

Butterfly Valves: Double-flanged, Lug-and Wafer-type

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Foreword

This standard is a purchase specification for butterfly valves designed for installation between flanges specified in ASME B16.1, ASME B16.5, ASME B16.24, and ASME B16.42, Classes 125-600; MSS SP-44, Class 150; and ASME B16.47, Series A (was MSS SP-44 except for certain materials) or Series B (was API 605), Class 150 for the NPS sizes defined herein.

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1 Scope

1.1 This standard covers design, materials, face-to-face dimensions, pressure-temperature ratings, and examination, inspection and test requirements for gray iron, ductile iron, bronze, steel, nickel-based alloy, or special alloy butterfly valves.

1.2 If product is supplied bearing the API Monogram and manufactured at a facility licensed by API, the requirements of Annex A apply.

1.3 The following two categories of butterfly valves are included.

a) Category A—Manufacturer's rated cold working pressure (CWP) butterfly valves, usually with a concentric disc and seat configuration. Sizes covered are NPS 2 to NPS 48 for valves having ASME Class 125 or Class 150 flange bolting patterns.

b) Category B—ASME Class and pressure-temperature rated butterfly valves that have an offset seat and either an eccentric or a concentric disc configuration. These valves may have a seat rating less than the body rating. Sizes covered are listed below.

— For lug and wafer, Class 150: NPS 3 to NPS 48.

— For lug and wafer, Class 300 and Class 600: NPS 3 to NPS 48.

— For double-flanged long pattern, Class 150, 300, and 600: NPS 3 to NPS 36.

— For double-flanged short pattern, Class 150 and Class 300: NPS 3 to NPS 48.

— For double-flanged short pattern, Class 600: NPS 3 to NPS 24.

Information to be specified by the purchaser is shown in Annex B.

1.4 Valve configurations include double-flanged, lug- and wafer-type with facings that permits installation between ASME and MSS flanges that conform to the standards and specifications listed in Section 2. Typical valve construction and nomenclature for valve parts are shown in Annex C.

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. Text in brackets after a publication title indicates a restriction on the classes to which the publication applies.

API Standard 578, *Valve Inspection and Testing*

API Standard 607, *Fire Test for Quarter-turn Valves and Valves Equipped with Nonmetallic Seats*

ASME B1.1¹, *Unified Inch Screw Threads* [UN and UNR Thread Form]

ASME B16.1, *Gray Iron Pipe Flanges and Flanged Fittings*

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