

SP

**VT7B or VT7BS - B10 - 1 R 00 - A 1 M0 -**

**Series**

**VT7B** series - ISO 2 bolts 3019-2  
mounting flange 100 A2 HW

**VT7BS** series- SAE B 2 bolts  
Mounting flange J744C

**Camring**

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

B02 = 5.7 (0.35)	B09 = 28.0 (1.71)
B03 = 9.8 (0.60)	B10 = 31.8 (1.94)
B04 = 12.8 (0.78)	B11 = 34.9 (2.13)
B05 = 15.9 (0.97)	B12 = 40.9 (2.50)
B06 = 19.8 (1.21)	B14 = 45.1 (2.75)
B07 = 22.5 (1.37)	B15 = 50.0 (3.05)
B08 = 24.9 (1.52)	

**Type of shaft VT7B-VT7BS**

2 - Keyed (ISO R775)

**Type of shaft VT7BS**

- 1 - Keyed (SAE B)
- 3 - Splined (SAE B)
- 4 - Splined (SAE BB)

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

- R - clockwise
- L - counter-clockwise

**Modifications**

**Mounting W/connection variables**

4 bolts SAE flange (J518C)

	UNC VT7BS		METRIC VT7B-VT7BS	
	00	01	M0	M1
P	1"	3/4"	1"	3/4"
S	1 1/2"			

