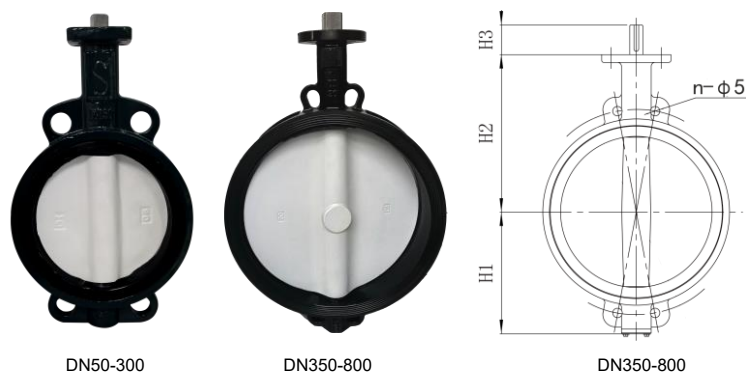


## BFV Wafer Butterfly Valve

### Dimension, Connection and Weight



| Model  | Dimension(mm) |     |    | Connection |    | Weight<br>kg |
|--------|---------------|-----|----|------------|----|--------------|
|        | H1            | H2  | H3 | Type       | □  |              |
| BFV050 | 70            | 130 | 12 | F05        | 11 | 1.8          |
| BFV065 | 76            | 143 | 15 | F05        | 11 | 2.3          |
| BFV080 | 89            | 155 | 15 | F05        | 11 | 2.7          |
| BFV100 | 104           | 170 | 19 | F07        | 11 | 4            |
| BFV125 | 120           | 190 | 19 | F07        | 14 | 5.5          |
| BFV150 | 139           | 210 | 19 | F07        | 14 | 6.6          |
| BFV200 | 175           | 243 | 25 | F10        | 17 | 10.9         |
| BFV250 | 203           | 282 | 30 | F10        | 22 | 15.8         |
| BFV300 | 242           | 310 | 30 | F10        | 22 | 24.4         |
| BFV350 | 277.5         | 368 | 30 | F12        | 27 | 31           |
| BFV400 | 309           | 400 | 40 | F12        | 27 | 42.5         |
| BFV450 | 337           | 422 | 40 | F14        | 36 | 58.1         |
| BFV500 | 361           | 480 | 40 | F14        | 36 | 79.1         |
| BFV600 | 459           | 562 | 40 | F16        | 36 | 124.5        |
| BFV700 | 527           | 629 | 46 | F16        | 46 | 220          |
| BFV800 | 594           | 666 | 46 | F16        | 46 | 250          |

### Applications & Features

- Apply in the flow control of hot or cold water in various HVAC systems, such as chillers, cooling towers, heat exchangers, etc.
- Comply with ISO5211, can work with Fluxera's butterfly valve actuator BFVA series or other applicable actuators
- Compact and simple structure, easy to install with dual directions seal
- Special design of narrow brim sealing surface, compatible for popular butterfly flanges' connection
- With back structure's valve seat, make the sealing very reliable and long life
- Strengthened valve disc with nylon coating, corrosion preventive, erosion resistant and high temperature resistant. SS304 disc is optional
- The design of no shaft pin can avoid the leak of the hole
- Good reliability, small driving torque and big closing differential pressure

### Specifications

**Size:** DN50~800

**Pressure:** PN16

**Medium:** Cool or hot water, 50% or lower glycol water

**Medium temperature:** -10~120°C

**Closing pressure:** Max. 1200kPa, see Models

**Flow characteristics:** 0~60%: near equal percentage  
0~100%: S shape

**Leakage rate:** Class A, comply with ISO 5208(tight sealing)

**Angle of rotation:** 90°

**Pipe connection:** Flange, comply with ISO7005

**Actuator connection:** Flange comply with ISO5211

**Face to Face dimension:** DIN EN 558, series 20

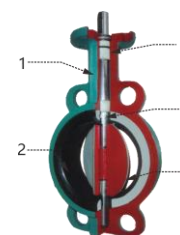
**Install direction:** Valve stem upward or horizontal

