

## VT67DC W - 038 - B08 1 R 00 - A 1 M1 -

**Series**  
SAE B 2 bolts  
Mounting flange J744c

use for severe duty shaft only

### Camring for "P1"

Volumetric displacement  $\text{cm}^3/\text{rev}$  ( $\text{in}^3/\text{rev}$ )  
 B14=2.68 (43.9) B31=6.05 (99.1)  
 B17=3.36 (55.0) B35=6.92 (113.4)  
 B20=4.03 (66.0) B38=7.36 (120.6)  
 B22=4.29 (70.3) B42=8.39 (137.5)  
 B24=4.95 (81.1) 045=8.89 (145.7)  
 B28=5.49 (89.9) 050=9.64 (157.9)  
 \* '0' - Uni - directional 'B' - Bi - directional

### Camring for "P2"

Volumetric displacement  $\text{cm}^3/\text{rev}$  ( $\text{in}^3/\text{rev}$ )  
 003/B03=0.66 (10.80) 015/B15=3.08 (50.50)  
 005/B05=1.05 (17.20) 017/B17=3.56 (58.30)  
 006/B06=1.30 (21.30) 020/B20=3.89 (63.80)  
 008/B08=1.61 (26.40) 022/B22=4.29 (70.30)  
 010/B10=2.08 (34.10) 025/B25=4.84 (79.30)  
 012/B12=2.26 (37.10) 028/B28=5.42 (88.80)  
 014/B14=2.81 (46.00) 031/B31=6.10 (100.00)  
 \* '0' - Uni - directional 'B' - Bi - directional

### Modifications

### Mounting W/connection variables

	UNC		METRIC	
	00	01	M0	M1
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

00 - standard

### Direction of rotation (view on shaft end)

- R - clockwise
- L - counter-clockwise

### Type of shaft

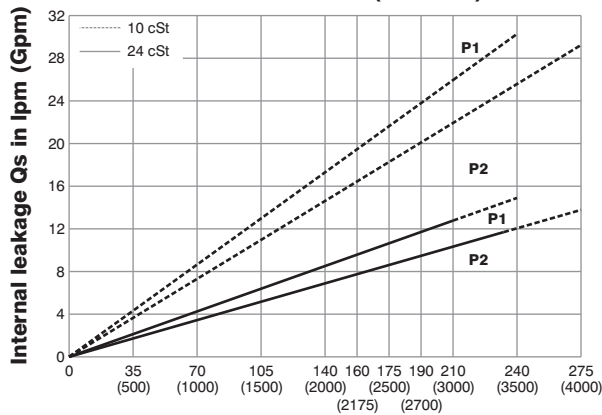
- 1 - keyed (SAE C)
- 2 - keyed (no SAE)
- 3 - splined (SAE C)
- 4 - splined (no SAE)

### Sever duty (VT67DCW only)

5 - keyed (no SAE)

VP  
DP

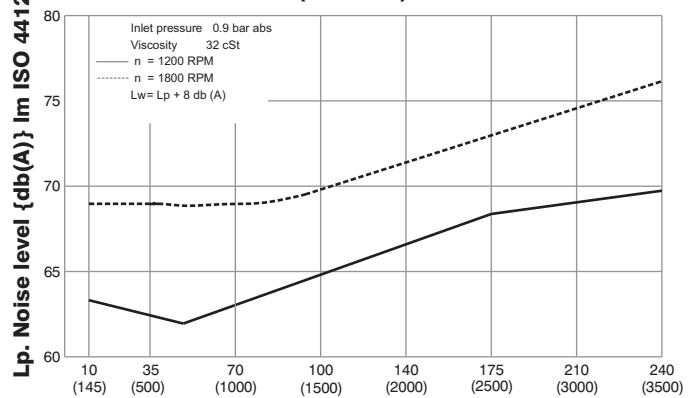
### INTERNAL LEAKAGE (TYPICAL)



### Pressure in bar (psi)

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.

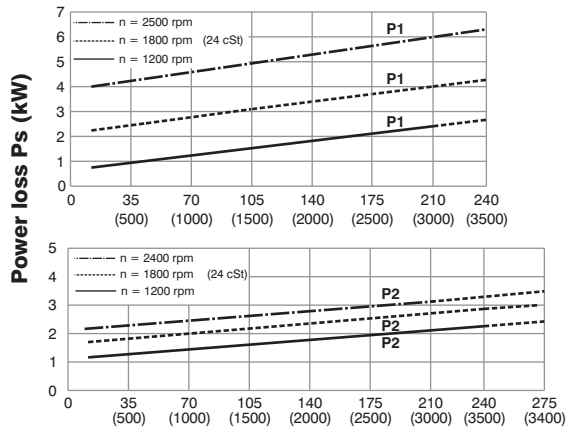
### NOISE LEVEL (TYPICAL) - VT67DC- B31-022



### Pressure in bar (psi)

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

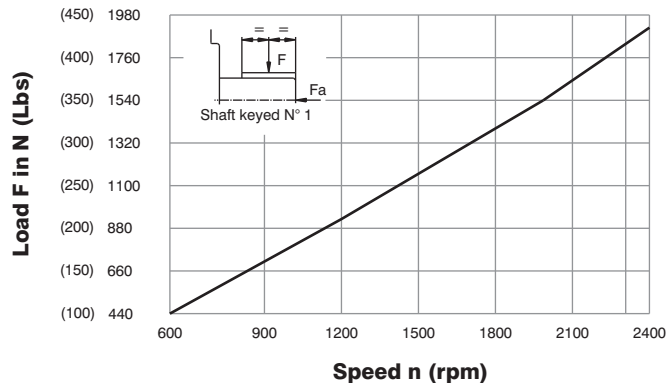
### HYDROMECHANICAL POWER LOSS (TYPICAL)



