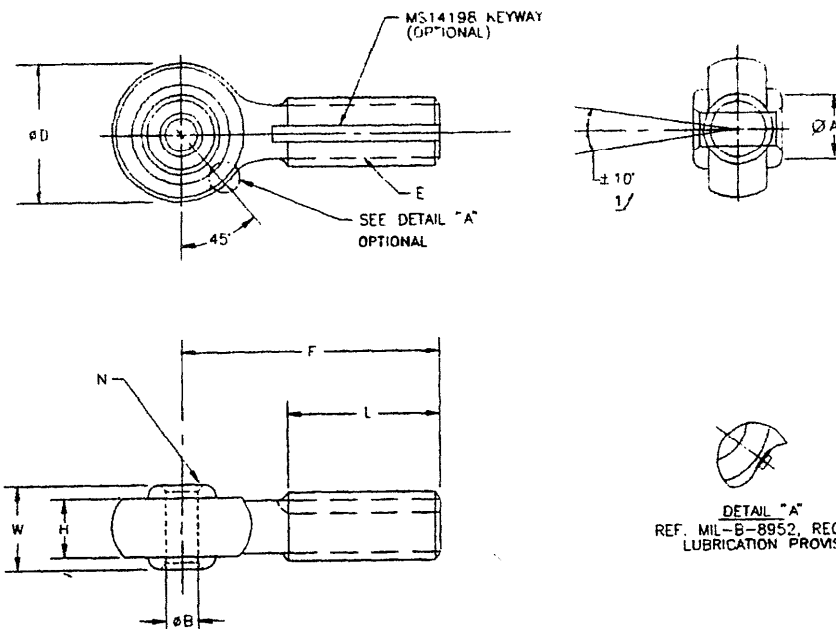


THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIDER THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE SPECIFICATION SHEET. THE SOLICITATION: MIL-B-8952



DETAIL "A"  
REF. MIL-B-8952, REQUIREMENTS FOR  
LUBRICATION PROVISIONS

TABLE I. DIMENSIONS AND LOADS

| MS<br>DASH<br>NO. | A<br>±.005 | B<br>+.0000<br>-.0005 | D<br>+.000<br>-.050 | E<br>UNJF-3A<br>THREAD | F<br>±.015 | H<br>+.000<br>-.015 | L<br>+.060<br>-.000 | N<br>CORNER<br>CHAMFER<br>±.005 | W<br>+.000<br>-.005 | LIMIT LOAD<br>RATING, LBS |       | RADIAL<br>DYNAMIC<br>LOAD<br>RATING, LBS | NET<br>WT<br>LBS |
|-------------------|------------|-----------------------|---------------------|------------------------|------------|---------------------|---------------------|---------------------------------|---------------------|---------------------------|-------|--|------------------|
|                   |            |                       |                     |                        |            |                     |                     |                                 |                     | RADIAL                    | AXIAL |  |                  |
| -4G               | .430       | .2500                 | 1.020               | .375-24                | 1.880      | .360                | 1.060               | .015                            | .500                | 2710                      | 270   | 2240                                     | .10              |
| -5G               | .580       | .3125                 | 1.340               | .438-20                | 1.910      | .340                | .800                |                                 | .593                | 3900                      | 390   | 3230                                     | .13              |
| -6G               | .660       | .3750                 | 1.660               |                        | 2.560      | .480                | 1.310               |                                 | .812                | 6180                      | 610   | 5110                                     | .31              |

1/ THESE BEARINGS ARE SELF-ALIGNING FOR 10° IN EITHER DIRECTION.

REQUIREMENTS:

- (D) 1. MATERIAL: INNER RING AND ROLLERS: STEEL, E52100 PER FED-STD-66.  
OUTER RING ROD END: STEEL, AIS-SAE 4620 PER AMS 6294 OR AISI-SAE 8620H PER AMS 6274 OR COMPOSITION III (9310) PER MIL-S-7395 OR E52100 PER FED-STD-66.
- (D) 2. LUBRICANT: MIL-G-81322 OR MIL-G-23827. ALL BEARINGS SHALL BE PACKED WITH GREASE CONFORMING TO MIL-G-81322 UNLESS OTHERWISE SPECIFIED. ALL BEARINGS SHALL BE FILLED 80% MINIMUM WITH GREASE. IF MIL-G-23827 IS REQUIRED, ADD THE LETTER "H" AFTER THE MS21223 DASH NUMBER. IF A LUBRICATION FITTING IS NOT DESIRED, DELETE THE CODE "G" AFTER THE MS21223 DASH NUMBER. MIL-G-23827 SHALL NOT BE USED FOR OPERATION WHERE TEMPERATURES EXCEED 250°F
3. SEALS: POLYTETRAFLUOROETHYLENE PER AMS 3852 OR POLYTETRAFLUOROETHYLENE SHEET, GLASS FABRIC REINFORCED PER AMS 3666.
- (D) 4. INTERNAL CLEARANCE: RADIAL .0001 TO .0015; AXIAL .001 TO .030.
- (D) 5. SURFACE ROUGHNESS: RACEWAYS 8 MICROINCHES  $R_a$  MAXIMUM, ROLLERS 6 MICROINCHES  $R_a$  MAXIMUM, IN ACCORDANCE WITH ANSI/ASME B46.1.
6. BEARING RATINGS ARE FOR OPERATION UP TO 250°F MAX. FOR OPERATION UP TO 350°F, THE RATINGS SHALL BE REDUCED BY 20%.

