

# HIGH PERFORMANCE VANE PUMP VT7DSW



SP

VT7DSW - B42 - X L 00 - A 1 W1 - \*\*

**Series**

**Camring**

Volumetric displacement  $\text{cm}^3/\text{rev}$  ( $\text{in}^3/\text{rev}$ )

B14 = 43.9 (2.68)	B31 = 99.1 (6.05)
B17 = 55.0 (3.36)	B35 = 113.4 (6.92)
B20 = 66.0 (4.03)	B38 = 120.6 (7.36)
B22 = 70.3 (4.29)	B42 = 137.5 (8.39)
B24 = 81.1 (4.95)	045 = 145.7 (8.89)
B28 = 89.9 (5.49)	050 = 157.9 (9.64)

**Type of shaft VT7DS**

X - keyed (SAE C)  
3 - keyed (SAE C)

**Direction of rotation (view on shaft end)**

R - clockwise  
L - counter-clockwise

**Modifications**

IM 1115- Housing and mounting flange fluid connections are in the same plane

**Mounting w/connection variables**

4 bolts SAE flange J518

P = 1-1/4"		S = 2 1/2"	
	UNC		METRIC
VT7DSW	W1		M1

1) 250 bar (3630 psi) max. int.

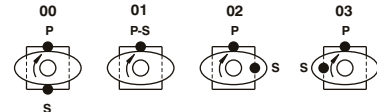
**Seal class**

1 - S1 (for mineral oil)  
4 - S4 (for fire resistant fluids)  
5 - S5 (for mineral oil and fire resistant fluids)

