

# T-114 Auburn Open Self Contained Style T-114 Ball Thrust Bearing



The T-114 Series is recommended for use in enclosed protected locations, inside the machine housing or where it will operate in an oil bath.

The T-114 Series requires protection from dust, dirt, water and foreign matter. The balls are retained between two hardened steel races, which are banded together by a mild steel or brass sleeve on the inside diameter. When preloaded and installed to be held by the outside diameter B, the V grooved raceways enable this series to carry radial loads equal to 25% of its thrust load capacity. This decreases the amount of friction created by a full contact round groove design.

**Please note:** Part numbers with a grey background indicate items normally stocked in Macedon, NY.

## Heavy Type

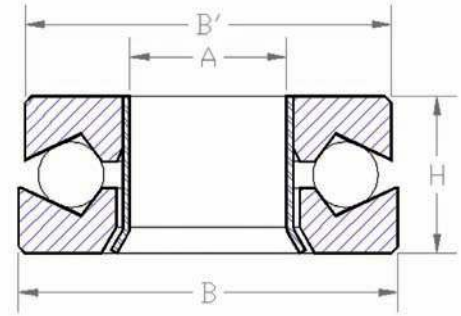
### DIMENSIONS IN INCHES

### THRUST LOAD CAPACITY IN LBS. AT VARIOUS SPEEDS

Bearing Number	A Bore	A Tolerance	B Outside Diameter	B Tolerance	B' Outside Diameter	B' Tolerance +.000	H Height (H Tolerance) + or - .005	Balls No. - Size	Bearing Weight in Lbs.	25 RPM	100 RPM	500 RPM	1500 RPM
1	$1^{11}/16$	+0.001 +0.003	$1-^{15}/16$	+0.003 -.003	$1-^{59}/64$	-.015	$7/8$	$11-^{3}/8$	.50	4405	2900	1785	1285
2	$1^{15}/16$	+0.001 +0.003	$2-^{7}/16$	+0.003 -.003	$2-^{13}/32$	-.015	1	$13-^{7}/16$	.88	6595	4345	2675	1925
3	$1-^{3}/16$	+0.001 +0.003	$2-^{11}/16$	+0.003 -.003	$2-^{21}/32$	-.015	$1-^{1}/8$	$12-^{1}/2$	1.03	7910	5210	3210	2305
4	$1-^{7}/16$	+0.001 +0.003	$2-^{15}/16$	+0.003 -.003	$2-^{29}/32$	-.015	$1-^{1}/8$	$14-^{1}/2$	1.34	8830	5815	3580	2575
5	$1-^{11}/16$	+0.001 +0.003	$3-^{3}/16$	+0.003 -.003	$3-^{5}/32$	-.015	$1-^{1}/8$	$16-^{1}/2$	1.44	9640	6350	3910	2810
6	$1-^{15}/16$	+0.001 +0.003	$3-^{3}/4$	+0.003 -.003	$3-^{23}/32$	-.015	$1-^{1}/4$	$17-^{9}/16$	2.22	12320	8115	5000	3590
7	$2-^{3}/16$	+0.001 +0.003	4	+0.003 -.003	$3-^{31}/32$	-.015	$1-^{1}/2$	$16-^{5}/8$	3.00	14285	9410	5795	4165
