

**Haws®**

model **TWBS.HF**  
AXION® Thermostatic Mixing Valves

## FEATURES & BENEFITS

### BYPASS

Best-in-class cold water bypass flow (100% of rated tempered water flow) means continued protection under adverse conditions.

### POSITIVE SHUT OFF

Actively suspends hot water flow when cold water supply is lost to protect against scalding.

### PRESSURE DROP

Lowest internal pressure drop for this valve class – essential where supply pressure is low.

### OPERATING RANGE

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

### SHUTTLE DESIGN

Superior shuttle design combined with premium material selection eliminates valve binding and reduces maintenance costs.

### MIXING CHAMBER

Innovative funnel design generates turbulent flow to ensure consistent temperature blending across entire flow range.

### LEAD FREE

Certified to NSF61 and California Health and Safety Code 116875 (AB 1953-2006).

### ANTI-SCALD PROTECTION

Redundant anti-scald protection with internal cold water bypass ensures reliable protection. Main tempering valve provides primary protection while backup shutoff valve provides secondary high-temp protection. Internal cold water bypass supplies cold water if hot water supply or main tempering valve fails.

### FLOW RATES

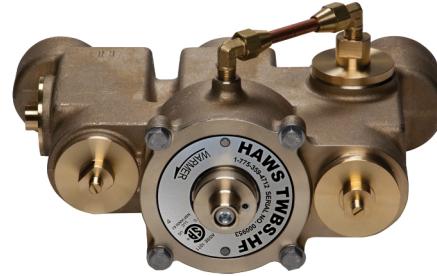
Flow range of 1 to 78 gpm (295 L) provides service for multiple emergency combination showers or multiple eyewashes to reduce hardware costs.

### MEDICALLY SUPERIOR RESPONSE

AXION's superior design and technology provide a complete safety solution for increased victim comfort.

### EXTENDED WARRANTY

3-year extended warranty based on superior engineering and best-in-class material selection means reliable protection you can trust for the long term.



## SPECIFICATIONS

### Model TWBS.HF - Thermostatic Mixing Valve (patent pending)

	MAXIMUM		MINIMUM	
Flow Rate	78 GPM	295 LPM	1 GPM	4 LPM
Hot Inlet Temperature	180° F	82° C	120° F	49° C
Recommended Hot Inlet Temperature	140° F	60° C		
Cold Inlet Temperature	70° F	21° C	40° F	4° C
Adjustable Outlet Temperature Range	85° F	29° C	60° F	16° C
Operating Pressure	125 PSI	8.6 BAR		
Factory Temperature Set Point	85° F	29° C		
Cold Water Bypass	79 GPM	299 LPM @ 30 PSI		

Inlet Ports: 2" NPT(f) Outlet Port: 2" NPT(F)

