



WATER SAFETY AND CONTROL PRODUCTS

Backflow Preventers

Series 709 (2-1/2"–10")

Double check valve assemblies

- Backflow preventers used for non-health hazard cross connections and continuous pressure applications.

Features

- Fused epoxy coated cast iron body
- Requires no special tools for servicing
- Replaceable bronze seats
- Captured spring assemblies

Model No.	Size (in.)	Model No.	Size (in.)
709NRS	2-1/2	709OSY	2-1/2
709NRS	3	709OSY	3
709NRS	4	709OSY	4
709NRS	6	709OSY	6
709NRS	8	709OSY	8
709NRS	10	709OSY	10



Series N775 (3"–8")

Double check valve backflow preventer

Series N775DCDA (3"–8")

Double check detector assembly

- Designed to prevent the reverse flow of non-health hazard polluted water from entering into the potable water system.
- DCDA models mandatory to prevent the reverse flow of fire protection system substances, i.e., glycerin wetting agents, stagnant water and water of non-potable quality.
- Features the shortest end-to-end dimensions in the industry as well as the lowest head loss available.

Model No.	Size (in.)	Model No.	Size (in.)
N775	3	N775DCDA	3
N775	4	N775DCDA	4
N775	6	N775DCDA	6
N775	8	N775DCDA	8



Series 7 (3/8"–1")

Dual-check backflow preventers

- For use at the drinking water supply service entrance or with individual outlets.
- Designed for non-health hazard residential water system containment and continuous pressure applications.
- Bronze body construction.

- Uses two compact replaceable check modules.
- Buna-N seals and stainless steel springs.
- Installed immediately downstream of the residential water meter.



Model No.	Size (in.)
7	3/8
7	1/2
7	3/4
7	1

Series SS07F (4"–10")

Stainless steel single detector checks

- For automatic fire sprinkler systems.
- With optional bypass assembly, detects leakage or misuse of water in fireline.

Model SS07F—detector check—
Sizes: 4"–10" (100–250 mm), 125#
flanged connections.



Model TK-9A

- +/- 2% accuracy full scale
- Test kit easily connects to any testable backflow preventer assembly.
- Designed for testing all testable backflow preventers.

Maximum pressure 175 psi (12.1 bars).
Maximum temperature 210°F (98.9°C).
Order No. 0385496. Wgt. 8 lbs. (3.6 kg).



We have repair parts for all models of Watts backflow preventors in stock.



WATER SAFETY AND CONTROL PRODUCTS

Backflow Preventers

Series 009 (1/4"-3")

Reduced pressure backflow preventers

- Designed to protect potable water supplies requirements.
- Protection from health hazard cross-connections or containment at the service line entrance.
- For continuous pressure use.



Model	Size (in.)	Model	Size (in.)
009QT	1/4	009M2QT-S	1-1/2
009QT	3/8	009M2QT-S	2
009QT	1/2	009NRS	2-1/2
009M3QT	3/4	009NRS-S	2-1/2
009M2QT	1	009OSY	2-1/2
009M2QT	1-1/4	009QT-FDA	2-1/2
009M2QT	1-1/2	009NRS	3
009M2QT	2	009NRS-S	3
009QT-S	1/4	009OSY	3
009QT-S	3/8	009QT-FDA	3
009QT-S	1/2		
009M3QT-S	3/4		
009M2QT-S	1		
009M2QT-S	1-1/4		

Series 9 (1/4"-3/8")

Backflow preventers/vacuum breakers

- Used to prevent the flow of contaminated water into the potable water supply.



Series 188A/288A/289A/N388 (1/4"-3")

Anti-siphon vacuum breakers

- Designed to protect against the back-siphonage of contaminated water into the potable water supply.
- For health hazard cross-connections not subject to continuous pressure.
- Install 6" (150 mm) above highest downstream point of water.



Air Gaps and Elbows

Air Gaps for use with backflow preventers on horizontal installations.

Vent Elbows are used with Watts air gaps for vertical installation of reduced pressure zone backflow preventers.



