

FED. SUPPLY CLASS

5320

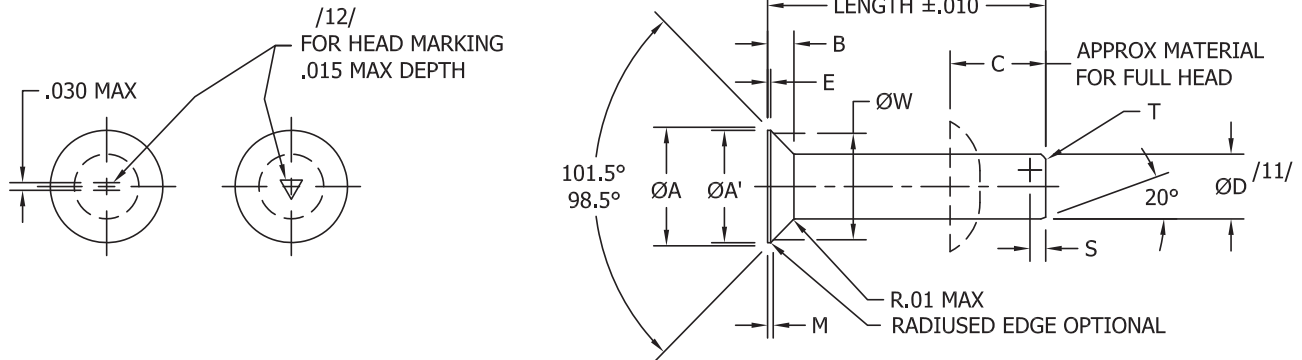


TABLE I – DIMENSIONS

NOM DIA	ØA MAX /8/	ØA' MIN /8/	B MAX /8/	C	ØD		E MAX	M GAGE PROTRUSION /13/		W GAGE DIAMETER /13/		S MAX	T RAD MAX
					MAX	MIN		MAX	MIN	MAX	MIN		
1/16	.1346	.0898	.0317	.094	.065	.061	.008	.0165	.0105	.0842	.0840	.016	.019
3/32	.1900	.1548	.0418	.140	.097	.093		.0179	.0118	.1462	.1460	.023	.029
1/8	.2360	.2006	.0483	.187	.128	.124		.0191	.0130	.1892	.1890	.031	.039
5/32	.2976	.2566	.0614	.234	.159	.155	.010	.0226	.0163	.2422	.2420	.039	.049
3/16	.3654	.3234	.0769	.281	.190	.186		.0252	.0185	.3038	.3036	.047	.059
1/4	.4890	.4412	.1034	.375	.253	.249		.0289	.0220	.4182	.4180	.062	.078
5/16	.5772	.5288	.1147	.469	.315	.311	.012	.0315	.0245	.5000	.4998	.078	.098
3/8	.7074	.6586	.1436	.562	.378	.374		.0341	.0270	.6240	.6238	.094	.117

MATERIAL: CARBON STEEL, AIR 4127, C1010-C1015, ANNEALED AFTER HEADING;
CORROSION-RESISTANT STEEL, AIR 4127, 300 SERIES, CONDITION A, ANNEALED AFTER HEADING BY HEATING AT 1,950 TO 2,000 °F FOR 5 MINUTES, FOLLOWED BY WATER QUENCH;
NICKEL-COPPER, QQ-N-281, ANNEALED.
COPPER, A-A-59511, ANNEALED.

FINISH: CARBON STEEL; CADMIUM PLATE IN ACCORDANCE WITH AMS-QQ-P-416, TYPE II, CLASS 3, OR BLACK OXIDE COATING PER MIL-DTL-13924, CLASS 1.
NICKEL-COPPER; WHEN SPECIFIED, CADMIUM PLATE IN ACCORDANCE WITH AMS-QQ-P-416, TYPE II, CLASS 3.

SHEAR STRENGTH: CORROSION-RESISTANT STEEL, 65,000 PSI TO 85,000 PSI.
CARBON STEEL, 38,000 PSI TO 48,000 PSI.
NICKEL-COPPER, 49,000 PSI TO 59,000 PSI.
COPPER, 23,000 PSI TO 27,000 PSI.

