

Type ZN and WN

Structure:

Over pressure valve is compact device with internal barriers and shelves to keep proper traps height, overflows and surfaces. Main device housing depends of OPV type and can be placed: above connection flanged pipe from digester (type ZN) or inside the connection flange (type WN). OPV element for type ZN is blow-out chimney and for type WN top dome, used for liquid spilling and biogas outlet. Whole device is produced based on stainless steel material.

Process:

Digesters/ anaerobic reactors/ gasholders are equipped with Over Pressure Valves to protect against over and under pressure. Biogas is blow-out during too high overpressure, and air is sucked during too low underpressure. Gas migration taking place thanks to water syphon penetration. Device is designed for proper level of over and under pressure reactions. For external OPV - type ZN, antifreezing liquids must be used during winter low temperatures period.

Basic equipment:

- main device structure, blow-out chimney or top dome (depend on OPV type), internal blocks and edges system, flexible indicator pipe, ball valves.

- assembled as gasholder equipment or directly on digester/ fermenter;
- facilities protection against over and under pressure;
- precise operation inside Explosive atmosphere thanks to liquid trap construction;
- biogas blow out/ sucking with emergency pressure level;
- used liquid: water for internal type, glycol for external type.



OPVs type of series:

OPV Model	Body/chimney diameter *)
BC/ZN-400/150	DN 400 / DN 150
BC/ZN-500/150	DN 500 / DN 150
BC/ZN-550/200	DN 550 / DN 200
BC/WN-400	DN 400
BC/WN-500	DN 500

Options:

- condensate level measurement for type WN;
- external OPV type ZN heating.

Devices designation:

BC - liquid Over Pressure Valve,
/ZN - external version,
/WN - internal version (liquid chamber internally);
DN 500 / DN 200 - OPV main diameter/ *).

*) - blow-out pipe - only for type ZN

More options are available on request