

**INCH-POUND**

MS20664F  
 10 January 2001  
 SUPERSEDING  
 MS20664E  
 30 October 1999

MILITARY SPECIFICATION SHEET

BALL END, WIRE ROPE, SWAGING, SINGLE SHANK

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, QPL-781.

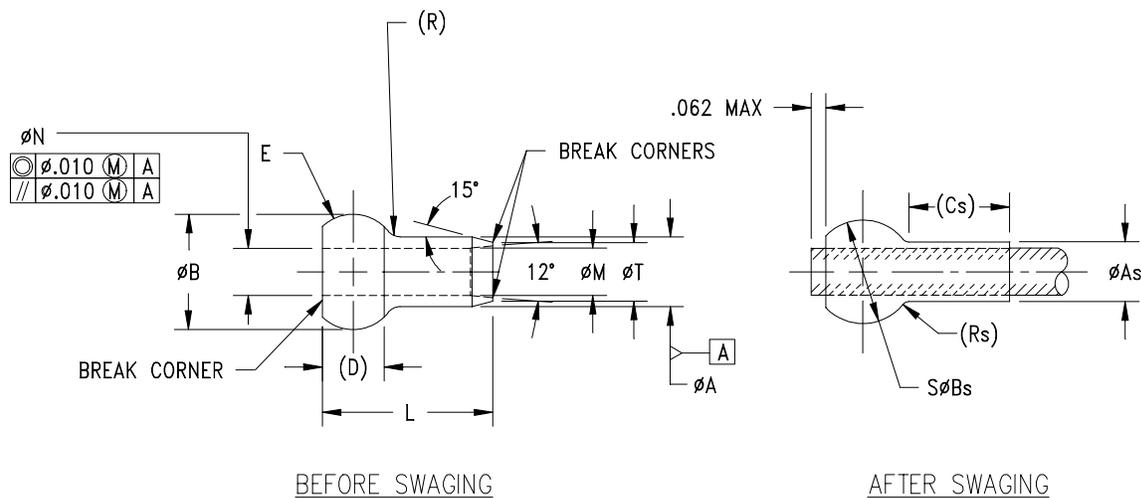


FIGURE 1. Ball end, wire rope, swaging, single shank.

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TABLE I. Part numbers and dimensions.

MS part number	Wire rope diameter		Minimum breaking strength lb	ØA	ØAs	ØB		SØBs spherical		Cs reference		
	Nominal	Minimum										
MS20664C2	1/16	.062	480	.132	+ .000 - .004	.112	+ .000 - .003	.212	+ .000 - .004	.190	+ .000 - .003	.156
MS20664C3	3/32	.093	920	.168		.143		.282		.253		.234
MS20664C4	1/8	.125	2,000	.223	+ .000 - .004	.190	+ .000 - .004	.350	+ .000 - .004	.315	+ .000 - .004	.313
MS20664C5	5/32	.156	2,800	.259		.222		.424		.379		.391
MS20664C6	3/16	.187	4,200	.298	+ .000 - .005	.255	+ .000 - .005	.492	+ .000 - .005	.442	+ .000 - .005	.469
MS20664C7	7/32	.218	5,600	.352		.302		.560		.505		.547
MS20664C8	1/4	.250	7,000	.406	+ .000 - .007	.348	+ .000 - .007	.629	+ .000 - .007	.567	+ .000 - .007	.625
MS20664C9	9/32	.281	8,000	.444		.382		.699		.632		.750
MS20664C10	5/16	.312	9,800	.480		.413		.768		.694		.813

TABLE I. Part numbers and dimensions - Continued.

MS part number	D reference		E radius reference	L ±.005	ØM +.010 -.000	ØN		R radius reference	Rs radius reference	ØT +.000 -.010
MS20664C2	.114	+ .000 - .003	.0825	.2685	.079	.073	+ .004 - .000	.028	.014	.109
MS20664C3	.152	+ .000 - .004	.110	.384	.114	.104		.037	.019	.141
MS20664C4	.1895	+ .000 - .005	.137	.500	.152	.139	+ .005 - .000	.046	.023	.188
MS20664C5	.2275		.165	.616	.185	.169		.056	.028	.219
MS20664C6	.2645	+ .000 - .005	.192	.730	.221	.201	+ .005 - .000	.065	.033	.250
MS20664C7	.3025		.220	.846	1/	.233		.075	.038	.297
MS20664C8	.3395	.247	.962	1/		.264	.084	.042	.344	
MS20664C9	.3775	.275	1.078		1/	.297	.094	.046	.375	
MS20664C10	.4145	.302	1.193			.328	.103	.046	.406	

1/ No tapered bellmouth on -7, -8, -9, -10.

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

## REQUIREMENTS:

1. Material: Material shall be in accordance with MIL-DTL-781.
2. Finish: Finish shall be in accordance with MIL-DTL-781.
3. Swage: Swage shall be in accordance with MIL-DTL-6117.
4. Tolerances: Unless otherwise specified, tolerances: decimals ± .010, angles ± 3°.

## NOTES:

1. Dimensions are in inches.
2. Remove all burrs and sharp edges. (See procurement specification for definition.)
3. Interpret drawing in accordance with ASME Y14.5M.

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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. MS20664 and AN664 parts identified by the same dash numbers are universally, functionally and dimensionally interchangeable.

7. Corrosion resistant steel parts shall be used for new design and can be universally substituted for carbon and alloy steel parts as shown in table II. Carbon and alloy steel parts cannot be substituted for corrosion resistant steel parts.

8. Carbon and alloy steel parts are inactive for new design.

TABLE II. Substitution table.

MS PART NUMBERS	
Corrosion resistant steel	Carbon steel, cadmium plate
MS20664C2	MS20664-2
MS20664C3	MS20664-3
MS20664C4	MS20664-4
MS20664C5	MS20664-5
MS20664C6	MS20664-6
MS20664C7	MS20664-7
MS20664C8	MS20664-8
MS20664C9	MS20664-9
MS20664C10	MS20664-10

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.

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