



2-piece Ball Valves

Ball Valves take a leading role in the valve industry . The scope of applications is enormous, because of the quarter turn construction they are easy to operate and require almost no maintenance.

Moreover full bore Ball Valves are ideal for conditions which require maximum flow capacity with minimum pressure drop.

Besides these advantages, all Buffalo Valves two-piece flanged full bore Ball Valves are fire-safe and TA-Luft certified. The standard ISO Direct Mount feature enables an easy installation of any actuator, even after initial start-up in a manual configuration. Finally, the Buffalo Valves label ensures reliability and an excellent price quality ratio.

Construction

The Ball Valves are of a two piece construction and has a solid full bore ball. Relevant design standards are ENISO 17292, EN12516, ASME B16.34 and API 608.

Materials

Carbon steel (1.0619/ASTM A 216 WCB) and stainless steel (1.4408/ASTM A351 CF8M) are the materials which form standard supply. Other materials can be supplied upon request.

Direct Mount

A Direct Mount top-flange according to ISO 5211 is standard for these Ball Valves. This feature makes it possible to mount an actuator without the need of a mounting bracket and drive adapter. This gives a considerable cost reduction, compact automated unit and a higher level of safety for operators.

Fire-Safe

The Ball Valves are fire-safe certified according to API 607 4th Edition. In the event of fire, a secondary metallic seat prevents leakage through the valve port. A graphoil stem seal and a graphoil spiralwound body gasket ensures tightness through the stem packing and body joints.

Ball

The highly polished solid ball has a pressure relief hole in the stem slot to equalize the pressure in the body cavity. This ensures a tight shutoff and long service life.



TA-Luft

Because of the double stem seal construction utilizing an O-ring and a spring loaded gland packing the Buffalo Valves flanged Ball Valves comply with very strict emission requirements. In this respect they are certified by TA-Luft (vdi 2440, Section 3.3.1.3)

Stem

The valve stem assembly has a blow-out proof construction and a square top. A PTFE thrust washer ensures a smooth operation between body and stem.

Anti-static

The ball-stem connection and the stem-body connection have an antistatic feature, which ensures electrical continuity between those parts.

Gland Packing

Two Belleville spring washers ensures optimal sealing performance also compensating for changing process conditions. Advantages of this feature are an increased operational safety and less maintenance. In accordance with fire-safe requirements, packing material is made of graphoil. In order to comply with the very strict emission requirements for TA-Luft certification, a Viton™ O-Ring has been placed under the gland packing.

Seats

A flexible seat design provides tight shut-off at high and low pressures. Relief grooves at the outside of the seat protects the seat from being pushed against the ball by media pressure. This feature reduces wear to a minimum and gives favourable torque figures under various process conditions. Standard seat material is a high grade PTFE;TFM1600. Besides the proven mechanical and chemical properties of PTFE, this chemical reinforced version offers suitability for a wider range of applications in respect to pressure and temperature.

Testing

The Ball Valves are 100% tight shut-off and are tested in accordance with API598 (ASME) or EN 12266 (DIN).



Face to face length

The DIN Ball Valves are supplied with a face to face dimension in accordance with EN 558-1.27 (DIN 3202 F18) and ASME Valves in accordance with B16.10 long pattern.

Flanges

The flanges are in accordance with EN 1092-1 (DIN version) or ASME B16.5 RF (ASME version). Flange facings have a finish to Ra 3.2-6.3.

NACE

All stainless steel Buffalo Valves Ball Valves comply with NACE MR0175 as standards. On request we can also supply the steel version according to NACE specifications.

Finish

Castings have a high quality finish (minimum MSSSP112, level 2). Carbon steel Ball Valves have a primer and Blue top coat (RAL 5015).

Operation

The Ball Valves as standard are supplied with a SS304 handlever (DN15-DN80) or a T-bar (DN100-DN150). For DN200 a gearbox can be supplied. All handleiers are lockable in open or closed position. Where Extra security is required a padlock should be fitted to lock the valve in the open or closed position.

Options

- *Gearbox for all sizes.
- *Manual override (emergency operator), in combination with a pneumatic actuator.
- *Spring return lever
- *Extended Spindle to clear lagging
- * Extended bonnet for low temperature applications
- *Limit switches for remote open/close indication
- *Electric actuator
- *Pneumatic actuator
- *Hydraulic actuator



Material and test certificates

All Buffalo Valves flanged Ball Valves can be supplied with a EN 10204-3.1B test-and material certification.