

VT67DC W - 038 - B08 1 R 00 - A 1 M1 -

Series
SAE B 2 bolts
Mounting flange J744c

use for severe duty shaft only

Camring for "P1"
Volumetric displacement cm^3/rev (in^3/rev)
B14=2.68 (43.9) B31=6.05 (99.1)
B17=3.36 (55.0) B35=6.92 (113.4)
B20=4.03 (66.0) B38=7.36 (120.6)
B22=4.29 (70.3) B42=8.39 (137.5)
B24=4.95 (81.1) 045=8.89 (145.7)
B28=5.49 (89.9) 050=9.64 (157.9)
* '0' - Uni - directional 'B' - Bi - directional

Camring for "P2"
Volumetric displacement cm^3/rev (in^3/rev)
003/B03=0.66 (10.80) 015/B15=3.08 (50.50)
005/B05=1.05 (17.20) 017/B17=3.56 (58.30)
006/B06=1.30 (21.30) 020/B20=3.89 (63.80)
008/B08=1.61 (26.40) 022/B22=4.29 (70.30)
010/B10=2.08 (34.10) 025/B25=4.84 (79.30)
012/B12=2.26 (37.10) 028/B28=5.42 (88.80)
014/B14=2.81 (46.00) 031/B31=6.10 (100.00)
* '0' - Uni - directional 'B' - Bi - directional

Modifications

Mounting W/connection variables

| | UNC | | METRIC | |
|----|-----|------|--------|------|
| | 00 | 01 | M0 | M1 |
| P2 | 1" | 3/4" | 1" | 3/4" |

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

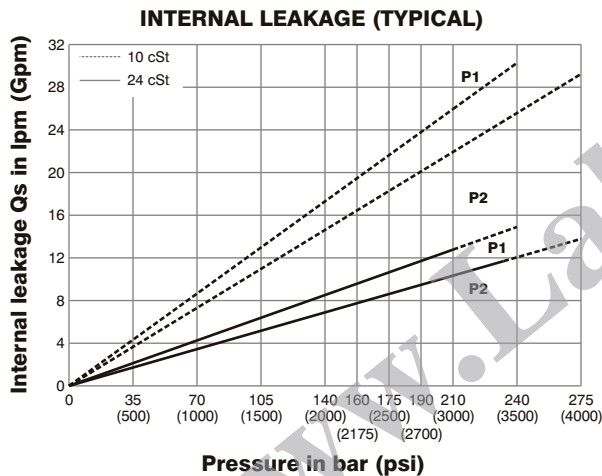
Direction of rotation (view on shaft end)

