

INCH-POUND

MS20664E

30 October 1999

Superseding

MS20664D

22 FEBRUARY 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.

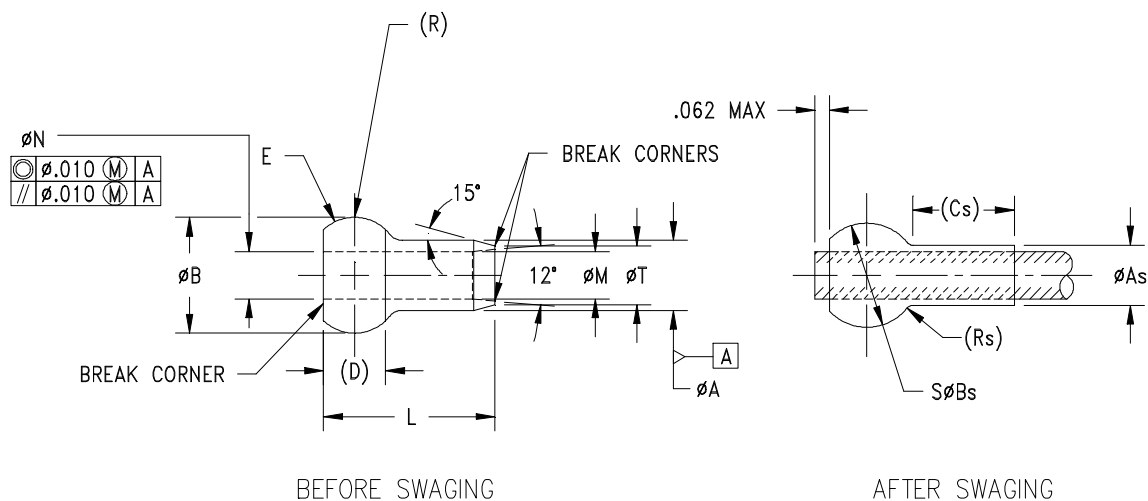


FIGURE 1. Ball end, wire rope, swaging, single shank.

(E) Denotes change(s)

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TABLE I. Dimensions and dash numbers.

MS PART NO.	CABLE DIA		MINIMUM BREAKING STRENGTH	ØA		ØAs		ØB		SØB <sub>s</sub> SPHERICAL		C <sub>s</sub> REF
CORROSION RES. STEEL	NOM	MIN										
MS20664C2	1/16	.062	480	.132	+.000 - .004	.112	+.000	.212	+.000 - .004	.190	+.000	.156
MS20664C3	3/32	.093	920	.168		.143	-.003	.282		.253	-.003	.234
MS20664C4	1/8	.125	2000	.223		.190		.350		.315		.313
MS20664C5	5/32	.156	2800	.259		.222	+.000 - .004	.424		.379	+.000 - .004	.391
MS20664C6	3/16	.187	4200	.298	+.000 - .005	.255		.492	+.000 - .005	.442		.469
MS20664C7	7/32	.218	5600	.352		.302	+.000	.560		.505	+.000	.547
MS20664C8	1/4	.250	7000	.406		.348	-.005	.629		.567	-.005	.625
MS20664C9	9/32	.281	8000	.444		.382	+.000	.699		.632	+.000	.750
MS20664C10	5/16	.312	9800	.480		.413	- .007	.768		.694	- .007	.813

TABLE I. Dimensions and dash numbers - Continued.

E

MS PART NO.	D REF		E RAD REF	L ±.005	(a) ØM +.010 -.000	ØN		R RAD REF	Rs RAD REF	ØT +.000 -.010
CORROSION RES. STEEL										
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		.046	.023	.188
MS20664C5	.2275		.165	.616	.185	.169		.056	.028	.219
MS20664C6	.2645		.192	.730	.221	.201	.065	.033	.250	
MS20664C7	.3025		.220	.846	(a)	.233	.075	.038	.297	
MS20664C8	.3395		.247	.962	(a)	.264	+ .005 - .000	.084	.042	.344
MS20664C9	.3775		.275	1.078	(a)	.297		.094	.046	.375
MS20664C10	.4145		.302	1.193	(a)	.328		.103	.046	.406

- (a) NO TAPERED BELLMOUTH ON -7, -8, -9, -10.  
 (b) REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT AN INSPECTION REQUIREMENT.

## 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  $\pm 3^\circ$ .

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## NOTES:

1. Dimensions in inches.
2. Remove all burrs and sharp edges (see procurement specification for definition).
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. MS20664 and AN664 parts identifies 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 the substitution table. Carbon and alloy steel parts cannot be substituted for corrosion resistant steel parts.
8. Carbon and alloy steel parts are inactive for new design.

SUBSTITUTION TABLE

MS PART NO.	
CARBON STEEL CAD PLATE	CORROSION RESISTANT STEEL
MS20664-2	MS20664C2
MS20664-3	MS20664C3
MS20664-4	MS20664C4
MS20664-5	MS20664C5
MS20664-6	MS20664C6
MS20664-7	MS20664C7
MS20664-8	MS20664C8
MS20664-9	MS20664C9
MS20664-10	MS20664C10

## MILITARY INTEREST

## Custodians:

Army – CR4  
Navy - AS  
Air Force - 99

Preparing activity:  
DLA - GS

(Project 1560-0262)

## Review activity:

Army - MI  
Air Force - 82