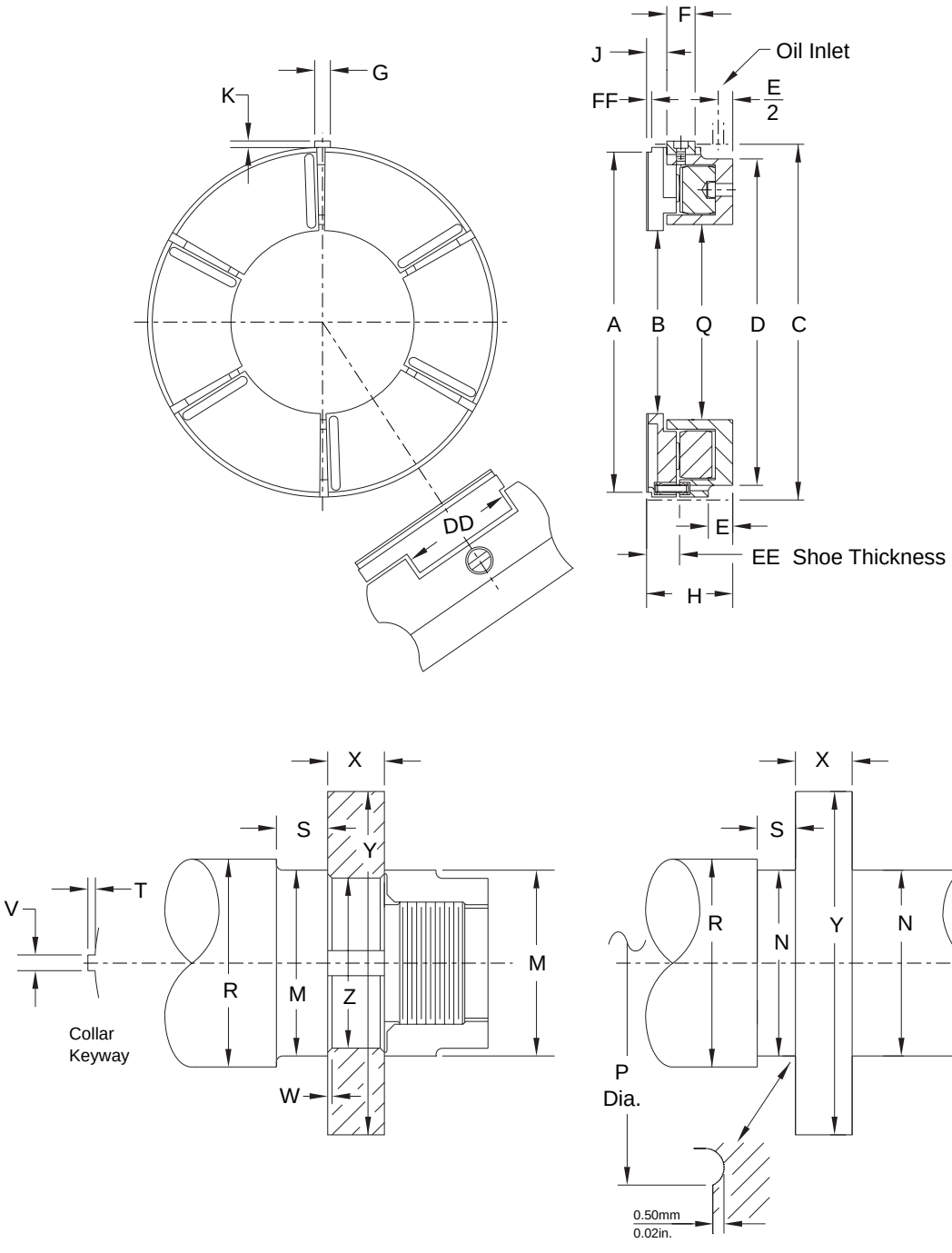
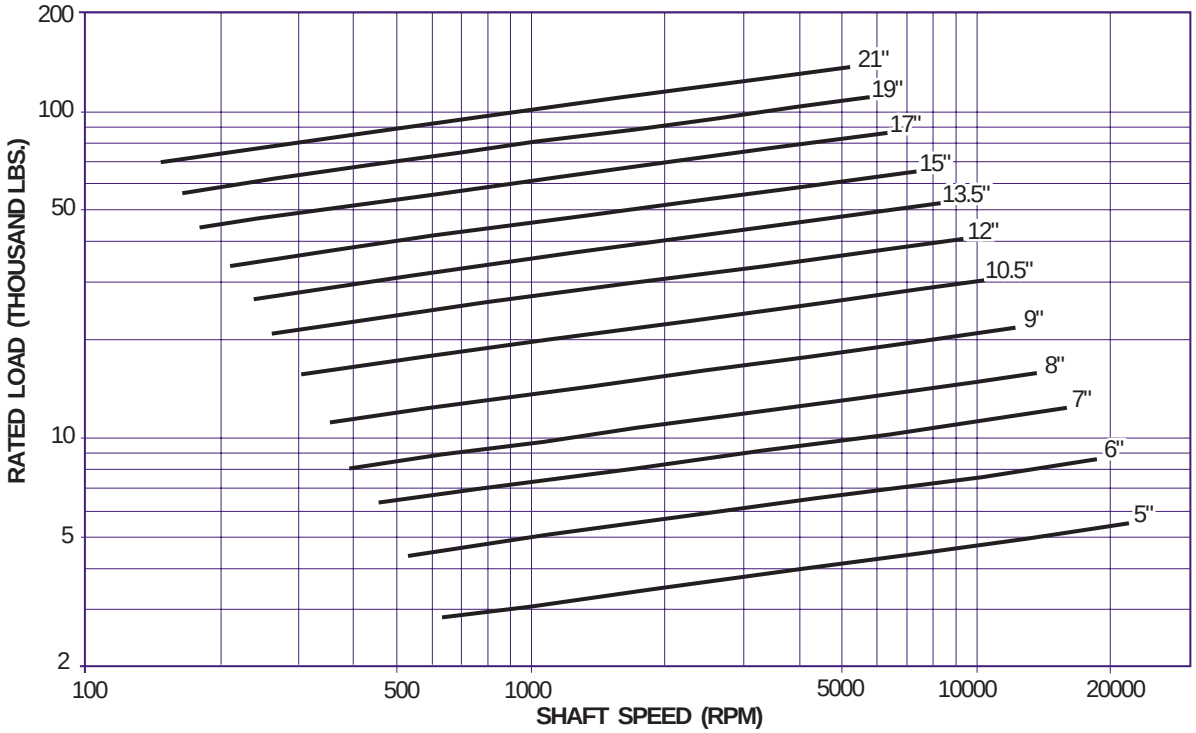
# J-STYLE LEG BEARINGS (ENGLISH)