② COMPLETELY REVISED

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS20427. PART NUMBERS REMAIN MS20427.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NONE	② RIVET, SOLID, 100° COUNTERSUNK HEAD, CARBON STEEL, CORROSION-RESISTANT STEEL, NICKEL-COPPER AND COPPER	CLASSIFICATION PART STANDARD
		MS20427 SHEET 1 OF 3

CODE: PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER TAKEN FROM TABLE II.

EXAMPLE OF PART NUMBER: MS20427-2X2 = RIVET, CARBON STEEL, BLACK OXIDE COATING, 1/16 DIAMETER 1/8 LONG.
MS20427-2C2 = RIVET, CARBON STEEL, CADMIUM PLATED, 1/16 DIAMETER, 1/8 LONG.
MS20427F2-2 = RIVET, CORROSION-RESISTANT STEEL, 1/16 DIAMETER, 1/8 LONG.
MS20427M2-2 = RIVET, NICKEL-COPPER, 1/16 DIAMETER, 1/8 LONG.
MS20427C2-2 = RIVET, COPPER, 1/16 DIAMETER, 1/8 LONG.
MS20427M2C2 = RIVET, NICKEL-COPPER, CADMIUM PLATED, 1/16 DIAMETER, 1/8 LONG.
MS20427M3-3-5 = RIVET, NICKEL-COPPER, 3/32 DIAMETER, 7/32 LONG.

FOR PART NUMBER OF RIVET LENGTH NOT LISTED ON SHEET 2, SHOW 1/16 INCREMENT REQUIRED. 1/32 INCREMENTS MAY BE OBTAINED BY ADDING -5 AFTER LAST DASH NUMBER.

NOTES:

- (1) DIMENSIONS IN INCHES.
- (2) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (3) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (4) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTABLE FOR USE UNTIL DEPLETION.
- (5) DIMENSIONS APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (6) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- (7) TOLERANCES UNLESS OTHERWISE SPECIFIED: ANGLES $\pm 5^\circ$.
- /8/ DIMENSIONS $\emptyset A$, $\emptyset A'$ AND B ARE INCLUDED FOR ENGINEERING REFERENCE PURPOSE ONLY AND ARE NOT TO BE USED FOR INSPECTION PURPOSE. VALUES $\emptyset A$, $\emptyset A'$ AND B ARE CALCULATED LIMITS RESULTING FROM TOLERANCES ON $\emptyset W$, M, E AND HEAD ANGLE.
- (9) MS20427 SUPERSEDES AN427 IN PART.
- (10) INTERCHANGEABILITY RELATION WITH AN427 RIVETS: MS20427 RIVETS AND AN427 RIVETS OF LIKE DASH NUMBER ARE UNIVERSALLY, FUNCTIONALLY, AND DIMENSIONALLY INTERCHANGEABLE.
- /11/ SHANK DIAMETER TO BE MEASURED WITHIN .10 INCH OF BASE HEAD.
- /12/ RECESSED TRIANGLE FOR MILD STEEL RIVETS ONLY, RECESSED DASH FOR CORROSION-RESISTANT STEEL RIVETS ONLY. NO HEAD MARKING REQUIREMENT FOR COPPER OR NICKEL-COPPER RIVETS.
- /13/ FLUSHNESS GAGE PROTRUSION SHALL BE INSPECTED PER NAS9800.
- (14) THE CONICAL SURFACE OF THE HEAD SHALL BE CONCENTRIC WITH THE SHANK OF THE RIVET WITHIN .005 TOTAL RUNOUT.
- (15) HEAD COCKING ANGLE RELATIVE TO AXIS OF RIVET $1/2^\circ$ MAXIMUM.
- (16) RIVETS MAY BE FURNISHED WITH PLAIN ENDS, OR A RADIUS TO T DIMENSION OR A 20° CHAMFER TO S DIMENSION.
- (17) RIVETS SHALL DRIVE COLD SATISFACTORILY WITH A FULL HEAD FREE FROM CRACKS.
- (18) RIVETS MUST BE TRUE TO FORM, CONCENTRIC, AND FREE FROM INJURIOUS SCALE, FINS, SEAMS AND ALL OTHER INJURIOUS DEFECTS. WHEN SPECIFIED, ADD "C" IN LIEU OF DASH FOR CADMIUM PLATED NICKEL-COPPER ALLOY RIVETS.

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REVISION

2

NAS20427

SHEET 2



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