



Mialo Water Blending System

Description

The Mialo water blending system is an efficient, safe, and cost effective solution for hot water blending. It's compact design and precise integration of pre-selected equipment ensures the delivery of constant and stable temperature, even under varying load conditions.

Operational specifications

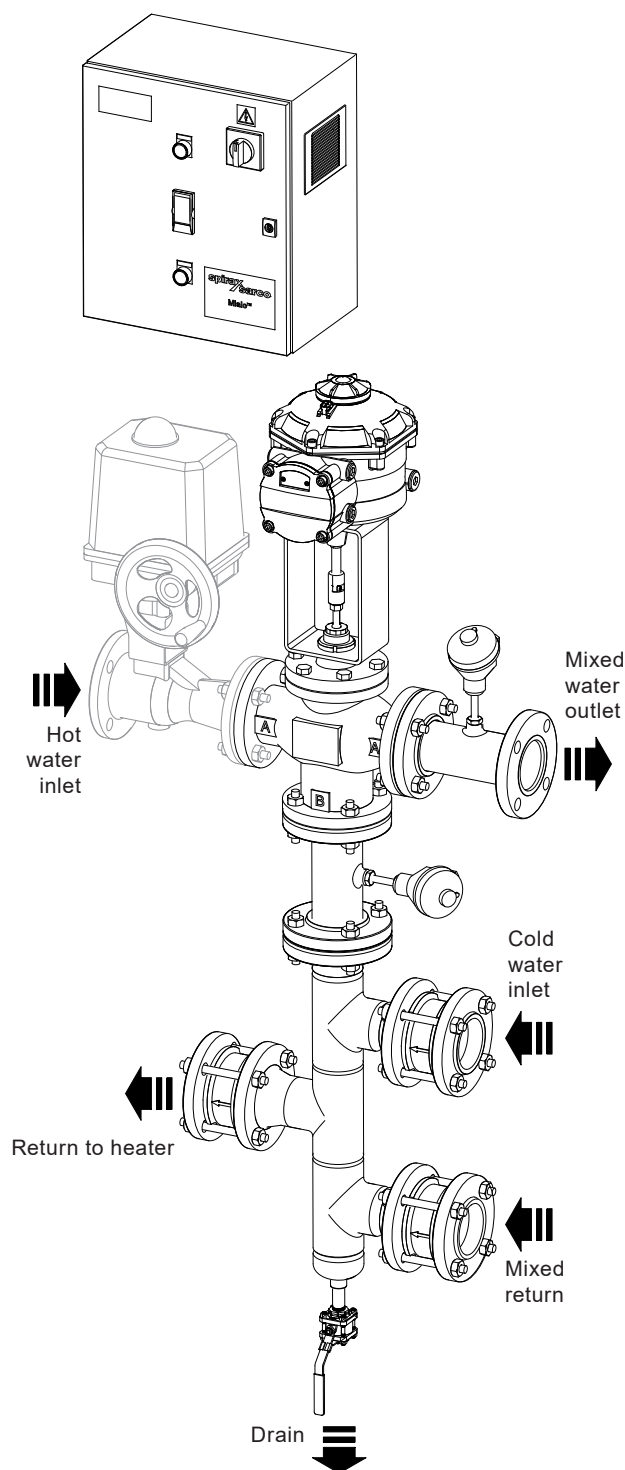
- Fast, accurate water temperature controls
- Temperature will be controlled accurately to within +/- 2°F
- Automatic hot water flow shut off in case of cold water supply failure
- Automatic hot water flow shut off in case of sensor failure
- Automatic hot water flow shut off in case of power failure
- Programmable set point range for 80 °F to 180 °F (27 °C to 82 °C)
- Programmable real time functions, which can be used for thermal disinfection cycles, or other time specific temperature profiles
- Four programmable high/low temperature alarms
- Programmable temperature error level
- Hand wheel for manual control
- Optional high limit hot water supply solenoid valve

