

ORDERING CODE

VST7EDB - 062 - 028 - B10 - 1 R 00 - A 1 01 *

Series

SAE 4 bolts

Mounting flange (J744)

Cam ring for "P1"

Volumetric displacement cm^3/rev (in^3/rev)

042 = 132.3 (8.07)

045 = 142.4 (8.69)

050 = 158.5 (9.67)

052 = 164.8 (10.06)

057 = 180.7 (11.02)

062 = 196.7 (12.00)

066 = 213.3 (13.02)

072 = 227.1 (13.86)

085 = 268.7 (16.40)

Cam ring for "P2"

Volumetric displacement cm^3/rev (in^3/rev)

014 = 43.9 (2.68) 028 = 89.9 (5.49)

017 = 55.0 (3.36) 031 = 99.1 (6.05)

020 = 66.0 (4.03) 035 = 113.4 (6.92)

022 = 70.3 (4.29) 038 = 120.6 (7.36)

024 = 81.1 (4.95) 042 = 137.5 (8.39)

Cam ring for "P3"

Volumetric displacement cm^3/rev (in^3/rev)

B02 = 5.7 (0.35)

B03 = 9.8 (0.60)

B04 = 12.8 (0.78)

B05 = 15.9 (0.97)

B06 = 19.8 (1.21)

B07 = 22.5 (1.37)

B08 = 24.9 (1.52)

B09 = 28.0 (1.71)

B10 = 31.8 (1.94)

B11 = 34.9 (2.13)

B12 = 40.9 (2.50)

Modifications

Mounting W/connection
variables 4 bolts
SAE flange (J518)

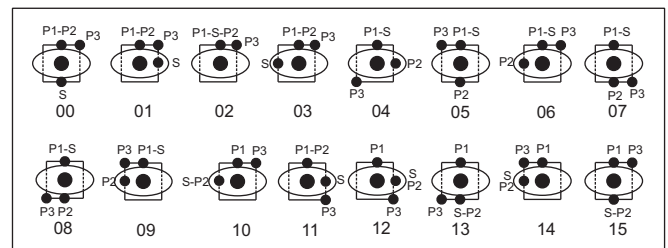
	P1 = 1½"	P2 = 1¼"	S = 4"
	P3	UNC	METRIC
VST7EDB	1"	00	M0
	3/4"	01	M1

Seal Class

1 - S1(for mineral oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire
resistant fluids)

Design Letters

Porting Combination

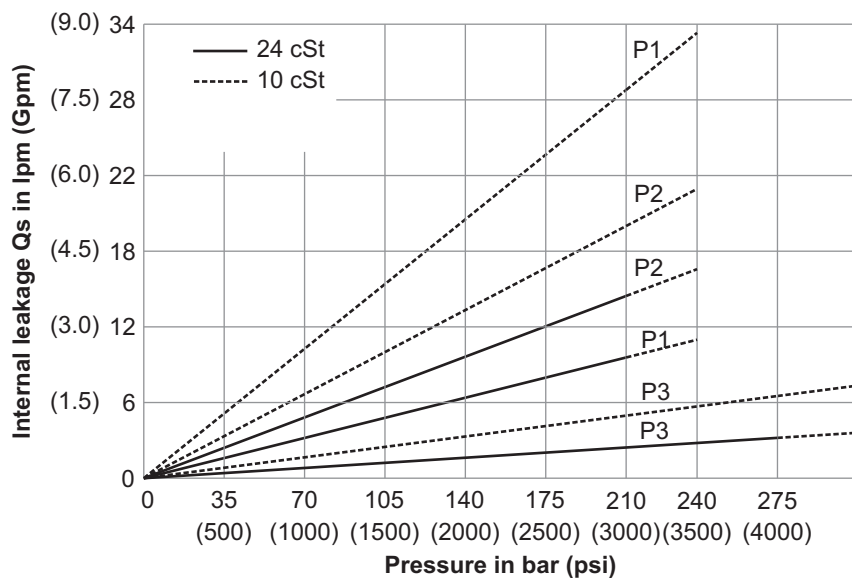
Direction of rotation
(view on shaft end)

