

# **5TEAMIX** Steam & Cold Water Hose Stations and Mixing Units

## Model 2031SS - Stainless Steel

STEAMIX® Model 203SS is a steam/water mixing valve of Type 304 stainless steel construction.

STEAMIX® Model 2033SS is supplied as standard with all stainless steel (SS) integral inlet supply risers comprising 3/4" Y-type strainers and 3/4" ball valves cross-linked by a stainless steel bridge piece and lever for simultaneous on/off control of both inlet supplies. The unit is supplied fully assembled, pressure-tested and installed on a stainless steel hose rack. Stainless Steel dual scale top mount Thermometer and Stainless Steel inlet Check Valves included.

STEAMIX 2033SS includes 25 feet of "safety yellow" washdown hose, low heat transfer, stainless steel polymer spray nozzle with trigger guard, SS swivel adapter, a stainless steel nozzle hook and SS inlet check valves.

### Safety Features

- Steamix 203SS will not pass live steam. In the event of a complete failure of the inlet cold-water supply, or a reduction in cold-water pressure to below 20 (+/-5) psi (1.4 bar), STEAMIX will safely respond with a complete shutdown of outlet flow.
- In the event of an unlikely structural failure of the diaphragm (primary operating component), STEAMIX will "fail safe" to cold water.
- To prevent over-temperature selection by the user and the potential for overheated water and flash steam presentation common with other types of hose stations, STEAMIX is supplied with a single-temperature locking set.

## **Technical Specifications**

- 3/4" (20 mm) NPT inlets/outlet(s)
- Type 304 stainless steel construction
- Operating pressures
  - Maximum: 150 psi (10 bar)
  - Minimum: 20 psi<sup>+</sup> (1.4 bar)
- Maximum pressure loss ratio 10:1<sup>++</sup>
- · Inlet check valves included
- Weight: 68 lbs (31 kg) with 25 ft hose
  79 lbs (36 kg) with 50 ft hose

## † IMPORTANT NOTE: Lower steam pressures significantly reduce outlet flow rates.

† Ratio of inlet pressures accounting for restrictions onvalve outlet (minus back pressure).

#### **Flow Rates**

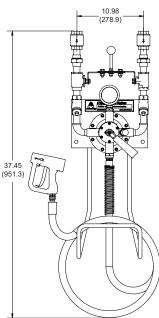
The capacity charts indicate STEAMIX 203 flow rates at steam and water pressures commonly available in the average manufacturing plant. The STEAMIX 203 can handle a wide diversity of pressures and temperatures. Three typical outlet temperatures shown in the flow tables were selected to demonstrate the valve's flow rate at:

- A) "User safe" temperature (approx. 120°F 48°C)
- B) "Hot hose down" temperature (approx. 150/160°F 65/71°C)
- C) "Common bacteria kill" temperature (approx. 180°F 82°C)

NOTE: All flow rates shown are with open outlet, and a reduction of flow is to be expected depending on the length and diameter of outlet pipework, washdown hose, spray nozzle, etc.

For a fully detailed approval drawing, refer to D31130 (2033SS-25) or D31131 (2033SS-50).





A) 55°F (31°C) Temperature Rise					
Water Steam	20 (1.4)	45 (3)	75 (5)	100 (7)	psi (bar)
22 psi (1.5 bar)	6.9 (26.1)	10.2 (38.6)	10.2 (38.6)	10.2 (38.6)	gal/min (l/min)
45 psi (3 bar)	6.9 (26.1)	13.2 (49.9)	13.2 (49.9)	13.2 (49.9)	gal/min (l/min)
60 psi (4 bar)	6.9 (26.1)	13.8 (52.2)	15.7 (59.4)	15.7 (59.4)	gal/min (l/min)
B) 100°F (56°C) Temperature Rise					
Water Steam	20 (1.4)	45 (3)	75 (5)	100 (7)	psi (bar)
22 psi (1.5 bar)	3.6 (13.6)	6.9 (26.1)	8.3 (31.4)	8.5 (32.1)	gal/min (l/min)
45 psi (3 bar)	3.6 (13.6)	6.9 (26.1)	9.4 (35.5)	9.9 (37.4)	gal/min (l/min)
60 psi (4 bar)	3.6 (13.6)	6.9 (26.1)	9.4 (35.5)	10.5 (39.7)	gal/min (l/min)
C) 135°F (75°C) Temperature Rise					
Water Steam	20 (1.4)	45 (3)	75 (5)	100 (7)	psi (bar)
22 psi (1.5 bar)	2.5 (9.4)	5.0 (18.9)	6.6 (24.9)	7.2 (27.2)	gal/min (l/min)
45 psi (3 bar)	2.5 (9.4)	5.0 (18.9)	7.2 (27.2)	8.0 (30.2)	gal/min (l/min)
60 psi (4 bar)	2.5 (9.4)	5.0 (18.9)	7.2 (27.2)	8.0 (30.2)	gal/min (l/min)