



Pibiviesse® High Performance Control Ball Valve

- Sizes 2" to 48"
- Pressure rating up to ANSI 2500#
- Anti-cavitation and low noise trim available
- High turndown
- High rangeability
- Unique self-cleaning effect
- Single metal/metal seating - Class V or VI tightness
- Low and balance dynamic torque
- Built to European or US standards
- Fire safe
- Expansion outlets to suit piping configuration
- Depressurisation, blowdown and anti-surge application

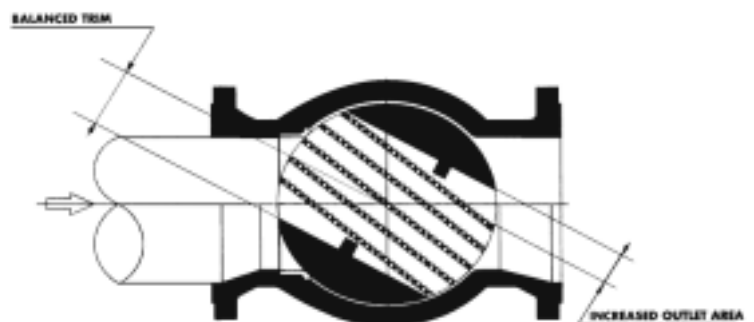


Fig. 1 - NEW CAGE-BALL™ TRIM CONCEPT



PIBIVIESSE is an Italian valve manufacturer with over 15 years experience of manufacturing trunnion mounted ball valves and gate valves for oil & gas, petrochemical and water transportation services. Their products are currently used everywhere in the world.

All PIBIVIESSE ball valves are of bolted construction which simplifies field service and maintenance. PIBIVIESSE top entry ball valves can be easily serviced without removing the valve from the line.

All the components of the side entry ball valves and all the internals of the top entry ball valves are made of forgings. Only the body of the top entry ball valves is in the cast form.



Side Entry Ball Valve



Top Entry Ball Valve



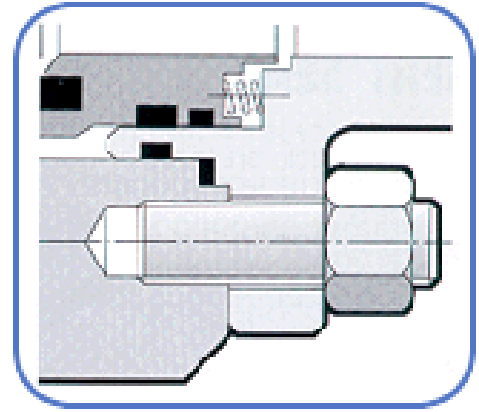
Welded Ball Valve

PORT SIZES

PIBIVIESSE ball valves are available in full, reduced or venturi port. Through conduit full round opening, to API 6D and API 6A, ensuring smooth flow and suitability for pigging and hot tapping.

BODY JOINTS

Double o-rings or the combination of o-rings and gaskets grant a perfect and safe sealing on body and trunnion. Thus making the PIBIVIESSE ball valves suitable for both above ground and buried installation.



FIRE SAFE CERTIFICATION

PIBIVIESSE ball valves have been designed to meet the requirements of BS 5146, and 6755, API RP6F, 607 and 6FA. Fire safe tests have been witnessed and certified by customer's inspectors and independent authorities.

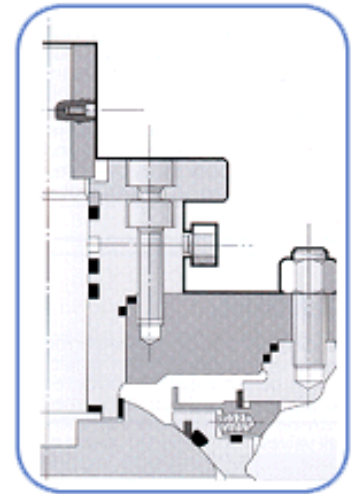
STEM FEATURES

Antiblowout stems permit the replacement of the stem seals with the valve in the fully closed position.

The stem seal integrity is achieved by the use of three o-rings (or two o-ring and a graphite gasket).

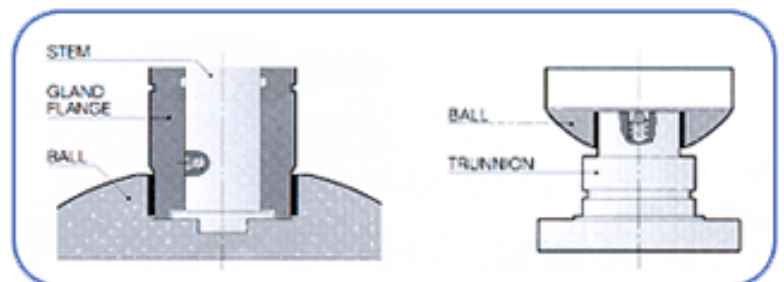
The upper o-ring (or the graphite gasket) can be replaced with the valve in line and under pressure.

The ball and stem are separate components which lessens torque. Stem and trunnion are supported by P.T.F.E. impregnated steel bearing sleeves. Provision for the injection of emergency sealant is available on request.



