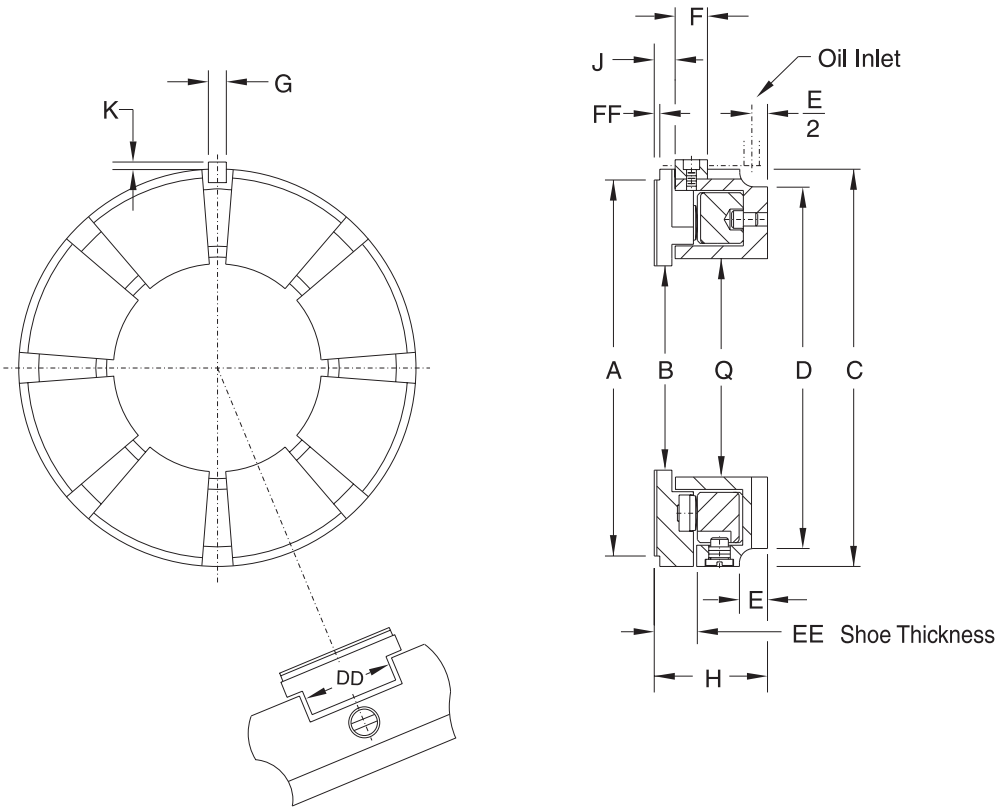
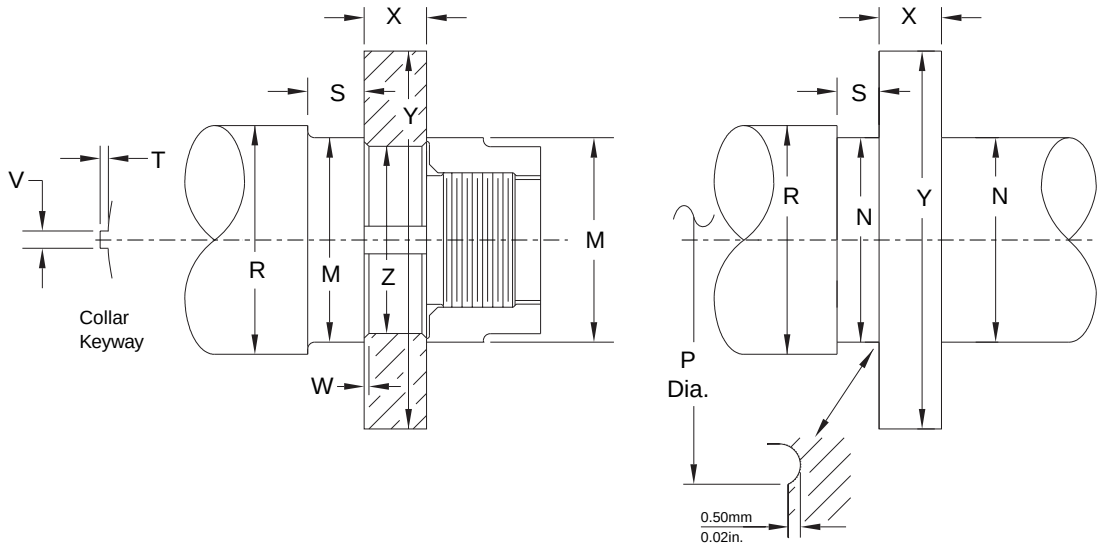
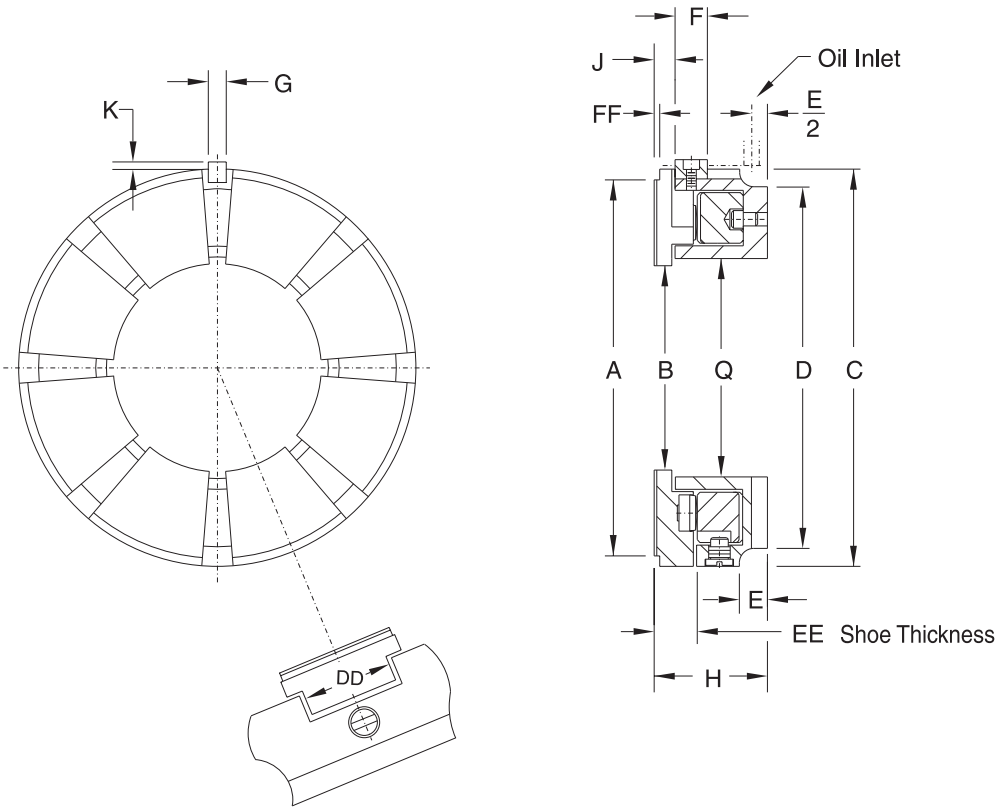


