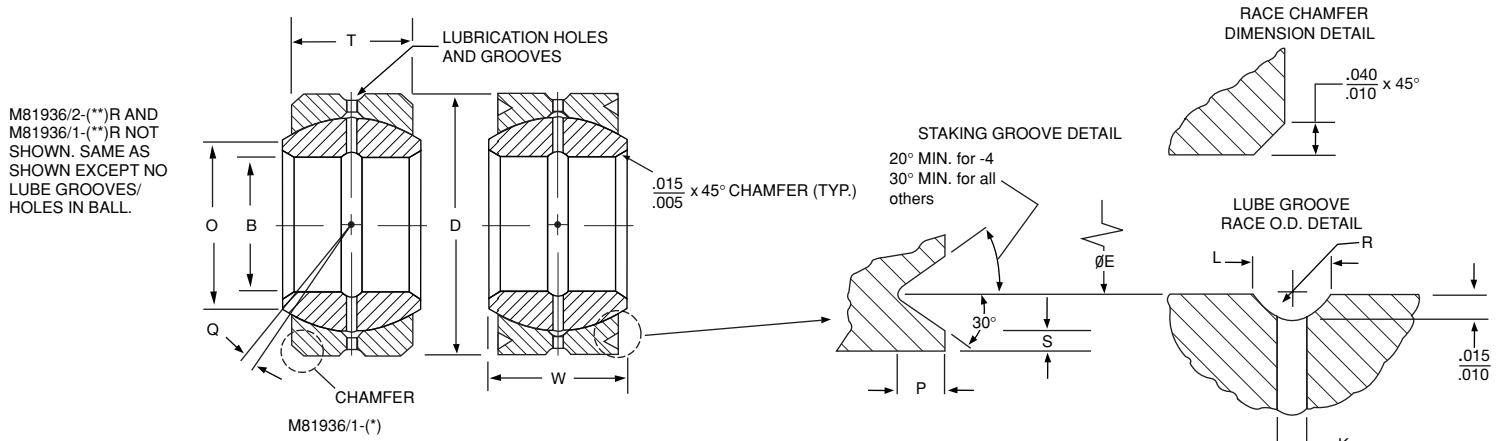


# SPHERICAL BEARINGS – Metal-to-Metal

## AS81936 Beryllium Copper Ball



M81936/2-(\*\*)R AND M81936/1-(\*\*)R NOT SHOWN. SAME AS SHOWN EXCEPT NO LUBE GROOVES/ HOLES IN BALL.

Part Number V-Grooved*	Part Number V-Grooved*	(B) Bore Diameter	(D) Outside Diameter	(W) Ball Width	(T) Race Width	(O) Shoulder Diameter	(Ø) Ball Diameter	(K) Lube Hole Diameter	(L) Groove Width ID & OD of Race & ID of Ball	(R) Groove Radius ID & OD of Race & ID of Ball
		Inch +.0000 -.0005	Inch +.0000 -.0005	Inch +.000 -.002	Inch +.000 -.005	Inch Min.	Inch Ref.	Inch	Inch	Inch
<b>M81936/1-(**)R</b>	<b>M81936/1-(**)</b>									
AGB4V	AGB4VA	.2500	.6562	.343	.250	.357	.501	.032-.062	.042-.078	.030-.062
AGB5V	AGB5VA	.3125	.7500	.375	.281	.413	.563	.042-.062	.042-.078	.030-.062
AGB6V	AGB6VA	.3750	.8125	.406	.312	.509	.657	.042-.062	.042-.078	.030-.062
AGB7V	AGB7VA	.4375	.9062	.437	.343	.563	.719	.052-.062	.065-.094	.060-.094
AGB8V	AGB8VA	.5000	1.0000	.500	.390	.634	.814	.052-.062	.065-.094	.060-.094
AGB9V	AGB9VA	.5625	1.0937	.562	.437	.664	.876	.052-.062	.065-.094	.060-.094
AGB10V	AGB10VA	.6250	1.1875	.625	.500	.732	.969	.062-.078	.073-.109	.070-.125
AGB12V	AGB12VA	.7500	1.4375	.750	.593	.913	1.188	.062-.078	.073-.109	.070-.125
AGB13V	AGB13VA	.8125	1.5625	.812	.650	.984	1.282	.062-.078	.073-.109	.070-.125
AGB14V	AGB14VA	.8750	1.6562	.875	.703	1.054	1.376	.062-.078	.073-.109	.070-.125
AGB16V	AGB16VA	1.0000	1.8750	1.000	.797	1.193	1.563	.078-.093	.082-.109	.090-.125
AGB18V	AGB18VA	1.1250	2.1250	1.125	.900	1.334	1.751	.078-.093	.082-.109	.090-.125
AGB20V	AGB20VA	1.2500	2.3125	1.250	1.000	1.473	1.938	.078-.093	.082-.109	.090-.125
AGB22V	AGB22VA	1.3750	2.5625	1.375	1.100	1.654	2.157	.078-.093	.082-.109	.090-.125
AGB24V	AGB24VA	1.5000	2.8125	1.500	1.200	1.794	2.345	.078-.093	.082-.109	.090-.125