- R - clockwise
- L - counter-clockwise

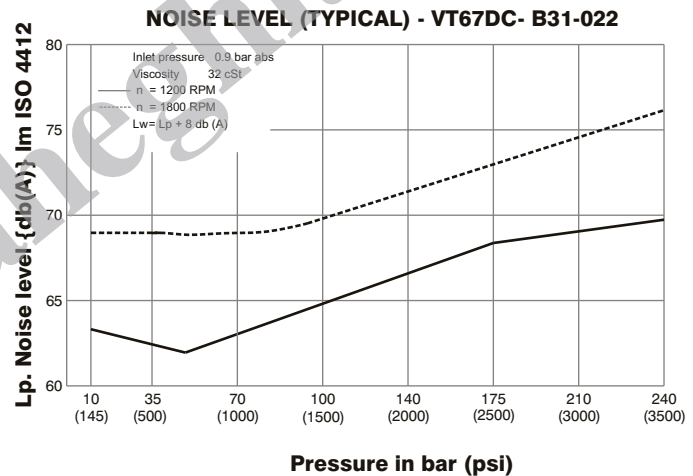
Type of shaft

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

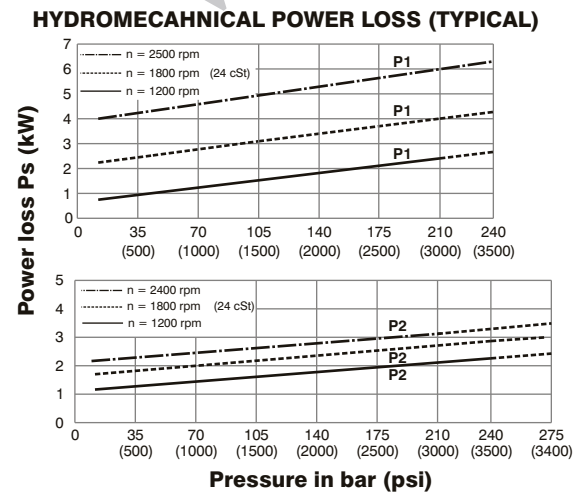
Sever duty (VT67DCW only)
5 - keyed (no SAE)



