

Ⓝ TABLE II. OVERSIZE BEARING DIMENSIONS 1/ 2/

RESTRICTED USAGE FOR REPAIR WORK ONLY

.010 AND .020 OVERSIZE OUTSIDE DIAMETER FOR
REPLACEMENT OF BEARINGS SHOWN ON SHEET 1

DASH NO.	NOMINAL SIZE	1st OVERSIZE (.010) #D
-3	.1875	.6350
-4	.2500	.6350
-5	.3125	.6975
-6	.3750	.8225
-7	.4375	.9475
-7A	.4375	.9162
-8	.5000	1.0100
-9	.5625	1.1350
-10	.6250	1.1975
-12	.7500	1.3850
-14	.8750	1.6350
-16	1.0000	2.1350

DASH NO.	NOMINAL SIZE	2nd OVERSIZE (.020) #D
-3	.1875	.6450
-4	.2500	.6450
-5	.3125	.7075
-6	.3750	.8325
-7	.4375	.9575
-7A	.4375	.9262
-8	.5000	1.0200
-9	.5625	1.1450
-10	.6250	1.2075
-12	.7500	1.3950
-14	.8750	1.6450
-16	1.0000	2.1450

- 1/ BEFORE INITIATING A REPAIR PROCEDURE TO USE AN OVERSIZE BEARING, APPROVAL FOR MODIFYING AND REIDENTIFYING THE BEARING HOUSING MUST BE OBTAINED FROM THE COGNIZANT ENGINEERING AUTHORITY.
- 2/ REFER TO NAS0331 FOR INSTALLATION PROCEDURE AND STAKING FORCES.

REQUIREMENTS:

1. MATERIAL: BALL 440C AMS-5630 OR PH13-8Mo AMS-5629 H1000 (SEE NOTE 8a).
OUTER RING, AMS-5643 (17-413+).
UNER PTFE SHALL BE INCLUDED IN THE UNER.
2. SURFACE TEXTURE: BALL DIA Ro B MAX; BORE, BALL, FACE, AND OUTER RING DIA Ro 32 MAX; ALL OTHERS Ro 125 MAX.
3. HARDNESS: BALL, 440C 55-62 Rc OR PH13-8Mo Rc 43 MIN; OUTER RING Rc 28 MIN/Rc 37 MAX BEFORE SWAGING.
- Ⓝ 4. SURFACE FINISH:
OUTER RING: PLATING, WHEN SPECIFIED, SHALL BE ZINC-NICKEL PLATING PER AMS-2417, TYPE 2, OR CADMIUM PLATING PER QQ-P-416, TYPE II, CLASS 2, WITH A THICKNESS RANGE OF 0.0003 TO 0.0006 INCHES. PLATE ON THE OUTSIDE DIAMETER SURFACE AND ON THE FLAT BETWEEN THE OUTSIDE DIAMETER AND THE GROOVE. PLATING RUNOUT MAY OCCUR EITHER IN THE GROOVE OR IN THE AREA BETWEEN THE GROOVE AND THE BALL.
BALL: PH13-8Mo, PASSIVATE PER QQ-P-35; 440C, PASSIVATE PER QQ-P-35, OPTIONAL
5. NO-LOAD TORQUE; WHEN THE LETTER L K " IS PRESENT IN THE PART NUMBER, LOWER VALUES OF NO-W TORQUE ARE SPECIFIED PER TABLE L IF THE MEASURED TORQUE OF A " K " TYPE BEARING IS LESS THAN 0.1 INCH-POUND, THE INTERNAL RADIAL PLAY SHALL BE MEASURED AND SHALL NOT EXCEED THE FOLLOWING:

DASH NO.	MAXIMUM RADIAL PLAY	MAXIMUM AXIAL PLAY
-3K THRU -12K	0.0007 INCH	0.0021 INCH
-14K THRU -18K	0.0010 INCH	0.0030 INCH

THE INTERNAL AXIAL PLAY SHALL BE MEASURED FOR ALL " K " TYPE BEARINGS.