R - clockwise
L - Counter - Clockwise

Type of shaft

1 - Keyed
2 - Keyed (SAE D&E)
3 - Splined (SAE D&E)

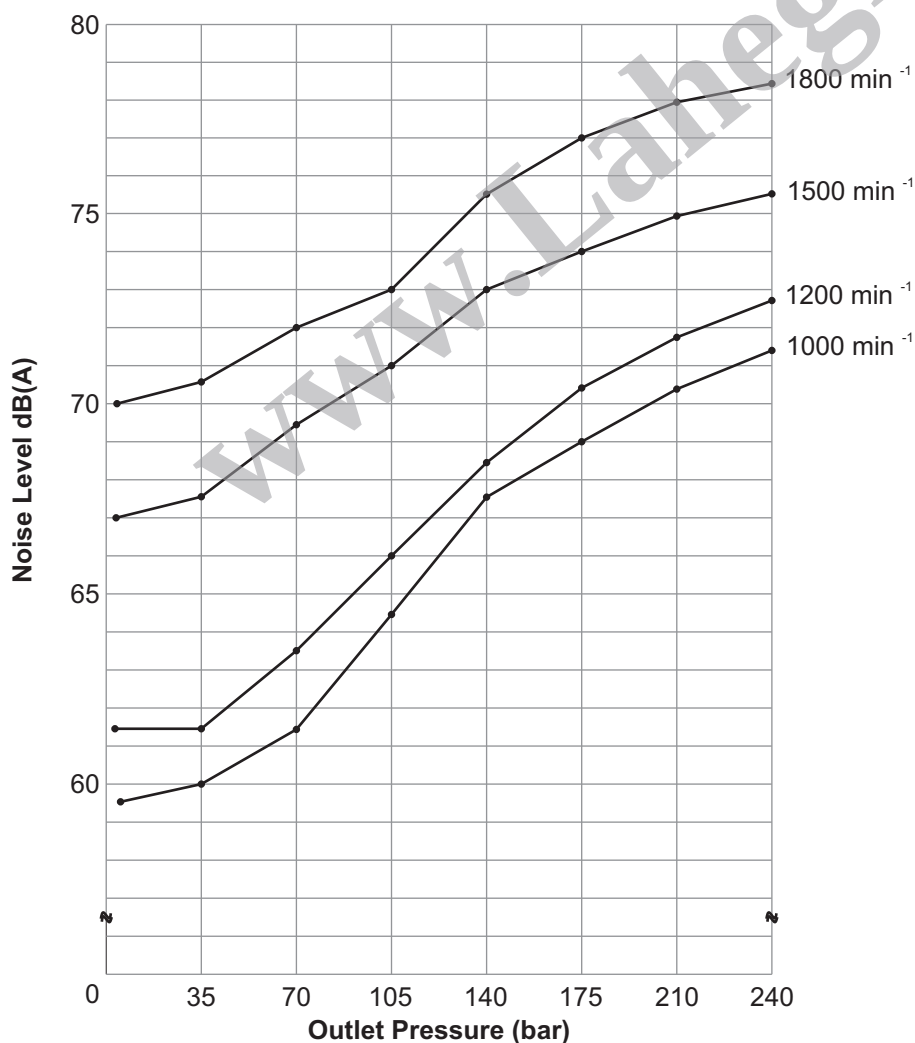
INTERNAL LEAKAGE (TYPICAL)



