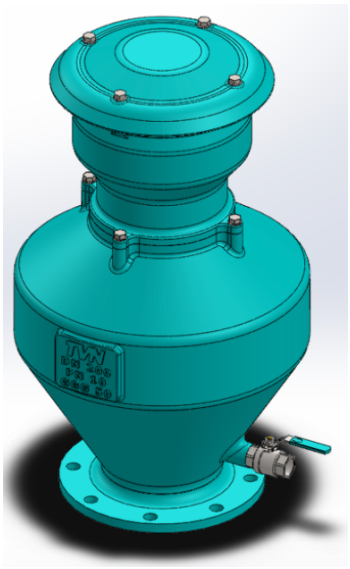
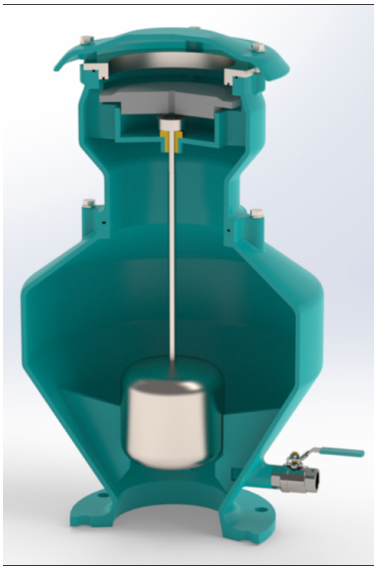
V306
WASTEWATER COMBINATION AIR RELEASE VALVE

Product Description

TVN V306 Triple Function Sewage Air Release Valve is a unique valve operating in sewage pipelines. This unique structure allows the dynamic valves to discharge air from the wastewater system in a controlled and gradual manner, preventing slam and local surges. When vacuum occurs, the valves fast reaction will draw in large volumes of air into the wastewater system, impeding down-surges and, consequently, all pressure surges in the line. The valves are normally closed when the line is not operating, thus preventing the infiltration of foreign particles and insects into the water system.





Technical Data	
Size range	DN50 - DN250
Pressure range	PN 10 -16
Temperature	-10°C to +80 °C
Design	EN 1074 - 4
Connection	EN 1092-2 ISO 7005-2 - Flanged
Coating	WRAS Approved Powder Epoxy
Testing	EN 12266-1
Marking	EN 19
Operation	Automatic

Application Range

- Wastewater transmission
- Treatment Plants
- Irrigation pipelines with particles

Related Products

- V151 Gate Valve Resilient Seated
- V106 Butterfly Valve Flanged
- V251 Dismantling Joint

WASTE WATER IRRIGATION POTABLE WATER

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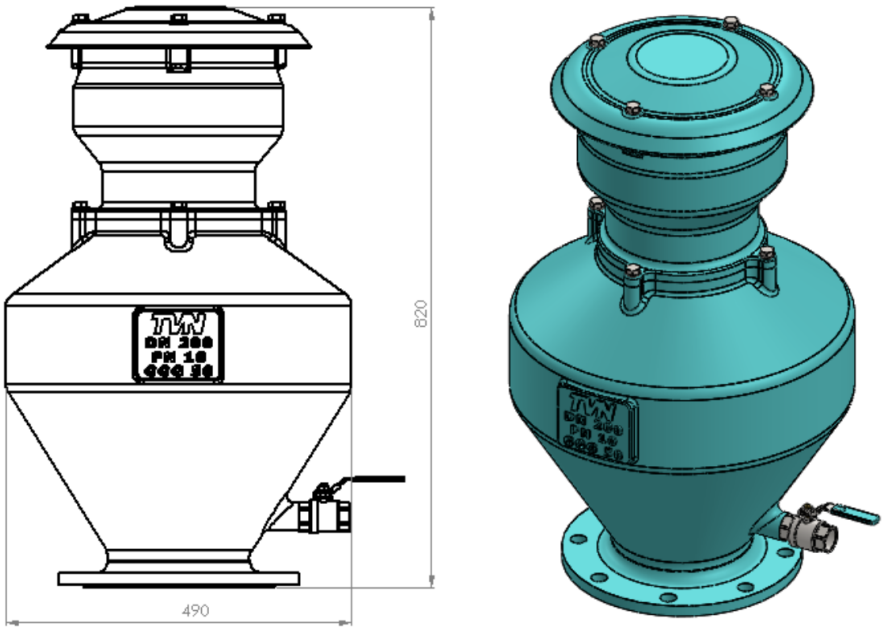
Product Features

