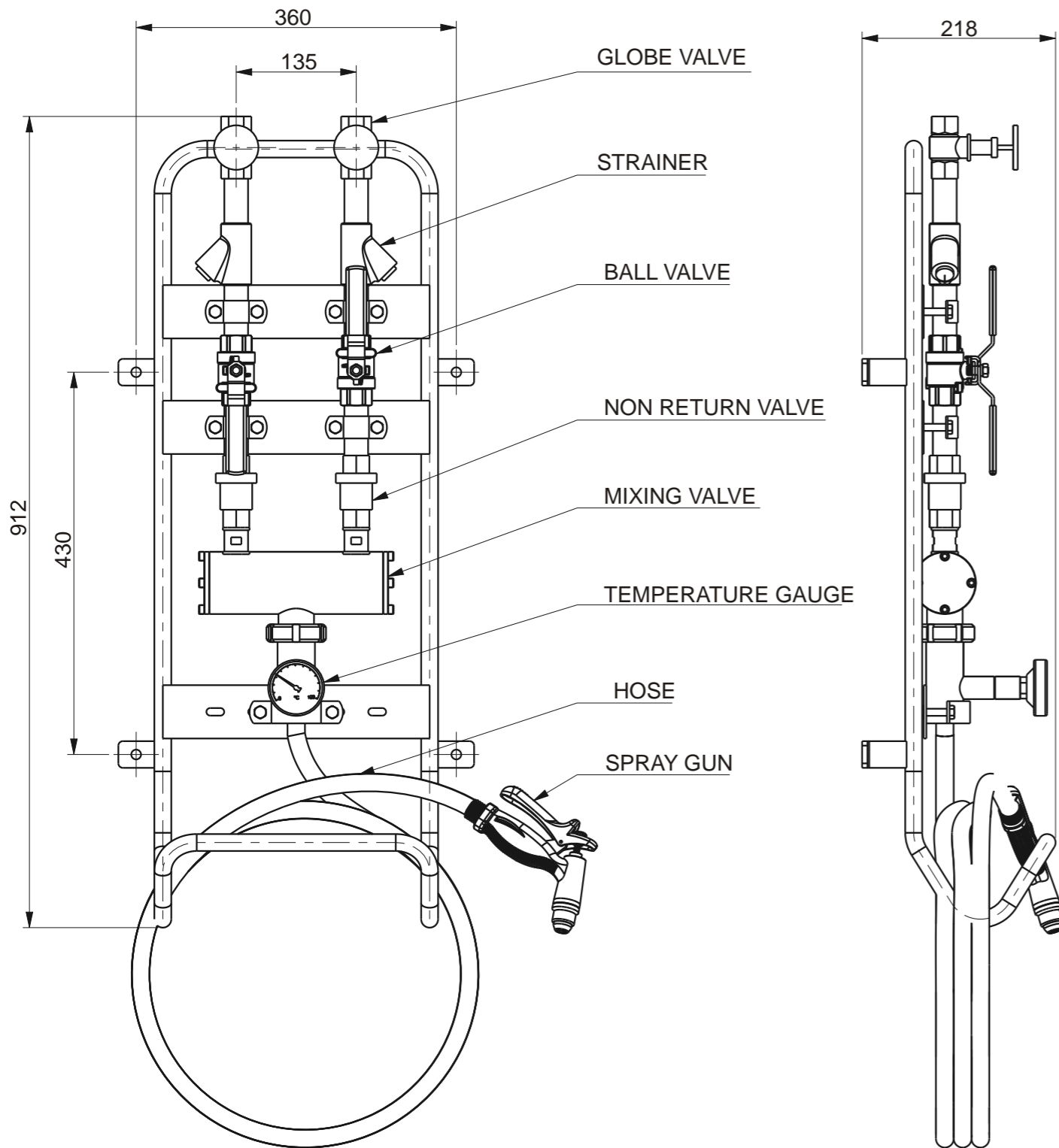


Standard Dimensions:



## Steam Water Mixing Battery (SWB-IA Series)



## Application:

- In Dairy, Food, Beverages and Pharmaceutical industry.
- Suitable for application where hot water is required for cleaning purposes.
- To provide hot water instantly, economically and safely at desired set temperatures with steady flow rates of steam and water.

## Features:

- Steam water mixing batteries are safe, cost effective, quiet in operation and easy to install.
- The battery produces instant hot water economically and effectively.
- Steam water battery has less moving parts and no electrical connections, needs only to be connected to steam and water supply.
- All parts of the mixing chamber are made from stainless steel AISI 304.
- The mixing chamber is fitted with a fail-safe device to ensure that live steam is not ejected from the battery.
- The temperature of water at the outlet of the mixer is easily controlled by using water and steam valves.
- A temperature gauge is provided to monitor the hot water outlet temperature.
- Insulated spray gun is provided for safe operation.