8	$2-^{7}/16$	+0.001 +0.003	$4-^{1}/2$	+0.003 -.003	$4-^{15}/32$	-.015	$1-^{5}/8$	$16-^{11}/16$	3.75	16875	11115	6845	4920
9	$2-^{11}/16$	+0.001 +0.003	$4-^{3}/4$	+0.003 -.003	$4-^{23}/32$	-.015	$1-^{3}/4$	$16-^{3}/4$	4.88	19615	12920	7960	---
10	$2-^{15}/16$	+0.001 +0.003	$5-^{1}/8$	+0.003 -.003	$5-^{1}/16$	-.015	$1-^{3}/4$	$17-^{3}/4$	5.50	20345	13400	8255	---
11	$3-^{3}/16$	+0.002 +0.004	$5-^{1}/2$	+0.003 -.003	$5-^{7}/16$	-.015	$1-^{3}/4$	$18-^{3}/4$	6.13	21005	13835	8525	---
12	$3-^{7}/16$	+0.002 +0.004	$5-^{3}/4$	+0.003 -.003	$5-^{11}/16$	-.015	$1-^{7}/8$	$18-^{13}/16$	7.00	24085	15865	9775	---
13	$3-^{11}/16$	+0.002 +0.004	$6-^{1}/8$	+0.003 -.003	$6-^{3}/32$	-.015	$1-^{7}/8$	$19-^{13}/16$	8.00	24815	16345	10070	---
14	$3-^{15}/16$	+0.002 +0.004	$6-^{1}/2$	+0.004 -.004	$6-^{13}/32$	-.031	2	$19-^{7}/8$	9.75	28140	18535	11420	---
15	$4-^{3}/16$	+0.003 +0.007	$6-^{7}/8$	+0.004 -.004	$6-^{25}/32$	-.031	$2-^{1}/4$	17-1	11.75	33050	21770	13410	---
16	$4-^{7}/16$	+0.003 +0.007	$7-^{1}/4$	+0.004 -.004	$7-^{5}/32$	-.031	$2-^{3}/8$	19-1	13.38	35170	23165	14270	---
17	$4-^{11}/16$	+0.003 +0.007	$7-^{1}/2$	+0.004 -.004	$7-^{13}/32$	-.031	$2-^{3}/8$	19-1	14.00	35170	23165	14270	---
18	$4-^{15}/16$	+0.003 +0.007	$8-^{1}/8$	+0.004 -.004	$8-^{1}/32$	-.031	$2-^{5}/8$	$18-1^{1}/8$	18.00	41395	27265	16795	---
19	$5-^{3}/16$	+0.003 +0.007	$8-^{1}/2$	+0.004 -.004	$8-^{13}/32$	-.031	$2-^{3}/4$	$19-1^{1}/8$	21.00	42640	28085	17300	---
20	$5-^{7}/16$	+0.003 +0.007	$8-^{7}/8$	+0.005 -.005	$8-^{3}/4$	-.031	3	$18-1^{1}/4$	25.00	48970	32255	19870	---
21	$5-^{11}/16$	+0.003 +0.007	$9-^{1}/4$	+0.005 -.005	$9-^{1}/8$	-.031	3	$19-1^{1}/4$	27.00	50420	33210	20460	---
22	$5-^{15}/16$	+0.003 +0.007	$9-^{3}/4$	+0.005 -.005	$9-^{5}/8$	-.031	$3-^{1}/4$	$16-1^{1}/2$	32.00	60655	39950	24610	---
23	$6-^{3}/16$	+0.010 +0.015	$10-^{1}/8$	+0.005 -.005	10	-.031	$3-^{3}/8$	$17-1^{1}/2$	36.00	63000	41495	25560	---
24	$6-^{7}/16$	+0.010 +0.015	$10-^{5}/8$	+0.005 -.005	$10-^{1}/2$	-.031	$3-^{3}/4$	$18-1^{1}/2$	44.00	65085	42870	26410	---

