

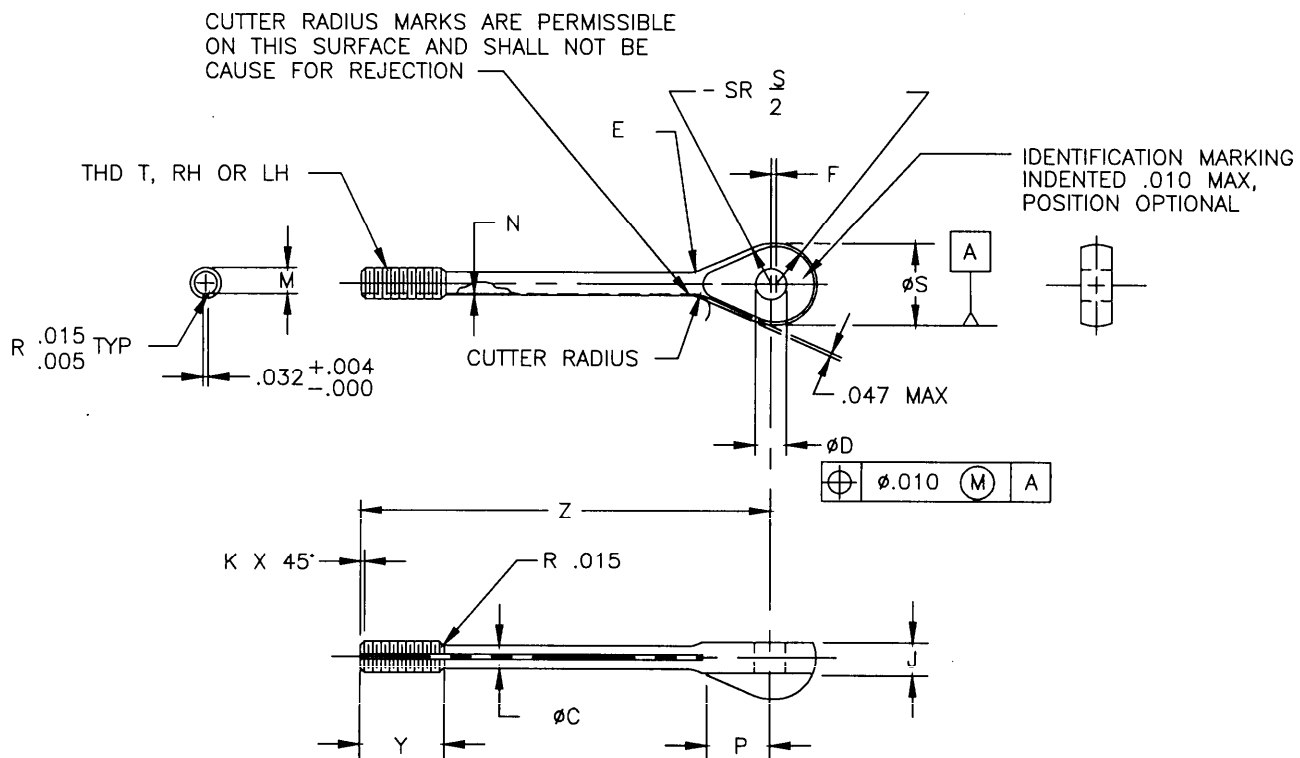
**INCH-POUND**

MS21254M  
 15 August 1997  
 SUPERSEDING  
 MS21253L  
 18 OCTOBER 1983

**MILITARY SPECIFICATION SHEET****CONNECTOR, EYE END, TURNBUCKLE, CLIP LOCKING**

This specification sheet 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 the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation: MIL-DTL-8878.



(M) Entire document revised

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Table I. Dash numbers and dimensions.

