

model TWBS.EWE

Thermostatic Mixing Valves

FEATURES & BENEFITS

BYPASS

Highest Cold Water Bypass flow rate by class in the industry (83% of the rated tempered water flow rate).

PRESSURE DROP

Lowest internal pressure drop for this class of valve translates into a significant advantage in installations where the supply pressure is low.

OPERATING RANGE

Minimal outlet temperature variation is achieved by having the best minimum flow rate in the industry.

SHUTTLE DESIGN

Valve binding, which is common in the industry, is virtually eliminated by material selection and advanced shuttle design.

MIXING CHAMBER

Efficient funnel design with turbulent hot water passages to improve mixing at low flow rates and to enhance temperature control

LEAD FREE

System is certified to NSF61 and the California Health and Safety Code 116875 (AB 1953-2006).

FLOW RATES

With a flow range of 1 to 12 GPM, this valve can be used for 1 or 2 safety eyewashes.

ANTI-SCALD PROTECTION

Redundant anti-scald protection; primary protection comes from the main tempering valve. An additional high temperature shut-off valve provides a secondary level of protection; the internal cold water bypass takes over to supply cold water in the event of a hot water pressure loss or main tempering valve failure.

EXTENDED WARRANTY

Superior engineering incorporated into this product carries an extended 3-year warranty.



SPECIFICATIONS

Model TWBS.EWE (patent pending) is a thermostatic mixing valve that mixes hot and cold water to supply tempered water to emergency eyewash fixtures requiring flow up to 12 GPM. Unit employs two paraffin-filled thermostatic mixing elements, with one of them being a secondary high-temperature limit valve to provide additional protection. Lowest internal pressure drop in this class of valve, and a high Cold Water Bypass flow rate of 10 GPM. A 0.0 GPM hot water flow occurs if cold supply fails. The modular lead-free, brass design with a one-piece casting uses internal check stops, oversized valve seats, a shuttle design that eliminates valve sticking, and a funnel design to improve temperature control with better mixing at low flow rates. Lime and calcium resistant components are used throughout. The outlet temperature factory setting is 85°F (26°C). Maximum operating pressure: 125 psi. Temperature adjustment range 60-95°F (15-35°C). Maximum inlet temperature: 180°F (82°C). Recommended inlet temperature: 140°F (60°C). Minimum inlet temperature: 120°F (49°C) Inlet 1/2" NPT(F). Outlet 3/4" NPT(F).

Hot water inlet pressure must be within +/- 10% of the cold inlet pressure.

Listings: ASSE 1071, CSA B125.3, NSF/ANSI 61-section 8, California Health and Safety Code 116875 (AB 1953-2006).

FLOW CAPACITIES

MODEL	INLET	OUTLET	MINIMUM FLOW	INTERNAL COLD WATER BY-PASS AT 30PSI DROP	PRESSURE DROP										
					1	2	5	10	15	20	25	30	45	60	PSI
TWBS.EWE	E 1/2"	3/4"			.069	.138	.345	.689	1.03	1.38	1.72	2.07	3.10	4.13	BAR
			1	10	2.2	3.1	4.9	6.9	8.5	9.8	10.9	12	14.7	17	GPM
			4	38	8.3	11.7	18.5	26.1	32.2	37.1	41.3	45	55.6	64.4	L/MIN



NSF/ANSI 61

