

INCH-POUND**A-A-50378A****March 24, 1998****SUPERSEDING****A-A-50378****February 6, 1991****COMMERCIAL ITEM DESCRIPTION****DRAWERS, EXTREME COLD WEATHER, MEN'S AND WOMEN'S**

The General Services Administration has authorized the use of this commercial item description for all Federal agencies.

1. SCOPE. This commercial item description covers the requirements for cold weather cotton knitted drawers for wear by both men and women personnel as part of a cold weather outfit.

2. CLASSIFICATION. The drawers shall be provided in the following sizes:

X-Small	Small	Medium	Large	X-Large
(XS)	(S)	(M)	(L)	(XL)

3. SALIENT CHARACTERISTICS

3.1 Description. The drawers shall be ankle length with rib knit anklets, boxer style fly, two side darts, and an elastic waistband made with a flat seam construction (see Figure 1).

3.2 Material.

3.2.1 Basic material. The material for the drawers shall be knitted waffle-type cloth, either circular knit or flat knit. The cloth shall be of a natural color cotton yarn with a series of broken ridges in both the length and width direction and on both fabric sides thus producing a dead air pocket construction. The finished cloth shall be scoured and thoroughly rinsed to produce a soft, lofty hand and conform to the requirements specified in Table I.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center-Philadelphia, Clothing and Textiles Directorate, Attn: DSCP-FNS, 2800 South 20th Street, Philadelphia, PA 19145-5099.

AMSC N/A**FSC 8415**

DISTRIBUTION STATEMENT A. *Approved for public release; distribution is unlimited.*

A-A-50378A**TABLE I. Physical requirements**

Characteristic	Requirements	Test method
Fiber identification	100 percent cotton	<u>1/</u>
Yarn size	10-14/1 c.c. (weft knit) 18-22/1 c.c. (Raschel)	<u>1/</u> <u>2/</u>
<u>Knit stitch (Raschel)</u>		
Weight	11.1 ± 1.0 sq. yd.	ASTM-D-3776, Option C
Fabric thickness	At 0.1 psi 0.08"(min.) At 1.1 psi 0.06"(min.)	<u>5/</u> ASTM-D-1777 <u>3/</u>
Pattern repeats per 10 inches	18-22 (wale direction) 65-85 (course direction)	ASTM-D-1777 <u>3/</u> Visual <u>1/</u>
Bursting strength	100 pounds	Visual <u>1/</u>
Dimensional change	± 12.0 percent (max.) wale/course direction	ASTM-D-3787 AATCC 96
Non-fibrous material	<u>4/</u>	ASTM-D-629, Section 9
pH	5.0 to 8.5	ASTM-D-2165

1/ Unless otherwise specified, a certificate of compliance shall be submitted and will be acceptable for the stated requirements.

2/ Chain setting for links:

Front Guide Bar: 4-0/2-6 (x5); 10-6/4-8 (x5)

Back Guide Bar: 10-6/4-8 (x5); 4-0/2-6 (x5)

3/ See 3.2.1.1.

4/ Not to exceed 3.0 percent starch and protein content including chloroform soluble material.

5/ Samples shall be conditioned as directed in ASTM-D-1776, Practices for Conditioning Textiles for Testing.

3.2.1.1 Thickness. A thickness gauge of the dead weight type equipped with a dial graduated to read directly to 0.001 inch shall be used. The presser foot shall be circular with a diameter of 1.129 ± 0.001 inches and with moving parts weighted to apply a total load of 0.60 ± 0.03 pounds per square inch to the specimen. The anvil shall be not less than 1.129 inches in diameter. The presser foot and the anvil surface shall be planed to within 0.0001 inches and shall be parallel to each other to within 0.0001 inches.

3.2.1.2 Anklets. The material for the anklets shall be knitted from unbleached cotton, 1x1 rib knit fabric, 20 wales and 35 courses minimum, yarn size 18/1, with a minimum bursting strength of 95 pounds when tested in accordance with ASTM-D-3787.

3.2.1.3 Fly facing. The material for the fly facing shall be bleached or unbleached cotton jean cloth and shall weigh a minimum of 4.8 ounces per square yard when tested according to ASTM-D-3776, Option C.

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3.2.1.4 Waistband. The material for the waistband shall be woven, unbleached cotton webbing, 1-1/2 inches in width with a minimum thickness of 0.05 inch and a minimum weight per linear yard of 0.65 ounces. The percent elongation shall be 50 percent with a carriage load of 15 pounds and tension of 1.30 to 1.60 pounds when tested in accordance with ASTM-D-4964. A certificate of compliance shall be submitted for this requirement and the Government reserves the right to inspect such items to determine the validity of the certification.

3.2.2 Thread. The thread shall be cotton machine thread with a soft finish; Tex 35. The color shall be a natural color and shall be a good match to the base cloth of the end item. The thread shall have a minimum breaking strength of 1.5 to 1.8 pounds (5 determinations per sample unit) when tested in accordance with ASTM-D-2256. The finished thread shall have no chemical finishes or treatments other than those used on commercial threads and no finish or treatment shall be applied for the purpose of increasing breaking strength. The direction of the final twist shall be "Z". Colorfastness shall be consistent with the end item. Any suitable textured polyester thread may be used in place of the cotton for all sewing operations. A certificate of compliance shall be submitted for all requirements and the Government reserves the right to inspect such items to determine the validity of the certification.