Style S Bearings—English Units (inches), Sizes 3" through 26.5"

Bearing Size	3	4	5	6.5	7.5	8	9.88	11.12	12.25
Number of Shoes	4	4	8	8	8	8	12	8	8
Area (in^2)	3.5	6	8.5	15.5	21	20	34	54	54
A – Babbitt O.D.	3.00	4.00	5.00	6.50	7.50	8.00	9.88	11.12	12.25
B – Babbitt I.D.	1.25	1.75	3.25	4.06	4.62	5.50	7.00	6.50	7.50
H – Bearing Height	1.25	1.62	1.56	1.56	2.00	1.94	1.88	2.75	2.31
C – Bearing O.D.	3.250	4.875	5.375	6.750	7.750	8.375	10.125	11.500	12.625
Q – Base ring I.D.	1.50	1.75	3.25	4.06	4.75	5.50	7.00	6.75	7.62
D – Oil annulus dia.	3.00	4.00	5.00	6.38	7.31	7.81	9.69	10.88	11.62
E – Oil annulus depth, min.	0.25	0.44	0.41	0.41	0.50	0.53	0.50	0.62	0.44
F – Bearing key, length	0.16	0.56	0.25	0.56	0.66	0.75	0.66	0.94	0.94
G – Bearing key, width	0.16	0.31	0.31	0.31	0.38	0.50	0.38	0.44	0.44
J – Collar to key	0.50	0.59	0.50	0.31	0.44	0.44	0.31	0.59	0.59
K – Key projection	0.16	0.16	0.12	0.16	0.19	0.19	0.19	0.19	0.19
M – Separate shaft dia.	1.12	1.44	3.00	3.88	4.38	5.25	6.62	6.12	7.12
N – Intergral shaft dia.	1.00	1.25	2.75	3.62	4.12	5.00	6.25	5.88	7.00
P – Max dia. over fillet	1.12	1.56	3.00	3.88	4.44	5.31	6.81	6.31	7.38
R – Dia. through base ring	1.25	1.44	3.00	3.88	4.38	5.25	6.62	6.12	7.25
S – Shaft lgth @ shoe I.D.	0.44	–	–	–	–	–	–	0.62	1.12
X – Collar thickness	0.62	0.88	0.88	1.00	1.12	1.38	1.50	1.75	2.00
Y – Collar dia.	3.12	4.62	5.12	6.62	7.62	8.12	10.00	11.25	12.38
Z – Collar bore	0.875	1.125	2.800	3.500	4.125	4.500	6.000	5.500	6.500
T – Collar key depth	0.06	0.16	0.16	0.19	0.19	0.31	0.19	0.31	0.38
V – Collar key width	0.12	0.31	0.31	0.38	0.38	0.62	0.38	0.62	0.75
W – Collar chamfer	0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.09	0.09
DD – Straddle mill	1.25	–	1.22	1.59	1.97	2.13	1.72	2.84	3.03
EE – Shoe thickness	0.438	0.562	0.498	0.562	0.781	0.687	0.781	1.125	1.125
FF – Shoe relief	0.12	0.28	0.12	0.19	0.12	–	0.13	0.19	0.31
Weight (Lbs) Bearing	1.6	5.5	5.0	8.0	13	16	25	45	48
Weight (Lbs) Collar	1.25	4.0	4.5	7.0	10.5	14	21	37	50
Weight (Lbs) Spare shoes	0.4	1.2	1.2	2.4	4.5	3	7	16	16