## RATED LOAD FOR J-STYLE LEG THRUST BEARINGS

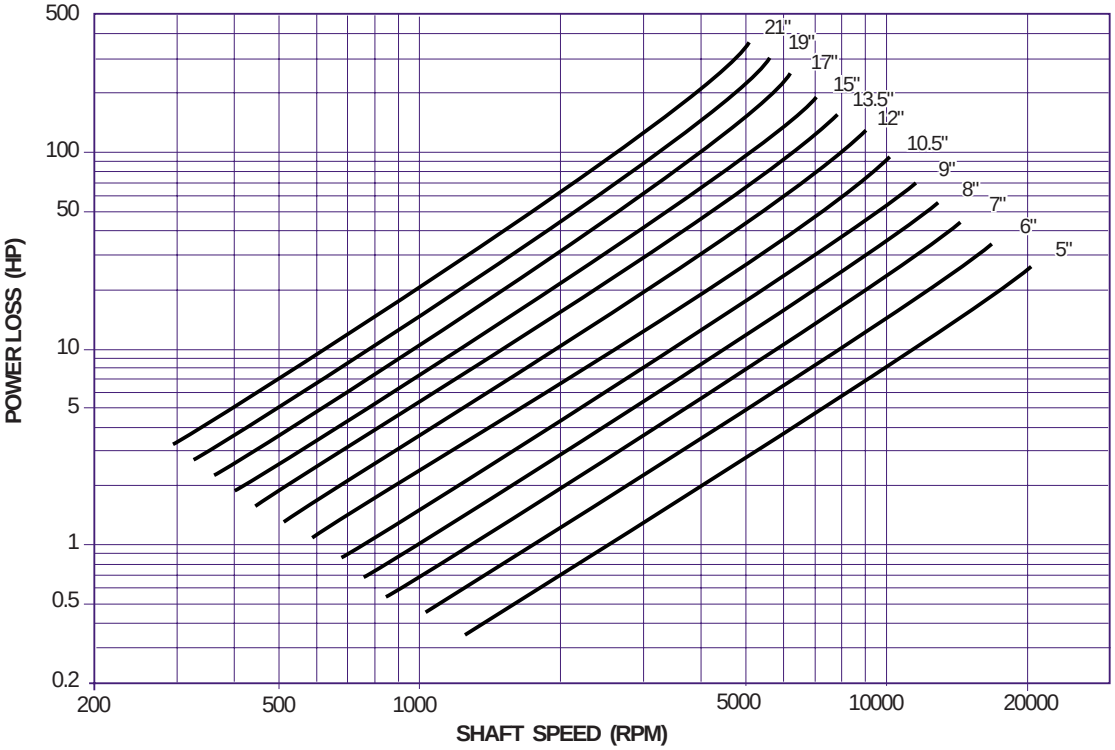



Based on ISO VG 32 supplied at 120° F

## ENGLISH SIZES (Inches)

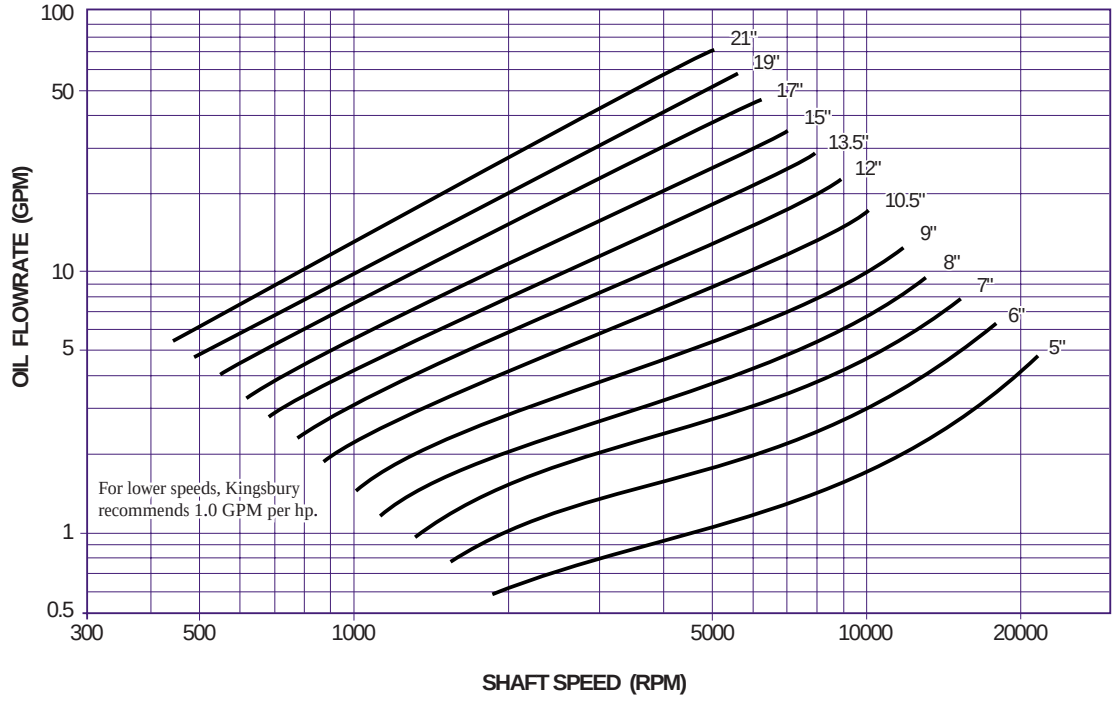
| Brg. Size | 5 | 6 | 7 | 8 | 9 | 10.5 | 12 | 13.5 | 15 | 17 | 19 | 21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Shoes | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Area ($in^2$) | 12.5 | 18.0 | 24.5 | 31.4 | 40.5 | 55.1 | 72 | 91.1 | 112.5 | 144.5 | 180.5 | 220.5 |
| A - Babbitt O.D. | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.50 | 12.00 | 13.50 | 15.00 | 17.00 | 19.00 | 21.00 |
| B - Babbitt I.D. | 2.50 | 3.00 | 3.50 | 4.12 | 4.50 | 5.25 | 6.00 | 6.75 | 7.50 | 8.50 | 9.50 | 10.5 |
| H - Bearing Height (J) | 1.75 | 2.06 | 2.38 | 2.69 | 3.00 | 3.38 | 3.75 | 4.25 | 4.62 | 5.25 | 5.25 | 5.25 |
| H - Bearing Height (B) | 1.62 | 1.88 | 2.12 | 2.38 | 2.69 | 2.94 | 3.25 | 3.56 | 3.88 | 4.38 | 4.75 | 5.25 |
| C - Bearing O.D. | 5.375 | 6.375 | 7.375 | 8.375 | 9.375 | 11.000 | 12.500 | 14.000 | 15.500 | 17.625 | 20.250 | 22.250 |
| Q - Base ring I.D. | 2.75 | 3.25 | 3.75 | 4.31 | 4.88 | 5.69 | 6.50 | 7.31 | 8.12 | 9.19 | 10.62 | 11.75 |
| D - Oil annulus dia. | 4.94 | 5.94 | 6.75 | 7.62 | 8.62 | 10.00 | 11.56 | 13.00 | 14.50 | 16.50 | 18.5 | 20.25 |
