
J Pressure Code 2S- Side BSPP Porting	3/4 BSPP

HPVR-6 AXIAL PISTON PUMPS



SIZE			
CODE	FLOW AT 1750 RPM	MAXIMUM PRESSURE	DISPLACEMENT
6B40	6 GPM	4000 PSI	in^3/rev 0.88
			cm^3/rev 14.4

ROTATION	
CODE	**DESCRIPTION**
RF	CW ROTATION (STD)
LF	CCW ROTATION

SEALS	
CODE	**DESCRIPTION**
O	BUNA-N (STD)
P	VITON

PORT OPTIONS	
CODE	**DESCRIPTION**
1R	SAE A 2 BOLT MOUNTING FLANGE (STD) SAE O-RING THREAD CASE DRAIN REAR SAE O-RING THREAD PORTS
2R	SAE A 2 BOLT MOUNTING FLANGE BRITISH STD PIPE (BSPP) THREAD CASE DRAIN REAR BSPP THREAD PORTS
1S	SAE A 2 BOLT MOUNTING FLANGE SAE O-RING THREAD CASE DRAIN SIDE SAE O-RING THREAD SIDE PORTS
2S	SAE A 2 BOLT MOUNTING FLANGE BRITISH STD PIPE (BSPP) THREAD CASE DRAIN SIDE BSPP THREAD PORTS

CONTROL OPTIONS	
CODE	**DESCRIPTION**
OMIT	PRESSURE COMPENSATOR (STD)
7	REMOTE COMPENSATOR
19	LOAD SENSING COMPENSATOR

TANDEM	
CODE	**DESCRIPTION**
OMIT	NO TANDEM OPTION (STD)

SHAFT	
CODE	**DESCRIPTION**
OMIT	STRAIGHT KEY (STD) SAE J744 A .750 inch SHAFT
12	FRONT MALE SPLINE SAE B: 13 TOOTH 16/32 Pitch