Type Testing of Rising Stem Valves Equipped with Graphite Packing for Fugitive Emissions

API STANDARD 624
SECOND EDITION, FEBRUARY 2023

ERRATA 1, MAY 2023
ERRATA 2, MAY 2025



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Type Testing of Rising Stem Valves Equipped with Graphite Packing for Fugitive Emissions

1 Scope

This standard specifies the requirements and acceptance criteria (100 ppmv) for fugitive emission type testing of rising and rising-rotating stem valves equipped with packing previously tested in accordance with API Standard 622. Valves larger than NPS 42 or valves greater than class 1500 are outside the scope of this standard.

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

API Standard 600, *Steel Gate Valves – Flanged and Butt-welding Ends, Bolted Bonnets*

API Standard 602, *Steel Gate, Globe and Check Valves for Sizes DN 100 and Smaller for the Petroleum and Natural Gas Industries*

API Standard 603, *Corrosion-resistant, Bolted Bonnet Gate Valves—Flanged and Butt-welding Ends*

API Standard 622, *Type Testing of Process Valve Packing for Fugitive Emissions*

API Standard 623, *Steel Globe Valves—Flanged and Buttwelding Ends, Bolted Bonnets*

ASME B16.34,[1] *Valves—Flanged, Threaded, and Welding End*

3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1
ambient temperature
Temperature that is between 15 °C to 40 °C (59 °F to 104 °F).

3.2
auxiliary connection
Drain(s), vent(s), thermal relief(s), or sealant injection port(s).

3.3
bolting torque
The amount of twisting or turning effort (expressed as N-m, ft-lb, or in.-lb) required to tighten a threaded fastener.

3.4
braided packing type
Packing rings that have an interlaced construction in which yarns/filaments are woven to a round, square or lattice weave pattern. Can also be die formed into shape.

3.5
combo-set packing type
Combination of die formed packing type and braided packing type.

[1] ASME International, 3 Park Avenue, New York, New York 10016-5990, www.asme.org.