

INCH-POUND

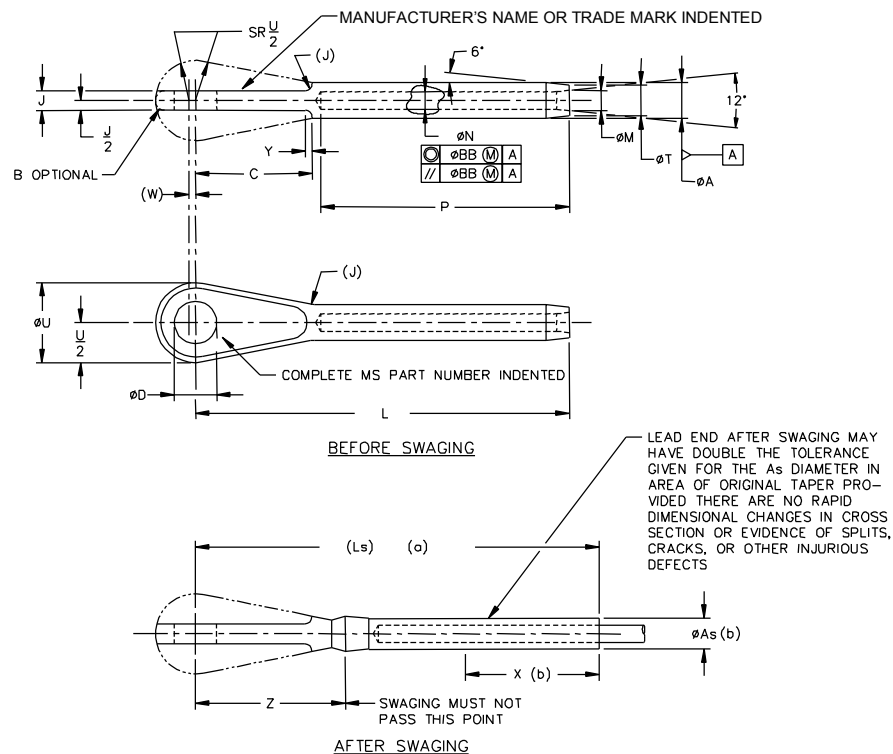
MS20668D
22 FEBRUARY 1999
 MS20668C
 15 August 1997

MILITARY SPECIFICATION SHEET

TERMINAL, WIRE ROPE, SWAGING, EYE END

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-781.



- (a) Reference dimensions are for design purposes only and are not an inspection requirement.
- (b) Swaged terminals shall conform to ϕAs for length X.
- (c) To achieve the minimum breaking strength, for the terminal test only, a galvanized carbon steel wire rope shall be used.

(D) Entire document revised

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MS PART NUMBERS	NOM CABLE DIA. REF	MIN. BREAKING STRENGTH LB (a)	ØA	ØAs	B RAD	C	ØD	J RAD (REF)	L	Ls REF
CORROSION RESISTANT STEEL										
MS20668-2	.062 (1/16)	480	.150	.136	.562	.523		.088	1.631	1.809
MS20668-3	.093 (3/32)	920	.218	.190	.378	.707	.150	.103	2.043	2.160
MS20668-4	.125 (1/8)	2000	.250	.219	.125	.738		.190	2.337	2.593
MS20668-5	.156 (5/32)	2800	.297	.250	.140	.831	.250	.197	2.654	3.029
MS20668-6	.187 (3/16)	4200	.359	.313	.171	.903	.313	.255	3.019	3.187
MS20668-7	.218 (7/32)	5600	.427	.375	.187	1.007	.375	.291	3.382	3.678
MS20668-8	.250 (1/4)	7000	.494	.436	.203	1.133	.436	.307	3.763	4.062
MS20668-9	.281 (9/32)	8000	.563	.500	.203	1.257	.438	.322	4.153	4.512
MS20668-10	.312 (5/16)	9800	.635	.563	.218	1.373	.500	.343	4.546	4.969
MS20668-12	.375 (3/8)	14400	.703	.625	.255	1.688	.500	.375	5.562	5.968
MS20668-14	.437 (7/16)	17500	.781	.688	.275	1.968	.562	.375	6.358	6.867
MS20668-16	.500 (1/2)	22300	.844	.750	.295	2.115	.625	.468	7.323	7.886
MS20668-18	.562 (9/16)	28500	.934	.875	.310	2.625	.750	.562	8.185	8.778
MS20668-20	.625 (5/8)	35000	1.109	1.000	.321	3.062	.875	.657	9.167	9.854
MS20668-24	.750 (3/4)	49500	1.359	1.250	.345	3.093			10.328	10.900
MS20668-28	.875 (7/8)	56500	1.593	1.437	.360	3.515	1.000	.750	11.530	12.290
MS20668-32	1.000 (1)	35400	1.812	1.625	.375	3.937	1.125	.844	13.156	14.062

