

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

Series

VT7B series-100 A2 HW
ISO 2 bolts 3019-2 mounting flange
VT7BS series- SAE B 2 bolts
Mounting flange J744

Camring

Volumetric displacement cm^3/rev (in^3/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"			

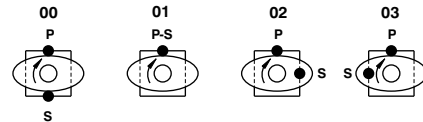
Seal class

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

Design letter

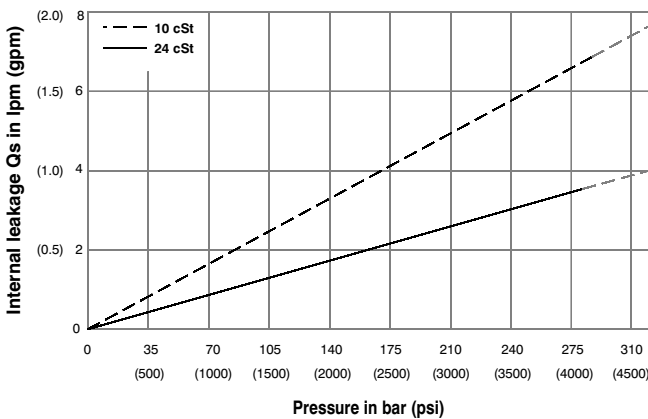
Porting combination

00 - standard

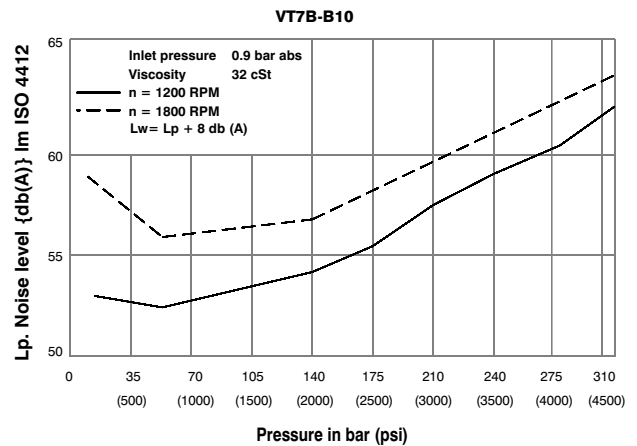


S - Suction port P - Pressure port

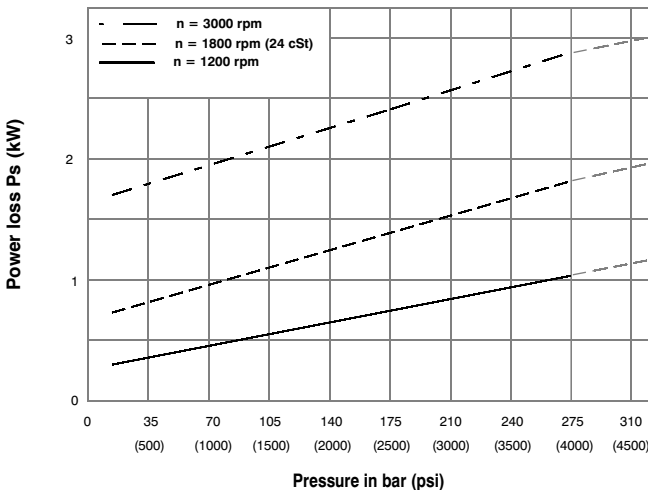
INTERNAL LEAKAGE (TYPICAL)



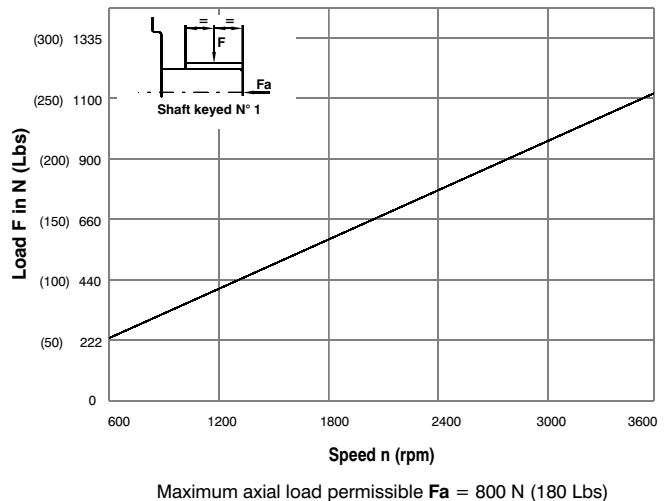
NOISE LEVEL (TYPICAL)