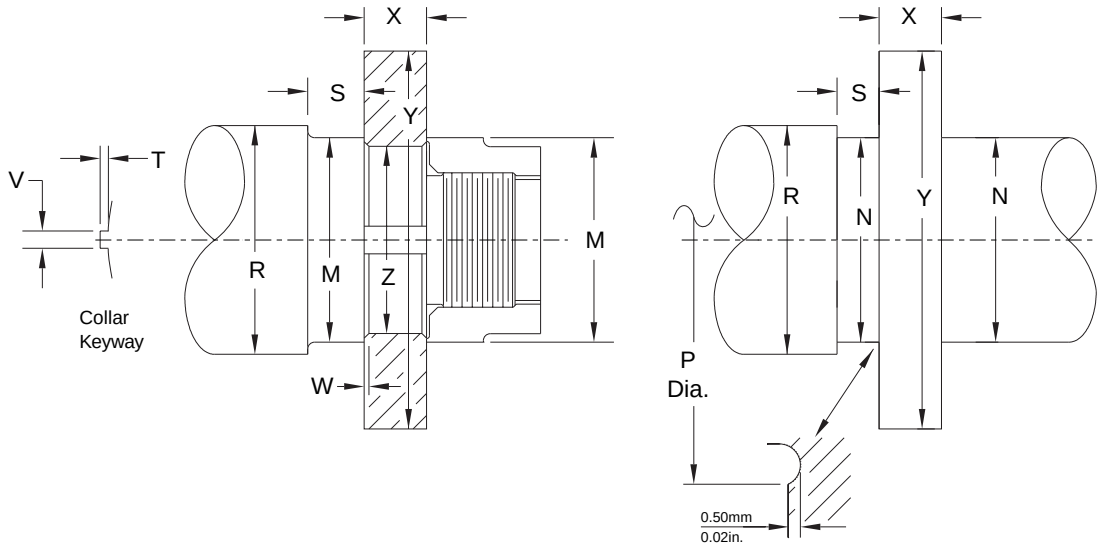


Bearing Size	13	15	18	22	22.5-A	22.5-B	25-A	25-B	26.00	26.5
Number of Shoes	8	10	8	10	8	8	8	8	8	8
Area (in^2)	73.5	70	91	92	152	230	265	172	160	273
A – Babbitt O.D.	13.00	15.00	18.00	22.00	22.50	22.50	25.00	25.00	26.00	26.50
B – Babbitt I.D.	7.75	10.50	12.25	16.25	14.00	13.00	15.00	17.00	18.00	17.00
H – Bearing Height	2.81	2.75	3.50	3.00	5.00	5.00	6.12	4.75	4.75	5.75
C – Bearing O.D.	13.500	15.500	18.750	22.500	23.125	23.125	26.500	26.000	26.750	27.000
Q – Base ring I.D.	8.12	10.62	12.75	16.75	14.00	14.00	15.62	16.25	18.00	17.00
D – Oil annulus dia.	12.88	14.88	17.88	21.62	22.12	22.12	24.75	25.19	25.31	25.19
E – Oil annulus depth, min.	0.75	0.69	0.88	0.75	1.25	1.25	1.19	1.75	1.69	2.38
F – Bearing key, length	0.94	0.94	1.19	1.19	1.62	1.62	2.50	1.38	1.38	2.12
G – Bearing key, width	0.44	0.44	0.56	0.56	0.75	0.75	1.12	1.00	1.00	1.12
J – Collar to key	0.66	1.12	0.75	0.66	1.12	1.12	2.50	1.00	1.00	1.12
K – Key projection	0.19	0.19	0.22	0.25	0.38	0.38	0.50	0.44	0.44	0.50
M – Separate shaft dia.	7.50	10.25	11.88	16.00	13.50	12.50	14.50	16.00	17.38	16.38
N – Intergral shaft dia.	7.12	9.75	11.50	15.50	13.00	12.00	14.00	16.00	17.00	16.00
P – Max dia. over fillet	7.56	10.25	12.00	16.00	13.62	12.62	14.62	16.62	17.62	16.62
R – Dia. through base ring	7.75	10.25	12.38	16.00	13.50	13.50	15.12	18.00	17.88	17.75
S – Shaft lgth @ shoe I.D.	1.25	1.12	1.44	1.25	1.94	1.94	2.12	3.50	2.75	2.00
X – Collar thickness	2.25	2.50	3.00	2.00	3.25	3.25	4.25	4.25	4.50	4.00
Y – Collar dia.	13.19	15.19	18.25	22.25	22.75	22.75	25.25	25.25	26.25	26.75
Z – Collar bore	6.750	9.000	10.500	14.750	12.250	11.250	13.000	15.250	15.875	14.750
T – Collar key depth	0.38	0.50	0.50	0.38	0.62	0.62	0.75	0.75	0.75	0.75
V – Collar key width	0.75	1.00	1.00	0.75	1.25	1.25	1.50	1.50	1.50	1.50
W – Collar chamfer	0.09	0.09	0.12	0.31	0.16	0.16	0.16	0.16	0.16	0.16
DD – Straddle mill	3.19	3.19	4.09	3.19	4.97	4.97	6.97	5.00	5.25	6.50
EE – Shoe thickness	1.250	1.125	1.438	1.250	1.938	1.938	2.125	1.750	1.781	2.000
FF – Shoe relief	0.16	0.28	0.31	0.28	0.56	0.56	0.38	0.38	0.38	0.25
Weight (Lbs) Bearing	57	65	115	112	286	321	492	310	298	395
Weight (Lbs) Collar	64	84	135	122	265	282	440	380	435	440
Weight (Lbs) Spare shoes	25	21	35	30	78	112	157	88	77	152



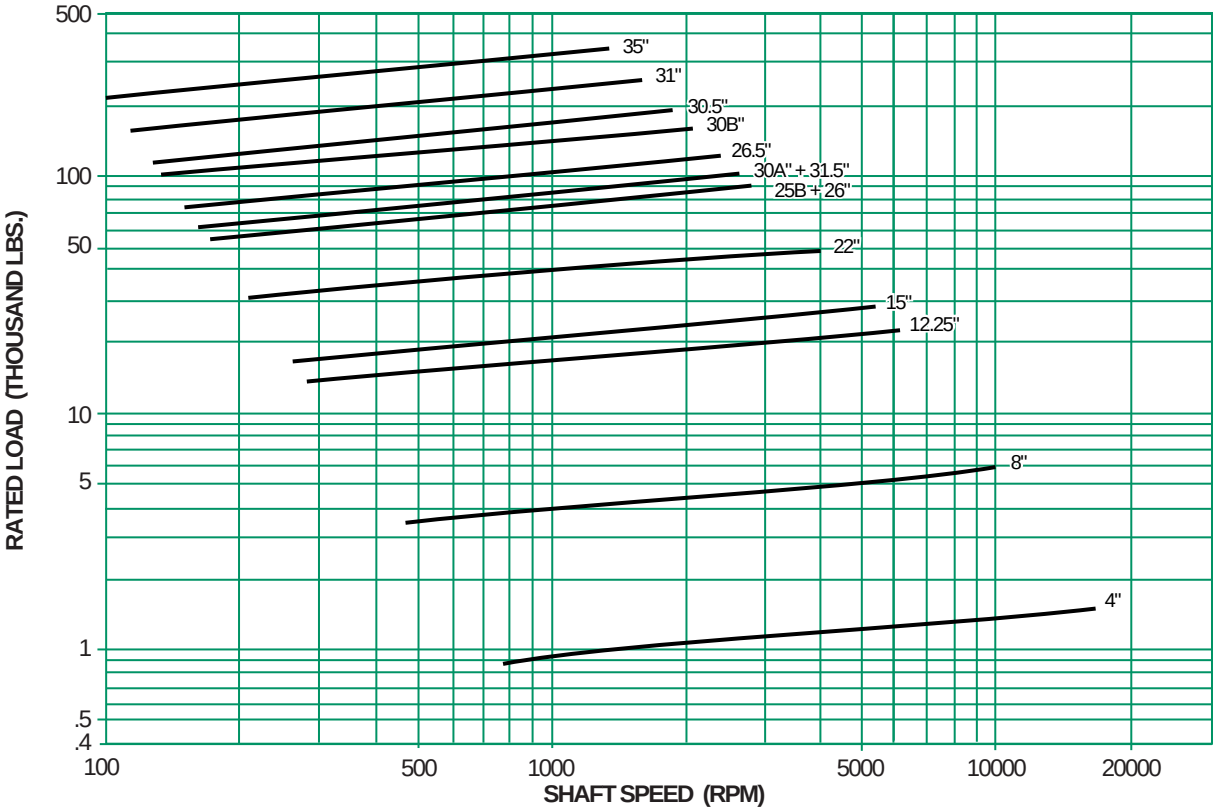
Style S Bearings—English units (inches), Sizes 27" – 72"

