

VANE PUMPS TRIPLE

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

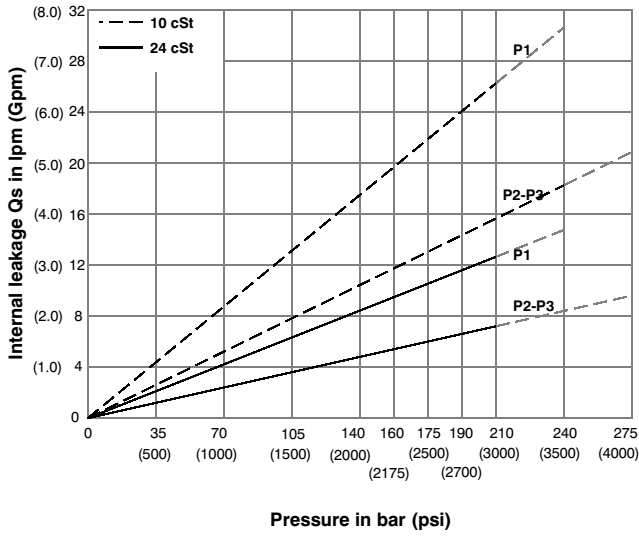
Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
		in <sup>3</sup> /rev	cm <sup>3</sup> /rev	p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
				gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	014	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
	017	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
	020	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
	024	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
	028	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
	031	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
	035	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
	038	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
	042 <sup>1)</sup>	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
	045 <sup>1)</sup>	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
	050 <sup>1)</sup>	9.64	158.0	62.69	237.0	60.23	227.7	59.25 <sup>2)</sup>	224.0 <sup>2)</sup>	5.90	4.4	76.44	57.0	113.98 <sup>2)</sup>	85.0 <sup>2)</sup>
061 <sup>1)</sup>	11.65	190.5	76.25	285.7	73.54 <sup>3)</sup>	278.0 <sup>3)</sup>	--	--	6.16	4.6	81.26 <sup>3)</sup>	60.6 <sup>3)</sup>	--	--	
P2 & P3	003	0.66	10.8	4.29	16.2	2.96	11.2	2.04	7.7	1.74	1.3	7.11	5.3	11.22	8.4
	005	1.05	17.2	6.83	25.8	5.50	20.8	4.57	17.3	1.88	1.4	10.06	7.5	16.36	12.2
	006	1.30	21.3	8.44	31.9	7.11	26.9	6.19	23.4	2.01	1.5	11.94	8.9	19.71	14.7
	008	1.61	26.4	10.48	39.6	9.15	34.6	8.22	31.1	2.15	1.6	14.35	10.7	22.93	17.7
	010	2.08	34.1	13.52	51.1	12.19	46.1	11.26	42.6	2.28	1.7	18.64	13.4	29.90	22.3
	012	2.26	37.1	14.71	55.6	13.36	50.6	12.46	47.1	2.28	1.7	19.31	14.4	32.32	24.1
	014	2.81	46.0	18.25	69.0	16.93	64.0	16.00	60.5	2.55	1.9	23.60	17.6	39.56	29.5
	015	3.08	50.5	20.00	75.6	18.73	73.2	19.02	67.5	2.68	2.0	25.61	19.1	42.91	32.0
	017	3.56	58.3	23.12	87.4	21.79	82.4	23.07	78.9	2.82	2.1	29.37	21.9	49.48	36.9
	020	3.89	63.8	25.32	95.7	23.99	90.7	23.07	87.2	2.95	2.2	31.92	23.8	53.91	40.2
	022	4.29	70.3	27.88	105.4	26.56	100.4	25.63	96.9	3.08	2.3	35.00	26.1	59.14	44.1
025	4.84	79.3	31.46	118.9	30.13	113.9	29.21	110.4	3.35	2.5	39.16	29.2	66.38	49.5	
028	5.42	88.8	35.24	133.2	33.92	128.2	33.28 <sup>2)</sup>	125.8 <sup>2)</sup>	3.75	2.8	43.85	32.7	65.04 <sup>2)</sup>	48.5 <sup>2)</sup>	
031	6.10	100.0	39.68	150.0	38.35	145.0	37.72 <sup>2)</sup>	142.6 <sup>2)</sup>	3.75	2.8	48.95	36.5	72.95 <sup>2)</sup>	54.4 <sup>2)</sup>	

1) 042-045-050-061=2200 RPM max.

