

VT6DCCM - 038 - 028 - 008 - 1 R 00 - A 1 - 00 - *

Series

Cam ring for "P1"
 Volumetric displacement cm³/rev (in³/rev)
 *B14/R14 = 47.6 (2.90) B35/R35 = 110.0 (6.77)
 B17/R17 = 58.2 (3.55) B38/R38 = 120.3 (7.34)
 B20/R20 = 66.0 (4.03) B42/R42 = 136.0 (8.30)
 B24/R24 = 79.5 (4.85) B45/R45 = 145.7 (8.80)
 B28/R28 = 89.7 (5.47) B50/R50 = 158.0 (9.64)
 B31/R31 = 98.3 (6.00) B61/R61 = 190.5 (11.62)
 *'B' - for Mobile 'R' - for Mobile - spring assisted

Cam ring for "P2" & "P3"
 Volumetric displacement cm³/rev (in³/rev)
 *B03/R03 = 10.8 (0.66) B15/R15 = 50.5 (3.08)
 B05/R05 = 17.2 (1.05) B17/R17 = 58.3 (3.56)
 B06/R06 = 21.3 (1.30) B20/R20 = 63.8 (3.89)
 B08/R08 = 26.4 (1.61) B22/R22 = 70.3 (4.29)
 B10/R10 = 34.1 (2.08) B25/R25 = 79.3 (4.84)
 B12/R12 = 37.1 (2.26) B28/R28 = 88.8 (5.42)
 B14/R14 = 46.0 (2.81) B31/R31 = 100.0 (6.10)
 *'B' - for Mobile
 'R' - for Mobile - spring assisted

Modification

Mounting w/connection variables

	UNC		METRIC	
	00	01	M0	M1
P3	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 CI-1-4,5)
 00 = Standard

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

Type of Shaft
 1 - Keyed (no SAE)
 2 - Keyed (SAE CC)
 3 - Splined (SAE C)
 4 - Splined (SAE CC)
 6 - Splined (no SAE)



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

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 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)	
				in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw
P1	B14	2.90	47.6	18.88	71.4	16.42	62.1	14.78	55.9	3.08	2.3	24.81	18.5	41.03	30.6
	B17	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0
	B20	4.00	66.0	26.19	99.0	23.73	89.7	22.08	83.5	3.75	2.8	33.39	24.9	55.92	41.7
	B24	4.80	79.5	31.56	119.3	29.10	110.0	27.46	103.8	4.02	3.0	39.69	29.6	66.78	49.8
	B28	5.50	89.7	35.58	134.5	33.12	125.2	31.48	119.0	4.29	3.2	44.52	33.2	74.96	55.9
	B31	6.00	98.3	39.00	147.5	36.53	138.1	34.89	131.9	4.42	3.3	48.54	36.2	81.80	61.0
	B35	6.80	111.0	44.04	166.5	41.58	157.2	39.94	151.0	4.69	3.5	54.58	40.7	92.13	68.7
	B38	7.30	120.3	47.72	180.4	45.26	171.1	43.62	164.9	4.96	3.7	58.87	43.9	99.64	74.3
	B42 ¹⁾	8.30	136.0	53.96	204.0	51.50	194.7	49.86	188.5	5.36	4.0	66.25	49.4	112.24	83.7
	B45 ¹⁾	8.89	145.7	57.80	218.5	55.34	209.2	53.70	203.0	5.50	4.1	70.81	52.8	120.02	89.5
	B50 ¹⁾	9.64	158.0	62.69	237.0	60.23	227.7	59.25 ²⁾	224.0 ²⁾	5.90	4.4	76.44	57.0	113.98 ²⁾	85.0 ²⁾
	B61 ¹⁾	11.62	190.5	76.25	285.7	73.54 ³⁾	278.0 ³⁾	--	--	6.16	4.6	81.26 ³⁾	60.6 ³⁾	--	--
P2 & P3	B03	0.66	10.8	4.29	16.2	2.83	10.7	--	--	1.74	1.3	7.11	5.3	--	--
	B05	1.05	17.2	6.83	25.8	5.37	20.3	4.17	15.8	1.88	1.4	10.06	7.5	16.36	12.2
	B06	1.30	21.3	8.44	31.9	7.01	26.5	5.82	22.0	2.01	1.5	11.94	8.9	19.71	14.7
	B08	1.61	26.4	10.48	39.6	9.02	34.1	7.83	29.6	2.15	1.6	14.35	10.7	22.93	17.7
	B10	2.08	34.1	13.52	51.1	12.08	45.7	10.89	41.2	2.28	1.7	18.64	13.4	29.90	22.3
	B12	2.26	37.1	14.71	55.6	13.28	50.2	12.08	45.7	2.28	1.7	19.31	14.4	32.32	24.1
	B14	2.81	46.0	18.25	69.0	16.79	63.5	15.60	59.0	2.55	1.9	23.60	17.6	39.56	29.5
	B15	3.08	50.5	20.00	75.6	18.62	70.4	17.46	66.0	2.68	2.0	25.61	19.1	42.91	32.0
	B17	3.56	58.3	23.12	87.4	21.69	82.0	20.50	77.5	2.82	2.1	29.37	21.9	49.48	36.9
	B20	3.89	63.8	25.32	95.7	23.86	90.2	22.67	85.7	2.95	2.2	31.92	23.8	53.91	40.2
	B22	4.29	70.3	27.88	105.4	26.45	100.0	25.26	95.5	3.08	2.3	35.00	26.1	59.14	44.1
	B25	4.84	79.3	31.46	118.9	30.02	113.5	28.83	109.0	3.35	2.5	39.16	29.2	66.38	49.5
B28	5.42	88.8	35.24	133.2	33.78	127.7	32.93 ²⁾	124.5 ²⁾	3.75	2.8	43.85	32.7	65.04 ²⁾	48.5 ²⁾	
B31	6.10	100.0	39.68	150.0	38.22	144.5	37.38 ²⁾	141.3 ²⁾	3.75	2.8	48.95	36.5	72.95 ²⁾	54.4 ²⁾	