- Ventilation outlet in nominal size (large opening cross-section according to the flange size).
- Intake of large volumes of air on shut-off of the system, while pipelines are being drained.
- Efficient, high performance ventilation protects pipeline from vacuum related damages.
- High velocity air discharge prevents premature closure, thus safeguarding optimum ventilation during the process of filling pipelines or containers.
- Large orifice for outlet and intake of large air volumes, during filling and emptying of pipeline.
- Continuously reliable ventilation of air inlets under normal operating conditions.
- Non slam closure by the help of two stage closing design.
- Excellent corrosion protection, all stainless-steel internal parts
- The housing is made of ductile iron and coated with high quality epoxy powder All uncoated metal is stainless steel.
- High capacity inlet sectional area and outlet are equal area hence ensures highest efficieny.
- Casting Standard: EN 1563:2011 / TS EN 1074-4 / TS EN 1092-2.
- Hydrostatic test pressure for seat: PN x 1.1 , for shell: PN x 1.5 according to EN 12266-1.



*V306 Dynamic Air Release Valve is a available for OEM branding alternative.

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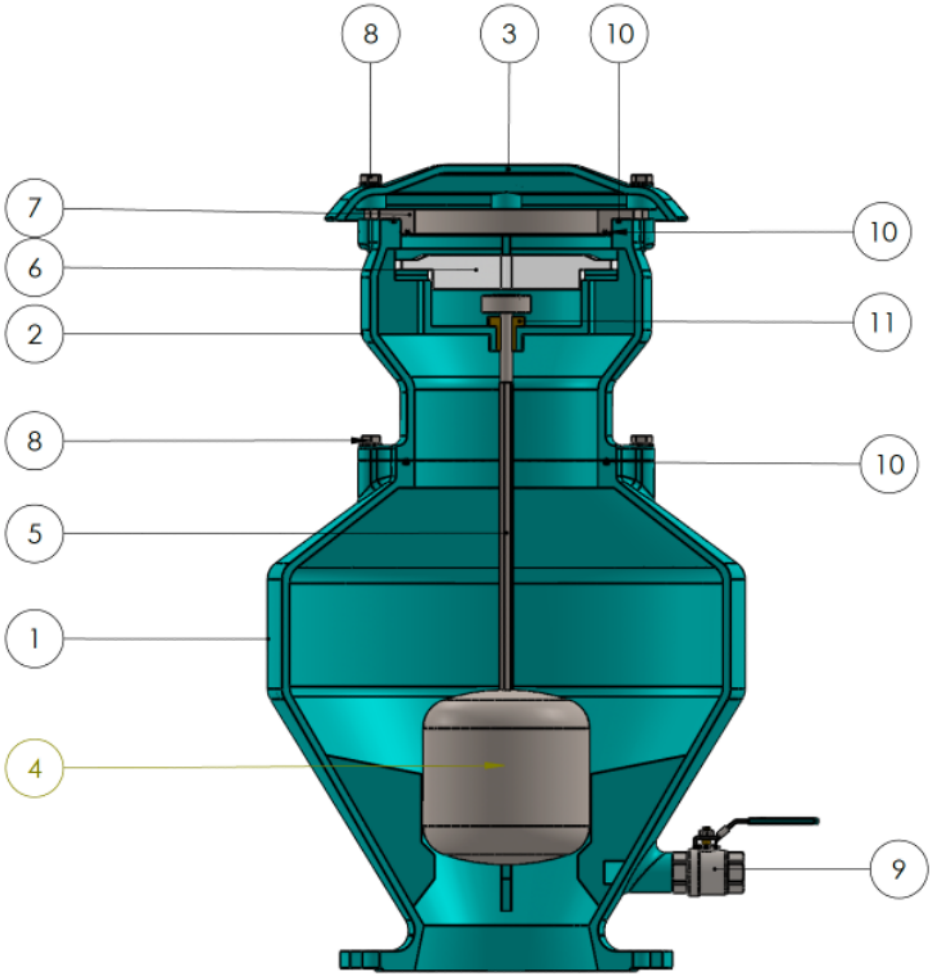
Material List



