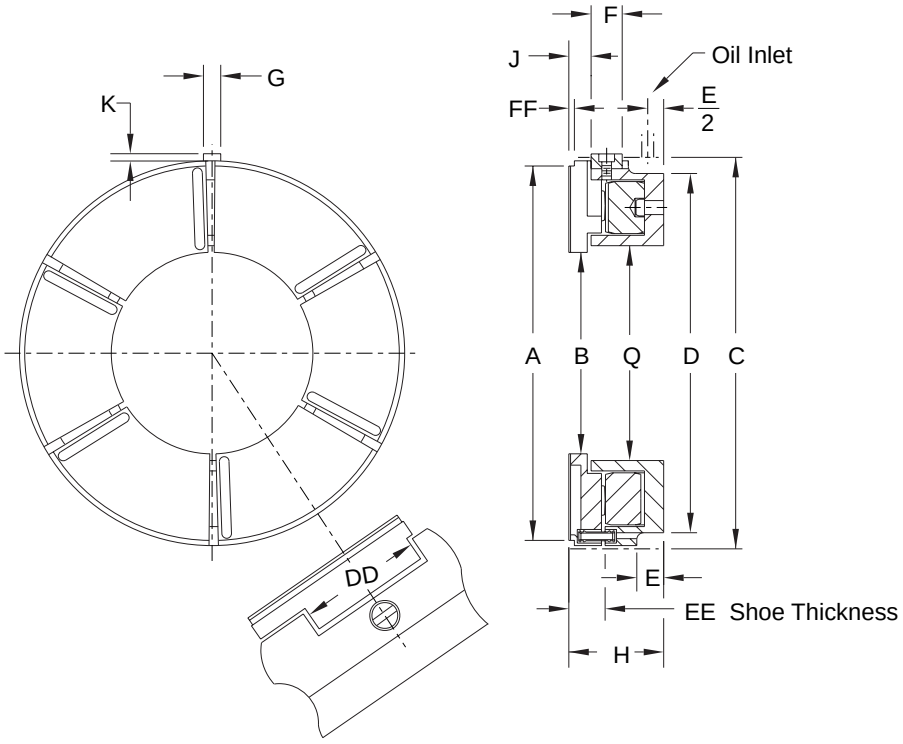
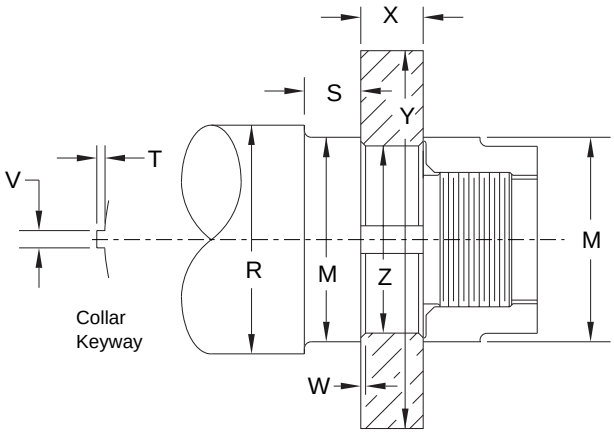
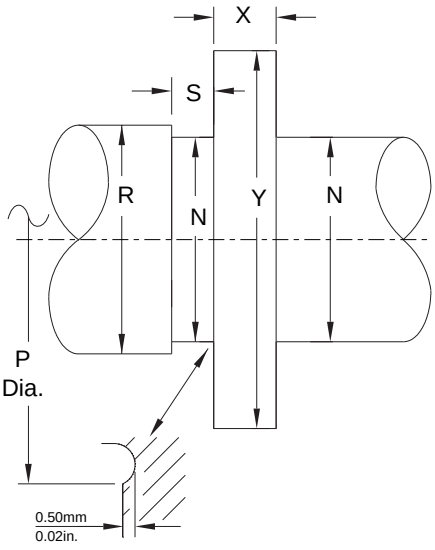
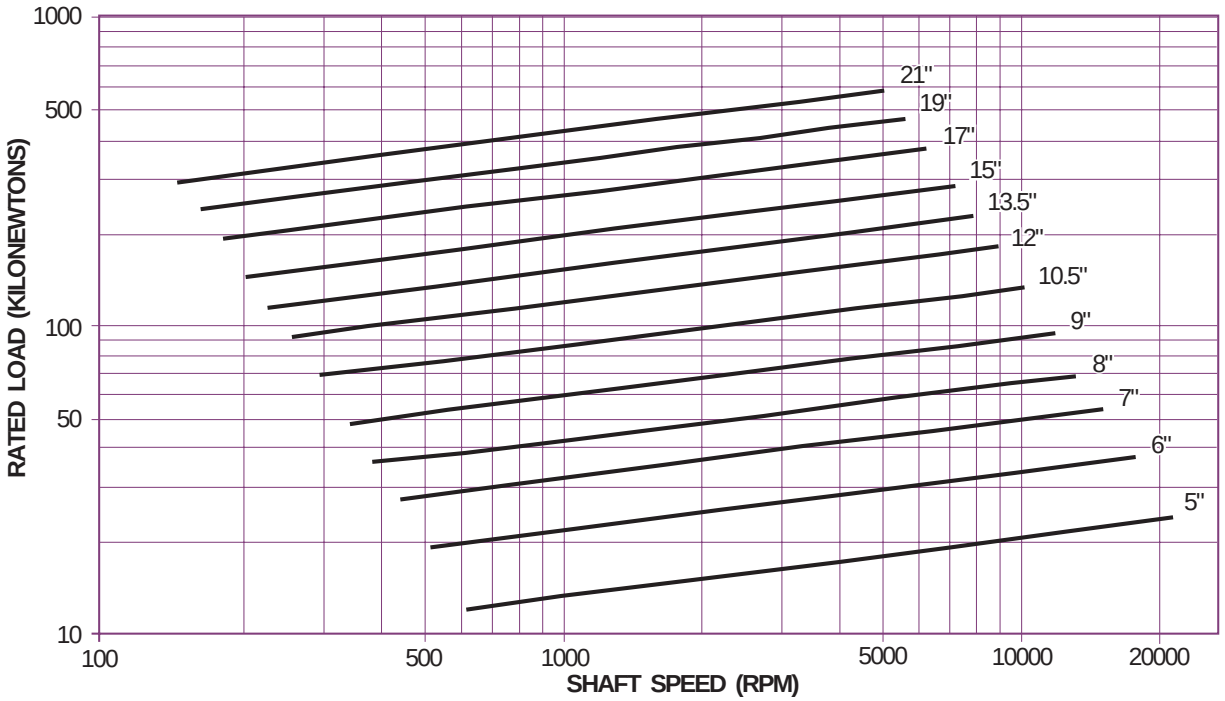
J-STYLE BEARINGS (METRIC)







RATED LOAD FOR J-STYLE LEG THRUST BEARINGS

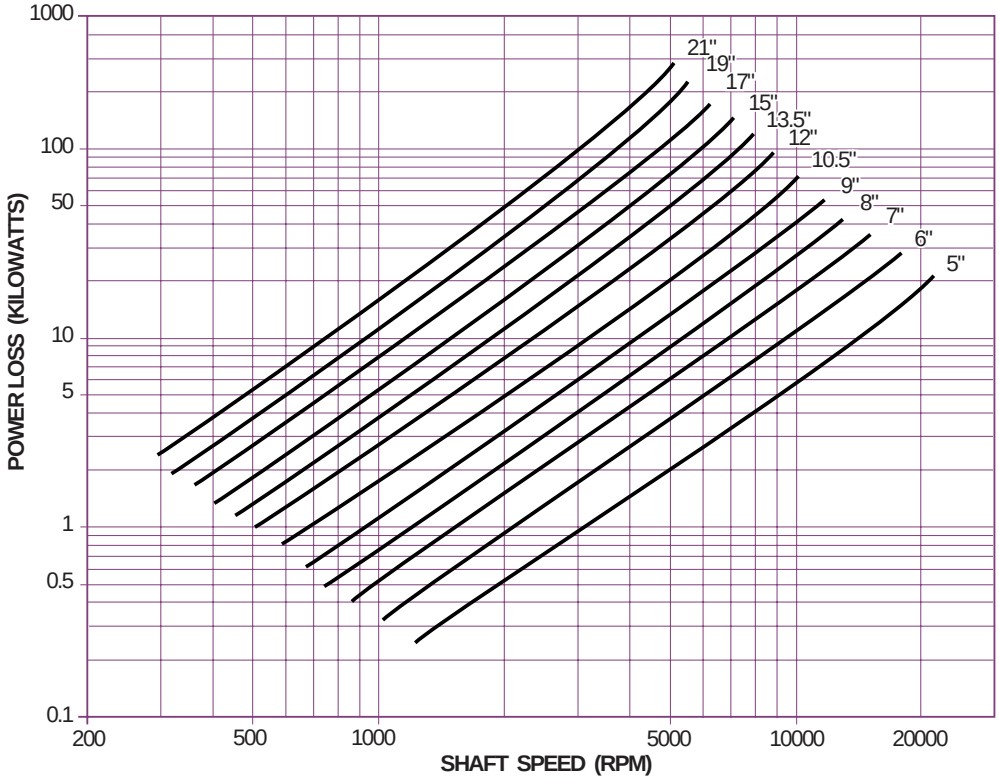


Based on ISO VG 32 supplied at 50°C

METRIC SIZES (mm)

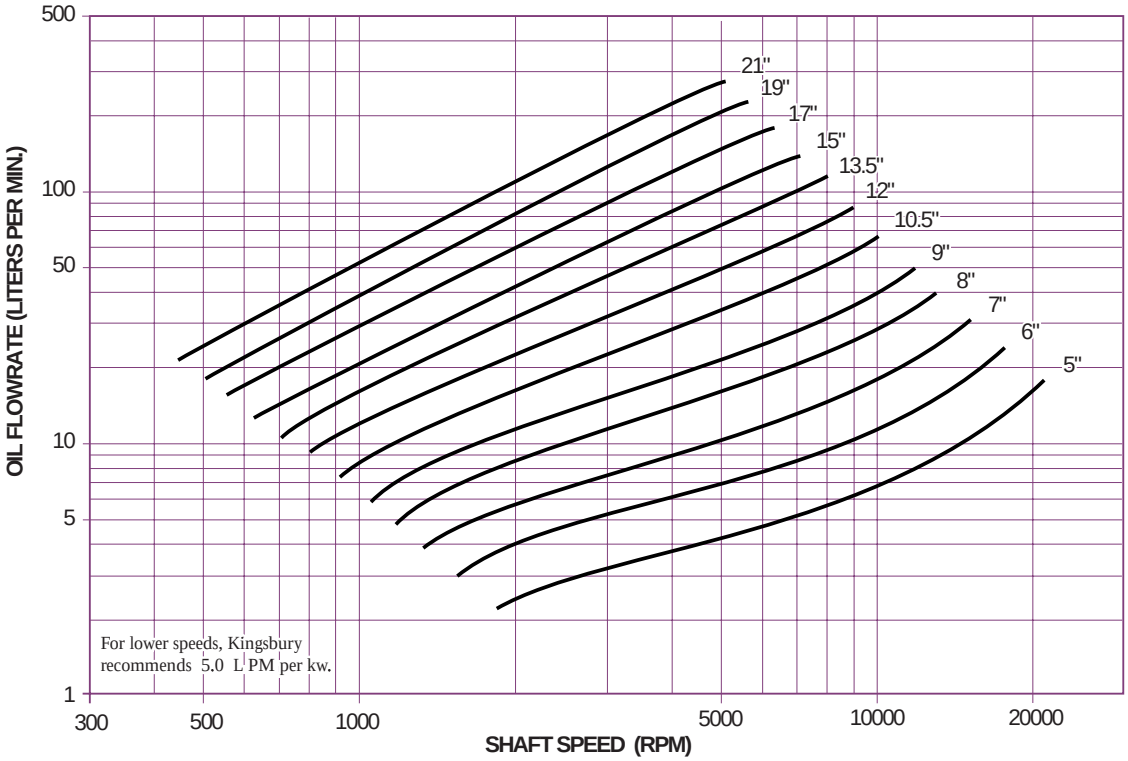
Brg. Size	5	6	7	8	9	10.5	12	13.5	15	17	19	21
No. of Shoes	6	6	6	6	6	6	6	6	6	6	6	6
Area (mm^2)	8065	11613	15806	20258	26129	35548	46452	58774	72581	93226	116451	142258
A - Babbitt O.D.	127.0	152.4	177.8	203.2	228.6	266.7	304.8	342.9	381.0	431.8	482.6	533.4
