

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 cm³/rev (in³/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)

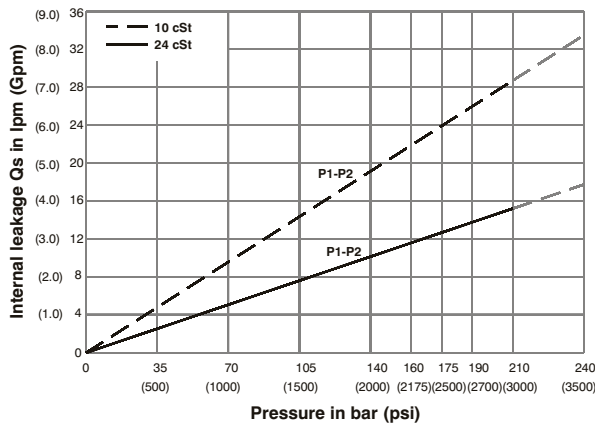
00 = Standard

Direction of rotation (View on shaft end)

- R - Clockwise
- L - Counter - clockwise

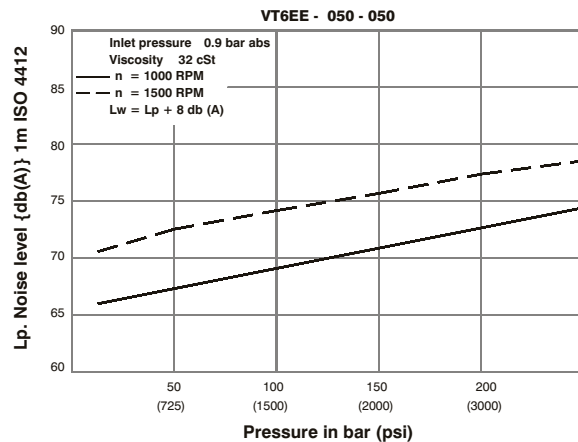


INTERNAL LEAKAGE (TYPICAL)



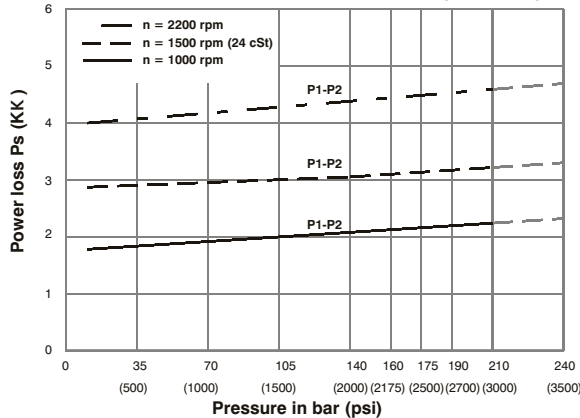
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



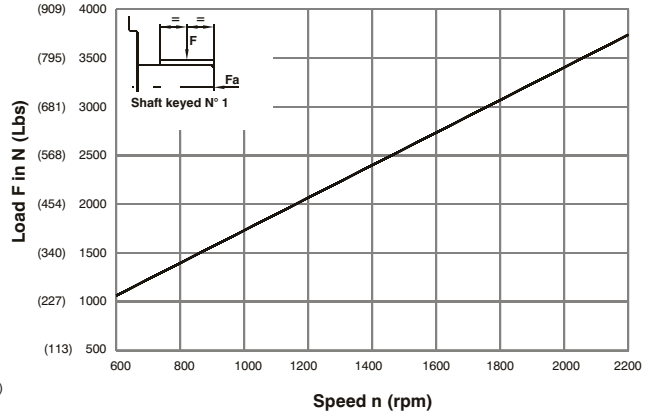
Double pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