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

TP

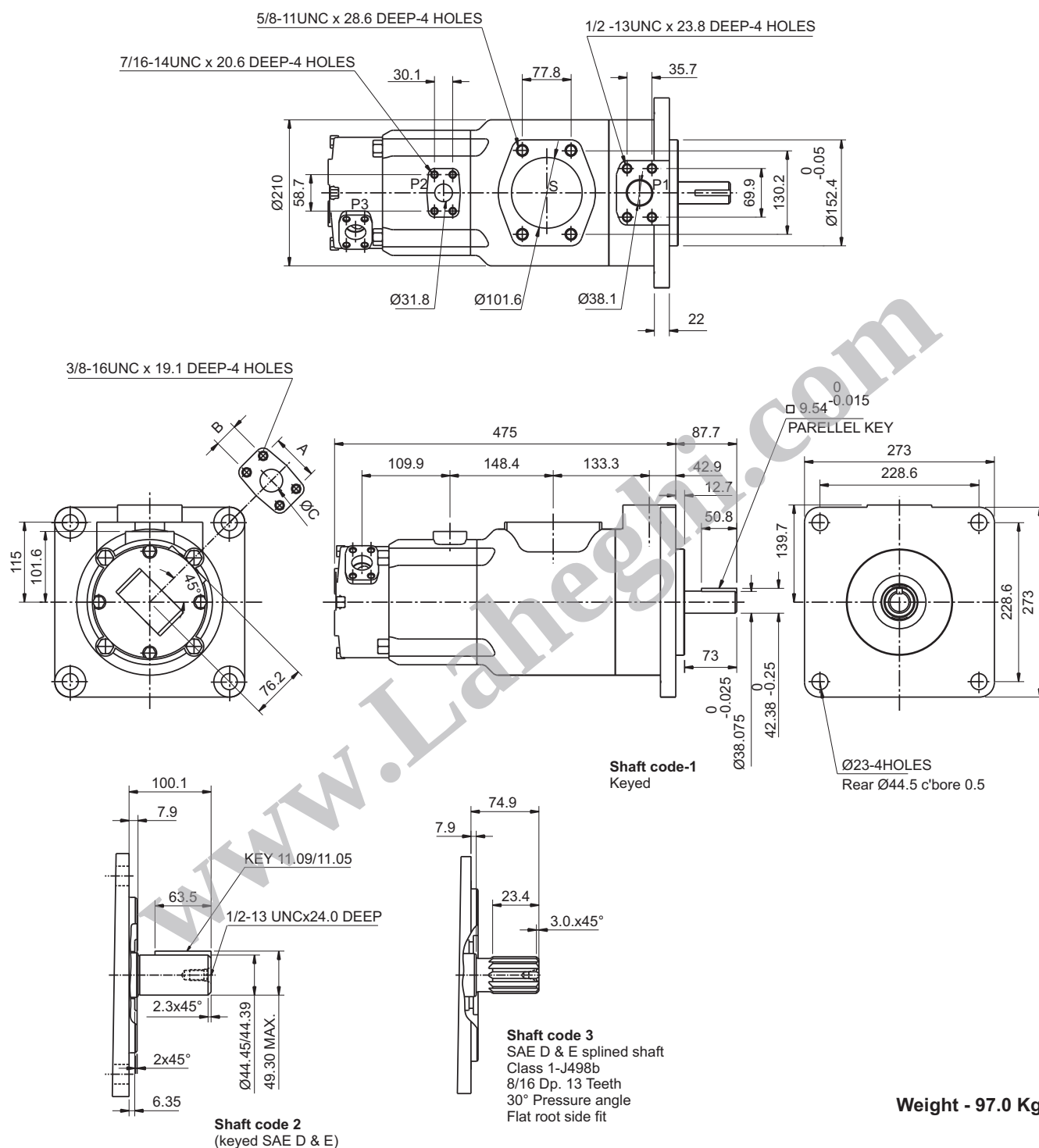
NOISE LEVEL (TYPICAL) VST7EDB-062-028-B10



Measurement Conditions:
ISO VG32 oil at 50°C and
measured 1m from rear of
pump cover

