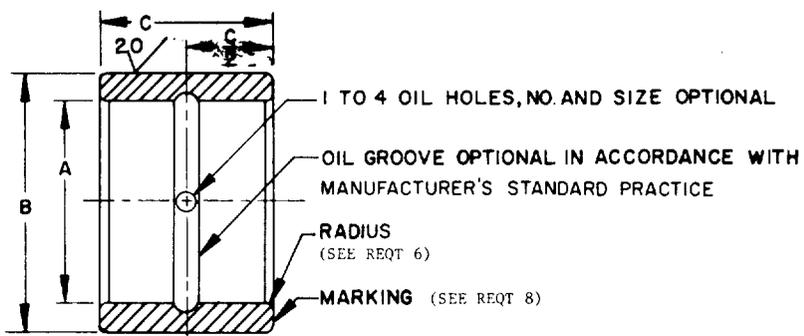


FED. SUP CLASS  
3110



(SEE REQ 5)

REVIEW ACTIVITIES: ARMY-AV; NAVY-MC; DLA-1S  
USER ACTIVITIES: ARMY-AR, GL; NAVY-YD; AF-99

MS DASH NO.	A BORE DIAMETER			B OUTSIDE DIAMETER			C WIDTH		RAD	MATING BEARING MS17131
	NOM	MIN	MAX	NOM	MIN	MAX	MIN	MAX		
+61	3/8	.3745	.3750	9/16	.5620	.5625	.505	.510	.025	-16
-62	3/8	.3745	.3750	9/16	.5620	.5625	.755	.760	.025	-17
-63	3/8	.3745	.3750	5/8	.6245	.6250	.505	.510	.025	-18
- 1	3/8	.3745	.3750	5/8	.6245	.6250	.755	.760	.025	-19
-64	7/16	.4370	.4375	5/8	.6245	.6250	.777	.784	.025	-19
-65	1/2	.4995	.5000	3/4	.7495	.7500	.505	.510	.040	-22
- 2	1/2	.4995	.5000	3/4	.7495	.7500	.755	.760	.040	-23
- 4	5/8	.6245	.6250	7/8	.8745	.8750	.755	.760	.040	-26
-66	5/8	.6245	.6250	7/8	.8745	.8750	1.005	1.010	.040	-27
- 5	3/4	.7495	.7500	1	.9995	1.0000	.755	.760	.040	-29
-67	3/4	.7495	.7500	1	.9995	1.0000	1.005	1.010	.040	-30
- 6	13/16	.8120	.8125	1	.9995	1.0000	.755	.760	.040	-29
- 7	13/16	.8120	.8125	1	.9995	1.0000	1.005	1.010	.040	-30
- 8	7/8	.8745	.8750	1-1/8	1.1245	1.1250	1.005	1.010	.040	-33
- 9	15/16	.9370	.9375	1-1/8	1.1245	1.1250	1.005	1.010	.040	-33
-10	1	.9995	1.0000	1-1/4	1.2495	1.2500	1.005	1.010	.040	-35
-11	1	.9995	1.0000	1-1/4	1.2495	1.2500	1.255	1.260	.040	-36
-13	1-1/8	1.1245	1.1250	1-3/8	1.3745	1.3750	1.255	1.260	.040	-40
-14	1-3/16	1.1870	1.1875	1-1/2	1.4995	1.5000	1.255	1.260	.040	-43
-15	1-1/4	1.2495	1.2500	1-1/2	1.4995	1.5000	1.005	1.010	.060	-42
-16	1-1/4	1.2495	1.2500	1-1/2	1.4995	1.5000	1.255	1.260	.060	-43
-18	1-3/8	1.3745	1.3750	1-5/8	1.6245	1.6250	1.255	1.260	.060	-45
-68	1-7/16	1.4370	1.4375	1-3/4	1.7495	1.7500	1.505	1.510	.060	-48
-21	1-1/2	1.4995	1.5000	1-3/4	1.7495	1.7500	1.005	1.010	.060	-47
-69	1-1/2	1.4995	1.5000	1-3/4	1.7495	1.7500	1.505	1.510	.060	-48
-24	1-3/4	1.7495	1.7500	2-1/16	2.0620	2.0625	1.505	1.510	.060	-56
-70	1-7/8	1.8745	1.8750	2-1/8	2.1245	2.1250	1.505	1.510	.060	-54
-27	2	1.9995	2.0000	2-1/2	2.4995	2.5000	1.505	1.510	.080	-57
-71	2-1/2	2.4995	2.5000	2-3/4	2.7495	2.7500	1.005	1.010	.060	-59

FOR NEEDLE ROLLER BEARING WITH THICK OUTER RING USE INNER RING MS51962

(F) ENTIRE STANDARD REVISED

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

P.A. ARMY-AI Other Cust NAVY-OS AF-11	TITLE	RING, BEARING, INNER: FOR NEEDLE ROLLER BEARING WITH DRAWN OUTER RING	MILITARY STANDARD
	PROCUREMENT SPECIFICATION	SUPERSEDES:	MS17130
NONE	MS17136	SHEET	OF 2

APPROVED 7 JUNE 1960 REVISED (A) 25 OCTOBER 1962 (B) 21 NOVEMBER 1967 (C) 20 MAY 1969 (D) 23 MAY 1975 (E) 25 JULY 1975 (F) 28 SEP 81

FED. SUP CLASS  
3110

REQUIREMENTS:

1. MATERIAL: STEEL, ALLOY OR CARBON, CARBURIZING GRADE, 4620, 4720, 8620, 8720 OR 1018, 1022 OR 1117; SAE E51100, SAE 52100 PER FEDERAL STANDARD 66 OR SAE J-404.
2. HEAT TREATMENT: STEEL, 4620, 4720, 8620, 8720, 1018, 1022 OR 1117, CASE HARDENED TO RC 58-65, CASE DEPTH .025 MIN. STEEL, SAE E51100, SAE 52100, THROUGH HARDENED TO RC 58-65.
3. SURFACE FINISH: SURFACE MARKED <sup>20</sup> SHALL HAVE MAXIMUM SURFACE ROUGHNESS IN ACCORDANCE WITH ANSI B46.1.
4. PROTECTIVE COATING: UNLESS OTHERWISE SPECIFIED, PLAIN (NOT PLATED) INNER RINGS TO BE COATED WITH RUST PREVENTIVE FILM BY MANUFACTURER.
5. INTENDED FOR USE ON UNHARDENED SHAFTS IN CONJUNCTION WITH OPEN END NEEDLE ROLLER BEARINGS SHOWN ON MS17131 AND MS52141. TAPER IN SHAFT SHALL NOT EXCEED 0.0005 IN. PER INCH OF BEARING LENGTH.
6. RING MUST CLEAR THE MAXIMUM SHAFT FILLET RADIUS SHOWN IN RAD. COLUMN. THE RADII OR CHAMFERS ON THE INNER DIAMETER OF THE RING MAY BE UNEQUAL. WHERE THE RADII ARE UNEQUAL THE SURFACE WITH THE LARGER RELIEF SHOULD BE MOUNTED AGAINST THE SHAFT SHOULDER.
7. THE MS PART NUMBER SHALL CONSIST OF THE MS NUMBER PLUS THE DASH NUMBER. EXAMPLE: MS17130-2.
8. MARKING SHALL CONSIST OF THE MS PART NUMBER AND THE MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130. ON INNER RINGS, WHERE THE INSIDE DIAMETER RELIEF RADII ARE NOT EQUAL, THE MARKING SHALL APPEAR ON THE SURFACE WITH THE LESSER RADIUS.

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. GIVEN THE SHAFT DIAMETER AND RADIAL LOAD FOR A PARTICULAR BEARING APPLICATION, THE BORE DIAMETER OF THE INNER RING IS SELECTED FROM THE SHAFT SIZE. THE OUTSIDE DIAMETER AND WIDTH ARE CHOSEN BY DIMENSIONALLY MATING THE INNER RING WITH THE OUTER RING ON MS17131 OR MS52141 WHICH EXHIBITS THE REQUIRED LOAD CAPACITY.
3. FOR DESIGN FEATURE PURPOSES THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
4. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS.
5. THE USE OF RECYCLED MATERIALS WHICH MEET THE REQUIREMENTS OF THE APPLICABLE MATERIAL SPECIFICATIONS WITHOUT JEOPARDIZING THE INTENDED USE OF THE ITEM SHALL BE ENCOURAGED.

APPROVED  
REVISED (F)  
FOR CHANGES SEE SHEETS 1 & 2

P. A. Other Cust	INTERNATIONAL INTEREST	TITLE <b>RING, BEARING, INNER: FOR NEEDLE ROLLER BEARING WITH DRAWN OUTER RING</b>	<b>MILITARY STANDARD MS17130</b>
PROCUREMENT SPECIFICATION		SUPERSEDES:	SHEET 2 OF 2