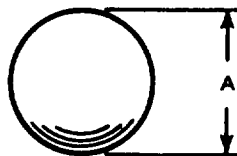


FED. SUP CLASS  
3110USER ACTIVITIES:  
ME, PA, WV, SA,  
B4, 17, MCTIES:  
REVIEW  
AV, M.Standard is approved for use by all Departments and Agencies of the Department of Defense.  
New engineering and design applications and for repetitive use shall be made from this  
This is  
Select in  
due timeTABLE I.  
BASIC DIAMETER  
NON-FERROUS BRASS BALLS

NOMINAL BALL DIAMETER	BASIC DIAMETER A	GRADE 200 DASH NO.
1/16	.062500	-20001
3/32	.093750	-20002
1/8	.125000	-20003
5/32	.156250	-20004
3/16	.187500	-20005
7/32	.218750	-20006
1/4	.250000	-20007
9/32	.281250	-20008
5/16	.312500	-20009
11/32	.343750	-20010
3/8	.375000	-20011
13/32	.406250	-20012
7/16	.437500	-20013
15/32	.468750	-20014
1/2	.500000	-20015
9/16	.562500	-20016
5/8	.625000	-20017
11/16	.687500	-20018
3/4	.750000	-20019

For NOTES see SHEET 2.

TABLE II.  
TOLERANCE BY GRADE FOR INDIVIDUAL BALLS  
NON-FERROUS BRASS BALLS  
(Tolerance in millionths of an inch)

GRADE	ALLOWABLE BALL DIAMETER VARIATION VD	ALLOWABLE DEVIATION FROM SPHERICAL FORM W
200	200	200

TABLE III.  
TOLERANCE BY GRADE FOR LOTS OF BALLS  
NON-FERROUS BRASS BALLS  
(Tolerance in millionths of an inch)

GRADE	ALLOWABLE LOT DIAMETER VARIATION	BASIC DIAMETER TOLERANCE
200	400	± 1000

Ⓑ ENTIRE STANDARD REVISED

P. A. Other Cust	OS AT 11	INTERNATIONAL INTEREST	TITLE  <b>BALLS, BEARING, NON-FERROUS BRASS</b>	<b>MILITARY STANDARD MS 19062</b>
PROCUREMENT SPECIFICATION <b>MIL-B-1083</b>			SUPERSEDES:	SHEET 1 OF 2

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

3110-0472

APPROVED 3 November 1959 REVISED Ⓐ 17 November 1965 Ⓑ 3 August 1976

FED. SUP CLASS  
3110

## NOTES:

1. **MATERIAL:** Non-ferrous brass conforming to chemical composition of SAE CA 260. Balls shall be manufactured from selected brass free from alloy segregation, and shall be free from cracks when examined visually without magnification.
2. **HARDNESS:** Surface hardness of Rockwell Rb 75-87 or equivalent measured on parallel flats.
3. **SURFACE ROUGHNESS:** Not to exceed maximum roughness height value (AA) of 8 microinches, interpreted in accordance with ANSI B46.1.
4. **MATERIAL DENSITY:** .306 pound per cubic inch.
5. **PART NUMBER:**
  - (a) The MS part number consists of the MS number, plus the dash number.
  - Example: MS 19062-20001 is the part number for a Grade 200 non-ferrous brass bearing ball with basic diameter of .062500 inch.
  - (b) Dash numbers, formerly designated -1 thru -19, have been redesignated -20001 thru -20019.
6. **DIMENSIONS:** All dimensions are in inches, unless otherwise specified. Column headings in tolerance tables are defined in AFBMA Standard 10.
7. **OTHER NOTES:**
  - (a) Referenced documents shall be of the issue in effect on date of invitation for bids.
  - (b) For design feature purposes, this standard takes precedence over procurement documents referenced herein.

ⓑ ENTIRE STANDARD REVISED

P. A. Other Cust	OS AT 11	INTERNATIONAL INTEREST	TITLE  BALLS, BEARING, NON-FERROUS BRASS	MILITARY STANDARD  <b>MS 19062</b>
PROCUREMENT SPECIFICATION MIL-B-1083		SUPERSEDES:		SHEET 2 OF

APPROVED 3 November 1959 REVISED ⓑ For changes see Sheets 1 a