INSTALLATION DRAWING

FLANGE MOUNTING

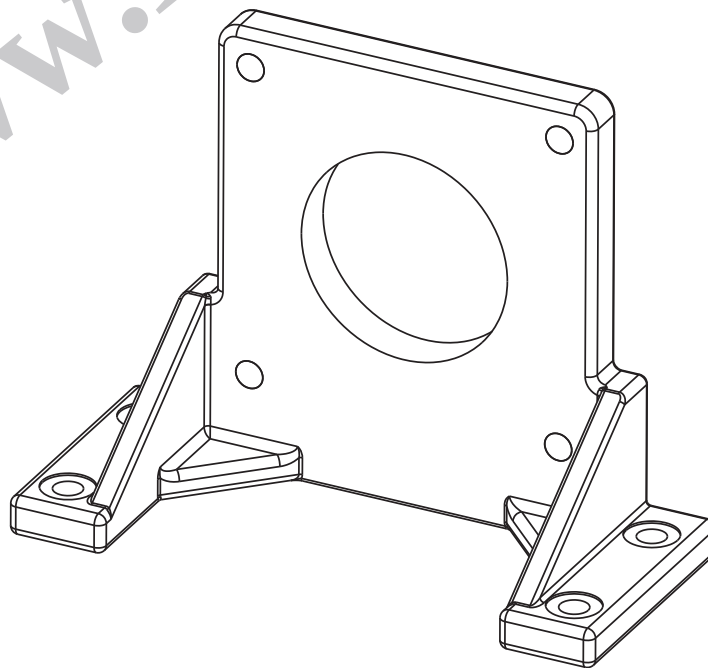
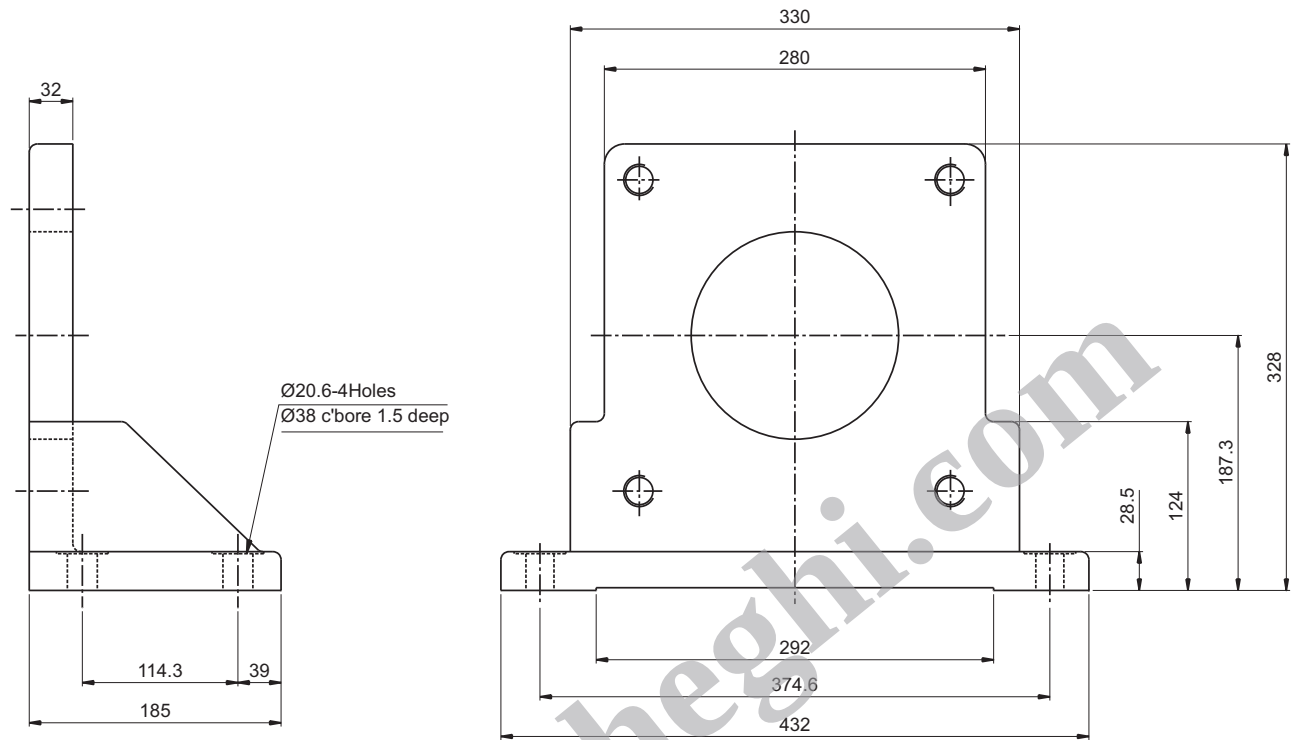
Shaft torque limits in³ / rev x psi (ml / rev x bar)

Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)
2	104818 (118458)
3	112312 (126928)

PORT	CODE	A	B	ØC
P3	00 & M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	01 & M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.0)

INSTALLATION DRAWING

FOOT MOUNTING



Weight - 25 Kgs.