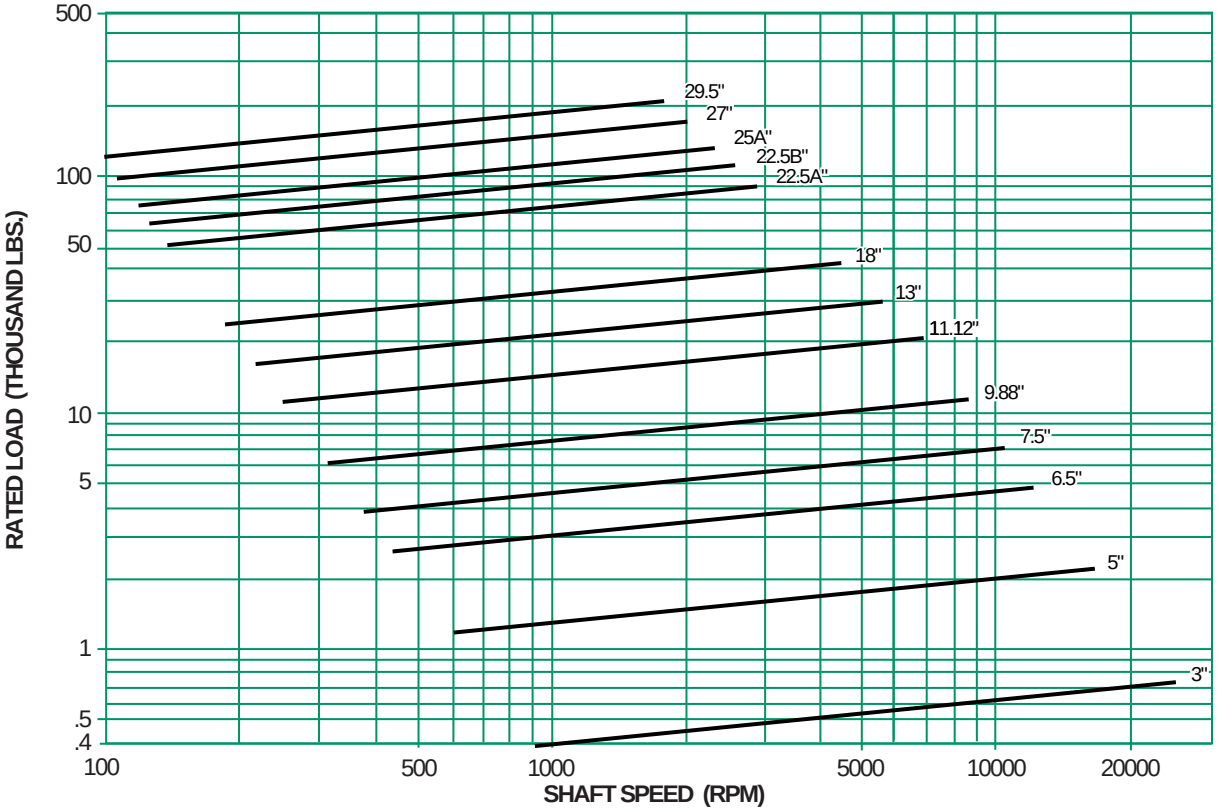
Bearing Size	27	29.5	30-A	30-B	30.5	31	31.5	35
Number of Shoes	8	8	18	8	8	8	20	8
Area (in^2)	332.5	396	222	274	401	470	207	603
A – Babbitt O.D.	27.00	29.50	30.00	30.00	30.50	31.00	31.50	35.00
B – Babbitt I.D.	15.50	17.00	24.00	19.00	18.50	16.50	26.00	18.50
H – Bearing Height	5.75	6.38	3.50	5.00	5.00	6.38	4.00	6.75
C – Bearing O.D.	27.750	30.250	30.000	30.750	30.750	31.750	32.000	35.750
Q – Base ring I.D.	15.50	17.00	24.25	19.50	19.50	17.00	26.00	19.31
D – Oil annulus dia.	26.12	28.75	28.85	28.75	28.75	28.75	31.00	32.88
E – Oil annulus depth, min.	1.94	2.44	1.06	2.25	1.62	2.44	1.50	2.00
F – Bearing key, length	2.25	1.88	1.19	1.62	1.62	1.88	1.19	2.25
G – Bearing key, width	1.25	1.25	0.56	1.00	1.00	1.25	0.56	1.25
J – Collar to key	1.25	1.38	0.75	1.12	1.12	1.38	0.88	1.62
K – Key projection	0.50	0.50	0.31	0.44	0.44	0.50	0.31	0.50
M – Separate shaft dia.	14.75	16.50	23.00	18.00	18.00	16.00	25.00	18.00
N – Intergral shaft dia.	14.12	16.00	22.38	17.38	16.88	14.88	25.00	17.00
P – Max dia. over fillet	15.00	16.62	23.38	18.38	17.88	15.88	25.62	18.00
R – Dia. through base ring	16.50	19.00	23.62	20.25	20.25	18.75	25.25	21.25
S – Shaft lgth @ shoe I.D.	3.25	3.88	1.38	3.00	3.00	3.88	1.50	4.12
X – Collar thickness	4.50	5.00	2.50	5.12	5.25	5.25	5.25	6.00
Y – Collar dia.	27.25	29.75	30.12	30.25	30.62	31.25	31.75	35.25
Z – Collar bore	13.500	14.750	21.000	16.500	16.250	14.250	23.000	15.750
T – Collar key depth	0.75	0.88	0.62	0.88	0.88	0.88	0.88	1.00
V – Collar key width	1.50	1.75	1.25	1.75	1.75	1.75	1.75	2.00
W – Collar chamfer	0.16	0.19	0.12	0.19	0.19	0.19	0.19	0.25
DD – Straddle mill	6.59	7.25	3.91	5.75	7.75	7.75	3.75	8.25
EE – Shoe thickness	2.125	2.625	1.375	2.000	2.000	2.656	1.500	3.00
FF – Shoe relief	0.38	0.50	–	0.50	0.44	0.50	0.19	0.50
Weight (Lbs) Bearing	552	685	248	430	478	720	240	1000
Weight (Lbs) Collar	560	740	260	730	780	900	570	1300
Weight (Lbs) Spare shoes	195	260	77	136	184	336	80	445



