



ASSE Comparison

A Comparison
of ASSE

1016, 1017,
1062, 1069,
1070, 1071

ASSE Standards



A Comparison of ASSE 1069, 1070 and 1071 with revised 1016 and 1017 standards.

Standard	ASSE 1016 - 1996*	ASSE 1016 - 2005*	ASSE 1017 - 2003
Status	Model Code Adopted	Current	Current
Title	Individual Thermostatic, Pressure Balancing, and Combination Pressure Balancing, 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
Category	Point-of use, bather interface	Point-of use, bather or bather attendant interface	Tempered water distribution
Application	Bath & shower	Shower or tub-shower combination only	Hot water source/boiler
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
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
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)
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
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
Flow Test	Not applicable	Minimum 2.25 gpm	Not applicable
Minimum Tested Flow to Provide Control	2.5 gpm	2.5 gpm	50% of flow @ 10psid
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
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
Watts Applicable Products † Undergoing listing process	L111, MMV, USG-B, USG-P	L111, MMV, USG-B, USG-P	1170, L1170, MMV

ASSE 1062 - 2006	ASSE 1069 - 2005	ASSE 1070 - 2004	ASSE 1071
Current	Current	Current	In Development
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
In-line high temperature limit devices	Point-of-use distribution Adjustment by installer	Point-of-use or distribution	Point-of-use or distribution
Faucets, shower heads, tub spouts dramatically reduce flow when temperature exceeds actuation point	Gang showers, sitz baths, spas, gang lavatories	Sinks, lavatories, baths	Eye washers, eye/face washes, drench showers and combination units
Thermostatic only	Thermostatic only	Thermostatic only	Thermostatic only
Not applicable	100°F - 115°F	105°F - 110°F	65°F - 95°F
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.
Not applicable	20% up and down for cold & hot supply	20% up and down for cold & hot supply	Not applicable
Not applicable	25°F hot water increase	25°F hot water increase	25°F hot water increase
0.25 gpm within five seconds when temp. exceeds 120°F and one second once actuation temperature exceeds 129°F	Must be 90% of manufacturer's published flow	Must be 90% of manufacturer's published flow	HW Failure, CW flow = manufacturer's rated by-pass flow @ 30 psid
Not applicable	2.5 gpm or less	Manufacturer's minimum stated flow	3.0 gpm or manufacturer's stated minimum
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, HW flow gpm not to exceed 0.5
125,000 cycles	100,000 cycles	100,000 cycles	Not applicable
WHT-115	MMV†	MMV, USG-B†, USG-P†	Not applicable

* Shaded sections of chart denote changes from ASSE 1016 - 1996 to ASSE 1016 - 2005.

For Technical Assistance Call Your Authorized Watts Agent.