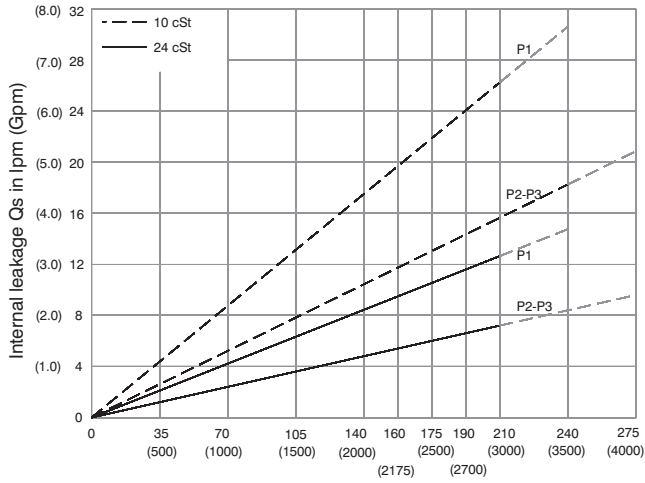
1) B42-B45-B50-B61=2200 RPM max.

2) B28-B31- B50=210 bar (3000 psi) max.

3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.

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

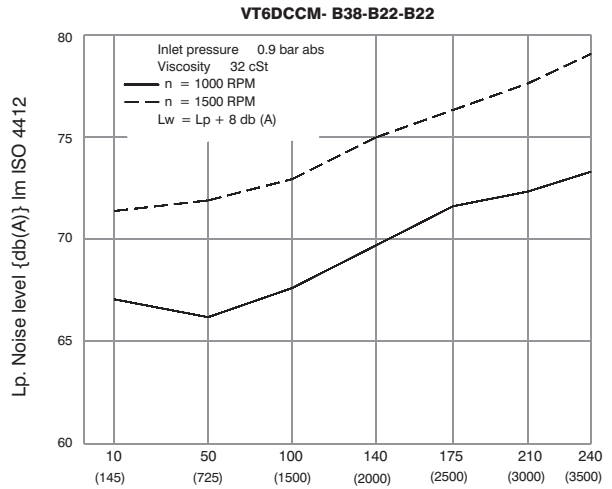
INTERNAL LEAKAGE (TYPICAL)



Pressure in bar (psi)

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

NOISE LEVEL (TYPICAL)