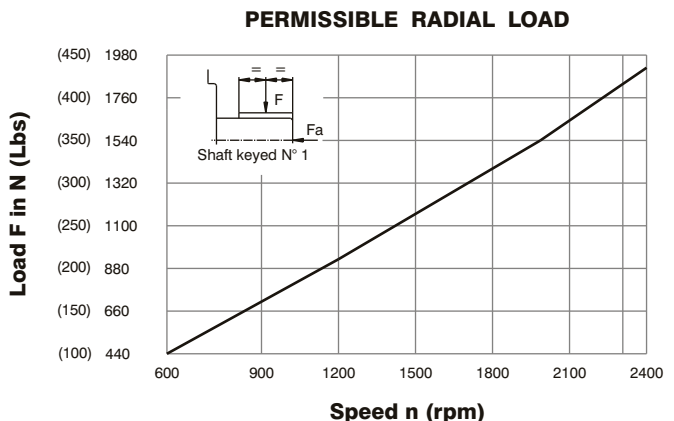
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.



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

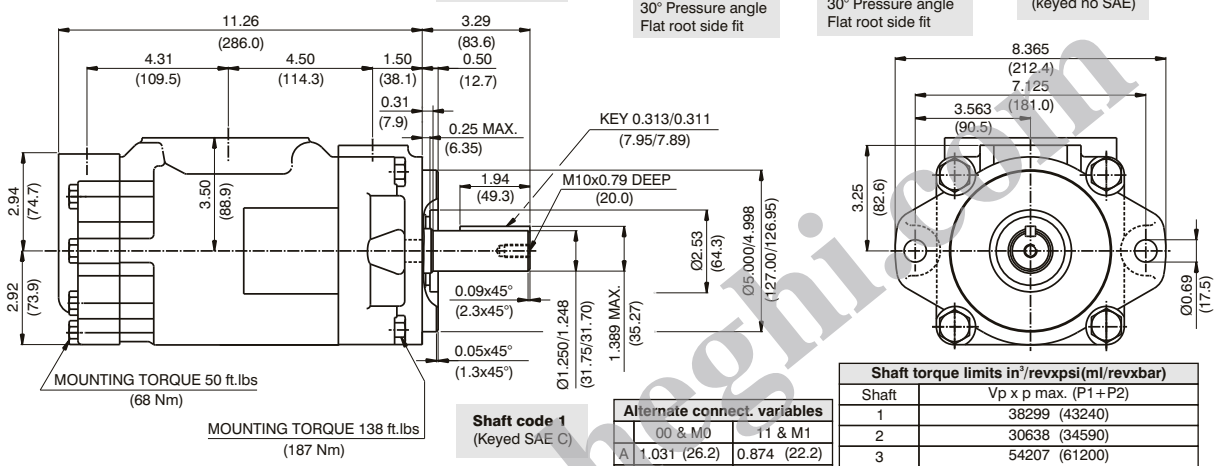
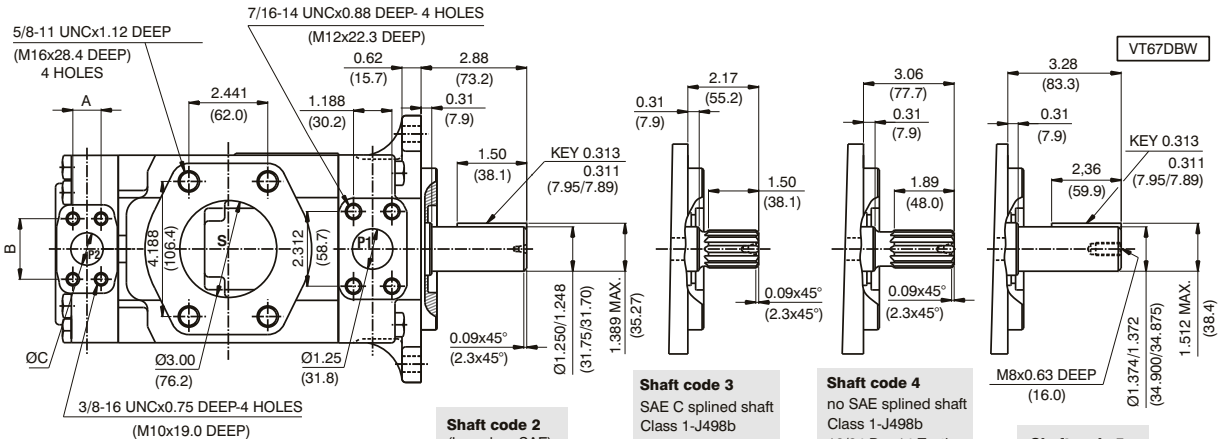


