

**AURORA BEARING features**

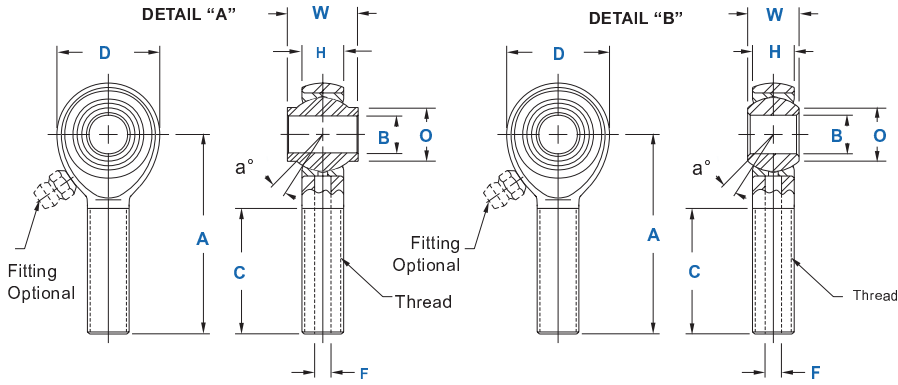
All steel components providing optimum wear and impact resistance.  
Precision ground balls and races - necessary for precise bearing fits.  
Unique assembly techniques utilizing precision components to insure precise fits.  
Maintenance free self-lubricating PTFE liners available on all series.  
AURORA BEARING COMPANY Quality Systems are approved by the FAA,  
most major Aerospace companies and is in accordance with ISO 9002.

**Not listed in this brochure but available:**

A complete line of Military approved  
Rod Ends (AS81935/1 & AS81935/2)  
Spherical Bearings (AS14101 thru AS14104) &  
Teflon Lined Bushings (AS81934)



# GM Series



Specifications	
<b>Body</b>	Carbon Steel protective coated for corrosion resistance.
<b>Ball</b>	Alloy steel, Heat treated, Hard Chrome Plated (QQ-C-320, Class 2).
<b>Race</b>	Carbon Steel, Protective Coated for Corrosion Resistance.

**Units are traceable and magnetic particle inspected after assembly.**

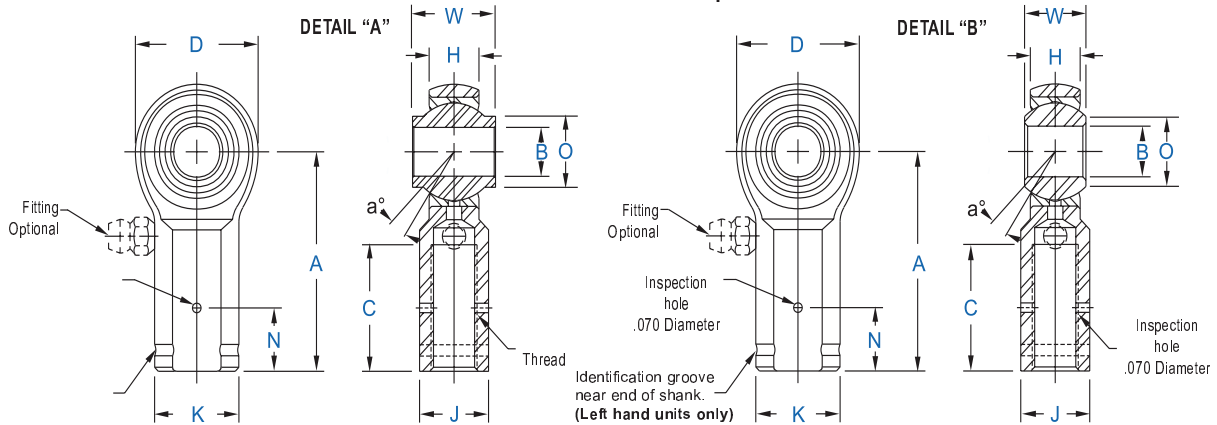
Load ratings apply only to rod ends without grease fittings. For load ratings with fittings, please contact our engineering department.

