



TM-800



TA-300



TM-850



TA-350

EMERGENCY MIXING VALVES

LEONARD THERMOSTATIC WATER MIXING VALVES control water temperature to provide tepid water for emergency showers, eyewash and eye/face wash units



DURA-trol® solid bimetal thermostatic control
Locked temperature regulator set for 85°F (29°C)



High temperature limit stop set for 90°F (32°C)

Internal cold water bypass on failure of hot water supply standard on all models

ASSE Standard 1071 listed

ANSI Z358.1-2004 requires water to emergency equipment to be "tepid"

Optional systems with temperature override protection available



All systems factory tested before shipment

Toll free technical support



ANSI Standard Z358.1-2004 & ASSE Standard 1071-2008

- ANSI Standard Z358.1-2004 addresses the minimum performance requirements for emergency eyewash and shower equipment. The Standard mandates that water supplied by emergency equipment shall be “tepid,” which is generally assumed to be between 60°F and 100°F (16°C and 37°C), “moderately warm or lukewarm.”
- ASSE Standard 1071-2008 establishes the minimum performance requirements for temperature activated mixing valves used in conjunction with emergency equipment. The standard states that upon hot water failure, the cold water shall continue to flow at the manufacturer’s rated by-pass flow rate at 30.0 psi 206.9 kPa) differential pressure.
- In facilities where adequate hot and cold water is available at each emergency fixture, a single emergency mixing valve should be installed at the emergency unit. Where more than one emergency fixture is supplied by a single emergency mixing valve, it is the responsibility of the specifier, owner and safety professional to assure that there is an adequate flow of tepid water to each emergency fixture.
- Depending upon the application, where there is the possibility that a chemical reaction can be accelerated by a certain water temperature, a medical advisor should be consulted to establish the proper water temperature setting.

Selection/Specification Guide

Standard Systems with Internal Cold Water By-Pass	Finish	Mounting	Options
TA-300 Eye/Face Wash, 1/2" 2.0-10 GPM (1.9-38 l/min) TM-500A Single or Multiple Eye/Face Wash, 3/4" 3-24 GPM (11-91 l/min) TM-600 Single Drench or Combination Shower, 3/4" inlets, 1" outlet 3-58 GPM (11-220 l/min) TM-800 Single or Multiple Drench or Combination Shower, 1" inlets, 1-1/4" outlet 3-64 GPM (11-242 l/min) TM-5100 Multiple Drench or Combination Showers, 1-1/4" inlets, 1-1/4" outlet 3-126 GPM (11-477 l/min)	– RF Rough Finish – CP Chrome Plated* <small>*Standard Systems Only</small>	Exposed Assemblies include an integral wall mounting bracket Cabinet Assemblies: – STSTL-REC Recessed Stainless Steel Cabinet – STSTL-EXP Exposed Stainless Steel Cabinet – BWE-REC Recessed Baked White Steel Cabinet – BWE-EXP Exposed Baked White Steel Cabinet	– VIEW Viewport in Door – IT Inlet Thermometers – TOP Top Inlets (standard on Dual Systems)

Dual Systems with Internal Cold Water By-Pass and Temperature Override Protection

- TA-350** Eye/Face Wash 3/4" inlets, 3/4" outlet 2.0-10 GPM (1.9-38 l/min)
- TM-850** Single or Multiple Drench or Combination Shower, 1 1/4" inlets, 1 1/4" outlet 3-64 GPM (11-242 l/min)
- TM-5125** Multiple Drench or Combination Showers, 1 1/4" inlets, 1 1/2" outlet 3-126 GPM (11-477 l/min)





TA-300

Standard System Single Eyewash or Eye/Face Wash



TA-300



TA-300-STSTL-EXP



TA-300-STSTL-REC

TA-300 Emergency Mixing Valve to provide tepid water to eyewash or eye/face wash unit

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, minimum of 4 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 1/2" inlets (copper) with check and stop valves, 1/2" outlet (NPT).

