



## DISPLACEMENT LIQUID FOAM PROPORTIONERS FOR VARIABLE FLOWRATE - BLADDER TANKS (MSL/E type, MSL type, MSL/O type)

The displacement liquid foam proportioners for variable flowrate (bladder tanks) are utilized for foam systems with different independent foam outlets which can work simultaneously or separately.

The displacement liquid foam proportioners for variable flowrate regulate automatically the correct foam extract admixing percentage to a variable water flow in a range 1:8 (for example, the same foam proportioner is suitable for admixing automatically the proper foam compound percentage in a foam system with 8 monitors both if only 1 monitor is working singularly and if all monitors are working simultaneously).



Compared to the Venturi proportioners, the high advantage of the displacement liquid foam proportioners is that they don't require the installation of a foam compound pump (the admixing of the foam compound to the water flow is automatically provided by the membrane in the bladder tank).

Another advantage of the displacement liquid foam proportioners is that they include also the foam compound storage tank..

Caccialanza & C. displacement liquid foam proportioners for variable flowrate are supplied:

- with vertical tank and membrane fixed only at the top of the tank (MSL/E type) -
- with vertical tank and membrane fixed at the top and at the bottom of the tank (MSL type) -
- with horizontal tank (MSL/O type) -
- with single or double tank -
- with capacity of the tanks from 400 lt. to 13.000 lt. -

and are available for following water/premix flowrate ranges:

- DN 4" - 200÷ 1.600 lt/min -
- DN 6" - 400÷ 3.200 lt/min -
- DN 8" - 800÷ 6.400 lt/min -
- DN 10" - 1.200÷ 9.600 lt/min -
- DN 12" - 2.000÷16.000 lt/min -
- DN 14" - 2.500÷20.000 lt/min -

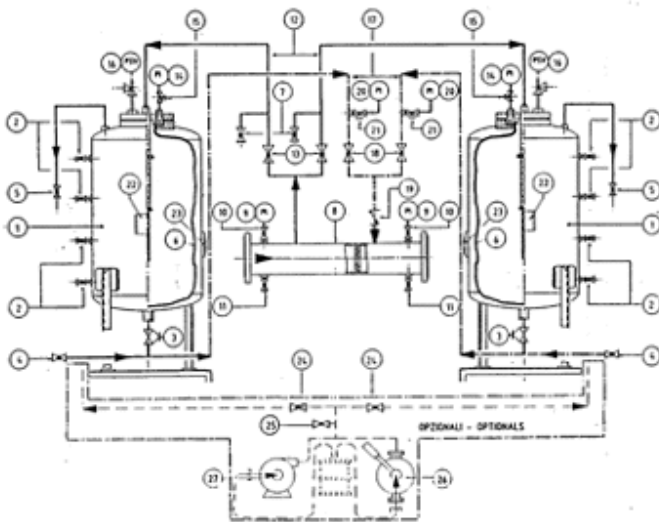
The MSL/E, MSL and MSL/O type displacement liquid foam proportioners for variable flowrate are provided with a foam compound admixing percentage regulating valve which allows the regulation of the admixing percentage between 1% and 6%.

Caccialanza & C. reserves the right to change or modify without previous notice any data or specification due to changes or modification in order to improve the products presented.

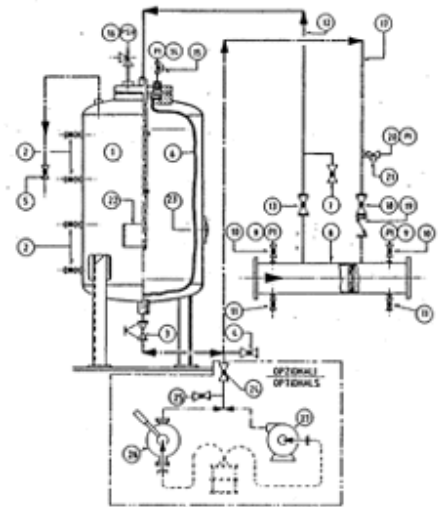


- with vertical tank and membrane fixed only at the top of the tank (MSL/E type) -