PREPARING ACTIVITY NAVY - AS
CUSTODIANS: ARMY- AV NAVY- As
AIR FORCE-99 DIA-
REVIEW ARMY-AR, AT, ME, DIA-IS, USAF-84
PROJECT NUMBER: 3120-0742-07

MILITARY SPECIFICATION SHEET

TITLE
BEARING, PLAIN, SELF-LUBRICATING,
SELF-ALIGNING, LOW SPEED WIDE,
GROOVED OUTER RING, -65° TO 325° F

SPECIFICATION SHEET NUMBER

MS14103

SUPERSEDING
MS14103

AMSC - N/A

REV J
5 DEC 94

REV H
24 JAN 94

FSC 3120

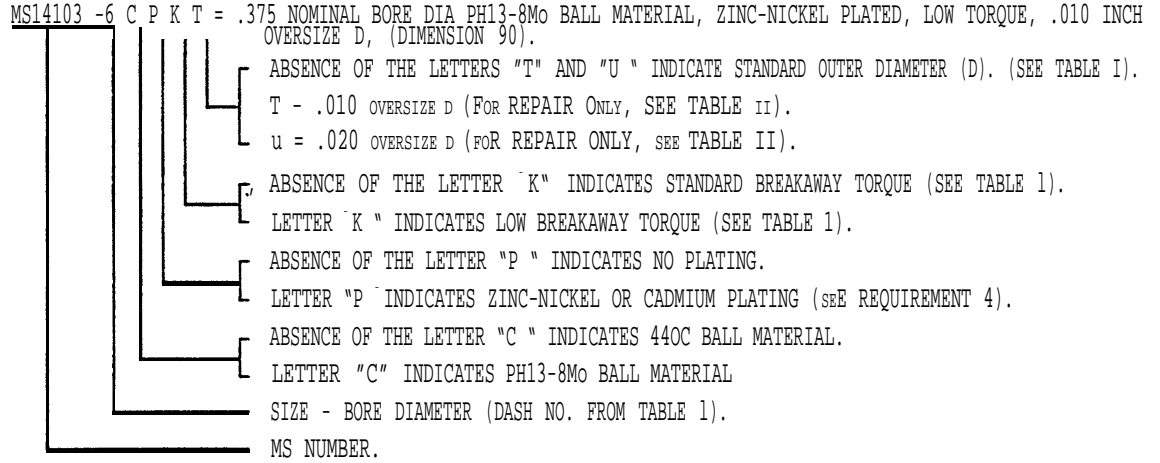
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THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED THE SOLICITATION: MIL-B-81820

NOTES:

1. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES ARE: DECIMALS *.010 AND ANGLES ± 0.5.
2. BREAM SHARP EDGES AND CORNERS AND REMOVE ALL BURRS AND SLIVERS.
3. THE -.3 SIZE BEARING IS EXEMPT FROM THE "RADIAL STATIC LIMIT LOAD" TEST BECAUSE THE LOAD CAPACITY OF THE BEARING IS PIN CRITICAL.
4. WHEN TESTED TO THE FLUID CONTAMINATION AND SUB-ZERO TEMPERATURE REQUIREMENTS W THE PROCUREMENT SPECIFICATION, THE OSCILLATING LOAD SHALL BE DECREASED TO 75% OF THE SPECIFIED LOAD.
5. WHEN FLUIDS MD ELEVATED TEMPERATURES (ABOVE 200' F) ARE BOTH PRESENT IN AN APPLICATION, THEN REDUCTIONS IN OPERATING LOADS OR SEARING LIFE MAY BE REQUIRED.
6. DASH NUMBER DESIGNATES NOMINAL BORE DIA IN SIXTEENTHS OF AN INCH.
7. DIMENSION 1 D" TO BE MET AFTER PLATING. DIMENSION " H " TO BE MET BEFORE PLATING WHEN APPLICABLE.
8. EXAMPLE OF PART NO.



80. BALL MATERIAL SHALL BE 440C AMS-5630 UNLESS " C ". CALLOUT IS PRESENT IN PART NUMBER. " C " INDICATES PH13-8Mo AMS-5629 H1000.
9. 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.
10. REFERENCED GOVERNMENT (OR NON-GOVERNMENT) 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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PREPARING ACTIVITY NAVY - AS CUSTODIANS: ARMY- AV NAVY- As AIR FORCE- 99 DIA- REVIEW: ARMY-AR, AT, ME, DIA-IS, USAF-84 PROJECT NUMBER: 3120-0742-07	MILITARY SPECIFICATION SHEET		SPECIFICATION SHEET NUMBER	
	TITLE		M S 1 4 1 0 3	REV J 5 DEC 91
	BEARING, PLAIN, SELF-LUBRICATING, SELF-ALIGNING, LOW SPEED, NARROW, GROOVED OUTER RING, -.65" TO .325" F		SUPERSEDING MS14103	REV H 24 JAN 94
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