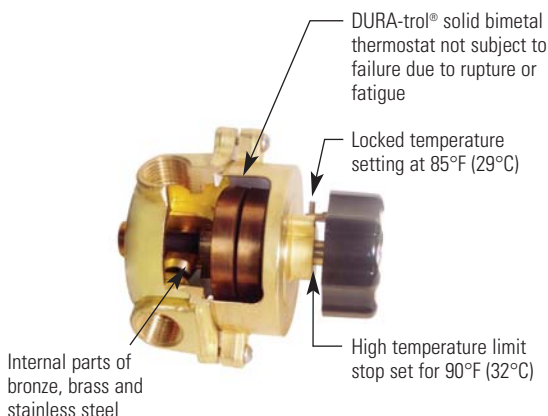
Installation: TA-300 has an integral wall mounting bracket. TA-300-STSTL-REC is mounted in a recessed stainless steel cabinet. TA-300-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP									
		5	10	15	20	25	30	35	40	45	PSI
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	BAR
2.0	4	2.5	4	5	6	7	8	8.5	9.5	10	GPM
7.6	15	9.5	15	19	23	27	30	32	36	38	L/MIN
ASSE STANDARD 1071 LISTED						MAXIMUM FLOW CAPACITY					

Options

- CP	Chrome Plated Finish
- IT	Inlet Thermometers
- BWE-EXP	Exposed Baked White Steel Cabinet
- BWE-REC	Recessed Baked White Steel Cabinet
- VIEW	Viewport in door



CAUTION: Thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart to be certain the flow requirement is within the flow capacity and supply pressure limits shown.

IMPORTANT: According to ANSI Z358.1-2004, emergency equipment must be used and maintained regularly. Thermostatic mixing valves should also be cycled and maintained on a regular basis. At installation, the mixing valve's temperature settings may have to be adjusted based upon the incoming hot water supply temperature.



TA-350

Dual System with Temperature Override Protection for Single Eyewash or Eye/Face Wash



TA-350



TA-350-STSTL-EXP



TA-350-STSTL-REC

TA-350 Emergency Mixing Valve to provide tepid water to eyewash or eye/face wash unit

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Temperature Override Protection: A redundant thermostatic control valve on the outlet opens on temperature rise over 90°F (32°C) to introduce cold water and maintain tepid flow to the fixture.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, minimum of 4 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 3/4" inlets (NPT) with check and stop valves, 3/4" outlet (NPT).

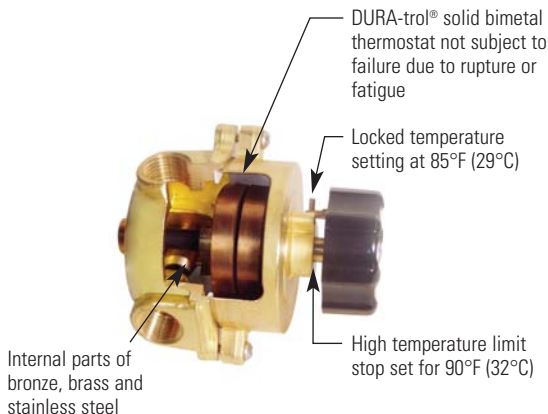
Installation: TA-350 has an integral wall mounting bracket. TA-350-STSTL-REC is mounted in a recessed stainless steel cabinet. TA-350-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP									
		5	10	15	20	25	30	35	40	45	PSI
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	BAR
2.0	4	2.5	4	5	6	7	8	8.5	9.5	10	GPM
7.6	15	9.5	15	19	23	27	30	32	36	38	L/MIN
ASSE STANDARD 1071 LISTED						MAXIMUM FLOW CAPACITY					

Options

- **BWE-EXP** Exposed Baked White Steel Cabinet
- **BWE-REC** Recessed Baked White Steel Cabinet
- **VIEW** Viewport in door



CAUTION: Thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart to be certain the flow requirement is within the flow capacity and supply pressure limits shown.

IMPORTANT: According to ANSI Z358.1-2004, emergency equipment must be used and maintained regularly. Thermostatic mixing valves should also be cycled and maintained on a regular basis. At installation, the mixing valve's temperature settings may have to be adjusted based upon the incoming hot water supply temperature.



TM-500A

Standard System Single or Multiple Eyewash or Eye/Face Wash



TM-500A



TM-500A-STSTL-EXP



TM-500A-STSTL-REC

TM-500A Emergency Mixing Valve to provide tepid water to single or multiple eyewash or eye/face wash units

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, minimum of 8 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 3/4" inlets (NPT) with check and stop valves, 3/4" outlet (NPT).