**Design letter**

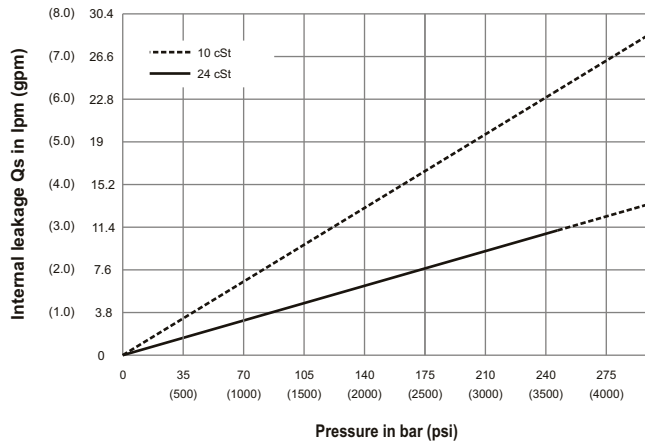
**Porting combination**

00 - standard

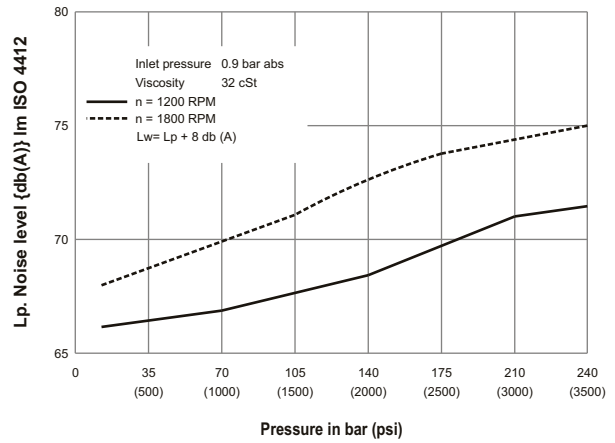


S - Suction port P - Pressure port

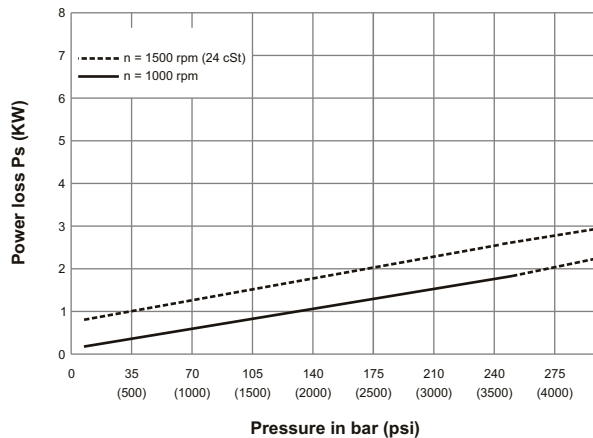
**INTERNAL LEAKAGE (TYPICAL)**



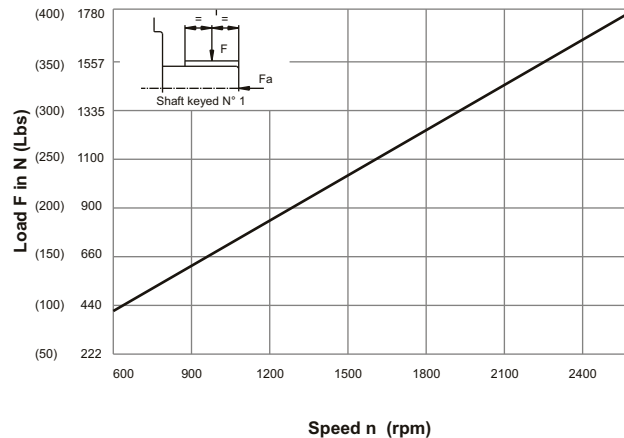
**NOISE LEVEL (TYPICAL)**  
VT7DSW- B31



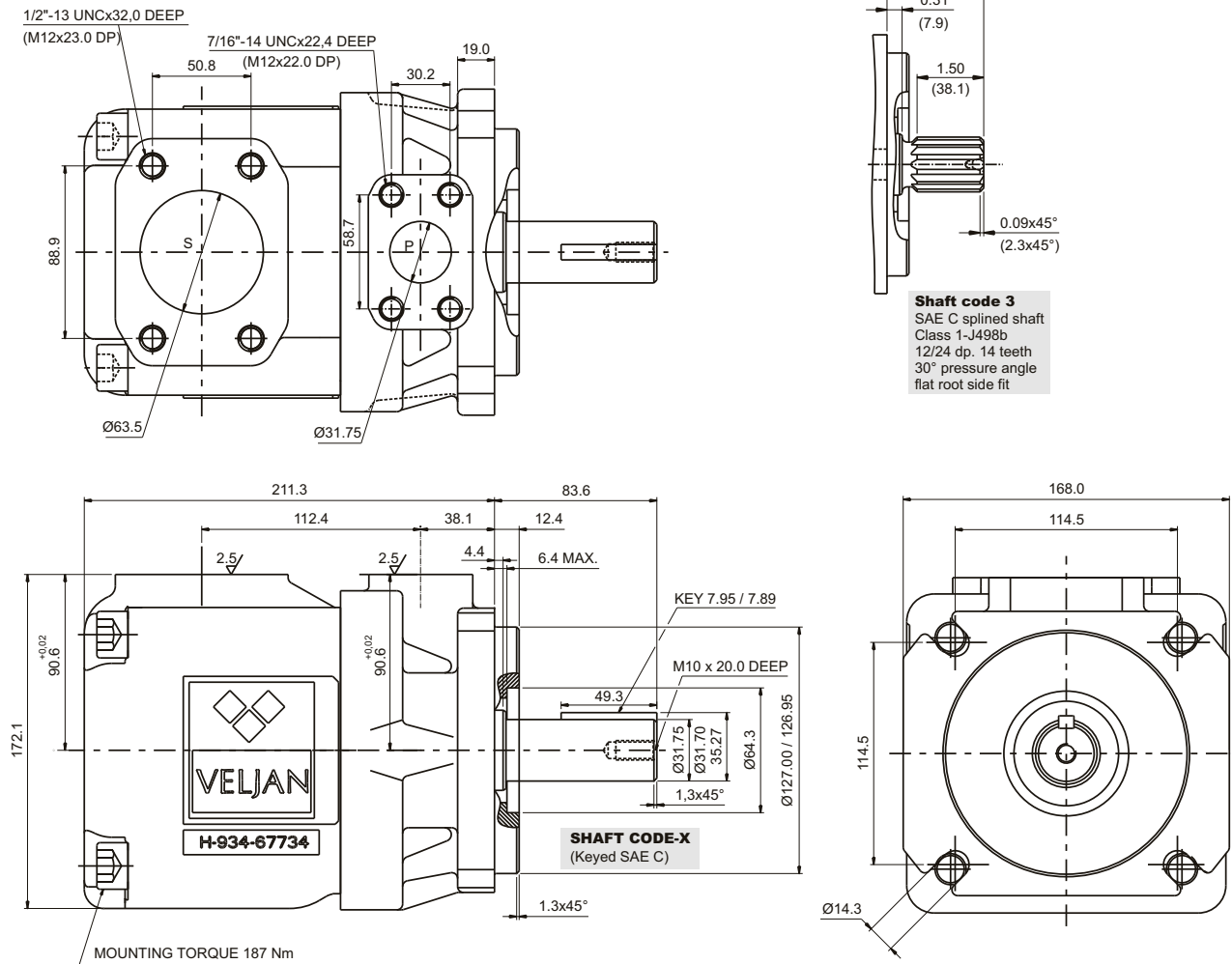
**HYDROMECHANICAL POWER LOSS (TYPICAL)**