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

PERMISSIBLE RADIAL LOAD

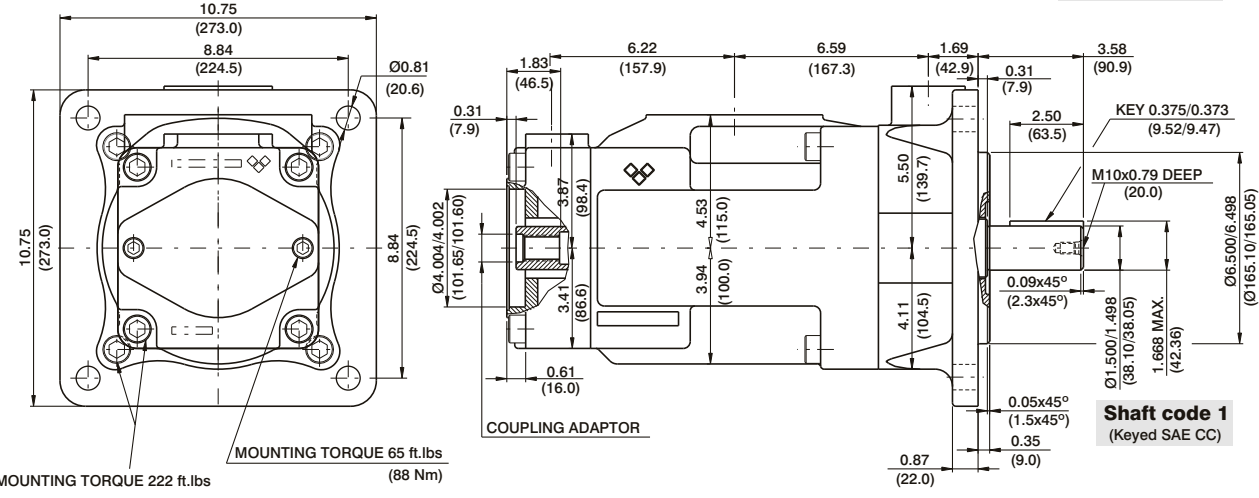
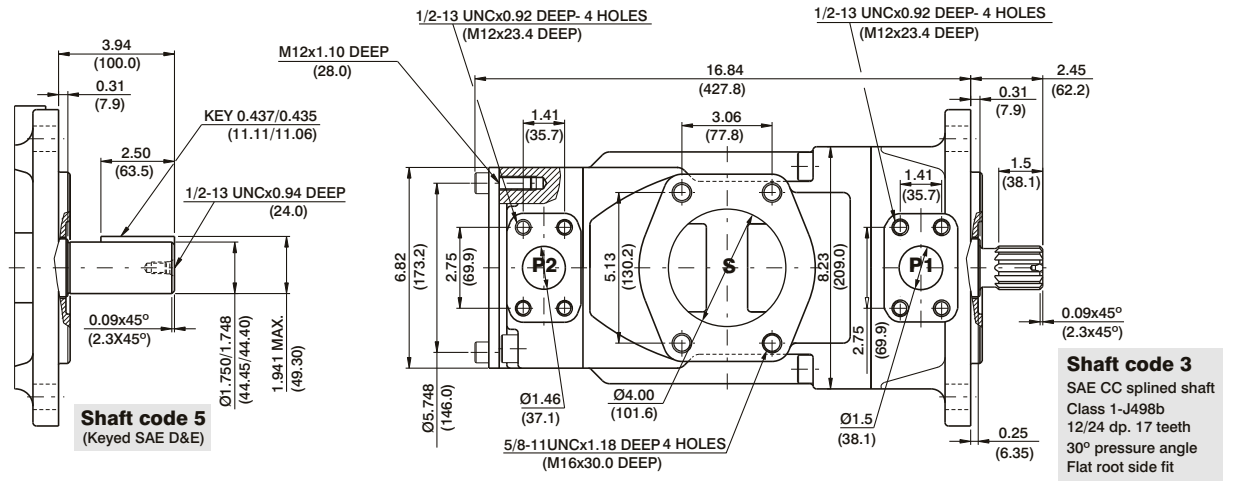


Maximum permissible axial load Fa = 2000 N (449 Lbs)

HIGH PERFORMANCE VANE PUMP VT6EE/ VT6EES



DP



| 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 | | | | | | |
|---------------|---------------------|----------------------------|-----------------------|----------------------|------------------------|--------|------------------------|-------|------------------------------|------|------------------------|--------|------------------------|--------|-------|
| | | | 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 ³ /rev | cm ³ /rev | gpm | lpm | gpm | lpm | gpm | lpm | hp | kw | hp | kw | hp |
| 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 ^{1,2)} | 16.40 | 269.8 | 107.00 | 404.7 | 105.21 | 397.7 | -- | -- | 9.78 | 7.3 | 87.56 | 65.3 | -- | -- |

1) 085 = 2000 RPM max. 2) 085 = 75 bar (1100 psi) cont. 085 = 90 bar (1300 psi) max. int.