| E - Oil annulus depth, min. | 0.38 | 0.38 | 0.44 | 0.50 | 0.56 | 0.56 | 0.69 | 0.75 | 0.62 | 0.94 | 0.88 | 1.00 |
| F - Bearing key, length | 0.56 | 0.66 | 0.81 | 0.94 | 0.94 | 1.12 | 1.19 | 1.38 | 1.50 | 1.62 | 1.75 | 1.75 |
| G - Bearing key, width | 0.31 | 0.38 | 0.38 | 0.44 | 0.44 | 0.50 | 0.56 | 0.62 | 0.69 | 0.75 | 0.88 | 1.00 |
| J - Collar to key | 0.31 | 0.38 | 0.47 | 0.50 | 0.56 | 0.62 | 0.69 | 0.75 | 0.81 | 0.94 | 1.00 | 1.12 |
| K - Key projection | 0.16 | 0.19 | 0.19 | 0.19 | 0.19 | 0.22 | 0.22 | 0.25 | 0.31 | 0.31 | 0.34 | 0.38 |
| M - Separate shaft dia. | 2.25 | 2.75 | 3.25 | 3.75 | 4.25 | 4.88 | 5.62 | 6.38 | 7.00 | 8.00 | 8.88 | 9.88 |
| N - Intergral shaft dia. | 2.12 | 2.62 | 3.12 | 3.62 | 4.12 | 4.75 | 5.50 | 6.25 | 6.88 | 7.88 | 8.75 | 9.75 |
| P - Max dia. over fillet | 2.41 | 2.92 | 3.42 | 3.91 | 4.42 | 5.12 | 5.87 | 6.62 | 7.32 | 8.32 | 9.27 | 10.27 |
| R - Dia. through base ring | 2.50 | 3.00 | 3.50 | 4.00 | 4.50 | 5.25 | 6.00 | 6.75 | 7.50 | 8.50 | 9.75 | 10.75 |
| S - Shaft lgth @ shoe I.D. | 0.62 | 0.75 | 0.88 | 1.00 | 1.12 | 1.25 | 1.38 | 1.50 | 1.62 | 1.75 | 2.00 | 2.25 |
| X - Collar thickness | 0.88 | 1.00 | 1.25 | 1.38 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.88 | 3.25 | 3.62 |