\* For chamfered version, delete 'V' from part number.

\*\* Add bore codes in multiples of 1/16.

### Notes:

- Radial Clearance: Free turning to 0.001.
- Axial Clearance: Free turning to 0.005.
- Concentricity: Outside diameter (D) and pitch diameter (E) to bore diameter (B) within .005 FIM.
- Bearings prepacked with MIL-PRF-81322.
- Temperature: Operating temperature range -65° to 350°F.
- Groove dimensions on ID of race and grease holes through race are before bearing assembly, but swaging shall not restrict grease flow.

### Materials

Ball	Race
BeCu, ASTM B196†	CRES 17-4PH, AMS 5643
Condition TH04††	Cond. H-1150
Rc37 min.	(Rc28-36)

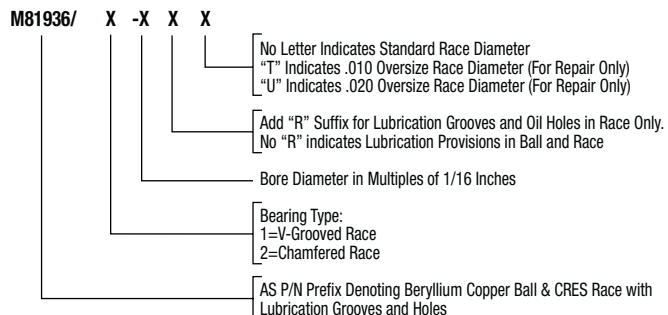
†Formerly QQ-C-530 ††Formerly HT

### Lubrication

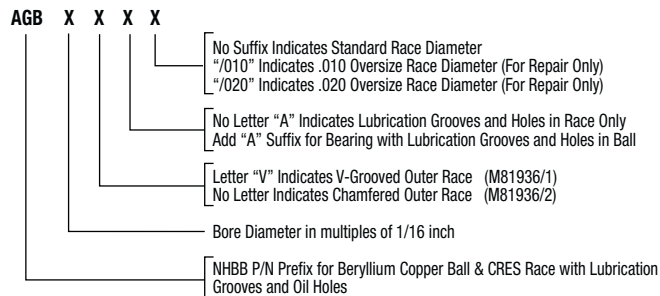
AGB & AGB-V	Lubrication grooves in race and 3 equally spaced holes through race only.
AGB-A & AGB-VA	Lubrication grooves in race and bore of ball and 3 equally spaced holes through race and ball.



### Aerospace Standard P/N



### NHBB P/N



(E) Pitch Diameter	(S)	(P)	Limit Static Radial Load	Limit Static Axial Load	Weight
Staking Groove Data					
Inch	Inch	Inch	lbs.	lbs.	lbs.
+.000	+.000	+.000			Ref.
-.010	-.010	-.015			
.596	.020	.030	6330	1930	.02
.652	.030	.040	8460	2450	.03
.714	.030	.040	11400	3090	.04
.808	.030	.040	14800	3740	.05
.878	.030	.060	20400	4860	.07
.972	.030	.060	26700	6100	.09
1.065	.030	.060	33100	8080	.11
1.315	.030	.060	50000	11440	.21
1.440	.030	.060	59000	13800	.24
1.534	.030	.060	70300	16160	.27
1.753	.030	.060	77700	20850	.39
2.003	.030	.060	121500	26740	.72
2.190	.030	.060	152000	33065	.93
2.440	.030	.060	186000	40120	1.28
2.690	.030	.060	224000	47820	1.67