Rod End No.		DIMENSIONS IN INCHES											a°	Ultimate	Approx.
AURORA Part No.	Heim Part No.	Ball Shoulder Configuration	B +.0015 -.0005	W +.000 -.005	H ±.005	A ±.015	D ±.010	O Shoulder Dia. Ref.	Ball Dia. Ref.	C Min.	F Drilled Hole Dia Ref.	Thread UNF-3A	Misalign. Angle	Radial Static Load Capacity	Brg. Wt. Lbs.
GMM-3M-470	M34-14M	See Detail "A"	.1900	.437	.281	1.562	.750	.315	.500	.969	-	1/4-28	17	2,158	.05
GMM-3M-570	MD35-14M	See Detail "A"	.1900	.437	.328	1.375	.875	.315	.500	.750	.113	5/16-24	10	2,823	.07
GMM-3M-670	MD36-14M	See Detail "A"	.1900	.437	.328	1.375	.750	.315	.500	.750	.113	3/8-24	10	2,850	.08
GMM-3M-680	MD36-16M	See Detail "B"	.1900	.500	.375	1.812	.833	.319	.593	1.062	.136	3/8-24	18	3,269	.09
GMM-4M-470	M44-14M	See Detail "B"	.2500	.437	.304	1.562	.812	.353	.562	.969	-	1/4-28	18	2,158	.07
GMM-4M-675	MD46-15M	See Detail "B"	.2500	.484	.335	2.312	.875	.395	.625	1.500	.136	3/8-24	18	3,160	.11
GMM-4M-680	MD46-16M	See Detail "B"	.2500	.500	.335	2.062	.875	.375	.625	1.500	.159	3/8-24	21	2,985	.10

Units are supplied without grease fittings. When grease fittings are required, specify by adding suffixes as designated.

Z Zerk type fitting Ex: GMM-3MZ-470 F Flush type fitting Ex: GMM-3MF-470

For left hand thread use the letter "B" in the prefix Ex: GMB-3M-470



Rod End No.		DIMENSIONS IN INCHES												a°	Ultimate	Approx.	
AURORA Part No.	Hiem Part No.	Ball Shoulder Configuration	B +.0015 -.0005	W +.000 -.005	H ±.005	A ±.015	D ±.010	K ±.010	J ±.010	N ±.005	O Shoulder Dia. Ref.	Ball Dia. Ref.	C +.062 -.031	Thread UNF-3B	Misalign. Angle	Radial Static Load Capacity	Brg. Wt. Lbs.
GMW-3M-470	F34-14M	See Detail "A"	.1900	.437	.328	1.375	.750	.468	.375	.312	.315	.500	.750	1/4-28	10	2,881	.06
GMW-3M-471	F347-14M	See Detail "A"	.1900	.437	.328	1.062	.750	.375	-	-	.315	.500	.437	1/4-28	10	2,881	.05
GMW-3M-480	F34-16M	See Detail "A"	.1900	.500	.375	1.375	.812	.468	.375	.312	.312	.562	.750	1/4-28	15	3,152	.08
GMW-3M-570	F35-14M	See Detail "A"	.1900	.437	.328	1.375	.750	.500	.437	.312	.315	.500	.750	5/16-24	10	2,881	.07
GMW-4M-470	F44-14M	See Detail "B"	.2500	.437	.304	1.375	.812	.468	.437	.312	.353	.562	.750	1/4-28	18	2,950	.08
GMW-4M-595	F45-19M	See Detail "A"	.2500	.593	.406	1.469	.938	.500	-	.312	.485	.687	.844	5/16-24	10	3,359	.10