Bearing Size	39	41	43	45	46	50	54	61	65	72
Number of Shoes	8	8	8	8	8	8	8	8	8	8
Area (in^2)	794	935.5	811.5	1015	937.5	1174.5	1337	1895.5	2342	2480
A – Babbitt O.D.	39.00	41.00	43.00	45.00	46.00	50.00	54.00	61.00	65.00	72.00
B – Babbitt I.D.	18.00	18.00	25.00	23.50	26.50	27.00	30.00	30.00	28.00	38.00
H – Bearing Height	7.25	7.25	8.50	9.00	9.00	10.00	10.63	11.13	12.56	14.50
C – Bearing O.D.	41.250	42.500	44.000	46.000	47.000	50.750	54.750	61.750	65.750	73.000
Q – Base ring I.D.	20.25	20.25	26.00	27.63	26.75	30.00	31.50	33.75	31.00	40.00
D – Oil annulus dia.	36.75	36.75	41.75	44.00	44.00	48.25	51.75	56.75	61.75	69.00
E – Oil annulus depth, min.	1.69	1.69	2.00	3.88	3.75	3.25	4.25	4.00	4.44	5.00
F – Bearing key, length	3.25	3.25	2.75	1.75	1.75	3.00	2.00	2.00	5.00	5.00
G – Bearing key, width	1.75	1.75	1.75	1.75	1.75	2.00	2.00	2.00	2.75	2.75
J – Collar to key	1.88	1.88	2.06	3.00	3.00	3.25	3.25	3.75	3.13	3.88
K – Key projection	.63	.63	.63	1.25	1.25	.75	1.00	1.00	1.50	1.38
M – Separate shaft dia.	15.75	15.75	23.75	22.25	25.25	25.50	28.50	28.50	26.25	36.25
N – Intergral shaft dia.	14.88	14.88	22.75	21.25	24.00	24.50	27.50	27.50	25.25	35.25
P – Max dia. over fillet	17.13	17.13	24.13	23.50	25.50	26.00	29.00	29.00	27.00	37.00
R – Dia. through base ring	23.00	23.65	27.00	25.50	28.75	31.50	33.75	37.00	34.75	44.00
S – Shaft lgth @ shoe I.D.	4.50	4.50	5.00	5.50	5.00	6.00	6.63	7.00	7.50	8.75
X – Collar thickness	7.00	7.00	7.25	7.63	7.63	9.00	9.50	10.50	11.00	11.50
Y – Collar dia.	39.50	42.00	43.50	45.50	46.50	50.50	54.50	61.50	65.50	72.75
Z – Collar bore	14.000	14.000	22.000	20.750	23.250	23.500	26.500	26.500	24.250	34.250
T – Collar key depth	1.13	1.13	1.13	1.13	1.13	1.25	1.25	1.38	1.38	1.50
V – Collar key width	2.25	2.25	2.25	2.25	2.25	2.50	2.50	2.75	2.75	2.75
W – Collar chamfer	.38	.38	.38	.38	.38	.50	.50	.63	.63	.75
DD – Straddle mill	9.19	9.19	11.09	11.09	11.97	12.94	14.94	16.69	17.69	16.88
EE – Shoe thickness	3.929	3.312	3.625	3.625	3.750	4.250	4.500	5.000	5.500	6.125
FF – Shoe relief	1.11	.11	.24	.49	.24	.24	.37	.36	.49	.61
Weight (Lbs) Bearing	1650	1800	2075	2100	2300	2900	3700	5200	7500	9500
Weight (Lbs) Collar	2045	2165	2760	2780	2750	4000	4800	7200	9100	10500
Weight (Lbs) Spare shoes	666	720	700	830	820	1130	1380	2100	3000	3400