B - Babbitt I.D.	63.5	76.2	88.9	104.6	114.3	133.4	152.4	171.5	190.5	215.9	241.3	266.7
H - Bearing Height (J)	44.5	52.3	60.5	68.3	76.2	85.9	95.3	108.0	117.4	133.4	133.4	133.4
H - Bearing Height (B)	41.1	47.8	53.8	60.5	68.3	74.7	82.6	90.4	98.6	111.3	120.7	133.4
C - Bearing O.D.	136.53	161.93	187.33	212.73	238.13	279.40	317.50	355.60	393.70	447.68	514.35	565.15
Q - Base ring I.D.	69.9	82.6	95.3	109.5	124.0	144.5	165.1	185.7	206.2	233.4	269.7	298.5
D - Oil annulus dia.	125.5	150.9	171.5	193.5	218.9	254.0	293.6	330.2	368.3	419.1	469.9	514.4
E - Oil annulus depth, min.	9.7	9.7	11.2	12.7	14.2	14.2	17.5	19.1	15.7	23.9	22.4	25.4
F - Bearing key, length	14.2	16.8	20.6	23.9	23.9	28.4	30.2	35.1	38.1	41.1	44.5	44.5
G - Bearing key, width	7.9	9.7	9.7	11.2	11.2	12.7	14.2	15.7	17.5	19.1	22.4	25.4
J - Collar to key	7.9	9.7	11.9	12.7	14.2	15.7	17.5	19.1	20.6	23.9	25.4	28.4
K - Key projection	4.1	4.8	4.8	4.8	4.8	5.6	5.6	6.4	7.9	7.9	8.6	9.7
M - Separate shaft dia.	57.2	69.9	82.6	95.3	108.0	124.0	142.7	162.1	177.8	203.2	225.6	251.0
N - Intergral shaft dia.	53.8	66.5	79.2	91.9	104.6	120.7	139.7	158.8	174.8	200.2	222.3	247.7
P - Max dia. over fillet	61.2	74.2	86.9	99.3	112.3	130.0	149.1	168.1	185.9	211.3	235.5	260.9
R - Dia. through base ring	63.5	76.2	88.9	101.6	114.3	133.4	152.4	171.5	190.5	215.9	247.7	273.1
S - Shaft lgth @ shoe I.D.	15.7	19.1	22.4	25.4	28.4	31.8	35.1	38.1	41.1	44.5	50.8	57.2