| Y - Collar dia. | 5.12 | 6.12 | 7.12 | 8.12 | 9.12 | 10.69 | 12.19 | 13.69 | 15.19 | 17.25 | 19.25 | 21.25 |
| Z - Collar bore | 1.750 | 2.125 | 2.500 | 3.000 | 3.500 | 4.125 | 4.750 | 5.375 | 6.000 | 6.625 | 7.500 | 8.500 |
| T - Collar key depth | 0.19 | 0.19 | 0.25 | 0.31 | 0.31 | 0.38 | 0.38 | 0.44 | 0.50 | 0.50 | 0.56 | 0.62 |
| V - Collar key width | 0.38 | 0.38 | 0.50 | 0.63 | 0.63 | 0.75 | 0.75 | 0.88 | 1.00 | 1.00 | 1.13 | 1.25 |
| W - Collar chamfer | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.09 | 0.09 | 0.09 | 0.09 | 0.12 | 0.12 | 0.12 |
| DD - Straddle mill | 1.59 | 1.97 | 2.34 | 2.72 | 3.03 | 3.19 | 3.97 | 4.22 | 5.09 | 5.72 | 5.97 | 6.97 |
| EE - Shoe thickness | 0.625 | 0.750 | 0.875 | 1.000 | 1.125 | 1.250 | 1.375 | 1.500 | 1.625 | 1.812 | 2.000 | 2.188 |
| FF - Shoe relief | 0.16 | 0.16 | 0.19 | 0.22 | 0.31 | 0.28 | 0.34 | 0.38 | 0.12 | 0.12 | 0.38 | 0.50 |
| Weight (Lbs) Bearing | 5.6 | 9.0 | 14.8 | 20.9 | 30.5 | 44.9 | 64.4 | 90.9 | 123.7 | 176.0 | 237.0 | 312.0 |
| Weight (Lbs) Collar | 4.5 | 7.3 | 12.3 | 17.4 | 23.6 | 37.8 | 56.0 | 79.2 | 108.1 | 162.2 | 226.8 | 304.8 |
| Weight (Lbs) Spare shoes | 2.1 | 3.5 | 5.5 | 7.8 | 11.2 | 18.0 | 25.0 | 34.5 | 47.0 | 68.0 | 100.0 | 132.0 |

