

## Wafer check valve, Article CSD-3364

### Diameter DN 125 (5") up to DN 200 (8")

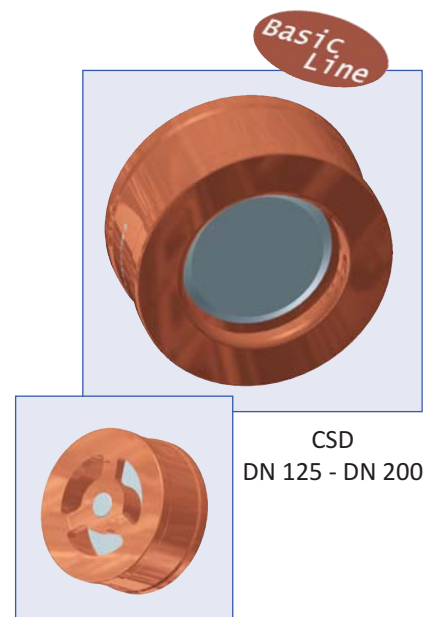
Wafer check valves to prevent media backflow in all fluid processes, whether in liquid, gaseous or vaporous forms. The return spring ensures that the valve disk closes securely. One-piece design of valve disc / spindle, guided and mounted in a spring cross. This guarantees a safe and exact closing on the machined sealing surface in the body, a high level of tightness can be guaranteed. The direction arrow embossed on the housing indicates the direction of flow.

Optionally, metallic or soft sealing with O-ring in the valve plate (EPDM / NBR / FPM / PTFE).

- ☛ **Installation between flanges according to DIN EN 1092-1 Form B1, PN 10 - 40 and ASME B 16.5, class 150/300**  
(use suitable flange seals for this!)
- ☛ **Overall length according to DIN EN 558-1, series 49 (DIN 3202-K4), from DN 250 DIN EN 558-2, series 52 (DIN 3202-K5)**
- ☛ **Installation in any pipe position (vertical/horizontal) possible**
- ☛ **Standard spring (stainless steel F316) temperature limit +250° C**

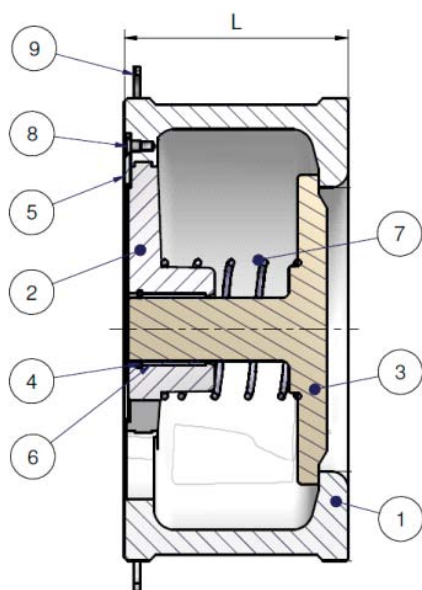
**Optional:** - oil and grease-free cleaned for use with oxygen  
- special springs up to max. 1000 mbar  
- execution without spring (vertical installation; flow from bottom to top)

**ATTENTION:** Do not used it as a safety or vacuum valve !



CSD  
DN 125 - DN 200

|     |                                                                                                                                                                                      |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CE  | 0036 Diameter DN 125 - DN 200                                                                                                                                                        |
| T°C | Ambient -20° C ... +80° C                                                                                                                                                            |
| TSC | Medium (depends from pressure)<br>metall seated -60° C ... +250° C<br>NBR -30° C ... +120° C<br>EPDM -50° C ... +130° C<br>FPM (Viton) -20° C ... +200° C<br>PTFE -60° C ... +200° C |

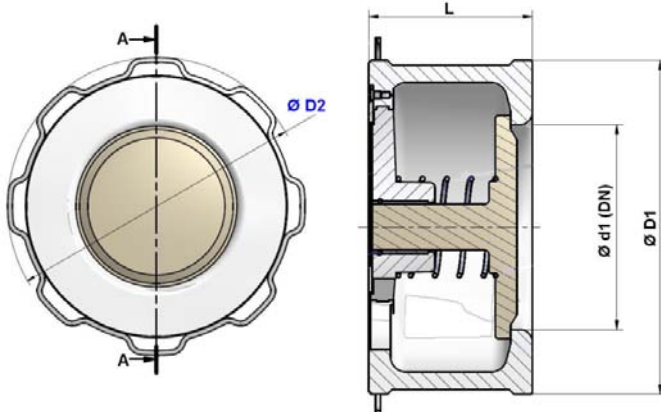


|                 | Pressure / temperature limits metal sealing (max.) |    |     |     |     |
|-----------------|----------------------------------------------------|----|-----|-----|-----|
| DN 125 - DN 200 | -60                                                | RT | 120 | 200 | 250 |
| t (°C)          | 16                                                 | 16 | 16  | 14  | 13  |
| PS (bar)        |                                                    |    |     |     |     |

