

ORDERING CODE

VST7ED - 042 - B22 - 1 R 00 - A 1 01 *

Series

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)

- B14 = 43.9 (2.68) B28 = 89.9 (5.49)
- B17 = 55.0 (3.36) B31 = 99.1 (6.05)
- B20 = 66.0 (4.03) B35 = 113.4 (6.92)
- B22 = 70.3 (4.29) B38 = 120.6 (7.36)
- B24 = 81.1 (4.95) B42 = 137.5 (8.39)

Type of shaft

- 1 - Keyed
- 2 - Keyed (no SAE)
- 3 - Splined (SAE-C)
- 4 - Splined (SAE-CC)
- 5 - Keyed (ISO/R775 - G38M)

Modifications

Mounting W/connection variables 4 bolts SAE flange J518

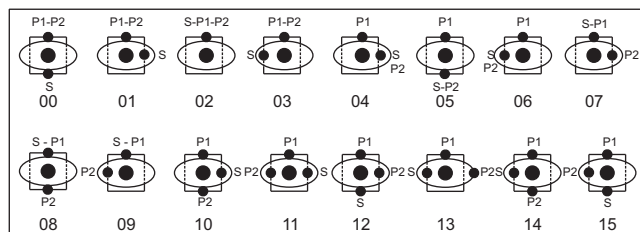
P1= 1½" P2= 1¼" S=4"		
VST7ED		
TYPE	UNC	METRIC
Code	01	M1

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

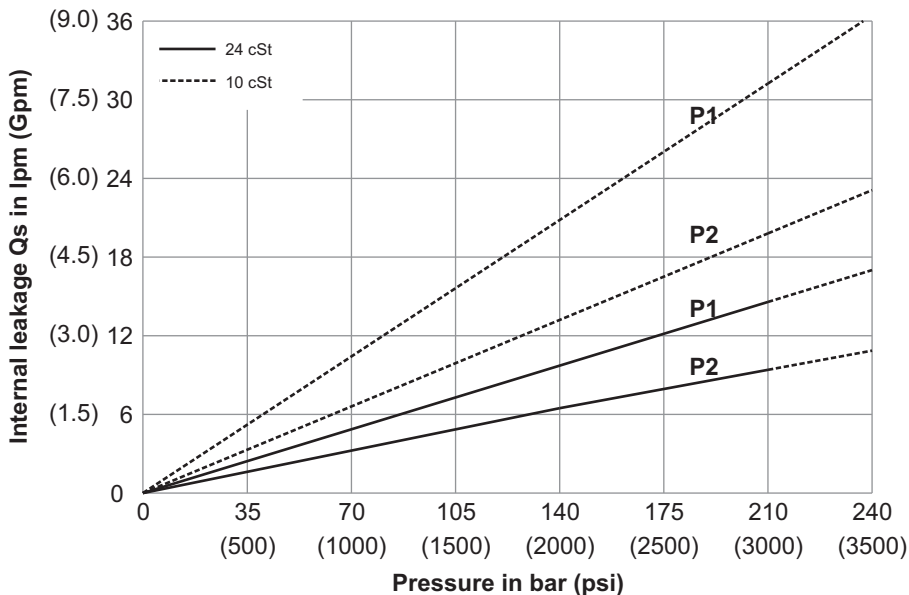


Direction of rotation (view on shaft end)