			Telephone #	Fax #
	HEADQUARTERS: Watts Regulator Company	815 Chestnut St., North Andover, MA 01845-6098 U.S.A.	978 688-1811	978 794-1848
North East	Edwards, Platt & Deely, Inc.	271 Royal Ave., Hawthorne, NJ 07506	973 427-2898	973 427-4246
	Edwards, Platt & Deely, Inc.	368 Wyandanch Ave., North Babylon, NY 11703	631 253-0600	631 253-0303
	Vernon Bitzer Associates, Inc.	980 Thomas Drive, Warminster, PA 18974	215 443-7500	215 443-7573
	W. P. Haney Co., Inc.	51 Norfolk Ave., South Easton, MA 02375	508 238-2030	508 238-8353
Mid Atlantic	Disney McLane & Associates	428 McGregor Ave., Cincinnati, OH 45206	800 542-1682	877 476-1682
	J. B. O'Connor Company, Inc.	P.O. Box 12927, Pittsburgh, PA 15241	724 745-5300	724 745-7420
	RMI	Glenfield Bus. Ctr., 2535 Mechanicsville Tpk., Richmond, VA 23223	804 643-7355	804 643-7380
	The Joyce Agency, Inc.	8442 Alban Rd., Springfield, VA 22150	703 866-3111	703 866-2332
	WMS Sales, Inc. (Main office)	9580 County Rd., Clarence Center, NY 14032	716 741-9575	716 741-4810
South East	Billingsley & Associates, Inc.	2728 Crestview Ave., Kenner, LA 70062-4829	504 602-8100	504 602-8106
	Billingsley & Associates, Inc.	478 Cheyenne Lane, Madison, MS 39110	601 856-7565	601 856-8390
	Francisco J. Ortiz & Co., Inc.	Charlyn Industrial Pk., Road 190 KM1.9 - Lot #8, Carolina, Puerto Rico 00983	787 769-0085	787 750-5120
	Mid-America Marketing, Inc.	203 Industrial Drive, Birmingham, AL 35211	205 879-3469	205 870-5027
	Mid-America Marketing, Inc.	1364 Foster Avenue, Nashville, TN 37210	615 259-9944	615 259-5111
	Mid-America Marketing, Inc.	5466 Old Hwy. 78, Memphis, TN 38118	901 795-0045	901 795-0394
	Smith & Stevenson Co., Inc.	4935 Chastain Ave., Charlotte, NC 28217	704 525-3388	704 525-6749
	Harry Warren, Inc.	1400 North Orange Blossom Trail, Orlando, FL 32804	407 841-9237	407 841-9246
	Watts Georgia	2861-B Bankers Industrial Drive, Atlanta, GA 30360	770 209-3310	770 447-4583
North Central	Dave Watson Associates	1325 West Beecher, Adrian, MI 49221	517 263-8988	517 263-2328
	Mid-Continent Marketing Services Ltd.	1275 Lakeside Drive, Romeoville, IL 60446	630 953-1211	630 953-1067
	Soderholm & Associates, Inc.	7150 143rd Ave. N.W., Anoka, MN 55303	763 427-9635	763 427-5665
	Stickler & Associates	333 North 121 St., Milwaukee, WI 53226	414 771-0400	414 771-3607
South Central	Hugh M. Cunningham, Inc.	13755 Benchmark, Dallas, TX 75234	972 888-3808	972 888-3838
	HMC Sandia Group	13755 Benchmark, Dallas, TX 75234	505 222-3134	800 339-0191
	Mack McClain & Associates	4407 Meramec Bottom, Suite G, St. Louis, MO 63129	314 894-8188	314 894-8388
	Mack McClain & Associates, Inc.	1450 NE 69th Place, Ste. 56 Ankeny, IA 50021	515 288-0184	515 288-5049
	Mack McClain & Associates, Inc.	15090 West 116th St., Olathe, KS 66062	913 339-6677	913 339-9518
	OK! Sales, Inc.	214 NE 12th. St., Ste A Moore, OK 73160	405 794-5200	405 794-5250
Western	Delco Sales, Inc.	1930 Raymer Ave., Fullerton, CA 92833	714 888-2444	714 888-2448
	Delco Sales, Inc.	111 Sand Island Access Rd., Unit I-10, Honolulu, HI 96819	808 842-7900	808 842-9625
	Fanning & Associates, Inc.	6765 Franklin St., Denver, CO 80229-7111	303 289-4191	303 286-9069
	Hollabaugh Brothers & Associates	6915 South 194th St., Kent, WA 98032	253 867-5040	253 867-5055
	Hollabaugh Brothers & Associates	3028 S.E. 17th Ave., Portland, OR 97202	503 238-0313	503 235-2824
	P I R Sales, Inc.	3050 North San Marcos Place, Chandler, AZ 85225	480 892-6000	480 892-6096
	Preferred Sales	30852 Huntwood Ave., Hayward, CA 94544	510 487-9755	510 476-1595
	R. E. Fitzpatrick Sales, Inc.	4109 West Nike Dr. (8250 South), West Jordan, UT 84088	801 282-0700	801 282-0600
Canada	Watts Industries (Canada) Inc. (Watts Regulator Co. Division)	5435 North Service Road, Burlington, Ontario L7L 5H7	905 332-4090	905 332-7068
	Con-Cur West Marketing, Inc.	71B Clipper Street, Coquitlam, British Columbia V3K 6X2	604 540-5088	604 540-5084
	D.C. Sales Ltd.	#13-6130 4th St. S.E., Calgary, Alberta T2H 2B6	403 253-6808	403 259-8331
	D.C. Sales Ltd.	16726 111 Ave, Edmonton, Alberta T5M 2S6	780 496-9495	780 496-9621
	GTA Sales Team.	Greater Toronto Area	888 208-8927	888 479-2887
	Hydro-Mechanical Sales, Ltd.	3700 Joseph Howe Drive, Suite 1, Halifax, Nova Scotia B3L 4H7	902 443-2274	902 443-2275
	Hydro-Mechanical Sales, Ltd.	P.O. Box 1445 (Mailing), 297 Collishaw St., Suite 7 (shipping) Moncton, New Brunswick E1C 9R2	506 859-1107	506 859-2424
	J.D.S. Sales Ltd.	4 Lancaster Street, St. John's, Newfoundland A1A 5P7	709 579-5771	709 579-1558
	Les Ent. Roland Lajoie	6221 Marivaux, St-Leonard, QC H1P 3H6	514 328-6645	514 328-6131
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	Mar-Win Agencies, Ltd.	1333 Clifton St., Winnipeg, Manitoba R3E 2V1	204 775-8194	204 786-8016
	Northern Mechanical Sales	P.O. Box 280 (mailing) 163 Pine St. (shipping), Garson, Ontario P3L 1S6	705 693-2715	705 693-4394
	Palser Enterprises, Ltd.	P.O. Box 28136 (mailing), 1885 Blue Heron Dr., #4, London, Ontario N6H 5L9	519 471-9382	519 471-1049
	RAM Mechanical Marketing Inc.	905 Winnipeg Street, Regina, Saskatchewan S4R 1J1	306 525-1986	306 525-0809
RAM Mechanical Marketing Inc.	510 Ave M South, Saskatoon, Saskatchewan S7M 2K9	306 244-6622	306 244-0807	
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A Watts Water Technologies Company



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