## T-114 Mounting Instructions

The T-114 Series is usually installed to be centered by the rotating shaft through bore A. The race with the inside sleeve attached to it should rotate with the shaft. The race which is loose from the inside sleeve, with outside diameter B, will seat against a fixed part of the machine and be stationary. If installed in a recess, a clearance of one eighth inch, or more, should be left around outside diameters B and B'. If the shaft should wear in its journal bearings, the thrust bearing will be free to follow without cramping or wedging the balls.



Medium Type		DIMENSIONS IN INCHES								THRUST LOAD CAPACITY IN LBS. AT VARIOUS SPEEDS			
Bearing Number	A Bore	A Tolerance	B Outside Diameter	B Tolerance	B' Outside Diameter	B' Tolerance +.000	H Height (H Tolerance) + or -.005	Balls No. - Size	Bearing Weight in Lbs.	25 RPM	100 RPM	500 RPM	1500 RPM
25	7/16	+.001 +.003	1-1/8	+.001 -.001	1-7/64	-.015	5/8	12-7/32	.09	1730	1140	700	505
26	5/8	+.001 +.003	1-7/16	+.002 -.002	1-27/64	-.015	11/16	14-1/4	.17	2480	1635	1005	725
27	3/4	+.001 +.003	1-1/2	+.002 -.002	1-31/64	-.015	11/16	17-7/32	.22	2185	1440	890	635
28	3/4	+.001 +.003	1-3/4	+.002 -.002	1-47/64	-.015	11/16	13-5/16	.31	3570	2350	1450	1040
29	13/16	+.001 +.003	1-15/16	+.003 -.003	1-59/64	-.015	13/16	14-5/16	.47	3760	2475	1525	1095
30	11/16	+.001 +.003	1-15/16	+.003 -.003	1-59/64	-.015	13/16	14-5/16	.50	3760	2475	1525	1095
31	15/16	+.001 +.003	2-1/8	+.003 -.003	2-3/32	-.015	3/4	15-5/16	.55	3940	2595	1600	1150
32	1-1/8	+.001 +.003	2-11/32	+.003 -.003	2-5/16	-.015	15/16	15-3/8	.67	5505	3625	2235	1605
33	1-3/16	+.001 +.003	2-11/32	+.003 -.003	2-5/16	-.015	15/16	15-3/8	.66	5505	3625	2235	1605
34	1-5/16	+.001 +.003	2-7/16	+.003 -.003	2-13/32	-.015	15/16	16-3/8	.67	5730	3775	2325	1670
35	1-7/16	+.001 +.003	2-11/16	+.003 -.003	2-21/32	-.015	7/8	17-3/8	.81	5945	3915	2410	1735
36	1-11/16	+.001 +.003	2-11/16	+.003 -.003	2-21/32	-.015	13/16	23-5/16	.63	4910	3235	1995	1430
37	1-13/16	+.001 +.003	2-15/16	+.003 -.003	2-29/32	-.015	15/16	20-3/8	.89	6485	4270	2630	1890
38	1-1/2	+.001 +.003	2-15/16	+.003 -.003	2-29/32	-.015	1-3/16	14-1/2	1.50	8830	5815	3500	2575
39	1-11/16	+.001 +.003	3-1/8	+.003 -.003	3-3/32	-.015	1-1/8	15-1/2	1.28	9255	6095	3755	2825
40	1-15/16	+.001 +.003	3-3/16	+.003 -.003	3-5/32	-.015	1-3/16	19-7/16	1.34	8365	5510	3395	2440
41	2-1/16	+.001 +.003	3-1/4	+.003 -.003	3-7/32	-.015	1	19-7/16	1.13	8365	5510	3395	2440
42	2-3/16	+.001 +.003	3-1/4	+.003 -.003	3-7/32	-.015	1-1/8	23-3/8	2.09	6870	4525	2785	2005
43	2-3/16	+.001 +.003	3-3/4	+.003 -.003	3-23/32	-.015	1-1/4	19-1/2	2.13	10635	7005	4315	3100
44	2-5/16	+.001 +.003	3-15/16	+.003 -.003	3-29/32	-.015	1-1/4	20-1/2	2.31	10900	7180	4425	3175
45	2-7/16	+.001 +.003	3-15/16	+.003 -.003	3-29/32	-.015	1-1/4	20-1/2	2.06	10900	7180	4425	3175
46	2-11/16	+.001 +.003	4-1/2	+.003 -.003	4-15/32	-.015	1-1/2	18-5/8	3.25	15325	10095	6220	4470
47	2-15/16	+.001 +.003	4-1/2	+.003 -.003	4-15/32	-.015	1-1/2	20-19/32	3.00	14780	9740	6000	4310
48	2-13/16	+.001 +.003	4-1/2	+.003 -.003	4-15/32	-.015	1-1/2	18-5/8	3.13	15325	10095	6220	---
49	3-7/16	+.002 +.004	5-3/8	+.003 -.003	5-5/16	-.015	1-1/2	22-5/8	4.25	16860	11105	6840	---
50	3-15/16	+.002 +.004	5-7/8	+.003 -.003	5-13/16	-.015	1-1/2	25-5/8	5.00	17575	11575	7130	---
51	4-7/16	+.003 +.007	6-1/4	+.003 -.003	6-3/16	-.015	1-1/2	27-5/8	5.25	17830	11745	7235	---
52	4-15/16	+.003 +.007	7	+.004 -.004	6-29/32	.031	1-1/2	30-5/8	6.63	17900	11790	7265	---
53	5-7/16	+.003 +.007	7-1/2	+.004 -.004	7-13/32	.031	1 3/4	27-3/4	8.75	24495	16135	9940	---
54	5-15/16	+.003 +.007	8	+.004 -.004	7-29/32	.031	1 3/4	29-3/4	10.00	24600	16205	9985	---