

Series SAE B 2 bolts
Mounting flange J744c

use for severe duty shaft only

Cam ring for "P1"

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

*014/B14 = 47.6 (2.90) 035/B35 = 111.0 (6.77)
017/B17 = 58.2 (3.55) 038/B38 = 120.3 (7.34)
020/B20 = 66.0 (4.03) 042/B42 = 136.0 (8.30)
024/B24 = 79.5 (4.85) 045/B45 = 145.7 (8.89)
028/B28 = 89.7 (5.47) 050/B50 = 158.0 (9.64)
031/B31 = 98.3 (6.00) 061/B61 = 190.5 (11.62)

*'0' - Uni-directional 'B' - Bi-directional

Cam ring for "P2"

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

B02 = 5.7 (0.35) B09 = 28.0 (1.71)
B03 = 9.8 (0.60) B10 = 31.8 (1.94)
B04 = 12.8 (0.78) B11 = 34.9 (2.13)
B05 = 15.9 (0.97) B12 = 40.9 (2.50)
B06 = 19.8 (1.21) B14 = 45.1 (2.75)
B07 = 22.5 (1.37) B15 = 50.0 (3.05)
B08 = 24.9 (1.52)

VT67DB W - 038 - B08 1 R 00 - A 1 M1 -

Sever duty (VT67DBW only)
5 - keyed (no SAE)

Modifications

Mounting W/connection variables

P1=1 1/4" & S=3"			
TYPE	Metric thread	UNC thread	
CODE	M0	M1	11
P2	1"	3/4"	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

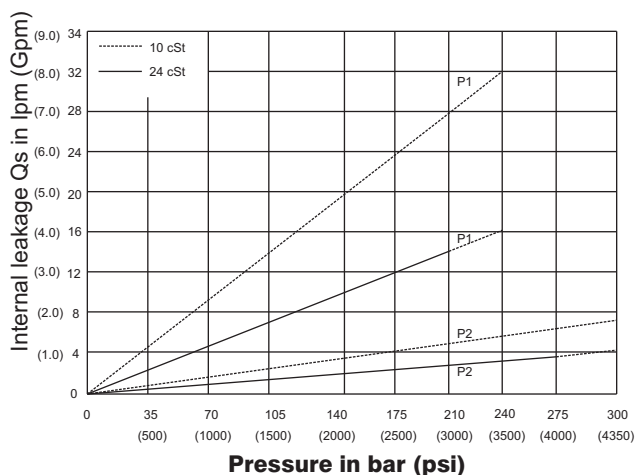
Porting combination (see page BM-1-5)
00 - standard

Direction of rotation (view on shaft end)
R - clockwise
L - counter-clockwise

Type of shaft

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

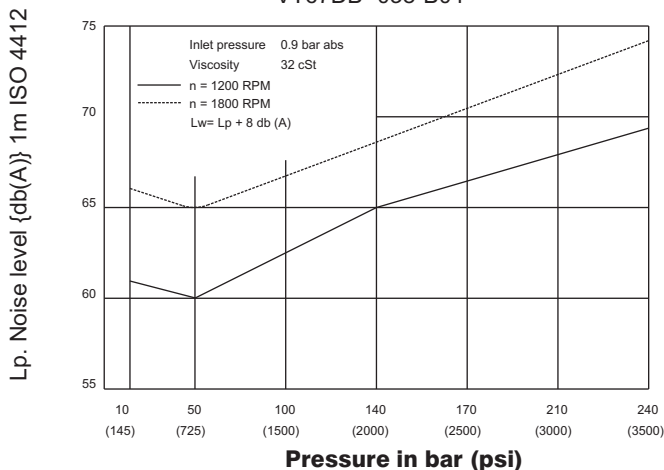
INTERNAL LEAKAGE (TYPICAL)



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.

