

Internet_Variants

Dimension range	PN	Temperature range	Material
65 - 3000 liters	0,5	-10 °C to 180 °C	Steel

Range of Application

Pipelines from each safety valve in a boiler plant of a power >100 kW and the temperature >110 ° C shall be led to a flash tank. Here the energy content is relaxed and the steam is separated from the condensate. Can also apply to a boiler plant with temperature ≤110° C if the outlet pipelines can not be lead externally without risk of personal injuries or if they should be led vertically e.g. above a roof.

PLC.3 Open Flash tank

Flash tank AT 8313V..... volumeliters. With ...conn. DN for outlet pipes from safety valves, with conn. DN..... for vent and conn. DN pipes for water outlet.

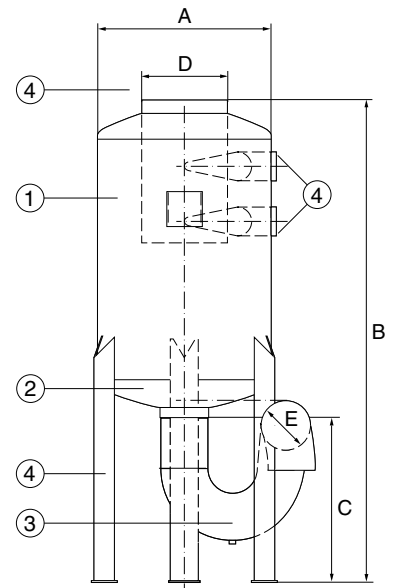
Quality Assurance

Open vessel, because of this it is free from duty and inspection.



Material Specification

1	Cylinder	steel	1.0345
2	Cylinder ends	steel	1.0345
3	Water seal	steel	1.0345
4	Weld ends	steel	1.0425
5	Legframe	steel	1.0038



Dimension and Weight

Volume	65	100	150	250	400	500	700	1100	1600	2000	3000
A	350	400	500	650	650	800	800	1000	1100	1200	1275
B	1290	1430	1665	1990	2315	2375	2645	2895	3370	3550	4100
C	500	500	500	650	800	800	900	900	1150	1150	1150
D max DN	125	150	200	200	250	300	400	500	600	600	600
E max DN	65	80	100	150	200	200	250	250	300	300	300
Weight	75	100	150	200	250	300	400	550	850	1000	1600

Measurements in mm, weight in kg.

Function and Design

The outlet pipeline from each safety valve should be connected to the upper side connections of the cylinder. At blow off a mixture of hot water and steam flows into the vessel. Due to the vessel design the relaxed steam separates from the hot water led through the outlet to open air. The hot water drainages from the vessel bottom and leads via a water trap to a floor drain.

The vessel is equipped with an internal display, which prevents the water to go with the steam-flow to open air, a device which facilitates water drainage to the floor drain. The vessel is delivered with water trap for connection to the floor drain.

Dimensioning

To be able to dimensioning a flash tank, in terms of volume, connections for vent outlet and water outlet, the following data are necessary:

- Opening pressure of the safety valve in bar
- Safety valve's venting capacity of saturated steam in kg / h
- Estimated length from the vessel top in meters
- Estimated numbers of pipe bends on the vent pipe
- Estimated length of the water outlet pipe from water seal to nearest floor drain in meters
- Estimated numbers of bends on the water outlet pipe

With the above data known, Armatec can make a complete design using a computer program based on the Commission of Pressure Vessel written document, series C35/82.

As a approximate dimensioning the table below can be used.

Power	Volume	2 safety valves	Steam pipe	Bottom outlet	Free hight water seal	Max. steam pipe
kW	Liter	Outet DN	DN	DN	mm.	lenght m.*
400	65	40	125	65	100	32
700	100	50	150	80	150	38
1200	150	65	200	100	200	40
2000	250	80	200	150	300	26
3000	400	100	250	200	350	35
4000	500	125	300	200	350	42
5800	700	125	400	250	285	80
9200	1100	150	500	250	285	100
12800	1600	250	600	300	340	150
16300	2000	250	600	300	340	110

* Refer to equivalent pipe lenght. Consideration must be given to bends, etc.

Accessories and Options

The vessel can also be supplied in the performance adapted to Annex 6 "Alternative systems for fusing at temperature $\leq 110^{\circ}\text{C}$, with power $\leq 900\text{ kW}$ and pressure $\leq 3\text{ bar}$ " in warm- and hot water instructions, VVA 1993.

Installation

All connections are welded ends.

The accompanying parts of the water seal can be mounted to the discharge-pipe in optional direction.

For drainage a valve, R 15, is to be mounted at the lowest point.

Maintenance and Spare parts

The vessel is normally maintenance free. However, regular corrosion inspection should be made.

Marking

Information about volume, material, year of manufacture and serial number is indicated on the vessel label plate.