(D) DENOTES CHANGES

INCH-POUND

|  |                                       |                            |
|--|---------------------------------------|----------------------------|
| PREPARING ACTIVITY: NAVY-AS                                | MILITARY SPECIFICATION SHEET          | SPECIFICATION SHEET NUMBER |
| CUSTODIANS: ARMY-AT NAVY-AS                                | TITLE                                 | MS21223 05 DEC 94          |
| AIR FORCE-99 DLA-  | BEARING, ROLLER, ROD END, EXTERNAL    | REV D                      |
| REVIEW: ARMY-AV  | THREAD, SELF-ALIGNING, ANTI-FRICTION, | SUPERSEDING                |
| PROJECT NUMBER: 3110-0871                                  | AIRFRAME, HEAVY DUTY, TYPE I,         | MS21223 C 31 JAN 1990      |
| DISTRIBUTION STATEMENT                                     | -67° TO 350°F, SEALED                 | AMSC- N/A FSC 3110         |
| A. Approved for public release; distribution is unlimited. |                                       | Page 1 of 2                |

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PREVIOUS EDITIONS ARE OBSOLETE

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 IN THE SOLICITATION MIL-B-8952

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

7. ADD SUFFIX LETTER "K" WHEN MS14198 KEYWAY IS REQUIRED.  
ADD SUFFIX LETTER "L" WHEN LEFT HAND THREAD IS REQUIRED.

Form Approved  
DPM 1-1004-10155

EXAMPLE OF PART NUMBER:

MS21223 -4 G K L H = BEARING, ROD END, ROLLER, SELF-ALIGNING, 2500 BORE LUBRICATOR FITTING WITH MIL-G-23827 LUBRICANT,  
MS14198 KEYWAY, .375-24UNF-3A LEFT HAND EXTERNAL THREAD  
PREPACKED WITH MIL-G-23827 GREASE LUBRICANT (SEE REQUIREMENT 2)  
LEFT HAND THREAD DESIGNATOR  
MS14198 KEYWAY DESIGNATOR  
LUBRICATOR FITTING DESIGNATOR  
DASH NUMBER  
MILITARY SPECIFICATION SHEET

WHEN THE DESIGNATOR IS NOT APPLICABLE, IT SHALL BE OMITTED FROM THE PART NUMBER.

- (D) 8. PLATING: ALL EXTERNAL SURFACES EXCEPT BORE, SEALS AND SEAL RETAINERS, SHALL BE ZINC-NICKEL PLATED PER AMS 2417 TYPE 2 OF CADMIUM PLATED IN ACCORDANCE WITH QQ-P-416, TYPE 1, CLASS 2, TO A THICKNESS OF .0003 TO .0006. THREADED SURFACES SHALL BE PLATED TO A THICKNESS OF .0002 TO .0005 INCHES.

NOTES:

1. DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED
2. DIMENSIONS TO BE MET AFTER PLATING.
3. REMOVE BURRS AND SHARP EDGES.
4. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS SPECIFICATION AND REFERENCES CITED HEREIN, THE TEXT OF THIS SPECIFICATION SHALL TAKE PRECEDENCE.
5. REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THIS 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 SPECIFICATION TO THE EXTENT SPECIFIED HEREIN.

|   |  |                                      |
|---|--|--------------------------------------|
| PREPARING ACTIVITY: NAVY-AS   | MILITARY SPECIFICATION SHEET   | SPECIFICATION SHEET NUMBER           |
| CUSTODIANS: ARMY-AT NAVY-AS   | TITLE  | MS21223 05 DEC 94<br>REV D           |
| AIR FORCE-99 DLA-   | BEARING, ROLLER, ROD END, EXTERNAL<br>THREAD, SELF-ALIGNING, ANTI-FRICTION,<br>AIRFRAME, HEAVY DUTY, TYPE 1,<br>-67° TO 350° F, SEALED | SUPERSEDING<br>MS21223 C 31 JAN 1990 |
| REVIEW: ARMY-AV   |  | AMSC- N/A FSC 3110                   |
| PROJECT NUMBER: 3110-0871   |  |                                      |
| DISTRIBUTION STATEMENT<br>A. Approved for public release; distribution is unlimited |  | Page 2 of 2                          |

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