



TABLE I. Dash numbers and dimensions.

ØD NOMINAL BALL DIAMETER	BASIC DIAMETER ¹	GRADE	
		100	200 ^{2/}
		DASH NUMBER	
1/16	.062500	10001	20001
3/32	.093750	10002	20002
1/8	.125000	10003	20003
5/32	.156250	10004	20004
3/16	.187500	10005	20005
7/32	.218750	10006	20006
1/4	.250000	10007	20007
9/32	.281250	10008	20008
5/16	.312500	10009	20009
11/32	.343750	10010	20010
3/8	.375000	10011	20011
7/16	.437500	10012	20012
1/2	.500000	10013	20013
9/16	.562500	10014	20014
5/8	.625000	10015	20015
11/16	.687500	10016	20016
3/4	.750000	10017	20017
13/16	.812500	10018	20018
7/8	.875000	10019	20019
15/16	.937500	10020	20020
1	1.000000	10021	20021
1-1/8	1.125000	10022	20022
1-1/4	1.250000	10023	20023
1-1/2	1.500000	10024	20024

¹ See Table III for tolerances² See note 2

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P.A. OS Other cust AT, 99	International interest	Title BALLS, BEARING, NICKEL-COPPER ALLOY (K-MONEL)	MILITARY STANDARD MS19064
PROCUREMENT SPECIFICATION MIL-B-1083	SUPERSEDES	PAGE 1 OF 2	

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(Tolerance in millionths of an inch)

GRADE	ALLOWABLE BALL DIAMETER VARIATION	ALLOWABLE DEVIATION FROM SPHERICAL FORM	MAXIMUM SURFACE ROUGHNESS (ARITHMETICAL AVERAGE)
	V _D	W	
100	100	100	5
200	200	200	8

TABLE III. Tolerances by grade for lots of balls.
(Tolerance in millionths of an inch)

GRADE	ALLOWABLE LOT DIAMETER VARIATION	BASIC DIAMETER TOLERANCE
100	200	± 500
200	400	± 1000

REQUIREMENTS:

1. MATERIAL: NICKEL-COPPER ALLOY (K-MONEL) CONFORMING TO THE CHEMICAL COMPOSITION OF UNS N05500 IN ACCORDANCE WITH QQ-N-286 AND AS SPECIFIED IN PROCUREMENT DOCUMENT
2. HARDNESS: SHALL HAVE A MINIMUM HARDNESS OF 27 HRC OR EQUIVALENT
3. SURFACE ROUGHNESS: TOLERANCE LIMITS FOR SURFACE ROUGHNESS AS SPECIFIED IN TABLE II, AND IN ACCORDANCE WITH ANSI B46.1.
4. MATERIAL DENSITY: SHALL BE .306 POUND PER CUBIC INCH.
5. PART NUMBER: THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

EXAMPLE: MS19064-10001

DASH NUMBER

BASIC MS NUMBER

MS19064-10001 INDICATES A GRADE 100 NICKEL-COPPER ALLOY (K-MONEL) WITH A BASIC DIAMETER OF 0.062500 INCH.

NOTES:

1. ALL DIMENSIONS ARE IN INCHES. COLUMN HEADINGS IN TOLERANCE TABLES ARE IN ACCORDANCE WITH AFBMA-STD-10.
2. DASH NUMBERS 20001 THRU 20024 WERE FORMERLY DASH 1 THRU 24.
3. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
4. REFERENCED GOVERNMENT (OR NONGOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.

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