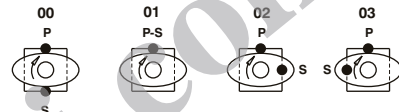
**Seal class**

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

**Design letter**

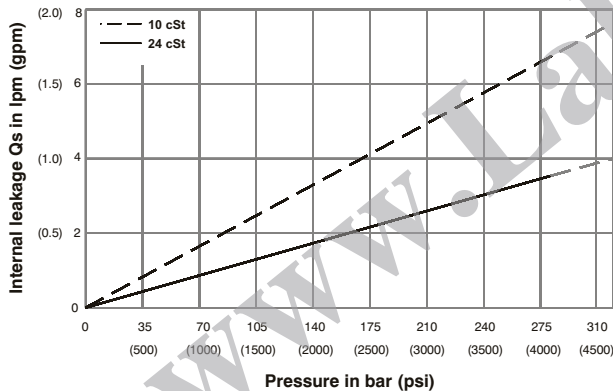
**Porting combination**

00 - standard

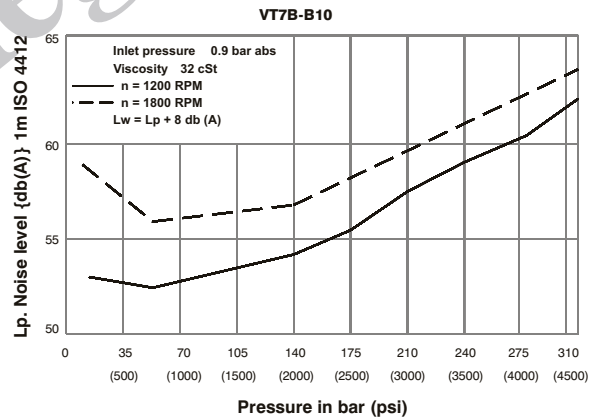


S - Suction port P - Pressure port

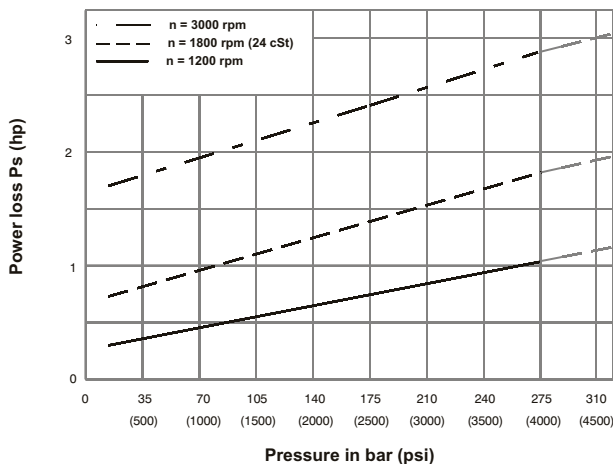
**INTERNAL LEAKAGE ( TYPICAL )**



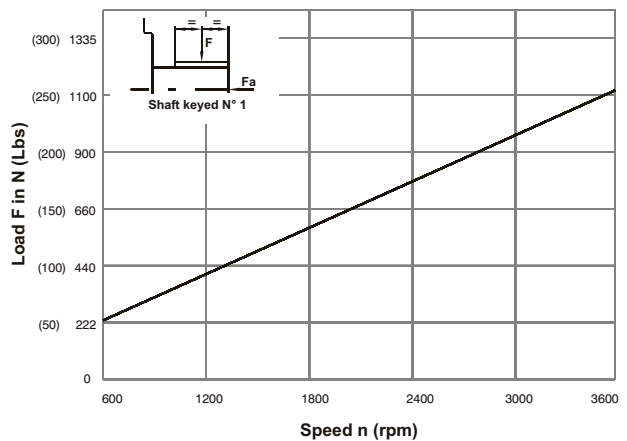
**NOISE LEVEL ( TYPICAL )**



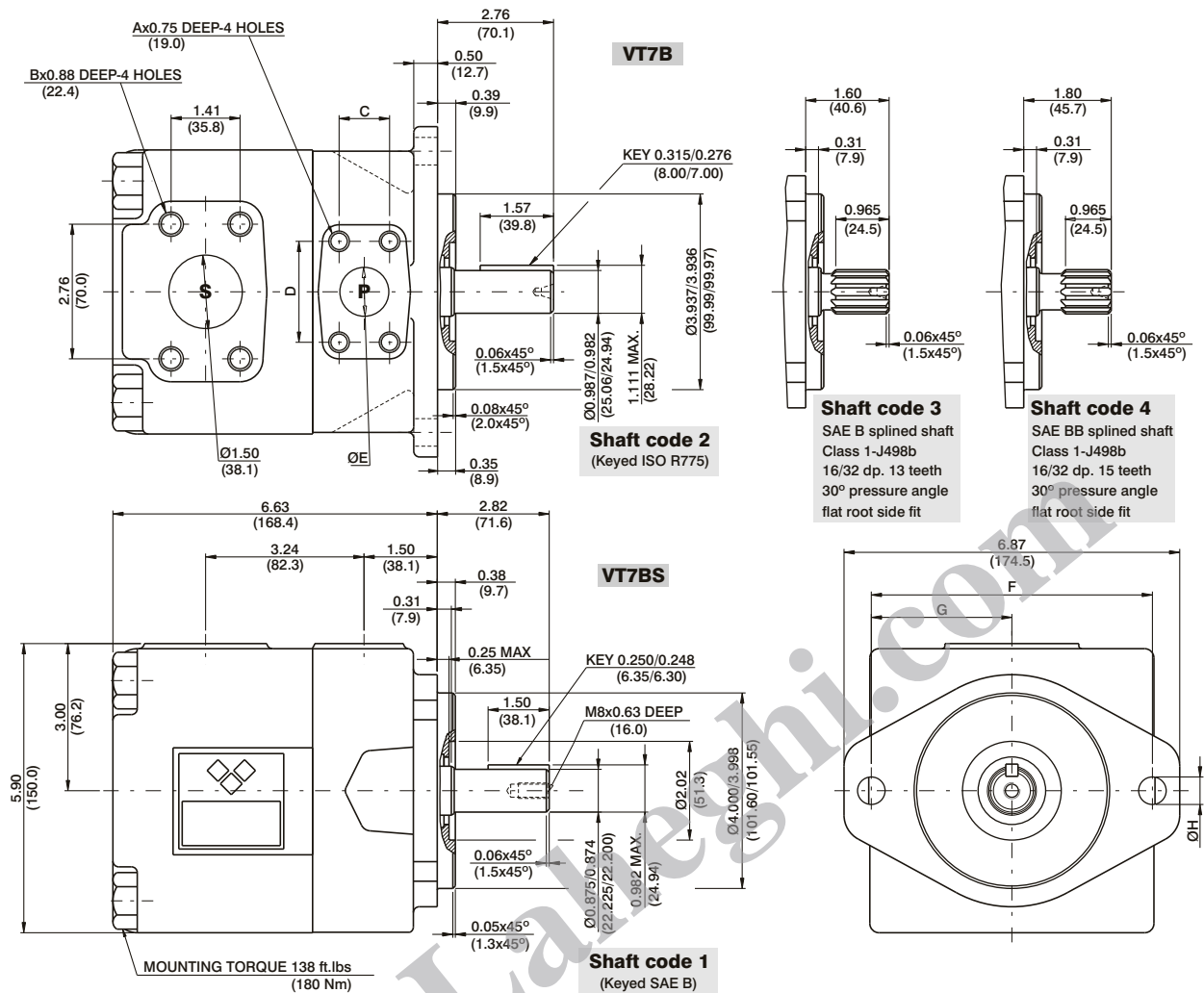
**HYDROMECHANICAL POWER LOSS ( TYPICAL )**