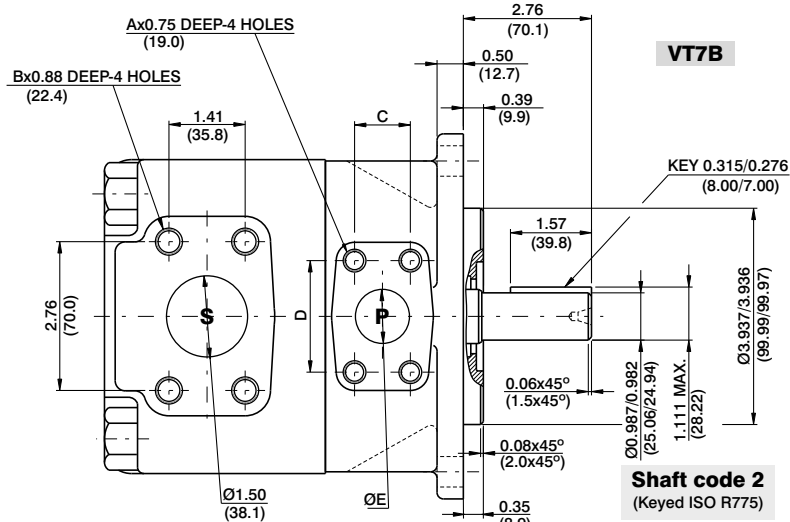
HYDROMECHANICAL POWER LOSS (TYPICAL)



PERMISSIBLE RADIAL LOAD

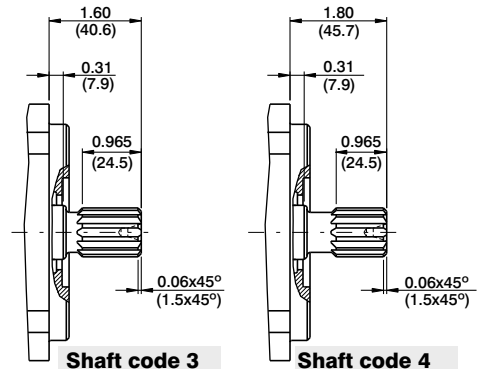


Maximum axial load permissible $F_a = 800 \text{ N (180 Lbs)}$



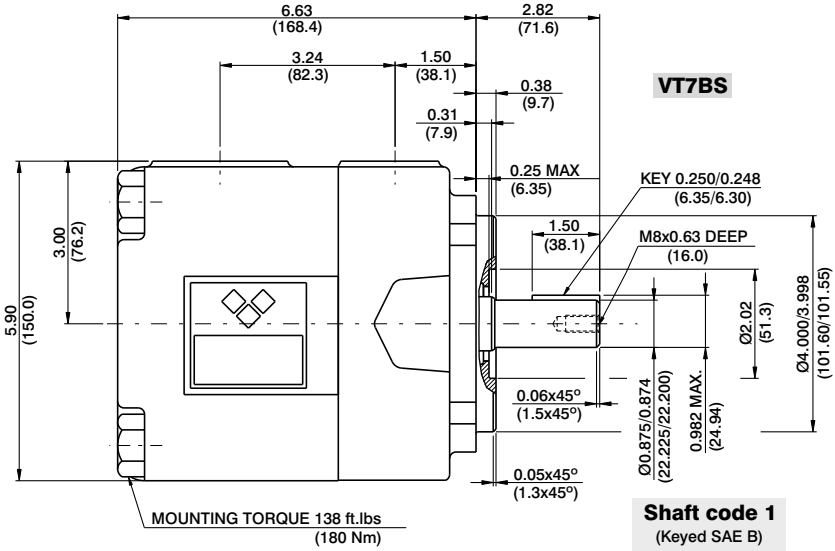
VT7B

Shaft code 2
(Keyed ISO R775)



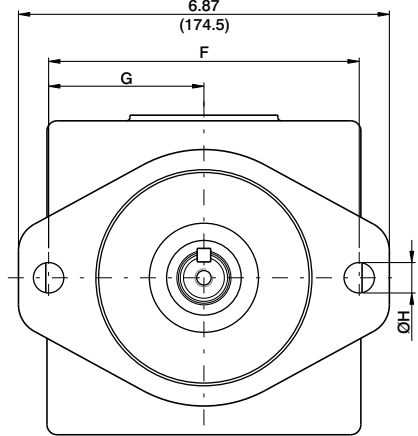
Shaft code 3
SAE B splined shaft
Class 1-J498b
12/24 dp, 13 teeth
30° pressure angle
flat root side fit

Shaft code 4
SAE BB splined shaft
Class 1-J498b
16/32 dp, 15 teeth
30° pressure angle
flat root side fit



VT7BS

Shaft code 1
(Keyed SAE B)



MOUNTING TORQUE 138 ft.lbs (180 Nm)

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

Shaft	Vp x p max.
1	14615 (16516)
2	18246 (20620)
3	18246 (20620)
4	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 ³ /rev	cm ³ /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	2.13	34.9	16.64	62.9	16.19	61.2	15.61 ¹⁾	59.0 ¹⁾	1.55	1.15	20.17	15.04	43.22 ¹⁾	32.22 ¹⁾
	B12	2.50	40.9	19.50	73.7	19.07	72.1	18.54 ¹⁾	70.1 ¹⁾	1.72	1.28	23.55	17.56	50.58 ¹⁾	37.71 ¹⁾
	B14	2.75	45.1	21.40	80.8	20.95	79.2	20.37 ¹⁾	77.0 ¹⁾	1.83	1.36	25.80	19.23	55.48 ¹⁾	41.37 ¹⁾
	B15	3.05	50.0	23.78	89.8	23.35	88.3	22.88 ²⁾	86.5 ²⁾	1.97	1.47	28.55	21.28	57.35 ²⁾	42.76 ²⁾

1) B11-B12-B14 = 300 bar (4350 psi) max. int

2) B15 = 280 bar (4060 psi) max. int