**DOUBLE TANK FLOW DIAGRAM**

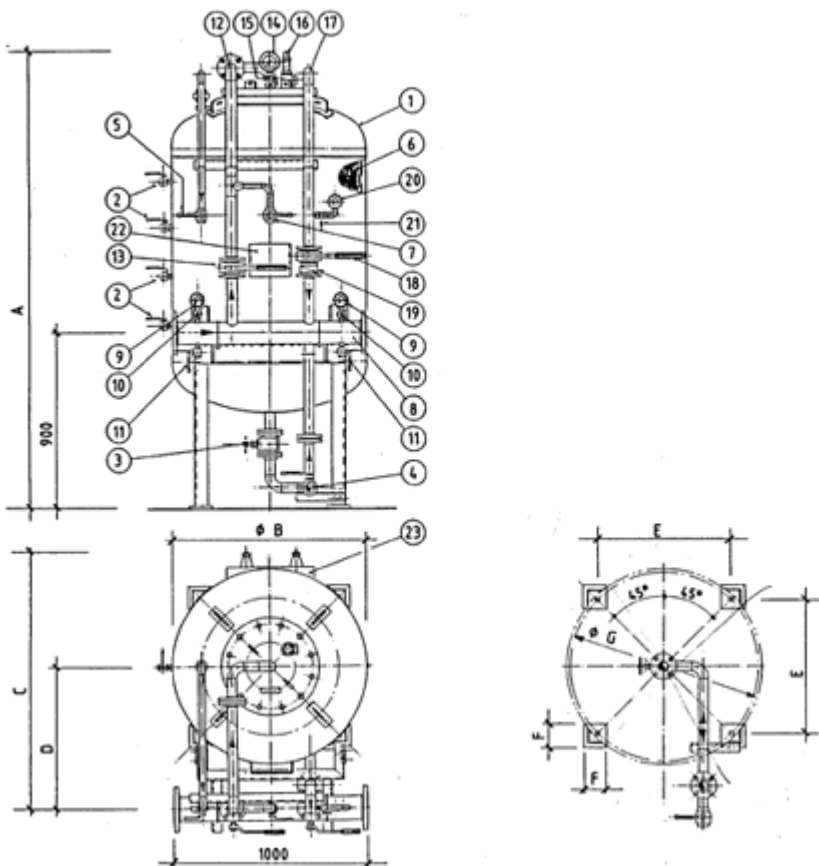


**SINGLE TANK FLOW DIAGRAM**



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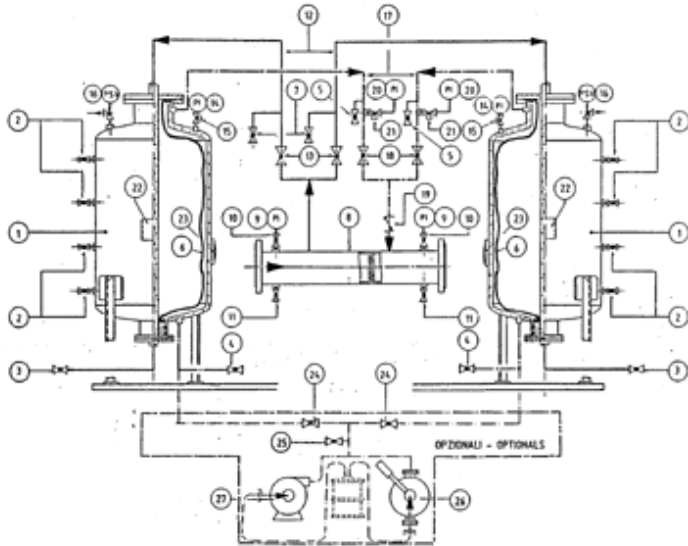
**TYPICAL LAYOUT**



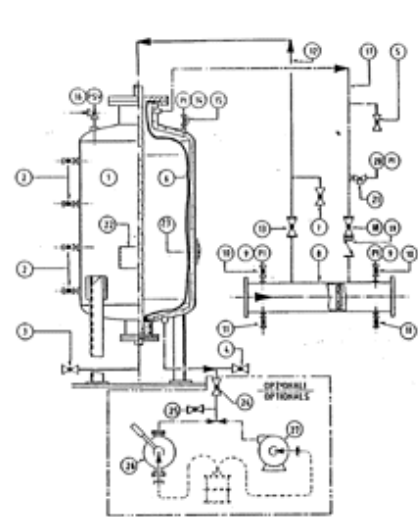


- with vertical tank and membrane fixed at the top and at the bottom of the tank (MSL type)