### Kv Value of Different Valve Opening

| DN    | Kv Value of Different Valve Opening |       |      |       |      |       |      |       |      |
|-------|-------------------------------------|-------|------|-------|------|-------|------|-------|------|
|       | 10°                                 |       | 10°  |       | 10°  |       | 10°  |       |      |
| DN50  | 0.1                                 | DN50  | 0.1  | DN50  | 0.1  | DN50  | 0.1  | DN50  | 0.1  |
| DN65  | 0.2                                 | DN65  | 0.2  | DN65  | 0.2  | DN65  | 0.2  | DN65  | 0.2  |
| DN80  | 0.3                                 | DN80  | 0.3  | DN80  | 0.3  | DN80  | 0.3  | DN80  | 0.3  |
| DN100 | 0.4                                 | DN100 | 0.4  | DN100 | 0.4  | DN100 | 0.4  | DN100 | 0.4  |
| DN125 | 0.7                                 | DN12  | 0.7  | DN12  | 0.7  | DN12  | 0.7  | DN12  | 0.7  |
| DN150 | 1.7                                 | DN15  | 1.7  | DN15  | 1.7  | DN15  | 1.7  | DN15  | 1.7  |
| DN200 | 2.6                                 | DN20  | 2.6  | DN20  | 2.6  | DN20  | 2.6  | DN20  | 2.6  |
| DN250 | 3.5                                 | DN25  | 3.5  | DN25  | 3.5  | DN25  | 3.5  | DN25  | 3.5  |
| DN300 | 4.3                                 | DN30  | 4.3  | DN30  | 4.3  | DN30  | 4.3  | DN30  | 4.3  |
| DN350 | 5.2                                 | DN35  | 5.2  | DN35  | 5.2  | DN35  | 5.2  | DN35  | 5.2  |
| DN400 | 6.9                                 | DN40  | 6.9  | DN40  | 6.9  | DN40  | 6.9  | DN40  | 6.9  |
| DN450 | 9.5                                 | DN45  | 9.5  | DN45  | 9.5  | DN45  | 9.5  | DN45  | 9.5  |
| DN500 | 12.1                                | DN50  | 12.1 | DN50  | 12.1 | DN50  | 12.1 | DN50  | 12.1 |
| DN600 | 19.0                                | DN60  | 19.0 | DN60  | 19.0 | DN60  | 19.0 | DN60  | 19.0 |
| DN700 | 31.1                                | DN70  | 31.1 | DN70  | 31.1 | DN70  | 31.1 | DN70  | 31.1 |
| DN800 | 38.9                                | DN80  | 38.9 | DN80  | 38.9 | DN80  | 38.9 | DN80  | 38.9 |

### Structure & Material

1. Valve body: Nodular cast iron
2. Valve seat: EPDM
3. Valve disc: Nylon coating  
Nodular cast iron
4. Valve stem: SS
5. Sealing ring: EPDM



### Formula for Flow Rate & Diff. Pressure

$$Kvs = \frac{F}{\sqrt{\frac{\Delta P}{100}}}$$

ΔP: Differential pressure when valve is 100% open, unit kPa

F: Flow rate when differential pressure is ΔP, unit m³/h

Kvs: When valve is 100% open, differential pressure is 100kpa, medium density is 1g/cm³, the flow through the valve, unit m³/h

### Models and Closing Diff. Pressure

| Model  | DN  |     | Closing Differential Pressure (ΔPs, kPa) |      |      |      |      |      |      |      |      |      |
|--------|-----|-----|------------------------------------------|------|------|------|------|------|------|------|------|------|
|        | mm  | in  | Toque(Nm)                                |      |      |      |      |      |      |      |      |      |
|        |     |     | 25                                       | 45   | 100  | 150  | 250  | 500  | 1000 | 2000 | 4000 | 6000 |
| BFV050 | 50  | 2   | 1200                                     |      |      |      |      |      |      |      |      |      |
| BFV065 | 65  | 2.5 | 1000                                     |      |      |      |      |      |      |      |      |      |
| BFV080 | 80  | 3   |                                          | 1200 |      |      |      |      |      |      |      |      |
| BFV100 | 100 | 4   |                                          | 1000 |      |      |      |      |      |      |      |      |
| BFV125 | 125 | 5   |                                          |      | 1200 |      |      |      |      |      |      |      |
| BFV150 | 150 | 6   |                                          |      |      | 1200 |      |      |      |      |      |      |
| BFV200 | 200 | 8   |                                          |      |      |      | 1200 |      |      |      |      |      |
| BFV250 | 250 | 10  |                                          |      |      |      |      | 1200 |      |      |      |      |
| BFV300 | 300 | 12  |                                          |      |      |      |      | 800  | 1200 |      |      |      |
| BFV350 | 350 | 14  |                                          |      |      |      |      |      | 1000 |      |      |      |
| BFV400 | 400 | 16  |                                          |      |      |      |      |      |      | 1200 |      |      |
| BFV450 | 450 | 18  |                                          |      |      |      |      |      |      | 1000 |      |      |
| BFV500 | 500 | 20  |                                          |      |      |      |      |      |      |      | 1200 |      |
| BFV600 | 600 | 24  |                                          |      |      |      |      |      |      |      |      | 800  |
| BFV700 | 700 | 28  |                                          |      |      |      |      |      |      |      |      | 800  |
| BFV800 | 800 | 32  |                                          |      |      |      |      |      |      |      |      | 600  |

1. SS304 disc models: add suffix S at the end of the model. For example: BFV300S.

2. ΔPs: (under the actuator torque), the max. permitted diff. pressure for ensuring the valve is 100% close.

3. The data in this table is for the BFV series valve matching with BFVA series actuator. If applied with other actuators, the closest data could be used.