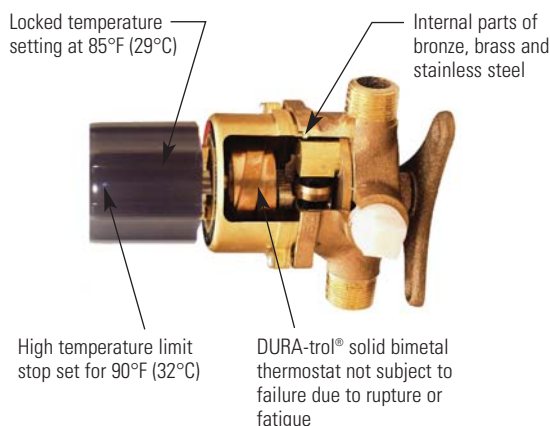
Installation: TM-500A has an integral wall mounting bracket. TM-500A-STSTL-REC is mounted in a recessed stainless steel cabinet. TM-500A-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP									
		5	10	15	20	25	30	35	40	45	PSI
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	BAR
3	8	7	8	10	13	16	18	20	22	24	GPM
11	30	26	30	38	49	61	68	76	83	91	L/MIN
ASSE STANDARD 1071 LISTED MAXIMUM FLOW CAPACITY											

Options

- CP Chrome Plated Finish
- IT Inlet Thermometers
- BWE-EXP Exposed Baked White Steel Cabinet
- BWE-REC Recessed Baked White Steel Cabinet
- VIEW Viewport in door



CAUTION: Thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart to be certain the flow requirement is within the flow capacity and supply pressure limits shown.

Where multiple emergency fixtures are supplied by a single emergency mixing valve, it is the responsibility of the specifier, owner, and safety professional to ensure there is sufficient flow of tepid water to each emergency fixture.

IMPORTANT: According to ANSI Z358.1-2004, emergency equipment must be used and maintained regularly. Thermostatic mixing valves should also be cycled and maintained on a regular basis. At installation, the mixing valve's temperature settings may have to be adjusted based upon the incoming hot water supply temperature.



TM-600



TM-600-STSTL-EXP



TM-600-STSTL-REC

TM-600 Emergency Mixing Valve to provide tepid water to single drench or combination shower

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, minimum of 20 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 3/4" inlets (NPT) with check and stop valves, 1" outlet (NPT).

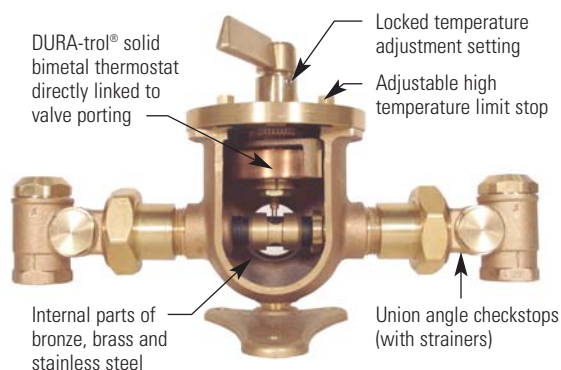
Installation: TM-600 has an integral wall mounting bracket. TM-600-STSTL-REC is mounted in a recessed stainless steel cabinet. TM-600-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP									
		5	10	15	20	25	30	35	40	45	PSI
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	BAR
3	20	18	23	29	34	40	45	51	56	58	GPM
11	76	68	87	110	129	151	170	193	212	220	L/MIN
ASSE STANDARD 1071 LISTED MAXIMUM FLOW CAPACITY											

Options

- CP	Chrome Plated Finish
- IT	Inlet Thermometers
- BWE-EXP	Exposed Baked White Steel Cabinet
- BWE-REC	Recessed Baked White Steel Cabinet
- VIEW	Viewport in door



CAUTION: Thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart to be certain the flow requirement is within the flow capacity and supply pressure limits shown.

IMPORTANT: According to ANSI Z358.1-2004, emergency equipment must be used and maintained regularly. Thermostatic mixing valves should also be cycled and maintained on a regular basis. At installation, the mixing valve's temperature settings may have to be adjusted based upon the incoming hot water supply temperature.



TM-800



TM-800-STSTL-EXP



TM-800-STSTL-REC

TM-800 Emergency Mixing Valve to provide tepid water to single or multiple drench or combination showers

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, minimum of 20 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 1" inlets (NPT) with check and stop valves, 1-1/4" outlet (NPT).