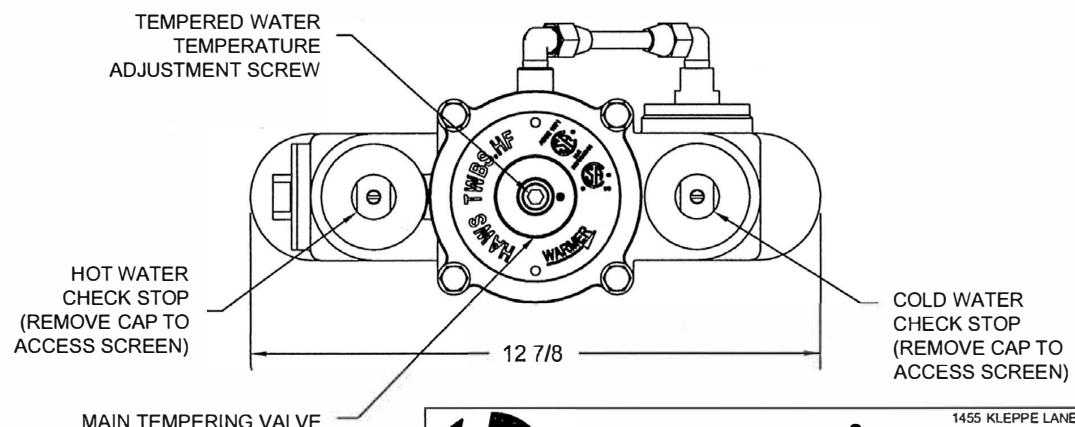
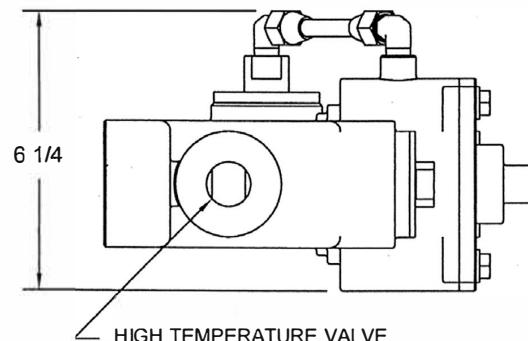
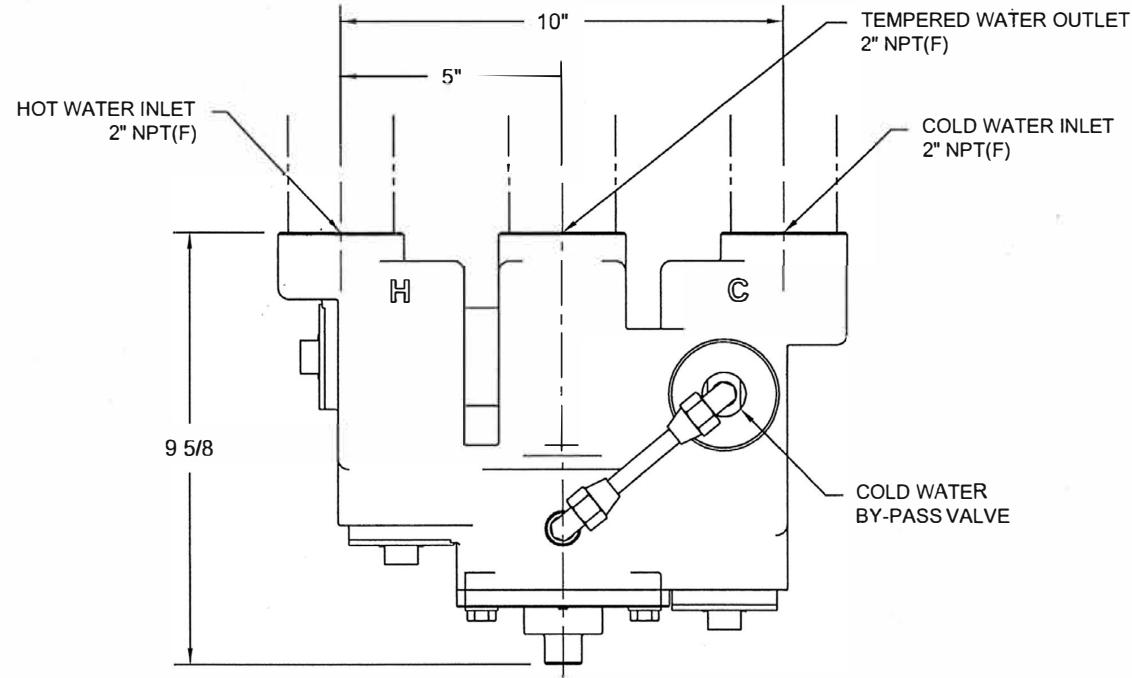
Maximum Inlet Pressure Differential: +/- 10%

Listings: ASSE 1071, ANSI Z358.1, CSA B125.3, NSF/ANSI 61-section 8, NSF/ANSI 372, 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							
					5	10	15	20	30	45	60	PSI
TWBS.HF	2"	2"			.345	.689	1.03	1.38	2.07	3.10	4.13	BAR
					1	79	32	45	55	64	78	95
			4	299	121	170	280	242	295	360	416	L/MIN

ASSE 1071  
LLC  
NSF/ANSI 61



ECN NO.	REVISED PER	BY:	MODEL(S)	PART NUMBER
4469	ECN: 4566	VWC	TWBS.HF	0002080229.D
DRAWN:	DATE:	CHKD:		DRAWING NO. REV
VWC	8/7/10			16049A 4
APPROVED:	DATE:		SCALE: 1/4 DRAWING TYPE: INSTALLATION	SIZE: A SHEET 1 OF 1