Air Gap



Elbow

Model	Series/Sizes	Sizes	
		in.	mm
909AG-A	1/4"-1/2" 009, 3/4" 009M2/M3		
	1/2"-1" 995	1/2	13
909AG-C	3/4"-1" 009/909, 1-1/2" 009M2	1	25
909AG-F	1-1/4"-3" 009/909	2	51
	1/4"-2" 009M1, 2" 009M2		
	4"-6" 993		
909AG-K	4"-6" 909, 8"-10" 909M1	3	76
909AG-M	8"-10" 909	4	102
994AG-K	2-1/2"-10" 994	2	51
995AG	3"-6"	—	—
909EL-A	1/4"-1/2" 009, 3/4" 009M2/M3	—	—
909EL-C	3/4"-1" 009/909, 1"-1-1/2" 009M2	—	—
909EL-F	1-1/4"-2" 009M1		
	1-1/4"-2" 009/909, 2" 009M2,		
	4"-6" 993	—	—
909EL-H	2-1/2"-3" 009/909	—	—
Vertical			
994EL-F	2-1/2"-10" 994	—	—

Tempering/Mixing Valves

Series 70A (1/2")

Hot water extender tempering valves

- For residential installations.
- All brass or bronze construction
- Adjustable knob for temperature control
- High capacity
- Low pressure drop



Model	Size (in.)
70A-F	1/2
70A-T	1/2
70A	3/4
70A-T	3/4
L70A-F	1/2
L70A-T	1/2
L70A	3/4
70A-T	3/4

Series N170 (3/4"-2")

Hot water extender tempering valves

- For commercial applications.
- Static adjustment screw seal
- All bronze construction
- Interchangeable thermostat
- High capacity
- Low pressure drop



Model	Size (in.)
N170-M2	3/4
N170-M2	1
N170-M2	1-1/4
N170-M2	1-1/2
N170-M2	2
N170L-M2	3/4
N170L-M2	1
N170L-M2	1-1/4
N170L-M2	1-1/2
N170L-M2	2



WATER SAFETY AND CONTROL PRODUCTS

Backflow Preventers

Series 8 (3/8"–3/4")

Hose connection vacuum breakers

- Health hazard, back siphonage protection, non-continuous pressure.
- Designed for attaching to sill cocks and other hose connections.

Specifications

Sizes: 3/4" (20 mm) hose thread (HT) female inlet x 3/4" (20 mm) HT male outlet connection. Maximum pressure 125 psi (8.6 bar). Maximum temperature 180°F (82°C).

- **Model 8***—Brass body, removable, non-draining.
- **Model 8A***—Patented “non-removable” feature, drainable. Interlocking spring prevents removal once installed.
- **Model 8B***—Brass body, with break-away set screw to prevent removal, drainable.
- **Models 8C, 8BC and 8AC**—same as above in chrome finish.
- **Model NF8C**—Specifically designed for wall and yard hydrants, permits manual draining for freezing conditions. Chrome finish.
- **Model NF8**—As above with brass finish.

- **Model 8P**—Thermoplastic body with patented “non-removable” feature and equipped to allow sill cock to be drained.
- **Model S8C**—Designed for tub and shower hand spray sets. Chrome finish.
- **Model S8**—As above with plain brass finish.
- **Model 8FR**—with freeze relief feature. Protects the valve from freeze damage with or without the hose attached. (Patent Pending)

* NOTE: Model 8, 8A, and 8B are not suitable for frost-free hydrants. See Model NF8. For additional information, request F-ASVB-PG.



Model No.	Size (in.)
8	3/4HT
8A	3/4HT
8AC	3/4HT
8B	3/4HT
8BC	3/4HT
8C	3/4HT
NF8	3/4HT
NF8C	3/4HT
8P	3/4HT
S8	1/2F**
S8C	1/2F**
S8C	3/8F**
8FR	3/4HT

HT = Hose threaded connections, female inlet x male outlet connection; **Female NPT threaded inlet x male NPT outlet connection.

Series SD-2 (1/4"–3/8") Dual Check

- Recommended for use on Post-Mix Carbonated Beverage Equipment and dispensing equipment for tea and coffee.
- Prevents the reverse flow of potentially contaminated water into the potable water supply due to back pressure backflow.
- Designed for protection of the water supply from carbonated water.
- For continuous or intermittent pressure conditions.