| Pos. | Description                         | Material                   |
|------|-------------------------------------|----------------------------|
| 1    | Body                                | Bronze 2.1086              |
| 2    | Spring cross                        | Bronze 2.1090              |
| 3    | Valve plate                         | Stainless steel A351 CF8-M |
| 4    | Safety ring (DN 125 - DN 150)       | Stainless steel            |
| 5    | Anti twist holder (DN 125 - DN 150) | Stainless steel A351 CF8-M |
| 6    | Bearing                             | PTFE MoS2/Stainless steel  |
| 7    | Spring                              | Stainless steel A316L      |
| 8    | Allen screw                         | Stainless steel A4         |
| 9    | Centre Ring                         | Stainless steel A182 F304  |

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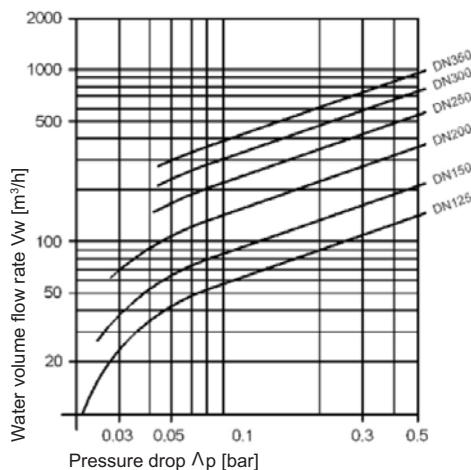
- Product classification DGRL 2014/68/EU, Fluidgroup I
- Body strenght DIN EN 12516-2
- Degin pressure PN 16
- Marking EN 19, MSS SP-25
- Testing DIN EN 12266 P10 / P11 / P12
- Application limits DIN EN 1092-1 und AD-leaflets W 10
- Tightness DIN 12266-1, Leakage rate D (metal seated / PTFE)  
Leakage rate A, soft seated (NBR / EPDM / FPM)

| Diameter | article-no.   | L (mm) | Ø d1 (mm) | Ø D1 (mm) |       | Ø D1 / Ø D2 (mm) |       | opening pressure (mbar) at flow direction |    |    | KV-value (m³/h) | weight (kg) |
|----------|---------------|--------|-----------|-----------|-------|------------------|-------|-------------------------------------------|----|----|-----------------|-------------|
|          |               |        |           | PN 10     | PN 16 | PN 25            | PN 40 | →                                         | ↑  | ↓  |                 |             |
| DN 125   | 286.1463.1.28 | 90     | 125       | 192       | 192   | 192              | 192   | 22                                        | 37 | 7  | 180             | 10          |
| DN 150   | 286.1463.1.29 | 106    | 150       | 218       | 218   | 226              | 226   | 25                                        | 40 | 10 | 270             | 14          |
| DN 200   | 286.1463.1.31 | 140    | 200       | 273       | 273   | 283              | 290   | 28                                        | 46 | 10 | 450             | 24          |

For the blue marked pressure classes a centering ring must be used. D2 stands for the outside diameter of the centering ring.

### Additional letter after article no. for soft seated and special designs

|                          | O-Ring <b>EPDM</b><br>-10°C up to +130°C | O-Ring <b>NBR</b><br>-10°C up to +120°C | O-Ring <b>FKM</b><br>-10°C up to +200°C | O-Ring <b>PTFE</b><br>-10°C up to +200°C | special<br>spring up to<br>400 mbar | Centering ring<br>from DN 200 for<br>Installation<br>between flanges<br>PN 25 / PN 40 /<br>ANSI | Execution<br><b>oil and grease<br/>free</b><br>(use of oxygen) |
|--------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Add. for<br>article no.: | <b>-E</b>                                | <b>-N</b>                               | <b>-V</b>                               | <b>-P</b>                                | <b>-SF40</b>                        | <b>-FL</b>                                                                                      | <b>-O2</b>                                                     |



### Pressure drop diagram

Pressure drop diagram for water at 20° C with an open valve and horizontal flow. To determine the pressure loss for other media is the equivalent water volume flow to calculate.

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

$\dot{V}_w$  = 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)