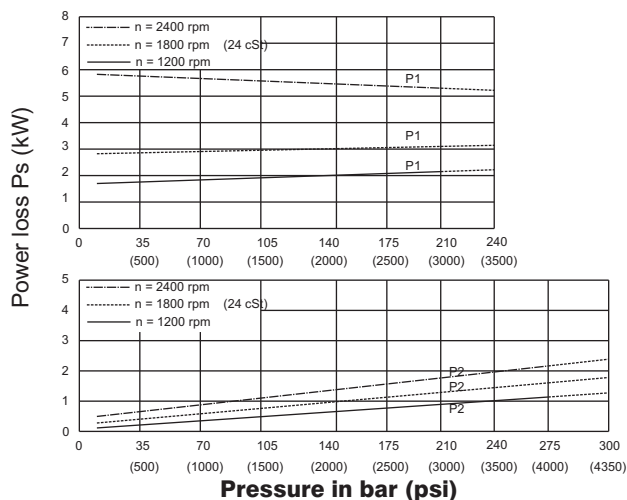
NOISE LEVEL (TYPICAL)

VT67DB- 038-B04



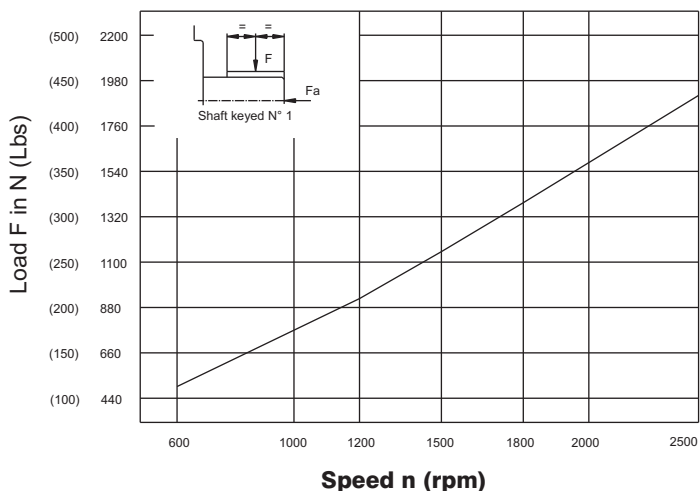
Double pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)