- R - clockwise
- L - Counter - Clockwise

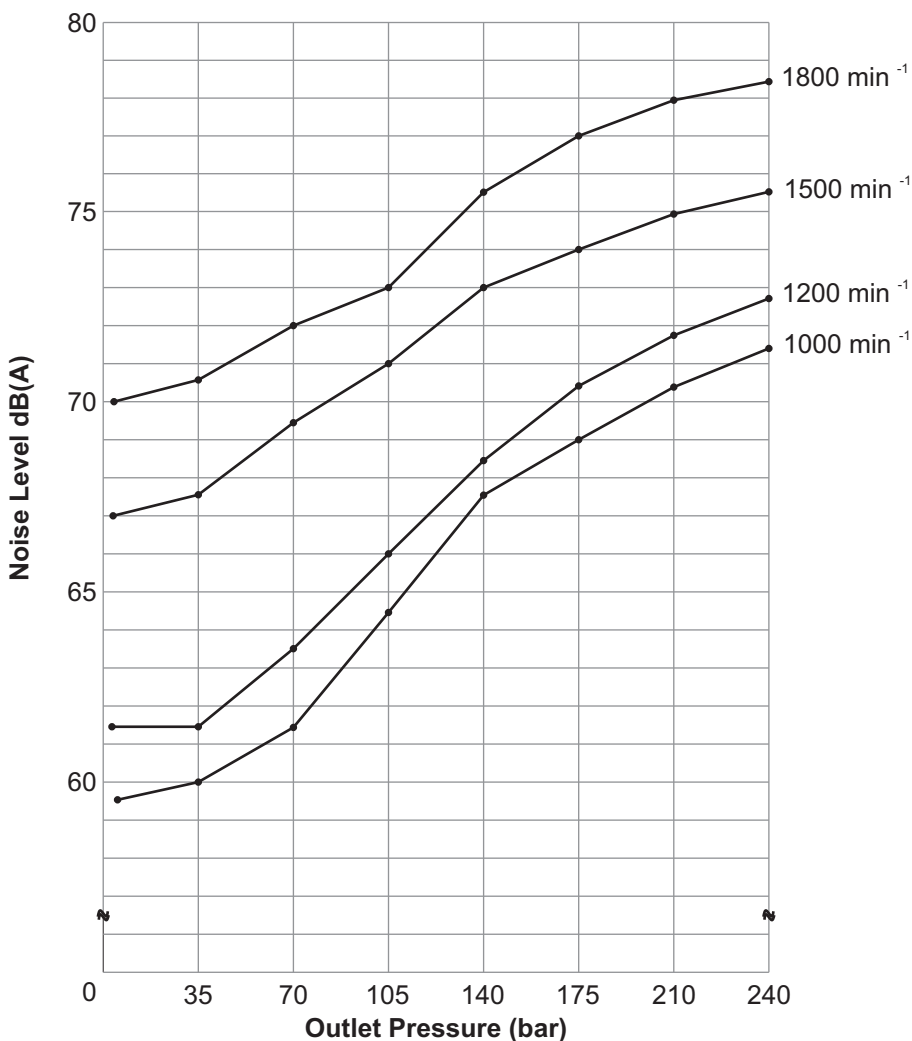


INTERNAL LEAKAGE (TYPICAL)



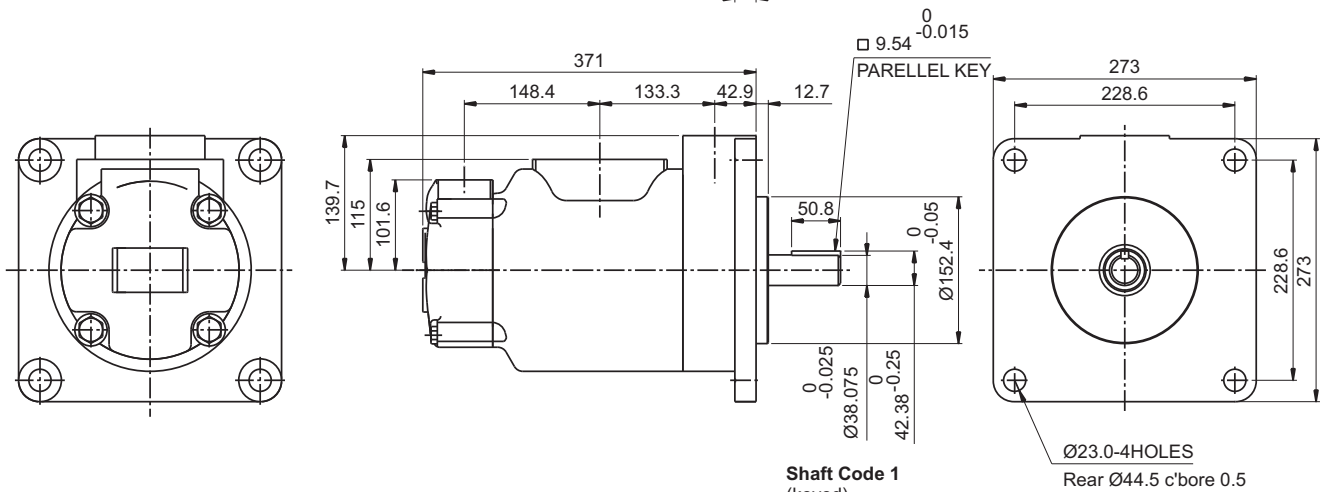
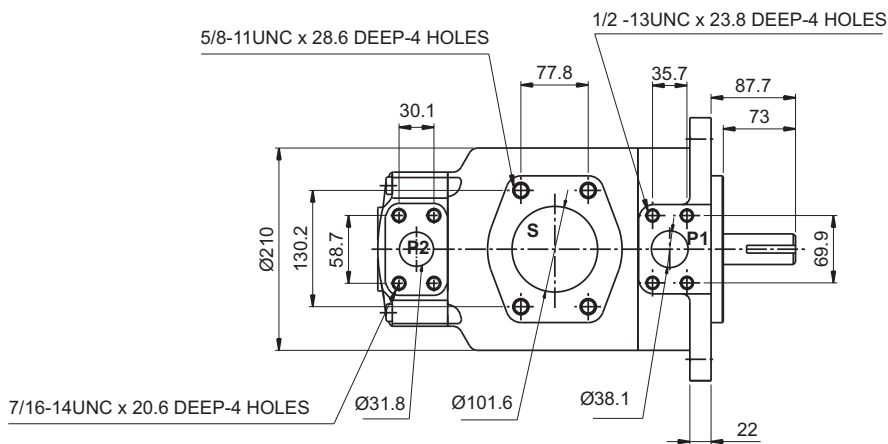
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL) VST7ED-050-B31