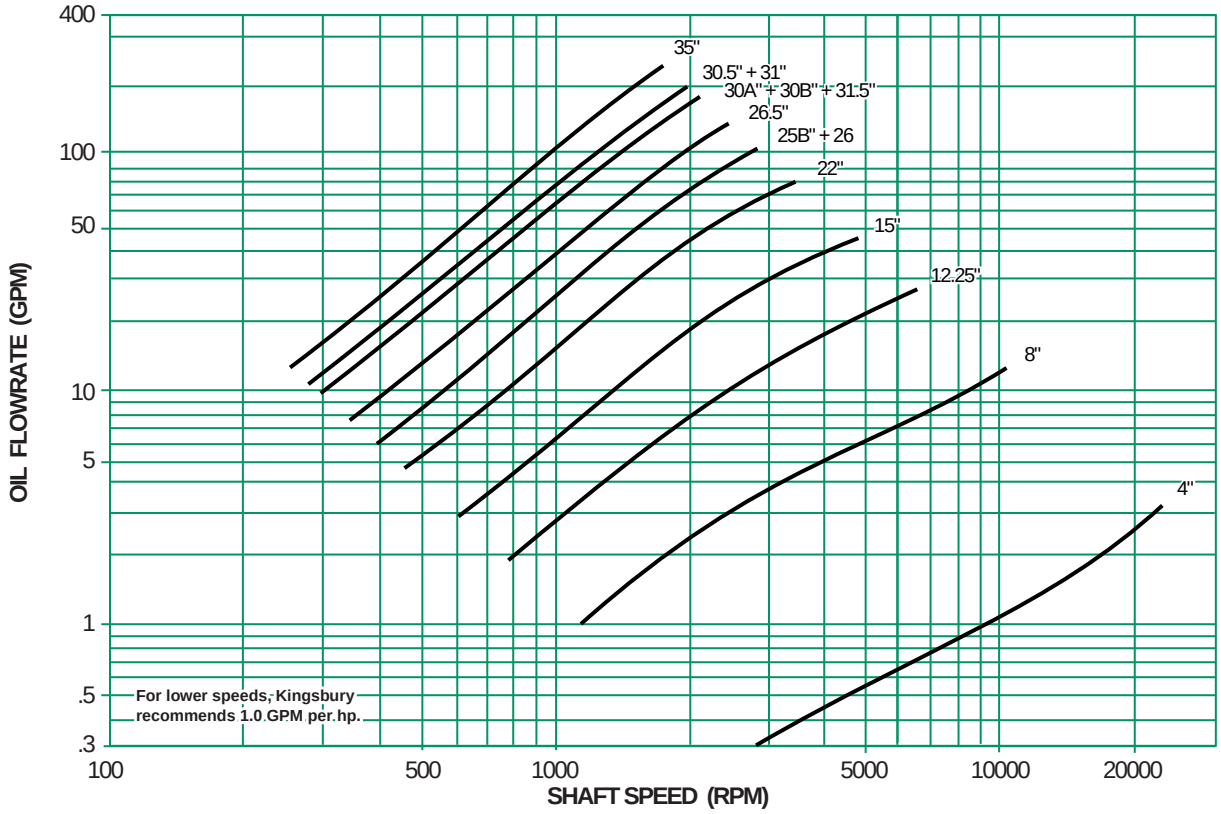
RATED LOAD FOR STYLE S THRUST BEARINGS (ENGLISH)

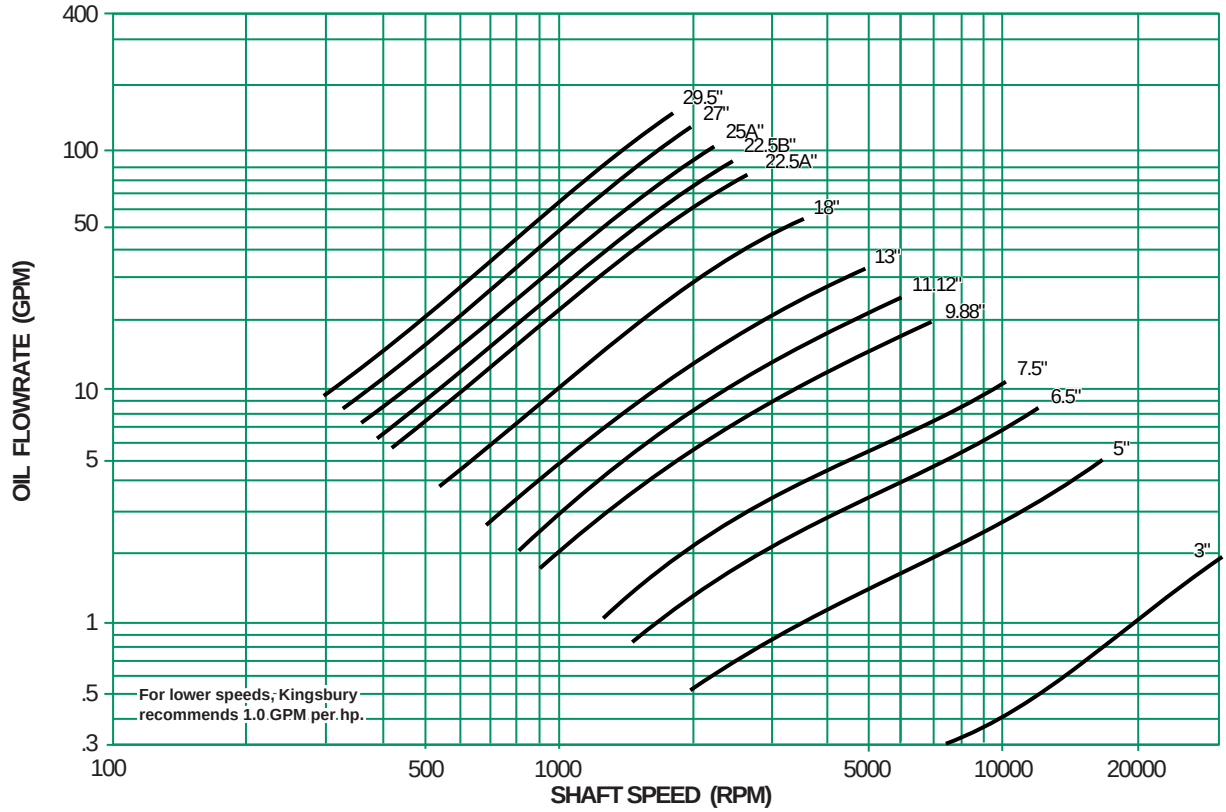




Based on ISO VG 32 supplied at 120˚F.