## POWER LOSS: DOUBLE ELEMENT J-STYLE LEG BEARINGS



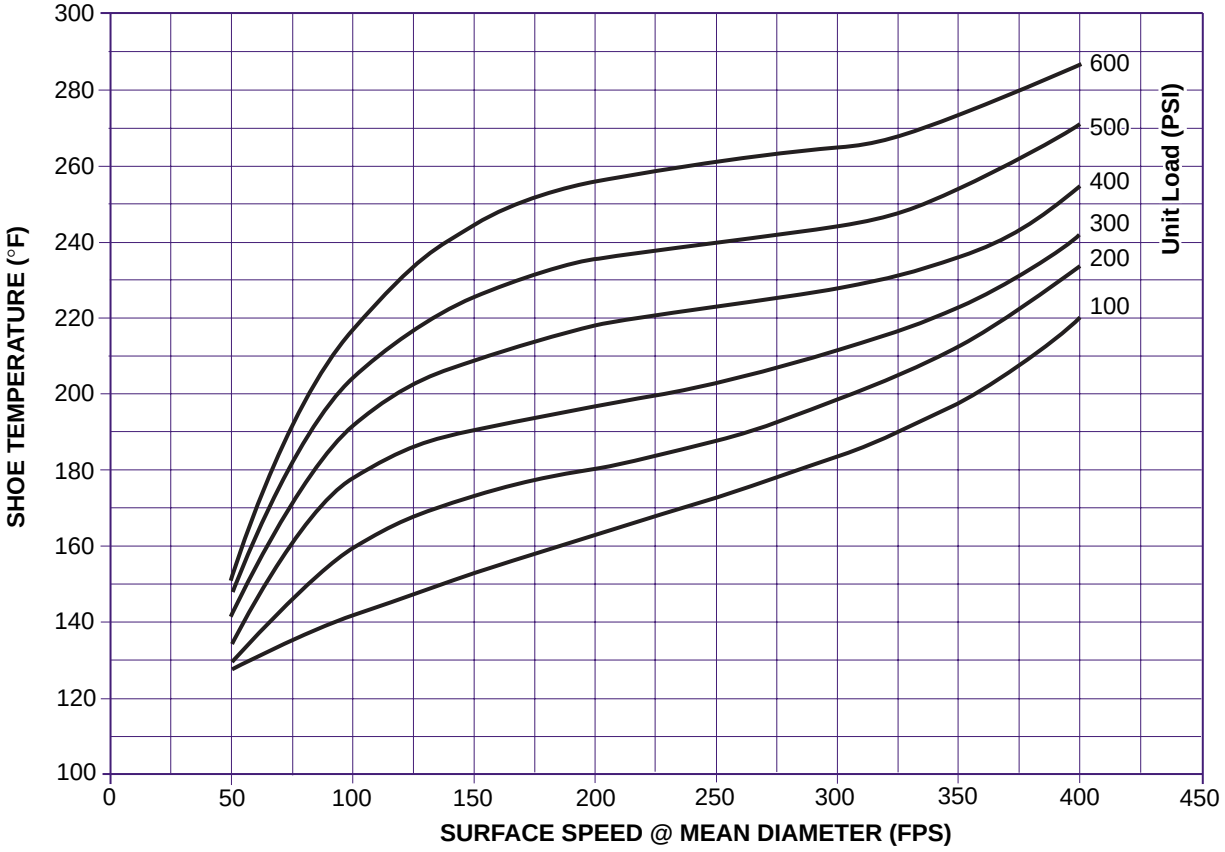

Based on 20% Slack Flow & ISO VG 32 supplied at 120° F.
Power loss is based on rated load, recommended oil flow, and Kingsbury's recommended discharge configuration. If any of these is changed the power loss will also change.