Technical specifications

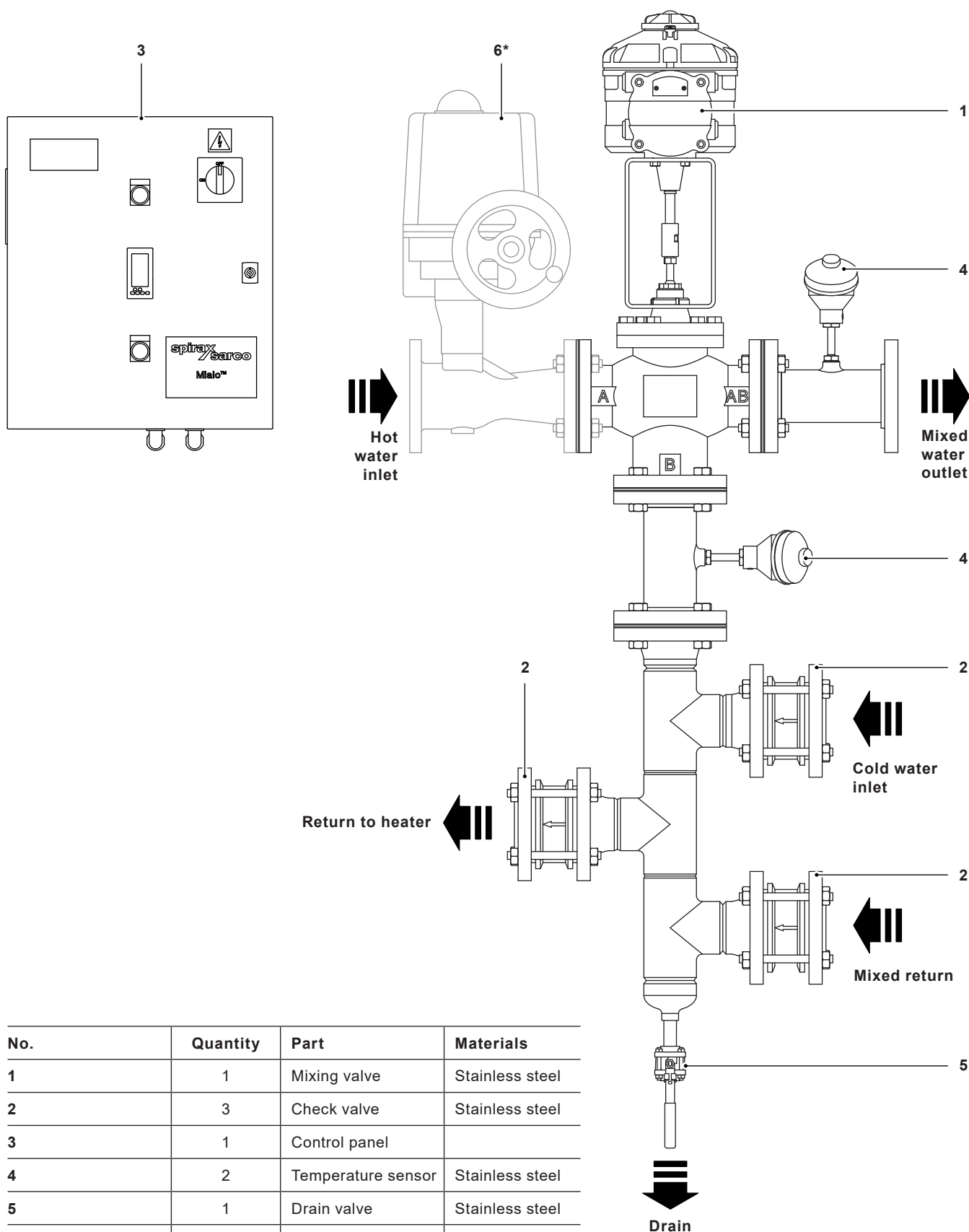
- Power Supply - 120 VAC
- Enclosure - NEMA 1
- Minimum system draw off – 0 GPM
- Maximum operating pressure: 125 psi g (8.6 bar g)
- Maximum operating temperature: 230 °F (110 °C)
- Positioning time: <2 seconds

Connectivity

- Dry contact relays for all alarms, can be set to be NO or NC
- 4-20mA re-transmission of valve position, inlet temperature, or outlet temperature
- Optional BACnet connectivity



