

Operating instructions Installation / Operation 3-pce ball valve series DG1 DN 8 – DN 100 full bore DN 15 – DN 150 reduced bore

# **General information**

- The valve may be fitted in any position in the pipework.
- Prior to the mounting of the valve flush the pipelines to remove all traces of soiling, welding residues etc.
- The pipes must not have any tension.
- CAUTION: The rotating ball may cause injury. Keep away from space between ball and body!

### Installation of valves with screwed ends

- Use hemp core, PTFE etc. to tighten the threads. Apply the wrench only on the screwed ends to tighten the valve to the pipe.
- Tightening by using the valve body or hand lever can lead to damage.

### Installation of valves with short butt weld ends DN 8 - DN 50 full bore

- ATTENTION: Short butt weld ends (DN 8 DN 50 full bore) are only pre-assembled.
- After installation the body screws have to be tightened (see table "tightening moments").
  - Spot weld the valve in the pipe.
  - Unscrew all body screws.
  - Remove the body screw and nut which are below the top plate (screw which is not going through the body).
  - Swing out the centre section (valve to be in open position).
  - Secure seats against falling out (e.g. with tape).
  - After having finished the welding swing back the centre section.
  - Replace screw and nut.
  - Secure that the ball valve is exactly in "open" position.
  - Tighten the body screws (see table "tightening moments").
  - ATTENTION: Do not operate the valve before flushing, the valve must stay in open position, as otherwise the seats may be damaged!

## Installation of firesafe valves, valves with long butt weld ends, ends for orbital welding or but weld ends DN 65 - DN 100 full bore

- Weld the valve in the pipe (**ball must be in open position**, centre section must not be dismounted). After dismounting of firesafe valves use new graphite sealings.
- ATTENTION: Do not operate the valve before flushing, the valve must stay in open position, as otherwise the seats may be damaged!

## Putting into operation

- Flush the ball valve and pipe thoroughly again.
- Open and close the valve for test run.
- In case of any leakage between centre section and end caps the body screws and nuts must be tightened again (see table "tightening moments").

## Mounting of actuators

- Before mounting the actuator the gland nut has to be secured by the security cap.
- The mounted actuator must not cause a thrust load on the valve shaft. If necessary the actuator must be fastened / supported. NOTE: In case of moving pipelines the fastening of the actuator must not be rigid.
- For working temperatures up to max. 140°C the actuators can be directly mounted. If temperatures are higher a mounting bracket should be used as thermal isolation between actuator and valve.

### Tightening moments

Max. tightening moments must not be significantly exceeded.

DN	8/10	15	20	25	32	40	50	65	80	100
M [Nm]	7	15	15	15	35	35	60	80	80	125