



VT6D * * * - B45 - 1 R 00 - C 1 *

Series

- N** - Shaft seal installed reverse
- Q** - Special mounting cap with ear orientation of 20° from standard
- M** = Mobile 1 shaft seal
- P** = Mobile 2 shaft seal
- Y** - Metric port connection (not for code 'Q')
Omit for UNC

Cam ring

Volumetric displacement cm^3/rev (in^3/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 (8.89)
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

Type of shaft

M version

- 1 - keyed (SAE C)
- 2 - keyed (no SAE)
- 3 - splined (SAE C)
- 4 - splined (no SAE)
- T - splined (SAE J718c)

P version

- 3 - splined (no SAE)

Modifications

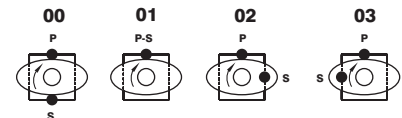
Seal class

- 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

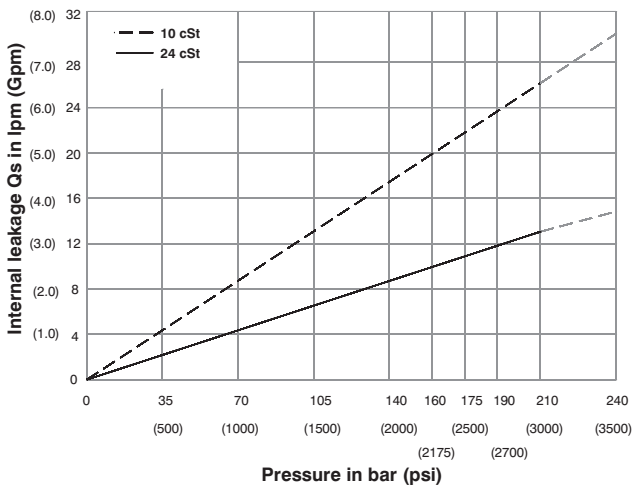


S - Suction port **P** - Pressure port

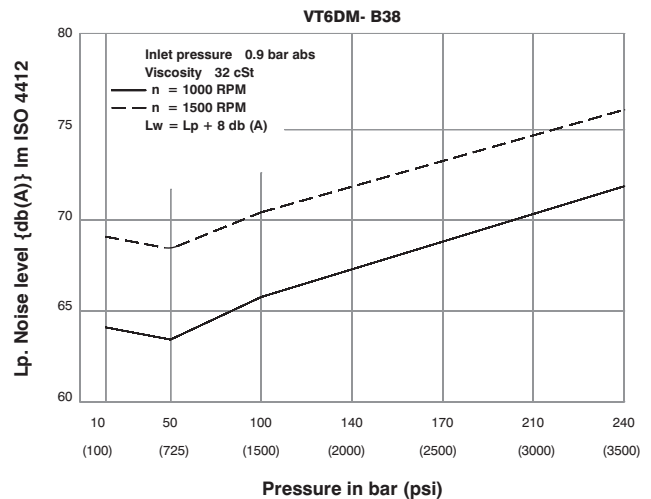
Direction of rotation (view on shaft end)

- R - clockwise
- L - counter-clockwise

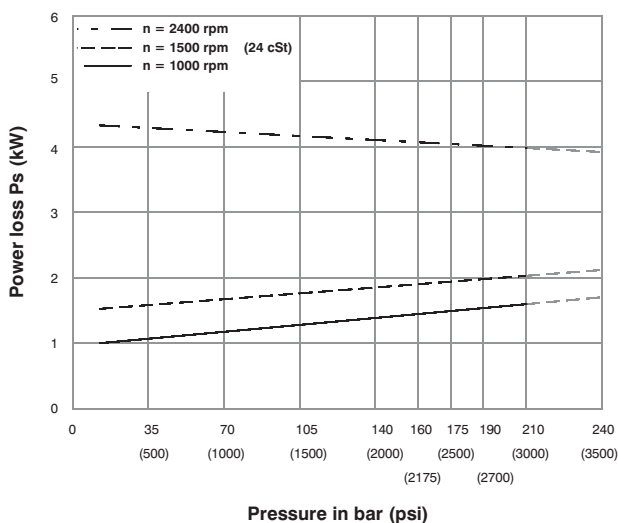
INTERNAL LEAKAGE (TYPICAL)



