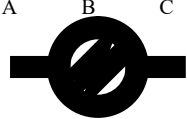
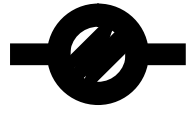
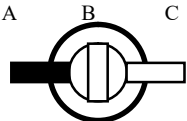
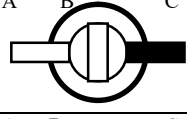
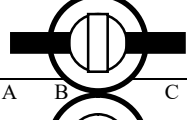
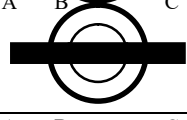
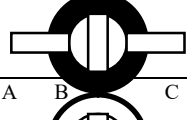
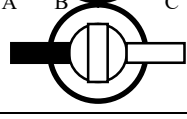
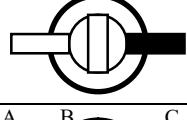
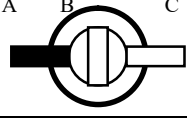
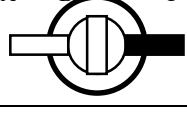


Annex 1

LIST OF FINAL TESTS GU DN 300 – DN 1400

| Name of test | Position of the ball | Pressures (bar) | | Time of the test. stabilisation/test (min) | Acceptation criterion | Testing medium | Test description |
|------------------------------------|---|-------------------|--------|--|---|-----------------|---|
| 1. Pneumatic body test |  | A | 6 | 30 / 30 | Neither leakage nor pressure losses | air | Tightness test of ball valve body surface with the use of foam creating solution. |
| | | B | 6 | | | | |
| | | C | 6 | | | | |
| 2. Hydrostatic body test |  | A | 1,5xPN | 30 / 30 | Neither leakage, pressure losses, nor deformation | water | Strength test of GU. After reaching testing pressure and stabilisation we follow pressure losses, leakage, and deformation. |
| | | B | 1,5xPN | | | | |
| | | C | 1,5xPN | | | | |
| 3. Function test |  | A | PN | - | Fluent opening in time limit | water | Function test from close position to open position at one-side pressure PN. |
| | | B | atmos. | | | | |
| | | C | atmos. | | | | |
| 4. Function test |  | A | atmos. | - | Fluent opening in time limit | water | Function test from close position to open position at one-side pressure PN on opposite side of GU |
| | | B | atmos. | | | | |
| | | C | PN | | | | |
| 5. Double Block & Bleed |  | A | 1,1xPN | 30 / 2 | 0 bubbles in 2min. | water or air | Test on tightness of seats from both sides A and C in close GU |
| | | B | atmos. | | | | |
| | | C | 1,1xPN | | | | |
| 6. Double Block & Bleed |  | A | 1,1xPN | 30 / 2 | 0 bubbles in 2min. | water or air | Test on tightness of seats from both sides A and C in open GU |
| | | B | atmos. | | | | |
| | | C | 1,1xPN | | | | |
| 7. Double Piston Effect |  | A | atmos. | 30 / 2 | 0 bubbles in 2min. | water or air | Test on tightness of seats from both sides A and C in close GU |
| | | B | 1,1xPN | | | | |
| | | C | atmos. | | | | |
| 8. Sealing test of seats |  | A | 0,5 | 30 / 2 | 0 bubbles in 2min. | nitrogen or air | Tightness test on side A |
| | | B | atmos. | | | | |
| | | C | atmos. | | | | |
| 9. Sealing test of seats |  | A | atmos. | 30 / 2 | 0 bubbles in 2min. | nitrogen or air | Tightness test on side C |
| | | B | atmos. | | | | |
| | | C | 0,5 | | | | |
| 10. Sealing test of seats |  | A | 1,1xPN | 30 / 2 | 0 bubbles in 2min. | nitrogen or air | Tightness test on side A |
| | | B | atmos. | | | | |
| | | C | atmos. | | | | |
| 11. Sealing test of seats |  | A | atmos. | 30 / 2 | 0 bubbles in 2min. | nitrogen or air | Tightness test on side C |
| | | B | atmos. | | | | |
| | | C | 1,1xPN | | | | |

Annex 1**Remark No. 1:**

Sample will be taken by pressure hose from the inter space of the ball. During measurement the free end of the hose is submerged 50mm below the water level (see picture No.1).

Picture No. 1**Remark No. 2 :**

At tests under water it is necessary to use calibrated pipette with max. internal diameter 5 mm.