MS PART NUMBERS	ØM	ØN	P	ØT	ØU +.025 - .010	W (REF)	X MIN	Y	Z MIN	ØRB (FIM)
CORROSION RESISTANT STEEL										
MS20668-2	.090	.078	1.042	.135	.359		.70	.072	.662	
MS20668-3	.119	.109	1.261	.190	.438	.031	.80	.092	.856	
MS20668-4	.154	.141	1.511	.219	.500		1.05	.103	.900	
MS20668-5	.188	.172	1.751	.250	.640		1.29	.131	.997	
MS20668-6	.223	.203	2.011	.313	.781		1.31	.155	1.082	
MS20668-7	.257	.234	2.261	.375	.813	.047	1.55	.187	1.195	.016
MS20668-8	.291	.265	2.511	.438	.968		1.70	.221	1.326	
MS20668-9	.326	.297	2.761	.500	1.109		1.89	.251	1.465	
MS20668-10	.360	.328	3.011	.563	1.218		2.06	.281	1.609	
MS20668-12	.430	.390	3.511	.625	1.500		3.12	.320	2.124	
MS20668-14	.514	.458	4.011	.688	1.750	.063	3.57	.350	2.450	.020
MS20668-16	.584	.531	4.698	.750	1.875		4.31	.406	2.698	
MS20668-18	.653	.594	5.011	.875	2.340		4.51	.450	3.247	
MS20668-20	.722	.656	5.511	1.000	2.730		5.04	.515	3.729	.030
MS20668-24	.860	.781	6.511	1.250	2.750		5.80	.600	3.990	
MS20668-28	1.013	.921	7.166	1.437	3.125	.093	6.31	.675	4.437	.040
MS20668-32	1.151	1.046	8.229	1.625	3.510		7.26	.775	5.000	

(a) TO ACHIEVE THE MINIMUM BREAKING STRENGTH, FOR THE TERMINAL TEST ONLY, A GALVANIZED CARBON STEEL WIRE ROPE SHALL BE USED.

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REQUIREMENTS:

1. Material: In accordance with MIL-DTL-781.
2. Finish: In accordance with MIL-DTL-781.
3. Swage: In accordance with specification MIL-DTL-6117
4. Tolerance: Unless otherwise specified, tolerances: decimals $\pm .010$, angles $\pm 3^\circ$.

NOTES:

1. Dimension in inches.
2. Remove all burrs and sharp edges
3. Interpret drawing in accordance with ASME Y14.5M.
4. In the event of a conflict between the text of this document and the references cited herein the text of this document takes precedence.
5. Unless otherwise specified, issues of referenced documents are those in effect at the time of solicitation.
6. Corrosion resistant steel parts can universally replace carbon and alloy steel parts as shown in the substitution table. Carbon and alloy steel parts are inactive for new design and cannot be substituted for corrosion resistant steel parts.

SUBSTITUTION TABLE

MS PART NUMBERS	
CORROSION RESISTANT STEEL	CARBON STEEL CADMIUM PLATED
MS20668-2	MS20668F2
MS20668-3	MS20668F3
MS20668-4	MS20668F4
MS20668-5	MS20668F5
MS20668-6	MS20668F6
MS20668-7	MS20668F7
MS20668-8	MS20668F8
MS20668-9	MS20668F9
MS20668-10	MS20668F10
MS20668-12	MS20668F12
MS20668-14	MS20668F14
MS20668-16	MS20668F16
MS20668-18	MS20668F18
MS20668-20	MS20668F20
MS20668-24	MS20668F24
MS20668-28	MS20668F28
MS20668-32	MS20668F32

MILITARY INTEREST

Custodians:

Army – CR4
Navy – AS
Air Force – 99

Preparing Activity:

DLA-GS

(Project 1560-0240)

Review:

Air Force – 82
DLA - IS