

## VT6EES SERIES DOUBLE VANE PUMPS

High performance pumps for industrial use,  
max pressure up to 240 bar.



# HIGH PERFORMANCE VANE PUMP VT6EE/ VT6EES

VT6EE / VT6EES - 066 - 045 - 1 R 00 - B 1 0 - 00 \*

**Series**

**VT6EE Series - 250 B4HW**

ISO 3019-2 mounting flange

**VT6EES Series - SAE 4 bolts**

Mounting flange J744c

**Cam ring for "P1" & "P2"**

Volumetric displacement cm<sup>3</sup>/rev (in<sup>3</sup>/rev)

042 = 132.3 (8.07)

045 = 142.4 (8.69)

050 = 158.5 (9.67)

052 = 164.8 (10.06)

057 = 180.7 (11.02)

062 = 196.7 (12.00)

066 = 213.3 (13.02)

072 = 227.1 (13.86)

085 = 269.8 (16.46)

**Type of Shaft VT6EE**

2 - Keyed (G45N ISO 3019-2)

**VT6EES**

1 - Keyed (SAE CC)

3 - Splined (SAE CC)

4 - Splined (SAE D&E)

5 - Keyed (SAE D&E)

P1 P2

**Modifications**

**Port connection variables**

SAE 4 bolt flange (J518c)

	UNC	METRIC
VT6EE		M0
VT6EES	00	M0

**Coupling adaptor**

0 - None

2 - SAE B

3 - SAE BB

**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 (see page BM-1-5)**

00 = Standard

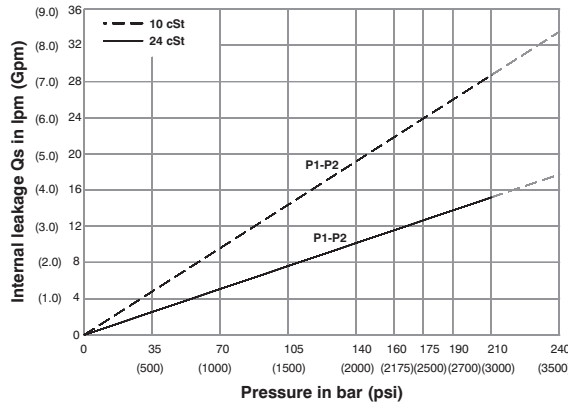
**Direction of rotation (View on shaft end)**

R - Clockwise

L - Counter - clockwise

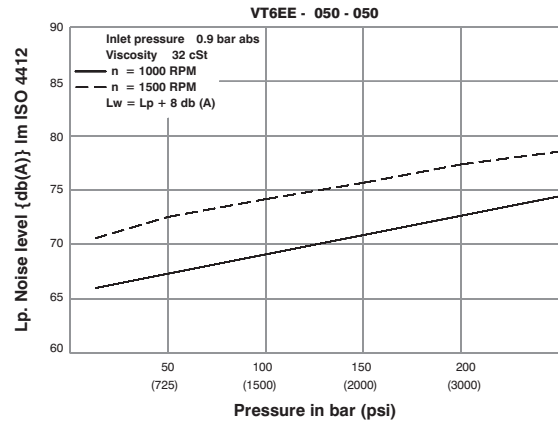


**INTERNAL LEAKAGE (TYPICAL)**



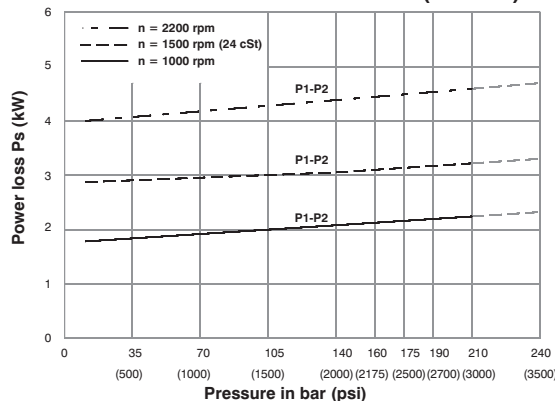
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