Materials



No.	Quantity	Part	Materials
1	1	Mixing valve	Stainless steel
2	3	Check valve	Stainless steel
3	1	Control panel	
4	2	Temperature sensor	Stainless steel
5	1	Drain valve	Stainless steel
6 *	1	High limit valve	Stainless steel
High limit hot water supply solenoid valve is optional			

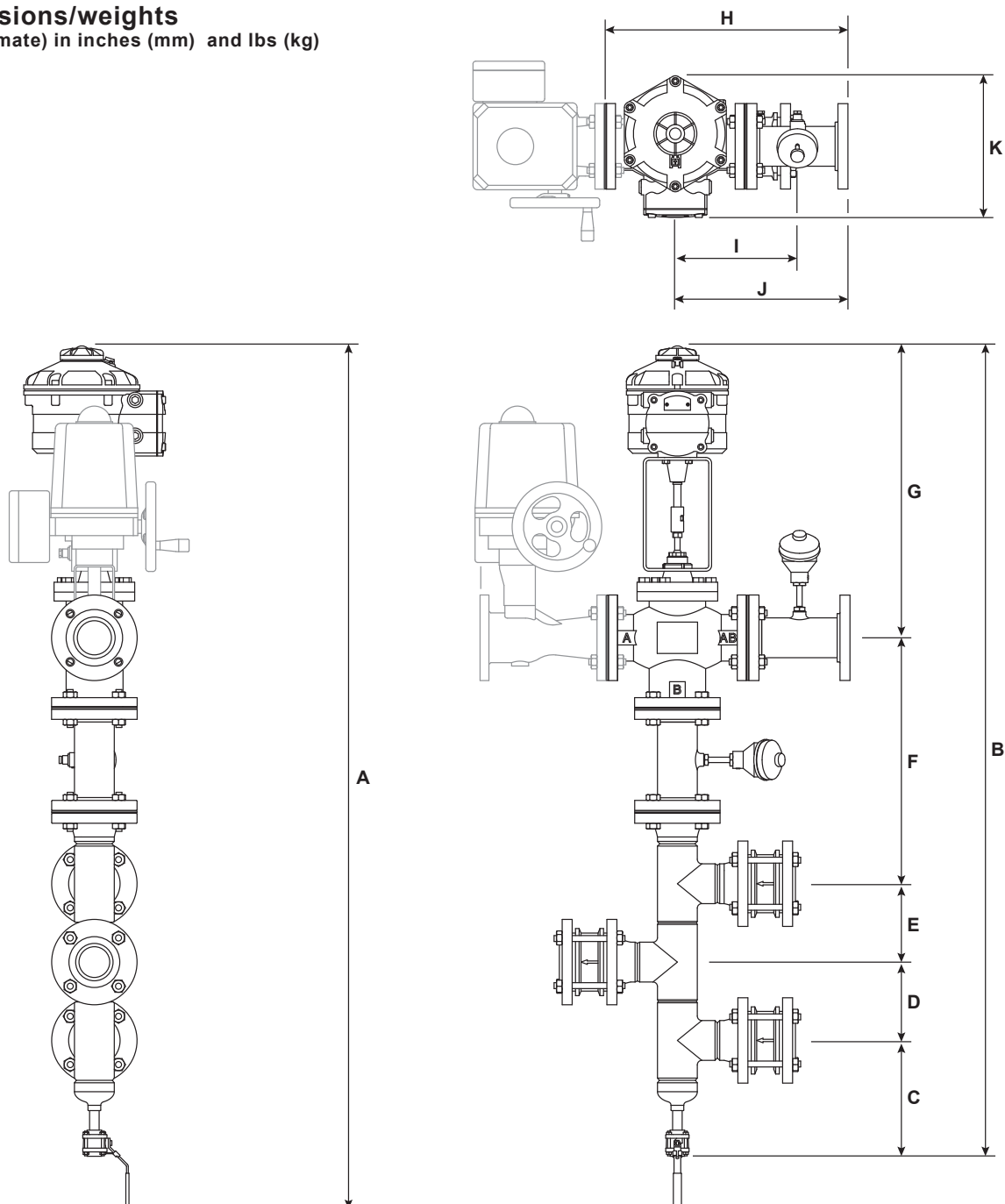
Connections approximate in inches (mm)
ANSI 150 connections, unless otherwise specified

(GPM)	Hot water inlet	Mixed water outlet	Cold water inlet	Return to heater	Mixed return	Drain (NPT)
Mialo025SS	1" (25.4 mm)	1" (25.4 mm)	1" (25.4 mm)	1" (25.4 mm)	1" (25.4 mm)	1/2" (12.7 mm)
Mialo040SS	1 1/2" (38.1 mm)	1 1/2" (38.1 mm)	1 1/2" (38.1 mm)	1 1/2" (38.1 mm)	1 1/2" (38.1 mm)	
Mialo050SS	2" (50.8 mm)	2" (50.8 mm)	2" (50.8 mm)	2" (50.8 mm)	2" (50.8 mm)	
Mialo065SS	2 1/2" (63.5 mm)	2 1/2" (63.5 mm)	2" (50.8 mm)	2" (50.8 mm)	2" (50.8 mm)	
Mialo080SS	3" (76.2 mm)	3" (76.2 mm)	3" (76.2 mm)	3" (76.2 mm)	3" (76.2 mm)	

Capacity chart

Gallons Per Minute (US) (GPM)	Pressure drop psi (bar)				Min system draw off	Pipe flow @ 7.5 ft/sec	CV
	5 (0.34)	10 (0.69)	15 (1.0)	20 (1.4)			
Mialo025SS	26 (98.4)	38 (144)	46 (174)	54 (204)	0	20	12
Mialo040SS	65 (246)	92 (348)	112 (424)	130 (492)	0	48	29
Mialo050SS	89 (337)	126 (477)	154 (583)	178 (674)	0	78	40
Mialo065SS	160 (606)	227 (859)	279 (1056)	322 (1219)	0	112	72
Mialo080SS	259 (980)	366 (1385)	449 (1700)	518 (1961)	0	173	116

Dimensions/weights
(approximate) in inches (mm) and lbs (kg)



Model	A	B	C	D	E	F	G	H	I	J	K	Weight
Mialo025SS	57 ⁷ / ₁₆ (1459)	54 (1372)	6 ¹ / ₂ (165)	5 (127)	5 (127)	13 ¹ / ₂ (343)	24 (610)	18 ⁹ / ₁₆ (471)	5 ¹ / ₂ (140)	11 ¹ / ₄ (286)	12 ¹ / ₁₆ (316)	90 (40.8)
Mialo040SS	64 ¹¹ / ₁₆ (1643)	61 ¹ / ₄ (1556)	6 ¹⁵ / ₁₆ (176)	6 (152)	6 (152)	17 ¹ / ₄ (438)	25 ¹ / ₁₆ (637)	19 ¹⁵ / ₁₆ (506)	7 ⁵ / ₁₆ (186)	11 ¹ / ₁₆ (281)		140 (63.5)
Mialo050SS	73 ³ / ₁₆ (1859)	69 ³ / ₄ (1772)	11 ¹¹ / ₁₆ (297)	6 ¹ / ₂ (165)	6 ¹ / ₂ (165)	19 ¹ / ₂ (495)	25 ⁵ / ₁₆ (645)	23 ³ / ₄ (591)	8 ¹⁵ / ₁₆ (227)	12 ¹¹ / ₁₆ (322)		155 (70.3)
Mialo065SS	75 ¹¹ / ₁₆ (1922)	72 ¹ / ₄ (1835)				22 ⁷ / ₁₆ (570)	25 ¹ / ₁₆ (637)	24 ³ / ₁₆ (619)		13 ¹³ / ₁₆ (351)		170 (77.1)
Mialo080SS	74 ⁵ / ₁₆ (1895)	71 ¹ / ₁₆ (1808)	10 ⁹ / ₁₆ (268)	6 ⁷ / ₁₆ (175)	6 ⁷ / ₁₆ (175)	21 ⁵ / ₁₆ (549)	25 ¹ / ₄ (641)	26 ⁷ / ₁₆ (672)	9 ³ / ₁₆ (233)	15 ¹ / ₄ (387)		220 (99.8)

Note: A range of alternative body, plate and component materials are available to satisfy special applications. Please contact Spirax Sarco for further information on availability and how to order.

Optional high limit hot water supply solenoid valve is shown in grey.