

A-A-50432
20 April 1989

COMMERCIAL ITEM DESCRIPTION

HINGE, BUTT (SHIPBOARD/MARINE)

The General Services Administration has authorized the use of this commercial item description in preference to Military Specification MIL-H-1237.

This commercial item description covers commercial and marine quality butt hinges suitable for shipboard use.

Salient characteristics

Design - Unless otherwise specified, the requirements shall be in accordance with ANSI A156.7.

Type

- I - Swaged, fast pin, flush or oval ends, with holes
- II - Swaged, loose pin, button-tipped with holes.
- III - Swaged, fast pin, flush or oval ends, without holes
- IV - Non-swaged, fast pin, flush or oval ends, with holes
- V - Swaged (heavy), fast pin, flush or oval ends with holes
- VI - Non-swaged (heavy), fast pin, flush or oval ends with holes
- VII - Non-swaged, fast pin, flush or oval ends, without holes

Class

- I - Wrought brass hinge with corrosion resistant steel (CRES) pin
- II - Wrought aluminum hinge
 - Group A - With hard brass pin
 - Group B - With CRES pin
- III - Wrought steel hinge
 - Group A - With hard brass pin
 - Group B - With CRES pin

Style

- A - Without virgin nylon shoulder bushings (for type II, class I, 3-1/2 by 3-inch hinges only)
- B - With virgin nylon shoulder bushings (for type II, class I, 3-1/2 by 3-inch hinges only)

Material Hinges shall be constructed of materials one-nine (see section 4) of ANSI A156.18 unless otherwise specified.

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Finishes The surface of the hinge shall be finished as specified in ANSI A156 18

- (a) Class 1. After manufacture, brass hinges, tips and screws shall be satin nickel finished 0.0002-inch thick. Type II, class 1, styles A and B, 3-1/2 by 3-inch hinges and screws shall have a dull chrome US26D finish
- (b) Class 2. After manufacture, aluminum hinges and tips shall be satin finished and given a commercial anodized treatment that shall provide a coating of aluminum oxide not less than 0.0004 inch thick to obtain the necessary hardness and positive protection against corrosion.
- (c) Class 3. After manufacture, steel hinges and screws shall be zinc coated with a minimum thickness of 0.0005 inch of zinc and then treated with a phosphate solution

Shoulder bushing. Shoulder bushings shall be made of virgin nylon or CRES

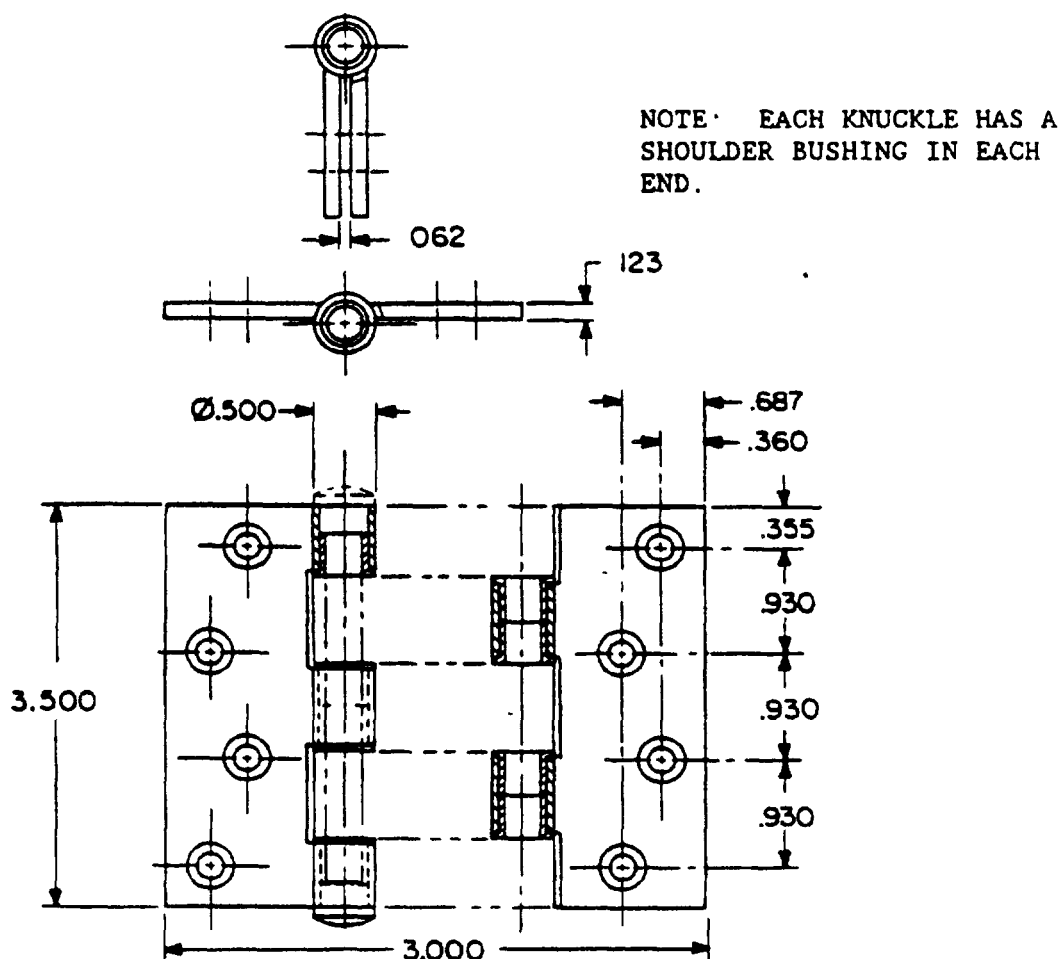
NOTE. 3-1/2 by 3-inch hinge shall be fitted with virgin nylon or CRES shoulder bushings in each knuckle when ordered for metal joiner doors. Type I, II, III, IV, and VII aluminum hinges 3 inches and up shall be fitted with a CRES bushing extending the entire length of each knuckle