DASH NO. DIRECTION OF THREAD		WIRE ROPE DIA REF	MIN BREA K-ING STRE NGTH LB	THREAD T UNF-3A	ØC +.006 -.000	ØD +.002 -.000	E +.031 RAD	F +.010 -.000	J +.005 -.000	K +.000 -.015	M		N MAX	P ±.031	ØS	Y +.047	Z +.031 -.015
											MAX	MIN					
RH	LH	.062 (1/16)	800	.1380 (#6)-40	.094	.190	.125	.031	.125		.1139	.1094	.0096	.325	.375	.375	1.500
-2RS	-2LS																2.375
-2RL	-2LL																
-3RS	-3LS	.093 (3/32)	1600	.1900 (#10)-32	.133	.156	.188	.031	.1638		.1568	.0077	.416	.500	.500	1.625	
-3RL	-3LL															2.500	
-5RS	-5LS															.156 (5/32)	3200
-5RL	-5LL	2.625															
-6RS	-6LS	.187 (3/16)	4600	.3125 (5/16)-24	.243	.313	.250	.281	.047		.2830	.2754	.0064	.527	.688		
-6RL	-6LL															2.750	
-8RL	-8LL															.250 (1/4)	8000
-9RL	-9LL	.281 (9/32)	12500	.4375 (7/16)-20	.362	.438	.359		.375	.063	.4052	.3972	.0056	.831	1.063	1.000	3.375
-10RL	-10LL	.312 (5/16)	17500	.5000 (1/2)-20	.425	.500	.406	.078	.469		.4678	.4597	.0058	.900	1.188		3.625

## REQUIREMENTS:

1. Material: 17-4PH stainless steel in accordance with AMS 5643 or ASTM A564. Steel, carbon or alloy in accordance with MIL-DTL-8878
2. Protective treatment: None for 17-4PH. Cadmium plate, QQ-P-416, Type II, Class 2 for carbon or alloy steel.
3. Heat treatment: Steel, carbon or alloy shall be heat treated to 125 to 145 KSI in accordance with MIL-H-6875. 17-4PH shall be in accordance with MIL-DTL-8878.
4. Finish: Finish in accordance with MIL-DTL-8878.
5. Threads: Threads shall be in accordance with FED-STD-H28/20.
6. Tolerances: Unless otherwise specified, tolerance: decimals  $\pm .010$ , angles  $\pm .5^\circ$ .
7. The OD of the "F" dimension may be a flat area.
8. Part number: Part Identifying Number (PIN) shall consist of the basic MS number, followed by a dash number, C in lieu of dash indicates 17-4PH (dash indicates carbon or alloy steel); first letter following dash number or letter C indicates direction of thread (left or right hand), second letter following dash number indicates length (short or long).

Example of part number: MS21254C3LS- eye, turnbuckle, 17-4PH, .1900 (#10)-32 left hand thread, short.  
MS21254-3RL- eye, turnbuckle, steel, .1900 (#10)-32 right hand thread, long.

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## NOTES:

1. Remove all burrs and sharp edges. (Burrs in thread area which do not interfere are acceptable).
2. Dimensions in inches.
3. Interpret drawing in accordance with ASME Y14.5M.
4. MS21254 items can replace AN165 items of like thread size and material.
5. Use -5 parts with .125 (1/8) inch diameter wire rope, minimum breaking strength 2200 pounds (Ref).
6. Steel, Carbon and Alloy eye end turnbuckles are inactive for new design. 17-4PH stainless eye end turnbuckles shall be used for new design and can be used to replace comparable steel parts..
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. Unless otherwise specified, issues of referenced documents are those in effect at the time of solicitation.
9. MS33736 for locking clip.

## SUBSTITUTION TABLE

The parts covered by dash numbers shown on AN165 are cancelled after 25 November 1963. Use the dash numbers given in the preceding sheet. The cancelled parts cannot replace the new parts and should be used until existing stock is depleted. Use only the MS21254 parts for new design and substitution. Substitution shall be in accordance with this table.

PART NUMBER	
CANCELLED	NEW
AN165	MS21254
DASH NUMBER	DASH NUMBER
8	2
16	3
22	5
32	5
46	6
61	8
80	8
125	9
175	10

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MILITARY INTEREST

Custodians:

Army - AV

Navy - AS

Air Force - 99

Review activities:

Army - ME

Navy - MC

Air Force - 11, 82

Preparing Activity:  
DLA-IS

(Project 5340-2386)