

Flanged Steel Pressure-relief Valves

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Flanged Steel Pressure-relief Valves

1 Scope

This standard is a purchase specification for flanged steel pressure-relief valves. Basic requirements are given for direct spring-loaded pressure-relief valves and pilot-operated pressure-relief valves as follows:

- orifice designation and area;
- valve size and pressure rating, inlet and outlet;
- materials;
- pressure–temperature limits;
- center-to-face dimensions, inlet and outlet.

Nameplate nomenclature and requirements for stamping are detailed in Annex A [metric units (SI)] and Annex E [U.S. customary units (USC)].

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API Standard 520 (Part 1 and Part 2), *Sizing, Selection, and Installation of Pressure-relieving Devices in Refineries*

API Standard 527, *Seat Tightness of Pressure Relief Valves*

ASME B1.20.1¹, *Pipe Threads, General Purpose (Inch)*

ASME B16.5, *Pipe Flanges and Flanged Fittings—NPS 1/2 Through NPS 24 Metric/Inch Standard*

ASME B16.34, *Valves—Flange, Threaded, and Welding End*

ASME Boiler and Pressure Vessel Code (BPVC), *Section VIII: Pressure Vessels; Division 1 and Division 2*

ASME Boiler and Pressure Vessel Code (BPVC), *Section XIII: Rules for Overpressure Protection*

ASME BPVC, *Section II: Materials:*

ASME SA-210, *Carbon-Steel Castings Suitable for Fusion Welding for High-Temperature Service*

ASME SA-217, *Martensitic Stainless Steel and Alloy Steel Castings for Pressure-Containing Parts, Suitable for High-Temperature Service*

ASME SA-351, *Specification for Castings, Austenitic, Austenitic-Ferritic (Duplex), for Pressure-Containing Parts*

ASME SA-494, *Specification for Castings, Nickel and Nickel Alloy*

¹ ASME International, 2 Park Avenue, New York, NY 10016-5990, www.asme.org.