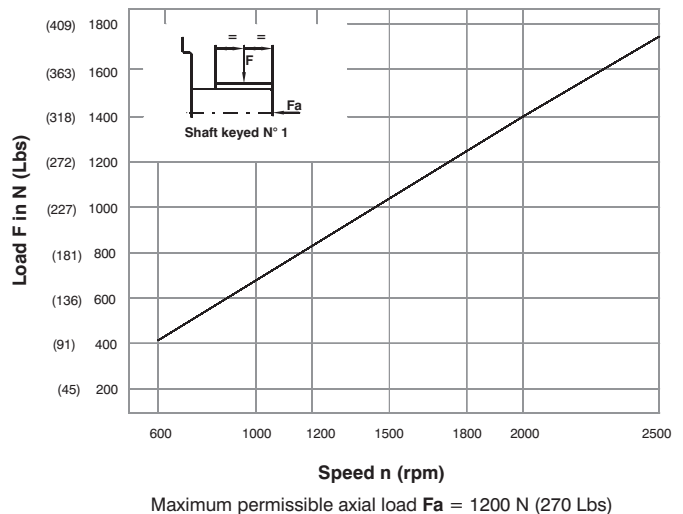
NOISE LEVEL (TYPICAL)



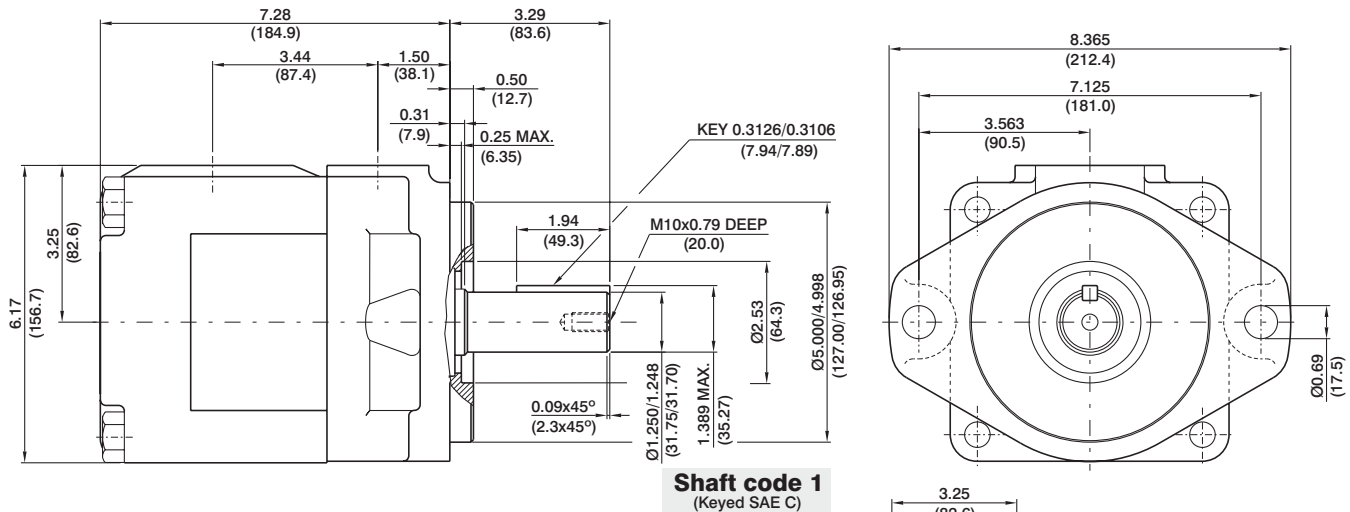
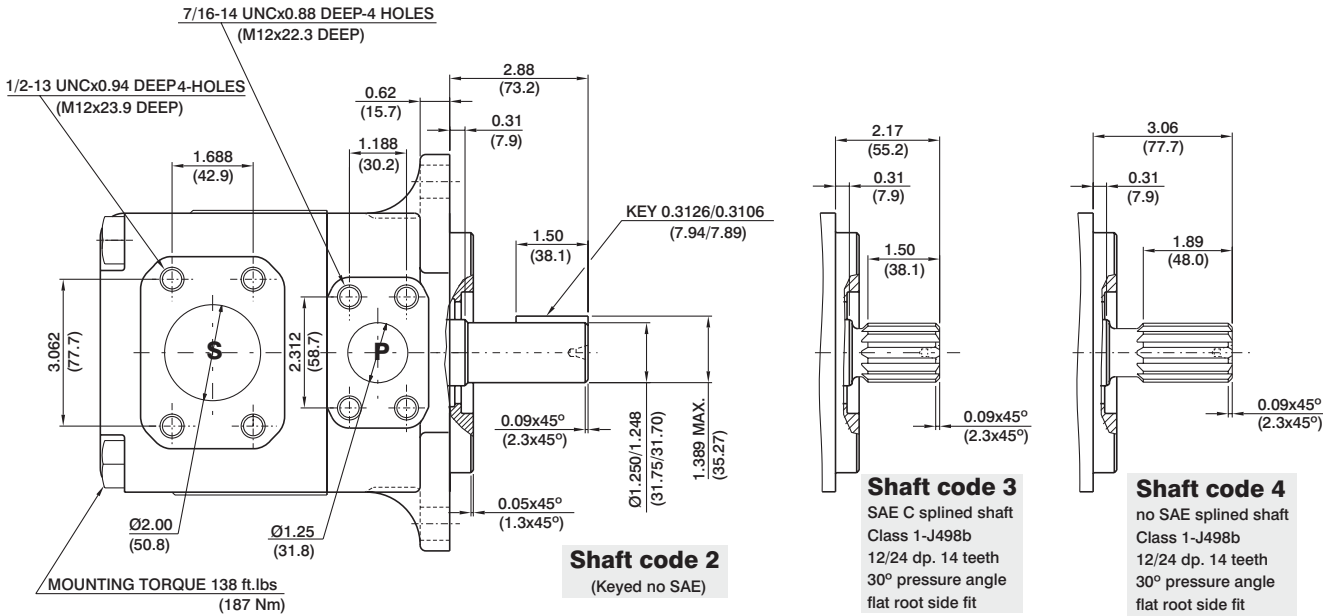
HYDROMECHANICAL POWER LOSS (TYPICAL)



