

## Washing system dynamic Head rotating on an axis-away model ALSA.



### **Building:**

This washing system is constructed entirely of stainless steel AISI 316, with the exception of the pneumatic actuator (available on request AISI 316). The rotating head cleaning is mounted on two ball bearings. All the internal and external surfaces are machined with high precision machine tools ensuring a smooth finish and an excellent quality of the product. The heads are available in two different types of length for single wall tanks and with insulation.

### **Functioning:**

The rotating head reaches the rinsing position, coming out from the cylinder, thanks to a pneumatic actuator. This distance may be predetermined thanks to the two magnetic sensors stroke end positioned on the actuator tire.

At this point it is possible to actuate the passage of the washing liquid, which generates the motion of rotation of the head due to the reaction force of the jets. The speed of rotation depends on the pressure of the washing fluid, which must be limited: a rotating too fast in fact causes breakage of the jet into drops and loss of impact strength.

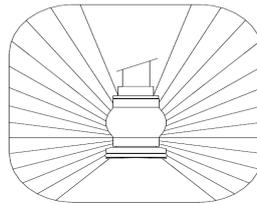
During the washing, a sealing system provides isolation from the washing liquid of the pneumatic actuator.

Once the washing process, is operated again the pneumatic actuator, the rotary head will return to its initial position within the cylinder.

**Technical features:**

Model	Capacity at pressure			coverage (degree)	Washing ray DIN 32676	Thread liquid Clamp DIN 32676	Wall thread Clamp DIN 32676	spec Wall tank
	(lt/min)	(Bar)						
	1	2	3					
ALSA2550M1	82	103	120	270°	2,2- 3,4	DN25	DN50	NOT ISOLATED
ALSA2550M1I	82	103	120	270°	2,2- 3,4	DN25	DN50	ISOLATED

Max. working temperature 95°C. Min. Non working temperature 0°C.

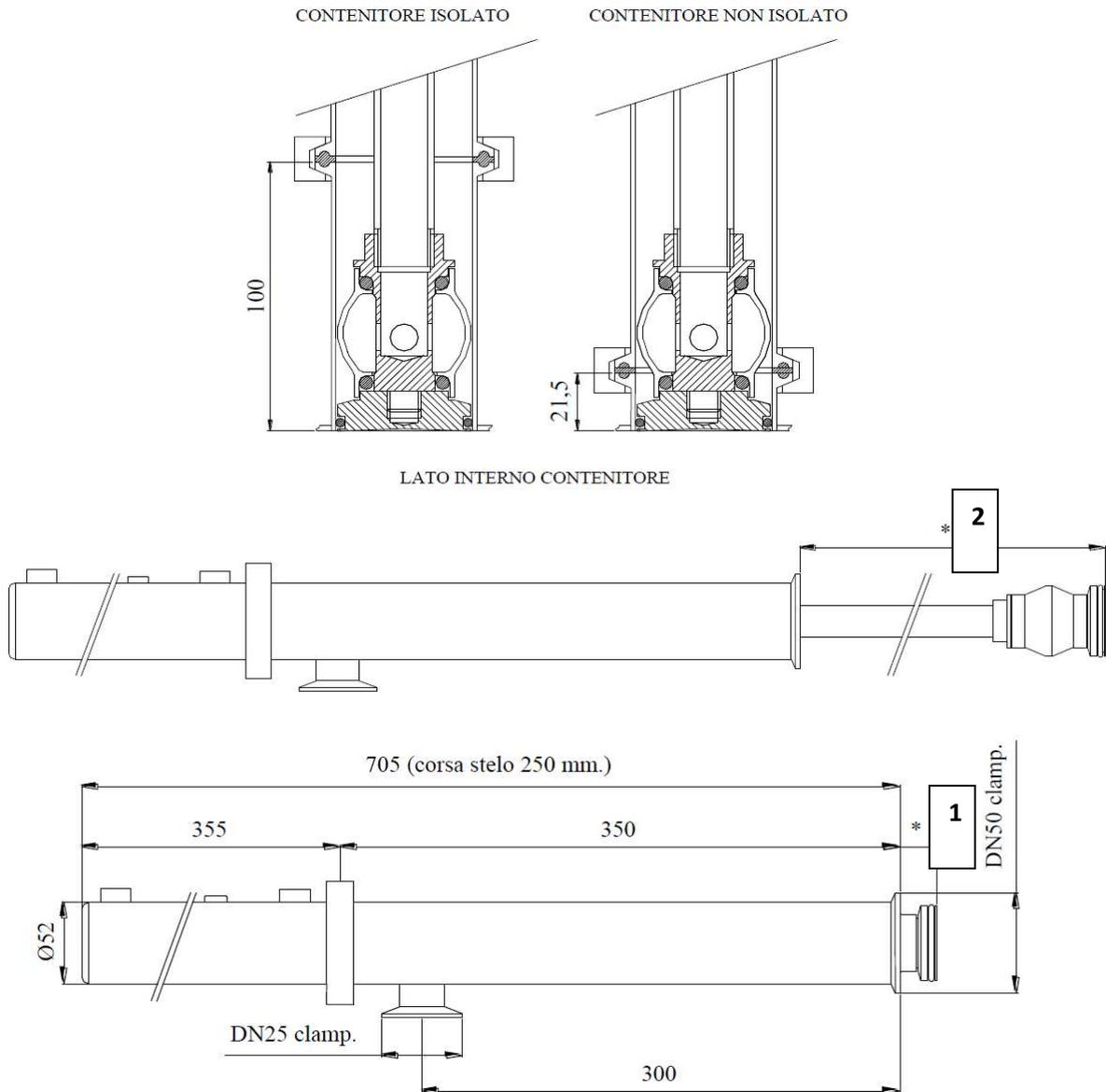


270°

**\*\*Washing max ray:**

It is not possible to define the distance at which a rotating head is able to wash a tank, without mentioning the precise conditions of the process, such as the product to be deleted, the washing solution, the pressure and the temperature of the washing jets. This value can only be determined as a result of tests, for each individual process. Instead it is possible to define a radius as a distance of wetting, ie the distance at which a given device is able to wet the entire inner surface of a tank: in these conditions must be considered that the fluid hits the wall with only a fraction of its original strength impact.





The weight of a head rotating about an axis varies from 3.40 to 3.70 Kg depending on the model

Modello	Non working position (1)	Position in max whasing (2)
ALSA2550M1	21,5 mm	271,5 mm
ALSA2550M1I	100 mm	350 mm

## PNEUMATIC ACTUATOR

The pneumatic cylinders inserted in the new washing heads ALSA are actuators manufactured based on the dimensional specifications contained in ISO 6432.

The design followed in the realization of actuators prefer the reliability, robustness and ease of maintenance.

In fact, the heads are screwed to the tube in order to allow easy inspection while the pistons are provided with elastic shock dampers to absorb shock better stroke end conferring to the machine noise and Increasing durability.

The actuator is equipped with sensors in order to control at each moment the positioning of the head "ALSA" and manage in a fully automatic and safe washing.

