

# BE 891 AERATION AND VENT VALVE DATASHEET



**Nominal size DN 10 - 80**

**Nominal size in inches 1/2 - 3**

**Nominal pressure PN in bar 10**

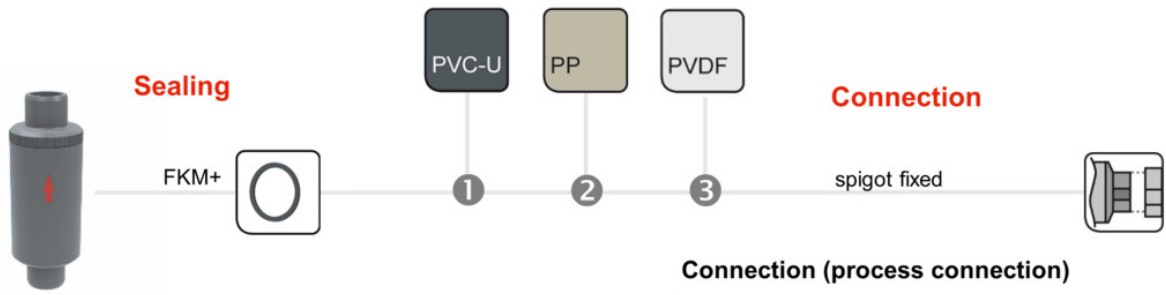
## Characteristics

- for reliable aeration and venting of tanks
- reliable and low-maintenance
- ball / float made of PP

<https://www.stuebbe.com/en/products-and-systems/valves/>

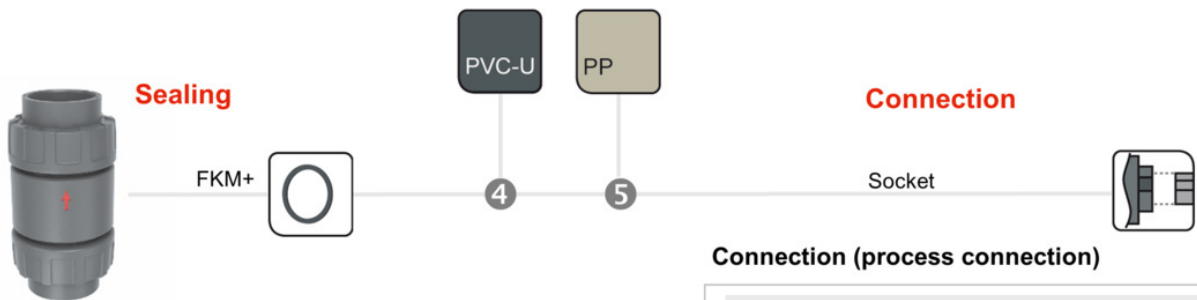


## Pictogram



### Connection (process connection)

- ① PVC-U spigot fixed
  - ② PP\* spigot fixed
  - ③ PVDF\* spigot fixed
- \*only for socket welding



### Connection (process connection)

- ④ PVC-U socket DIN
- ⑤ PP socket DIN

● Available

○ not available

### Basic nominal diameters

DN 8	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300	DN 350	DN 400
------	-------	-------	-------	-------	-------	-------	-------	-------	-------	--------	--------	--------	--------	--------	--------	--------	--------

