

§ 58.25-70

(1) 125% of the rated full-load current rating of the electric steering-gear motor or power unit; and

(2) 100% of the normal current of one steering-gear control system including all associated motors.

§ 58.25-70 Steering-gear control systems.

(a) Each power-driven steering-gear system must be provided with at least one steering-gear control system.

(b) The main steering gear must be operable from the pilothouse by mechanical, hydraulic, electrical, or other means acceptable to the Commanding Officer, Marine Safety Center. This gear and its components must give full followup control of the rudder. Supplementary steering-gear control not giving full followup may also be provided from the pilothouse.

(c) Each steering-gear control system must have in the pilothouse a switch arranged so that one operation of the switch's lever automatically supplies power to a complete system and its associated power unit or units. This switch must be—

(1) Operated by one lever;

(2) Arranged so that not more than one control system and its associated power unit or units can be energized from the pilothouse at any one time;

(3) Arranged so that the lever passes through "off" during transfer of control from one control system to another; and

(4) Arranged so that the switches for each control system are in separate enclosures or are separated by fire-resistant barriers.

(d) Each steering-gear control system must receive its power from—

(1) The feeder circuit supplying power to its steering-gear power unit or units in the steering-gear compartment; or

(2) A direct connection to the busbars supplying the circuit for its steering-gear power unit or units from a point on the switchboard adjacent to that supply.

(e) Each steering-gear control system must have a switch that—

(1) Is in the steering-gear compartment; and

(2) Disconnects the system from its power source and from the steering gear that the system serves.

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(f) Each motor controller for a steering gear must be in the steering-gear compartment.

(g) A means of starting and stopping each motor for a steering gear must be in the steering-gear compartment.

(h) When the main steering gear is arranged in accordance with § 58.25-10(e), two separate and independent systems for full followup control must be provided in the pilothouse; except that—

(1) The steering wheel or lever need not be duplicated; and

(2) If the system consists of a hydraulic telemotor, no second separate and independent system need be provided other than on each tank vessel subject to § 58.25-85.

(i) When only the main steering gear is power-driven, two separate and independent systems for full followup control must be provided in the pilothouse; except that the steering wheel or lever need not be duplicated.

(j) When the auxiliary steering gear is power-driven, a control system for the auxiliary steering gear must be provided in the pilothouse that is separate and independent from the control system for the main steering gear; except that the steering wheel or lever need not be duplicated.

(k) On a vessel of 500 gross tons or above, each main steering gear and auxiliary steering gear must be arranged so that its power unit or units are operable by controls from the steering-gear compartment. These controls must not be rendered inoperable by failure of the controls in the pilothouse.

§ 58.25-75 Materials.

(a) Materials used for the mechanical or hydraulic transmission of power to the rudder stock must have an elongation of at least 15% in 5 centimeters (2 inches); otherwise, components used for this purpose must be shock-tested in accordance with subpart 58.30 of this part.

(b) No materials with low melting-points, including such materials as aluminum and nonmetallic seals, may be used in control systems for steering gear or in power actuating systems unless—