

INCH-POUND

A-A-59430
20 April 1999

COMMERCIAL ITEM DESCRIPTION

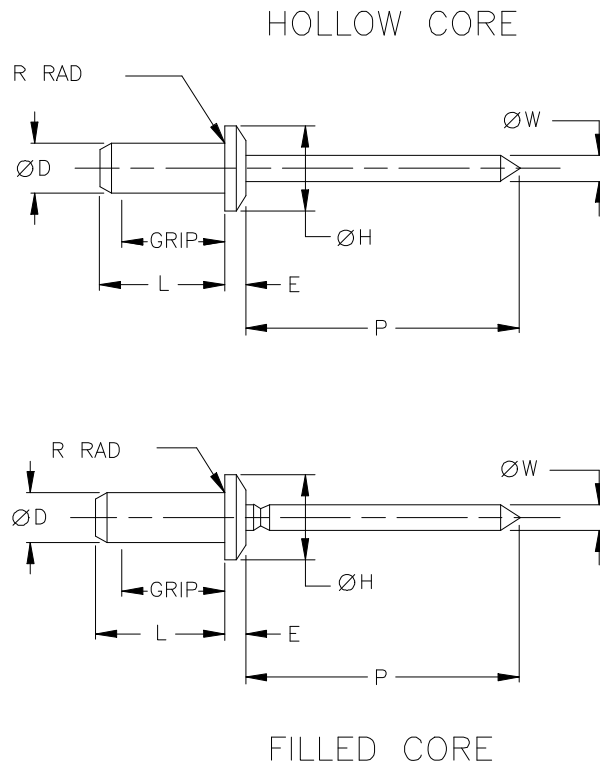
RIVETS, BLIND, NONSTRUCTURAL, RETAINED MANDREL,
CLOSED-END, DOMED HEAD, ALUMINUM ALLOY

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
		.156	430	605
	Mandrel: 1012-1025 Steel (UNS G10120-G10250)	.188	575	840
	1045-1075 Steel (UNS G10450-G10750)	.250	900	1100
C	Body: 1100 Al Alloy (UNS A91100)	.125	105	150
		.156	155	240
	Mandrel: 2024 Al Alloy (UNS A92024)	.188	220	310
	FILLED CORE			
A	Body: 5056 Al Alloy (UNS A95056)	.125	480	280
		.156	590	480
	Mandrel: 1012-1025 Steel (UNS G10120-G10250)	.188	890	840
	1045-1075 Steel (UNS G10450-G10750)			

TABLE II. BASIC DIMENSIONS

NOM DIA	BASIC DIMENSIONS						RECOMMENDED HOLE SIZE
	ØD	ØH	E REF	R MAX	ØW REF		
					MAT'L CODE		
					A	C	
.125	.128	.248	.051	.025	.064	.072	.129-.133
	.124	.224	.031				
.156	.159	.327	.066	.025	.086	.090	.160-.164
	.154	.297	.046				
.188	.191	.393	.081	.025	.104	.108	.192-.196
	.186	.357	.061				
.250	.255	.525	.099	.025	.144	-	.257-.261
	.249	.475	.079				

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TABLE III. DASH NUMBERS AND DIMENSIONS

MATERIAL COMBINATIONS					
HOLLOW CORE		FILLED CORE			
A	C	A	L	P MIN	RECOMMENDED GRIP RANGE
A401H A402H A403H A404H A405H A406H	C402H C403H C404H	A401F A402F A403F	.222-.252 .286-.316 .347-.377 .410-.440 .472-.502 .535-.565	1.00	.032-.062 .063-.125 .126-.187 .188-.250 .251-.312 .313-.375
A502H A503H A505H	C504H	A502F A503F A505F	.300-.330 .362-.392 .425-.455 .487-.517	1.00	.063-.125 .126-.187 .188-.250 .251-.312
A602H A604H A606H A608H	C602H C604H C606H	A602F A604F A606F	.315-.345 .440-.470 .565-.595 .690-.720	1.00	.063-.125 .126-.250 .251-.375 .376-.500
A804H			.465-.505	1.00	.126-.250

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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.

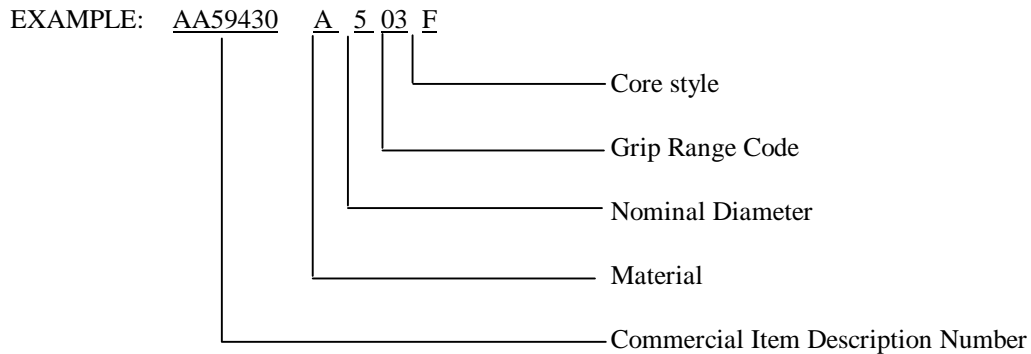
3.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and the quality assurance practices, and be the same product offered for sale in the commercial market. The government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



AA59430A503 Indicates -

Rivet, blind, nonstructural, retained mandrel, closed-end, domed head, 5056 (UNS A95056) aluminum alloy body, C1012-C1025 (UNS G10120-G10250) or C1045-C1075 (UNS G10450-G10750) steel mandrel; nominal body diameter size, .156; grip range, .126-.187, style; filled 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. 5320-0959)

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I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER
A-A-59430

2. DOCUMENT DATE (YYMMDD)
990420

3. DOCUMENT TITLE:

RIVETS, BLIND, NONSTRUCTURAL, RETAINED MANDREL, CLOSED-END, DOMED 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)****7. DATE SUBMITTED (YYMMDD)**

(1) Commercial

(2) AUTOVON (If applicable)

8. PREPARING ACTIVITY DLA-IS**a. NAME**

Emelia Altomari

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(2) (DSN) 442-6827

c. ADDRESS (Include Zip Code)

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

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