

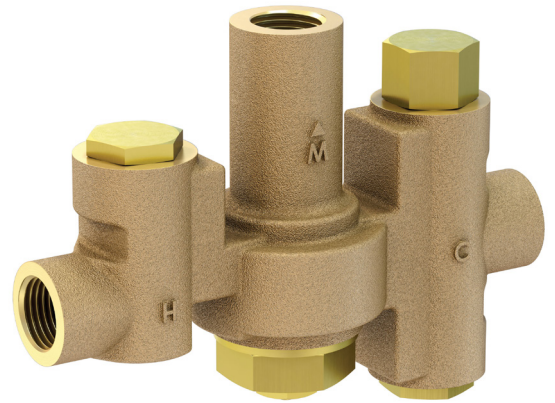
Product Datasheet

Thermostatic Mixing Valve

TMV-AC Series

The Hughes TMV-AC Series emergency tempering valve is certified to ASSE 1071 and will deliver safe, tepid water to safety systems such as eye, face and shower fixtures and combination units.

Factory set to 85F (29.4C) to ensure comfort when used with an eye wash, yet can be safely set up to 95F (35C) for maximum effectiveness when used with body washes. The TMV-AC is offered in 3 sizes to meet the needs of your application based on minimum flow performance requirements and maximum flow demands. The valve can be used to control the temperature of recirculating as well as non-recirculating supply systems.



Features:

- IAPMO certified per ASSE 1071 at the minimum flow rates detailed below.
- Lead-free** certified DZR brass body with corrosion resistant and lead-free internal components.
- Integral cartridge style checks with screens to prevent backflow and to filter debris entering the valve.
- On demand internal cold water bypass ensures the flow of cold water in the event of loss of hot water.
- Temperature adjustment is made using an Allen wrench. A locknut on the bonnet prevents unauthorized or accidental temperature adjustment.
- Commercial quality paraffin actuator provides repeatable, reliable performance.
- Optional BVS lockable ball valve shut-off meets ANSI Z358.1 2014 and ASSE 1071 requirements that state, "If shut-off valves are installed in the supply line for maintenance purposes provisions SHALL be made to prevent unauthorized shut-off". Acorn eliminates the need for a locked cabinet or other means to prevent unauthorized access to un-lockable, and potentially unsafe, check stop shut-off valves."

* In accordance to ASSE 1071 as certified by IAPMO

**The wetted surface of the valves contacted by consumable water contains less than 0.25% of lead by weight in conformance with national lead free law.

Specifications

VALVE	
OPERATING PRESSURE	Maximum 125 PSI (861 kPA)
HOT WATER SUPPLY TEMPERATURE	Maximum 180F (82C) Minimum 5F (3C) above set point
OUTLET TEMPERATURE RANGE	60-95F (15-35C)
CERTIFIED MINIMUM FLOW*	- TMVEF-AC 0.5 GPM (1.9 LPM) - TMVS-AC 1 GPM (3.8 LPM) - TMVM-AC 2 GPM (7.6 LPM)

GPM (LPM) FLOW RATES @ 30 PSID*			
Model	Tempered	CW BY-PASS	CW FAILURE MAX.
TMVEF-AC	9.8 (37.1)	6.5 (24.5)	0.5 (1.9)
TMVS-AC	35.1 (133)	25 (94.6)	1 (3.8)
TMVM-AC	70.2 (256.7)	60 (227)	1 (3.8)

Guide Specification:

Emergency Fixture Thermostatic Mixing Valve shall be IAPMO certified to ASSE 1071 and CSA standards. Valve shall have an on demand internal cold water bypass of at least 60% of the normal flow rate. Valve body shall be "lead-free" brass with corrosion resistant internal components. Checks and screen must be integral. The sensor will be an advanced paraffin actuator with a temperature range of 60°F to 95F (16C or 35C) or 60F to 90F (16C to 32C) (t), factory set to 85F (29C) and adjustable by the safety officer. A locknut will prevent unauthorized or accidental set point changes. Shut-offs, if shown in the manufacturer's part number at the end of this specification, must be lockable to help prevent unauthorized or accidental closing in accordance with ANSI Z358 and ASSE 1071 shall be a reliable ball valve design."

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Technical Dimensions

	PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
ET71-1 12 GPM (45 LPM)	FLOW RATE GPM (LPM)	1.8	4 (15.1)	5.66 (21.4)	6.9 (26.1)	8 (30.2)	9.8 (37.1)	12 (45.4)	13.9 (52.6)
	COLD WATER BYPASS ONLY							6.5 (24.5)	
ET71-2 43 GPM (163 LPM)	FLOW RATE GPM (LPM)	6.4	14.3 (54.1)	20.3 (76.8)	24.8 (93.9)	28.7 (108.6)	35.1 (132.9)	43 (162.8)	49.7 (188)
	COLD WATER BYPASS ONLY							25 (94.6)	
ET71-3 86 GPM (325.5 LPM)	FLOW RATE GPM (LPM)	12.8	28.7 (108.6)	40.5 (153.3)	49.7 (188.1)	57.3 (217)	70.2 (265.7)	86 (325.5)	99.3 (375.9)
	COLD WATER BYPASS ONLY							60 (227)	

	INLET	OUTLET	"A"	"B"	"C"	"D"	"E"
ET71-1	1/2" NPT	1/2" NPT	5-3/4" (146)	2-5/8" (67)	4" (102)	3" (76)	2" (51)
ET71-2	3/4" NPT	1" NPT	8-1/2" (216)	3 (76)	5-1/2" (140)	4-1/4" (108)	3" (76)
ET71-3	1" NPT	1-1/4" NPT	14" (356)	5-1/4" (133)	8-3/4" (222)	6-1/4" (159)	5-3/4" (145)

