

STEAM or WATER EJECTOR **MODEL 248**

Main characteristic

Valfonta ejectors are used for pumping or mixing liquid and solid products, thin or thick, muddy, sandy, etc. using liquid (normally water) or steam as a motive power. They are installed in places where it is complicated to do a constant maintenance of the power pump.

No maintenance is required as they haven't any movable components.

Body PN16 and PN25, maximum pressure 16 bar to 200°C.

Materials

Body: Carbon Steel ASTM A216 Grade WCB (standard)
Bronze RG10
Stainless steel A351 CF3M.

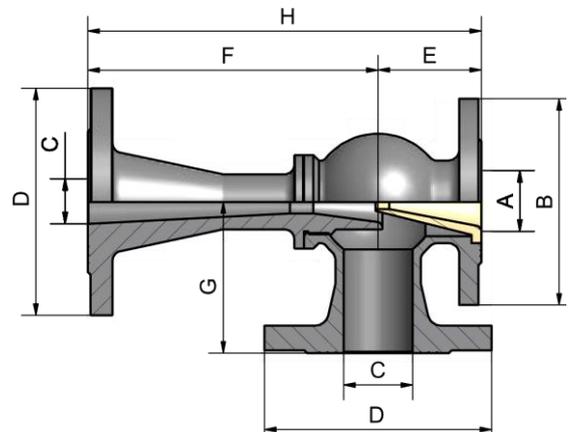
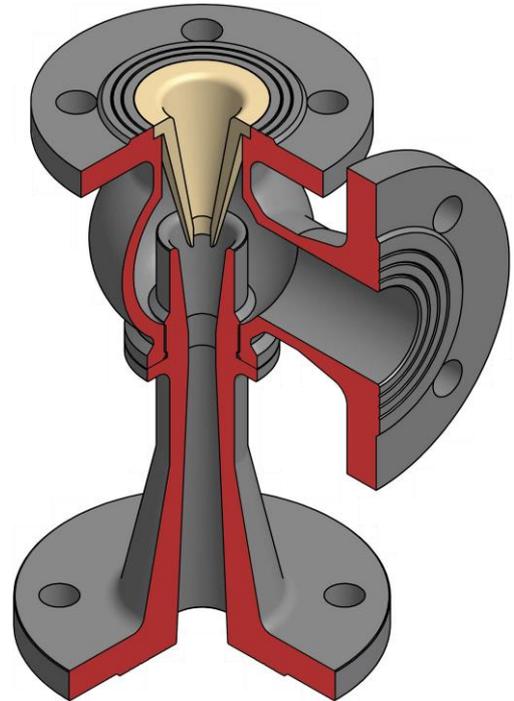
Nozzle: Bronze RG-10 (standard)
Stainless steel A351 CF3M Monel

Connection

Standard construction flanges DIN PN16
Other connection under consultation.

Most common applications

They are especially suitable for use in the manufacture of chemical products, paper, soap, tanning-works, beer and alcohol, sugars, spinning mills, dye-works, bleaching and sizing, mines and as bilge pumps in ships.



Dimensions Table

n°	Mixture *	A	B	C	D	E	F	G	H
1	1200	15	95	20	105	45	85	80	130
2	2400	20	105	25	115	50	140	85	190
3	4800	25	115	32	140	55	145	90	200
4	7500	32	140	40	150	65	175	110	240
5	9500	40	150	50	165	75	215	110	290
6	15000	40	150	50	165	75	215	110	290
7	18000	50	165	65	185	85	305	110	390
8	35000	65	185	80	200	95	415	140	510
9	72000	80	200	125	250	115	432	145	547
	l / h	mm.							

*Calculated to 4 bar steam motive pressure

Test conclusions:

- **Model immersed in liquid:** The maximum aspiration is 2m with cold water. With a steam pressure of 5 barg it can be raised to 38m.
- **Model non immersed in liquid to allow great heights:** It is possible to reach aspiration heights up to 6,5m and impulse heights of 5-12m depending on steam pressure.

NOTE:

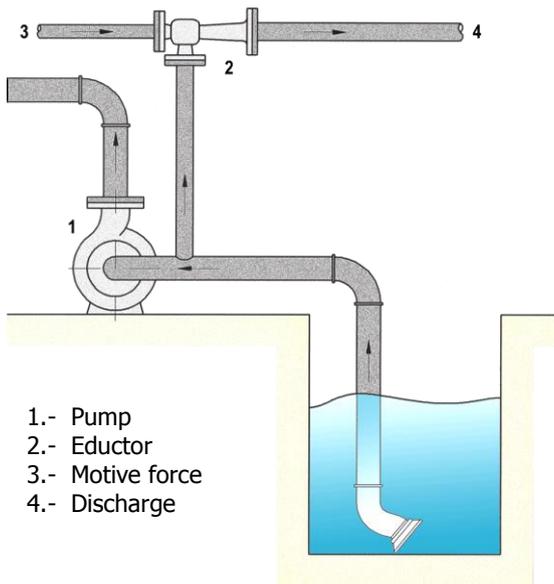
Valfonta has a simulator based on own tests to check water/water and steam/water scenarios.



Some applications for industry

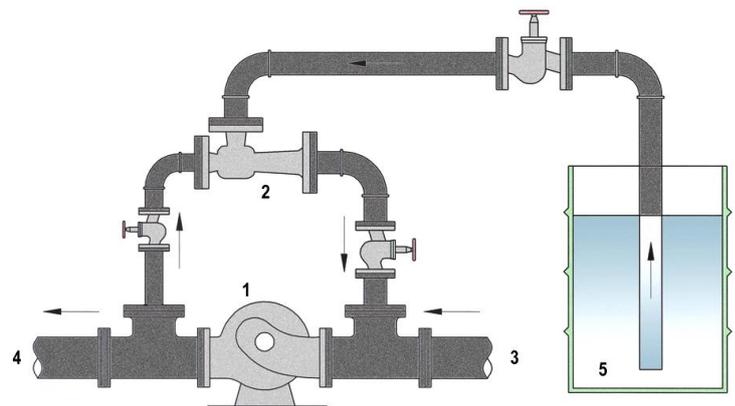
PUMP FEED

We can use the eductor like pump feeder. Motive force in eductor produces an aspiration in feed pipe and the liquid arrives to pump for a normal work.



WATER TREATMENT

Other common application is water treatment. We can use the motive force of pump (item 1) to aspire the liquid of the tank (item 5) and mix it to the main line through eductor (item 2) before their entrance in the pump (for example to mix a fertilizer).



SOLIDS ADDITION

These eductors are used for pumping or mixing solids or for the production of chemical solutions. Applying a liquid motive power and a solid one in a container, we obtain their mixture and a displacement of the solid materia in the discharge. Examples of this eductor are cement, common salt, ...

