

VT7E or VT7ES - 072 - 1 R 00 - A 1 M0 -

SP

**Series**

**VT7E** series-125 A2 HW  
ISO 2 bolts 3019-2 mounting flange  
**VT7ES** series- SAE C 2 bolts  
Mounting flange J744

**Camring**

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

042 = 132.2 (8.07)	057 = 183.2 (11.18)
045 = 142.5 (8.70)	062 = 196.6 (12.0)
050 = 158.5 (9.67)	066 = 213.0 (13.0)
052 = 163.8 (10.0)	072 = 227.1 (13.86)
054 = 170.9 (10.43)	085 = 268.7 (16.40)

**Type of shaft VT7E-VT7ES**

5 - keyed (ISO R775-G38M)

**Type of shaft VT7ES**

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

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

- R - clockwise
- L - counter-clockwise

**Modifications**

**Mounting w/connection variables**

4 bolts SAE flange (J518)

P = 1-1/2" S = 3"

	UNC	METRIC
VT7E		M0
VT7ES	00	M0

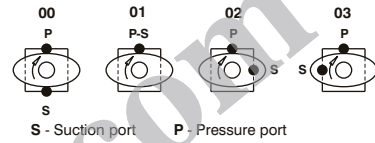
**Seal class**

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

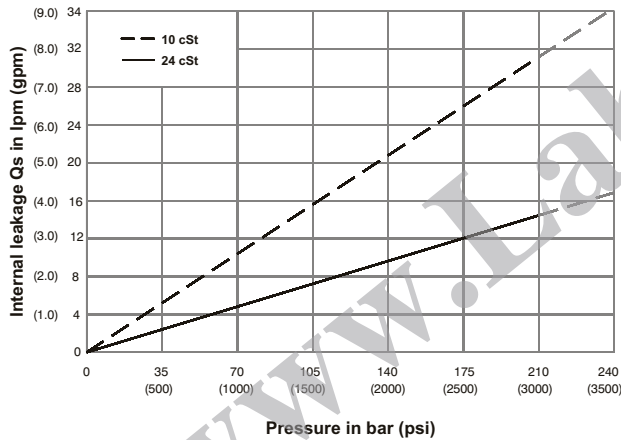
**Design letter**

**Porting combination**

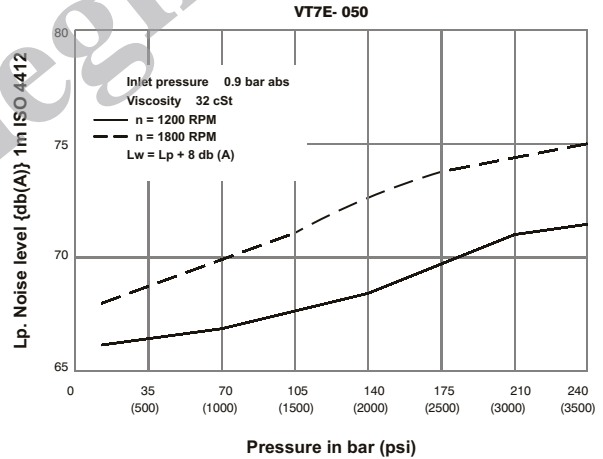
00 - standard



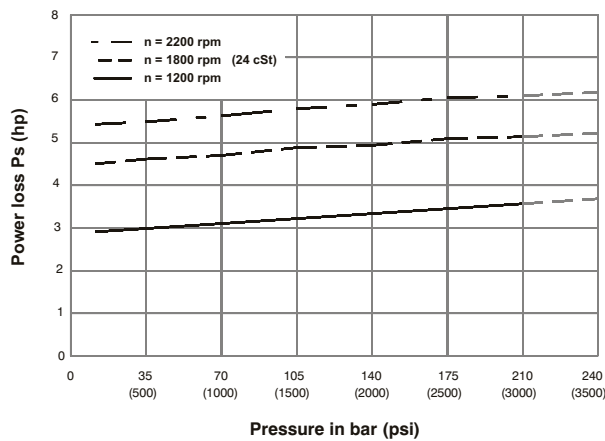
**INTERNAL LEAKAGE (TYPICAL)**



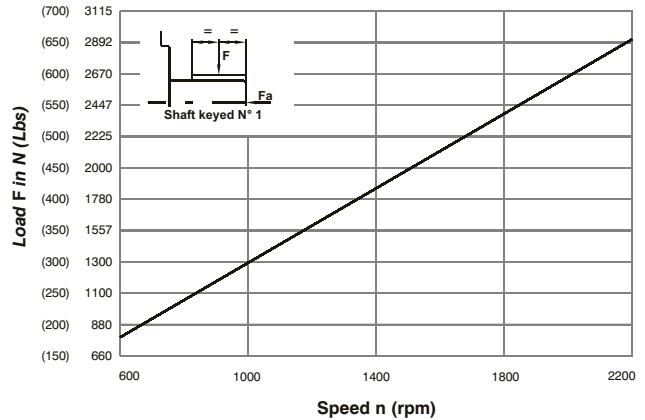
**NOISE LEVEL (TYPICAL)**



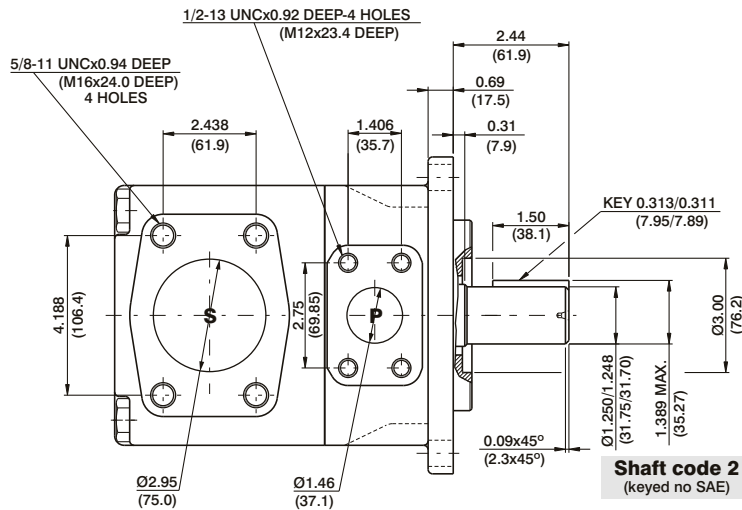
**HYDROMECHANICAL POWER LOSS (TYPICAL)**



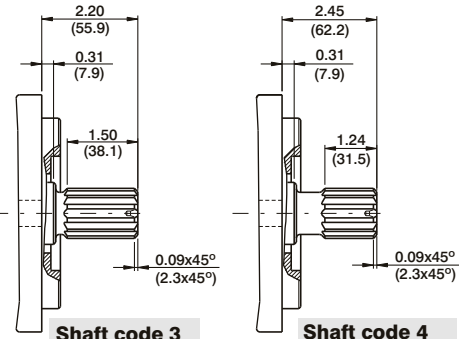
**PERMISSIBLE RADIAL LOAD**



Maximum axial load permissible  $F_a = 2000 \text{ N}$  (449 Lbs)

