

INCH-POUND

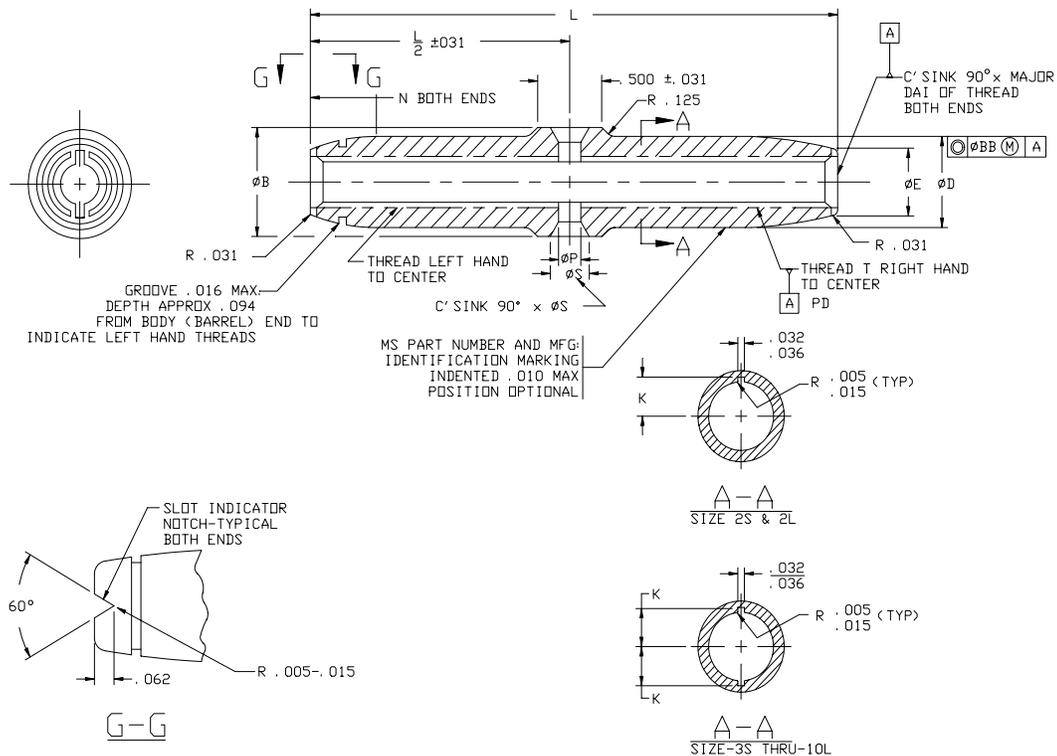
MS21251M
 20 November 2002
 SUPERSEDING
 MS21251L
 5 November 2001

DETAIL SPECIFICATION SHEET

TURNBUCKLE BODY, CLIP LOCKING

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of MIL-DTL-8878 and QPL-8878 listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation.



NOTES:

- * 1. The notch shall align within the width of the slot.

FIGURE 1. Turnbuckle body, clip locking.

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TABLE I. Dash numbers and dimensions.