## BE 891 Aeration and vent valve

<b>Use</b>	<ul style="list-style-type: none"><li>- Chemical plant manufacture</li><li>- Water treatment</li></ul>
<b>Application</b>	<ul style="list-style-type: none"><li>- for venting and deaerating process engineering systems</li></ul>
<b>Device connection</b>	<ul style="list-style-type: none"><li>- see pictogram</li></ul>
<b>Process pressure</b>	<ul style="list-style-type: none"><li>- see pressure-/temperature diagram</li></ul>
<b>STÜBBE resistance guide</b>	<ul style="list-style-type: none"><li>- <a href="http://www.stuebbe.com/pdf_resistance/300051.pdf">www.stuebbe.com/pdf_resistance/300051.pdf</a></li></ul>
<b>Function</b>	<ul style="list-style-type: none"><li>- Type BE891 for aeration and deaeration</li><li>- Valve "Open" in case of negative pressure (emptying) and during filling by the weight of the closing part, valve "Closed" by floating of the closing part</li></ul>
<b>Housing material (with medium contact)</b>	<ul style="list-style-type: none"><li>- PVC-U</li><li>- PP</li><li>- PVDF</li></ul>
<b>material thrust ring</b>	<ul style="list-style-type: none"><li>- PVC-U</li><li>- PP</li><li>- PVDF</li></ul>
<b>Material sealing element (in contact with medium)</b>	<ul style="list-style-type: none"><li>- FKM+</li></ul>
<b>Material ball</b>	<ul style="list-style-type: none"><li>- PP</li></ul>
<b>Nominal pressure PN in bar</b>	<ul style="list-style-type: none"><li>- 10</li></ul>
<b>Flow direction</b>	<ul style="list-style-type: none"><li>- Always in the direction of the arrow</li></ul>
<b>Mounting position</b>	<ul style="list-style-type: none"><li>- Note "ABOVE" marking</li><li>- vertical</li></ul>
<b>Actuation</b>	<ul style="list-style-type: none"><li>- medium-controlled</li></ul>
<b>Operation Note</b>	<ul style="list-style-type: none"><li>- In the closed state, venting can only take place despite air accumulation (outgassing media) when the container pressure becomes lower than the atmospheric pressure.</li><li>- Connect the aerator to a leakage line.</li></ul>
<b>Testing</b>	<ul style="list-style-type: none"><li>- according to DIN 3441, 3442 and 8063, DIN EN 12266</li></ul>
<b>Application limits</b>	<ul style="list-style-type: none"><li>- adhering media</li><li>- Sticky or highly viscous liquids that prevent the float from positioning</li><li>- not suitable for liquids with solid particles</li></ul>
<b>CE Conformity</b>	<ul style="list-style-type: none"><li>- Pressure equipment directive 2014/68/EU</li></ul>

## BE 891 Aeration and vent valve

### Weblink Product

- <https://www.stuebbe.com/en/products-and-systems/valves/>

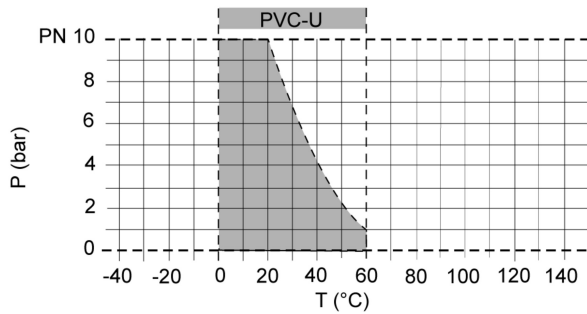
### flow rate Q

d	16	20	25	32	40	50	63	75	90
<b>DN</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>32</b>	<b>40</b>	<b>50</b>	<b>65</b>	<b>80</b>
<b>DN*</b>	<b>3/8</b>	<b>1/2</b>	<b>3/4</b>	<b>1</b>	<b>1 1/4</b>	<b>1 1/2</b>	<b>2</b>	<b>2 1/2</b>	<b>3</b>
Q(Nm <sup>3</sup> /H)	10	14	18	40	60	75	85	180	180

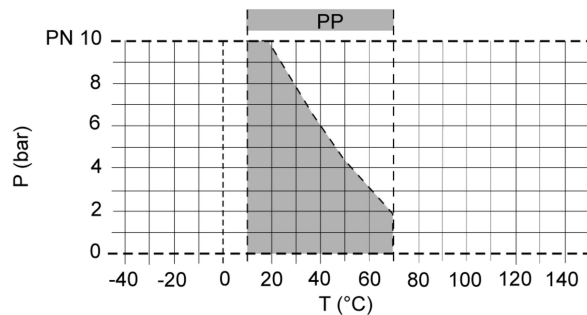
- Guide value: Flow velocity  $V_{air} \sim 10-20$  m/s
- Flow rate related to air (Nm<sup>3</sup>/h)

## BE 891 Aeration and vent valve

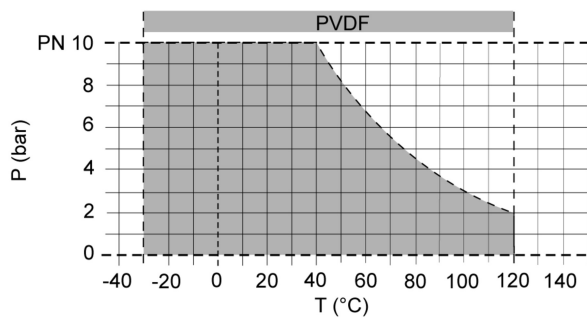
### Pressure and temperature diagram PVC-U