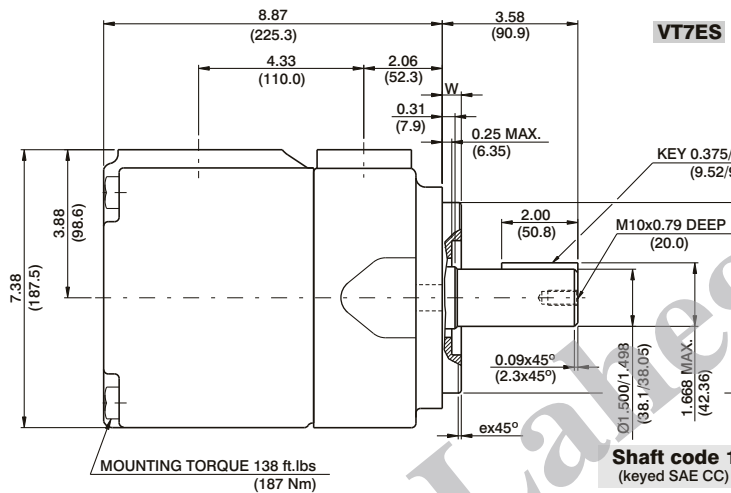


**Shaft code 2**  
(keyed no SAE)



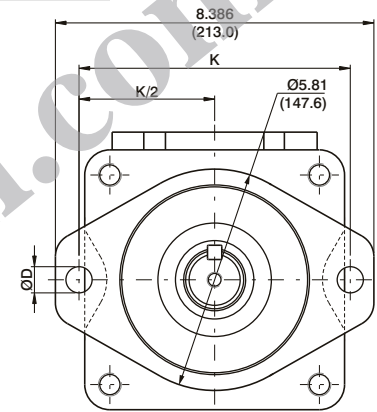
**Shaft code 3**  
SAE C splined shaft  
Class 1-J498b  
12/24 dp. 14 teeth  
30° pressure angle  
flat root side fit

**Shaft code 4**  
SAE CC splined shaft  
Class 1-J498b  
16/32 dp. 17 teeth  
30° pressure angle  
flat root side fit



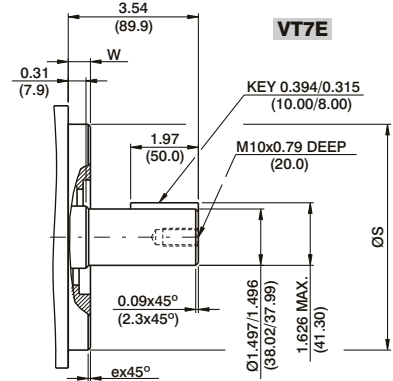
**Shaft code 1**  
(keyed SAE CC)

MOUNTING TORQUE 138 ft.lbs (187 Nm)



Shaft torque limits in <sup>3</sup> /rev x psi (ml/rev x bar)	
Shaft	Vp x p max.
1	48273 (54555)
2	30638 (34590)
3	54207 (61200)
4	54207 (61200)
5	48273 (54555)

Alternate mounting flange						
Series	ØS		ex45°	W	K	ØD
	MAX.	Min.				
VT7E	4.921 (124.99)	4.919 (124.94)	0.079 (2.0)	0.374 (9.49)	7.087 (180.0)	0.709 (18.0)
VT7ES	5.00 (127.00)	4.998 (126.94)	0.051 (1.3)	0.50 (12.7)	7.126 (181.0)	0.689 (17.5)



**Shaft code 5**  
(Keyed ISO R775 - G38M)

## 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 = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in <sup>3</sup> /rev	cm <sup>3</sup> /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
VT7E VT7ES	042	8.07	132.2	62.92	237.8	60.37	228.2	58.52	221.2	8.09	6.03	78.44	58.49	133.80	99.77
	045	8.70	142.5	67.72	255.9	65.17	246.3	63.32	239.3	8.37	6.24	84.04	62.66	143.60	107.08
	050	9.67	158.5	75.38	284.9	72.83	275.3	70.98	268.3	8.82	6.58	92.97	69.32	159.24	118.75
	052	10.00	163.8	78.37	296.2	75.82	286.6	73.97	279.6	8.99	6.70	96.47	71.94	165.36	123.31
	054	10.43	170.9	81.27	307.2	78.72	297.6	76.87	290.6	9.17	6.84	99.75	74.38	177.46	132.33
	057	11.18	183.2	87.12	329.3	84.57	319.7	82.72	312.7	9.51	7.09	106.57	79.47	189.84	141.56
	062	12.00	196.6	93.54	353.6	90.99	343.9	89.14	336.9	9.88	7.37	114.17	85.13	196.34	146.41
	066	13.00	213.0	101.44	383.4	98.89	373.8	97.04	366.8	10.34	7.71	123.38	92.0	212.46	158.43
	072	13.86	227.1	108.00	408.2	105.45	398.6	103.60	391.6	10.72	7.99	131.04	97.71	225.86	166.42
085 <sup>1)</sup>	16.40	268.7	127.79	483.0	126.13	476.7	--	--	11.88	8.85	101.66	75.80	--	--	

1) 085 = 90 bar (1300 psi) max.int. & 085 = 2000 rpm max.

\* special 3 1/2 (3.5 dia) suction also available - Please contact VELJAN