

VT67EB - 066 - B08 1 R 00 - A 1 M1 -

Series- SAE C 2 bolts
Mounting flange J744c

Cam ring for "P1"
Volumetric displacement cm³/rev (in³/rev)

| | |
|---------------------|---------------------|
| 042 = 132.3 (8.07) | 062 = 196.7 (12.00) |
| 045 = 142.4 (8.69) | 066 = 213.3 (13.02) |
| 050 = 158.5 (9.67) | 072 = 227.1 (13.86) |
| 052 = 164.8 (10.06) | 085 = 269.8 (16.46) |
| 057 = 180.7 (11.02) | |

Cam ring for "P2"
Volumetric displacement cm³/rev (in³/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

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

Modifications

Mounting W/connection variables

| | |
|----------------------------|--------|
| P1=1-1/2" P2=3/4" S=3-1/2" | |
| UNC | METRIC |
| 01 | M1 |

Seal class

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

Design letter

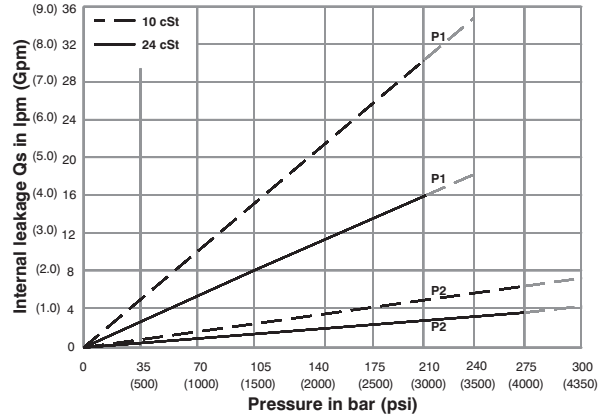
Porting combination (see page BM-1-5)
00 - standard

Direction of rotation (view on shaft end)

- R - clockwise
- L - counter-clockwise

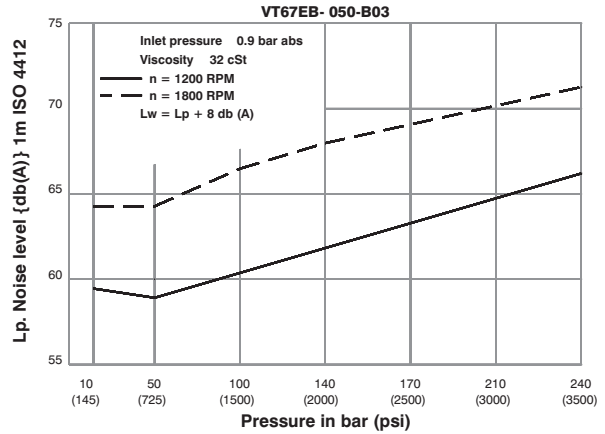
VP
DP

INTERNAL LEAKAGE (TYPICAL)



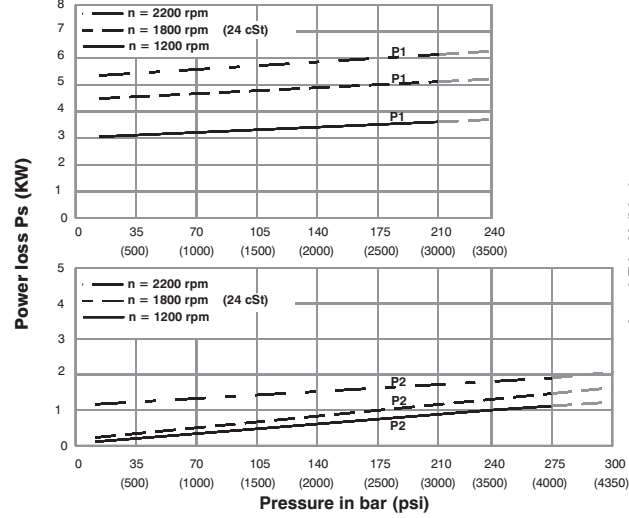
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



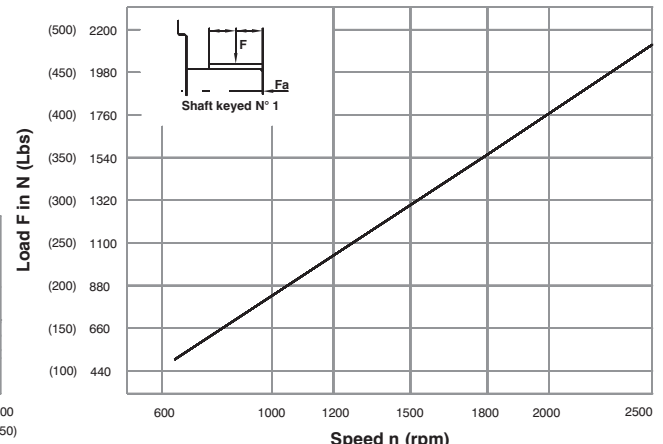
Double pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