Part No.	Part Name	Material
1	Lower Body	GGG40/50 Ductile Iron
2	Upper Body	GGG40/50 Ductile Iron
3	Bonnet Cap	GGG40/50 Ductile Iron
4	Lower Float	SS316 Stainless Steel
5	Lower Float Shaft	SS316 Stainless Steel
6	Upper Float	Polypropylene
7	Upper Float Seat	SS304 Stainless Steel
8	Bolts	A2 / SS304
9	Ball Valve 1"	SS304 Stainless Steel
10	O-Rings	NBR
11	Shaft Centering Nut	Brass
-	Coating	WRAS Approved Powder Epoxy
-	Operation	Automatic

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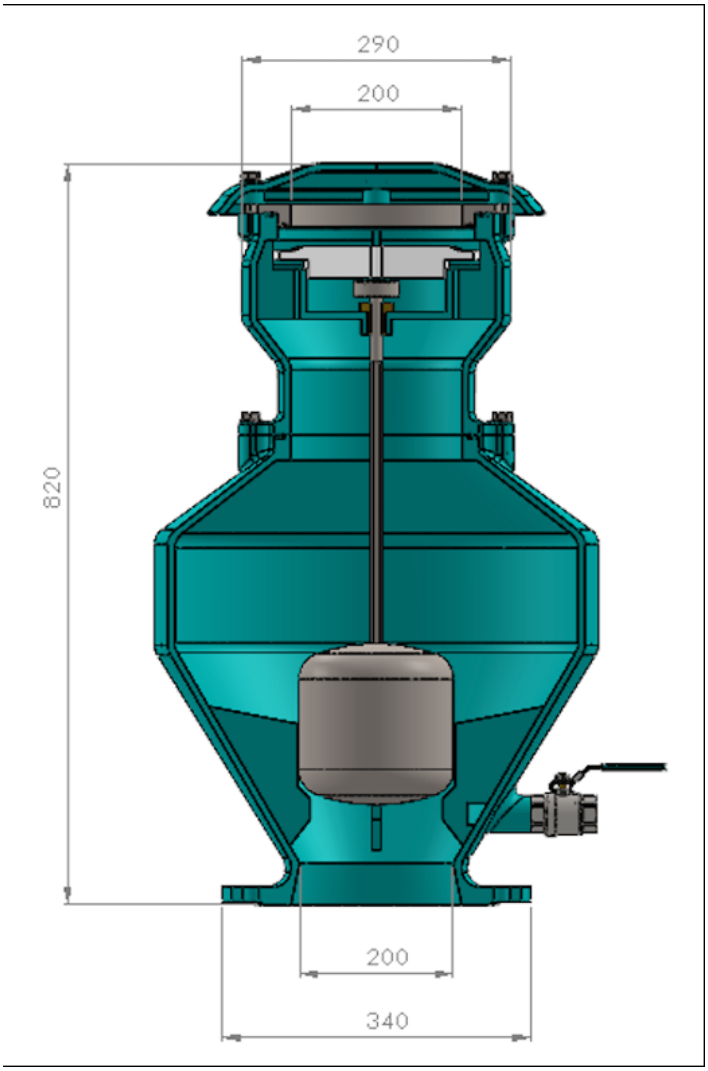
Dimension Table (for DN200 size only)