2) 028-031 - 050=210 bar (3000 psi) max.

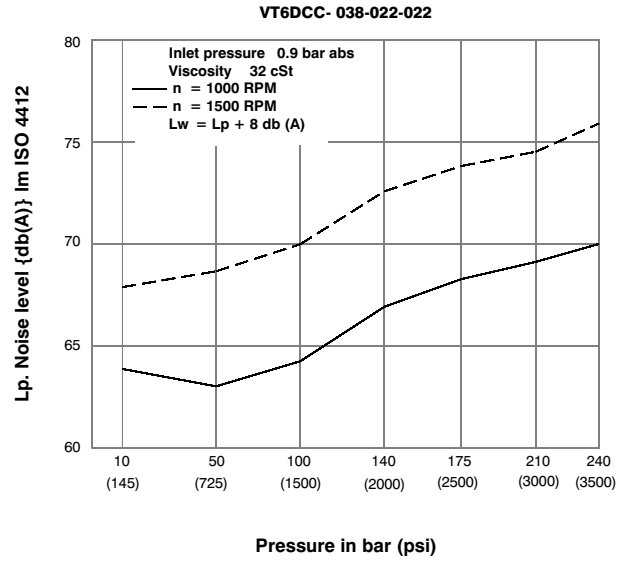
3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.

## INTERNAL LEAKAGE (TYPICAL)



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

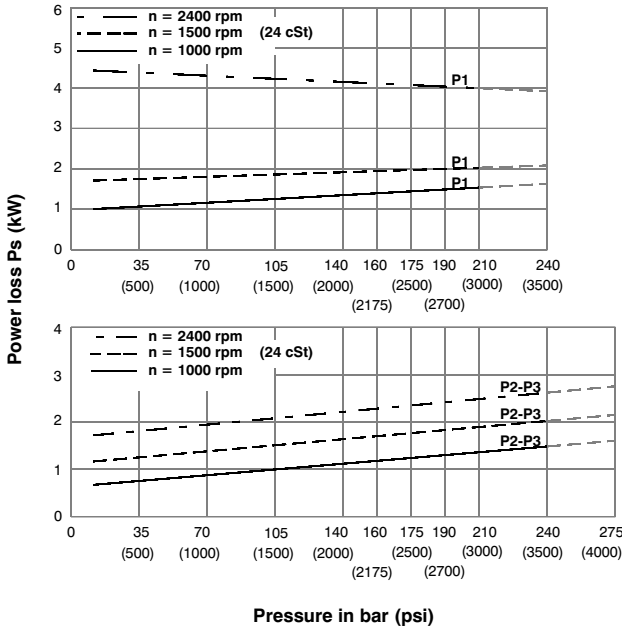
## NOISE LEVEL (TYPICAL)



