

# PRODUCT TECHNICAL SPECIFICATION

## STATIC BALANCE VALVE, FLANGED

### SCOPE

Balance Valve, Static, Flanged, Gray Cast Iron, (DN40-200) Y Type and (DN250-300) T Type  
Sizes and Materials comply with EN Standards  
Has TS EN 13789 and CE Certificates  
DN 40, 50, 65, 80, 100, 125, 150, 200, 250, 300  
PN 16

### A. MATERIALS

|                           |   |   |
|---------------------------|---|---|
| <b>Body</b>               | in accordance with the TS 552 EN 1561 Standard; Gray Cast Iron, EN GJL 250 (GG 25 according to the older rating)  |   |
| <b>Bonnet</b>             | in accordance with the EN 1561 Standard; Gray Cast Iron, EN GJL 250 (GG 25 according to the older rating)   |   |
| <b>Disc</b>               | <b>Core</b>   | in accordance with the TS 526 EN 1563/A1 Standard; Ductile Iron, EN GJS 400 (GGG 40.3 according to the older rating) in accordance with the DIN 30677-1 Standard; Wet Paint |
|                           | <b>Seat</b>   | Shore A EPDM Rubber, Hardness $70 \pm 5$ , coating via Vulcanization process  |
| <b>Stem</b>               | Stainless Steel, AISI 410 or 420 or 304   |   |
| <b>Fitting Components</b> | Minimum Property Class 6.8  |   |
| <b>Handwheel</b>          | 30% Glass Fiber Reinforced Plastic in diameters between DN 40-150 in diameters between DN 200-300, in accordance with the TS 526 EN 1563/A1 Standard; Ductile Iron, EN GJS 400 (GGG 40.3 according to the older rating) |   |

## **B. FACE TO FACE DIMENSIONS**

in accordance with the EN 558-1 SERIES-1 Standard

## **C. FLANGE SIZES**

in accordance with the TS EN 1092-2 and BS EN 1092-2 Standards; PN 16

## **D. NOMINAL PRESSURE / OPERATING PRESSURE**

PN 16 / 16 Bar

## **E. OPERATING TEMPERATURE RANGE**

-10 ~ +120 °C

## **F. MARKING**

Minimal marking that is legible and obtained in the form of embossing from casting;

**MANUFACTURER (BRAND)**

BODY MATERIAL: **EN GJL 250**

PRESSURE GRADING: **PN16**

**ARROW INDICATING THE DIRECTION OF THE FLOW**

NOMINAL SIZE:

**DN40/DN50/DN65 / DN80 / DN100 / DN125 / DN150 / DN200 / DN250 / DN300**

## **G. PAINT**

**After Casting** Cast Iron parts are primed

**Before Assembly** in accordance with the DIN 30677-1 Standard; epoxy powder oven-paint

## **H. TEST**

in accordance with the EN 12266-1 Standard; RATE-A

## **I. WARRANTY**

2-year warranty against workmanship and material defects

## **J. PACKAGING AND SHIPMENT**

Plastic plugs in fluid bore openings.

For products with nominal diameters of DN 40 - 150, shipped in individual cardboard boxes.

Protection with custom-molded foam inserts in cardboard boxes for each product.

For products with nominal diameters of DN 200 - 300, shipped individually in wooden crates with special protection for the handwheel section.

## **K. OTHER ISSUES**

Free travelling stem-disc connection. Disc providing sealing with vulcanized EPDM on it. (In this way, the minimum embrittlement effect on the sealing element due to temperature effect.)

For products with nominal diameters between DN 40 - 80 the body-bonnet connection is threaded and the handwheel diameter is 85 mm. For products with nominal diameters between DN 100 - 150 the body-bonnet connection is flanged and the handwheel diameter is 160 mm. For products with nominal diameters between DN 200 - 300 the body-bonnet connection is flanged and the handwheel diameter is 400 mm.

Each turn divided into 20 equal parts on the handwheel. Thus, an accuracy of 0.05 turns of flow rate difference is obtained.

Two flow measurement points on each product, one at the inlet and one at the outlet.

Measurement points deviate 90° from handwheel axis in products with nominal diameters of DN 40 and 50.

Measurement points are on handwheel axis in products with nominal diameters of DN 65 to 300.

Integrated carrying handle to facilitate the transport of the body in products with nominal diameters of DN 40 to 100.

Number of handwheel turns and minimum Kvs values depending on the nominal diameter.

Product with a nominal diameter of DN 40 has 6 handwheel turns and has a flow rate of 26 m<sup>3</sup>/h.

Product with a nominal diameter of DN 50 has 8 handwheel turns and has a flow rate of 47 m<sup>3</sup>/h.

Product with a nominal diameter of DN 65 has 8 handwheel turns and has a flow rate of 79 m<sup>3</sup>/h. Product with a nominal diameter of DN 80 has 8 handwheel turns and has a flow rate of 116 m<sup>3</sup>/h.

Product with a nominal diameter of DN 100 has 8 handwheel turns and has a flow rate of 196 m<sup>3</sup>/h.

Product with a nominal diameter of DN 125 has 10 handwheel turns and has a flow rate of 360 m<sup>3</sup>/h. Product with a nominal diameter of DN 150 has 10 handwheel turns and has a flow rate of 387 m<sup>3</sup>/h.

Product with a nominal diameter of DN 200 has 12 handwheel turns and has a flow rate of 724 m<sup>3</sup>/h. Product with a nominal diameter of DN 250 has 12 handwheel turns and has a flow rate of 860 m<sup>3</sup>/h. Product with a nominal diameter of DN 300 has 14 handwheel turns and has a flow rate of 1,300 m<sup>3</sup>/h.