

Series VT6D * * - 045 - 1

N - Shaft seal installed reverse

Q - Special mounting cap with ear orientation of 20° from standard

Y - Metric port connection (not for code 'Q')
Omit for UNC

Cam ring

Volumetric displacement cm³/rev (in³/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

Type of shaft

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

Modifications

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

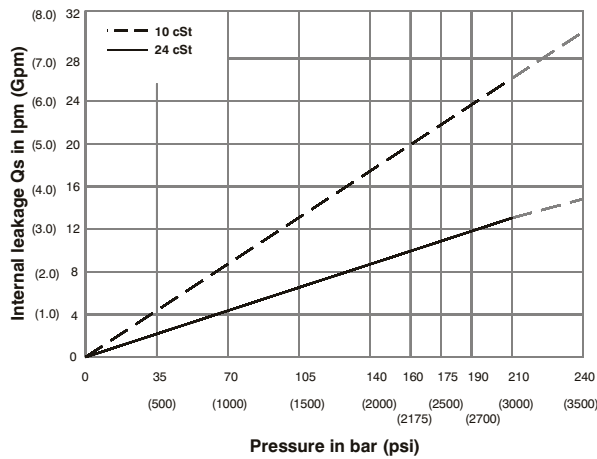
00	01	02	03

S - Suction port **P** - Pressure port

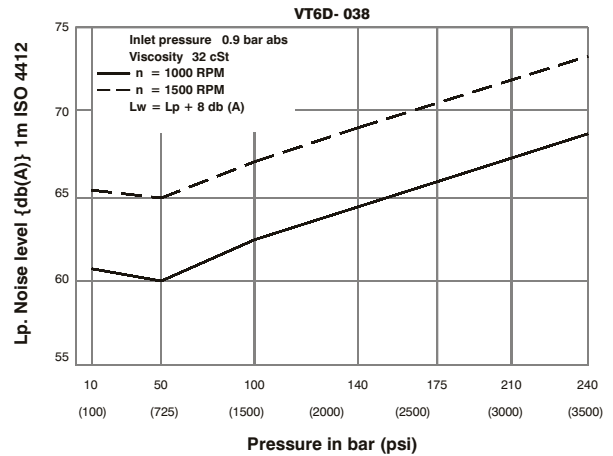
Direction of rotation (view on shaft end)

R - clockwise
L - counter-clockwise

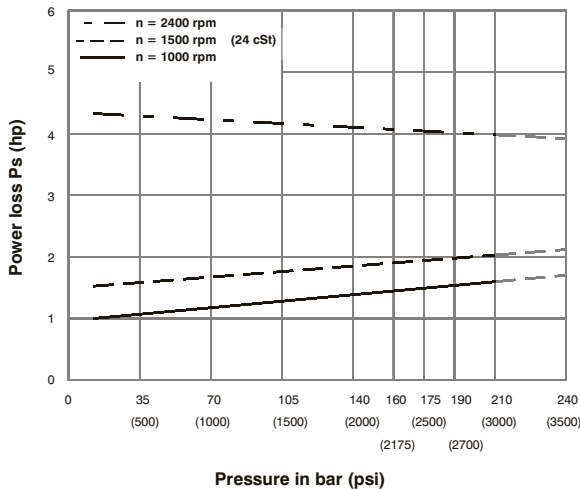
INTERNAL LEAKAGE (TYPICAL)



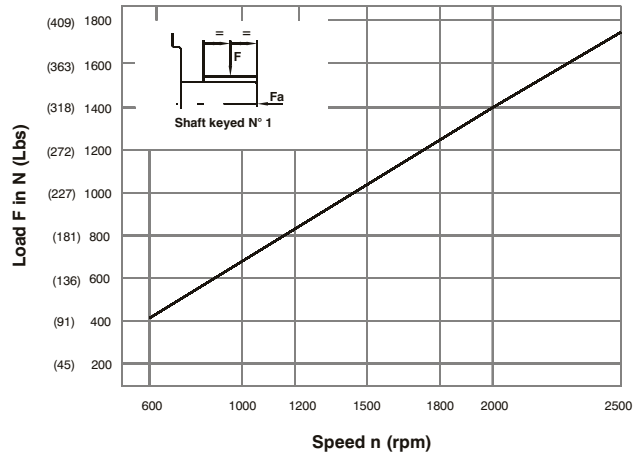
NOISE LEVEL (TYPICAL)