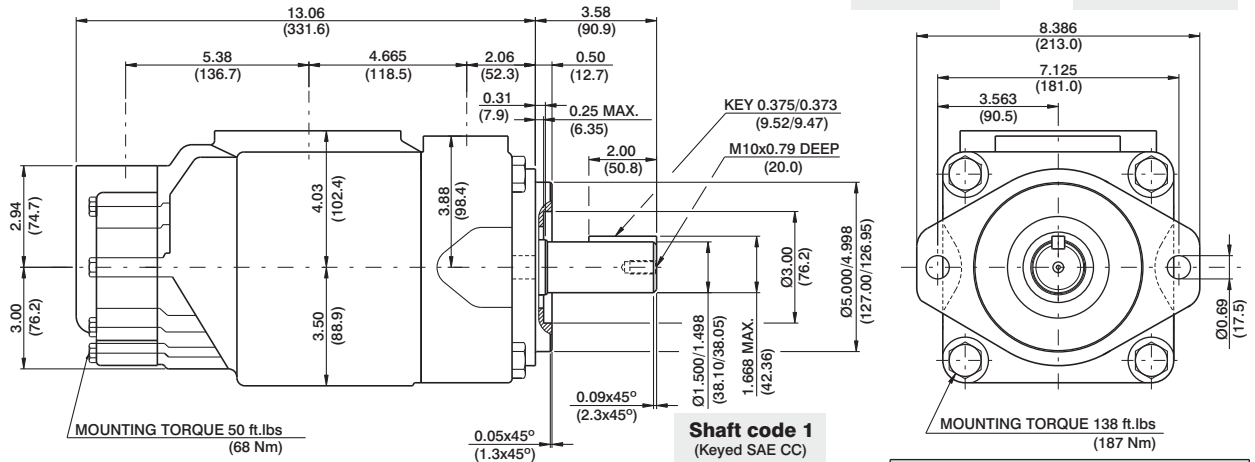
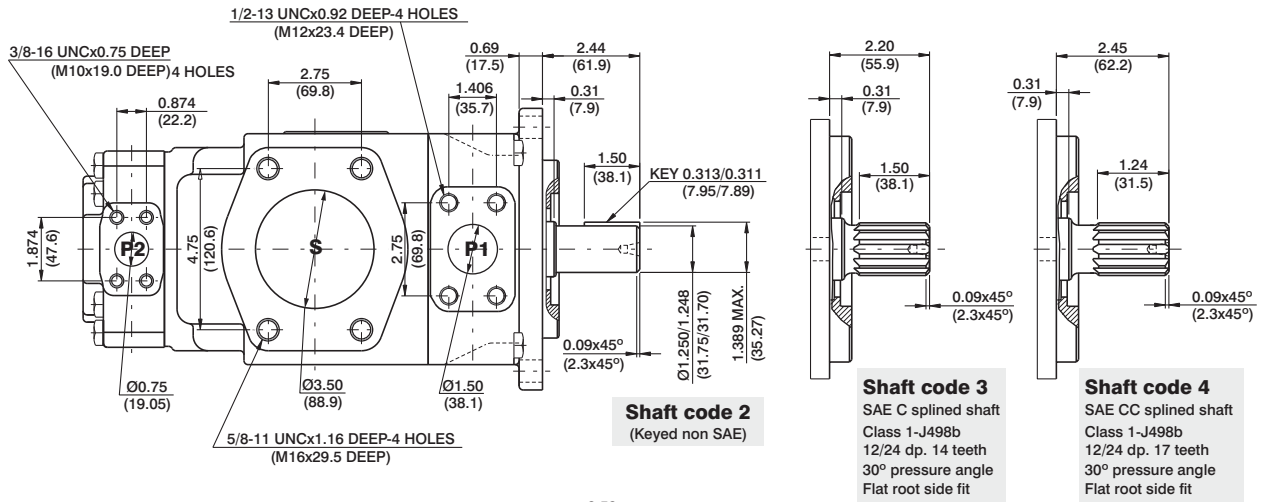
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



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

HIGH PERFORMANCE VANE PUMP VT67EB



| Shaft torque limits in ³ /rev x psi (ml/rev x bar) | | |
|---|---------------------|---------|
| Shaft | Vp x p max. (P1+P2) | |
| 1 | 64044 | (72306) |
| 2 | 30638 | (34590) |
| 3 | 54207 | (61200) |
| 4 | 67582 | (76376) |