| Dash number | | | Wire rope diameter | | Minimum breaking strength lbs. | Thread T UNF-3B | L ±0.031 | ØB ±0.005 | N ±0.031 | ØD ±0.005 | ØE ±0.005 | K | | ØS | ØP ±0.005 | ØBB | Applicable Locking clip MS21256 |
|-------------|-------|-------|--------------------|---------|--------------------------------|------------------|----------|-----------|----------|-----------|-----------|---------|---------|-------|-----------|-----------|---------------------------------|
| Steel | Brass | Alloy | Nominal reference | Minimum | | | | | | | | Minimum | Maximum | | | | |
| 2S | B2S | A2S | 1/16 | 0.062 | 800 | 0.1380 (#6)-40 | 2.250 | 0.250 | 0.156 | 0.219 | 0.188 | 0.0749 | 0.0807 | 0.187 | 0.125 | 0.020 FIM | -1 |
| 2L | B2L | A2L | | | | | 4.000 | | | | | | | | | | -2 |
| 3S | B3S | A3S | 3/32 | 0.093 | 1,600 | 0.1900 (#10)-32 | 2.250 | 0.344 | 0.188 | 0.281 | 0.250 | 0.1009 | 0.1048 | 0.187 | 0.125 | 0.020 FIM | -1 |
| 3L | B3L | A3L | | | | | 4.000 | | | | | | | | | | -2 |
| 5S | B5S | A5S | 5/32 | 0.156 | 3,200 | 0.2500 (1/4)-28 | 2.250 | 0.438 | 0.312 | 0.391 | 0.328 | 0.1294 | 0.1334 | 0.187 | 0.125 | 0.020 FIM | -1 |
| 5L | B5L | A5L | | | | | 4.000 | | | | | | | | | | -2 |
| 6S | B6S | A6S | 3/16 | 0.187 | 4,600 | 0.3125 (5/16)-24 | 2.250 | 0.500 | 0.375 | 0.438 | 0.406 | 0.1587 | 0.1627 | 0.187 | 0.125 | 0.020 FIM | -1 |
| 6L | B6L | A6L | | | | | 4.000 | | | | | | | | | | -2 |
| 8L | B8L | A8L | 1/4 | 0.250 | 8,000 | 0.3750 (3/8)-24 | 4.250 | 0.625 | 0.500 | 0.594 | 0.469 | 0.1900 | 0.1939 | 0.187 | 0.125 | 0.025 FIM | -2 |
| 9L | B9L | A9L | 9/32 | 0.281 | 12,750 | 0.4375 (7/16)-20 | 4.250 | 0.750 | 0.594 | 0.688 | 0.563 | 0.2185 | 0.2225 | 0.187 | 0.125 | 0.025 FIM | -2 |
| 10L | B10L | A10L | 5/16 | 0.312 | 17,500 | 0.5000 (1/2)-20 | 4.250 | 0.875 | 0.656 | 0.813 | 0.625 | 0.2498 | 0.2537 | 0.250 | 0.188 | 0.025 FIM | -3 |

1/ See note 6.

REQUIREMENTS:

1. Material and protective treatment: Material and protective treatment shall be in accordance with MIL-DTL-8878.
2. Finish: Surface finish shall be RMS 125 or better.
3. Threads: Threads shall be in accordance with FED-STD-H28/20.
4. Bodies (barrels): Bodies (barrels) shall be marked with the year of manufacture.
5. Marking: Marking by impression stamping (or any other stress inducing method), if used, shall be done before stress relieving.
6. Tolerances: Unless otherwise specified, tolerances: decimals ± 0.010 , angles $\pm 3^\circ$.

NOTES:

1. The part or identifying number (PIN) consists of the letters MS, the specification sheet number, and a dash number taken from table I. The first letter of the dash number indicates material, the second number refers to the size, and the third letter indicates length (short or long).

EXAMPLE: MS 21251 - B5L

MS prefix

21251 Specification sheet number

- B5L Dash number

MS21251-B5L Indicates - Body (barrel), turnbuckle, brass, 0.2500 (1/4)-28 thread, long.

2. Dimensions are in inches.
3. Remove burrs and break sharp edges. (See MIL-DTL-8878.)

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4. Interpret drawing in accordance with ASME Y14.5M.
5. For clip locking of turnbuckles, see MS33736 and MIL-DTL-8878.
6. For 0.125 (1/8) inch diameter wire rope use -5 parts, minimum breaking strength 2,200 pounds (lbs.) (reference).
7. A turnbuckle with a manufacturing date of 1978 or older shall not be used for replacement repairs since stress relieving was not required prior to this date.
8. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence.
9. Unless otherwise specified, issues of referenced documents are those in effect at the time of solicitation.

CHANGES FROM PREVIOUS ISSUE: The margins of this specification sheet are marked with asterisks to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

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Army - AV
Navy - AS
Air Force - 99

Preparing Activity:
DLA - GS5
(Project 1560-0019)

Review Activities:
Navy - MC
Air Force - 71