TRUNNION MOUNTED BALLS

Trunnion mounted balls permit ease of operation, minimise the operating torque and reduce seat seal wear.



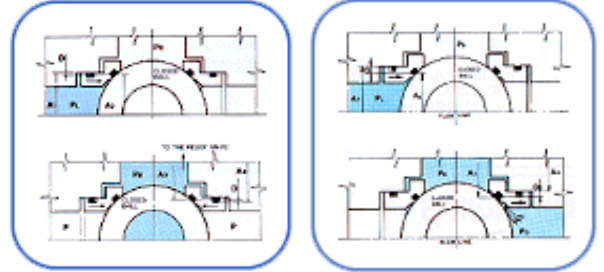
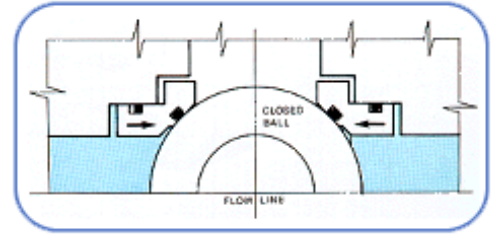
ANTISTATIC

A stainless steel or inconel spring between the stems and the ball or between the stem and the gland plate permits electrical continuity between all valve components.

SEATS FEATURE

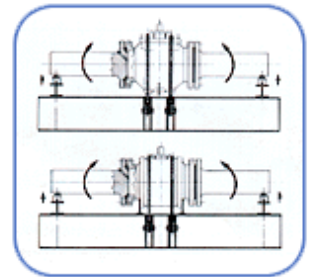
Independent floating spring loaded seats are always in contact with the ball to provide an effective tight seal even at low differential pressures. Independent upstream and downstream seat permit draining of fluid from the body cavity, allowing double block and bleed operation.

With the single sealing feature, there is an automatic body cavity release of over pressure to the line through the down stream seat. Double sealing feature (available on request), maintains the sealing capacity of the valve even in the case of failure of the up stream seat. Body cavity over pressure in this case can be released through a relief valve to atmosphere. A combination of double sealing features on the downstream side and single sealing on the upstream seat is available on request. This configuration maintains the sealing capacity of the valve in case of failure of the up stream seat and release of the body cavity over pressure through the up stream seat.



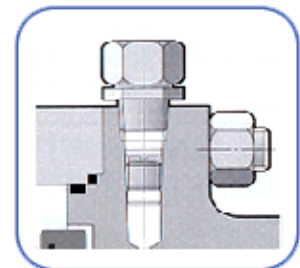
BENDING

Bending tests to verify the performance of the valves, when subject to the bending loads transmitted by piping, have been performed both on side entry and top entry ball valves. Tests included checks of possible body distortions, torque and leakage rates. The bending tests have been performed with internal pressure exceeding the maximum rated pressure on top entry ball valves. Certificates are available. Bending tests have been performed in both operational and maintenance models.



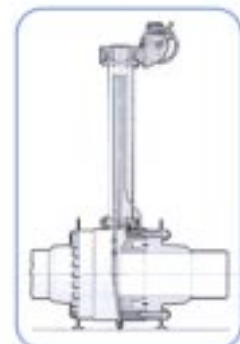
EMERGENCY SEAT SEAL

An emergency sealant injection system is available on request which can restore the sealing integrity if damage is caused to the sealing surfaces.



EXTENDED STEM

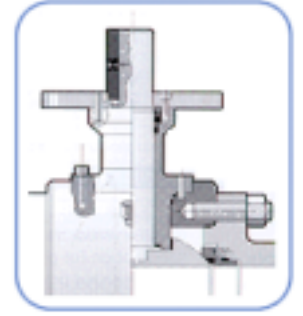
When ball valves are to be installed below ground on buried pipelines or where not easily accessible, operators can be remote mounted by means of suitable stem extension. Drain lines and grease injectors (if required) will be piped up to the top of the extension for an easier access. The distance between valve centre-line and operator handwheel must be specified.



EXTENDED BONNET

Ball Valves to be used in low temperature/cryogenic service are equipped with extended bonnet to allow vapour space between body cavity and gland seals.

This feature preserves stem seals from damages that may occur during operation at cryogenic temperatures, and allows stem seal servicing even on installed on insulated lines. Vapour space length or insulating thickness shall be specified.



PUPS

Butt weld ends valves may be supplied with transition pieces (PUPS) to avoid any risk of seat and seal damage during welding and post weld heat treatment operations. Length of pups and matching pipe details must be specified.

QUALIFICATIONS

API LICENCES

PIBIVIESSE has been granted (from the American Petroleum Institute) the authority to use the API 6A and the API 6D monograms. The API 6A includes the product specification level 4, which is the highest quality level specified.

Licence numbers are:

- API 6A: 0370
- API 6D: 0215

QUALITY

The high consideration given by management to the problem of quality and its control has been one of the main factors to determining the success of PIBIVIESSE. All of our manufacturing activities, are covered by a quality assurance program, which has been audited and qualified in accordance with:

- B.S. 5750
- ISO 9001/2
- API 6A/6D SPEC Q1
- ASME III DIV I/INCA 4000

Full implementation of the Q.A. program, has been approved and is regularly audited by API, inspection authorities and customer inspector.