**NOISE LEVEL (TYPICAL)**



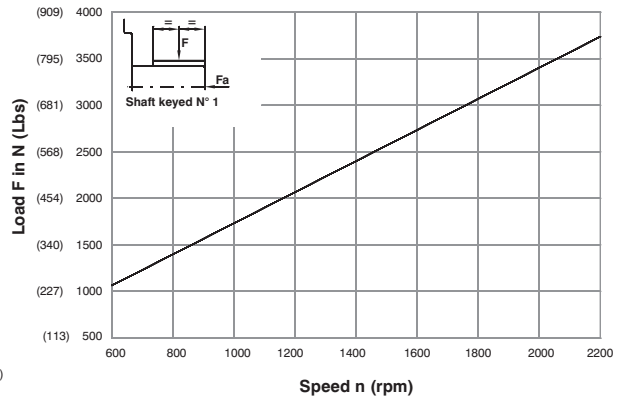
Double pump noise level is given with each section discharging at the pressure noted on the curve.

**HYDROMECHANICAL POWER LOSS (TYPICAL)**



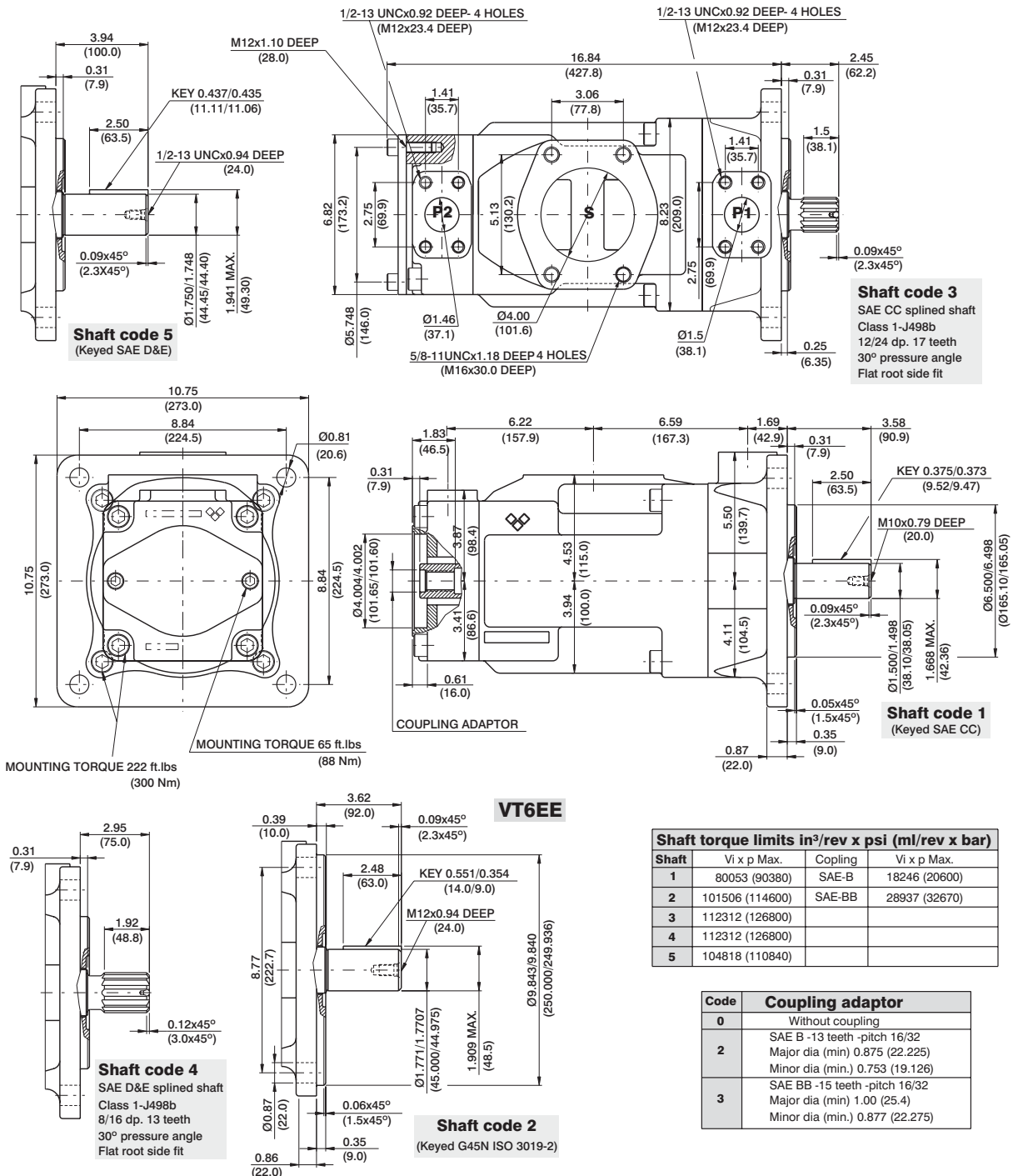
Total hydromechanical power loss is the sum of each section at its operating conditions.