Specifications

- **SD2-MN**—1/4" (8mm) Male NPT.
- **SD2-MN**—3/8" (10mm) Male NPT.
- **SD2-FN**—1/4" (8mm) Female NPT.
- **SD2-FN**—3/8" (10mm) Female NPT.
- **SD2-MF**—1/4" (8mm) SAE Male Flare.
- **SD2-MF**—3/8" (10mm) SAE Male Flare.
- **SD2-FF**—1/4" (8mm) SAE Female Flare.
- **SD2-FF**—3/8" (10mm) SAE Female Flare.



Model	Size (in.)
SD2-MN	1/4
SD2-MF	1/4
SD2-MN	3/8
SD2-MF	3/8
SD2-FN	1/4
SD2-FF	1/4
SD2-FN	3/8
SD2-FF	3/8

Strainers

Series 777 (1/4"–4")

Bronze wye-type strainers

- For liquid or steam service to protect valves or similar controls from foreign matter.



Specifications

Sizes: 1/4"–2-1/2" (8–65 mm) have a 20 mesh strainer screen. Sizes 3" (80 mm) has 3/64" (1 mm) perforated screen, and 4" (100 mm) has 1/8" (3 mm) perforated screen.

Model 777, solid retainer cap for strainer screen. Sizes: 1/4"–4" (8–100 mm) NPT female threaded inlet/outlet connections.

Model 777S, retainer cap tapped for closure plug (plug not furnished)—Sizes: 1/2"–4" (15–100 mm), NPT female threaded connections.

Model S777†, solid retainer cap—Sizes: 1/2"–2" (15–20 mm), solder end connections.

Model S777S†, retainer cap tapped for closure plug (plug not furnished) - Sizes: 1/2" - 2" (15-50 mm), solder end connections. Maximum pressures: 400 psi WOG (27.6 bars) and 125 psi WSP (8.6 bars).

†—Maximum pressure rating for solder models is 400 psi (27.6 bars) @ 150°F (66°C) and requires 95-5 solder. (Ref. ANSI B16.18) They are steam rated @ 15 psi (1 bar) maximum.

Series 27 (1/8"–1/2")

Bronze compact “V”—pattern water strainers

- For beverage dispensers, ice cube machines, dental equipment, instrument control systems and similar applications.

Specifications - Model 27—Sizes: 1/8"–1/2" (3–15 mm), NPT female threaded connections. Strainer screen is 24 mesh for sizes 3/8", 1/2" (10, 15 mm), size 1/4" (8 mm) has 30 mesh, and 1/8" (3 mm) has 40 mesh screen. Maximum pressure 250 psi WWP (17.2 bars).





WATER SAFETY AND CONTROL PRODUCTS

Water Pressure Regulators

Series U5 (1/2"–2")

High performance water pressure regulators

- Provides water pressure control solutions for residential, commercial, and industrial applications.
- Basic design and construction is time tested and proven.
- Offers durability and years of continuous trouble-free operation.
- Water savings up to 30%

Features

- High temperature resistant diaphragm
- Bronze body construction
- Stainless steel integral strainer
- Renewable stainless steel seat
- Serviceable in-line.



Model	Model	Size (in.)
U5	U5B	1/2
U5	U5B	3/4
U5	U5B	1
—	U5B	1-1/4
—	U5B	1-1/2
—	U5B	2

Series 25AUB (1/2"–2")

Standard capacity water pressure regulators

- Accurate water pressure control.
- Bronze body construction.
- Fast and easy adjustment.
- Popular choice for residential and commercial applications.

Features

- Standardly furnished with integral bypass
- Renewable stainless steel seat
- Stainless steel integral strainer
- High temperature resistant diaphragm
- Serviceable in-line



Model No.	Size (in.)
25AUB	1/2
25AUB	3/4
25AUB	1
25AUB	1-1/4
25AUB	1-1/2
25AUB	2

Series 223 (1/2"–3")

High capacity water pressure regulators

- One of the most proven regulator designs available.
- For commercial, institutional and industrial water pressure control applications.
- Available with or without a strainer.

Features

- High capacity
- Sealed spring cage
- Serviceable in line



Order No.		Size (in.)	Body
Model 223	Model 223S		
0296237	0300873	1/2	Bronze
0296430	0301233	3/4	Bronze
0296600	0301828	1	Bronze
0296844	0302278	1-1/4	Bronze
0297254	0303068	1-1/2	Bronze
0297450	0303428	2	Bronze
0287460	0303426	2-1/2	Iron
Model N223B	Model N223BS		
0297458	0303430	2-1/2	Bronze
0303647	0303648	3	Bronze

Series P50, P60 (1/4")

Plastic water pressure regulators

- Compact, superior corrosion resistant regulators.
- For general purpose, OEM and irrigation applications.
- Can be used with deionized water.

Specifications

- 1/4" (8 mm) NPT female connections.



Series 215 (1/4", 3/8")

Precision regulator for low pressures

- Forged brass body, for water and No. 2 fuel oil.
- For other liquids, consult factory.



Reduced pressure ranges:	Std. psi set at:
Suffix A for 0-8 psi	4
Suffix B for 0-20 psi	10
Suffix C for 0-50 psi	15

Model 276H300 (3/4")

Water pressure test gauge

- For testing water supply pressure within a distribution system.

Specifications

- 3/4" (20 mm) hose thread connection; 0-300 psi (0-20.7 bars).



Lakeside stocks renewal parts for all Watts regulator products.



WATER SAFETY AND CONTROL PRODUCTS

Water Pressure Regulators

Series 26A, 263A (1/8"–1/2")

Small pressure regulators

- Brass or stainless steel body regulators suitable for water and No. 2 fuel oil. Before using them with other liquids, please consult the factory.
- Readily meets requirements for use in beverage dispensing and paint spraying equipment, drinking fountains and many other applications. We recommend the use of strainers with all regulators.

Specifications

- Sizes: 1/8", 1/4", 3/8", 1/2" (3–15 mm) NPT threaded female inlet and outlet connections.
- Initial pressures up to 300 psi (20.7 bars).
- Maximum temperature 140°F (60°C).



Model	Size (in.)
26A	1/8
26A	1/4
26A	3/8
26A	1/2
263A	1/4
263A	3/8
263A	1/2

Steam Pressure Regulators

Series 152A/252A (1/2"–2")

Medium capacity process steam pressure regulators

- For autoclaves, steam tables/irons, vulcanizers and single radiators.
- Also used on sterilizers, process lines, testing fixtures and oil lines.
- Highly sensitive to reduced pressure changes.
- Full volume with minimum pressure drop.
- Sensitivity adjustment feature for critical flow.

Specifications

- **Model 152A**—with iron body. Sizes: 1/2" to 2".
- **Model 152SS**—with stainless steel body and trim. Sizes 1/2", 3/4", 1".
- **Model 252A**—sizes 1/2", 3/4" (15, 20 mm) identical to 152A except furnished in bronze body.
- **Model 152A-T, 152SS-T or 252A-T**—Tight seating models for dead end and liquid service.



Model	Size (in.)
152A 3-15	1/2
152A 3-15	3/4
152A 3-15	1
152A 3-15	1-1/4
152A 5-40	1-1/2
152A 5-40	2
252A 10-50	1/2
252A 10-50	3/4
152SS 10-50	1/2
152SS 10-50	3/4
152SS 10-50	1

Series 127 (1/2"–4")

Process steam pressure regulators

- Diaphragm type regulator.
- Single seated.
- Large capacity.
- Main line and high capacity process regulation.
- Heating and dead end service.
- Institutional, commercial and industrial applications.



Model	Size (in.)
127	1/2
127	3/4
127	1
127	1-1/4
127	1-1/2
127	2
127	2-1/2
127	3
F127*	3
F127*	4

*Iron body, flanged connections

Relief Valves

Model 5300A (1/2")

Poppet-type, compact bypass relief valve

- Bronze body construction.
- "T" handle facilitates pressure adjustment.



Series BP30 (1/2")

Bypass control relief valves

- Controls liquid pressure as supplied by a positive pressure pump.
- Protects equipment by operating at the desired pressure setting and allows excess volume to be bypassed back to the source.





WATER SAFETY AND CONTROL PRODUCTS

Hot Water Boiler Relief Valves

Series 174A (3/4"-2") Model 374A (3/4")

ASME water pressure safety relief valves

- For hot water heating and supply boilers.
- Pressure protection only.
- Series 174 bronze body construction resists corrosive water conditions of water supplies.



Model No.	Size (in.)
174A	3/4
174A	1
174A	1-1/4
174A	1-1/2
174A	2
374A	3/4

Series 740 (3/4"-2")

Iron body ASME rated water pressure relief valves

- For hot water heating boiler pressure protection.
- Expanded outlet drain connections.
- Size for size, Watts 740 Models offer greater discharge capacity than comparable competitive models.



Model No.	Size (in.)
740	3/4 x 1
740	1 x 1-1/4
740	1-1/4 x 1-1/2
740	1-1/2 x 2
740	2 x 2-1/2

Pressure Relief Valves

Series 53L/3L (1/2"-3/4")

Poppet type pressure relief valves for protection against excessive pressure



Model 53—without test lever.

- Sizes: 1/2", 3/4" (15, 20 mm), NPT male inlet x NPT female (drain) outlet.
- Pressure range 75–175 psi (5.2–12.1 bars).
- Standard pressure relief setting is 75 psi (517.1 kPa). Optional settings 100, 125 or 150 psi (6.9, 8.6, or 10.3 bars).

Steam Boiler Safety Valves

Series 315 and 415 (3/4"-1-1/2")

ASME rated and tested steam safety relief valves

- For low pressure steam heating equipment.



Model	Size (in.)	ASME Steam Discharge Capacity lbs./hr. @ 15 psi
315-M1	3/4 x 3/4	375
415-M1	3/4 x 3/4	450
415-M1	1 x 1	643
415	1-1/4 x 1-1/2	1265
415	1-1/2 x 2	1860

Series Fig. 10 (3/4"-3")

Safety valves

- Model Fig. 10 are cast iron ASME section IV safety valves.
- For low pressure steam heating boilers and associated equipment with operating pressures up to 15 psi (103.4 kPa).



Fig. 10 Order No. §	Size (in.)
0215998†	3/4 x 1
0216006*	1 x 1-1/4
0216002*	1-1/4 x 1-1/2
0215997†	1-1/2 x 2
0215994‡	2 x 2-1/2
0216018Δ	2-1/2 x 2-1/2
0215995‡	3 x 3

Set At: †(12 psi/82.7 kPa), *(10 psi/68.9 kPa), Δ(8 psi/55.2 kPa), ‡(5 psi/34.5 kPa)
§—Contact your local Watts agent for ordering number of products with other pressure ratings than shown.

Series 30 (1/2")

Pressure relief valves



- Pressure relief only.
- **Model 30L**—with test lever; not diaphragm activated. Nominal size: 1/2" (15 mm), NPT male inlet x female (drain) outlet. Standard pressure setting 75 psi (5.17 bars). Optional settings 100, 125 and 150 psi (6.9, 8.6, 10.3 bars).

Series 530C (1/2"-3/4")

Calibrated pressure relief valves



- Adjustable pressure relief range 50–175 psi (3.4–12.1 bars).
- Designed for use as protection against excessive pressure build-up in systems containing water, oil and air.



WATER SAFETY AND CONTROL PRODUCTS

Water Heater T&P Safety Relief Valves

Series 1L, 1XL, 10L, and 100XL (1/2", 3/4")

Self-closing T&P safety relief valves for hot water storage tanks and heaters

- Temperature and Pressure relief valves provide the least expensive protection against both excessive temperature and pressure.
- Fully automatic for domestic hot water supply tanks and heaters.
- Includes test lever.

- For water heaters from 15,000 to 105,000 BTU/hr.
- NPT male inlet and female outlet.

Standards

- ANSI Z21.22 and ASME Section IV Rated, CSA Listed.

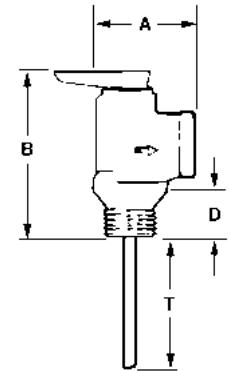
Specifications

- Temperature relief 210°F (99°C). Pressure relief range 75 to 150 psi (5.2–10.3 bars). Standard pressure relief settings: 75 psi (517.1 kPa), 100 psi (6.9 bars), 125 psi (8.6 bars) or 150 psi (10.3 bars).



Dimensions/Wgts.

Model	Order No.	Size in.	(DN) mm	A		B		D		T		Weight oz.	Weight gm.	CSA Temp. Steam Rating BTU/hr.
				in.	mm	in.	mm	in.	mm	in.	mm			
1L2	0002268	1/2	15	1-3/4	43	3-1/2	89	7/8	22	2	50	10	284	15,000
1XL	0004494	1/2	15	1-3/4	43	3-1/2	89	7/8	22	3	76	12	340	15,000
1XL-8	0004497	1/2	15	1-3/4	43	3-1/2	89	7/8	22	8	203	16	454	15,000
10L-2	*0063069	3/4	20	1-3/4	43	3-1/2	89	1-1/8	9	2	50	10	284	80,000
100XL	0066100	3/4	20	1-3/4	43	3-1/2	89	1-1/8	29	3	76	12	340	100,000
100XL-8	0066110	3/4	20	1-3/4	43	3-1/2	89	1-1/8	29	8	203	14	397	100,000
L100XL	0066133	3/4	20	1-3/4	43	4-1/4	108	1-5/8	41	3	76	12	340	100,000
SL100XL	0066445	3/4	20	1-3/4	43	4-3/8	111	1-1/4	32	3-1/2	89	12	340	105,000
LL100XL	0066132	3/4	20	1-3/4	43	4-3/4	121	2	50	2-1/2	64	12	340	100,000
LLL100XL-Z5	0066446	3/4	20	1-3/4	43	5-1/4	133	2-1/2	64	2-1/8	54	12	54	105,000



A = overall width of the valve. B = overall height of the valve, with lever closed, not including thermostat element length. D = length of shank, from shoulder under outlet orifice overhang to inlet orifice edge. T = length of thermostat element, measured from inlet orifice edge to end of thermostat.

Set @ 150 psi (10.3 bars). Consult your local Watts Agent for ordering codes of valves with pressure relief settings of 75, 100, 125 psi (5.2, 6.9, 8.6 bars). *Set @ 75 psi (5.2 bars).

Model 210

Immersion-type, temperature gas shut-off for hot water storage heaters.

- Protects against excessive temperatures in gas water heaters.
- Shuts off the gas supply to the water heater in the event that the water temperature reaches 210°F (98.9°C).
- Used in conjunction with Model 3L pressure relief valve.

Specifications

- Tank connection 3/4" (20 mm) NPT male.
- Gas inlet and outlet connection 1/2" (15 mm) NPT female.
- CSA ratings: natural gas 150,000 BTU/hr., liquefied petroleum gas 243,000 BTU/hr.



ASME Rated Series 40, 140, 240, 340, 342 (3/4"-2")

Automatic Reseating T&P Relief Valves for hot water supply tanks and heaters.

- Temperature and Pressure relief valves provides the least expensive protection against both excessive temperature and pressure.
- Fully automatic temperature and pressure relief protection for hot water supply tanks and heaters based on the latest ANSI Z21.22 Listing Requirements.

Dimensions/Wgts.



Model	Size (DN) M = Male F = Female Inlet x Outlet in. x in.	Model	Size (DN) M = Male F = Female Inlet x Outlet in. x in.	Model	Size (DN) M = Male F = Female Inlet x Outlet in. x in.
40L-3	3/4M x 3/4F	40L-2	1M x 1F	*N240X-9	1F x 1F
40XL-5	3/4M x 3/4F	40XL-4	1M x 1F	*N241X-5	1-1/4M x 1F
40XL-8	3/4M x 3/4F	40XL-7	1M x 1F	*N241X-8	1-1/4M x 1F
LL40XL	3/4M x 3/4F	LL40XL	1M x 1F	*340-3	1-1/2F x 1-1/2F
LLL40XL	3/4M x 3/4F	*140S-3	1F x 1F	*340X-8†	1-1/2F x 11/2F
140S-3	3/4F x 3/4F	*140X-6	1F x 1F	*342-3	2M x 1-1/2F
140X-5	3/4F x 3/4F	*140X-9	1F x 1F	*342X-8	2M x 1-1/2F
140X-8	3/4F x 3/4F	*N240X-6	1F x 1F		

*Standardly furnished with stainless steel thermostat tube.

†340X-M4Z—Temperature Relief of 210°F, Certified CSA only.