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

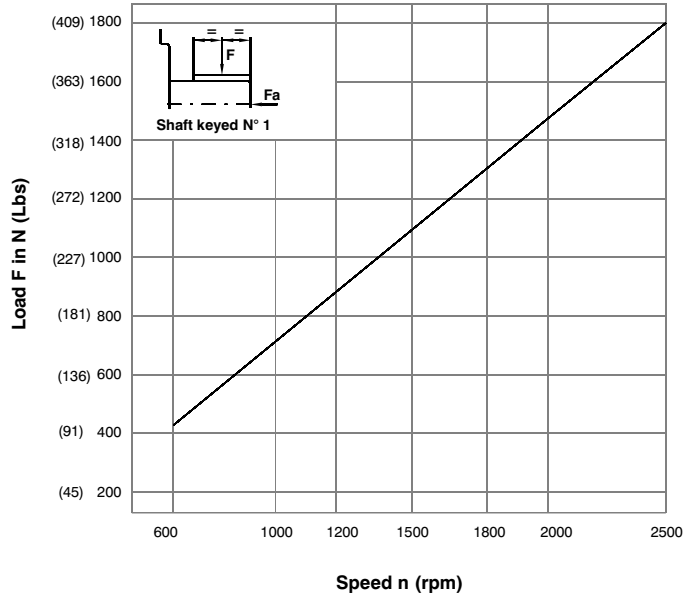
TRIPLE PUMPS

## HYDROMECAHNICAL POWER LOSS (TYPICAL)

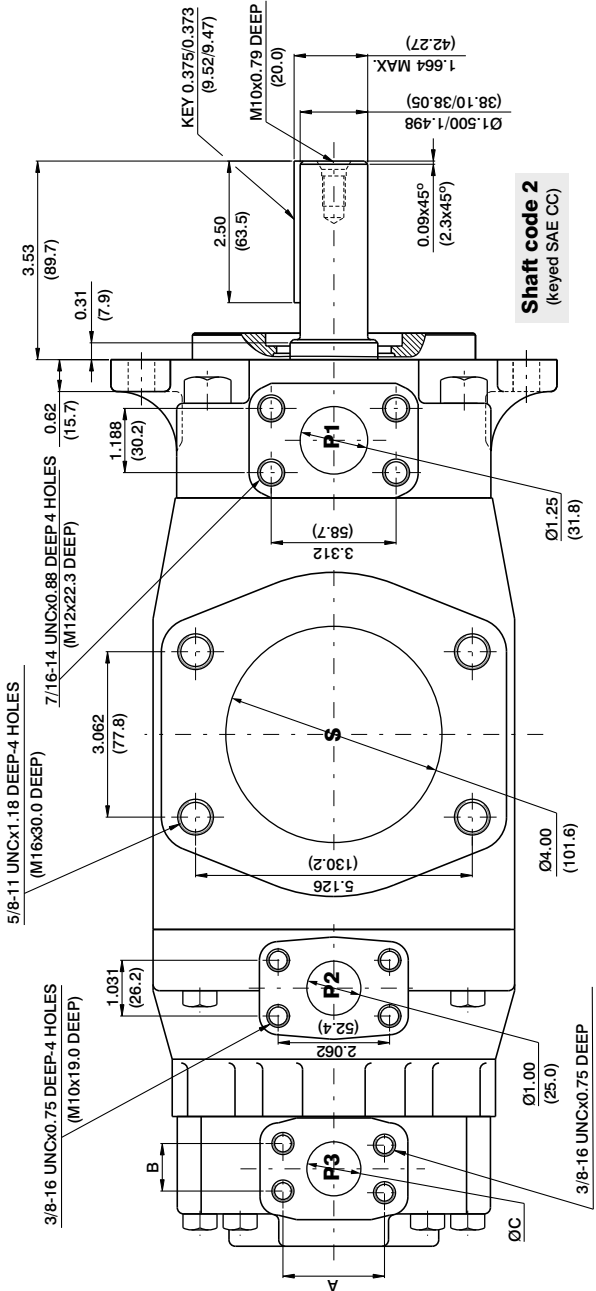


Total hydromechanical power loss is the sum of each section at its operating conditions.