X - Collar thickness	22.4	25.4	31.8	35.1	38.1	44.5	50.8	57.2	63.5	73.2	82.6	91.9
Y - Collar dia.	130.0	155.4	180.8	206.2	231.6	271.5	309.6	347.7	385.8	438.2	489.0	539.8
Z - Collar bore	44.45	53.98	63.50	76.20	88.90	104.78	120.65	136.53	152.40	168.28	190.50	215.90
T - Collar key depth	4.8	4.8	6.4	7.9	7.9	9.7	9.7	11.2	12.7	12.7	14.2	15.7
V - Collar key width	9.7	9.7	12.7	16.0	16.0	19.1	19.1	22.4	25.4	25.4	28.7	31.8
W - Collar chamfer	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3	3.0	3.0	3.0
DD - Straddle mill	40.4	50.0	59.4	69.1	77.0	81.0	100.8	107.2	129.3	145.3	151.6	177.0
EE - Shoe thickness	15.88	19.05	22.23	25.40	28.58	31.75	34.93	38.10	41.28	46.02	50.80	55.58
FF - Shoe relief	4.1	4.1	4.8	5.6	7.9	7.1	8.6	9.7	3.0	3.0	9.7	12.7
Weight (kG) Bearing	2.5	4.1	6.7	9.5	13.8	20.4	29.2	41.2	56.1	79.8	107.5	141.5
Weight (kG) Collar	2.0	3.3	5.6	7.9	10.7	17.1	25.4	35.9	49.0	73.6	102.9	138.3
Weight (kG) Spare shoes	1.0	1.6	2.5	3.5	5.1	8.2	11.3	15.6	21.3	30.8	45.4	59.9

POWER LOSS: DOUBLE ELEMENT J-STYLE LEG BEARINGS



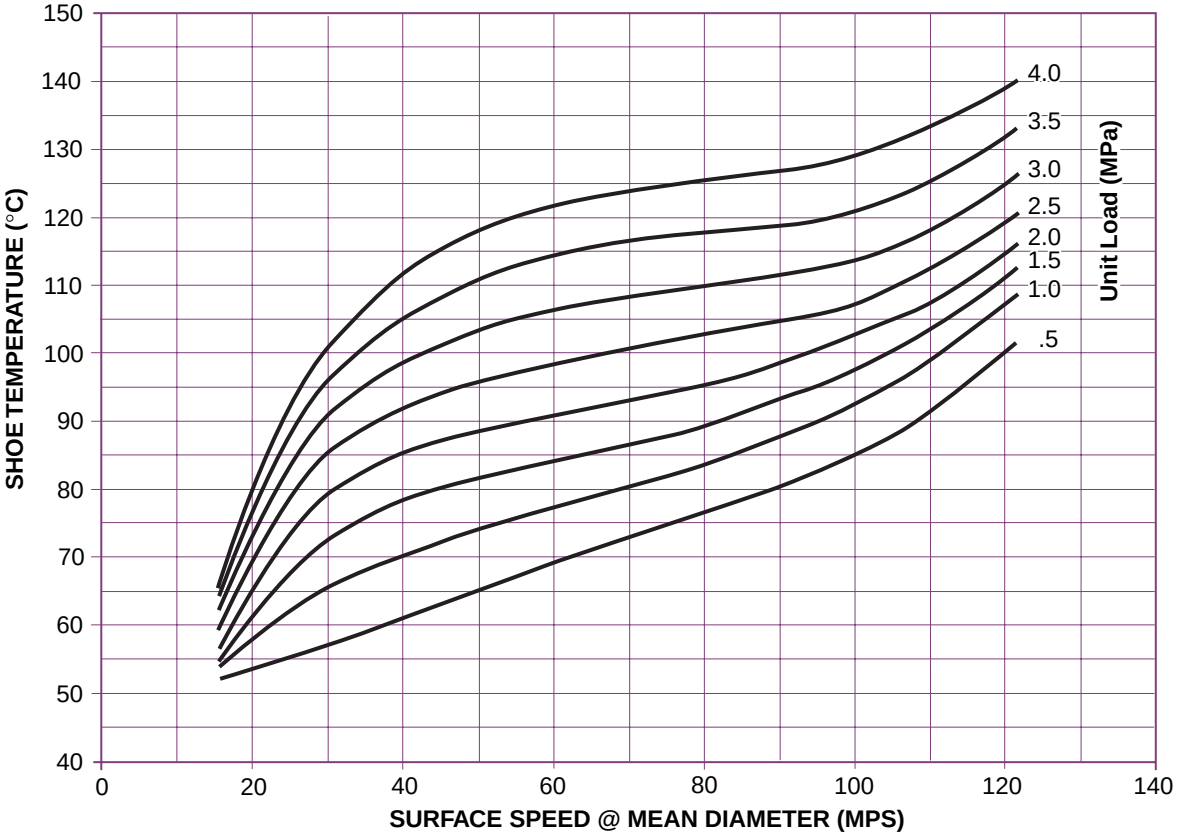
Based on 20% Slack Flow & ISO VG 32 supplied at 50°C
Power loss is based on rated load, recommended oil flow, and Kingsbury's recommended discharge configuration. If any of these is changed the power loss will also change.