Pins. Pins shall be made of materials one-nine (see section 4) of ANSI A156 18 and conform to design types I through VII.

Button tips On steel hinges button tips shall be made of brass. Button tips shall be of the cylindrical type having a square shoulder approximately 1/8 inch high flush with the barrel of the butt hinge.

Fasteners All mounting hardware required for attachment shall be included with the hinges. The hardware shall be of suitable size and shall be compatible with the material and finish of the hinge.

Workmanship The hinge shall be free from imperfections such as blemishes, burrs and unsquare edges which may impair durability or serviceability. Also, the pins shall fit neatly and the hinges operate freely



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FIGURE 1. Layout of type II, class I, style B, 3-1/2 by 3-inch hinge for metal joiner doors.

Quality assurance provisions Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

Sampling.

Lot. All hinges of the same type, class, style, size, and finish presented for acceptance at one time shall be considered a lot for purposes of inspection

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Sampling for quality conformance examination and testing A random sample of hinges shall be selected from each lot in accordance with MIL-STD-105.

Visual and dimensional inspection. Samples shall be selected in accordance with MIL-STD-105, special inspection level S-3. The sample hinges shall be visually and dimensionally examined to verify compliance with this specification

Testing for permanent set and finish. Samples shall be selected in accordance with MIL-STD-105, special inspection level S-2. The sample hinges shall be tested in accordance with ANSI A156.1 and A156.18 as applicable

Certification of performance and finish test requirements When specified in the contract or purchase order, a certificate of conformance may be furnished in lieu of actual testing on a lot-by-lot basis provided that

- (1) Objective evidence dated not more than 2 years prior to the date of the start of the contract as described in the solicitation, or date of the purchase order as applicable, shall be available.
- (2) Tests specified in the industry standards referenced herein have been performed by an independent test facility acceptable to the Government
- (3) That the product being offered is the same type, material and finish and has been manufactured using the same material, processes and manufacturing techniques as the product tested

Examination for preparation for delivery. A random sample of unit, intermediate and shipping containers (as applicable) shall be selected from each lot and examined for conformance to the preservation, packaging, packing, labeling and marking required in the contract or order. Samples shall be selected in accordance with MIL-STD-105, inspection level II.

Preservation, packaging, packing, labeling, and marking (civil agencies)
The preservation, packaging, packing, labeling, and marking shall be as specified in the contract or order.

Packaging (DoD) The packaging shall be in accordance with ASTM D 3951

Regulatory requirements. In accordance with section 23 403 of the Federal Acquisition Regulations, the Government's policy is to acquire items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing suppliers' employees to undue hazards from the recovered materials. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials as opposed to virgin raw materials. None of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this commercial item description unless otherwise specified

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Notes.Ordering data.

- (a) Title, number and date of this commercial item description.
- (b) Type, class and style of hinge
- (c) Size of hinge
- (d) The issues of ANSI A156.1, A156.18 and A156.7 in effect on the date of the solicitation shall be used to determine compliance with these requirements.
- (e) Applications for ANSI Documents should be addressed to the American National Standards Institute, 1430 Broadway, New York, NY 10018-3308

Supersession data. The relationship of the types of butt hinges covered in this commercial item description, MIL-H-1237C, MIL-H-001237B and MIL-H-1237A to the types covered in MIL-H-1237 is as follows:

This commercial item description and MIL-H-1237A, MIL-H-001237B, MIL-H-1237C	MIL-H-1237
Type I	Type A
Type II	Type B
Type III	----
Type IV	Type D
Type V	Type E
Type VI	Type F
Type VII	----

MILITARY INTERESTS.Custodians:

Army - AR
Navy - SH
Air Force - 82

PREPARING ACTIVITY

Navy - SH

Agent

DLA - IS

Review activities:

Air Force - 85
DLA - IS

(Project 5340-1633)

User activities:

Navy - AS, MC, OS