

(P-nj. No. 3120-0560)

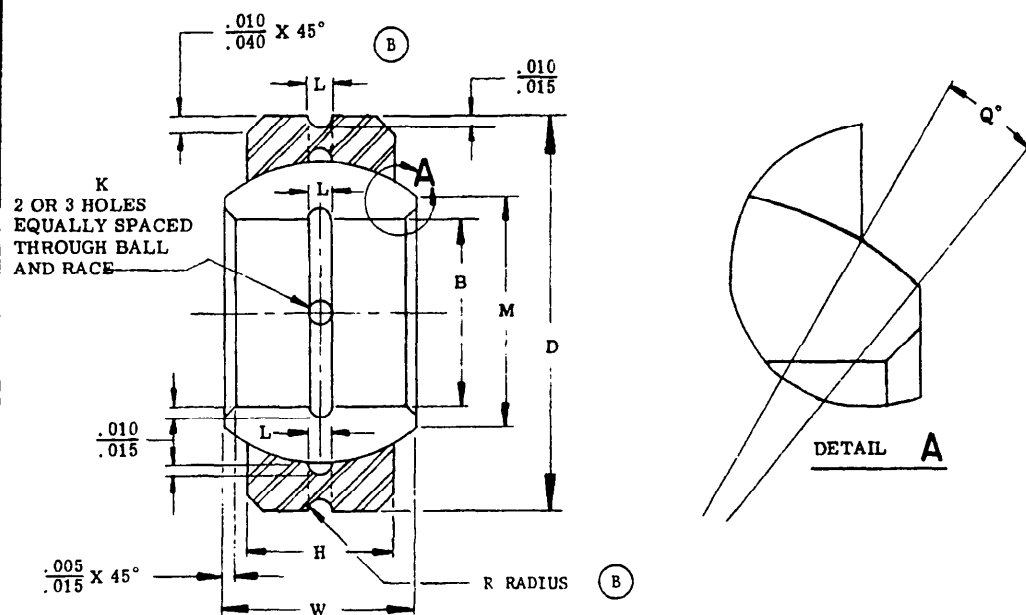
FED. SUP CLASS
3120

USER SYMBOLS:

REVIEWER SYMBOLS:

Review/user information is current as of the date of this document.
For future coordination of changes to this document, draft circulation
should be based on the information in the current 0001SS.*

This military standard is approved for use by all Departments
& Agencies of the Department of Defense. Selection for all new
engineering and design applications and for repetitive use shall
be made from this document.



NOTES:

- (B) 1. MATERIAL: BALL - 52100, 440C AMS 5630.
RACE - CODES: "S" ALLOY STEEL, MIL-S-5000, MIL-S-6758 OR MIL-S-6050
"B" ALUMINUM BRONZE (AMPCO 15) OR ALUMINUM BRONZE PER QQ-C-465 -
EXCEPT THAT CHEMICAL COMPOSITION SHALL BE:

ELEMENT	Cu	Al	Fe	Ni	Si	Mn	Sn	Zn	SUM OF NAMED ELEMENTS MIN
PERCENT	80.0 to 93.0	6.5 to 11.0	4.0 1/	1.0 1,2/	2.2 1,2/	1.5 1/	.60 1/	1.0 1/	99.5

1/ MAXIMUM

2/ WHEN BOTH SILICON AND NICKEL ARE PRESENT ONLY ONE SHALL BE IN EXCESS OF 0.25 PERCENT.

2. FINISH: BALL - CHROME PLATE CLASS 2, .0002 MINIMUM ON SPHERICAL SURFACES, .0005 ON FACES.
RACE - CADMIUM PLATE PER QQ-P-416, TYPE 1, CLASS 2.
3. HARDNESS: BALL - Rc 56 MIN.
RACE - Rc 27-36 ALLOY STEEL.
4. LUBRICATION: PREPACKED WITH MIL-G-21164.
5. SURFACE TEXTURE: SPHERICAL SURFACE OF BALL 8 PRR; BORE, BALL FACE AND OUTER FACE O.D. 32 PRR.
ALL OTHER SURFACES 125 PRR. IN ACCORDANCE WITH ANSI B46.1.
6. TEMPERATURE RANGE: -65°F TO +250°F.
7. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS $\pm .010$, ANGLES $\pm 1/2^\circ$.
8. BREAK ALL SHARP EDGES AND CORNERS AND REMOVE ALL BURRS AND SLIVERS.