**PERMISSIBLE RADIAL LOAD**



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

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Shaft	Vi x p Max.	Copling	Vi x p Max.
1	80053 (90380)	SAE-B	18246 (20600)
2	101506 (114600)	SAE-BB	28937 (32670)
3	112312 (126800)		
4	112312 (126800)		
5	104818 (110840)		

Code	Coupling adaptor
0	Without coupling
2	SAE B -13 teeth -pitch 16/32 Major dia (min) 0.875 (22.225) Minor dia (min) 0.753 (19.126)
3	SAE BB -15 teeth -pitch 16/32 Major dia (min) 1.00 (25.4) Minor dia (min) 0.877 (22.275)

## OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

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 = 240 bar (3500 psi)	p = 7 bar (100 psi)	p = 140 bar (2000 psi)	p = 240 bar (3500 psi)	hp	kw	hp	kw	hp	kw
P1 & P2	042	8.07	132.3	52.50	198.5	49.87	188.5	47.96	181.3	6.97	5.2	66.25	49.4	110.77	82.6
	045	8.70	142.4	56.51	213.6	53.86	203.6	51.98	196.5	7.24	5.4	70.94	52.9	118.95	88.7
	050	9.67	158.5	62.88	237.7	60.24	227.7	58.36	220.6	7.64	5.7	78.45	58.5	131.82	98.3
	052	10.00	164.8	65.40	247.2	62.75	237.2	60.87	230.1	7.78	5.8	81.53	60.8	136.92	102.1
	057	11.02	180.7	71.71	271.1	69.07	261.1	67.19	254.0	8.18	6.1	89.04	66.4	143.35	106.9
	062	12.00	196.7	78.04	295.0	75.40	285.0	73.52	277.9	8.58	6.4	96.42	71.9	162.67	121.3
	066	13.00	213.3	84.63	319.9	81.98	309.9	80.11	302.8	8.98	6.7	104.20	77.7	175.94	131.2
	072	13.86	227.1	90.11	340.6	87.46	330.6	85.58	323.5	9.25	6.9	110.77	82.6	187.07	139.5
	085 <sup>1)</sup>	16.40	269.8	107.00	404.7	105.21 <sup>2)</sup>	397.7 <sup>2)</sup>	--	--	9.78	7.3	87.56 <sup>2)</sup>	65.3 <sup>2)</sup>	--	--

1) 085 = 2000 RPM max.

2) 085 = 75 bar (1100 psi) cont. 085 = 90 bar (1300 psi) max. int.