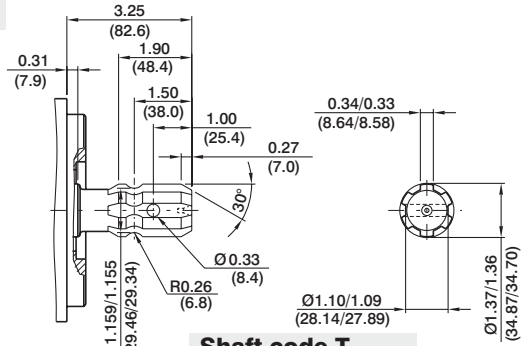
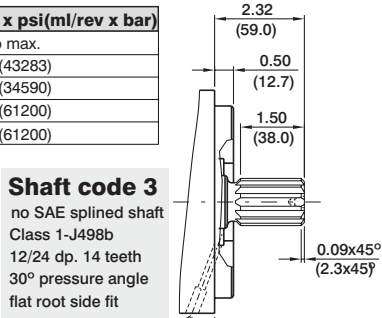
PERMISSIBLE RADIAL LOAD



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



Shaft	Vp x p max.
1	38299 (43283)
2	30638 (34590)
3	54207 (61200)
4	54207 (61200)



Drain hole between double shaft seals

VT6DP

OPERATING CHARACTERISTICS - TYPICAL (24 cST)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm							
		in ³ /rev		cm ³ /rev		gpm		lpm		hp		kw		hp		kw	
		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)										
VT6DM VT6DP	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⁾	--	--		

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

2) B50=210 bar (3000 psi) max.

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