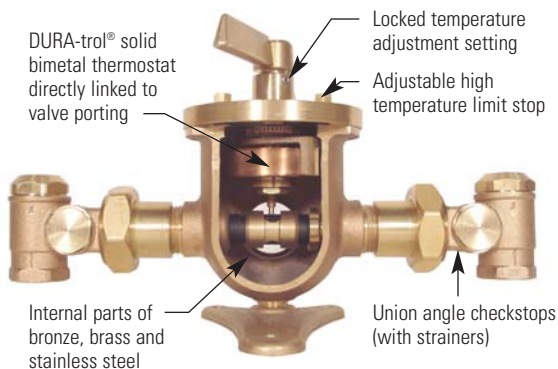
Installation: TM-800 has an integral wall mounting bracket. TM-800-STSTL-REC is mounted in a recessed stainless steel cabinet. TM-800-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP									
		5	10	15	20	25	30	35	40	45	PSI
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	BAR
3	20	21	29	38	44	50	53	56	61	64	GPM
11	76	79	110	143	167	189	201	212	231	242	L/MIN
ASSE STANDARD 1071 LISTED MAXIMUM FLOW CAPACITY											

Options

- CP	Chrome Plated Finish
- IT	Inlet Thermometers
- BWE-EXP	Exposed Baked White Steel Cabinet
- BWE-REC	Recessed Baked White Steel Cabinet
- VIEW	Viewport in door



CAUTION: Thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart to be certain the flow requirement is within the flow capacity and supply pressure limits shown.

Where multiple emergency fixtures are supplied by a single emergency mixing valve, it is the responsibility of the specifier, owner, and safety professional to ensure there is sufficient flow of tepid water to each emergency fixture.

IMPORTANT: According to ANSI Z358.1-2004, emergency equipment must be used and maintained regularly. Thermostatic mixing valves should also be cycled and maintained on a regular basis. At installation, the mixing valve's temperature settings may have to be adjusted based upon the incoming hot water supply temperature.



TM-850



TM-850-STSTL-EXP



TM-850-STSTL-REC

TM-850 Emergency Mixing Valve to provide tepid water to single or multiple drench or combination showers

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Temperature Override Protection: A redundant thermostatic control valve on the outlet opens on temperature rise over 90°F (32°C) to introduce cold water and maintain tepid flow to the fixture.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, minimum of 20 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 1-1/4" inlets (NPT) with check and stop valves, 1-1/4" outlet (NPT).

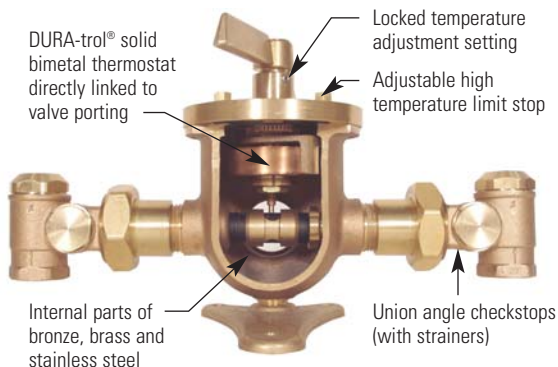
Installation: TM-850 has an integral wall mounting bracket. TM-850-STSTL-REC is mounted in a recessed stainless steel cabinet. TM-850-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP									
		5	10	15	20	25	30	35	40	45	PSI
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	BAR
3	20	21	29	38	44	50	53	56	61	64	GPM
11	76	79	110	143	167	189	201	212	231	242	L/MIN
ASSE STANDARD 1071 LISTED MAXIMUM FLOW CAPACITY											

Options

- IT Inlet Thermometer
- BWE-EXP Exposed Baked White Steel Cabinet
- BWE-REC Recessed Baked White Steel Cabinet
- VIEW Viewport in door



CAUTION: Thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart to be certain the flow requirement is within the flow capacity and supply pressure limits shown.

Where multiple emergency fixtures are supplied by a single emergency mixing valve, it is the responsibility of the specifier, owner, and safety professional to ensure there is sufficient flow of tepid water to each emergency fixture.

IMPORTANT: According to ANSI Z358.1-2004, emergency equipment must be used and maintained regularly. Thermostatic mixing valves should also be cycled and maintained on a regular basis. At installation, the mixing valve's temperature settings may have to be adjusted based upon the incoming hot water supply temperature.



