METRIC

A-A-59836 October 2, 2009

# COMMERCIAL ITEM DESCRIPTION

### CARABINER

This commercial item description is approved for use by the all Departments and Agencies of the Department of Defense or for all Federal agencies.

#### 1. SCOPE.

1.1 <u>Scope.</u> This commercial item description covers the requirements for carabiners which are used as connectors between ropes, webbing, rock and ice protection, and anchors.

2. CLASSIFICATION. The carabiners will be furnished in the following types:

#### 2.1 <u>Types:</u>

Type D -Non-locking, D-shapedType X -Non-locking, ovalType H (1) - Locking, pear-shapedType H (2) - Auto-locking, pear-shaped

3. SALIENT CHARACTERISTICS. The carabiner design shall provide ease of use with typical combat gloves while meeting the standards in this description.

3.1 <u>Type D</u>. The Type D carabiner shall be "D" shaped and meet the dimension requirements in drawing 3-3-0104. The hinge pin attaching the gate to the body shall be tightly peened or pressed into the body of the carabiner. The gate shall not be of a wire gate construction. The gate shall operate easily without jamming in either direction. (See Drawing 3-3-0104).

3.1.1 <u>Type X</u>. The Type X carabiner shall be oval shaped and meet the dimension requirements in drawing 3-3-0105. The hinge pin attaching the gate to the body shall be tightly peened or pressed into the body of the carabiner. The gate shall not be of a wire gate construction. The gate shall operate easily without jamming in either direction. (See Drawing 3-3-0105).

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 <a href="http://assist.daps.dla.mil/">http://assist.daps.dla.mil/</a>.

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3.1.2 <u>Type H (1)</u>. The Type H (1) carabiner shall be pear-shaped and meet the dimension requirements in drawing 3-3-0106, also referred to as HMS, to allow for use with the Italian or Munter Hitch while belaying. The hinge pin attaching the gate to the body shall be tightly peened or pressed into the body of the carabiner. The carabiner gate shall be threaded and fitted with a knurled manual locking sleeve. The sleeve shall screw into place over the opening between the gate and carabiner body to prevent inadvertent opening of the gate during use. The gate and the locking sleeve shall operate easily without jamming in either direction. The locking sleeve shall not be capable of being screwed completely off the end of the gate. (See Drawing 3-3-0106).

3.1.3 <u>Type H (2)</u>. The Type H (2) carabiner shall be pear-shaped, and meet the dimension requirements in drawing 3-3-0107, also referred to as HMS, to allow for use with the Italian or Munter Hitch while belaying. The hinge pin attaching the gate to the body shall be tightly peened or pressed into the body of the carabiner. The carabiner gate shall be threaded and fitted with a knurled automatic locking sleeve. The locking sleeve will automatically lock into place over the opening, over the gate and carabiner body to prevent inadvertent opening of the gate during use, when released. The automatically locking gate shall operate with a spring loaded twisting mechanism. The gate and the locking sleeve shall operate easily without jamming in either direction. The locking sleeve shall not be capable of being screwed completely off the end of the gate. (See Drawing 3-3-0107).

## 3.2 Physical requirements

3.2.1 <u>Physical characteristics</u>. The carabiners for all types shall conform to the sizes and characteristics as specified in Table I.

Туре	Gate closed,	Gate open		Rope bearing	Gate
	strength	strength	Weight	Surface width	Opening Width
	kN	kN	grams	Mm	Mm
D	24	8	50	8.4	15
Х	23	7	45	7.8	25
H (1)	24	8	69	12.0	20
H (2)	23	N/A	105	16.0	24
Tolerance	N/A	N/A	±10%	<u>+/-1</u>	<u>+/-1</u>

# TABLE I. Physical characteristics

3.3 <u>Color</u>. The carabiner shall be provided in a low reflectance, matte finish and provide low contrast with typical use terrain unless otherwise specified in the solicitation or contract order. (See 7.2)

# 3.4 Materials.

3.4.1 Basic material (All types). The carabiner body shall be 7075 aluminum.

3.5 <u>End item testing</u>. The carabiners shall meet the International Mountaineering and Climbing Federation Union Internationale des Associations d'Alpinisme – (UIAA) Standard 121 or EN 12275 for their respective types.

3.6 <u>Workmanship</u>. The finished carabiner 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 <u>Service life</u>. The carabiner shall have no unexpected material or component failures during a continuous one-year cycle. The carabiner shall have no unexpected material or component failures during periodic use over a five year period.

3.8 <u>Labels/barcoding/instruction slip</u>. 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).

4.1 <u>Recycled, recovered, or environmentally preferable materials.</u> 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 <u>Product conformance</u>. 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 <u>Visual examination</u>. The carabiner for all types shall be examined for the following defects as listed in Table II.

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		
Gate	Gate does not fully close		
	Gate pin not peened correctly (i.e. peening not spread		
	evenly in the countersunk area, peened end protrudes		
	beyond surface of gate, or metal cracks in area.		
	Gate locking sleeve doesn't lock (Type H only)		
Labels/barcoding/instruction slip.	Incorrect, illegible, omitted or misplaced		
(if applicable)			
Marking	Omitted, missing information or illegible		

## TABLE II. End item examination

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

## 6. PACKAGING.

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

## 7. NOTES.

#### 7.1 Sources of documents.

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

#### DRAWINGS

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

3-3-0104 Carabiner, Type D
3-3-0105 Carabiner, Type X
3-3-0106 Carabiner, Type H (1)
3-3-0107 Carabiner, H (2)

(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 <u>http://acquisition.gov/far/index.html</u> or by contacting the Superintendent of Documents at 202-512-1800.

7.1.3 <u>Non-Government documents</u>. 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.

EUROPEAN STANDARD (EN)

EN 12275 Mountaineering Equipment - Connectors - Safety Requirements and Test Methods

(Copies are available online at <u>www.bsi-global.com</u> or from BSI British Standards, Customer Services 389 Chiswick High Road London W4 4AL United Kingdom)

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

UIAA Safety Standard 121 Mountaineering and Climbing Equipment, Connectors

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

7.2 <u>Ordering data</u>. The contract or order should specify the following:

- a. Title, number, and date of this Commercial Item Description.
- b. Type, sizes required. (See 2.1)
- c. Color required. (See 3.3)
- d. When required, labeling, barcoding, and instruction slip (see 3.8)
- e. Acceptance criteria. (See 5.3)
- f. Packaging requirements. (See 6.1)

## 7.3 Key words:

anchors connectors ropes, ice protection rock protection webbing

#### MILITARY INTERESTS:

#### CIVIL AGENCY COORDINATION ACTIVITY GSA – FSS

<u>Custodian:</u> Army - GL Marine Corps – MC

# PREPARING ACTIVITY: DLA-CT

Project Number: 8465-2009-001

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