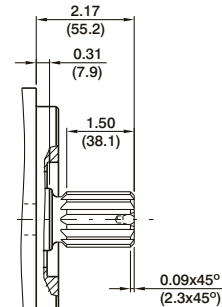
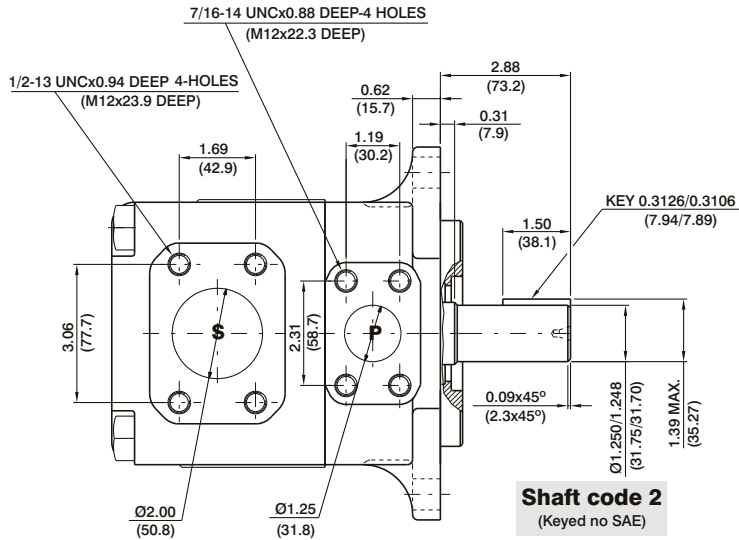
HYDROMECHANICAL POWER LOSS (TYPICAL)



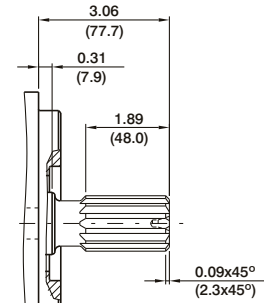
PERMISSIBLE RADIAL LOAD



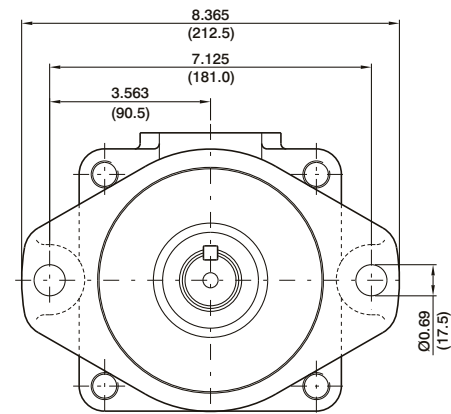
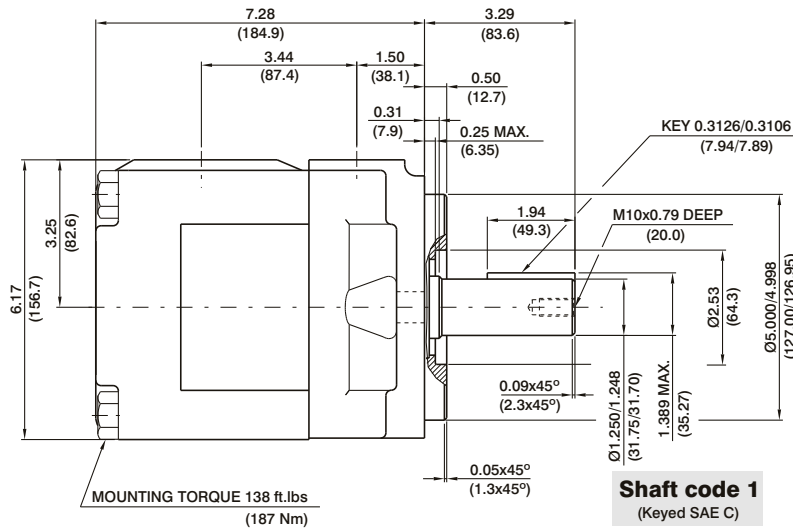
Maximum permissible axial load Fa = 1200 N (270 Lbs)



Shaft code 3
SAE C splined shaft
Class 1-J498b
12/24 dp. 14 teeth
30° pressure angle
flat root side fit



Shaft code 4
no SAE splined shaft
Class 1-J498b
12/24 dp. 14 teeth
30° pressure angle
flat root side fit



Shaft torque limits in ³ /rev x psi (ml/rev x bar)	
Shaft	Vp x p max.
1	38299 (43283)
2	30638 (34590)
3	54207 (61200)
4	54207 (61200)

OPERATING CHARACTERISTICS - TYPICAL (24 cST)

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	hp	kw
VT6D VT6DQ VT6DN	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 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
	045 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
	050 ^{1,2)}	9.64	158.0	62.69	237.0	60.23	227.7	59.25	224.0	5.90	4.4	76.44	57.0	113.98	85.0
061 ^{1,3)}	11.62	190.5	76.25	285.7	73.54	278.0	--	--	6.16	4.6	81.26	60.6	--	--	

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

2) 050=210 bar (3000 psi) max. int.

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