### Pressure and temperature diagram PP



### Pressure and temperature diagram PVDF



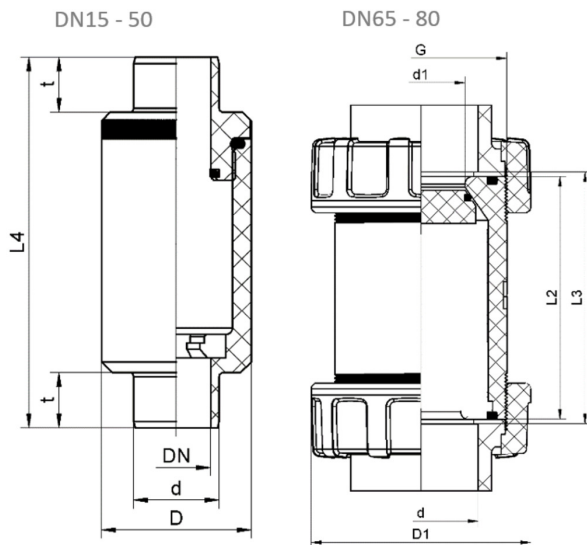
**P** = Operating pressure

**T** = Temperature

The pressure/temperature limits of the materials are valid for the stated nominal pressures and a service life of 25 years. These values are guide values for flow medium types which do not negatively impact the physical and chemical characteristics of the valve material. It may be necessary to take diminution factors into consideration.

## BE 891 Aeration and vent valve

### Dimensioned drawing

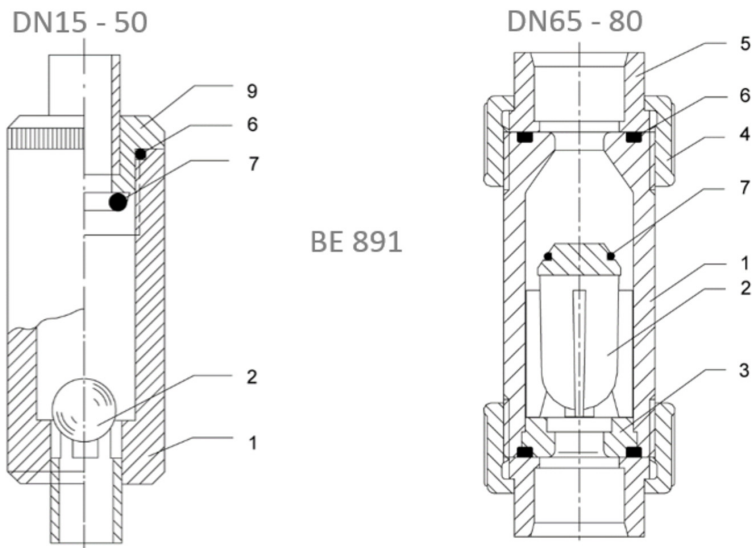


d	16	20	25	32	40	50	63	75	90
<b>DN</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>32</b>	<b>40</b>	<b>50</b>	<b>65</b>	<b>80</b>
<b>DN*</b>	<b>3/8</b>	<b>1/2</b>	<b>3/4</b>	<b>1</b>	<b>1 1/4</b>	<b>1 1/2</b>	<b>2</b>	<b>2 1/2</b>	<b>3</b>
d1	-	-	-	-	-	-	-	57,5	57,5
D	35	40	45	56	70	80	95	-	-
D1	-	-	-	-	-	-	-	134	134
G*	-	-	-	-	-	-	-	4	4
L2	-	-	-	-	-	-	-	160	160
L3	PVC-U	-	-	-	-	-	-	166	171,2
L3	PP	-	-	-	-	-	-	186	170
L4	114	124	144	154	174	194	224	-	-
t	14	16	19	22	26	31	38	-	-

all dimensions in mm / \* in inch

## BE 891 Aeration and vent valve

### Bill of materials



position	quantity	designation
1	1	housing
2	1	ball / float
3	1	Pressure disc
4	2	union nut
5	2	union end
6	2	O-ring
7	1	O-ring
9	1	Bonnet