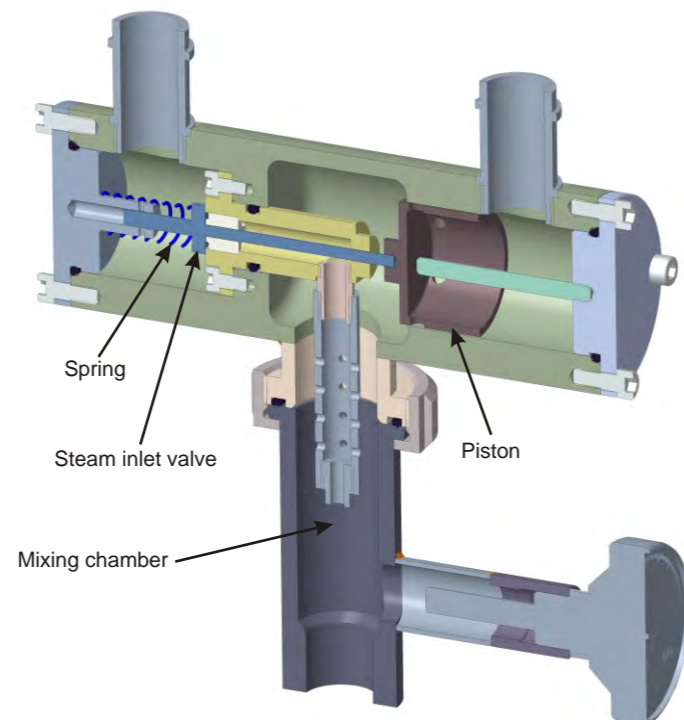
## Technical specifications:

Product connection sizes.....	¾" BSP
Peak product pressure.....	10 bar
Maximum steam temperature.....	180°C
Pressure and temperature limit of hose pipe.....	10 bar g & 150°C
Recommended inlet water TDS (maximum).....	150 PPM
Seals.....	NBR
Thread sealants.....	A-750 (Make: Fasto)
Max hot water temperature.....	75°C

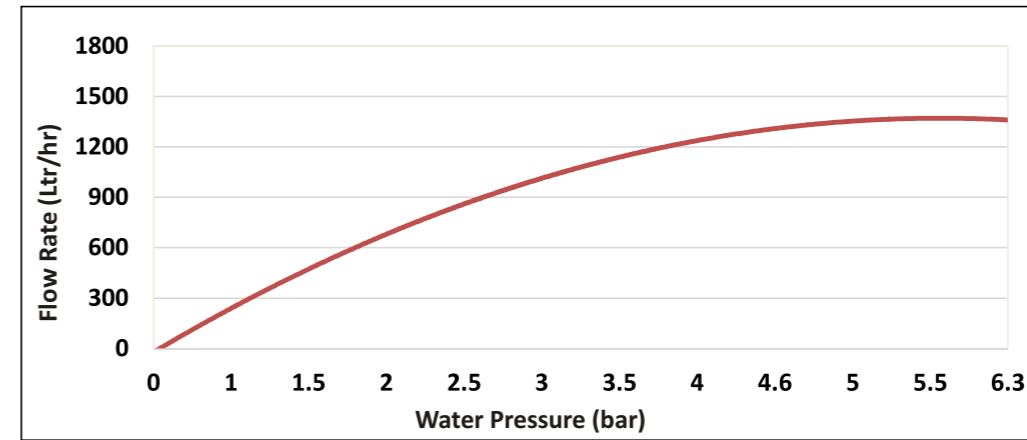
## Operating:

The battery comprises of mixing valve with spring and a piston, which moves to the left to open the steam inlet valve. Holes on piston are exposed to allow water to enter the mixing chamber and mix with the steam. If at any time the water pressure fails or the outlet is closed, steam pressure causes the piston to move to the right and the steam inlet valve closes. Non return valves are fitted in the inlet connections to prevent water entering the steam supply, and vice versa.

A minimum water supply pressure of 2 bar is required to give a reasonable hot water spray velocity at the outlet of spray gun. Steam pressure should always be greater than the water pressure by minimum 1 bar.

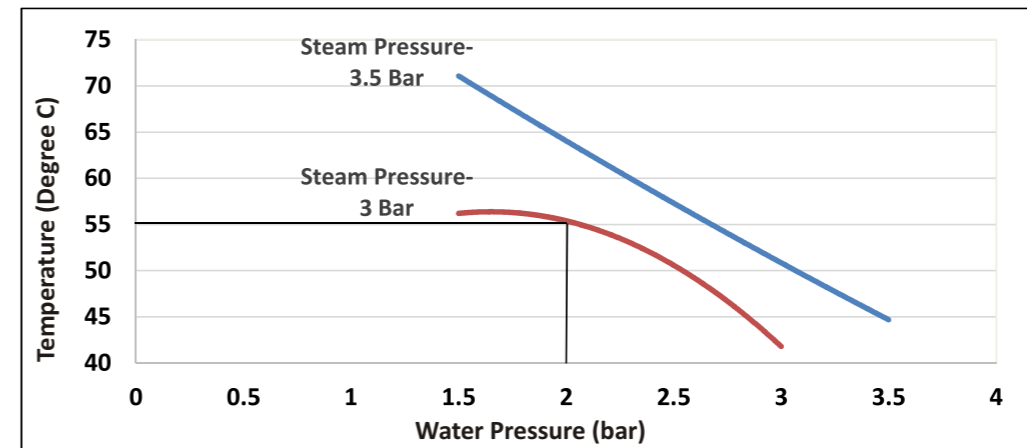


## Flow Characteristics:



**Note:** While using the chart, steam pressure is always 1 bar higher than the corresponding water pressure.

- All readings considering both steam and water control valves in fully open condition.
- All readings were taken at Inlet water temperature considering 30°C and may vary with variation in inlet water temperature.



- This chart will help in deciding the minimum inlet water pressure for a required hot water temperature.
- If, for example, the required hot water temperature is 55°C and available steam pressure is 3 bar, locate 55°C on the Y-axis. Draw a horizontal line from that point till it meets the 3 bar steam pressure curve in the chart and move vertically down. The corresponding value on the X-axis represents the inlet water pressure, which in this case, is around 2 bar.