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

| Pressure port | Series | Volumetric Displacement Vp | | Flow q & n = 1800 rpm | | | | | | Input power p & n = 1800 rpm | | | | | |
|---------------|---------------------|----------------------------|----------------------|-----------------------|-------|------------------------|-------|------------------------|-------|------------------------------|------|------------------------|-------|------------------------|--------|
| | | in ³ /rev | cm ³ /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) | |
| | | | | gpm | lpm | gpm | lpm | gpm | lpm | hp | kw | hp | kw | hp | kw |
| P1 | 042 | 8.07 | 132.3 | 62.92 | 237.8 | 60.37 | 228.2 | 58.52 | 221.2 | 8.09 | 6.03 | 78.44 | 58.49 | 133.80 | 99.78 |
| | 045 | 8.69 | 142.4 | 67.72 | 256.0 | 65.17 | 246.3 | 63.32 | 239.4 | 8.37 | 6.24 | 84.04 | 62.67 | 143.60 | 107.08 |
| | 050 | 9.67 | 158.5 | 75.38 | 285.0 | 72.83 | 275.3 | 70.98 | 268.3 | 8.82 | 6.58 | 92.97 | 69.30 | 159.24 | 118.7 |
| | 052 | 10.06 | 164.8 | 78.37 | 296.2 | 75.82 | 286.3 | 73.97 | 279.6 | 8.99 | 6.70 | 96.47 | 71.94 | 165.36 | 121.31 |
| | 057 | 11.02 | 180.7 | 71.70 | 325.3 | 69.07 | 261.1 | 80.63 | 304.8 | 9.40 | 7.00 | 114.30 | 85.14 | 172.10 | 128.30 |
| | 062 | 12.00 | 196.7 | 93.54 | 353.6 | 90.99 | 344.0 | 89.14 | 337.0 | 9.88 | 7.36 | 114.17 | 84.00 | 196.34 | 146.41 |
| | 066 | 13.02 | 213.3 | 101.44 | 383.4 | 98.89 | 373.8 | 97.04 | 366.8 | 10.34 | 7.71 | 123.38 | 92.01 | 212.46 | 158.43 |
| | 072 | 13.86 | 227.1 | 108.00 | 408.2 | 105.45 | 400.0 | 103.60 | 391.6 | 10.72 | 8.00 | 131.04 | 97.72 | 225.86 | 168.42 |
| | 085 ^{1,2)} | 16.40 | 268.7 | 127.08 | 483.0 | 126.13 | 476.7 | -- | -- | 11.66 | 8.70 | 87.56 | 65.30 | -- | -- |
| P2 | | | | p = 0 bar (0 psi) | | p = 140 bar (2000 psi) | | p = 300 bar (4350 psi) | | p = 7 bar (100 psi) | | p = 140 bar (2000 psi) | | p = 300 bar (4350 psi) | |
| | B02 | 0.35 | 5.7 | 2.76 | 10.4 | 2.33 | 8.8 | 1.80 | 6.8 | 0.74 | 0.55 | 4.02 | 2.99 | 8.10 | 6.40 |
| | B03 | 0.60 | 9.8 | 4.66 | 17.6 | 4.23 | 15.9 | 3.70 | 14.0 | 0.85 | 0.63 | 6.24 | 4.65 | 12.93 | 10.25 |
| | B04 | 0.78 | 12.8 | 6.09 | 23.0 | 5.66 | 21.4 | 5.13 | 19.4 | 0.94 | 0.70 | 7.90 | 5.89 | 16.55 | 13.13 |
| | B05 | 0.97 | 15.9 | 7.56 | 28.6 | 7.13 | 26.9 | 6.60 | 25.0 | 1.02 | 0.76 | 9.62 | 7.17 | 20.29 | 16.12 |
| | B06 | 1.21 | 19.8 | 9.42 | 35.6 | 8.99 | 33.9 | 8.46 | 32.0 | 1.13 | 0.84 | 11.79 | 8.79 | 25.00 | 19.88 |
| | B07 | 1.37 | 22.5 | 10.70 | 40.4 | 10.27 | 38.8 | 9.74 | 36.8 | 1.20 | 0.89 | 13.29 | 9.91 | 28.26 | 22.47 |
| | B08 | 1.52 | 24.9 | 11.84 | 44.7 | 11.41 | 43.1 | 10.88 | 41.1 | 1.27 | 0.94 | 14.62 | 10.90 | 31.15 | 24.78 |
| | B09 | 1.71 | 28.0 | 13.31 | 50.3 | 12.87 | 48.6 | 12.35 | 47.0 | 1.36 | 1.01 | 16.35 | 12.19 | 34.92 | 27.77 |
| | B10 | 1.94 | 31.8 | 15.12 | 57.2 | 14.69 | 55.5 | 14.16 | 53.5 | 1.46 | 1.11 | 18.45 | 13.75 | 39.48 | 31.42 |
| | B11 ³⁾ | 2.13 | 34.9 | 16.64 | 62.9 | 16.19 | 61.2 | 15.68 | 59.3 | 1.55 | 1.15 | 20.17 | 15.04 | 43.22 | 32.22 |
| | B12 ³⁾ | 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 ³⁾ | 2.75 | 45.1 | 21.40 | 80.8 | 20.95 | 79.2 | 20.44 | 77.0 | 1.83 | 1.36 | 25.80 | 19.23 | 55.48 | 41.37 |
| | B15 ³⁾ | 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) 085 = 2000 RPM max. 2) 085=75 bar (1087 psi)cont. 085=90 bar (1300 psi) max. int.
3) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm