

Watts Backflow Preventer Test Kits & Accessories



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REGULATOR www.wattsreg.com

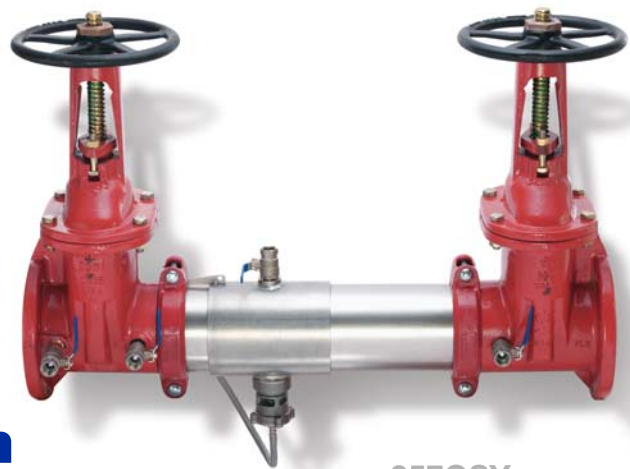


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General Information

Mechanical backflow preventers have internal seals, springs, and moving parts that are subject to fouling, wear, or fatigue. Also, mechanical backflow preventers and air gaps can be bypassed. Therefore, all backflow preventers have to be tested periodically to ensure that they are functioning properly. A visual check of air gaps is sufficient, but mechanical backflow preventers have to be tested with properly calibrated gauge equipment. Watts Regulator offers a wide variety of backflow testing equipment, outlined in the following pages of this guide.



9570SY

Training and Certification

Training and Certification for Backflow Prevention Assembly Testers varies state-by-state but the American Backflow Prevention Association does set some national standards. The ABPA maintains a voluntary certification program for those individuals who have the proper backflow prevention training or have prior experience, or a suitable combination of both. With this certification, a Backflow Prevention Assembly Tester is certified to field test any type of backflow prevention assembly. Most States or Provinces do not have mandated Tester programs; therefore, you will find that different areas may have very different requirements. In many jurisdictions where there are no local certification programs, the ABPA Tester Certification may be recognized.

Calibration Centers

Watts Regulator is affiliated with two backflow preventer test kit calibration centers which are certified to calibrate Watts backflow prevention digital test kits, they include:

Nicholson Labs

1423 Queen City Ave. Street
Cincinnati, OH 45214
Tel: (513) 251-8378
Fax: (513) 251-4388

BAVCO

20435 S. Susana Road
Long Beach, CA 90810-1136
Tel: (310) 639-5231
Fax: (310) 639-0721

Model TK-DL

Backflow Preventer Test Kit with Digital Print-Out and Computer Download Capability

The Watts Model TK-DL Test Kit with Digital Print-Out allows you to test backflow prevention assemblies in the field with the same digital print-out confidence that our quality control technicians achieve at the factory. The TK-DL replaces both pressure and differential test gauges and its powerful microprocessors and compact size make it the only test kit you'll need. The TK-DL can test pressure vacuum breakers, reduced pressure backflow preventers or double check valve assemblies.

The Watts TK-DL is substantially more accurate than mechanical test gauges (to $\pm 0.2\%$) and features an easy-to-read numerical display that eliminates reading errors common to analog dials and pointers. High-side, low-side and differential pressure are continuously displayed and recorded in the unit's 32-K memory. The TK-DL also provides printed, on-site documentation, recording time, date and verified test results. This means you can give your clients a copy of the test results before you leave the site as well as print copies for yourself as proof that the test was conducted. The TK-DL holds 50 three-minute tests in its memory (or 75 shorter tests) which allows you to access and print your test results whenever you like, or to transfer the data to your computer for permanent storage.

We've designed the TK-DL so it's easy to use and requires no programming. The TK-DL automatically checks its calibration and battery power when turned on and before each test. If you forget to turn it off, it shuts itself down. The TK-DL comes standard with a rugged carrying case with handgrip and adjustable shoulder strap. The kit includes a set of NiCad batteries, AC battery charger, three six-foot color-coded hoses, a set of brass adapters, the operating manual, computer cable and software. The TK-DL also comes backed by a full one-year warranty.



TK-DL

Features

- Downloading capability allows for permanent storage of all test results on a floppy disk
- Allows user to customize printed header and footer through your PC system
- RS232 serial port for downloading test results to a PC system
- Provides printed, on site documentation, recording the time, date and verified test results.
- Unmatched accuracy to $\pm 0.2\%$
- No programming required
- Software program is menu driven and will operate with a mouse or key stroke
- Self calibrates prior to each test
- Designed to test pressure vacuum breakers, reduced pressure backflow preventers or double check valve assemblies, allowing you to eliminate both pressure and differential test gauges



MODEL	WEIGHT (KIT ALONE)	WEIGHT W/ FITTINGS IN CASE	DIMENSIONS	DIMENSIONS (IN CASE)
TK-DL	9 lbs	16 lbs	14" x 9" x 5 1/4"	16 3/4" x 13 3/4" x 6"

Model TK-99D

Delta Lite™ Backflow Preventer Test Kit

The Watts Model TK-99D hand-held digital test kit is an advanced test instrument designed to test pressure vacuum breakers, spill resistant vacuum breakers, double check valve assemblies, double check detector assemblies, reduced pressure zone backflow assemblies, and reduced pressure detector assemblies. The high contrast LCD display and large $\frac{5}{8}$ " height Differential Character make backflow testing a snap. This compact test kit features .25% Full Scale "Accuracy" in addition to a low battery indicator and an automatic shutdown feature to conserve battery life. Why lug around gauges weighing 15lbs. or more? At "less than 3 lbs.", the TK-99D test kit from Watts Regulator beats the competition hands down.

Features

- Reviewed by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California
- "Lightest" test kit available-Only 2.8 lbs
- Compact "Hand-held" test kit for ease of use
- State-of-the-art accuracy of ".25% of full scale" for reliable testing of all types of backflow prevention assemblies
- Easy to read high contrast LCD Readout displays both A and B readings for duplex gauge requirements
- "Low Battery Indicator" displays when batteries are needed
- "Automatic shutdown feature" conserves battery life by turning test kit off after 15 minutes without pressure on the gauge
- Large $\frac{5}{8}$ " Differential Character Display insures accurate reading of the gauge
- Durable High Impact ABS body provides water resistance
- Adjustable hand and shoulder straps for field use
- Color-coded hoses to assist tester in using test kit
- Corrosion resistant stainless steel needle valves with renewable seats
- Inlet pressure readout to assist in troubleshooting
- Minimum/maximum inlet pressure readout-records range of supply pressure fluctuations
- Uses two Alkaline "C" sized batteries-approximately 400 hours of use
- Test kit includes test fittings
- 100 mesh screen protects gauge from dirt and debris and are field cleanable
- Durable carrying case, available separately, provides protection for the TK-99D test kit. The high density foam case packaging protects the test kits from damage due to rough handling

Specifications

- Maximum working pressure: 200psi
- Maximum working temperature: 210°F
- Differential Pressure Readout: 0-200psi
- Separate inlet pressure readout: 0-200psi
- Adapters included
- Hoses: Three 36" color-coded hoses with female swivel couplings
- One moisture resistant operation manual
- High contrast LCD display
- 25% Full Scale Accuracy
- Needle Valves- 316 stainless steel needle valves with adjustable packing gland and renewable seats
- High impact ABS housing



TK-99D



Durable carrying case available separately

Model TK-99E

Backflow Preventer Test Kit

The Watts Model TK-99E Backflow Preventer Test Kit has been designed for simplified operation and rugged reliability in a compact package. Offering the latest in gauge technology, the Watts TK-99E provides dependable accuracy when testing pressure vacuum breakers, anti-spill vacuum breakers, reduced pressure backflow preventers or double check assemblies and is accurate to $\pm 1\%$ of full scale.

Features

- Color-coded valves and hoses for simplified operation
- Top mounted drain/purge valves and conveniently located line pressure gauge for ease of use
- A large 4.5" anti-parallax dial which indicates descending measurement, accurate to $\pm 1\%$ of full scale
- Conveniently located needle valves for easy access
- Lightweight needle valves encased in a chemical-resistant body for trouble-free operation
- Replaceable hose filters and valve stem seals for field repair
- Complete kit contains gauge with color-coded valves and hoses, hose adapters, shock cord for easy mounting, supply pressure gauge. All contained in a durable carrying case with room for tools

Specifications

- Maximum working pressure – 200psi
- Maximum working temperature – 200°F
- Gauge – 4.5" diameter face, dual scale 0-15psi and 0-1 kg/cm², $\pm 1\%$ accuracy full scale
- Test valves – Three needle valves
- Pressure gauge – 0-200psi system gauge
- Hoses – Three 6 foot color-coded hoses with female threaded swivel couplings
- Adapter – Three $\frac{3}{4}$ " x $\frac{1}{4}$ " bushings
Three $\frac{1}{2}$ " x $\frac{1}{4}$ " bushings
Three $\frac{3}{8}$ " x $\frac{1}{4}$ " bushings
Three $\frac{1}{4}$ " Flared fittings
- One shock cord
- One lightweight durable carrying case resistance



TK-99E

TK-9A

Backflow Preventer Test Kit

The Watts Model TK-9A Backflow Preventer Test Kit is a compact portable testing device made for testing all Reduced Pressure Zone Backflow Prevention Assemblies and Double Check Valve Assemblies. The TK-9A is easily connected to any RPZ device enabling accurate testing of 'zone' differential pressure, relief valve opening differential, fouled check valves or similar problems that visual inspections cannot locate. The unit is supplied with a rugged carrying case for easy handling and accessibility.

Specifications

- Maximum working pressure – 175psi
- Maximum working temperature – 210°F
- Gauge – 4½" diameter face dual scale 0-15psi and 0-1 kg/cm2, ±2% accuracy full scale
- Test Valves – (2) ball valves and (1) needle valve
- Hoses – (3) 3' with female threaded swivel couplings
- Adaptors – (3) ¼" threaded coupling adaptors
(3) ½" x ¼" bushings
(3) ¾" x ¼" bushings
- 1 – 16" securing strap
- 1 – Moisture resistant instruction guide
- Case – light weight, shock-resistant molded plastic with foam inserts



TK-9A

TK-7

Backflow Preventer Test Kit

The Watts Model TK-7 Backflow Preventer Test Kit is especially made to test the individual check modules of the Watts Series 7 residential dual check backflow preventers and can also be used to test any double check valve assembly. The test kit contains three segments of durable 7/16" shatterproof tubing, two brass adaptors used to assemble the three tubing segments, and test hardware to enable testing of Watts Series 7 check modules and standard double checks. A rugged simulated leather carrying case is provided for ease of handling and compactness.

Specifications

- Total working height of tube – 44"
- Adaptors – (2) Brass, for Series 7 modules and double checks
- Tubing – Three segments of plastic tubing
- Moisture resistant instruction panel
- Case – Durable simulated leather – weather proof and mildew proof



TK-7

Test Cocks

For use with backflow preventers, isolation valves for gauges, and isolation valves for small equipment lines.

TC

- TC full port ball valve design
- Screw driver slot to open and close
- Available 1/8" M x 1/4" F or 1/4" M x 1/4" F



TC

SAE-TC

- Full port ball valve design
- Screwdriver slot operation
- 1/8" M x SAE



SAE-TC

SAE-TC Adapter

- 1/4" female SAE x 7/16" FPT
- Adapts to SAE-TC for use with pressure gauge and/or site tube
- SAE-TC Adapter
- 1/8" SAE-TC Brass Cap



SAE-TC Adapter

SilverEagle TC

- 1/2" TC for 2 1/2" – 4" series 757 and 957
- 3/4" TC for 6" – 10" series 757 and 957
- Full port ball valve design



1/2" SilverEagle TC

No. 3 TC with O-Ring

- for 2 1/2" – 4" series 757 and 957
- for 6" – 10" series 757 and 957

Caps & Tethers

For use with backflow preventer test cocks to protect from damage. Four required per backflow preventer.

RK-TC P

- **Plastic Cap and tether**
(four required per backflow preventer)
- Fits 1/4" Female test cocks
- Plastic dust cap and rubber tether



RK-TC P

RK-SAE-TC

- **SAE Brass Cap, O-ring and Tether**
(four required per backflow preventer)
- Fits 1/8" M x SAE test cocks
- Brass dust cap with O-ring seal and rubber tether
- RK-SAE-TC



RK-SAE-TC

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. W. P. Haney Co., Inc.	368 Wyandanch Ave., North Babylon, NY 11703 51 Norfolk Ave., South Easton, MA 02375	631 253-0600 508 238-2030	631 253-0303 508 238-8353
Mid Atlantic	J. B. O'Connor Company, Inc. RMI	P.O. Box 12927, Pittsburgh, PA 15241 Glenfield Bus. Ctr., 2535 Mechanicsville Tpk., Richmond, VA 23223	724 745-5300 804 643-7355	724 745-7420 804 643-7380
	The Joyce Agency, Inc.	8442 Alban Rd., Springfield, VA 22150	703 866-3111	703 866-2332
	Vernon Bitzer Associates, Inc.	980 Thomas Drive, Warminster, PA 18974	215 443-7500	215 443-7573
	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.	1243 West Colonial Dr., 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	Aspinall Associates, Inc.	6840 Hillsdale Court, Indianapolis, IN 46250	317 849-5757
Dave Watson Associates		1325 West Beecher, Adrian, MI 49221	517 263-8988	517 263-2328
Disney McLane & Associates		428 McGregor Ave., Cincinnati, OH 45206	800 542-1682	877 476-1682
BWA Company		17610 S. Waterloo Rd., Cleveland, OH 44119	216 486-1010	216 486-2860
Mid-Continent Marketing Services Ltd.		1724 Armitage Ct., Addison, IL 60101	630 953-1211	630 953-1067
Soderholm & Associates, Inc.		7150 143rd Ave. N.W., Anoka, MN 55303	763 427-9635	763 427-5665
South Central	Stickler & Associates	333 North 121 St., Milwaukee, WI 53226	414 771-0400	414 771-3607
	Hugh M. Cunningham, Inc.	13755 Benchmark, Dallas, TX 75234	972 888-3808	972 888-3838
Western	Mack McClain & Associates	11132 South Towne Square, Suite 202, St. Louis, MO 63123	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.	2200 Blue Creek Dr., Norman, OK 73026	405 360-6161	405 360-0092
	Phoenix Marketing, Ltd.	2416 Candelaria N.E., Albuquerque, NM 87107	505 883-7100	505 883-7101
Canada	Delco Sales, Inc.	1930 Raymer Ave., Fullerton, CA 92833	714 888-2444	714 888-2448
	Delco Sales, Inc.	111 Sand Island Access Rd., Unit 1-10, 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	31177 Wiegman Road, 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
	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 Corporation Inc.	#10-6130 4th St. S.E., Calgary, Alberta T2H 2A6	403 253-6808	403 259-8331
D.C. Sales Corporation Inc.	11420 142 Street, Edmonton, Alberta T5M 1V1	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	
Le Groupe B.G.T., Inc.	23 du Buisson, Pont Rouge, Quebec G3H 1X9	418 873-2500	418 873-2505	
Le Groupe B.G.T., Inc.	86 des Entreprises #208, Boisbriand, Quebec J7G 2T3	450 434-9010	450 434-9848	
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.	1401 St. John Street, Regina, Saskatchewan S4R 1S5	306 525-1986	306 525-0809	
RAM Mechanical Marketing Inc.	510 Ave M South, Saskatoon, Saskatchewan S7M 2K9	306 244-6622	306 244-0807	
Walmar Mechanical Sales	24 Gurdwara Rd., Nepean, Ontario K2E 8B5	613 225-9774	613 225-0673	
0518	EXPORT Hdqtrs.: Watts Regulator Co.	815 Chestnut St., North Andover, MA 01845-6098 U.S.A.	978 688-1811	978 794-1848



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