

METRIC

A-A-59846

November 18, 2009

## COMMERCIAL ITEM DESCRIPTION

### ANCHOR, ROCK, SPRING LOADED CAMMING DEVICE

This commercial item description is approved for use by the Defense Supply Center, Philadelphia and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE. This commercial item description covers the requirements for spring loaded camming devices (SLCDs), which are used for protecting climbers on steep rock routes by placing the SLCDs into cracks in the rock.

2. CLASSIFICATION. The SLCDs will be furnished in the following types.

#### 2.1 Types

Type I - Single stem, double axle, large

Type II - Double stem, single axle, small

#### 2.2 Sizing

Type I: Sizes: .3, .4, .5, .75, 1, 2, 3, 4, 5, 6

Type II: Sizes: 000, 00, 0, 1, 2

Comments, suggestions, or questions on this document should be addressed to: Defense Supply Center Philadelphia, Clothing and Textiles Directorate, Attn: DSCP Standardization Team, 700 Robbins Avenue, Philadelphia, PA 19111-5096. Since contact information can change, you may want to verify the currency of this address information using Acquisition Streamlining and Standardization Information System (ASSIST) online database at <http://assist.daps.dla.mil/>.

AMSC N/A

FSC 8465

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3. SALIENT CHARACTERISTICS. The camming device shall be as light-weight as possible while meeting the requirements as specified in this document. The camming device shall be an active, spring-loaded device. The camming device shall be capable of being placed as a passive protection device. The wired stem as specified in 3.1 shall be coated for protection. The coated wire stem shall provide a stable platform for the thumb to assist in the pulling of the trigger. The trigger shall be easily operated and provide an even pull throughout the entire range. The Type I SLCD stem head shall attach to two axles which the four grooved cams will rotate around independently. The Type II SLCD dual-stem head shall attach to one axle which the four grooved cams will rotate around independently. The size shall be stamped on the shaft and the head. The camming device design shall provide ease of use with the typical combat glove while meeting the standards in this description and shall conform to the size and physical characteristics of Table I, and Table II.

TABLE I. Physical characteristics, Type I

Size	Expansion Range (+/- 2)mm		Min. breaking Strength, kN	Weight, +/- 10 grams
	min, mm	max, mm		
.3	13.8	23.4	8	75
.4	15.5	26.7	10	83
.5	19.6	33.5	12	99
.75	23.9	41.2	14	119
1	30.2	52.1	14	136
2	37.2	64.9	14	155
3	50.7	87.9	14	201
4	66	114.7	14	289
5	85.4	148.5	14	380
6	114.1	195	14	557

TABLE II. Physical characteristics, Type II

Size	Expansion Range (+/- 2)mm		Min. breaking Strength, kN	Weight, +/- 10 grams
	min, mm	max, mm		
000	7.8	12.9	4	55
00	9.0	13.7	6	57
0	10.7	15.8	7	59
1	12.0	18.8	10	62
2	14.2	22.6	10	66

3.1 Wire stem.

3.1.1 Wire stem Type I. The Type I wire stem shall protrude 177 ( $\pm$  13) millimeters beneath the stem head on all sizes.

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3.1.2 Wire stem Type II. The Type II wire stem shall protrude 165 ( $\pm$  13) millimeters beneath the stem head on all sizes.

3.2 Webbing runner( all Types). The webbing runner shall be 101 ( $\pm$  13) millimeters long and affixed to the coated stem, forming a loop sized to fit all types of typical carabiners in accordance with A-A-59836.

3.3 Color. Each size of each type shall be of a different color. The color shall be on the complete outer cams (Type I only) and the webbing runner. The rest of the camming device shall be provided in a low reflectance, matte finish and provide low contrast with typical use terrain.