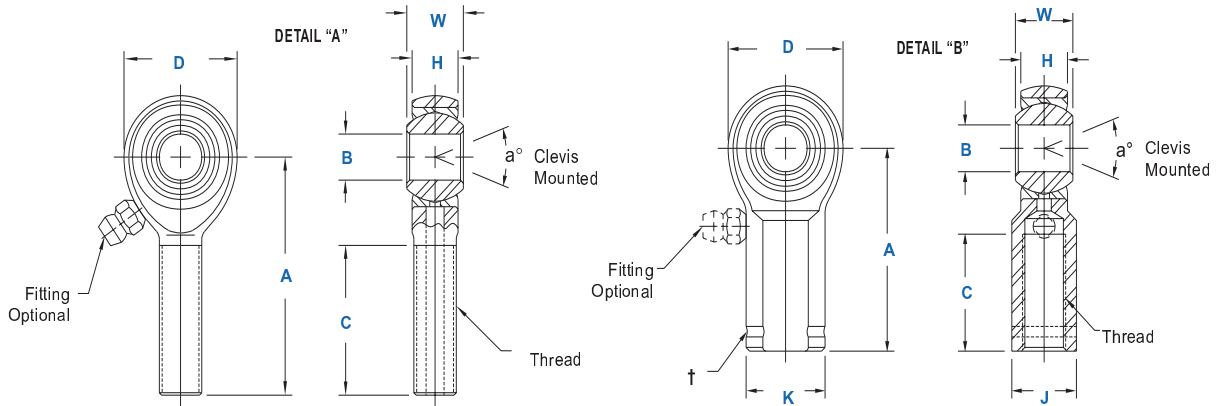
Units are supplied without grease fittings. When grease fittings are required, specify by adding suffixes as designated.

Z Zerk type fitting Ex: GMW-3MZ-470 F Flush type fitting Ex: GMW-3MF-470

For left hand thread use the letter "G" in the prefix Ex: GMG-3M-470

# M Series

(Material specs above, as per GM series)



† Left hand units identification groove near end of shank

See Detail "A"

Rod End No.		DIMENSIONS IN INCHES								a° Misalign. Angle Min.	Ultimate Static Radial Load Lbs.	Approx. Brg. Wt. Lbs.
Aurora Part No.	Heim Part No.	B +.0015 -.0005	W +.000 .005	H ±.005	A ±.015	D ±.010	Ball Dia. Ref.	C +.062 -.031	Thread UNF-3A			
MM-2M-500 *	HM2M	.1250	.250	.187	.937	.500	.312	.562	6-32 <sup>1</sup>	16	502	.013
MM-3M-500	HM3M	.1900	.312	.250	1.250	.625	.437	.750	10-32	13	1,169	.028
MM-4M-500	HM4M	.2500	.375	.281	1.562	.750	.500	1.000	1/4-28	16	2,158	.043
MM-5M-500	HM5M	.3125	.437	.344	1.875	.875	.625	1.250	5/16-24	14	2,784	.072
MM-6M-500	HM6M	.3750	.500	.406	1.938	1.000	.719	1.250	3/8-24	12	3,915	.112
MM-7M-500	HM7M	.4375	.562	.437	2.125	1.125	.812	1.375	7/16-20	14	4,218	.160
MM-8M-500	HM8M	.5000	.625	.500	2.438	1.312	.937	1.500	1/2-20	12	6,660	.249
MM-10M-500	HM10M	.6250	.750	.562	2.625	1.500	1.125	1.625	5/8-18	16	7,364	.382
MM-12M-500	HM12M	.7500	.875	.687	2.875	1.750	1.312	1.750	3/4-16	14	11,518	.602

For Rod End bearings which are non-traceable and/or non-magnetic particle inspected ,(STOCKED) consult factory.

For left hand thread use the letter "B" in the prefix Ex: MB-6M-500

Units are supplied without grease fittings. When grease fittings are required, specify by adding suffixes as designated.

Z Zerk type fitting Ex: MM-6MZ-500      F Flush type fitting Ex: MM-6MF-500      T Teflon lining Ex: MM-6TM-500

\* Grease fittings not available

Y Solid shank Ex: MM-6YM-500

1 Threads 6-32 UNC.

See Detail "B"