TM-5100

TM-5100 Emergency Mixing Valve to provide tepid water to multiple drench or combination showers

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, 40 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 1-1/4" inlets (NPT) with check and stop valves, 1-1/4" outlet (NPT).

Installation: TM-5100 has an integral wall mounting bracket. TM-5100-STSTL-REC is mounted in a recessed stainless steel cabinet. TM-5100-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.



TM-5100-STSTL-EXP

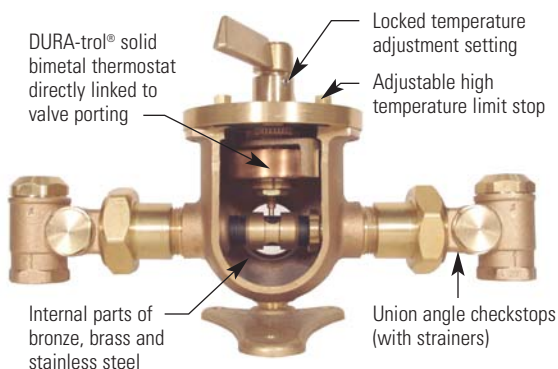


TM-5100-STSTL-REC

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP								
		5	10	15	20	25	30	35	40	45
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1
3	40	53	64	72	81	90	99	108	117	126
11	151	201	242	273	307	341	374	409	443	477
MAXIMUM FLOW CAPACITY										

Options

- CP	Chrome Plated Finish
- IT	Inlet Thermometers
- BWE-EXP	Exposed Baked White Steel Cabinet
- BWE-REC	Recessed Baked White Steel Cabinet
- VIEW	Viewport in door



CAUTION: Thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart to be certain the flow requirement is within the flow capacity and supply pressure limits shown.

Where multiple emergency fixtures are supplied by a single emergency mixing valve, it is the responsibility of the specifier, owner, and safety professional to ensure there is sufficient flow of tepid water to each emergency fixture.

IMPORTANT: According to ANSI Z358.1-2004, emergency equipment must be used and maintained regularly. Thermostatic mixing valves should also be cycled and maintained on a regular basis. At installation, the mixing valve's temperature settings may have to be adjusted based upon the incoming hot water supply temperature.



TM-5125

Dual System with Temperature Override Protection for Multiple Drench or Combination Showers



TM-5125



TM-5125-STSTL-EXP



TM-5125-STSTL-REC

TM-5125 Emergency Mixing Valve to provide tepid water to single or multiple drench or combination showers

Thermostatic Control: DURA-trol® solid bimetal element not subject to rupture or fatigue controls water at 85°F (29°C). High temperature limit stop set for 90°F (32°C). Outlet dial thermometer, color coded, to view temperature.

Temperature Override Protection: A redundant thermostatic control valve on the outlet opens on temperature rise over 90°F (32°C) to introduce cold water and maintain tepid flow to the fixture.

Performance: On failure of hot water supply, internal cold water by-pass delivers cold water to the emergency fixture, 40 GPM @ 30 PSI. On failure of cold water supply, hot water is shut down.

Supply Conditions: Minimum hot water supply temperature: 140°F (60°C). Minimum hot and cold supply pressure: 30 PSI (per ANSI Z351.8-2004). Maximum supply pressure is 125 PSI. 1-1/4" inlets (NPT) with check and stop valves, 1-1/2" outlet (NPT).

Installation: TM-5125 has an integral wall mounting bracket. TM-5125-STSTL-REC is mounted in a recessed stainless steel cabinet. TM-5125-STSTL-EXP is mounted in an exposed stainless steel cabinet. All are factory preassembled (cabinet units) and tested.

Finish: Rough bronze finish.

MINIMUM FLOW (GPM) L/MIN	INTERNAL COLD WATER BY-PASS MINIMUM	SYSTEM PRESSURE DROP									
		5	10	15	20	25	30	35	40	45	PSI
		.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	BAR
3	40	53	64	72	81	90	99	108	117	126	GPM
11	151	201	242	273	307	341	374	409	443	477	L/MIN
MAXIMUM FLOW CAPACITY											

Options

- IT	Inlet Thermometer
- BWE-EXP	Exposed Baked White Steel Cabinet
- BWE-REC	Recessed Baked White Steel Cabinet
- VIEW	Viewport in door

Note: All specifications are subject to change without notice!



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