

INCH-POUND

A-A-59431
20 APRIL 1999

COMMERCIAL ITEM DESCRIPTION

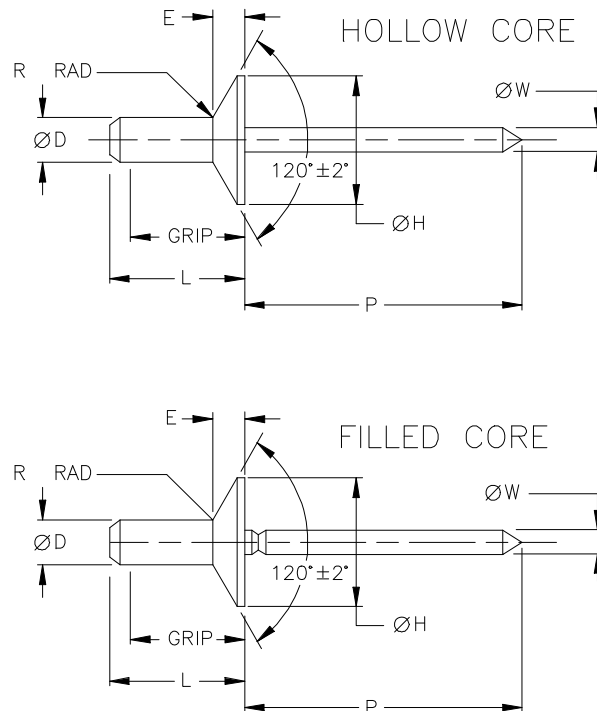
RIVETS, BLIND, NONSTRUCTURAL, RETAINED MANDREL,
CLOSED-END, 120° COUNTERSUNK HEAD, ALUMINUM ALLOY

This General Services Administration has authorized the use of this Commercial Item Description for all Federal agencies.

1. SCOPE: This Commercial Item Description (CID) covers the requirements for pull-stem expandable blind rivets. These rivets are intended for rapid and permanent non-structural fastening applications in which access is available to one side only.

2. SALIENT CHARACTERISTICS:

2.1 Blind rivets furnished under this CID shall conform to the materials, strengths, and dimensions as specified in Table I, II, and III and as shown in Figure 1 below.

FIGURE 1. RIVETS

BENEFICIAL COMMENTS, RECOMMENDATIONS, ADDITIONS, DELETIONS, CLARIFICATIONS, ETC., AND DATA WHICH MAY IMPROVE THIS DOCUMENT SHOULD BE SENT TO: DEFENSE INDUSTRIAL SUPPLY CENTER, ATTN: DISC-AEEB, 700 ROBBINS AVENUE, PHILADELPHIA, PA 19111-5096.

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TABLE I. MATERIAL COMBINATION SYMBOLS AND STRENGTHS

SYMBOL	MATERIAL COMBINATION	RIVET DIA	MINIMUM SHEAR LOAD LBS	MINIMUM TENSION LOAD LBS
	HOLLOW CORE			
A	Body: 5056 Al Alloy (UNS A95056)	.125	305	385
	Mandrel: 1012-1025 Steel (UNS G10120-G10250)	.156	430	605
	1045-1075 Steel (UNS G10450-G10750)	.188	575	840
	FILLED CORE			
A	Body: 5056 Al Alloy (UNS A95056)	.125	480	280
	Mandrel: 1012-1025 Steel (UNS G10120-G10250)	.156	590	480
	1045-1075 Steel (UNS G10450-G10750)	.188	890	840

TABLE II. BASIC DIMENSIONS

NOM DIA	BASIC DIMENSIONS					RECOMMENDED HOLE SIZE
	ØD	ØH	E REF	R MAX	ØW REF	
.125	.128	.245	.035	.025	.064	.129-.133
	.124	.221				
.156	.159	.327	.050	.025	.086	.160-.164
	.155	.297				
.188	.191	.395	.060	.025	.104	.192-.196
	.186	.355				

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ABLE III. DASH NUMBERS AND DIMENSIONS

MATERIAL COMBINATIONS		L	P MIN	RECOMMENDED GRIP RANGE
HOLLOW CORE A	FILLED CORE A			
A401H	A401F	.257-.297	1.00	.031-.062
A402H	A402F	.321-.361		.063-.125
A403H	A403F	.382-.422		.126-.187
A404H		.446-.486		.188-.250
A405H		.508-.548		.251-.312
A502H	A502F	.350-.390	1.06	.063-.125
A503H	A503F	.412-.452		.126-.187
A505H	A505F	.538-.578		.251-.312
A602H	A602F	.375-.415	1.06	.063-.125
A604H	A604F	.500-.540		.126-.250
A606H	A606F	.625-.665		.251-.375

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2.2 Materials shall be of the type and grade specified in Table I.