3.4 Materials.

3.4.1 Basic material The cam shaped portion of the SLCD shall be 6061-T6 or 7075 aluminum.

3.4.2 Wired stem material. The wired stem portion shall be either a coated galvanized steel or coated stainless steel.

3.4.3 Trigger cable material. The trigger cables shall be made of steel.

3.4.4 Trigger material. The trigger shall be made of plastic.

3.4.5 Stem protector material. The stem protector shall be made of plastic.

3.4.6 Sling material. The sling shall be made of nylon.

3.5 Tests The SLCDs shall meet Union Internationale des Association d'Alpinisme (UIAA) Standard 125.

3.6 Workmanship. The finished SLCDs shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the contractors own quality assurance standards and the quality assurance standards defined in the technical data in the solicitation and/or contract.

3.7 Service life. The SLCDs shall have no unexpected material or component failures during a continuous one-year cycle. The SLCDs shall have no unexpected material or component failures during periodic use over a five year period.

3.8 Labels, barcoding and instruction slip. If applicable, all labeling, barcoding and instruction slip requirements shall be as specified in the solicitation or contract (see 7.2).

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

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4.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible, provided that the material meets or exceeds the operational and maintenance requirements and promotes economically advantageous life cycle costs.

## 5. PRODUCT CONFORMANCE PROVISIONS.

5.1 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 quality assurance practices, and be the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance.

5.2 Visual examination. Each SLCD shall be examined for the following defects as listed in Table III.

TABLE III. End item examination

Examine	Defect Description
Finish	Not smooth and adherent
	Not low reflectance, matte finish
	Does not provide low contrast with typical use terrain
Construction	Not free of burrs, rough spots, slivers, flat areas or projections
	Any component missing or not specified type
	Any component fractured, slit, punctured, dented, bowed, malformed or damaged
	Marking etched or indented, contains rough or sharp edges
	Any component loose
	Incorrect, illegible, omitted or misplaced
	Omitted, missing information or illegible
Trigger Cable	Not attached at trigger or lobe
Label, barcoding and instruction slip (if applicable)	Incorrect, illegible, omitted or misplaced

5.3 Acceptance criteria. Acceptance criteria shall be as specified in the contract or purchase order (see 7.2).

## 6. PACKAGING.

6.1 Preservation, packing and marking. The preservation, packing and marking shall be as specified in the contract or order (see 7.2).

## 7. NOTES.

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## 7.1 Sources of documents.

7.1.1 Government documents. Copies of Government documents are available online at <http://assist.daps.dla.mil/quicksearch/> or from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

### DRAWINGS

#### U.S. ARMY NATICK SOLDIER CENTER

3-3-0118 Anchor, Rock, Camming Device, Type I

3-3-0119 Anchor, Rock, Camming Device, Type II

(Copies of drawings are available from the U.S. Army Natick Research Development and Engineering Center, Natick Soldier Center, ATTN: NSRDEC-RDNS-WPW-C, Natick, MA 01760)

7.1.2 Federal Acquisition Regulations are available online at <http://acquisition.gov/far/index.html> or by contacting the Superintendent of Documents at 202-512-1800.

7.1.3 Non-Government documents. Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents may be available in or through libraries or other informational services.

#### INTERNATIONAL MOUNTAINEERING AND CLIMBING FEDERATION UNION INTERNATIONALE DES ASSOCIATIONS D'ALPINISME (UIAA)

UIAA Safety Standard 125 Mountaineering and Climbing Equipment, Frictional Anchors

(Copies are available online at [www.theuiaa.org](http://www.theuiaa.org) or from the Union Internationale Des Associations D'Alpinisme (UIAA) Monbijoustrasse 61 Postfach CH-3000 Bern 23 Switzerland.

7.2 Ordering data. The contract or order should specify the following:

- a. Title, number, and date of this Commercial Item Description
- b. Type and size required (see 2.1).
- c. When required, labeling, barcoding and instruction slip (see 3.8).
- d. Acceptance criteria (see 5.3).
- e. Packaging (see 6.1).

7.3 Subject term (key word) listing.

SLCD  
Protection  
Climbing

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MILITARY INTERESTS:

CIVIL AGENCY COORDINATING ACTIVITY:  
GSA-FSS

Custodian:

Army - GL  
Marine Corps - MC

PREPARING ACTIVITY:

DLA-CT

Project 8465-2009-002

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 ASSIST Online database at <http://assist.daps.dla.mil/>.