**PERMISSIBLE RADIAL LOAD**



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



### OPERATING CHARACTERISTICS - TYPICAL (24 cST)

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 = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
				gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
VT7DSW	B14	2.68	43.9	17.43	65.8	15.98	60.7	14.32	54.1	2.88	2.1	23.14	17.2	48.73	36.3
	B17	3.36	55.0	21.79	82.3	20.34	76.8	18.68	70.6	3.14	2.3	28.23	21.0	59.93	44.6
	B20	4.03	66.0	26.15	98.8	24.69	93.3	23.04	87.0	3.39	2.5	33.31	24.8	71.12	53.0
	B22	4.29	70.3	27.85	105.2	26.40	99.7	24.74	93.5	3.49	2.6	35.30	26.3	75.49	56.3
	B24	4.95	81.1	32.14	121.4	30.68	115.9	29.02	109.6	3.74	2.7	40.29	30.0	86.47	64.4
	B28	5.49	89.9	35.66	134.7	34.21	129.3	32.54	123.0	3.94	2.9	44.41	33.1	95.53	71.2
	B31	6.05	99.1	39.31	148.5	37.85	143.0	36.19	136.7	4.15	3.1	48.67	36.3	104.89	78.2
	B35	6.92	113.4	44.93	169.8	43.48	164.3	42.03 <sup>1)</sup>	158.8 <sup>1)</sup>	4.49	3.3	55.23	41.1	108.65 <sup>1)</sup>	81.0 <sup>1)</sup>
	B38	7.36	120.6	47.78	180.6	46.33	175.1	44.88 <sup>1)</sup>	169.6 <sup>1)</sup>	4.65	3.4	58.56	43.6	115.31 <sup>1)</sup>	85.9 <sup>1)</sup>
	B42	8.39	137.5	54.48	205.9	53.03	200.4	51.78 <sup>2)</sup>	195.7 <sup>2)</sup>	5.04	3.7	66.38	49.4	124.48 <sup>2)</sup>	92.8 <sup>2)</sup>
	045	8.89	145.7	57.73	218.2	55.92	211.3	54.55 <sup>3)</sup>	206.1 <sup>3)</sup>	5.61	4.1	69.78	52.0	120.33 <sup>3)</sup>	89.7 <sup>3)</sup>
050	9.64	157.9	62.61	236.6	60.79	229.7	59.81 <sup>4)</sup>	226.0 <sup>4)</sup>	5.89	4.4	75.48	56.2	112.11 <sup>4)</sup>	83.6 <sup>4)</sup>	

1) B35-B38 = 280 bar (4060 psi) max.int. 2) B42 = 260 bar (3770 psi) max.int. 3) 045 = 240 bar (3500 psi) max. int. 4) 050 = 210 bar (3000 psi) max. int.  
 \*special 2\"/>