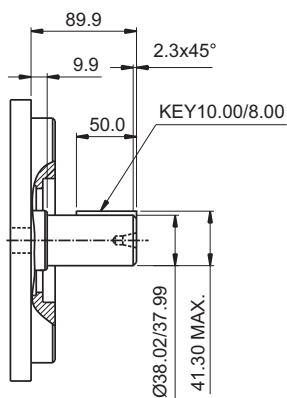


Measurement Conditions:
ISO VG32 oil at 50°C and measured 1m from rear of pump cover

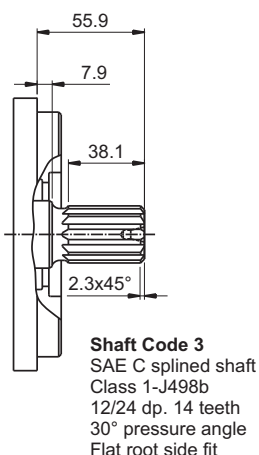
INSTALLATION DRAWING
FLANGE MOUNTING



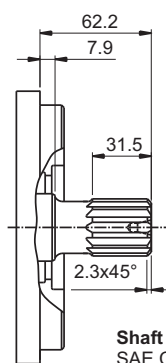
Shaft Code 1
(keyed)



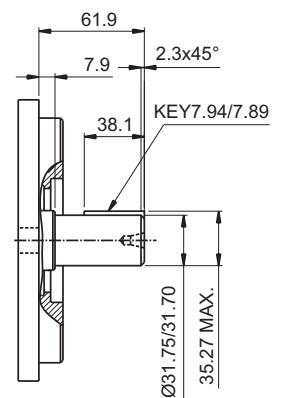
Shaft Code 5
(Keyed Iso/R775-G38M)



Shaft Code 3
SAE C splined shaft
Class 1-J498b
12/24 dp. 14 teeth
30° pressure angle
Flat root side fit



Shaft Code 4
SAE CC splined shaft
Class 1-J498b
12/24 dp. 17 teeth
30° pressure angle
Flat root side fit