OPERATING CHARACTERISTICS (24 cSt)

Pressure port	Series	Volumetric Displacement Vp		Flow q (lpm) & n = 1500 rpm					
				p = 0 bar (0 psi)		p=140bar(2000psi)		p=240bar(3500psi)	
		in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm
P1	042	8.07	132.3	52.50	198.5	49.87	188.5	47.96	181.3
	045	8.69	142.4	56.51	213.6	53.86	203.6	51.98	196.5
	050	9.67	158.5	62.88	237.7	60.24	227.7	58.36	220.6
	052	10.06	164.8	65.40	247.2	62.75	237.2	60.87	230.1
	057	11.02	180.7	71.71	271.1	69.07	261.1	67.19	254.0
	062	12.00	196.7	78.04	295.0	75.40	285.0	73.52	277.9
	066	13.02	213.3	84.63	319.9	81.98	309.9	80.11	302.8
	072	13.86	227.1	90.11	340.6	87.46	330.6	85.58	323.5
	085	16.40	268.7	107.00	404.7	105.21	397.7	--	--

TP

Pressure port	Series	Volumetric Displacement Vp		Input Power p & n = 1500 rpm					
				p = 7 bar (100 psi)		p = 140bar(2000psi)		p = 240bar(3500psi)	
		in ³ /rev	cm ³ /rev	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.3	6.97	5.2	66.25	49.4	110.77	82.6
	045	8.69	142.4	7.24	5.4	70.94	52.9	118.95	88.7
	050	9.67	158.5	7.64	5.7	78.45	58.5	131.82	98.3
	052	10.06	164.8	7.78	5.8	81.53	60.8	136.92	102.1
	057	11.02	180.7	8.18	6.1	89.04	66.4	143.35	106.9
	062	12.00	196.7	8.58	6.4	96.42	71.9	162.67	121.3
	066	13.02	213.3	8.98	6.7	104.20	77.7	175.94	131.2
	072	13.86	227.1	9.25	6.9	110.77	82.6	187.07	139.5
	085	16.40	268.7	9.78	7.3	87.56	65.3	--	--

* Max, int. pressure 240 bar

* Max, cont. pressure 210 bar

Measurement Conditions: ISO VG32 oil at 50°C

Note : 085 = 90 bar (1300 psi) max. int. & 085 = 2000 rpm max.

OPERATING CHARACTERISTICS (24 cSt)

Pressure port	Series	Volumetric Displacement Vp		Flow q (lpm) & n = 1500 rpm					
				p = 0 bar (0 psi)		p=140bar(2000psi)		p=240bar(3500psi)	
		in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm
P2	014	2.68	43.9	18.88	71.40	16.42	62.10	14.78	55.95
	017	3.36	55.0	23.10	87.30	20.60	78.00	18.99	71.88
	020	4.03	66.0	26.19	99.00	23.73	89.70	22.08	83.58
	022	4.29	70.3	28.85	109.21	26.41	99.97	25.31	95.81
	024	4.95	81.1	31.56	119.3	29.10	110.00	27.46	103.95
	028	5.49	89.9	35.58	134.50	33.12	125.20	31.48	119.16
	031	6.05	99.1	39.00	147.50	36.53	138.10	34.89	132.07
	035	6.92	113.4	44.04	166.50	41.58	157.20	39.94	151.18
	038	7.36	120.6	47.72	180.40	45.26	171.10	43.62	165.12
	042	8.39	137.5	53.96	204.00	51.50	194.70	49.86	188.74



