INCH-POUND A-A-59808 18 NOVEMBER 2008

# COMMERCIAL ITEM DESCRIPTION BLOCKS, TACKLE

The general Services Administration has authorized the use of this commercial item description by all federal agencies.

- 1. SCOPE. This commercial item description (CID) covers single, double and multiple sheave tackle blocks for use with manila and nylon ropes.
- 2. SALIENT CHARACTERISTICS.
- 2.1 <u>General requirements</u>. The block (see figure 1) shall consist of one to three sheaves As specified, shells with straps, and a rig assembly (see figure 2). Block to be furnished shall be as specified (see 6.1) and shall conform to the dimensions and working load limit (WLL) in Table 1.

Table 1. Blocks

	Shell	WLL in pounds			Rope size	Sheave size in inches	
Size	length	Single	Double	Triple	diameter	Outside	Thickness at
	nominal	sheave	sheaves	sheaves	nominal	diameter	rim
	inches				inches	nominal	nominal
1	4	1100	1600	2200	1/2	2-1/4	5/8
2	4	2000	3000	4000	1/2	2-1/4	5/8
3	6	2000	3300	4000	3/4	3-1/2	1
4	6	4000	5000	6000	5/8	3-1/2	1
5	8	3300	5100	7000	1	4-3/4	1-1/8
6	8	5000	7000	9000	7/8	4-1/2	1-3/8
7	10	5000	7000	10000	1-1/4	6-1/4	1-1/2
8	10	6000	9000	11000	1-1/8	6-1/4	1-1/2
9	12	6800	10600	14000	1-1/2	8	1-5/8
10	12	10000	15000	20000	1-5/16	8	1-5/8
11	14	9600	15000	20000	1-3/4	9-1/2	1-7/8
12	14	16000	30000	36000	1-5/8	9-1/2	1-7/8

Comments, Suggestions, or questions on this document should be addressed to: Defense Supply Center Philadelphia, ATTN: DSCP-NASA, 700 Robbins Ave., Philadelphia, PA 19111-5096 or email to <a href="mailto:dscpg&inspccomments@dla.mil">dscpg&inspccomments@dla.mil</a>. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <a href="http://assist.daps.dla.mil">http://assist.daps.dla.mil</a>.

AMSC N/A FSC 3940

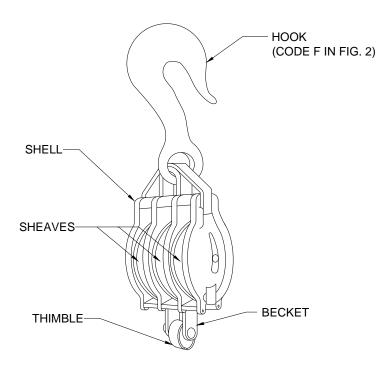
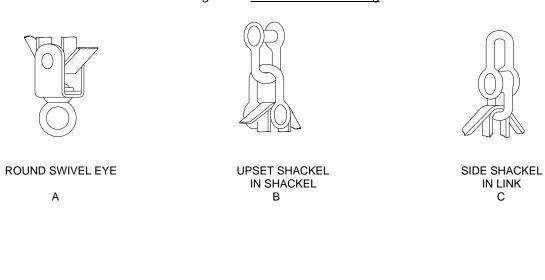


Figure 1. Block with hood fitting.



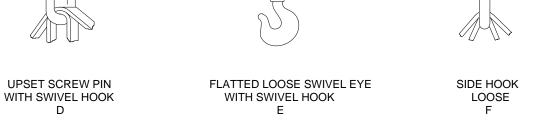
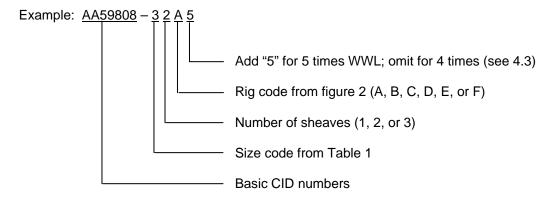


Figure 2. Rig assemblies.

