



ASSE vs. ASSE
How do 1069, 1070 and 1071 compare with revised 1016 & 1017?

Products, Applications, Performance and More

Standard	ASSE 1016 - 1996	ASSE 1016 - 2005	ASSE 1017 - 2003	ASSE 1062 - 1997	ASSE 1069 - 2004	ASSE 1070 - 2004	ASSE 1071
Status	In Model Codes	Approved by ASSE Board - In print	Current	Current	Current	Current	Draft
Title	Individual Thermostatic, Pressure Balancing and Combination Pressure Balancing and Thermostatic Control Valves for Individual Fixtures	Automatic Compensating valves for Individual Showers and Tub Shower Combinations	Temperature Activated Mixing Valves for Hot Water Distribution Systems	Temperature Actuated, Flow Reduction Valves for Individual Fixture Fittings (TAFR)	Automatic Temperature Control Mixing Valves	Water Temperature Limiting Devices	Temperature Activated Mixing Valves for Plumbed Emergency Equipment
Category	Point-of-Use, Bather Interface	Point-of-Use, Bather or Bather Attendant Interface	Tempered Water Distribution	In-Line high temperature limit devices	Point-of-Use, Bather Interface	Point-of-Use or Distribution	Point-of-Use or Distribution
Application	Tub, Shower or Tub/Shower Combination	Shower or Tub/Shower Combination Only	Hot Water Source/Boiler	Faucets, Shower Heads, Tub Spouts Dramatically reduces flow when temperature exceeds actuation point	Gang showers, sitz baths, spas	Sinks, Lavatories, Baths	Eye Washers, Eye Face Washes, Drench Showers and Combination Units
Types	Type P - Pressure Balancing, Type T - Thermostatic, Type T/P - Combination	Type P - Pressure Balancing, Type T - Thermostatic, Type T/P - Combination	Thermostatic Only	Thermostatic Only	Thermostatic Only	Thermostatic Only	Thermostatic Only
Valve Temp Range - Outlet	Full cold to 105°F minimum	Full cold to 105°F minimum, 120°F maximum	Minimum adjustable range 105°F - 120°F	Not Applicable	100° F - 115° F	105° F - 110° F	65° F - 95° F
Temperature Tolerance	±3°F	T/P and P = ±3.6°F T = +5.4°F, -9.0°F	±3°F to ±7°F (depending on valve size/capacity)	Maximum actuation temperature 120° F or less	+ 5° F lasting more than 1.5 seconds within first 5 seconds - 9° F lasting more than 1 second within first five seconds	±7° F	Varies depending on capacity. Also, hot water control has a tighter tolerance than cold water control.
Pressure Change Test (hot & cold)	P = 50% up/down T = 20% up/down T/P = 50% up/down	P = 50% up/down T = 20% up/down T/P = 50% up/down	No pressure change test	Not Applicable	20% up and down for cold & hot supply	20% up and down for cold & hot supply	Not Applicable
Temperature Change Test (hot)	P = Does not test for temperature change T = 25°F hot water increase T/P = 25°F hot water increase	P = Does not test for temperature change T = 25°F hot water increase T/P = 25°F hot water increase	25°F hot water increase	Not Applicable	25°F hot water increase	25°F hot water increase	25°F hot water increase
Flow Test	Not Applicable	minimum 2.25 gpm	Not Applicable	0.25 gpm within five seconds when temp. exceeds 120° F and one second once actuation temperature exceeds 129° F	yes - must be 90% of manufacturers published flow	yes - must be 90% of manufacturers published flow	HW Failure, CW flow = manufactures rated by-pass flow @ 30 psid
Minimum Tested Flow to Provide Con	2.5 gpm	2.5 gpm	Manufacturers stated minimum flow	Not Applicable	2.5 gpm or less	Manufactures minimum stated flow	3.0 gpm or manufacturers stated minimum
Cold Water Failure Allowance	P, T, T/P < 0.5 gpm within 5 seconds before 120° F	P, T, T/P < 0.5 gpm within 5 seconds before 120° F	Not Applicable	Not Applicable	0.5 gpm for 1/2" and 3/4" devices 1.0 gpm for 1" devices and larger	0.2 gpm or 20% of minimum flow, whichever is greater before 120° F	CW failure, < 0.5 gpm within 5 seconds or before 100oF
Life Cycle	P = 100,000 cycles T = 20K control dial/80K sensor T/P = 20K control dial/80K sensor	100,000 cycles - all	Not Applicable	125,000	100,000 cycles	100,000 cycles	Not Applicable
Applicable POWERS Products	e700 Type T/P - bath & shower e480 - Type T/P - lavatory e420 Type T/P - bath & shower, lavatory e427 - Type T - high capacity bath & shower 900 Type P - bath & shower 410 Type P - bath & shower LM495 - lavatory	e700 Type T/P - bath & shower e420 Type T/P - bath & shower e427 - Type T - high capacity bath & shower 900 Type P - bath & shower 410 Type P - bath & shower	e430 Series - Master Mixing Valves LM490 Series for multiple lavatories e1430 Single Valve Hi/Los	HT115	e427 & e428 for sitz baths	e700 Type T/P - bath & shower e480 - Type T/P - lavatory e420 Type T/P - bath & shower, lavatory e427 - Type T - high capacity bath & shower	ES150 - Eye/face washes ES200 - Drench Showers ES400 Combination Units

change from previous