



AURORA

The Motion-Transfer Specialists

ROD END & SPHERICAL BEARING CATALOG & RESOURCE GUIDE

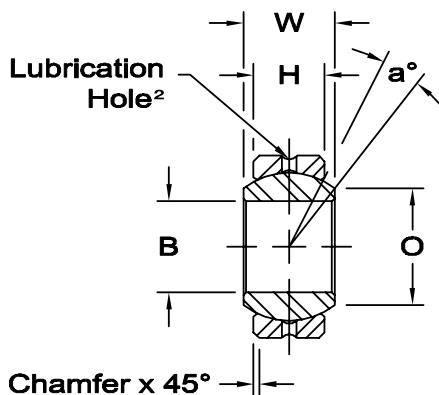
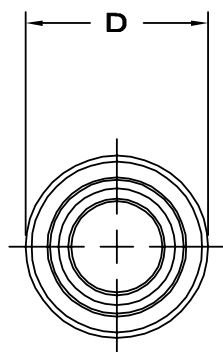
Effective August 21st, 2023, the Naval Air Warfare Center Aircraft Division (NAWCAD) has disapproved Timken Aurora's qualification status for SAE-AS81820 and SAE-AS81935 specifications. Timken Aurora is working diligently to get requalified.

COMMERCIAL | MILITARY | AIRCRAFT



COM & HCOM SERIES SPHERICAL BEARINGS

(PTFE Liners Available)¹



Race - Low carbon steel, I.D. protective coated for corrosion resistance.

Ball - Alloy steel, heat treated, hard chrome plated.

* Bore tolerance on these items is as follows -
INCH: +.0025, -.0005; METRIC: +.064, -.013

1 PTFE Liners use suffix T Ex: COM-10T

2 PTFE Lined parts have no lubrication groove in race.
Hole manufactures option.

BEARING NO.	DIMENSIONS IN INCHES							a° Misalign. Angle	Radial Static Limit Load Capacity Lbs.	Approx. Brg. Wt. Lbs.
	B +.0015 -.0005	D +.0000 -.0007	H ±.005	W ±.005	O Flat Dia Ref.	M Chamfer Ref.	Ball Dia Ref.			
COM-3	.1900	.5625	.218	.281	.293	.015	.406	11	3,250	.01
COM-4	.2500	.6562	.250	.343	.364	.022	.500	13.5	4,950	.02
COM-5	.3125	.7500	.281	.375	.419	.032	.562	12	6,475	.03
COM-6	.3750	.8125	.312	.406	.516	.032	.656	10	8,400	.04
COM-7	.4375	.9062	.343	.437	.530	.032	.687	8	9,453	.05
COM-8	.5000	1.0000	.390	.500	.640	.032	.813	9.5	13,250	.07
COM-9	.5625	1.0937	.437	.562	.710	.032	.906	9.5	16,630	.09
COM-10	.6250	1.1875	.500	.625	.780	.032	1.000	8.5	21,280	.11
COM-12	.7500	1.4375	.593	.750	.920	.044	1.187	9	31,920	.20
COM-14	.8750	1.5625	.703	.875	.980	.044	1.312	9.5	41,960	.26
*COM-16	1.0000	1.7500	.797	1.000	1.118	.044	1.500	10	55,200	.39
*HCOM-16	1.0000	2.0000	.781	1.000	1.360	.032	1.687	9	70,820	.55
*HCOM-19	1.1875	2.3750	.937	1.187	1.610	.032	2.000	8.5	100,730	.90
*HCOM-20	1.2500	2.3750	.937	1.187	1.610	.032	2.000	8.5	100,730	.90
*HCOM-24	1.5000	2.7500	1.094	1.375	1.860	.032	2.312	8.5	135,950	1.36
*HCOM-28	1.7500	3.1250	1.250	1.562	2.110	.044	2.625	8	176,370	1.95
*HCOM-32	2.0000	3.5000	1.375	1.750	2.360	.044	2.937	8.5	217,060	2.65

BEARING NO.	DIMENSIONS IN MILLIMETERS							a° Misalign. Angle	Radial Static Limit Load Capacity Newtons	Approx. Brg. Wt. Grams
	B +.038 -.013	D +.000 -.018	H ±.13	W ±.13	O Flat Dia Ref.	M Chamfer Ref.	Ball Dia Ref.			
COM-3	4.826	14.29	5.54	7.14	7.44	.38	10.31	11	14,464	6
COM-4	6.350	16.67	6.35	8.71	9.25	.56	12.70	13.5	22,015	10
COM-5	7.938	19.05	7.14	9.53	10.64	.81	14.27	12	28,800	14
COM-6	9.525	20.64	7.92	10.31	13.11	.81	16.66	10	37,361	17
COM-7	11.113	23.02	8.71	11.10	13.46	.81	17.45	8	42,048	21
COM-8	12.700	25.40	9.91	12.70	16.26	.81	20.65	9.5	58,934	29
COM-9	14.288	27.78	11.10	14.27	18.03	.81	23.01	9.5	73,967	39
COM-10	15.875	30.16	12.70	15.88	19.81	.81	25.40	8.5	94,658	50
COM-12	19.050	36.51	15.06	19.05	23.37	1.12	30.15	9	141,982	93
COM-14	22.225	39.69	17.86	22.23	24.89	1.12	33.32	9.5	186,639	119
*COM-16	25.400	44.45	20.24	25.40	28.40	1.12	38.10	10	245,534	175
*HCOM-16	25.400	50.80	19.84	25.40	34.54	.81	42.85	9	315,010	251
*HCOM-19	30.163	60.33	23.80	30.15	40.89	.81	50.80	8.5	448,049	406
*HCOM-20	31.750	60.33	23.80	30.15	40.89	.81	50.80	8.5	448,049	406
*HCOM-24	38.100	69.85	27.79	34.93	47.24	.81	58.72	8.5	604,710	616
*HCOM-28	44.450	79.38	31.75	39.67	53.59	1.12	66.68	8	784,495	884
*HCOM-32	50.800	88.90	34.93	44.45	59.94	1.12	74.60	8.5	965,485	1,198

For suggested housing bores, see page 110