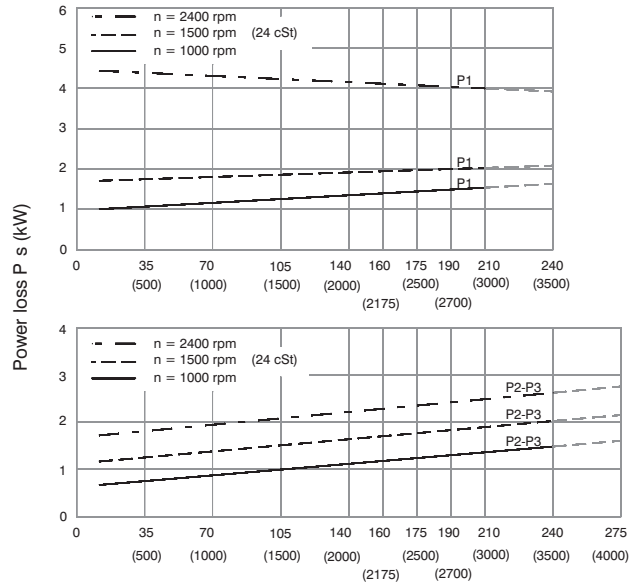


Pressure in bar (psi)

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



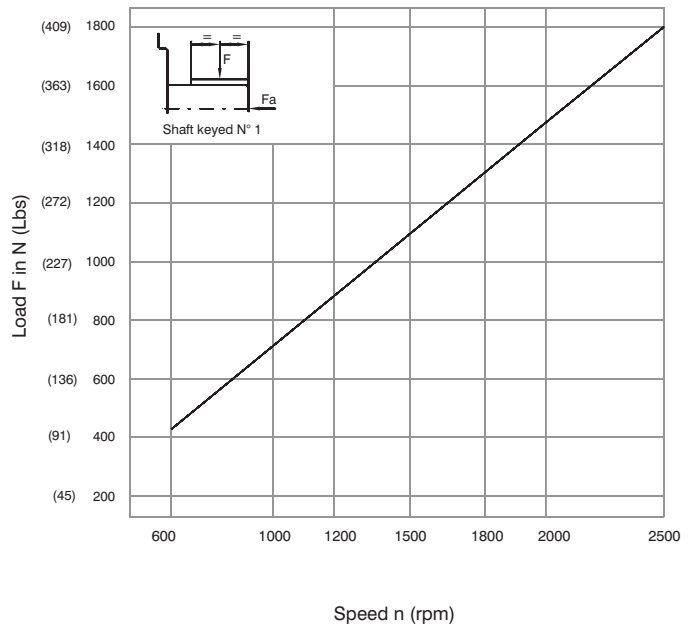
HYDROMECHANICAL POWER LOSS (TYPICAL)



Pressure in bar (psi)

