Dal 1932
Officine Giudici
Eiettori a misura di futuro

BRONZE STEAM WATER MIXER fig.93

Threaded connections

Description

The Steam water mixer fig.93 is a simple, yet efficient device that allows to heat process liquids by direct steam injection, at low cost

Designed for direct connection to liquid and steam lines, the heater mixes cold liquid and steam and raise the temperature of the liquid instantly to predetermined levels.

When the heater is in operation, there is no drop in water pressure throughout the unit.

These units have no moving parts to adjust or repair.

Temperature and water flow at the outlet of the mixer are regulated by using water and steam valves attached to the connections (not included in supply).

Construction

Fig. 93 steam water mixer consists of a one complete body part and a diffuser and a detachable steam nozzle. These heaters are normally made and stocked in bronze but can be supplied in other machinable materials and castable alloys.

Operation

Pressurised steam enters the heater and flows through the motive nozzle.

The steam jet emerging from the motive nozzle at high velocity transmits its kinetic energy to the liquid. Intimate mixing of steam and water occurs in the venturi diffuser. Thus the steam is completed condensed and the liquid is heated before it is discharged into the connecting pipeline.

Steam and water adjustment valves are mandatory to obtain flow rate of hot water at the required temperatures.

Installation

The heater can be installed in any position.

The steam valve in shall be installed directly at the steam connection if possible.

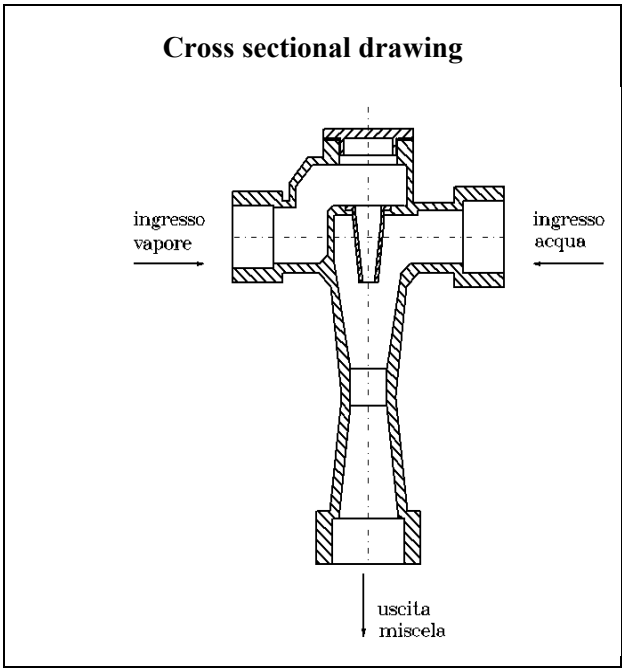
It is recommended that is strainer is fitted at the steam inlet in order to avoid any impurities.

The mixer performs a noiseless operation.

To guarantee correct operation, the steam inlet pressure need to be:

- Minimum 1.0 bar
- Equal or not less of the water pressure

That fig.93 steam water mixer, available in two size operates with a maximum steam pressure of 10 bar. Max outlet water temperature is 90° at atmospheric pressure



Flow rate chart