Pressure port	Series	Volumetric Displacement Vp		Input power p & n = 1500 rpm					
				p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	hp	kw	hp	kw	hp	kw
P2	014	2.68	43.9	3.08	2.3	24.81	18.5	41.03	30.6
	017	3.36	55.0	3.35	2.5	29.77	22.2	49.62	37.0
	020	4.03	66.0	3.75	2.8	33.39	24.9	55.92	41.7
	022	4.29	70.3	4.00	2.9	36.50	27.7	63.80	46.6
	024	4.95	81.1	4.02	3.0	39.69	29.6	66.78	49.8
	028	5.49	89.9	4.29	3.2	44.52	33.2	74.96	55.9
	031	6.05	99.1	4.42	3.3	48.54	36.2	81.80	61.0
	035	6.92	113.4	4.69	3.5	54.58	40.7	92.13	68.7
	038	7.36	120.6	4.96	3.7	58.87	43.9	99.64	74.3
	042	8.39	137.5	5.36	4.0	66.25	49.4	112.24	83.7

Max. int. pressure 240 bar

Max. cont. pressure 210 bar

Measurement Conditions: ISO VG32 oil at 50°C

OPERATING CHARACTERISTICS (24 cSt)

Pressure port	Series	Volumetric Displacement Vp		Flow q (lpm) & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm
P3	B02	0.35	5.7	2.29	8.70	1.94	7.34	–	–
	B03	0.60	9.8	3.88	14.7	3.52	13.32	2.91	11.0
	B04	0.78	12.8	5.07	19.2	4.71	17.83	4.09	15.5
	B05	0.97	15.9	6.31	23.9	5.94	22.49	5.28	20.0
	B06	1.21	19.8	7.85	29.7	7.49	28.35	6.87	26.0
	B07	1.37	22.5	8.90	33.7	8.56	32.40	7.79	29.5
	B08	1.52	24.9	9.88	37.4	9.51	35.99	8.85	33.5
	B09	1.71	28.0	11.07	41.9	10.72	40.58	10.04	38.0
	B10	1.94	31.8	12.62	47.8	12.24	46.33	11.23	42.5
	B11	2.13	34.9	13.81	52.27	13.49	51.07	12.81	48.5
	B12	2.50	40.9	16.25	61.51	15.89	60.15	15.19	57.5

Pressure port	Series	Volumetric Displacement Vp		Input power p & n = 1500 rpm					
				p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	hp	kw	hp	kw	hp	kw
P3	B02	0.35	5.7	0.62	0.46	3.08	2.30	–	–
	B03	0.60	9.8	0.71	0.53	4.96	3.70	8.35	6.23
	B04	0.78	12.8	0.78	0.58	6.37	4.75	10.77	8.03
	B05	0.97	15.9	0.86	0.64	7.78	5.80	13.18	9.83
	B06	1.21	19.8	0.95	0.71	9.49	7.08	16.40	12.23
	B07	1.37	22.5	1.01	0.75	10.74	8.01	18.28	13.63
	B08	1.52	24.9	1.06	0.79	12.00	8.95	20.42	15.23
	B09	1.71	28.0	1.14	0.85	13.39	9.99	22.84	17.03
	B10	1.94	31.8	1.23	0.92	15.13	11.28	25.25	18.83
	B11	2.13	34.9	1.30	0.97	16.69	12.45	28.46	21.23
	B12	2.50	40.9	1.45	1.08	19.51	14.55	33.29	24.83

-- Not to use because internal leakage greater than 50 of theoretical flow.

B12 = Max. int. pressure 210 bar(3000 psi)

Max. cont. pressure 175 bar(2500 psi), Except B02

Measurement Conditions: ISO VG32 oil at 50°C

CONSTRUCTION

1. Key
2. Shaft
3. Shaft Seal
4. Bearing
5. Retaining Ring
6. Mounting Flange
7. Cartridge
8. Housing
9. Cartridge
10. Port Block
11. Bolts
12. Cartridge
13. Endcap
14. Bolts

