

VT67EC - 062 - 010 1 R 00 - A 1 00 - *

Series-SAE C 2 bolts
Mounting flange J744c

Cam ring for "P1"

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

042 = 132.2 (8.07)	057 = 183.2 (11.18)
045 = 142.5 (8.70)	062 = 196.6 (12.00)
050 = 158.5 (9.67)	066 = 213.0 (13.00)
052 = 163.8 (10.00)	072 = 227.1 (13.86)
054 = 170.9 (10.43)	085 = 268.7 (16.40)

Cam ring for "P2"

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

003 = 10.8 (0.66)	015 = 50.5 (3.08)
005 = 17.2 (1.05)	017 = 58.3 (3.56)
006 = 21.3 (1.30)	020 = 63.8 (3.89)
008 = 26.4 (1.61)	022 = 70.3 (4.29)
010 = 34.1 (2.08)	025 = 79.3 (4.84)
012 = 37.1 (2.26)	028 = 88.8 (5.42)
014 = 46.0 (2.81)	031 = 100.0 (6.10)

Type of shaft

- 1 - keyed (SAE CC)
- 2 - keyed (no SAE)
- 3 - splined (SAE C)
- 4 - splined (SAE CC)

Modifications

Mounting W/connection variables
4 bolts SAE flange J518

TYPE	P1 = 1 1/2" & S = 3 1/2"			
	Metric thread		UNC thread	
CODE	M0	M1	00	01
P2	1"	3/4"	1"	3/4"

Seal class

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

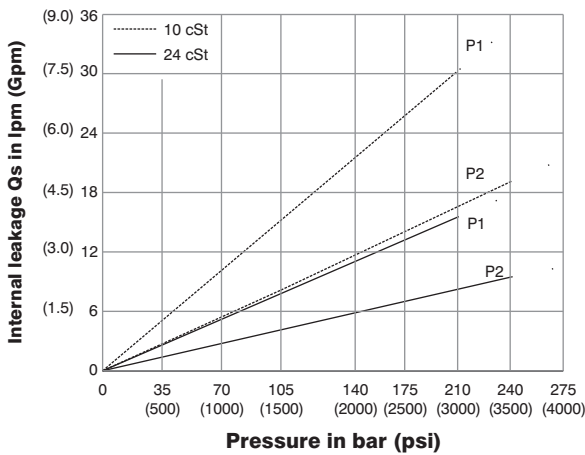
Design letter

Porting combination (see page BM-1-5)
00 - standard

Direction of rotation (view on shaft end)

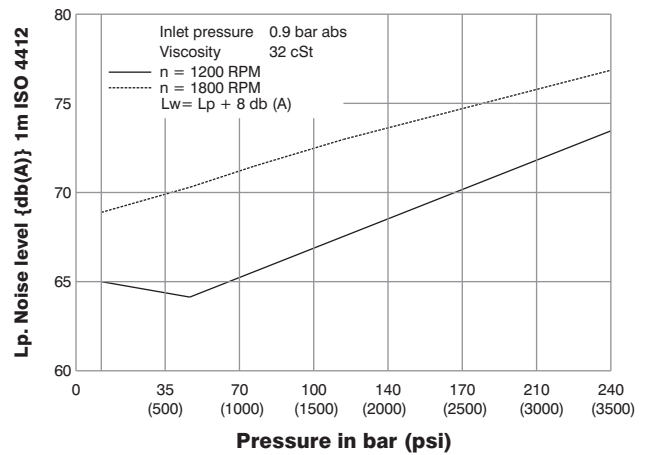
- R - clockwise
- L - counter-clockwise

INTERNAL LEAKAGE (TYPICAL)



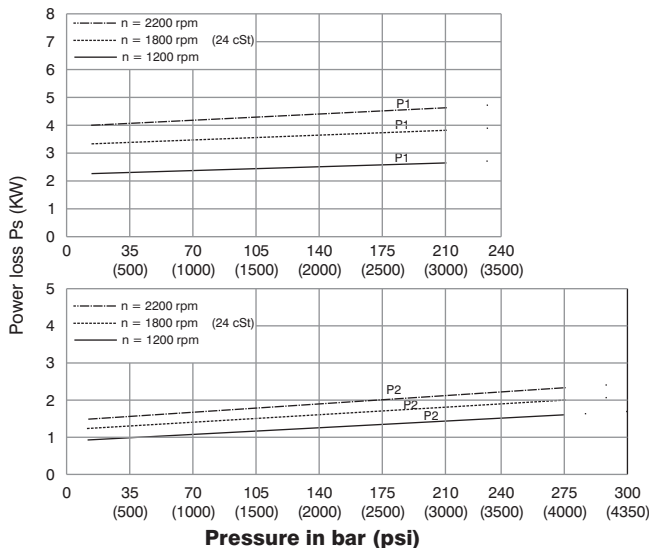
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)
VT67EC- 050-022



