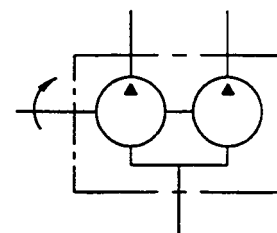


TIDAL VT6DC HIGH PERFORMANCE DOUBLE VANE PUMPS



High Performance in an Economical Package

TIDAL VT6DC fixed displacement vane pumps are engineered for higher operating pressures (3500psi) and shaft speeds (2500rpm) demanded by today's expanding Fluid Power Market. The VT6DC has an SAE "C" mount with a wide variety of displacements and keyed/splined shafts



Features:

- * High Volumetric Efficiency
- * Double Lip Vane Design

- * Lower Noise Levels
- * Large Variety Displacements

VT6DC	-	B50	-	B25	-	1	-	R	-	N
Series		Front Ring Size		Back Ring Size		Shaft		Rotation		Design
		B14	B35	B03	B14	1 - KEYED SAE C		R - Right		
		B20	B38	B05	B17	2 - KEYED NOT SAE		L - Left		
		B24	B42	B06	B20	3 - SPLINED SAE C				
		B28	B45	B08	B22	4 - SPLINED NO SAE				
		B31	B50	B10	B25					
				B12	B28					
					B31					

General Characteristics

Series	Max. Pressure PSI (MPa)	Speed r/min		Displ. in ³ /rev (cm ³ /rev)	Mounting Standard	Weight lb(kg)	Fluid Connection (SAE 4-bolt)	
		Max.	Min.				Pressure Ports (Front & Back)	Suction Inlet
VT6DC	3500(24.5)	2500	600	.66 ~ 9.64 (10.8 ~ 157.81)	SAE - C	79.2 (36)	(P1)=1 1/4", P2=1" S. FLG.	3" S. FLG.

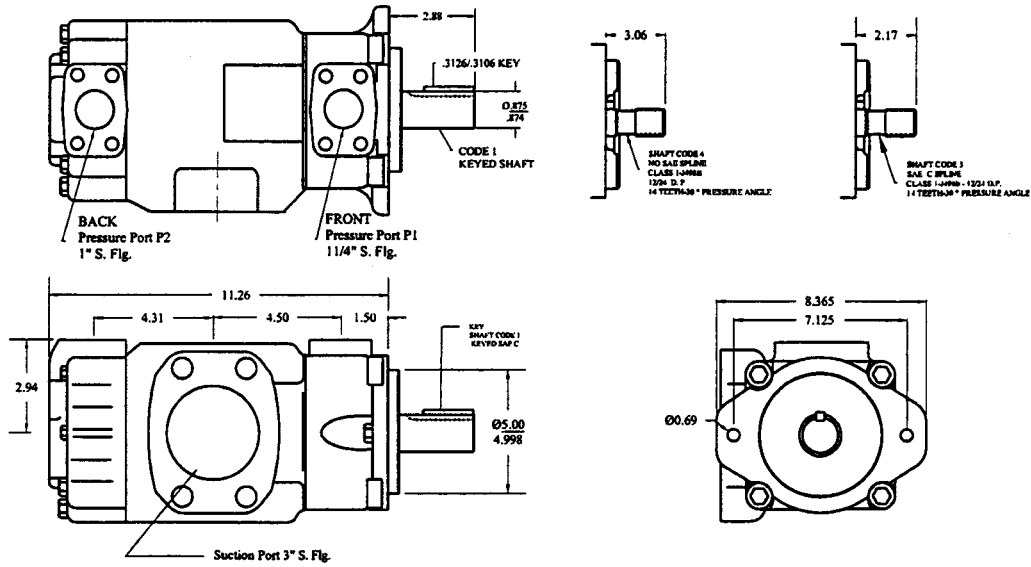
Operating Specifications

Fluid Type	P1 VT6DC Continuous		P2 VT6DC Intermittent	
	Speed r/min	Pressure psi(MPa)	Speed r/min	Pressure psi(MPa)
Antiwear Petroleum Base	2500	3500(24.5)	2500	4000(28.0)
Non Antiwear Petroleum Base	2500	2500(17.5)	2500	3000(21.0)
Water in Oil Emulsions	1800	2000(14.0)	1800	2500(17.5)
Water Glycols	1800	2000(14.0)	1800	2500(17.5)
Synthetic Fluids	1800	2500(17.5)	1800	3000(21.0)

