

§ 162.018-5

size drain at the lowest practicable point where liquid can collect.

[CGFR 52-43, 17 FR 9540, Oct. 18, 1952]

§ 162.018-5 Blow-down adjustment and popping tolerance.

(a) Safety relief valves shall be so constructed that no shocks detrimental to the valve or pressure vessel are produced when lifting or closing. Safety relief valves shall be designed to open sharply and reach full lift and capacity at the maximum accumulation. Valve closure after popping shall be clean and sharp. Safety relief valves shall operate satisfactorily without wiredrawing and chattering at any stage of operation.

(b) Safety relief valves having adjustable blow-down construction shall be adjusted to close after blowing down not more than 5 percent of the set pressure. Valves shall be adjusted to pop within a tolerance of plus or minus 3 percent of the set pressure, except that for pressures of 70 p.s.i. and below, the tolerance in popping pressure shall not vary more than plus or minus 2 p.s.i.

[CGFR 52-43, 17 FR 9541, Oct. 18, 1952]

§ 162.018-6 Marking.

(a) Each safety relief valve shall be plainly marked by the manufacturer with the required data in such a way that the marking will not be obliterated in service. The marking may be stamped on the valve or stamped or cast on a plate securely fastened to the valve. The marking shall include the following data:

- (1) The name or identifying trademark of the manufacturer.
- (2) Manufacturer's design or type number.
- (3) Size ___ inches. (The pipe size of the valve inlet).
- (4) Set pressure ___ p.s.i.
- (5) Rated capacity ___ cubic feet per minute of the gas or vapor (at 60 °F. and 14.7 p.s.i.a.).
- (6) Coast Guard approval number. The minimum wording for showing ap-

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proval shall be "USCG 162.018/* *" or "USCG 162.018-* *".

(b) [Reserved]

[CGFR 68-82, 33 FR 18908, Dec. 18, 1968, as amended by USCG 2001-10224, 66 FR 48620, Sept. 21, 2001]

§ 162.018-7 Flow rating tests.

(a) Flow rating of valves shall be conducted in accordance with UG-131 of section VIII of the ASME Code, S-1.2.5.2 of the Compressed Gas Association Standards, or other procedure approved by the Commanding Officer, USCG Marine Safety Center.

(b) [Reserved]

[CGFR 68-82, 33 FR 18908, Dec. 18, 1968, as amended by USCG 2001-10224, 66 FR 48620, Sept. 21, 2001]

§ 162.018-8 Procedure for approval.

(a) *General.* Safety relief valves for use on pressure vessels containing liquefied compressed gases shall be approved by the Commanding Officer, USCG Marine Safety Center, 400 Seventh Street SW., Washington, DC 20590-0001.

(b) *Plan submittal.* Manufacturers desiring to secure approval of a new design or type of safety relief valve shall submit in quadruplicate detail drawings showing the valve construction, and material specifications of the component parts. In the event the design is changed, amended drawings shall be submitted to the Commanding Officer, USCG Marine Safety Center, for re-approval.

(c) *Pre-approval tests.* (1) Prior to approval of safety relief valves by the Commanding Officer, USCG Marine Safety Center, manufacturers shall have capacity certification tests conducted, in accordance with § 162.018-7 or submit satisfactory evidence that such tests have been conducted and approved by The National Board of Boiler and Pressure Vessel Inspectors or by a properly supervised and inspected test laboratory acceptable to the Commanding Officer, USCG Marine Safety Center.

(2) Reports of conducted tests on designs of safety relief valves different

* * Number to be assigned by the Commanding Officer, USCG Marine Safety Center.