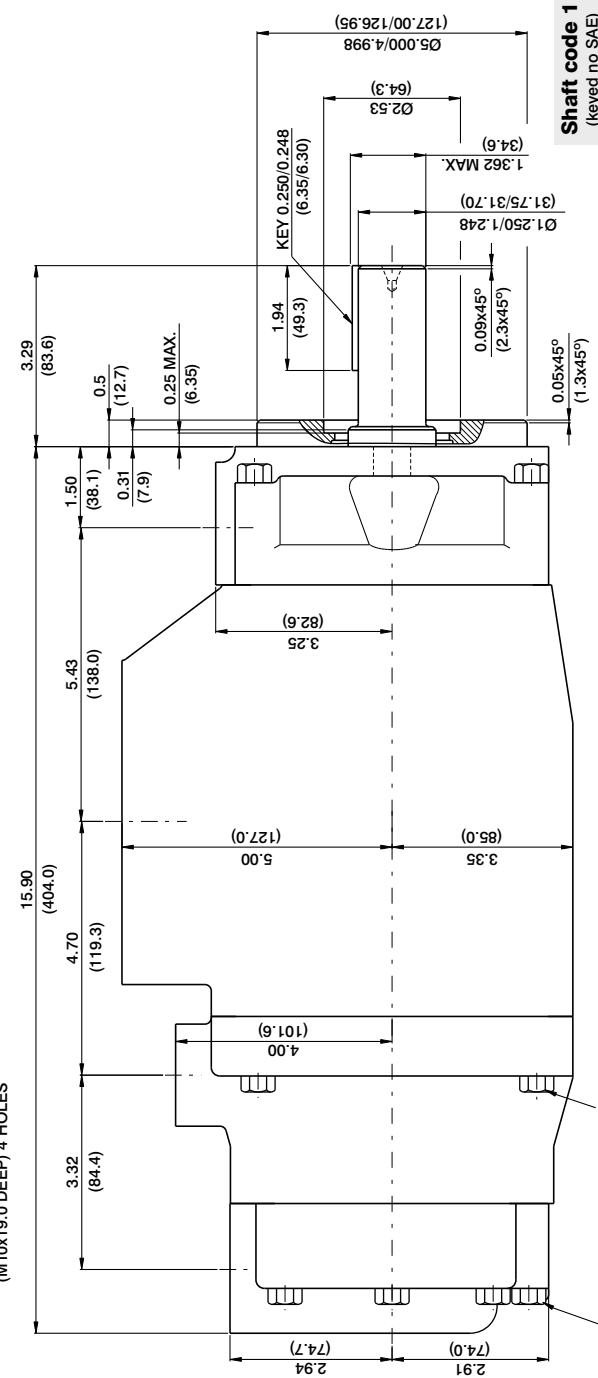
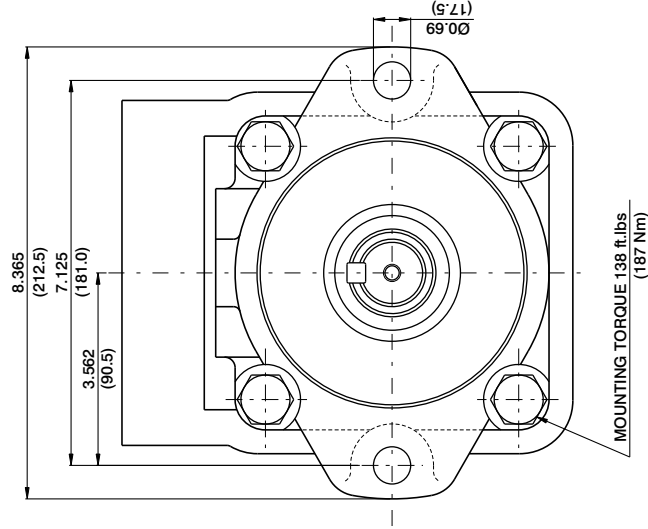
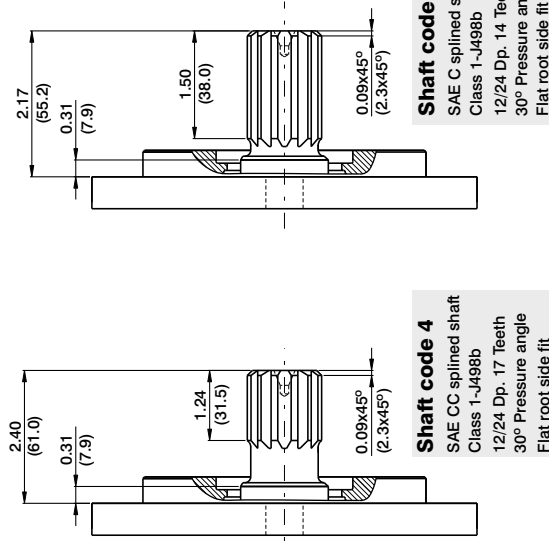
## PERMISSIBLE RADIAL LOAD



Maximum axial load permissible Fa=1200 N (449 Lbs)



**Shaft code 2**  
(keyed SAE CC)



**Shaft code 1**  
(keyed no SAE)

Shaft	Shaft torque limits in <sup>3</sup> rev x psi (ml/rev x bar) Vp x p max. (P1 + P2 + P3)
1	38299 (43240)
2	58901 (66500)
3	54027 (61200)
4	58901 (66500)

PORT	CODE	A	B	C
00 & M0		2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
P3	01 & M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

MOUNTING TORQUE 138 ft.lbs (187 Nm)  
 MOUNTING TORQUE 50 ft.lbs (68 Nm)