Dimension	mm.
Inlet Diameter	200
Outlet Diameter	200
Upper Body Diameter	290
Height	820
"D" Flange Diameter	340

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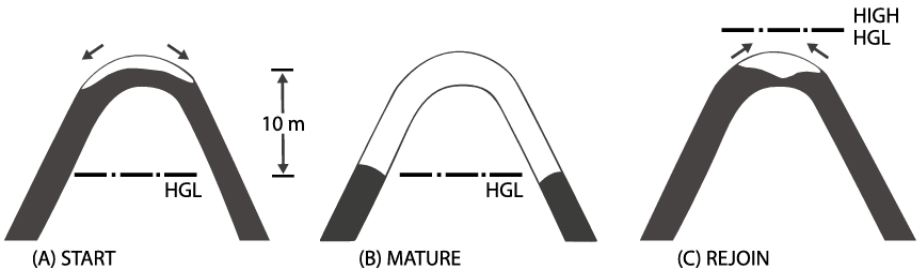
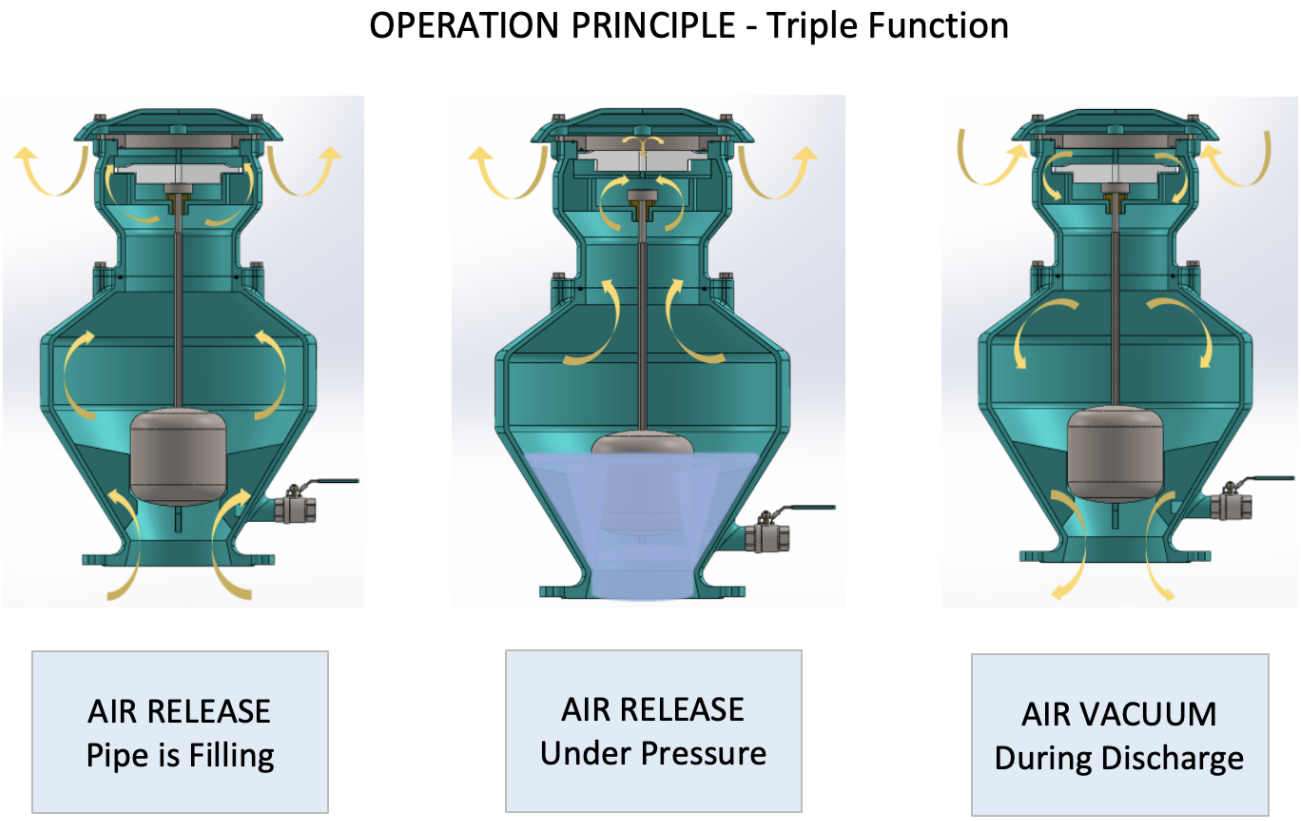
Effects of Air in Pipeline

