OPERATING INSTRUCTIONS FOR BALL VALVES

Applicable to Split Body Ball Valves type BV4
with nominal diameter DN 15 till DN 300 – NPS 1/2 till NPS 12

1. Safety

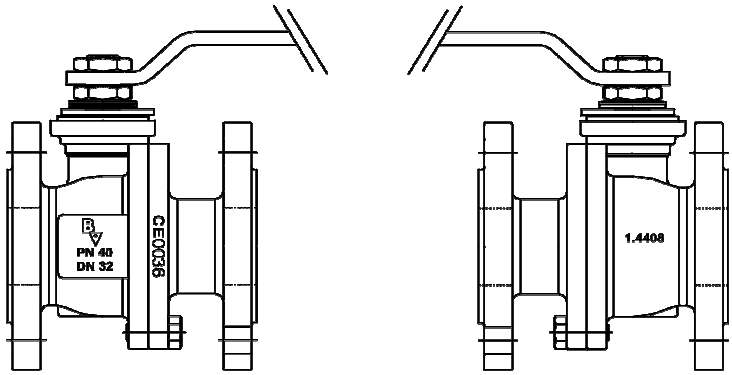
- ✓ For safety reasons, the installation must take place under the supervision of a foreman taking into account the local safety instructions and advises.
- ✓ The operation of ball valves and their controls must be done by staff trained in all aspects of their operation.

2. General remarks

- ✓ In general, the split body ball valve is bi-directional meaning that the valve can be mounted in the pipeline in either way.
- ✓ Do not weld or execute any mechanical working onto the pipeline with the valve in place.

3. Check prior to installation

- ✓ Before fitting the valve between the flanges, make sure that the operating conditions (pressure, temperature and fluid) are compatible with the technical specifications of the valve.
- ✓ Identification of the split body ball valve :



BV = manufacturer
PN40 = pressure class
DN32 = size in mm
CE0036 = CE label

1.4408 = material

- ✓ ***Before installation make sure that the main is depressurised and purged in order to avoid any danger to the operator.***

4. Installation

- ✓ Remove the plastic protection caps (if any) covering both the flange connections.
- ✓ Check and clean the ball valve before mounting in the pipeline.
- ✓ To ensure that all the moving parts are functioning correctly, the ball valve should first undergo a functional test (open/close).
- ✓ Check if the pipeline is free of welding splashes and slivers of metal.
- ✓ Move the ball valve in its open position before mounting in the pipeline.
- ✓ If the ball valve has a flow-direction indicator, assure yourself of the correct position of the valve.

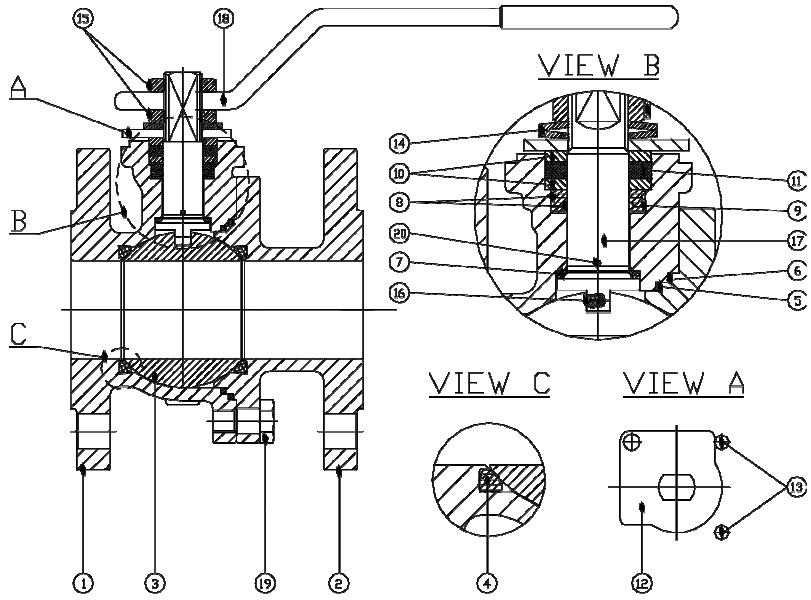
- ✓ Check if the flange connections of the pipeline are parallel with each other.
- ✓ Make sure that the valve fits between the flanges without difficulty. Force apart the flanges with a suitable tool if the fit is too tight.
- ✓ Do not forget to insert a gasket between flange and valve to guarantee a perfect sealing.
- ✓ Check that the bolt-hole-connections are in axial direction of each other.
- ✓ Keep the valve well aligned with the flanges while removing the flange separators and tighten the screws with a torque wrench to assure correct sealing (opposing bolts sequentially).
- ✓ After mounting and inspecting the ball valve in the pipeline, it has to be operated 3 to 5 times to assure proper functioning before using the pipeline.

4. Storage

- ✓ When storing the ball valve do not remove the original packaging and leave the plastic protection caps on both the flange connections.
- ✓ The ball valve has to be stored in open position, inside in a clean, dry place.
- ✓ When storing for a longer period of time, the inner part of the ball valve has to be provided with an oil/fat layer to prevent corrosion.

5. Maintenance

- ✓ Maintain the ball valve regularly according to the frequency of operation, the pressure, temperature and medium passing through the valve. A valve that is operated frequently has to be maintained more often.
- ✓ Make sure the ball valve is manoeuvred at least twice a year.
- ✓ Components are available in spare parts.



1.	body
2.	cap
3.	ball
4.	ball seal
5.	seat
6.	seat
7.	thrust
8.	stem packing
9.	stem packing
10.	packing gland
11.	stem packing
12.	stopper plate
13.	stopper bolts
14.	washer
15.	nut
16.	anti-static spring
17.	stem
18.	lever
19.	bolt
20.	anti-static spring