

OPTIONAL

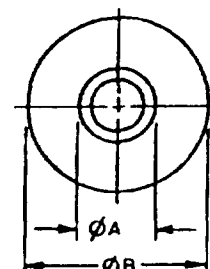


TABLE I

NOMINAL SIZE		.061		.089		.123		.146		.188	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
BODY DIAMETER	ØA	.058	.061	.085	.089	.118	.123	.141	.146	.182	.188
HEAD DIAMETER	ØB	.104	.114	.142	.152	.213	.223	.229	.239	.306	.318
HEAD THICKNESS	H	.015	.019	.020	.026	.030	.038	.035	.045	.055	.065
STRAIGHT HOLE	D	.039	.044	.062	.068	.084	.090	.100	.107	.134	.141
TAPER AT BOTTOM OF HOLE	ØE1	.032		.050		.079		.085		.110	
TAPER AT END OF RIVET	ØE2	.042	.046	.064	.068	.091	.095	.106	.112	.139	.145
FILLET	F		.008		.012		.016		.020		.025
HOLE DEPTH (TAPER)	C	.042		.057		.082		.104		.135	
HOLE DEPTH (STRAIGHT)	NOM C	.046		.064		.094		.126		.155	
APPROX RADIUS	R	.160		.220		.310		.270		.250	
CLINCH ALLOWANCE 1/		.037		.064		.074		.089		.120	

1/ FOR REFERENCE ONLY. OPTIMUM VALUES VARY WITH CHARACTERISTICS OF MATERIALS TO BE RIVETED, AND SHOULD BE DETERMINED BY ACTUAL TEST IF POSSIBLE.

## REQUIREMENTS:

1. MATERIAL. STEEL, CARBON, COMPOSITION 1005 THRU 1022 (UNS G10050 THRU UNS G10200), IN ACCORDANCE WITH ASTM A29/A29M. BRASS 1/8 TO 1/4 HARD, COMPOSITION 260 OR 270, (UNS C26000 OR UNS C27000), IN ACCORDANCE WITH QQ-W-321. ALUMINUM ALLOY, COMPOSITION 2117-T4 OR 5056-H32, (UNS A92117 OR UNS A95056), IN ACCORDANCE WITH QQ-A-430. NICKEL-COPPER ALLOY (MONEL), CLASS A, NO. 0 TEMPER, (UNS N04400), IN ACCORDANCE WITH QQ-N-281. COPPER, TYPE S, (UNS C10200), IN ACCORDANCE WITH QQ-W-343. CORROSION RESISTANT STEEL, CLASS 302, 304, OR 305 (UNS S30200, UNS S30400, OR UNS S30500) IN ACCORDANCE WITH QQ-S-763.
2. PROTECTIVE COATING: STEEL, CARBON, CADMIUM PLATED, TYPE II, CLASS 2, IN ACCORDANCE WITH QQ-P-416. BRASS, BLACK (OXIDE) FINISH, IN ACCORDANCE WITH MIL-F-495, OR NICKEL PLATING, CLASS 1, FULLY BRIGHT, 0.0002 THICK, IN ACCORDANCE WITH QQ-N-290. ALUMINUM ALLOY, COMPOSITIONS 2117-T4 AND 5056-H32 ANODIZED IN ACCORDANCE WITH MIL-A-8625 OR GIVEN A CHEMICAL FILM AS SPECIFIED IN MIL-C-5541. CORROSION RESISTANT STEEL, PASSIVATED IN ACCORDANCE WITH QQ-P-35.
3. DOUBLE SHEAR STRENGTH. CARBON STEEL RIVETS 32,000 PSI MIN  
BRASS RIVETS 35,000 PSI MIN  
ALUMINUM RIVETS (2117) 26,000 PSI MIN  
ALUMINUM RIVETS (5056) 24,000 PSI MIN  
NICKEL ALLOY (MONEL) RIVETS 49,000 PSI MIN  
COPPER RIVETS 24,000 PSI MIN  
CORROSION RESISTANT STEEL RIVETS 65,000 PSI MIN
4. TOLERANCES: TOLERANCES ARE ±.005 FOR DECIMAL DIMENSIONS, UNLESS OTHERWISE SPECIFIED. LENGTH TOLERANCES SHALL BE IN ACCORDANCE WITH ANSI B18.7.

(J) DENOTES CHANGE

INCH-POUND

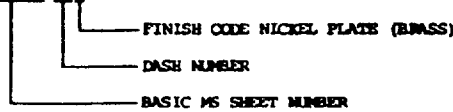
PREPARING ACTIVITY: ARMY-AR CUSTODIANS: ARMY-AR NAVY-OS AIR FORCE-99 DLA- REVIEW: ARMY-EA, GL MI AIR FORCE-82 DLA-S NSA-NS USER: ARMY-ER, ME NAVY-MC PROJECT NUMBER: 5320-0779	MILITARY SPECIFICATION SHEET TITLE RIVET - TUBULAR, OVAL HEAD	SPECIFICATION SHEET NUMBER MS16535J 26 MAY 92 SUPERSEDING MS16535H 21 NOV 89 AMSC- N/A FSC- 5320
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.		Page 1 of 3

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODDS SPECIFIED IN THE SOLICITATION: FF-R-556

Form Approved  
OMB No. 0704-0188

5. PART NUMBER. THE PART NUMBER SHALL CONSIST OF THE BASIC MS SHEET NUMBER, FOLLOWED BY A DASH NUMBER TAKEN FROM TABLE II. ADD "N" AS A SUFFIX TO DASH NUMBER FOR NICKEL PLATING TO BRASS MATERIAL. ADD "A" IN LIEU OF DASH FOR ALUMINUM ALLOY, COMPOSITION 5056-H32, (UNS A95056).

EXAMPLE : MS16535-11N



EXAMPLE:

MS16535-1	RIVET, CARBON STEEL, CADMIUM PLATED.
MS16535-11	RIVET, BRASS, BLACK (OXIDE) FINISH.
MS16535-11N	RIVET, BRASS, NICKEL PLATE FINISH.
MS16535-21	RIVET, ALUMINUM ALLOY, COMPOSITION NO. 2117-T4, (UNS A92117).
MS16535A21	RIVET, ALUMINUM ALLOY, COMPOSITION NO. 5056-H32, (UNS A95056).
MS16535-424	RIVET, CORROSION RESISTANT STEEL PASSIVATED

NOTES:

- DIMENSIONS. ALL DIMENSIONS ARE IN INCHES.
- IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
- REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.
- ADDITIONAL SUPERSESSION DATA - SUPERSEDES: MS20450 IN PART.

PREPARING ACTMITY: ARMY-AR CUSTODIANS: ARMY-AR NAVY-OS AIR FORCE-99 DLA- REVIEW: ARMY-EA, GL MI AIR FORCE-82 DLA-IS NSA-NS USER: ARMY-ER ME NAVY-MC PROJECT NUMBER: 5320-0779	MILITARY SPECIFICATION SHEET TITLE RIVET-TUBULAR OVAL HEAD	SPECIFICATION SHEET NUMBER MS16535J 26 MAY 92 SUPERSEDING MS16535H 21 NOV 89 AMSC- N/A FSC-5320
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THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE

