(2) The pump is used to dewater not more than one watertight compartment;
(3) The pump is permanently mounted;
(4) The pump is equipped with a strainer that can be readily inspected and cleaned without removal;
(5) The pump discharge line is suitably supported;
(6) The opening in the hull for the pump discharge is placed as high above the waterline as possible;
(7) A positive shutoff valve is installed at the hull penetration; and
(8) The capacity of the electrical system, including wiring, and size and number of batteries, is designed to allow all bilge pumps to be operated simultaneously.

(f) A flexible tube or hose may be used instead of fixed pipe for the discharge line of a submersible electric bilge pump provided the hose or tube does not penetrate any required watertight bulkheads and is:

1. Of good quality and of substantial construction, suitable for the intended use; and
2. Highly resistant to salt water, petroleum oil, heat, and vibration.

(g) If a fixed hand pump is used to comply with Table 182.520(a), it must be permanently connected to the bilge system.

(h) On a vessel of not more than 19.8 meters (65 feet) in length, a power driven fire pump required by §181.300 of this chapter may serve as a fixed power bilge pump required by this subpart, provided it has the minimum flow rate required by Table 182.520(a).

1. On a vessel of more than 19.8 meters (65 feet) in length, a power driven fire pump required by §181.300 of this subpart may serve as one of the two fixed power bilge pumps required by this subpart, provided:

1. The bilge and fire pump systems are interconnected;
2. The dedicated bilge pump is capable of pumping the bilges at the same time the fire/bilge pump charges the firemain; and
3. Stop valves and check valves are installed in the piping to isolate the systems during simultaneous operation and prevent possible flooding through the bilge system.

(j) A catamaran vessel must be equipped with bilge pumps for each hull, as if each hull is a separate vessel, in accordance with Table 182.520(a), except where:

1. One dedicated pump is located in each hull;
2. Each dedicated pump is driven by an independent source of power; and
3. The bilge system is permanently cross connected between hulls.

§ 182.530 Bilge high level alarms.

(a) On a vessel of at least 7.9 meters (26 feet) in length, a visual and audible alarm must be provided at the operating station to indicate a high water level in each of the following normally unmanned spaces:

1. A space with a through-hull fitting below the deepest load waterline, such as a lazarette;
2. A machinery space bilge, bilge well, shaft alley bilge, or other spaces subject to flooding from sea water piping within the space; and
3. A space with a non-watertight closure, such as a space with a non-watertight hatch on the main deck.

(b) Vessels constructed of wood must, in addition to paragraph (a), provide bilge level alarms in all watertight compartments except small buoyancy chambers.

(c) A visual indicator must be provided at the operating station to indicate when any automatic bilge pump is operating.

§ 182.540 Ballast systems.

(a) Ballast piping must not be installed in any compartment integral with the hull of a wooden vessel. Where the carriage of liquid ballast in such a vessel is necessary, suitable ballast tanks, structurally independent of the hull, must be provided.

(b) Solid and water ballast must comply with the requirements of part 178 of this subchapter.