3.3 Label. A commercial-type label is acceptable, provided that an additional printed cloth label containing the contractor's name, contract number, size and National Stock Number (NSN) is caught on the stitching of the commercial label. The commercial label shall include care instructions and fiber content.

3.3.1 Label/tag. Each item shall be individually bar-coded with a paper tag for personal clothing items. The paper tag shall be standard bleached sulfate having a basis weight of 100 pounds. The paper used for the tags shall have a smooth finish to accept thermal transfer and direct printing. The tags shall have a hole and shall be attached to each item by a fastener, clearly legible and readable by a scanner. The bar coding element shall be a 13 digit national stock number (NSN). The bar code type shall be a medium to high code density and shall be located so that it is completely visible on the item when it is folded and/or packaged as specified and so that it causes no damage to the item.

3.4 Sizes and measurements. The finished drawers shall conform to the measurements in Table II.

TABLE II. Finished measurements (in inches) 1/

Size	Overall length (A)	Waistband (B)	Front rise (C)	Fly opening (D)	Anklet length (E)	Anklet width (F)
X-Small	42-1/2	11	15-1/2	5-1/2	3-1/2	4-3/8
Small	43	13	16	5-1/2	3-1/2	4-3/8
Medium	43-1/2	15	16-1/2	5-1/2	3-1/2	4-3/8
Large	44	17	17	5-1/2	3-1/2	4-3/8
X-Large	44-1/2	19	17-1/2	5-1/2	3-1/2	4-3/8
Tolerance	$\pm 1/2$	± 1	$\pm 1/2$	$\pm 1/4$	$\pm 1/4$	$\pm 1/4$

1/ For the location of A-F, refer to Figure 1.

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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).

5. QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The products offered 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 a similar product that is offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

5.2 Market acceptance criteria. The item offered, or a generic equivalent, must have been sold to the commercial market or to the Government.

5.3 Visual examination. Each pair of drawers shall be examined for the defects listed below.

5.3.1 Defects. Any hole, cut, or tear; color not as specified; any part shaded; any spot or stain (outside); raw edges, open seams, thread ends not removed, or loose tension resulting in loose seams; any material defects, distorted parts or poor workmanship; any component part omitted; label missing, incorrect, or illegible; measurement of item not as specified; bar code omitted or not readable by scanner; human-readable interpretation (HRI) omitted or illegible; bar code not visible on folded, packaged item; bar code causes damage to the item; any items not packaged in accordance with the contract or purchase order.

5.4 Acceptance criteria. Acceptance criteria shall be as specified in the contract or purchase order.

6. PACKAGING

6.1 Preservation, packing, and marking. The preservation, packing, and marking shall be as specified in the contract or purchase order.

7. NOTES

7.1 Source of Government documents. Copies of military and Federal documents are available from:

Standardization Documents Order Desk
Bldg. 4D
700 Robbins Avenue
Philadelphia, PA 19111-5094

7.2 Source of non-Government documents

ASTM Test Methods

(Applications for copies should be addressed to American Society For Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

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AATCC Test Methods

(Applications for copies should be addressed to American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Triangle Park, NC 27709-2215.)

MILITARY INTERESTS:

Custodians:

Navy - NU
Air Force - 99

Review Activities:

Navy - YD, CG
Air Force - 45, 82

CIVIL AGENCY COORDINATING ACTIVITY:
GSA - FSS

PREPARING ACTIVITY:
DLA - CT

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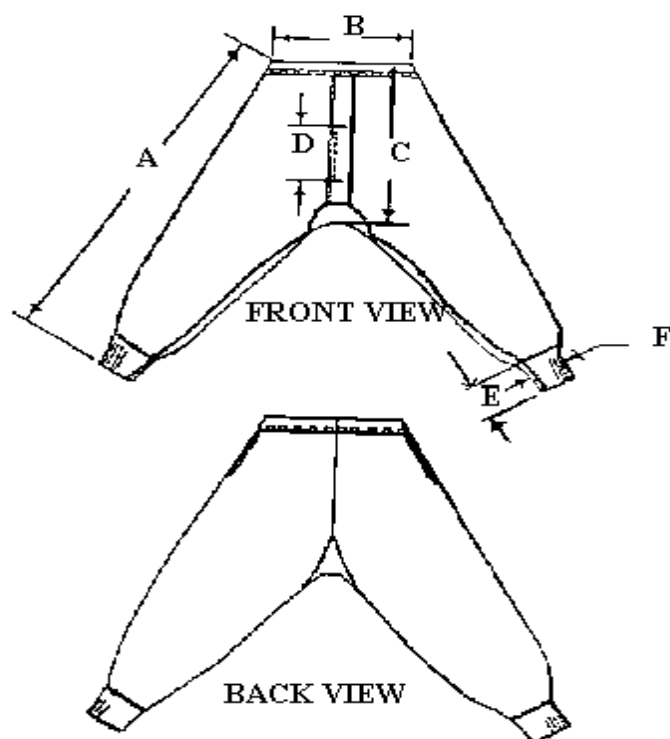


FIGURE 1

DRAWERS, EXTREME COLD WEATHER, MAN'S AND WOMAN'S