Rod End No.		DIMENSIONS IN INCHES										a° Misalign. Angle	Ult. Static Radial Load Lbs.	Approx. Brg. Wt. Lbs.
AURORA Part No.	Heim Part No.	B +.0015 -.0005	W +.000 .005	H ±.005	A ±.015	D ±.010	K ±.010	J ±.010	Ball Dia. Ref.	C +.062 -.031	Thread UNF-2B			
MW-2M-500 *	HF2M	.1250	.250	.187	.812	.500	.312	.250	.312	.437	6-32 <sup>1</sup>	16	1,202	.019
MW-3M-500	HF3M	.1900	.312	.250	1.062	.625	.406	.312	.437	.562	10-32	13	1,531	.038
MW-4M-500	HF4M	.2500	.375	.281	1.312	.750	.469	.375	.500	.750	1/4-28	16	2,539	.059
MW-5M-500	HF5M	.3125	.437	.344	1.375	.875	.500	.437	.625	.750	5/16-24	14	3,133	.092
MW-6M-500	HF6M	.3750	.500	.406	1.625	1.000	.687	.562	.719	.937	3/8-24	12	3,915	.152
MW-7M-500	HF7M	.4375	.562	.437	1.812	1.125	.750	.625	.812	1.062	7/16-20	14	4,218	.198
MW-8M-500	HF8M	.5000	.625	.500	2.125	1.312	.875	.750	.937	1.187	1/2-20	12	6,660	.329
MW-10M-500	HF10M	.6250	.750	.562	2.500	1.500	1.000	.875	1.125	1.500	5/8-18	16	7,364	.477
MW-12M-500	HF12M	.7500	.875	.687	2.875	1.750	1.125	1.000	1.312	1.750	3/4-16	14	11,518	.723

For Rod End bearings which are non-traceable and/or non-magnetic particle inspected ,(STOCKED) consult factory.

For left hand thread use the letter "G" in the prefix Ex: MG-6M-500

Units are supplied without grease fittings. When grease fittings are required, specify by adding suffixes as designated.

Z Zerk type fitting Ex: MW-6MZ-500      F Flush type fitting Ex: MW-6MF-500      T Teflon lining Ex: MW-6TM-500

\* Grease fittings not available

1 Threads 6-32 UNC.

## PTFE LINERS

**AT1400** is supplied as the standard liner in all except the military specification bearings. It is designed primarily to satisfy the demands of the commercial/industrial market as well as most high performance applications. This liner can be used in temperatures ranging from -65° to +250° F.

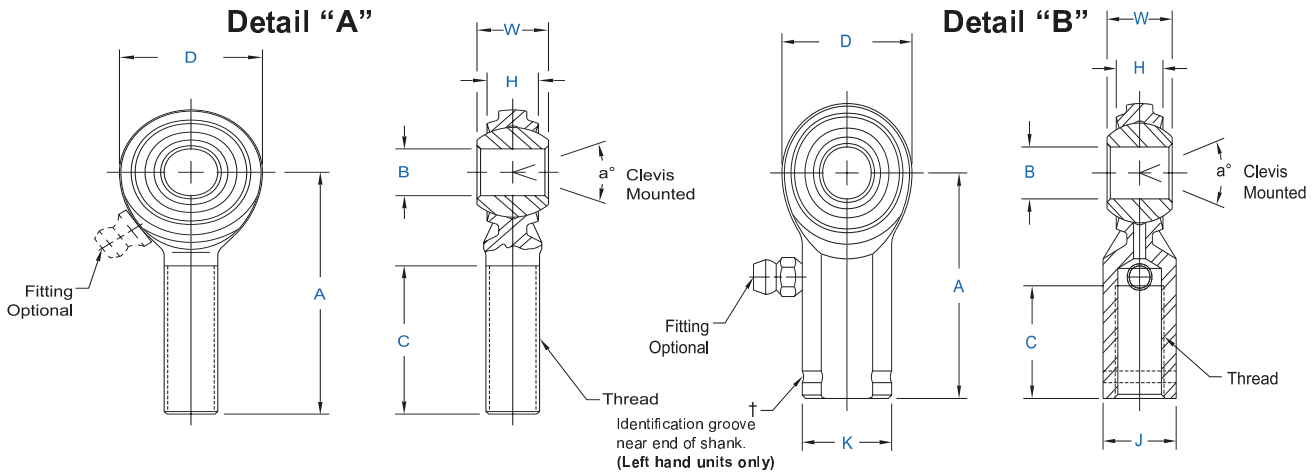
**AT3200** is an ultra-high performance liner fully qualified to SAE-AS81820(formerly MIL-B-81820), developed for military and aircraft/aero-space applications. This liner offers higher load carrying capacity as well as greatly increased dynamic wear characteristics and can be used in temperatures ranging from -65° to +325° F. This liner is now standard on all military specification bearings manufactured by Aurora Bearing, as well as certain high performance commercial bearings as used in the automotive racing industry. It can also be specified on other lined products manufactured by Aurora Bearing where demanding applications require its superior performance characteristics.