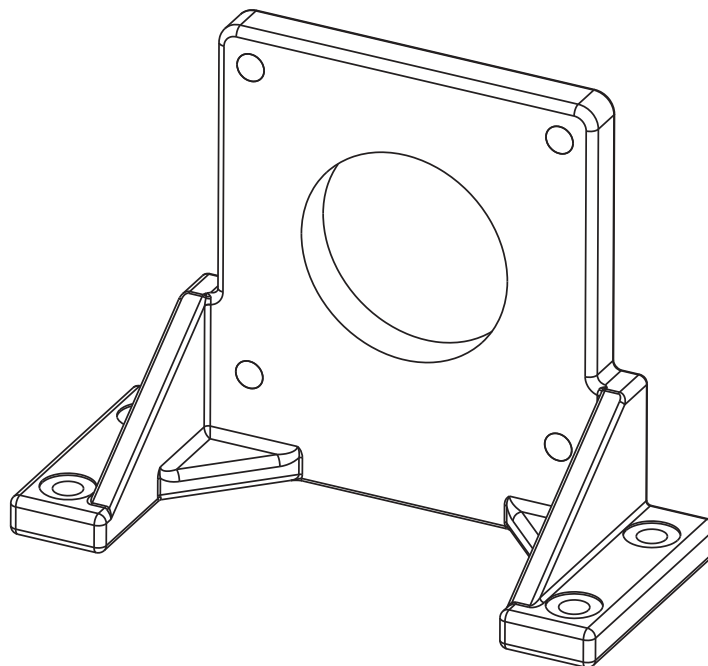
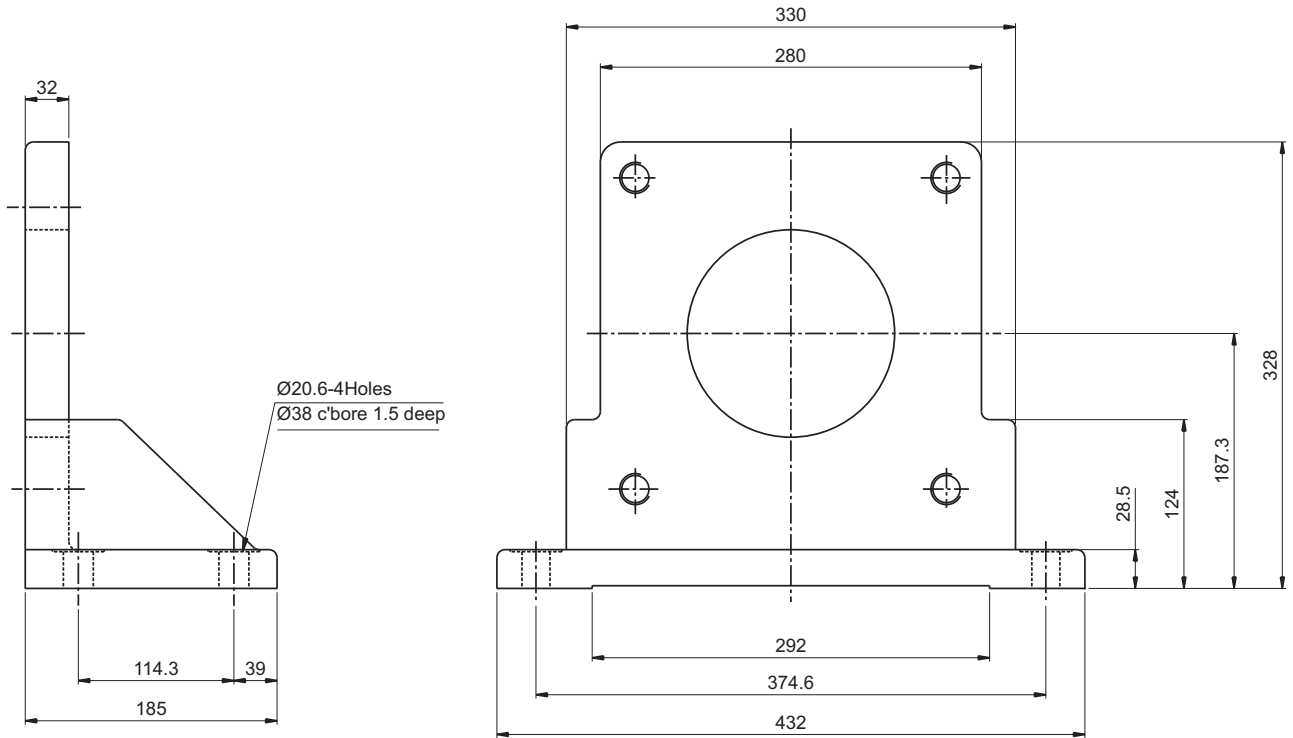
Shaft Code 2
(Keyed non SAE)

Shaft torque limits in ³ / rev x psi (ml / rev x bar)	
Shaft	Vp x p max. (P1+P2)
1	64039 (72372)
2	30638 (34590)
3	54207 (61200)
4	60673 (68568)
5	60673 (68568)

Weight-88.5 Kgs.



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	--	--



Pressure port	Series	Volumetric Displacement Vp		Input power p&n at 1500rpm					
				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	B14	2.68	43.9	18.88	71.40	16.42	62.10	14.78	55.95
	B17	3.36	55.0	23.10	87.30	20.60	78.00	18.99	71.88
	B20	4.03	66.0	26.19	99.00	23.73	89.70	22.08	83.58
	B22	4.29	70.3	28.85	109.21	26.41	99.97	25.31	95.81
	B24	4.95	81.1	31.56	119.3	29.10	110.00	27.46	103.95
	B28	5.49	89.9	35.58	134.50	33.12	125.20	31.48	119.16
	B31	6.05	99.1	39.00	147.50	36.53	138.10	34.89	132.07
	B35	6.92	113.4	44.04	166.50	41.58	157.20	39.94	151.18
	B38	7.36	120.6	47.72	180.40	45.26	171.10	43.62	165.12
	B42	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	B14	2.68	43.9	3.08	2.3	24.81	18.5	41.03	30.6
	B17	3.36	55.0	3.35	2.5	29.77	22.2	49.62	37.0
	B20	4.03	66.0	3.75	2.8	33.39	24.9	55.92	41.7
	B22	4.29	70.3	4.00	2.9	36.50	27.7	63.80	46.6
	B24	4.95	81.1	4.02	3.0	39.69	29.6	66.78	49.8
	B28	5.49	89.9	4.29	3.2	44.52	33.2	74.96	55.9
	B31	6.05	99.1	4.42	3.3	48.54	36.2	81.80	61.0
	B35	6.92	113.4	4.69	3.5	54.58	40.7	92.13	68.7
	B38	7.36	120.6	4.96	3.7	58.87	43.9	99.64	74.3
	B42	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

CONSTRUCTION

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