- 2.1.1 <u>Shells</u>. Shells shall be formed from steel or malleable iron and shall be flanged to provide additional stiffness and reduce wear and chafing of the rope. Shell pieces shall be securely held in position and shall be designed to prevent distortion or spreading under extreme lateral rope pulls.
- 2.1.2 <u>Straps</u>. Straps shall be made of steel. Each strap shall be of rugged one-piece construction and shall extend the full length of the shell pieces. Straps shall be securely welded, riveted, or bolted to the shell pieces, and shall furnish bearing support for the center pin and connections to transmit extreme loads from the sheave to the fittings.
- 2.1.3 <u>Sheaves</u>. Sheaves shall be gray iron, malleable or ductile cast iron, or steel and shall be designed to prevent cutting action on the rope. Sheaves shall be designed so that only the hubs bear against the shell or straps. Sheaves rims shall be grooved to fit the specified rope size. Overall sideplay shall be not more than 1/16 inch. Dimensions of the sheaves shall be as specified in Table 1.
- 2.1.4 <u>Bushings</u>. Each sheave shall be furnished with a one-piece, oil-self-lubricating, high grade bronze bushing which shall be pressed into the sheaves with sufficient tightness to prevent slippage at loads of four (4) times the WWL. The bushing shall be equal in length to the sheave thickness at the hub and shall have a minimum wall thickness of 3/16 inch.
- 2.1.5 <u>Center pin</u>. The sheave pin shall not rotate and shall transmit the sheave load to the straps. The pin shall be made of steel conforming to ASTM A108.
- 2.1.6 <u>Welding</u>. Weld areas shall be free from rust, scale, paint, grease, porosity, splatter, slag, overlap, undercut, nonfusion, cracks, and foreign matter. Welding shall not be used to repair the blocks.
- 2.1.7 <u>Fastening devices</u>. All pins, bolts, and similar parts shall be adjustable. Such parts shall not be swaged, peened, staked or otherwise permanently deformed.
- 2.1.8 <u>Rig assemblies</u>. Each block shall be fitted with a rig as specified (see 6.1). all rig Assemblies shall be of forged steel.
- 2.1.9 <u>Becket</u>. Blocks shall be fitted with a becket. The becket shall be formed by the extension of the straps and shall show no distortion with the rope dead-ended at the becket and the loads specified in Table 1 with a safety factor of 4. A thimble shall be fitted over the becket pin.
- 2.1.10 <u>Hook</u>. When specified, the hook shall be drop forged of forging-grade steel and shall be the flattened type, with substantially heavier sections at the areas which take the maximum stress.
- 2.2 <u>Finish</u>. All metal surfaces of the block assemblies, except bearing surfaces and Bushings, shall be hot-dipped galvanized in accordance with ASTM A153/A153M, or zinc coated in accordance with ASTM B695. Runny surfaces and guide surfaces shall be free of irregular coating distribution.
- 2.3 <u>Surface</u>. All castings, forgings, stampings, and welded parts shall be cleaned and free of sand, dirt, fins, sprues, scale, flux, and other harmful or extraneous material. External surfaces shall be free from burrs, sharp edges, and corners.

- 2.4 <u>Identification marking</u>. The block assembly shall be identified in accordance with MIL-STD-130. In addition, unless otherwise specified the WWL shall be permanently marked or stamped on the block, or marked on a weather resistant adhesive label.
- 3. 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. PRODUCT CONFORMANCE.
- 4.1 <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 market. The government reserves the right to require proof of such conformance.
- 4.2 <u>Inspection</u>. The block assembly shall be inspected to determine compliance with all requirements specified in this CID.
- 4.3 <u>Block assembly testing</u>. The individual block and rig assembly shall show no evidence of deformation, distortion, cracks, or permanent set when subjected to a proof load twice the WWL specified in Table 1 for a minimum of ten (10) minutes. Unless otherwise specified (see 6.1), the manufacturer shall certify that the blocks and rig assembly shall withstand four (4) times their WWL without failure.
- PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order.
- 6. NOTES.
- 6.1 <u>Part or Identification Number (PIN)</u>. The following PIN procedure is for government purposes and does not constitute a requirement for the contractor.

This example describes a part numbering system for CID A-A-59808.



- 6.2 Source of documents.
- 6.2.1 <u>FAR</u>. The FAR may be obtained from the Regulatory Secretariat, 1800 F Street NW, Washington, DC 20405 or online at <a href="http://www.acqnet.gov">http://www.acqnet.gov</a>.
- 6.2.2 <u>Government documents</u>. Copies of Military and Federal documents are available online at <a href="http://assist.daps.dla.mil">http://assist.daps.dla.mil</a> or from the Standardization Documents Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.
- 6.2.3 <u>ASTM Standards</u>. Copies of ASTM standards may be obtained from the ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 or online at <a href="http://www.astm.org">http://www.astm.org</a>.
- 6.3 Ordering data. The contract or order should specify the following:
  - a. CID document number, revision, and CID PIN.
  - b. Product conformance provisions.
  - c. Packaging requirements.
- 6.4 Key words.

Center pin Hook Rig Sheave

Military interests:

Preparing activity: DLA-IS

Custodians:

Army - CR4

(Project 3940-2008-002)

Navy - SH Air Force - 99

Reviewing activities:

Navy - YD Air Force - 84

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