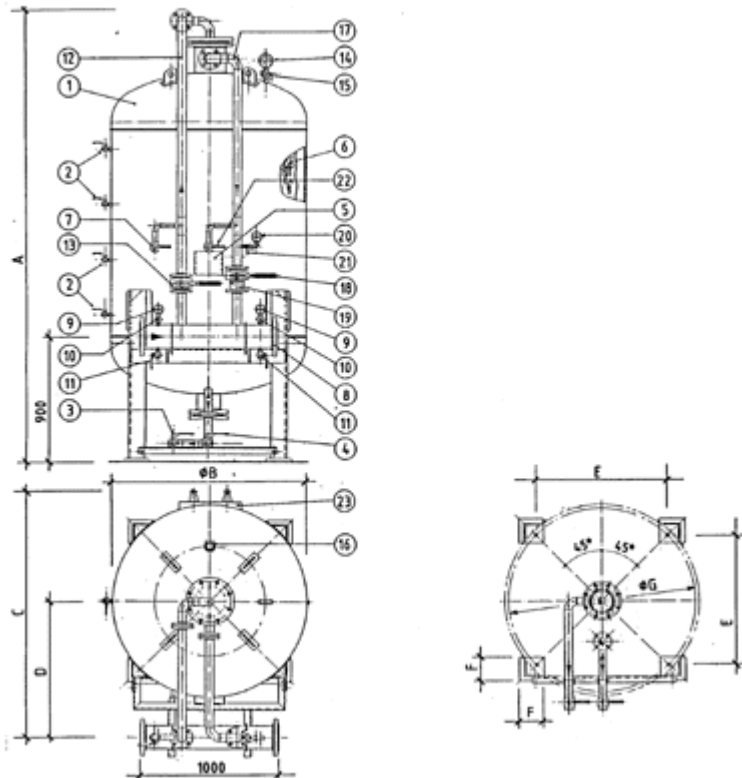
**DOUBLE TANK FLOW DIAGRAM**



**SINGLE TANK FLOW DIAGRAM**

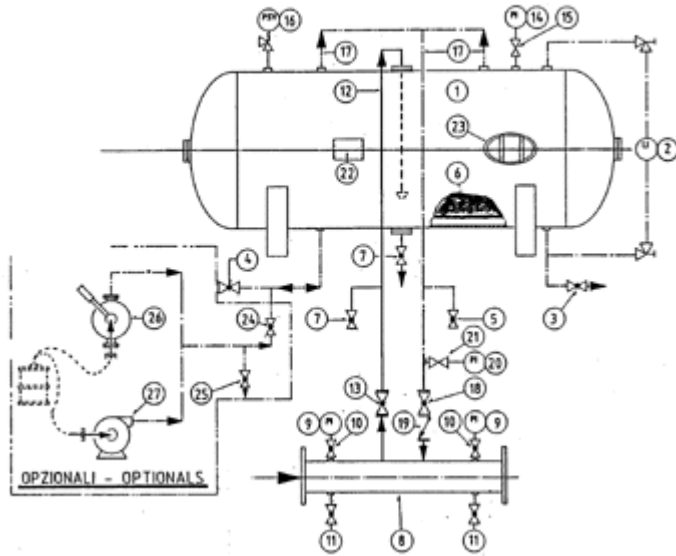


**TYPICAL LAYOUT**

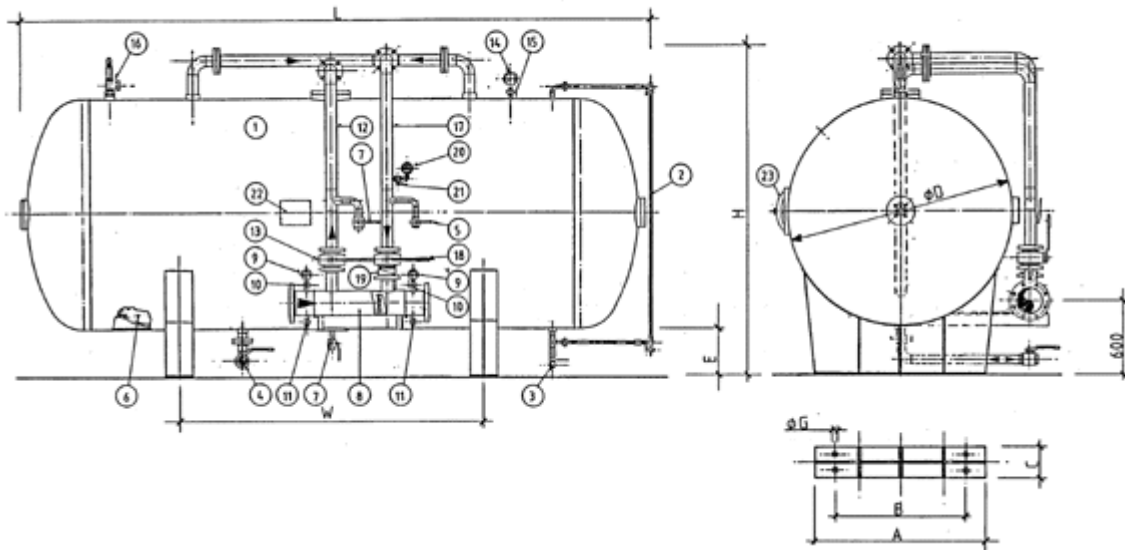


- with horizontal tank (MSL/O type) -

**FLOW DIAGRAM**



**TYPICAL LAYOUT**



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