INCH-POUND

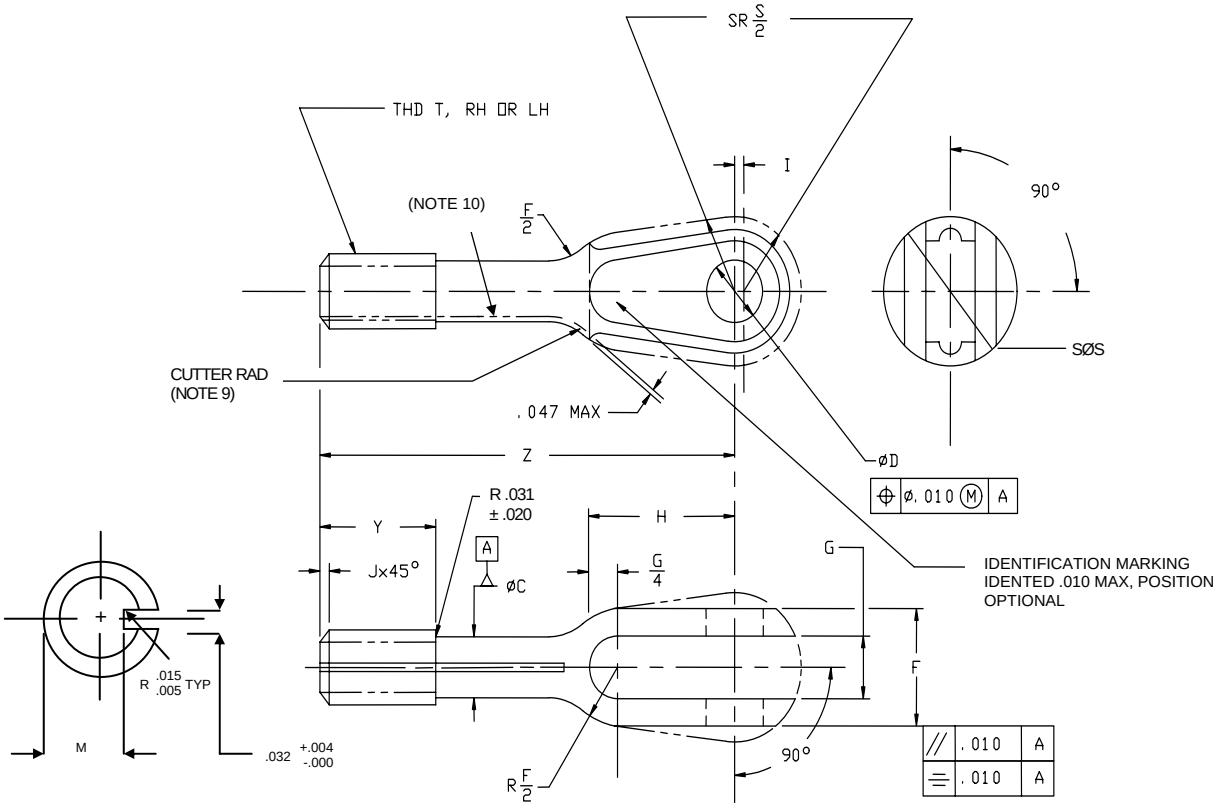
MS21252P
12 October 2007
SUPERSEDING
MS21252N
20 November 2002

DETAIL SPECIFICATION SHEET

CLEVIS END, TURNBUCKLE, 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, MIL-DTL-8878, and QPL-8878.



NOTE:
1. G dimension should be inspected below cross-hole.

FIGURE 1. Clevis, end, turnbuckle, clip locking.

TABLE I. Dash numbers and dimensions.

Dash number		Wire rope diameter		Minimum breaking strength lbs.	Thread T UNF-3A	ØC +0.006 -0.000	ØD +0.002 -0.000	F +0.010 -0.005	G +0.010 -0.000	H
Direction of thread										
RH	LH	Nominal reference	Minimum							
-2RS	-2LS	1/16	0.062	800	0.1380(#6)-40	0.094	0.190	0.250	0.109	0.375
-3RS	-3LS	3/32	0.093	1,600	0.1900(#10)-32	0.133	0.190	0.319	0.156	
-3RL	-3LL	3/32	0.093							
-4RS	-4LS	1/8	0.125	2,200	0.2500(1/4)-28	0.189	0.190	0.383	0.195	0.531
-4RL	-4LL	1/8	0.125							
-5RS	-5LS	5/32	0.156	3,200	0.2500(1/4)-28	0.189	0.250	0.452	0.218	0.531
-5RL	-5LL	5/32	0.156							
-6RS	-6LS	3/16	0.187	4600	0.3125(5/16)-24	0.243	0.313	0.547	0.250	0.656
-6RL	-6LL	3/16	0.187							
-8RL	-8LL	1/4	0.250	8,000	0.3750(3/8)-24	0.306	0.375	0.687	0.312	0.875
-9RL	-9LL	9/32	0.281	12,500	0.4375(7/16)-20	0.362	0.438	0.750	0.375	1.000
-10RL	-10LL	5/16	0.312	17,500	0.5000(1/2)-20	0.425	0.500	0.844	0.437	1.188

TABLE I. Dash numbers and dimensions - Continued.