TIDAL VT6DC DOUBLE VANE PUMP INSTALLATION/DIMENSIONS



Dimension & Operating Characteristics



Performance Data - Typical flow at 120°F, 10 W Oil (115 SUS), 0 PSI Inlet

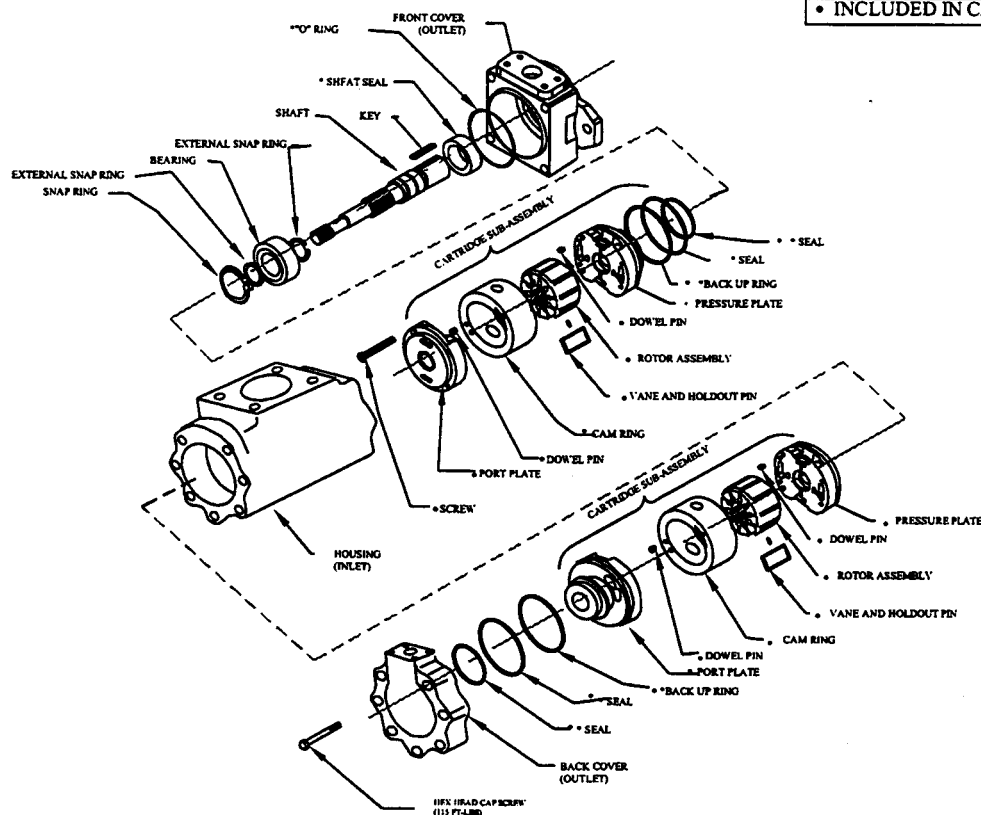
PRESSURE PORT	Series	Volumetric Displ. Vp	Speed n[R.P.M.]	Flow(GPM)			Inputpower(HP)		
				0 PSI	2000 PSI	3500 PSI	100 PSI	2000 PSI	3500 PSI
P1	B14	2.90 in ³ /rev	1800	22.64	19.69	17.72	4.02	28.97	49.24
	B20	4.00 in ³ /rev	1800	31.38	28.44	26.47	4.50	39.26	67.10
	B24	4.80 in ³ /rev	1800	37.82	34.87	32.88	4.82	47.63	80.14
	B28	5.50 in ³ /rev	1800	42.64	39.70	37.73	5.15	52.62	89.95
	B31	6.00 in ³ /rev	1800	46.73	43.79	41.82	5.30	57.44	98.16
	B35	6.80 in ³ /rev	1800	52.79	49.84	47.87	5.63	64.52	110.56
	B38	7.30 in ³ /rev	1800	57.19	54.24	52.28	5.95	69.68	119.40
	B42***	8.30 in ³ /rev	1800	64.68	61.73	59.76	6.43	78.37	134.69
	B45***	8.90 in ³ /rev	1800	69.28	66.32	64.36	6.60	83.84	144.02
	B50***	9.64 in ³ /rev	1800	75.14	72.19	71.02	7.08	91.72	136.78**
P2	B03	.66 in ³ /rev	1800	5.14	3.55	2.44	2.09	8.53	13.51
	B05	1.05 in ³ /rev	1800	8.18	6.59	5.48	2.26	12.07	19.63
	B06	1.30 in ³ /rev	1800	10.12	8.56	7.42	2.41	14.32	23.65
	B08	1.61 in ³ /rev	1800	12.55	10.97	9.86	2.57	17.22	28.49
	B10	2.08 in ³ /rev	1800	16.20	14.65	13.50	2.74	21.56	35.88
	B12	2.26 in ³ /rev	1800	17.64	16.35	2.74	2.84	23.05	38.92
	B14	2.81 in ³ /rev	1800	21.88	20.29	19.18	3.06	28.32	47.47
	B17	3.56 in ³ /rev	1800	27.71	26.16	25.01	3.38	35.24	59.38
	B22	4.29 in ³ /rev	1800	37.42	31.86	30.72	3.70	42.00	70.97
	B25*	4.84 in ³ /rev	1800	37.69	36.14	35.00	4.02	46.99	79.66
	B28*	5.42 in ³ /rev	1800	42.23	40.94	39.53**	4.50	52.62	73.76**
	B31*	6.10 in ³ /rev	1800	47.56	45.97	44.86**	4.50	58.74	87.54**