## C - Series

Specifications	
<b>Body</b>	Carbon steel protective coated for corrosion resistance.
<b>Ball</b>	Alloy steel, heat treated, hard chrome plated.

The C-Series parts are manufactured without traceability. The C-series is a stocked commercial rod end. Magnetic Particle Inspection is available on this series.

\* Grease fittings not available



See Detail "A"

Rod End No.		DIMENSIONS IN INCHES								a° Misalign. Angle Min.	Ultimate Static Radial Load Lbs.	Approx. Brg. Wt. Lbs.
Aurora Part No.	Heim Part No.	B +.0025 -.0005	W ± .005	H Ref.	A ± .015	D ± .010	Ball Dia. Ref.	C +.062 -.031	Thread UNF-3A			
CM-3*	M3CR	.1900	.312	.234	1.250	.625	.437	.750	10-32	20	1,204	.03
CM-4*	M4CR	.2500	.375	.250	1.562	.750	.500	1.000	1/4-28	27	2,212	.04
CM-5*	M5CR	.3125	.437	.312	1.875	.875	.625	1.250	5/16-24	22	3,577	.07
CM-6	M6CR	.3750	.500	.359	1.938	1.000	.719	1.250	3/8-24	22	5,068	.11
CM-7	M7CR	.4375	.562	.406	2.125	1.125	.812	1.375	7/16-20	21	6,345	.15
CM-8	M8CR	.5000	.625	.453	2.438	1.312	.937	1.500	1/2-20	20	8,338	.24
CM-10	M10CR	.6250	.750	.484	2.625	1.500	1.125	1.625	5/8-18	26	9,713	.36
CM-12	M12CR	.7500	.875	.593	2.875	1.750	1.312	1.750	3/4-16	24	14,207	.57

For left hand thread use the letter "B" in the prefix Ex: CB-6

Units are supplied without grease fittings. When grease fittings are required, specify by adding suffixes as designated.

**Z** Zerk type fitting Ex: CM-6Z      **F** Flush type fitting Ex: CM-6F

Magnetic Particle Inspection Ex: CM-6M

See Detail "B"

Rod End No.		DIMENSIONS IN INCHES										a° Misalign. Angle Min.	Ult. Static Radial Load Lbs.	Approx. Brg. Wt. Lbs.
AURORA Part No.	Heim Part No.	B +.0025 -.0005	W ± .005	H Ref.	A ± .015	D Ref.	K ± .010	J ± .010	Ball Dia. Ref.	C +.062 -.031	Thread UNF-2B			
CW-3*	F3CR	.1900	.312	.234	1.062	.625	.406	.312	.437	.500	10-32	20	2,079	.04
CW-4	F4CR	.2500	.375	.250	1.312	.750	.469	.375	.500	.687	1/4-28	27	3,208	.05
CW-5	F5CR	.3125	.437	.312	1.375	.875	.500	.437	.625	.687	5/16-24	22	3,824	.08
CW-6	F6CR	.3750	.500	.359	1.625	1.000	.687	.562	.719	.812	3/8-24	22	5,087	.13
CW-7	F7CR	.4375	.562	.406	1.812	1.125	.750	.625	.812	.937	7/16-20	21	6,385	.18
CW-8	F8CR	.5000	.625	.453	2.125	1.312	.875	.750	.937	1.062	1/2-20	20	9,096	.29
CW-10	F10CR	.6250	.750	.484	2.500	1.500	1.000	.875	1.125	1.375	5/8-18	26	9,713	.43
CW-12	F12CR	.7500	.875	.593	2.875	1.750	1.125	1.000	1.312	1.562	3/4-16	24	14,207	.65

For left hand thread use the letter "G" in the prefix Ex: CG-6

Units are supplied without grease fittings. When grease fittings are required, specify by adding suffixes as designated.

**Z** Zerk type fitting Ex: CW-6Z      **F** Flush type fitting Ex: CW-6F

Magnetic Particle Inspection Ex: CW-6M

For more Information about the AURORA BEARING COMPANY check out our web site at

[www.aurorabearing.com](http://www.aurorabearing.com)

contact us direct by phone at (630) 859-2030 or fax an inquiry to (630) 859-0971