§ 1211.13 Inherent force activated secondary door sensors.

(a) Normal operation test. (1) A force activated door sensor of a door system installed according to the installation instructions shall actuate when the door applies a 15 pound (66.7 N) or less force in the down or closing direction and when the door applies a 25 pound (111.2 N) or less force in the up or opening direction. For a force activated door sensor intended to be used in an operator intended for use only on a sectional door, the force is to be applied by the door against the longitudinal edge of a 1\% (47.6 mm) diameter cylinder placed across the door so that the axis is perpendicular to the plane of the door. See Figure 6 of this part. The weight of the door is to be equal to the...
maximum weight rating of the operator.

(2) The test described in paragraph (a)(1) of this section is to be repeated and measurements made at various representative points across the width and height of the door. For this test, a door sensor system and associated components shall withstand a total of 9 cycles of mechanical operation without failure with the force applied as follows:

(i) At the center at points one, three, and five feet from the floor,
(ii) Within 1 foot of the end of the door, at points one, three, and five feet from the floor,
(iii) Within 1 foot of the other end of the door at points one, three, and five feet from the floor.

(3) The cycles are not required to be consecutive. Continuous operation of the motor without cooling is not required.

(b) Adjustment of door weight. (1) With the door at the point and at the weight determined by the tests of paragraphs (a)(2) and (b)(2) of this section to be the most severe, the door sensor and associated components shall withstand 50 cycles of operation without failure.

(2) At the point determined by the test in paragraphs (a)(1) and (a)(2) of this section to be the most severe, weight is to be added to the door in 5.0 pound (2.26 Kg) increments and the test repeated until a total of 15.0 pounds (66.72 N) has been added to the door. Before performing each test cycle, the door is to be cycled 2 times to update the profile. Similarly, starting from normal weight plus 15.0 pounds, the test is to be repeated by subtracting weight in 5.0 pound increments until a total of 15.0 pounds has been subtracted from the door.

(c) Obstruction test. For a door traveling in the downward direction, when an inherent secondary entrapment protection device senses an obstruction and initiates a reversal, a control activation shall not move the door downward until the operator reverses the door a minimum of 2 inches (50.8 mm). The test is to be performed as described in §1211.7(b)(3).

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