

# SCANDI BREW® Combined valve (Overpressure/Vacuum)

## Tank top systems

## Application

The combined valve provides vacuum protection and overpressure regulation or safety in a single unit.

#### Design

The combined valve comprises a vacuum valve housing with an overpressure valve on top. The valve is available with the overpressure design in the following versions:

- Bursting disc (optional acc. PED/97/23 EEC)
- Spring loaded overpressure valve or remote controlled Pressure Exhaust (PE) valve
- Dead weight pressure relief valve (optional acc. PED/97/23 EEC)
- PED approved spring loaded safety valve

#### Available sizes:

| Tank top    | Vacuum | Bursting     | Spring        | Pressure            |
|-------------|--------|--------------|---------------|---------------------|
| connection  | valve  | disc         | loaded        | relief valve        |
|             |        |              | valve or PE   |                     |
| 3" / DN80   | 70 mm  | 50 or 80 mm  | 1½" or 2"     | 2" or 3"            |
| 4" / DN100  | 100 mm | 80 or 100 mm | 1½", 2" or 3" | 2", 3" or 4"        |
| 6" / DN150  | 150 mm | 80 or 100 mm | 1½", 2" or 3" | 2", 3", 4",5" or 6" |
| 8" / DN200* | 200 mm | 80 or 100 mm | 1½", 2" or 3" | 2", 3", 4",5" or 6" |

<sup>\*</sup> On request

Size and choice of valve type should be made based on the tank design data and process requirements.

The unit is standard delivered with a 90° bend ending in a liner and nut. The valve house should be placed in an upright position.

The benefits of the combined safety valve are:

- Design ensures operational reliability
- Low vacuum set points
- Fully cleanable with CIP system
- Compact and sanitary design and easy mounting

### Working principle

The anti vacuum valve operates as a standard at 50-75 mm W.G. depending on valve size. The pressure relief valve/bursting disc ensures pressure exhaust if pressure in the tank exceeds the preset opening value.



The vacuum valve housing can be cleaned during tank CIP cycle by connecting the CIP nozzle to main CIP supply. When the tank is cleaned pressureless, a small volume of cleaning fluid will pass the vacuum valve body and clean the seat. To ensure thorough flushing of valve seat, force opening of the valve is necessary - this is also done when the tank is pressureless. The use of a drain collector is recommended to prevent detergent from running over tank top.

**Specifications** 

All metallic parts: Stainless steel EN 1.4307 (AISI 304L) or

EN 1.4404 (AISI 316L) on request

Valve bodies: PF

Valve gasket: NBR. Non-toxic foodgrade materials.

Bursting discs: Graphite

The vacuum valve housing is supplied with a built-in CIP nozzle that ensures complete cleaning inside the housing. CIP connection: 1/4" BSP socket.

The vacuum valve housing is available with a flanged tank connection and can also be supplied with horizontal mounting pipe end. If only anti vacuum safety is required the upper valve part can be blanked off.

#### Extra equipment:

For bursting disc: Protecting cover

For spring loaded

overpressure valve: Adjustable spring, proximity switch

and force opener.

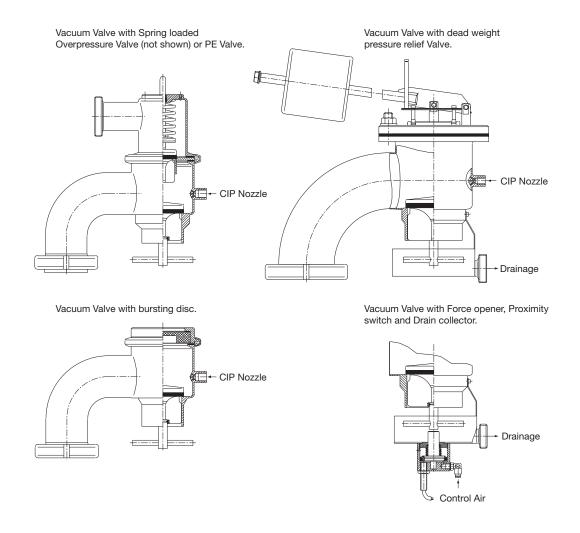
• For PE valve: CIP bypass

• For vacuum valve: Drain collector, proximity switch,

force opener, NBR CIP hose for

CIP nozzle and heating element.

• For dead-weight PRV: PED approval



PFT00160EN 1102

Alfa Laval reserves the right to change specifications without prior notification.

## How to contact Alfa Laval

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