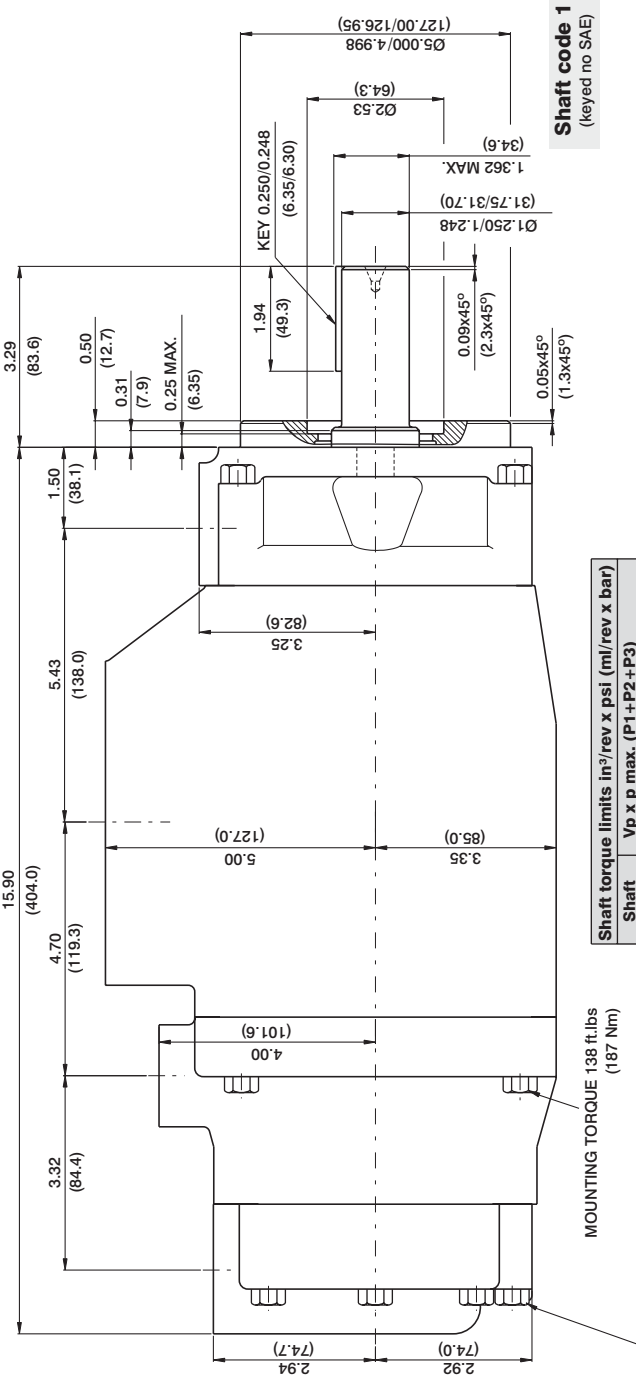
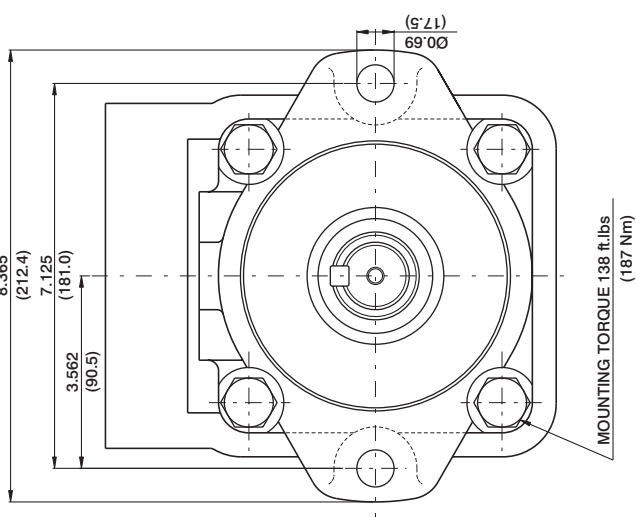
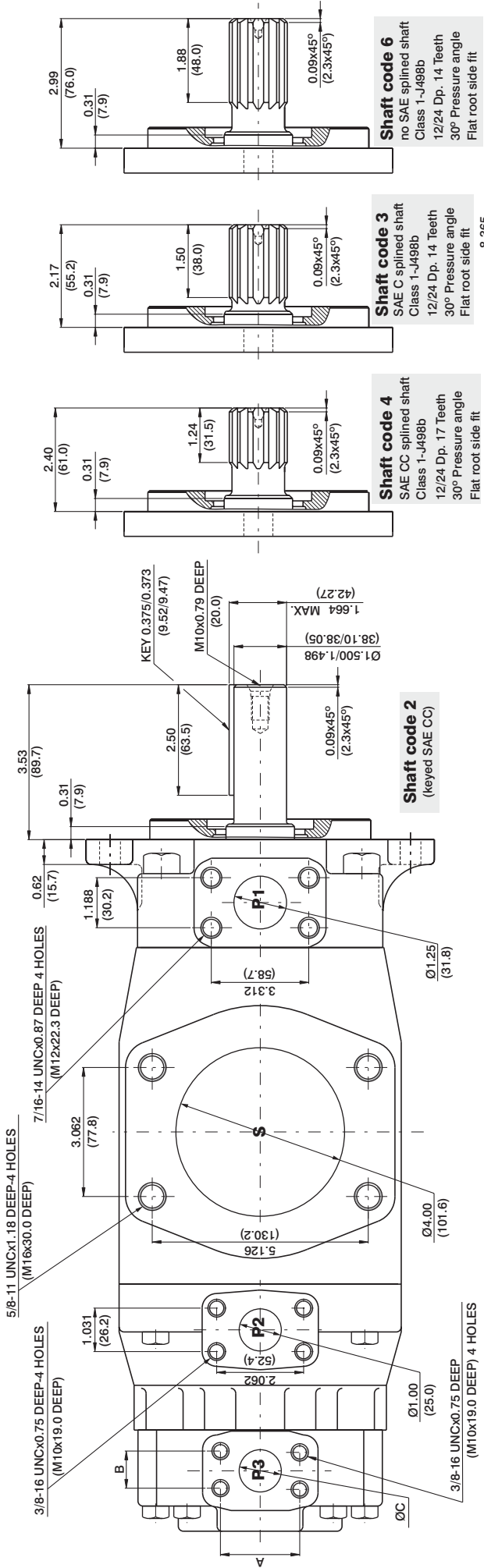
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Speed n (rpm)

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



Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	58209 (66500)
3	54027 (61200)
4	58902 (66500)

PORT	CODE	A	B	C
P0 & M0	00 & M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	P3	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)