pump shall be put in operation with the discharge line open, and then the restriction shall be gradually closed until the pressure builds up to at least 20 pounds per square inch. This pressure shall be maintained for at least 15 seconds, after which the pump shall be disassembled and inspected. No deformation or deformation of parts sufficient to affect the serviceability of the pump shall be permitted as a result of this test.

(c) Operating lever. With the pump firmly secured in such a position that both the shaft and operating lever are in a horizontal position, apply a downward load of 200 pounds for a period of 5 minutes at the free end of the operating lever and perpendicular to its axis and the axis of the shaft. There shall be no slippage of the lever around the shaft, nor any evidence of permanent set or undue stress in any part of the pump. In cases where the design of the pump is such that this test may not be applicable to the complete pump, the pump shall be disassembled and the 200-pound load applied to the shaft and operating lever while the free end of the shaft is held in a vise or check so that both the shaft and the operating lever are in a horizontal position.


§ 160.047–1 Incorporation by reference.

(a) Specifications and Standards. This subpart makes reference to the following documents:

(1) Federal Specification:
L-P-375C—Plastic Film, Flexible, Vinyl Chloride.

(2) Military specifications:
MIL-W-539—Webbing, Textile, Cotton, General Purpose, Natural or in Colors.
MIL-B-2766—Batt, Fibrous Glass, Lifesaving Equipment.

(3) Federal Standards:
No. 191—Textile Test Methods.
751A—Stitches, Seams, and Stitchings.

(4) Coast Guard specification:
164.003—Kapok, Processed.

(b) Plans. The following plans, of the issue in effect on the date buoyant vests are manufactured, form a part of this subpart:

Dwg. No. 160.047–1:
Sheet 1, Rev. 2—Cutting Pattern and General Arrangement, Models AK–1, and AF–1.
Sheet 2, Rev. 2—Cutting Pattern and General Arrangement, Models CKM–1 and CFM–1.
Sheet 3, Rev. 2—Cutting Pattern and General Arrangement, Models CKS–1 and CFS–1.
Sheet 4, Rev. 1—Pad Patterns.

(c) Copies on file. The manufacturer shall keep a copy of each specification and plan required by this section on file together with the certificate of approval. Plans and specifications may be obtained as follows:

(1) The Coast Guard plans and specifications may be obtained from the Commandant (CG-ENG), Attn: Office of Design and Engineering Systems, U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593-7509 or a recognized laboratory listed in §160.047–6b.

(2) The Federal Specifications and Standard may be purchased from the Business Service Center, General Services Administration, Washington, DC 20407.

(3) The military specifications may be obtained from the Military Specifications and Standards, Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia,
§ 160.047–2  
Each buoyant vest specified in this subpart is a:

(a) Model AK–1, adult, kapok (for persons weighing more than 90 pounds);
(b) Model AF–1, adult, fibrous glass (for persons weighing more than 90 pounds);
(c) Model CKM–1, child medium, kapok (for children weighing from 50 to 90 pounds);
(d) Model CFM–1, child medium, fibrous glass (for children weighing from 50 to 90 pounds);
(e) Model CKS–1, child small, kapok (for children weighing less than 50 pounds); or
(f) Model CFS–1, child small, fibrous glass (for children weighing less than 50 pounds).

§ 160.047–3  
(a) General. All components used in the construction of buoyant vests must meet the applicable requirements of subpart 164.019 of this chapter. The requirements for materials specified in this section are minimum requirements, and consideration will be given to the use of alternate materials in lieu of those specified. Detailed technical data and samples of all proposed alternate materials must be submitted for approval before those materials are incorporated in the finished product.
(b) Kapok. The kapok shall be all new material complying with Subpart 164.019 of this chapter and shall be properly processed.
(c) Fibrous glass. The fibrous glass shall comply with the requirements of specification MIL-B-2766.
(d) Envelope. The buoyant vest envelope, or cover, shall be made from 39" × 2.85 cotton jeans cloth, with a thread count of approximately 96 × 64. The finished goods shall weigh not less than 4.2 ounces per square yard, shall have a thread count of not less than 94 × 60, and shall have a breaking strength of not less than 85 pounds in the warp and 50 pounds in the filling. Other cotton fabrics having a weight and breaking strength not less than the above will be acceptable. There are no restrictions as to color, but the fastness of the color to laundering, water, crocking and light shall be rated “good” when tested in accordance with Federal Test Method Standard No. 191, Methods 5610, 5630, 5650, and 5660.
(e) Pad covering. The covering for the buoyant pad inserts shall be flexible vinyl film not less than 0.006" in thickness meeting the requirements of Federal Specification L-P-375 for Type I or II, class 1, film.
(f) Tie tapes and body strap loops. The tie tapes and body strap loops for an adult or child size buoyant vest specified by this subpart must be 3⁄4-inch cotton webbing meeting the requirements in military specification MIL-T-43566 (Class I) for Type I webbing.
(f–1) Body straps. The complete body strap assembly, including hardware, must have a breaking strength of 150 pounds for an adult size and 115 pounds for a child size. The specifications for the webbing are as follows:
(1) For an adult size vest, the webbing must be 1 inch.
(2) For a child size vest, the webbing must be three-fourth inch and meet the requirements of military specification MIL-W-530 for Type IIa webbing.
(f–2) Reinforcing tape. The reinforcing tape around the neck of a buoyant vest specified by this subpart must be 3⁄4-inch cotton tape weighing 0.18 ounce or more per linear yard and having a minimum breaking strength of 120 pounds.
(g) [Reserved]
(h) Thread. Each thread must meet the requirements of subpart 164.023 of this chapter. Only one kind of thread may be used in each seam.