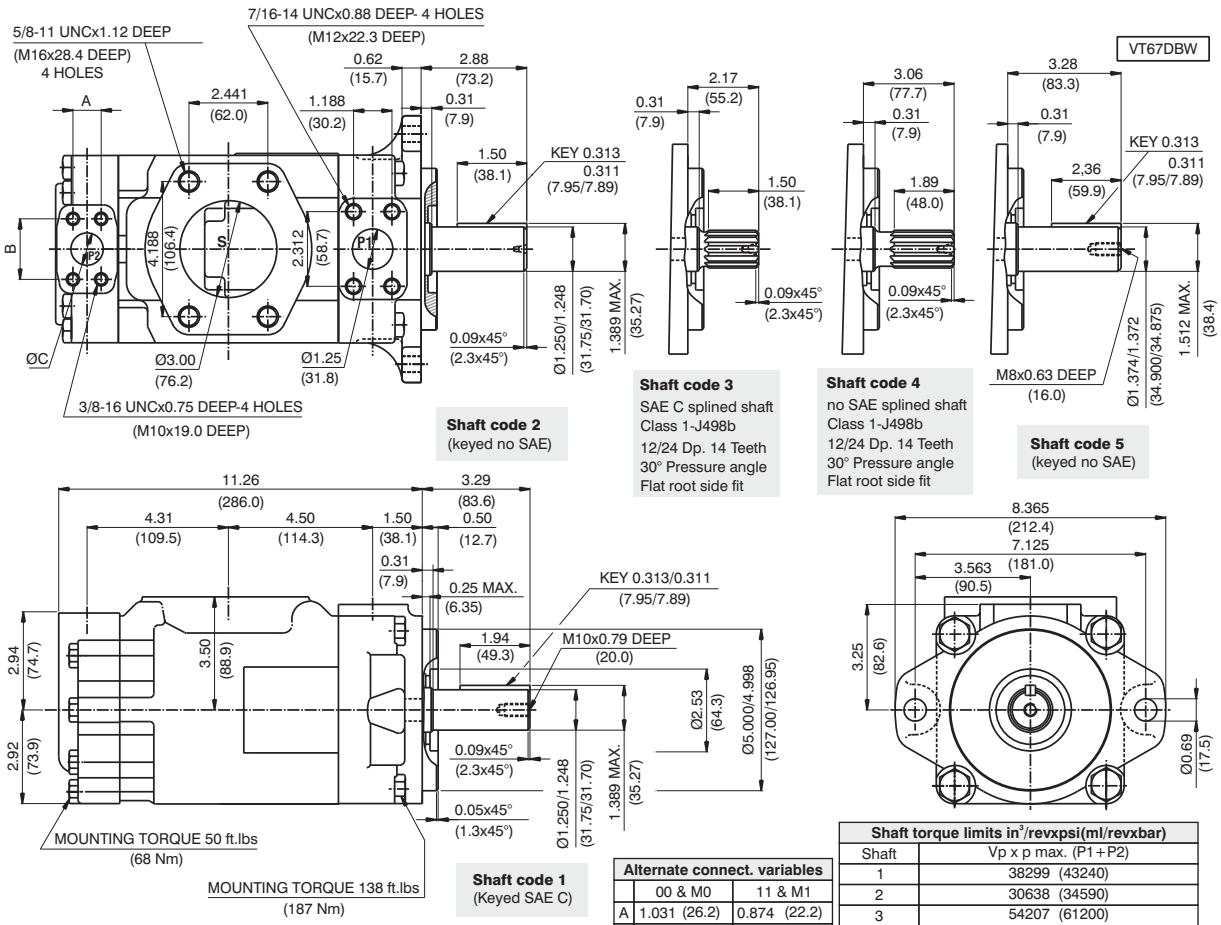
### Pressure in bar (psi)

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

### PERMISSIBLE RADIAL LOAD



Maximum permissible axial load  $F_a = 1200 \text{ N (270 Lbs)}$



## 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 <sup>3</sup> /rev	cm <sup>3</sup> /rev	p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
				gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.6	27.77	20.7	47.03	35.07
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.8	33.88	25.3	57.71	43.03
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.0	39.98	29.8	68.39	50.99
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.1	42.37	31.6	72.57	54.11
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.4	48.36	36.1	83.06	61.93
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.5	53.30	39.7	91.70	68.38
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.7	58.41	43.6	100.63	75.03
	B35	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.0	66.29	49.4	114.42	85.32
	B38	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.2	70.28	52.4	121.42	90.54
	B42	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.5	79.66	59.4	137.83	102.77
045	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.0	83.75	62.4	145.79	108.71	
050	9.64	157.9	75.14	284.0	72.96	275.8	71.78 <sup>1)</sup>	271.3 <sup>1)</sup>	7.08	5.3	90.58	67.5	134.50 <sup>1)</sup>	100.3 <sup>1)</sup>	
P2	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	4.29	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	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	5.42	88.8	42.23	159.6	40.94	154.7	40.32 <sup>2)</sup>	152.4 <sup>2)</sup>	4.27	3.18	51.74	38.58	76.73 <sup>2)</sup>	57.22 <sup>2)</sup>
031	6.10	100.0	47.56	179.7	46.27	174.9	45.65 <sup>2)</sup>	172.5 <sup>2)</sup>	4.58	3.41	57.95	43.21	86.06 <sup>2)</sup>	64.17 <sup>2)</sup>	

- Not recommended to use as the internal leakage is over 50% of theoretical flow.  
 1) 050 = 210 bar (3000 psi) max. int 2) 028 - 031 = 210 bar (3000 psi) max.int