## OIL SUPPLY FOR J-STYLE LEG BEARINGS

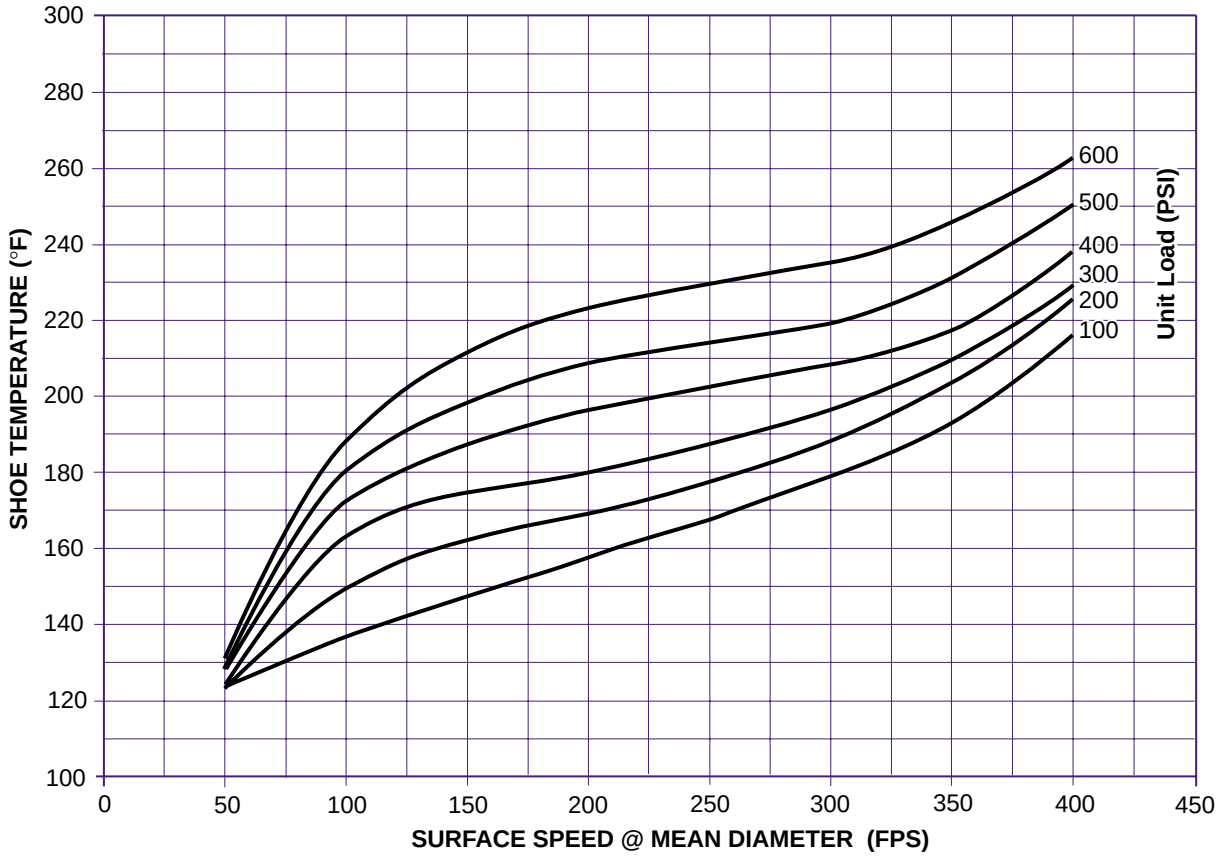



Based on ISO VG 32 supplied at 120°F.
This chart gives loaded side, single element flowrates for rated load. For double element bearings, supply an additional 20% to the inactive side. In machines where load may reverse and apply rated values to either side, provide equal flow to each side (a total of two times the chart value).

## 75/75 SHOE TEMPERATURE (STEEL)




## 75/75 SHOE TEMPERATURE (CR-CU)




Temperatures are based on recommended oil, flow, and supply temperatures.
Unit load is load divided by bearing area.