**PERMISSIBLE RADIAL LOAD**



Maximum axial load permissible  $F_a = 800 \text{ N}$  (180 Lbs)



	VT7BS		VT7B	
	00	01	M0	M1
<b>A</b>	3/8-16 UNC		M10	
<b>B</b>	1/2-13 UNC		M12	
<b>C</b>	1.03 (26.2)	0.874 (22.2)	1.03 (26.2)	0.874 (22.2)
<b>D</b>	2.06 (52.4)	1.874 (47.6)	2.06 (52.4)	1.874 (47.6)
<b>ØE</b>	1.00 (25.4)	0.75 (19.05)	1.00 (25.4)	0.75 (19.05)
<b>F</b>	5.75 (146.0)		5.51 (140.0)	
<b>G</b>	2.87 (73.0)		2.75 (70.0)	
<b>ØH</b>	0.56 (14.3)		0.55 (14.0)	

Shaft torque limits in <sup>3</sup> /rev x psi (ml/rev x bar)	
Shaft	Vp x p max.
<b>1</b>	14615 (16516)
<b>2</b>	18246 (20620)
<b>3</b>	18246 (20620)
<b>4</b>	18246 (20620)

## OPERATING CHARACTERISTICS - TYPICAL (24 cST)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
		p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 320 bar (4650 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 320 bar (4650 psi)			
		in <sup>3</sup> /rev	cm <sup>3</sup> /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw		
VT7B VT7BS	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.73	6.5	0.74	0.55	4.02	2.99	8.59	6.40
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	13.7	0.85	0.63	6.24	4.65	13.75	10.25
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.06	19.2	0.94	0.70	7.90	5.89	17.62	13.13
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.53	24.7	1.02	0.76	9.62	7.17	21.62	16.12
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.39	31.7	1.13	0.84	11.79	8.79	26.66	19.88
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.67	36.5	1.20	0.89	13.29	9.91	30.14	22.47
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.81	40.9	1.27	0.94	14.62	10.90	33.24	24.78
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.28	46.4	1.36	1.01	16.35	12.19	37.25	27.77
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.09	53.4	1.46	1.11	18.45	13.75	42.14	31.42
	B11 <sup>1)</sup>	2.13	34.9	16.64	62.9	16.19	61.2	15.61	59.0	1.55	1.15	20.17	15.04	43.22	32.22
	B12 <sup>1)</sup>	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 <sup>1)</sup>	2.75	45.1	21.40	80.8	20.95	79.2	20.37	77.0	1.83	1.36	25.80	19.23	55.48	41.37
	B15 <sup>1)</sup>	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

1) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm