

INCH-POUND

MS20664G
w/AMENDMENT 1
3 January 2011
SUPERSEDING
MS20664G
5 November 2001

DETAIL 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, MIL-DTL-781, and QPL-781.

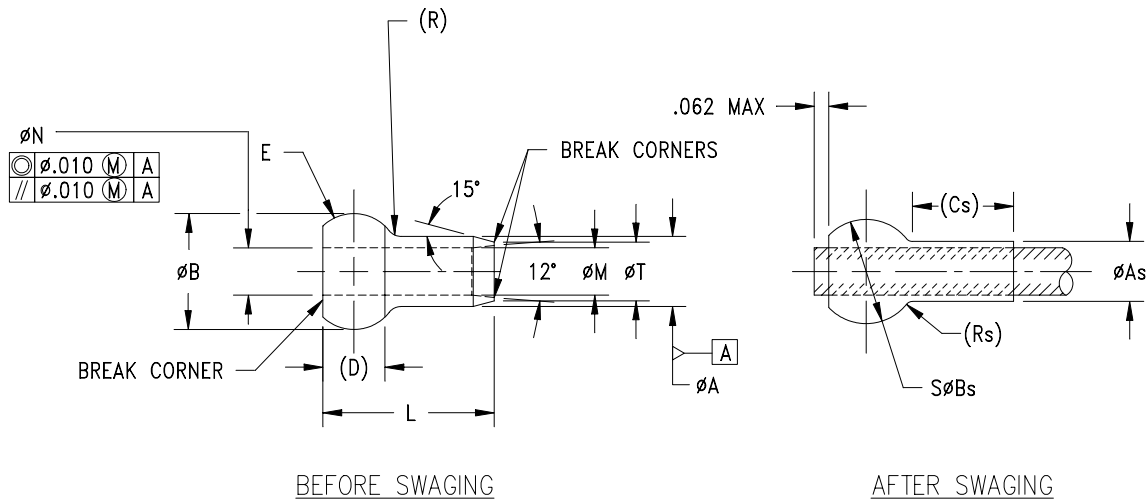


FIGURE 1. Ball end, wire rope, swaging, single shank.

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TABLE I. Dash numbers and dimensions.

Dash number	Wire rope diameter		Minimum breaking strength <u>1/</u> lbs.	ØA	ØAs		ØB		SØBs spherical		Cs reference	
	Nominal	Minimum										
-2	1/16	.062	480	.132	+.000 -.004	.112	+.000	.212	+.000 -.004	.190	+.000	.156
-3	3/32	.093	920	.168		.143	-.003	.282		.253	-.003	.234
-4	1/8	.125	2,000	.223	+.000 -.004	.190	+.000	.350	+.000 -.004	.315	+.000	.313
-5	5/32	.156	2,800	.259		.222	-.004	.424		.379	-.004	.391
-6	3/16	.187	4,200	.298	+.000 -.005	.255	+.000	.492	+.000 -.005	.442	+.000	.469
-7	7/32	.218	5,600	.352		.302	-.005	.560		.505	-.005	.547
-8	1/4	.250	7,000	.406	+.000 -.005	.348	+.000	.629	+.000 -.005	.567	+.000	.625
-9	9/32	.281	8,000	.444		.382	-.007	.699		.632	-.007	.750
-10	5/16	.312	9,800	.480	.413	+.000	.768	.694	+.000	.813		

TABLE I. Dash numbers and dimensions - Continued.

Dash number	D reference		E radius reference	L ±.005	ØM +.010 -.000	ØN		R radius reference	Rs radius reference	ØT +.000 -.010
-2	.114	+.000 -.003	.0825	.2685	.079	.073	+.004 -.000	.028	.014	.109
-3	.152	+.000 -.004	.110	.384	.114	.104		.037	.019	.141
-4	.1895	+.000 -.005	.137	.500	.152	.139	+.005 -.000	.046	.023	.188
-5	.2275		.165	.616	.185	.169		.056	.028	.219
-6	.2645		.192	.730	.221	.201		.065	.033	.250
-7	.3025		.220	.846	2/ 2/	.233		.075	.038	.297
-8	.3395		.247	.962		.264		.084	.042	.344
-9	.3775	.275	1.078	.297	.094	.046	.375			
-10	.4145	.302	1.193	.328	.103	.046	.406			

1/ To achieve the minimum breaking strength, for the terminal test only, a galvanized carbon steel wire rope shall be used.

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

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

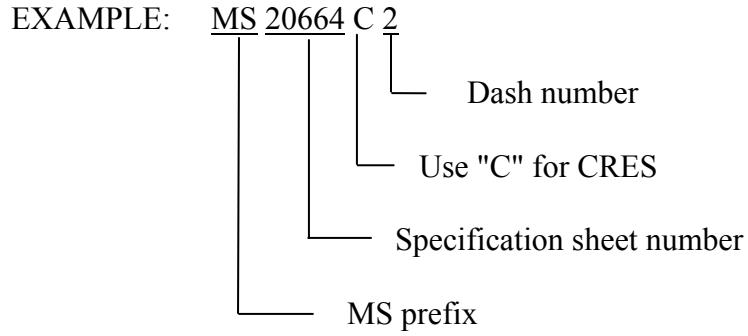
REQUIREMENTS:

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 ±0.010, angles ±3°.

NOTES:

1. The part or identifying number (PIN) consists of the letters MS, the specification sheet number, the letter "C" for corrosion resistant steel (CRES), and a dash number taken from table I.

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2. Dimensions are in inches.
3. Remove burrs and sharp edges. (See MIL-DTL-781.)
4. Interpret drawing in accordance with ASME Y14.5.
5. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence.
6. Unless otherwise specified, issues of referenced documents are those in effect at the time of solicitation.
7. MS20664 and AN664 parts identified by the same dash numbers are universally, functionally and dimensionally interchangeable.
8. 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.
9. 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

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AMENDMENT NOTATIONS: The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Custodians:

Army - CR4
Navy - AS
Air Force - 99
DLA - GS

Preparing Activity:

DLA - GS5

(Project 1640-2010-002)

Review Activities:

Army - MI
Air Force - 71

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 <https://assist.daps.dla.mil/>.