

## Model B11 – Vacuum relief valve



### PRODUCT DESCRIPTION

The vacuum valve is a protection device. Its primary purpose is to protect the tank or system against rupturing or imploding.

It is a type of breather valve that is specifically designed to release excess vacuum from a sealed system. It is used in situations where a vacuum may develop.

The Vacuum relief valves are commonly used in tanks, reservoirs, and other enclosures that contain gas or fluid and are subject to vacuum conditions. They are important for maintaining the integrity of the system and preventing damage or failure due to vacuum conditions, such as when a container or enclosure is cooled or when a fluid is pumped out of the system.

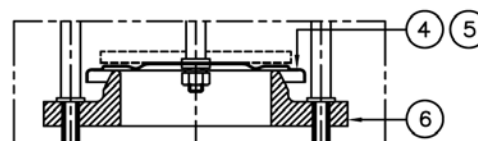
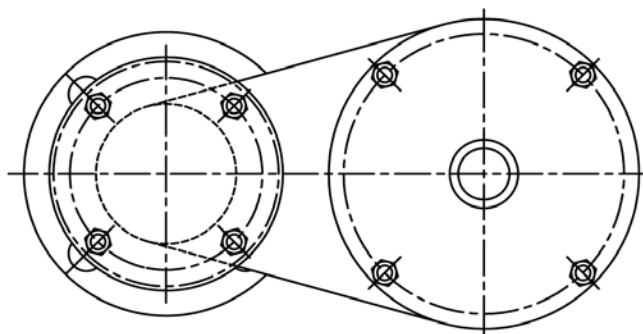
Without an opening or a controlled opening, a fixed roof atmospheric tank would rupture under increasing pressure caused by pumping liquid into the tank or as a result of vapor pressure changes caused by severe thermal changes. Imploding, or the collapsing of a tank, occurs during the pumping out procedure or thermal changes. As the liquid level lowers, the vapor space pressure is reduced to below atmospheric pressure. This vacuum condition must be alleviated through a controlled opening on the tank. In short, the tank needs to breathe in order to eliminate the possibility of rupturing or imploding. Because of its primary function, a vacuum valve is commonly referred to as a "breather valve".

### PRODUCT BENEFITS

- Less need for special materials in corrosive and extreme temperature
- Unique floating diaphragm construction assures tight seal
- Peripheral and stem guided vacuum pallet assures reliable operation
- Pallet contributes to high flow
- Heavy duty construction, yet compact enough for easy handling

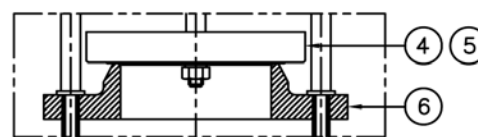
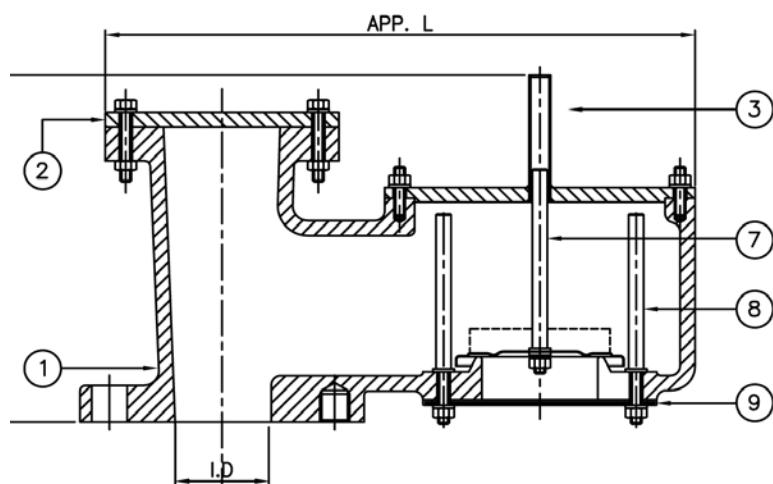
### MATERIALS

| REF. | PART        | MATERIAL         |                |
|------|-------------|------------------|----------------|
|      |             | ANSI / ASTM      | DIN / EN       |
| 1    | Body        | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | C.S. (A216WCB)   | C.S. (1.6019)  |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |
| 2    | Cover (1)   | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | C.S. (A216WCB)   | C.S. (1.6019)  |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |
| 3    | Cover (2)   | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | C.S. (A216WCB)   | C.S. (1.6019)  |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |
| 4    | Vacuum disc | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |
| 5    | Diaphragm   | PTFE             |                |
| 6    | Seat        | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |
| 7    | Stem        | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |
| 8    | Guide bar   | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |
| 9    | Screen mesh | S. S. (AISI 304) | S. S. (1.4308) |
|      |             | S.S. (AISI 316)  | S. S. (1.4408) |



☉ VACUUM SIDE

**TEFLON SEAL TYPE**



☉ VACUUM SIDE

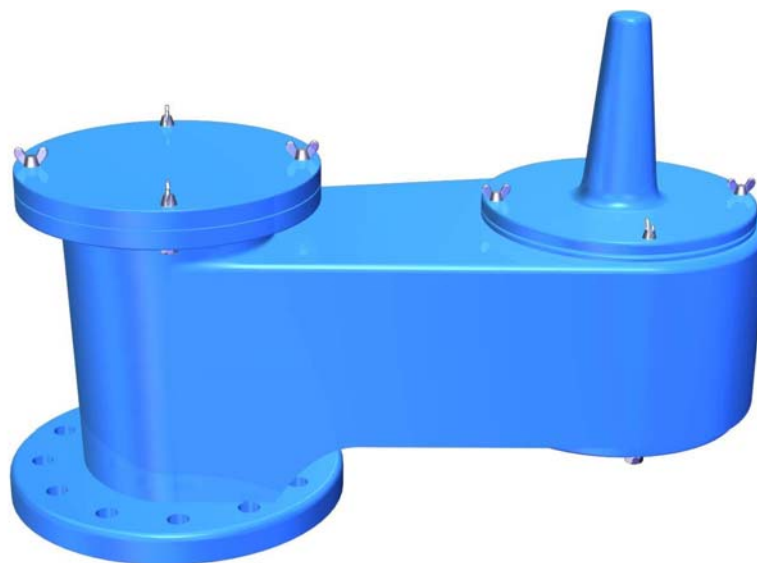
**METAL SEAL TYPE**

**Pressure settings [mmH<sub>2</sub>O]**

22 up to 8,400

## DIMENSIONS

|          | 2"  | 3"  | 4"  | 6"  | 8"  | 10" | 12" |
|----------|-----|-----|-----|-----|-----|-----|-----|
| I.D [mm] | 50  | 80  | 100 | 150 | 200 | 250 | 300 |
| H [mm]   | 164 | 190 | 250 | 322 | 341 | 395 | 610 |
| L [mm]   | 315 | 385 | 435 | 535 | 675 | 770 | 885 |



### Disclaimer

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