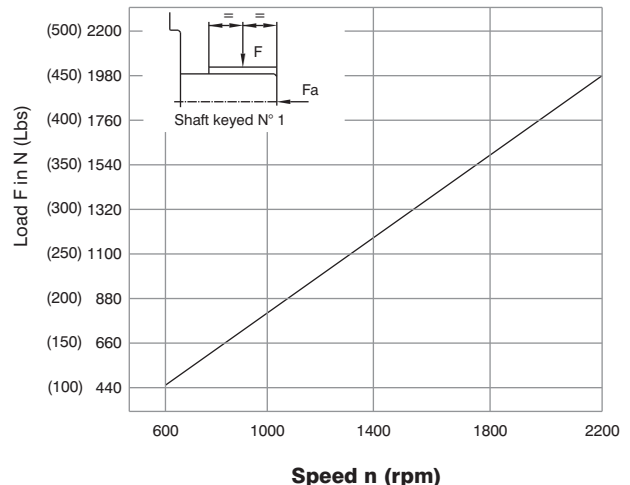
Double pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



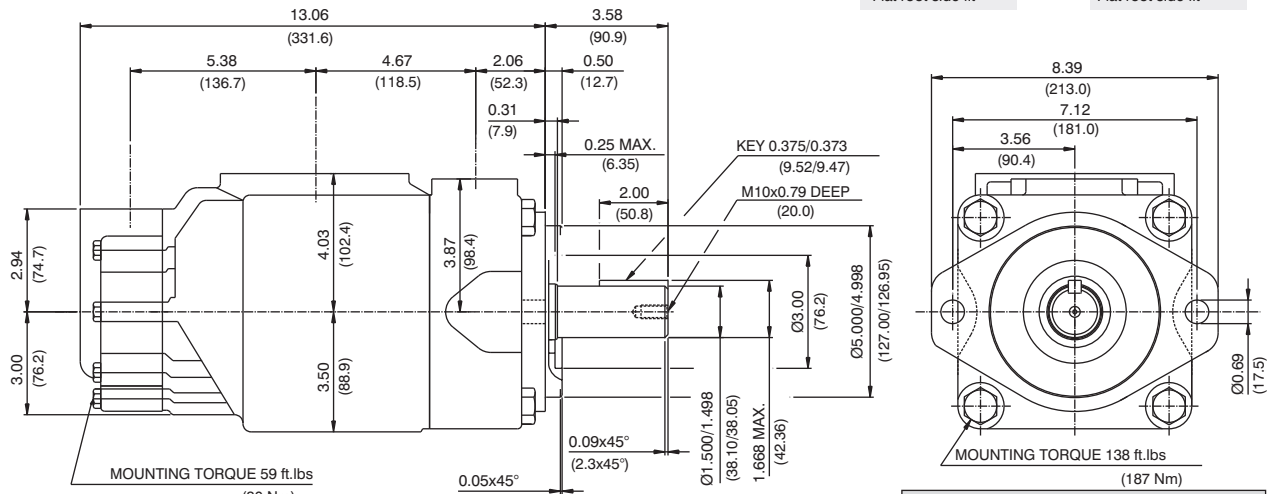
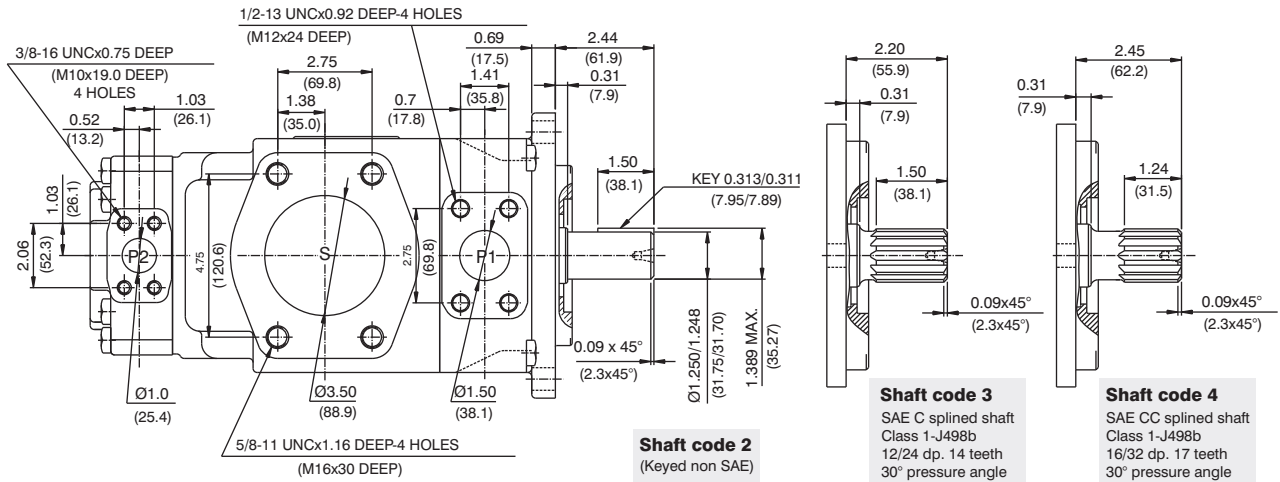
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load $F_a = 2000 \text{ N}$ (449 Lbs)

