

## Dual plate swing check valve, article 650-GGG/VA

Diameter 2" (DN 50) up to 12" (DN 300)

Double plate swing check valve from the "Slim-Line" series for general industrial applications.

Wafer design (intermediate flange) with double disc separated in the middle, guided on a bearing shaft and a second shaft as a limit stop. Due to this construction, the opening cross section is more than 90%, so that the lowest pressure losses occur. The discs returns by a helical spring. The double plates lie on a soft sealing elastomer sealing surface in the body, optionally in the qualities NBR / EPDM / FPM (Viton).

Body inside / outside with epoxy coating (> 200 µm).

☞ Installation between flanges according to DIN EN 1092-1 Form B1, PN 10/16 from nominal size DN 300 PN 10, also on request according to ASME 16.5, class 150

☞ Face to face according to EN 558-1, row 16 (DIN K-3)

☞ Installation in any pipe system (vertical / horizontal), with vertical mounting, the media flow should be from bottom to top.



|      |                           |
|------|---------------------------|
| CE   | 0036                      |
| T °C | Ambient -10° C ... +80° C |
| T °C | Medium                    |
|      | EPDM -10° C ... +120° C   |
|      | NBR -10° C ... + 90° C    |
|      | FPM -10° C ... +150° C    |

### Pressure drop diagram

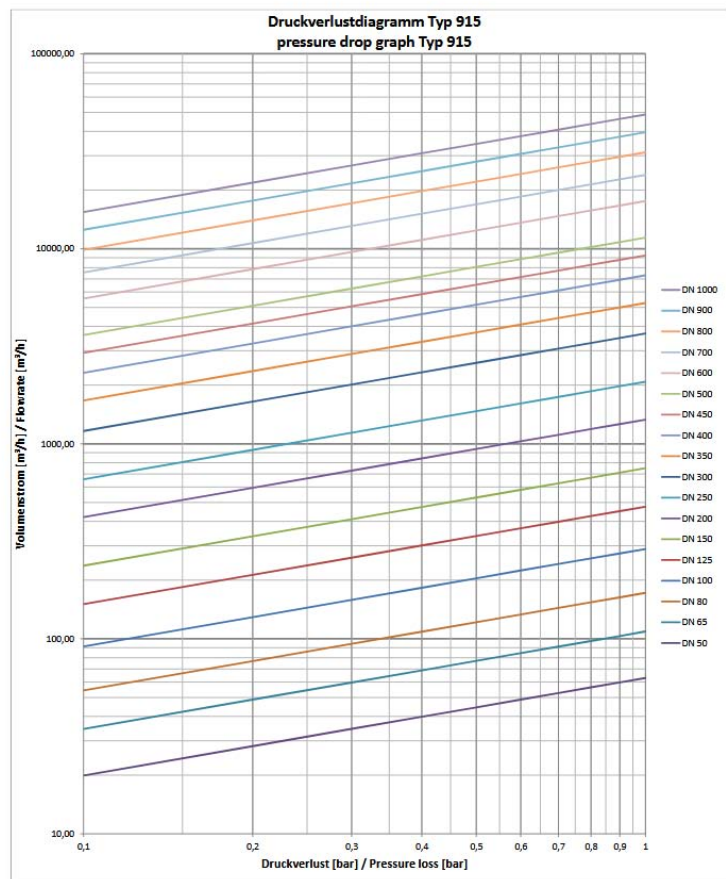
Pressure drop diagram for water at 20° C open valve and horizontal flow. To determine the pressure drops for others Media please calculate with the equivalent as for water volume flow

$$\dot{V}_w = \dot{V} \sqrt{\frac{\rho}{1000}}$$

$\dot{V}_w$  = equivalent water volume flow in m³/h

$\rho$  = Density of the medium in kg/m³ (operating condition)

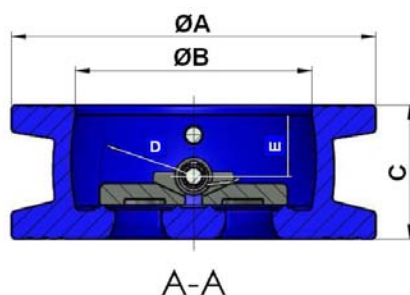
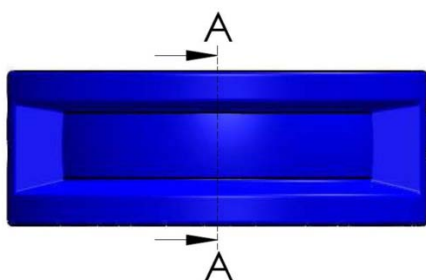
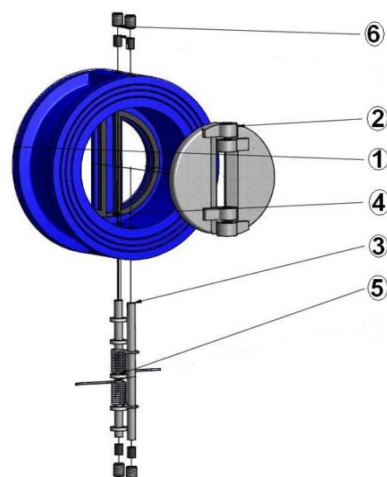
$\dot{V}$  = Volume flow of the medium in m³/h (operating condition)