Total hydromechanical power loss is the sum of each section at its operating conditions.



Maximum permissible axial load $F_a = 1200 \text{ N}$ (270 Lbs)

HIGH PERFORMANCE VANE PUMP VT67DC



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 = 250 bar (3630 psi) | p = 7 bar (100psi) | p = 140 bar (2000 psi) | p = 250 bar (3630 psi) | p = 7 bar (100psi) | p = 140 bar (2000 psi) | p = 250 bar (3630 psi) | | | |
| P1 | B14 | 2.68 | 43.9 | 20.92 | 79.1 | 19.18 | 72.5 | 17.81 | 67.3 | 3.46 | 2.6 | 27.77 | 20.7 | 47.03 | 35.07 |
| | B17 | 3.36 | 55.0 | 26.16 | 98.8 | 24.41 | 92.3 | 23.04 | 87.0 | 3.77 | 2.8 | 33.88 | 25.3 | 57.71 | 43.03 |
| | B20 | 4.03 | 66.0 | 31.39 | 118.6 | 29.64 | 112.0 | 28.27 | 106.8 | 4.07 | 3.0 | 39.98 | 29.8 | 68.39 | 50.99 |
| | B22 | 4.29 | 70.3 | 33.43 | 126.4 | 31.69 | 119.8 | 30.32 | 104.6 | 4.19 | 3.1 | 42.37 | 31.6 | 72.57 | 54.11 |
| | B24 | 4.95 | 81.1 | 38.57 | 145.8 | 36.82 | 139.2 | 35.45 | 134.0 | 4.49 | 3.4 | 48.36 | 36.1 | 83.06 | 61.93 |
| | B28 | 5.49 | 89.9 | 42.80 | 161.8 | 41.06 | 155.2 | 39.69 | 150.0 | 4.74 | 3.5 | 53.30 | 39.7 | 91.70 | 68.38 |
| | B31 | 6.05 | 99.1 | 47.18 | 178.3 | 45.43 | 171.7 | 44.06 | 166.5 | 4.99 | 3.7 | 58.41 | 43.6 | 100.63 | 75.03 |
| | B35 | 6.92 | 113.4 | 53.93 | 203.9 | 52.18 | 197.2 | 50.81 | 192.0 | 5.39 | 4.0 | 66.29 | 49.4 | 114.42 | 85.32 |
| | B38 | 7.36 | 120.6 | 57.35 | 216.8 | 55.61 | 210.2 | 54.24 | 204.9 | 5.59 | 4.2 | 70.28 | 52.4 | 121.42 | 90.54 |
| | B42 | 8.39 | 137.5 | 65.39 | 247.2 | 63.65 | 240.6 | 62.28 | 235.4 | 6.05 | 4.5 | 79.66 | 59.4 | 137.83 | 102.77 |
| 045 | 8.89 | 145.7 | 69.29 | 262.0 | 67.11 | 253.6 | 65.31 | 246.8 | 6.74 | 5.0 | 83.75 | 62.4 | 145.79 | 108.71 | |
| 050 | 9.64 | 157.9 | 75.14 | 284.0 | 72.96 | 275.8 | 71.78 ¹⁾ | 271.3 ¹⁾ | 7.08 | 5.3 | 90.58 | 67.5 | 134.50 ¹⁾ | 100.3 ¹⁾ | |
| P2 | 003 | 0.66 | 10.8 | 5.14 | 19.6 | 3.85 | 14.6 | -- | -- | 2.11 | 1.57 | 8.45 | 6.30 | -- | -- |
| | 005 | 1.05 | 17.2 | 8.18 | 30.9 | 6.89 | 26.0 | 5.68 | 21.5 | 2.29 | 1.70 | 12.00 | 8.94 | 19.81 | 14.77 |
| | 006 | 1.30 | 21.3 | 10.13 | 38.3 | 8.84 | 33.4 | 7.63 | 28.8 | 2.40 | 1.78 | 14.28 | 10.64 | 23.79 | 17.74 |
| | 008 | 1.61 | 26.4 | 12.55 | 47.4 | 11.26 | 42.6 | 10.05 | 37.9 | 2.54 | 1.89 | 17.11 | 12.75 | 28.75 | 21.43 |
| | 010 | 2.08 | 34.1 | 16.22 | 61.3 | 14.93 | 56.4 | 13.71 | 51.8 | 2.76 | 2.06 | 21.38 | 15.94 | 36.22 | 27.00 |
| | 012 | 2.26 | 37.1 | 17.64 | 66.7 | 16.35 | 61.8 | 15.14 | 57.2 | 2.84 | 2.11 | 23.05 | 17.18 | 39.14 | 29.18 |
| | 014 | 2.81 | 46.0 | 21.88 | 82.7 | 20.59 | 77.8 | 19.37 | 73.2 | 3.09 | 2.30 | 27.99 | 20.87 | 47.78 | 35.62 |
| | 015 | 3.08 | 50.5 | 23.99 | 90.7 | 22.83 | 86.3 | 21.56 | 81.5 | 3.21 | 2.40 | 30.30 | 22.60 | 51.36 | 38.30 |
| | 017 | 3.56 | 58.3 | 27.73 | 104.8 | 26.44 | 99.9 | 25.22 | 95.3 | 3.43 | 2.55 | 34.81 | 25.95 | 59.73 | 44.54 |
| | 020 | 3.89 | 63.8 | 30.34 | 114.7 | 29.05 | 109.8 | 27.84 | 105.2 | 3.58 | 2.66 | 37.86 | 28.23 | 65.07 | 48.52 |
| | 022 | 4.29 | 70.3 | 33.43 | 126.4 | 32.14 | 121.5 | 30.93 | 116.9 | 3.76 | 2.80 | 41.47 | 30.92 | 71.38 | 53.22 |
| | 025 | 4.84 | 79.3 | 37.71 | 142.5 | 36.42 | 137.6 | 35.21 | 133.1 | 4.01 | 2.99 | 46.46 | 34.64 | 80.12 | 59.74 |
| | 028 | 5.42 | 88.8 | 42.23 | 159.6 | 40.94 | 154.7 | 40.32 ²⁾ | 152.4 ²⁾ | 4.27 | 3.18 | 51.74 | 38.58 | 76.73 ²⁾ | 57.22 ²⁾ |
| 031 | 6.10 | 100.0 | 47.56 | 179.7 | 46.27 | 174.9 | 45.65 ²⁾ | 172.5 ²⁾ | 4.58 | 3.41 | 57.95 | 43.21 | 86.06 ²⁾ | 64.17 ²⁾ | |

- Not recommended to use as the internal leakage is over 50% of theoretical flow.
 1) 050 = 210 bar (3000 psi) max. int 2) 028 - 031 = 210 bar (3000 psi) max.int