2.3 Workmanship. Rivets shall be of uniform quality and free from injurious seams and other injurious defects.

2.4 Single shear load. The shear test shall be performed in accordance with Test Method 20 of NASM1312, or equivalent and shall conform to the data specified in Table I.

2.5 Tension load. The tension test shall be performed in accordance with Test Method 8 of NASM1312, or equivalent and shall conform to the data specified in Table I.

2.6 Packaging requirements The requirements for packaging shall be in accordance with ASTM D3951.

3. QUALITY ASSURANCE PROVISIONS.

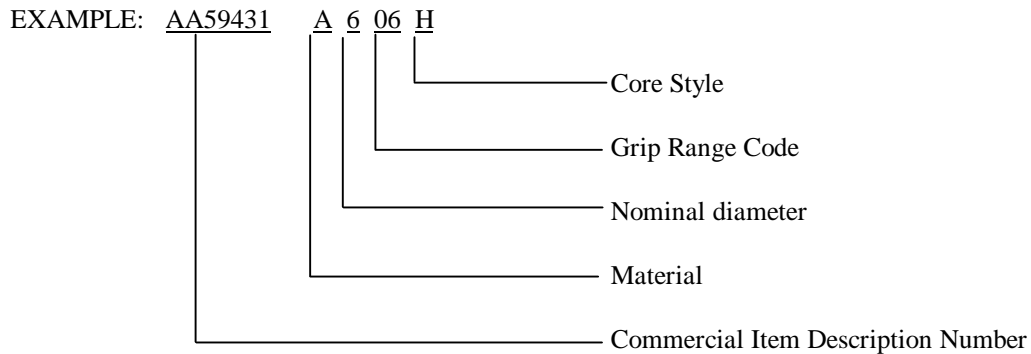
3.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and the quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

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4. NOTES

4.1 All dimensions are in inches.

4.2 The part number shall consist of the basic Commercial Item Description Number followed by a dash number from Table III. The dash number consists of a material combination symbol from Table I, a nominal body diameter size code in thirty-seconds of an inch from Table II, a maximum grip code in sixteenths of an inch from Table III, and a core style code from Table III.



AA59431A606H Indicates -

Rivet, blind, nonstructural, retained mandrel, closed-end, 120° countersunk head, 5056 (UNS A95056) aluminum alloy body, C1012-C1025 (UNS G10120-G10250) or C1045-C1075 (UNS G10450-G10750) steel mandrel; nominal body diameter size, .188; grip range, .251-.375, style; hollow core.

Military Interests:

Custodians:

Army - AR
Navy - AS
Air Force - 99

Preparing Activity:
DLA-IS

Review Activities:

Army - AV, MI
Air Force - 11, 82
National Security Agency-NS

(Project No. 5320-0960)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3 and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6 and 7.
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I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER
A-A-59431

2. DOCUMENT DATE (YYMMDD)
990420

3. DOCUMENT TITLE:

RIVETS, BLIND, NONSTRUCTURAL, RETAINED MANDREL, CLOSED-END, 120° COUNTERSUNK HEAD, ALUMINUM ALLOY

4. NATURE OF CHANGE

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)

- (1) Commercial
(2) AUTOVON (If applicable)

7. DATE SUBMITTED (YYMMDD)

8. PREPARING ACTIVITY DLA-IS

a. NAME

Emelia Altomari

b. TELEPHONE (Include Area Code)

- (1) Commercial (215) 697-6827
(2) (DSN) 442-6827

c. ADDRESS (Include Zip Code)

Defense Industrial Supply Center
700 Robbins Avenue
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Philadelphia, PA 19111-5096

IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:

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Falls Church, VA 22041
TELEPHONE (703) 756-2340 AUTOVON 289-2340