EXAMPLE OF PART NUMBER:

MS21155

X

XX

BORE CODE IN MULTIPLES OF 1/16 INCHES.

RACE MATERIAL CODE

BASIC PART NO.

- (B) 9. INTERNAL CLEARANCE: RADIAL - 0.0005 TO 0.0020 INCH.
AXIAL - 0.010 MAXIMUM.

FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

(B) DENOTES CHANGES

P.A. NAVY - AS Other Cust	TITLE BEARING, PLAIN, SELF ALIGNING	MILITARY STANDARD MS21155
PROCUREMENT SPECIFICATION MIL-B-8976	SUPERSEDES: MS21155(ASG)	SHEET 1 OF 1

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PLATE NO. 17709

APPROVED 17 Mar 1969 REVISED 9 JUN 72 15 SEPT 80

USER SYMBOLS:

REVIEWER SYMBOLS:

"Review/user information is current as of the date of this document.
For future coordination of changes to this document, draft circulation
should be based on the information in the current 000155."

This military standard is approved for use by all Departments
& Agencies of the Department of Defense. Selection for all new
engineering and design applications and for repetitive use shall
be made from this document.

P.A. NAVY - AS
Other Cust
USAF - 11
ARMY - AV

PROCUREMENT SPECIFICATION
MIL-B-8976

TITLE

BEARING, PLAIN, SELF ALIGNING

SUPERSEDES:

MS21155(ASG)

MILITARY STANDARD

MS21155

SHEET 2 OF 2

DASH NO.	B +.0000 -.0005	D +.0000 -.0005	H ±.005	K	L ±.005 (a)	M	Q° MIN	W +.000 -.002	ALLOY STEEL		ALUMINUM BRONZE	
									RADIAL STATIC LIMIT LOAD (b)	AXIAL STATIC LIMIT LOAD	RADIAL STATIC LIMIT LOAD (b)	AXIAL STATIC LIMIT LOAD
3	.1900	.5625	.218	.047	.062	.293	10	.281	4600	2100	2800	850
4	.2500	.5562	.250			.364		.343	7080	2800	4300	1100
5	.3125	.7500	.281			.419		.375	8500	3550	5200	1400
6	.3750	.8125	.312			.475	9	.406	11050	4400	6750	1760
7	.4375	.9062	.343	.062	.078	.530		.437	13900	5400	8500	2150
8	.5000	1.0000	.390			.600	8	.500	18850	7050	11500	2800
9	.5625	1.0937	.437			.670		.562	25500	8900	15600	3850
10	.6250	1.1875	.500			.739		.625	31950	11700	19500	4650
12	.7500	1.4375	.593	.078	.093	.920		.750	46750	16500	28500	6575
14	.8750	1.5625	.703			.990		.875	62750	23300	38300	9300
16	1.0000	1.7500	.797			1.118	9	1.000	83350	30000	51000	12000

(a) L DIMENSIONS AND HOLE DIAMETER TO BE MEASURED BEFORE BEARING ASSEMBLY BUT SWAGING SHALL NOT RESTRICT GREASE FLOW.

(b) NOTE: THESE BEARINGS MAY EXPERIENCE SOME METAL YIELDING AT THE RADIAL STATIC LIMIT LOADS LISTED.

DASH NO.	R RADIUS (REF)	BALL DIA. MAX.	
		ALLOY STEEL	ALUM. BRONZE
-3	.045	.407	.438
-4		.501	.501
-5		.563	.594
-6	.065	.657	.657
-7		.719	.719
-8		.814	.814
-9		.907	.907
-10		.970	1.001
-12	.088	1.188	1.251
-14		1.313	1.376
-16		1.501	1.563

APPROVED 17 Mar 1969 REVISED (B) FOR CHANGES SEE SHEETS 1 AND 2.