

BS ISO 10631:2013



BSI Standards Publication

Metallic butterfly valves for general purposes

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National foreword

This British Standard is the UK implementation of ISO 10631:2013.

The UK participation in its preparation was entrusted to Technical Committee PSE/18/3, Industrial valves, steam traps, actuators and safety devices against excessive pressure - Part turn valves (Ball, plug and butterfly).

A list of organizations represented on this committee can be obtained on request to its secretary.

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**Metallic butterfly valves for general
purposes**

Robinets métalliques à papillon d'usage général



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 153, *Valves*, Subcommittee SC 1, *Design, manufacture, marking and testing*.

This second edition cancels and replaces the first edition (ISO 10631:1994), which has been technically revised.

Metallic butterfly valves for general purposes

1 Scope

This International Standard specifies requirements for design, materials (e.g. steel, cast iron, ductile iron, copper alloy), pressure/temperature ratings and testing for butterfly valves having metallic bodies for use in general purpose flanged or butt welding piping systems.

This International Standard covers butterfly valves of the following nominal sizes, DN and NPS:

- DN 40; 50; 65; 80; 100; 125; 150; 200; 250; 300; 350; 400; 450; 500 (550); 600 (650); 700; 750; 800; 900; 1 000; 1 200; 1 400; 1 600; 1 800; 2 000; 2 200; 2 400.
- NPS 1 1/2; 2; 2 1/2; 3; 4; 5; 6; 8; 10; 12; 14; 16; 18; 20; (22); 24; (26); 28; 30; 32; 36; 40; 48; 56; 64; 72; 80; 88; 96.

This International Standard is applicable to butterfly valves of the following pressure designations, PN and Class:

- PN 2,5; PN 6; PN 10; PN 16; PN 25; PN 40;
- Class 125; 150; 300.

2 Normative references

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

ISO 185, *Grey cast irons — Classification*

ISO 1083, *Spheroidal graphite cast irons - Classification*

ISO 3755, *Cast carbon steels for general engineering purposes*

ISO 4991, *Steel castings for pressure purposes*

ISO 5208:2008, *Industrial valves — Pressure testing of metallic valves*

ISO 5209:1977, *General purpose industrial valves — Marking*

ISO 5211, *Industrial valves — Part-turn actuator attachments*

ISO 5752, *Metal valves for use in flanged pipe systems — Face-to-face and centre-to-face dimensions*

ISO 5922, *Malleable cast iron*

ISO 7005-3, *Metallic flanges — Part 3: Copper alloy and composite flanges*

ISO 9327-1, *Steel forgings and rolled or forged bars for pressure purposes — Technical delivery conditions — Part 1: General requirements*

ISO 9327-2, *Steel forgings and rolled or forged bars for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy (Mo, Cr and CrMo) steels with specified elevated temperature properties*

ISO 9327-3, *Steel forgings and rolled or forged bars for pressure purposes — Technical delivery conditions — Part 3: Nickel steels with specified low temperature properties*