OIL SUPPLY FOR J-STYLE LEG BEARINGS

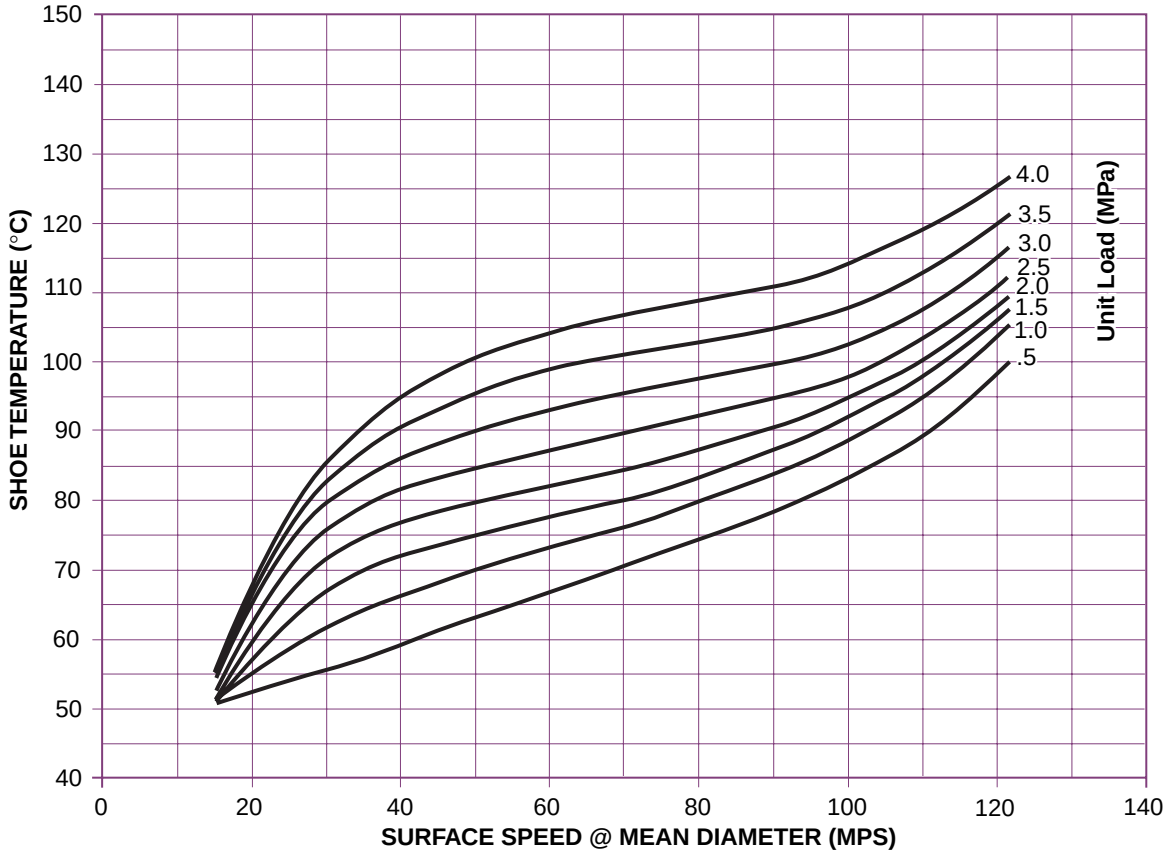


Based on ISO VG 32 supplied at 50°C
This chart gives loaded side, single element flowrates for rated load. For double element bearings, supply an additional 20% to the inactive side. In machines where load may reverse and apply rated values to either side, provide equal flow to each side (a total of 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.