HIGH PERFORMANCE VANE PUMP VT67EC



Shaft torque limits in ³ /rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2)
1	64039 (72306)
2	30638 (34590)
3	54207 (61200)
4	67582 (76376)

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
		in ³ /rev	cm ³ /rev	p = 0 bar (0 psi)	p = 140 bar (2000 psi)	p = 240 bar (3500 psi)	p = 275 bar (4000 psi)	p = 7 bar (100 psi)	p = 140 bar (2000 psi)	p = 240 bar (3500 psi)	p = 275 bar (4000 psi)	p = 7 bar (100 psi)	p = 140 bar (2000 psi)	p = 240 bar (3500 psi)	p = 275 bar (4000 psi)
		gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.2	62.92	237.8	60.37	228.2	58.52	221.2	8.09	6.03	78.44	58.49	133.80	99.77
	045	8.70	142.5	67.72	255.9	65.17	246.3	63.32	239.3	8.37	6.24	84.04	62.66	143.60	107.08
	050	9.67	158.5	75.38	284.9	72.83	275.3	70.98	268.3	8.82	6.58	92.97	69.32	159.24	118.75
	052	10.00	163.8	78.37	296.2	75.82	286.6	73.97	279.6	8.99	6.70	96.47	71.94	165.36	123.31
	054	10.43	170.9	81.27	307.2	78.72	297.6	76.87	290.6	9.17	6.84	99.75	74.38	177.46	132.33
	057	11.18	183.2	87.12	329.3	84.57	319.7	82.72	312.7	9.51	7.09	106.57	79.47	189.84	141.56
	062	12.00	196.6	93.54	353.6	90.99	343.9	89.14	336.9	9.88	7.37	114.17	85.13	196.34	146.41
	066	13.00	213.0	101.44	383.4	98.89	373.8	97.04	366.8	10.34	7.71	123.38	92.01	212.46	158.43
	072	13.86	227.1	108.00	408.2	105.45	398.6	103.60	391.6	10.72	7.99	131.04	97.71	225.86	166.42
085 ^{1,2)}	16.40	268.7	127.79	483.0	126.13	476.7	--	--	11.88	8.85	101.66	75.80	--	--	
P2				p = 0 bar (0 psi)	p = 140 bar (2000 psi)	p = 275 bar (4000 psi)	p = 275 bar (4000 psi)	p = 7 bar (100 psi)	p = 140 bar (2000 psi)	p = 275 bar (4000 psi)					
	003	0.66	10.8	5.14	19.6	3.85	14.6	--	--	2.11	1.57	8.45	6.30	--	--
	005	1.05	17.2	8.18	30.9	6.89	26.0	5.68	21.5	2.29	1.70	12.00	8.94	19.81	14.77
	006	1.30	21.3	10.13	38.3	8.84	33.4	7.63	28.8	2.40	1.78	14.28	10.64	23.79	17.74
	008	1.61	26.4	12.55	47.4	11.26	42.6	10.05	37.9	2.54	1.89	17.11	12.75	28.75	21.43
	010	2.08	34.1	16.22	61.3	14.93	56.4	13.71	51.8	2.76	2.06	21.38	15.94	36.22	27.00
	012	2.26	37.1	17.64	66.7	16.35	61.8	15.14	57.2	2.84	2.11	23.05	17.18	39.14	29.18
	014	2.81	46.0	21.88	82.7	20.59	77.8	19.37	73.2	3.09	2.30	27.99	20.87	47.78	35.62
	015	3.08	50.5	23.99	90.7	22.83	86.3	21.56	81.5	3.21	2.40	30.30	22.60	51.36	38.30
	017	3.56	58.3	27.73	104.8	26.44	99.9	25.22	95.3	3.43	2.55	34.81	25.95	59.73	44.54
	020	3.89	63.8	30.34	114.7	29.05	109.8	27.84	105.2	3.58	2.66	37.86	28.23	65.07	48.52
	022 ⁴⁾	4.29	70.3	33.43	126.4	32.14	121.5	30.93	116.9	3.76	2.80	41.47	30.92	71.38	53.22
	025 ^{3,5)}	4.84	79.3	37.71	142.5	36.42	137.6	35.21	133.1	4.01	2.99	46.46	34.64	80.12	59.74
	028 ^{3,6)}	5.42	88.8	42.23	159.6	40.94	154.7	40.32	152.4	4.27	3.18	51.74	38.58	86.73	64.52
	031 ^{3,6)}	6.10	100.0	47.56	179.7	46.27	174.9	45.65	172.5	4.58	3.41	57.95	43.21	94.06	70.17

1) 085 = 90 bar (1300 psi) max. int. 2) 085 = 2000 RPM max. 3) 025-028-031 = 2500 R.P.M. max. 4) 022 = 275 bar max. int.
5) 025 = 240 bar max. int. 6) 028-031 = 210 bar max. int.

-- Not recommended to use as the internal leakage is over 50 of theoretical flow.