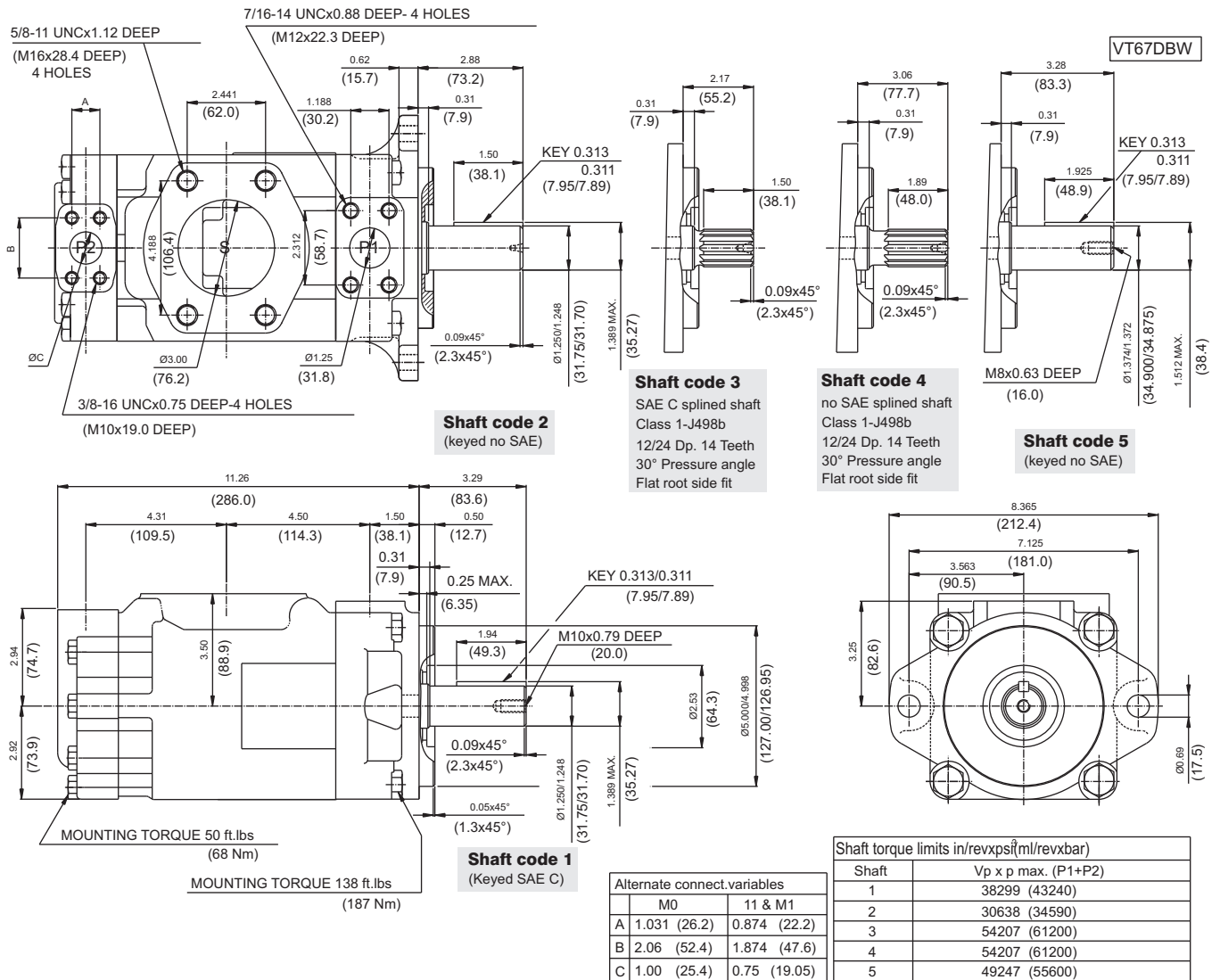


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load F_a = 1200 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					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)			
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw	hp	kw
P1	014	2.90	47.6	22.64	85.0	20.46	77.4	18.82	71.1	4.02	2.99	29.31	21.85	49.34	36.79		
	017	3.55	58.2	27.71	104.7	24.76	93.6	22.8	86.2	4.02	2.99	35.70	26.62	59.52	44.38		
	020	4.03	66.0	31.39	118.6	29.29	101.4	27.57	104.2	4.53	3.38	39.52	29.47	67.21	50.11		
	024	4.85	79.5	37.81	142.8	35.63	134.6	33.99	128.5	4.91	3.66	47.02	35.06	80.32	59.89		
	028	5.47	89.7	42.66	161.3	40.48	153.0	38.84	146.8	5.19	3.87	52.68	39.28	90.23	67.28		
	031	6.00	98.3	46.75	176.7	44.57	168.5	42.93	162.3	5.43	4.09	57.45	42.84	98.58	73.51		
	035	6.77	111.0	52.79	199.6	50.61	191.3	48.97	184.1	5.78	4.31	64.50	48.09	110.91	82.70		
	038	7.34	120.3	57.21	216.3	55.03	208.1	53.39	201.8	6.04	4.50	69.66	51.94	111.94	83.47		
	042 ¹⁾	8.30	136.0	64.68	244.5	62.50	236.3	60.86	230.1	6.47	4.83	78.37	58.44	135.19	100.81		
	045 ¹⁾	8.89	145.7	69.29	261.9	67.11	253.7	65.47	247.5	6.74	5.02	83.75	62.45	144.61	107.83		
	050 ¹⁾	9.64	158.0	75.14	284.1	72.96	275.8	71.78 ²⁾	271.3 ²⁾	7.08	5.27	90.58	67.54	134.54 ²⁾	100.32 ²⁾		
P2	061 ¹⁾	11.62	190.5	75.6	285.8	73.54 ³⁾	278.0 ³⁾	--	--	7.37	5.50	97.49 ³⁾	72.69 ³⁾	--	--		
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)			
	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.40		
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.65	12.93	10.25		
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	13.13		
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	16.12		
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	19.88		
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	22.47		
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.94	14.62	10.90	31.15	24.78		
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.01	16.35	12.19	34.92	27.77		
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.11	18.45	13.75	39.48	31.42		
	B11	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.15	20.17	15.04	43.22	32.22		
	B12	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71		
	B14	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.23	55.48	41.37		
	B15	3.05	50.0	23.78	89.8	23.35	88.3	22.88 ⁴⁾	86.5 ⁴⁾	1.97	1.47	28.55	21.28	57.35 ⁴⁾	42.76 ⁴⁾		

1) 042-045-050-061=2200 RPM max.2) 050=210 bar (3000 psi) max.3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.

4) B15 = 280 bar (4060 psi) max. int