Dash number		I +0.010 -0.000	J +0.000 -0.015	M		SØS ±0.010 reference 1/	Y ±0.047 2/	Z ±0.047
Direction of thread								
RH	LH			Maximum	Minimum			
-2RS	-2LS	0.031	0.031	0.1139	0.1094	0.375	0.375	1.500
-3RS	-3LS			0.1638	0.1568	0.500	0.500	1.625
-3RL	-3LL							2.500
-4RS	-4LS			0.2224	0.2152	0.547	0.563	1.844
-4RL	-4LL							2.734
-5RS	-5LS	0.047		0.2224	0.2152	0.641	0.625	1.844
-5RL	-5LL							2.734
-6RS	-6LS		0.047	0.2830	0.2754	0.734	0.750	2.031
-6RL	-6LL							2.906
-8RL	-8LL	0.063		0.3454	0.3378	0.922	0.875	3.188
-9RL	-9LL	0.078		0.4052	0.3972	1.094	1.000	3.438
-10RL	-10LL		0.063	0.4678	0.4597	1.219		3.688

1/ Reference dimensions are for design purposes only and are not an inspection requirement.

2/ Includes last full thread engagement.

REQUIREMENTS:

1. Material: Material shall be in accordance with MIL-DTL-8878.

2. Protective treatment: Protective treatment shall be in accordance with MIL-DTL-8878.

3. Heat treatment: Heat treatment shall be in accordance with MIL-DTL-8878.

4. Finish: Finish shall be in accordance with MIL-DTL-8878.

5. Threads: Threads shall be in accordance with FED-STD-H28/20.

6. Tolerances: Unless otherwise specified, tolerances: decimals ± 0.010, angles ± 0.5°.

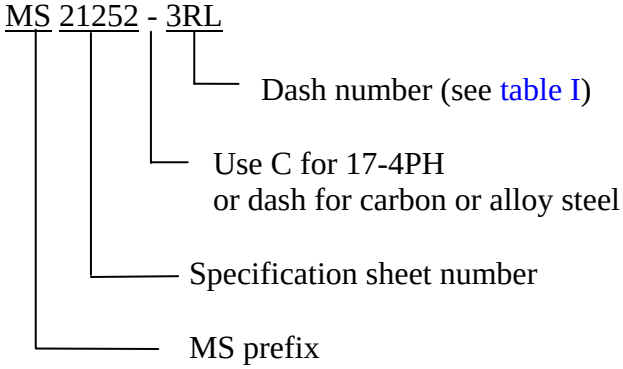
7. Outside diameter (O.D.): O.D. of the "I" dimension may be a flat area.

NOTES:

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

1. The part or identifying number (PIN) consists of the letters MS, the specification sheet number, and a dash number taken from table I. A "C" in lieu of dash indicates 17-4PH; a dash indicates carbon or alloy steel. The first letter following the dash number or letter C indicates direction of thread (left or right hand) and the second letter indicates length (short or long).

EXAMPLE: MS 21252 - 3RL



MS21252C3LS Indicates - Clevis end, 17-4PH, 0.1900 (#10)-32 left hand thread, short.
MS21252-3RL Indicates - Clevis end, steel, 0.1900 (#10)-32 right hand thread, long.

2. Remove burrs and sharp edges. (See MIL-DTL-8878.)

3. Dimensions are in inches.

4. Interpret drawing in accordance with ASME Y14.5M.

5. For clip locking of the turnbuckles, see MS33736 and MIL-DTL-8878.

6. Unless otherwise specified, issues of referenced documents are those in effect at the time of solicitation.

7. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence.

8. MS21252 items can replace AN161 items of like thread size and material.

9. Cutter radius mark, which is used as a clip slot alignment indicator, must be present on this surface.

10. Cutter radius marks are permitted on this surface and shall not be cause for rejection.

11. The parts covered by dash numbers shown on AN161 are canceled after 10 December 1971. Steel, carbon and alloy MS21252 parts are inactive for new design. Use only 17-4 PH stainless steel parts for new design and replacement for comparable alloy and carbon steel MS21252 parts and AN161 parts. The canceled AN161 parts and alloy and carbon steel MS21252 parts cannot replace comparable 17-4 PH stainless parts and should be used until existing stock is depleted. Substitution shall be in accordance with table II.

TABLE II. Substitution table.

PART NUMBERS		
Canceled part AN161	Inactive part MS21252	17.4 PH Stainless steel part
Dash number	Dash number	Dash number
5LS	None	None
5RS	None	None
8LS	2LS	C2LS
8RS	2RS	C2RS
16LS	3LS	C3LS
16RS	3RS	C3RS
16LL	3LL	C3LL
16RL	3RL	C3RL
22LS	4LS	C4LS
22RS	4RS	C4RS
22LL	4LL	C4LL
22RL	4RL	C4RL
32LS	5LS	C5LS
32RS	5RS	C5RS
32LL	5LL	C5LL
32RL	5RL	C5RL
46LS	6LS	C6LS
46RS	6RS	C6RS
46LL	6LL	C6LL
46RL	6RL	C6RL
61LL	8LL	C8LL
61RL	8RL	C8RL
80LL	8LL	C8LL
80RL	8RL	C8RL
125LL	9LL	C9LL
125RL	9RL	C9RL
175LL	10LL	C10LL
175RL	10RL	C10RL

CHANGES FROM PREVIOUS ISSUE: Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Navy - AS
Air Force - 99

Review Activities:
Navy - MC
Air Force - 71

Preparing Activity:
DLA - GS5

(Project 1640-2005-005)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST database at http://assist.daps.dla.mil/.