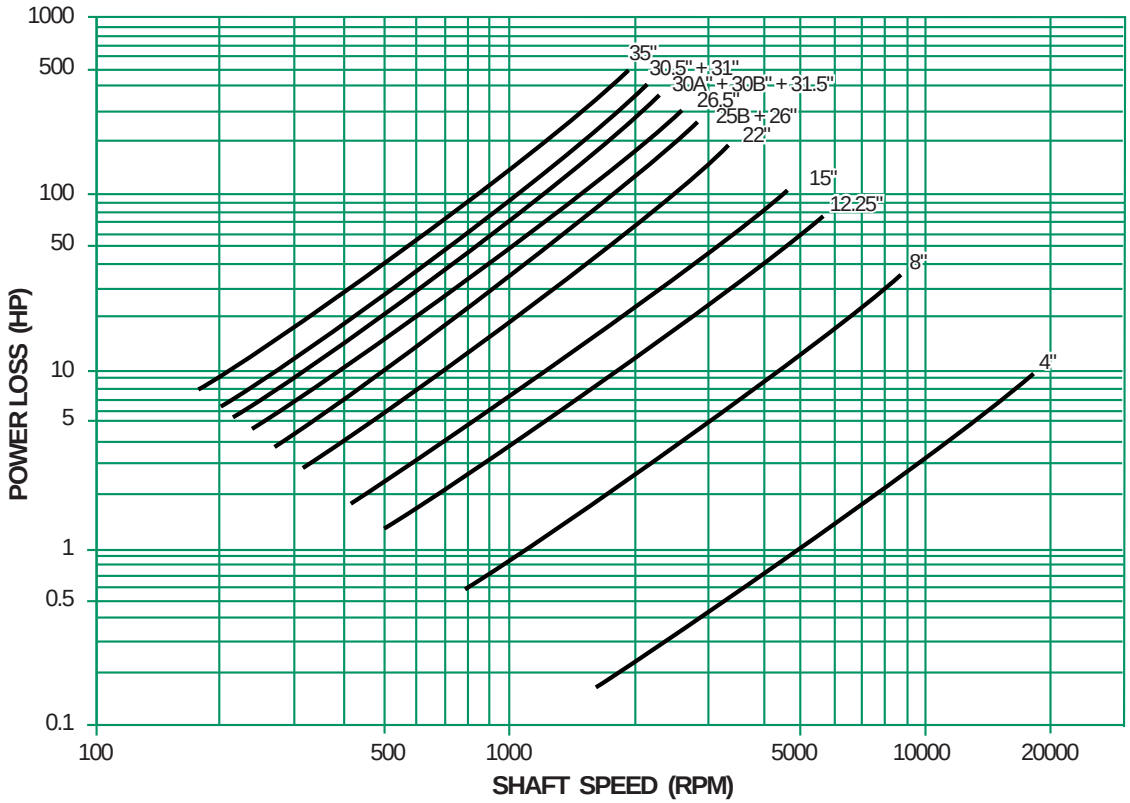
RECOMMENDED OIL SUPPLY FOR STYLE S THRUST BEARINGS (ENGLISH)

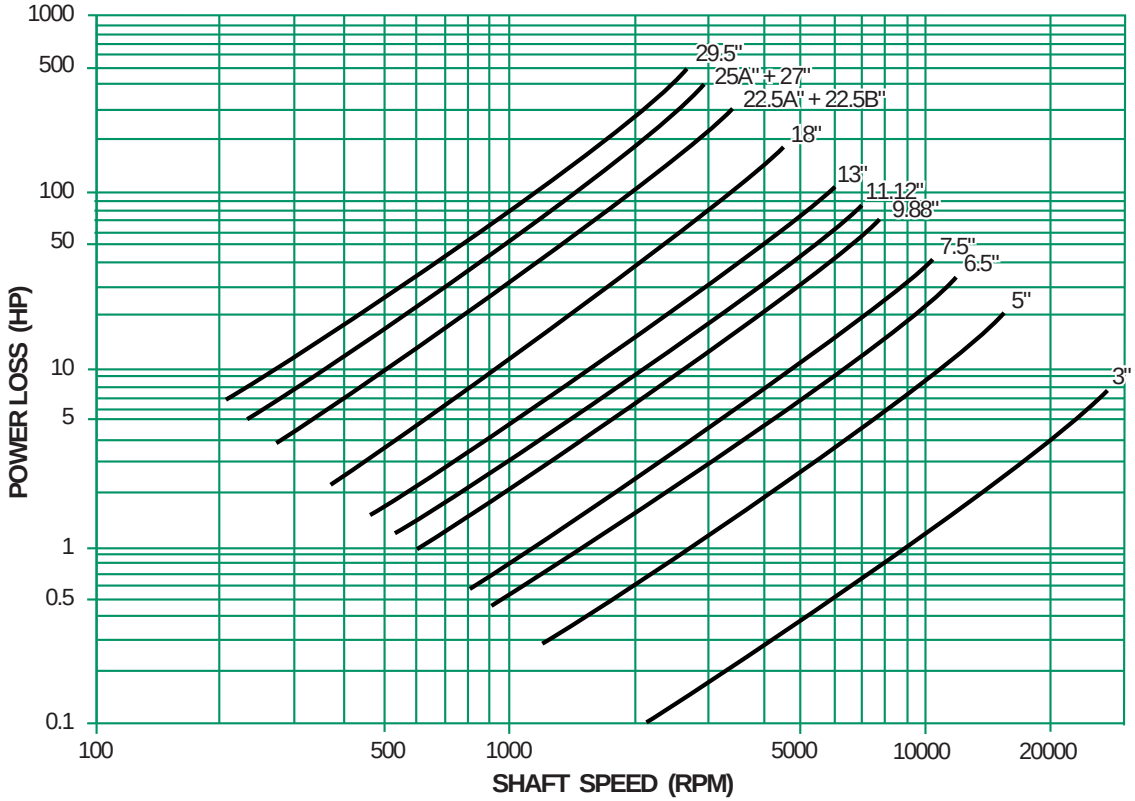




Based on 20% Slack Flow & ISO VG 32 supplied at 120˚F.
This chart gives loaded side, single element flowrates for rated load. For double element bearings, supply an additional 20% to the inactive side. In machines where load may reverse and apply rated values to either side, provide equal flow to each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