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| Pos. | Description | Material                                                             |
|------|-------------|----------------------------------------------------------------------|
| 1    | Body        | Nodular cast iron EN-JS 1030 (GGG40)<br>epoxyd coated, blue RAL 5010 |
| 2    | Dual disc   | Stainless steel A351 CF8M                                            |
| 3    | Shaft       | Stainless steel A182 F316                                            |
| 4    | Sealing     | NBR, EPDM, FPM                                                       |
| 5    | Springs     | Stainless steel AISI 316 Ti                                          |
| 6    | Screws      | Stainless steel                                                      |



| Diameter | Article-No.:  | ØA<br>(mm) |       | ØB<br>(mm) | C<br>(mm) | D<br>(mm) | E<br>(mm) | Opening pressure at<br>flow direction (mbar) |      |      | Design pressure |        | KV-value<br>(m³/h) | Weight<br>(kg) |
|----------|---------------|------------|-------|------------|-----------|-----------|-----------|----------------------------------------------|------|------|-----------------|--------|--------------------|----------------|
|          |               | PN 10      | PN 16 |            |           |           |           | ↔                                            | ↑    | ↓    | PN              | bar    |                    |                |
| DN 50    | 235.2703.6.21 | 107        | 107   | 70,5       | 43        | 28,8      | 19        | ~ 15                                         | ~ 20 | ~ 10 | 10 / 16         | 0 - 16 | 63                 | 1,5            |
| DN 65    | 235.2703.6.24 | 127        | 127   | 80,0       | 46        | 36,1      | 20        | ~ 15                                         | ~ 20 | ~ 10 | 10 / 16         | 0 - 16 | 109                | 2,4            |
| DN 80    | 235.2703.6.25 | 142        | 142   | 94,0       | 64        | 43,4      | 28        | ~ 15                                         | ~ 20 | ~ 10 | 10 / 16         | 0 - 16 | 172                | 3,6            |
| DN 100   | 235.2703.6.27 | 162        | 162   | 117,0      | 64        | 52,8      | 27        | ~ 15                                         | ~ 20 | ~ 10 | 10 / 16         | 0 - 16 | 289                | 5,7            |
| DN 125   | 235.2703.6.28 | 192        | 192   | 145,0      | 70        | 65,7      | 30        | ~ 15                                         | ~ 20 | ~ 10 | 10 / 16         | 0 - 16 | 476                | 7,3            |
| DN 150   | 235.2703.6.29 | 218        | 218   | 170,0      | 76        | 78,6      | 31        | ~ 15                                         | ~ 20 | ~ 10 | 10 / 16         | 0 - 16 | 750                | 9,0            |
| DN 200   | 235.2703.6.31 | 273        | 273   | 221,0      | 89        | 104,4     | 33        | ~ 15                                         | ~ 20 | ~ 10 | 10 / 16         | 0 - 16 | 1550               | 17,0           |
| DN 250   | 235.2703.6.33 | 328        | 328   | 275,5      | 114       | 127,0     | 50        | ~ 15                                         | ~ 20 | -    | 10 / 16         | 0 - 16 | 2880               | 26,0           |
| DN 300   | 235.2702.6.34 | 378        | 383   | 325,5      | 114       | 148,3     | 43        | ~ 15                                         | ~ 20 | -    | 10              | 0 - 10 | 4100               | 42,0           |
| DN 350   | 235.2702.6.35 | 438        | 444   | 360,0      | 127       | 172,4     | 45        | ~ 15                                         | ~ 20 | -    | 10              | 0 - 10 | 5274               | 55,0           |
| DN 400   | 235.2702.6.36 | 489        | 495   | 410,0      | 140       | 197,4     | 52        | ~ 15                                         | ~ 30 | -    | 10              | 0 - 10 | 8250               | 75,0           |

please add behind the article no. the code for the required sealing quality **-E = EPDM** **-N = NBR** **-V = FPM**