*B25-B28-B31 = 2500 R.P.M. max.
 ***B42-B45-B50 = 2200 R.P.M. max.
 **B28-B31-B50 = 3000 PSI max. Int.

TIDAL VT6DC DOUBLE PUMP SERVICE PARTS INFORMATION



* INCLUDED IN SEAL KIT
* INCLUDED IN CARTRIDGE KIT



VT6DC SPARE PARTS CHART

PUMP SIZE	P1 CART. KIT	P1 CAM RING	PUMP SIZE	P2 CART. KIT	P2 CAM RING	VANE KIT	ROTOR	PRESSURE PLATE	PORT PLATE	SHAFT
VT6DC-P1-B14		V034-66708	VT6DC-P2-B03	VS24-26607	V034-59050	V034-53588	VS24-10121	V034-59057	V034-59101	#1 V034-71363
VT6DC-P1-B20		V034-66596	VT6DC-P2-B05	VS24-26609	V034-59051	FRONT	FRONT	FRONT	FRONT	#2 V034-71364
VT6DC-P1-B24	VS24-26580	V034-59294	VT6DC-P2-B06	VS24-26611	V034-59052	CART. P1	CART. P1	CART. P1	CART. P1	#3 V034-71361
VT6DC-P1-B28		V034-59113	VT6DC-P2-B08	VS24-26613	V034-59053					#5 V034-66578
VT6DC-P1-B31	VS24-10160	V034-59135	VT6DC-P2-B10	VS24-26615	V034-59054					
VT6DC-P1-B35	VS24-10162	V034-59137	VT6DC-P2-B12	VS24-26617	V034-66595					
VT6DC-P1-B38	VS24-10164	V034-59139	VT6DC-P2-B14	VS24-26619	V034-59206	V034-59099	VS24-10116	V034-66453	VS24-10139	
VT6DC-P1-B42	VS24-10166	V034-59132	VT6DC-P2-B17	VS24-26621	V034-59207	REAR	REAR	REAR	REAR	
VT6DC-P1-B45	VS24-10168	V034-59131	VT6DC-P2-B20	VS24-26631	V034-66607	CART. P2	CART. P2	CART. P2		
VT6DC-P1-B45	VS24-10170	V034-66737	VT6DC-P2-B22	VS24-26623	V034-59208					
VT6DC-P1-B50	VS24-10170	V034-66737	VT6DC-P2-B25	VS24-26625	V034-59209					
			VT6DC-P2-B28	VS24-26627	V034-59245					
			VT6DC-P2-B31	VS24-26629	V034-66843					

- All cartridge assemblies are factory tested prior to shipping -

STANDARD SEAL KIT	VITON SEAL KIT	STANDARD SHAFT SEAL	VITON SHAFT SEAL	BEARING	FRONT COVER	BACK COVER	HOUSING COVER
VS24-10170-0-N	VS24-10170-4N	V620-82062N	V620-82062-4N	V230-00207N	V034-48135	V034-48579	V034-48133

Filtration

For satisfactory service life, use full flow filtration to provide fluid which meets ISO cleanliness code 16/13 or better.