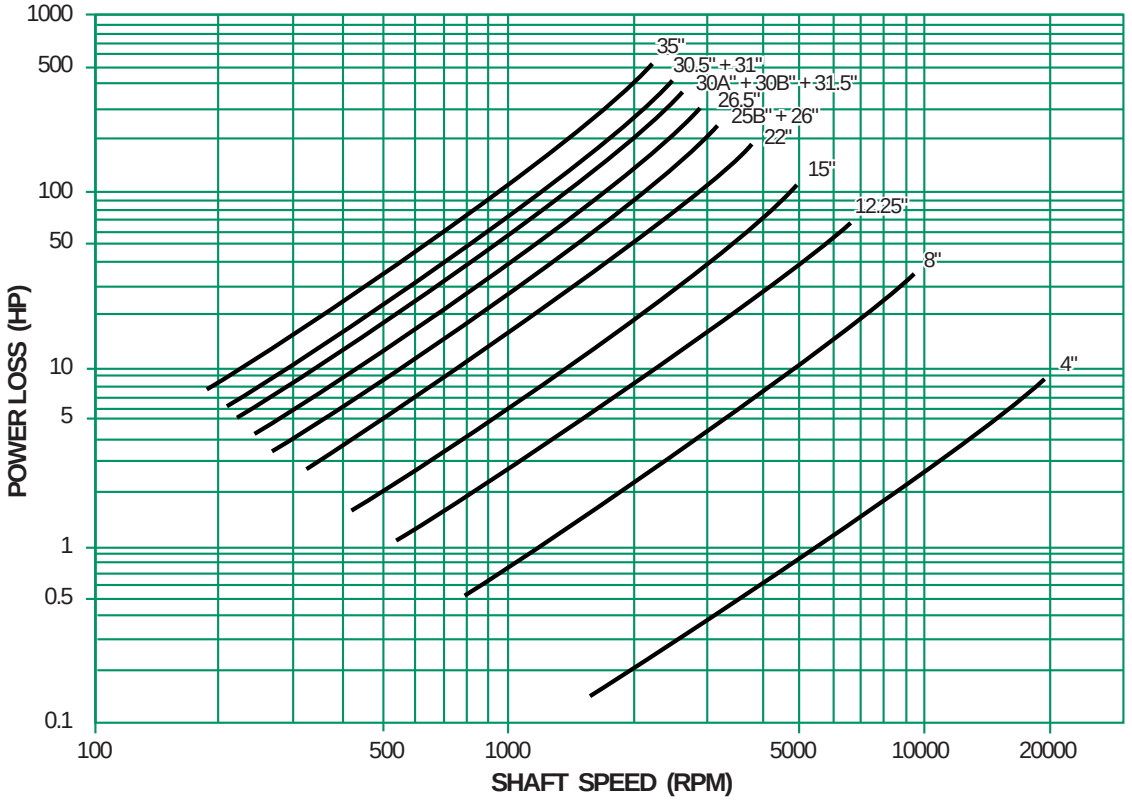
POWER LOSS FOR DOUBLE ELEMENT STYLE S THRUST BEARINGS (ENGLISH)

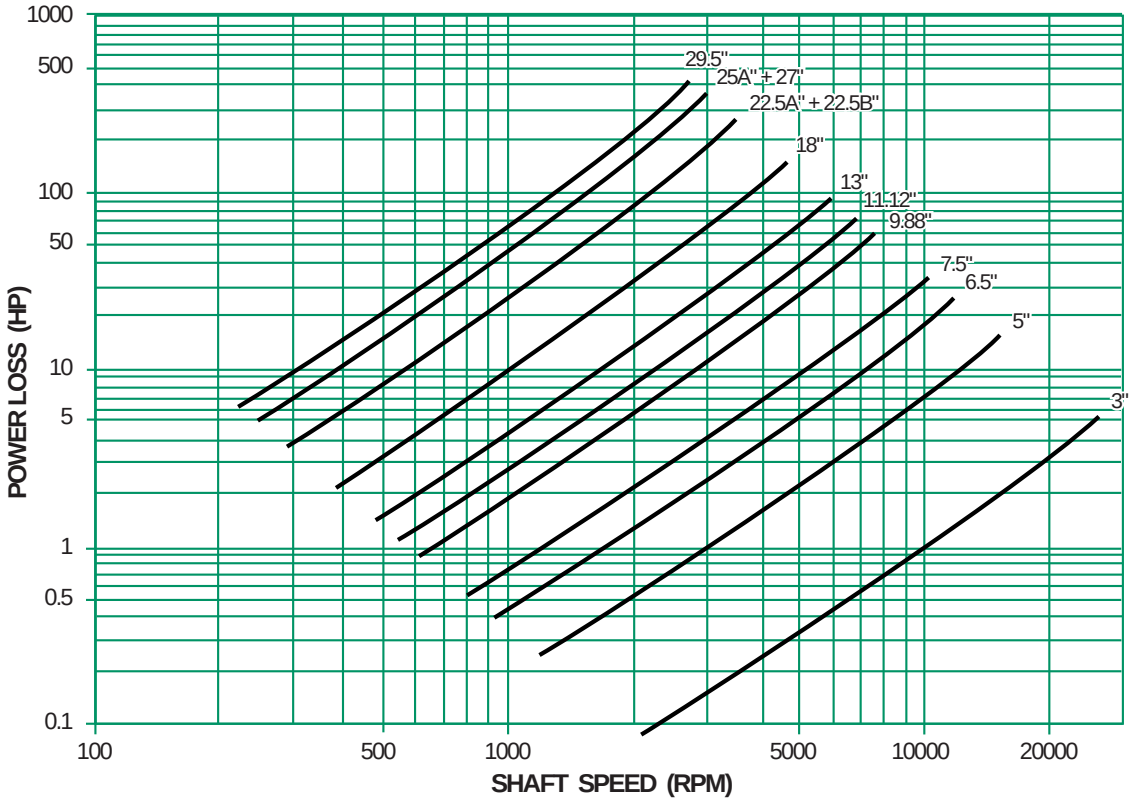




Based on 20% Slack Flow & ISO VG 32 supplied at 120˚F.
This chart gives loaded side, single element flowrates for rated load. For double element bearings, supply an additional 20% to the inactive side. In machines where load may reverse and apply rated values to either side, provide equal flow to each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

POWER LOSS FOR SINGLE ELEMENT STYLE S THRUST BEARINGS (ENGLISH)





Based on 20% Slack Flow & 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).