Air release and vacuum is crucial for the pipelines during line filling and line emptying. Problems occurs when air left in the pipeline

- Pipes are already filled with water before commissioning
- %2 of dissolved air already exists in water
- Pumps absorb air while operating
- Air accumulating in the pipeline narrows the water passage area even may stop the entire flow



Wastewater Combination Air Release Valve Working Principle



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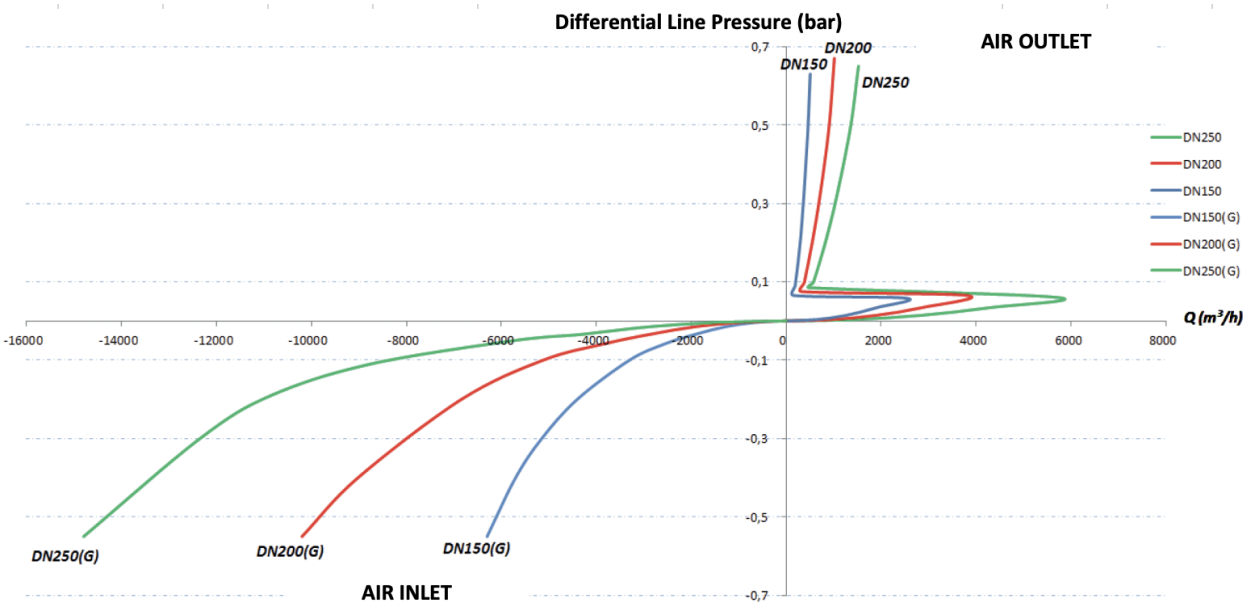
Sizing Selection Criteria and Flow Chart



Test Procedures

- Hydrostatic test
- Air release test
- Air release under pressure
- Air vacuum test
- Low pressure sealing test
- Body resistance test