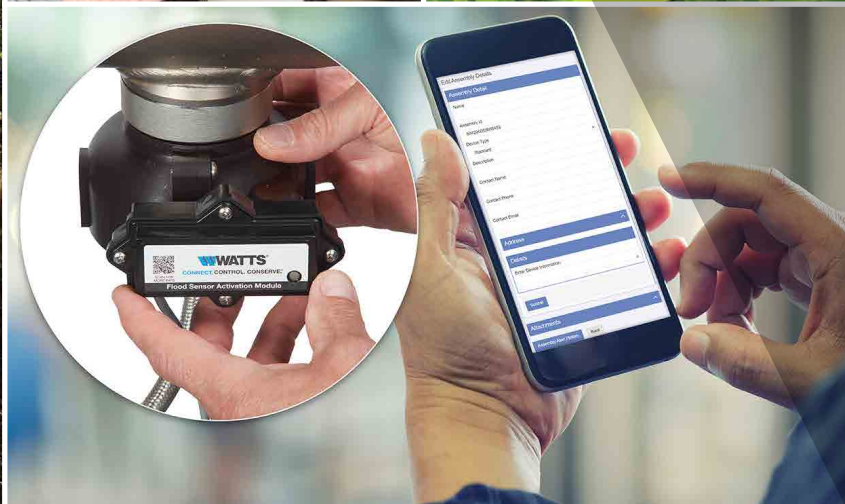


# Backflow Prevention & Flow Control for Plumbing



Valve Solutions from the Industry Leader

# Backflow Prevention Solutions for Keeping Water Safe

Whether at home or in a commercial or industrial building, people expect safe and clean water when they turn on their faucets. The knowledge and diligence of plumbing professionals—paired with high quality, reliable equipment—ensures our potable water systems stay free of harmful or deadly contaminants.

By identifying cross-connections, specifying and installing the appropriate backflow preventers, and inspecting them to ensure they operate correctly and are up to code, plumbing professionals ensure our communities are safe from the dangers of backflow.

## High-Risk Applications:

- Dishwashers
- Carbonated beverage dispensers
- Handheld shower heads
- Hose bibbs/sill cocks
- Irrigation systems
- Swimming pools
  - Industrial supply piping
  - Chemical feed pumps
  - Laboratory sinks
  - Cooling towers
  - Boilers/HVAC systems

## Typical Applications

### Residential

Single family, apartments, condominium buildings

### Commercial

Restaurants, car washes, hotels, salons, irrigation systems, HVAC, laundromats



# The Watts Advantage

## Broadest Range of Devices

From 10" Reduced Pressure Zone assemblies to hose bibb vacuum breakers, Watts has the valve you need with the options you want.

## Most Specified

With a reputation for high quality and performance, Watts backflow preventers are trusted by specifying engineers to protect the systems they design.

## Largest Rep Network

Wherever you are, you'll have local support from our extensive network of representatives equipped with knowledge and training to help you specify, install, troubleshoot, and repair backflow preventers.

## Smart and Connected

Select devices include sensor technology for flood protection, pressure monitoring, or freeze detection. Sensor activation installs a virtual watchman on guard to signal changes in backflow preventer performance or in temperature that could affect equipment.

### Industrial

Laboratories, food processing plants, chemical feed pumps, cooling towers

### Institutional

Schools, universities, hospitals

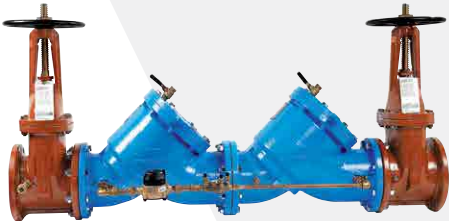


# Large Diameter Testable Backflow Preventers

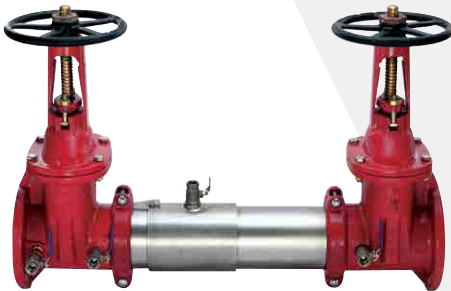
## Double Check Valve and Double Check Detector Assemblies



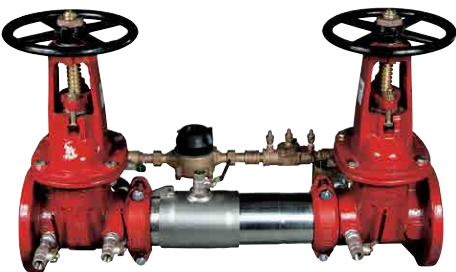
LF709-NRS-IOT



LF709DCDA



757



LF757DCDA



LF909-FS

Watts Double Check Valve and Double Check Detector assemblies are used to prevent backflow of non-health hazard pollutants that are objectionable but not toxic from entering the potable water supply system. They may be installed under continuous pressure service and may be subjected to backpressure and backsiphonage. These valves consist of two independently operating check valves, two shutoff valves, and four test cocks, with an additional bypass with double check and meter in the case of double check detector assemblies. Sensor technology on select devices does not affect assembly function or certification.

### Series LF709, 709DCDA

- Integrated sensors for pressure measuring on LF709 Model IOT with NRS gate valves (Suitable for non-fire protection applications.)
- Pressure data collected with add-on monitoring connection kit (BMS only.)
- Fused epoxy coated cast iron body
- Designed for easy maintenance and repair
- 709DCDA furnished with 5/8" x 3/4" bronze meter
- Non-health hazard applications
- Continuous pressure
- Size: 2½" – 10"



LEARN MORE ABOUT  
PRESSURE MONITORING

### Series 757, LF757DCDA, LF757NDCDA

- Lead Free\* construction
- Extremely compact design
- 70% lighter than traditional designs
- 304 (Schedule 40) stainless steel housing and sleeve
- Groove fittings allow integral pipeline adjustment
- Unique tri-link spring check provides lowest pressure loss
- Unmatched ease of serviceability
- Available with grooved butterfly valve shutoffs
- May be used for horizontal, vertical, or N-pattern installation
- Replaceable check disc rubber
- Size: 2½" – 10"

## Reduced Pressure Zone and Pressure Detector Assemblies

Watts Reduced Pressure Zone and Reduced Pressure Detector assemblies are designed in accordance with water authority containment requirements to protect the potable water system from health hazard applications. They prevent the reverse flow of water due to backpressure or backsiphonage for applications where potential pollutants are toxic, such as fertilizer chemicals. Sensor technology on select devices does not affect assembly function or certification.

### Series LF909, 909RPDA

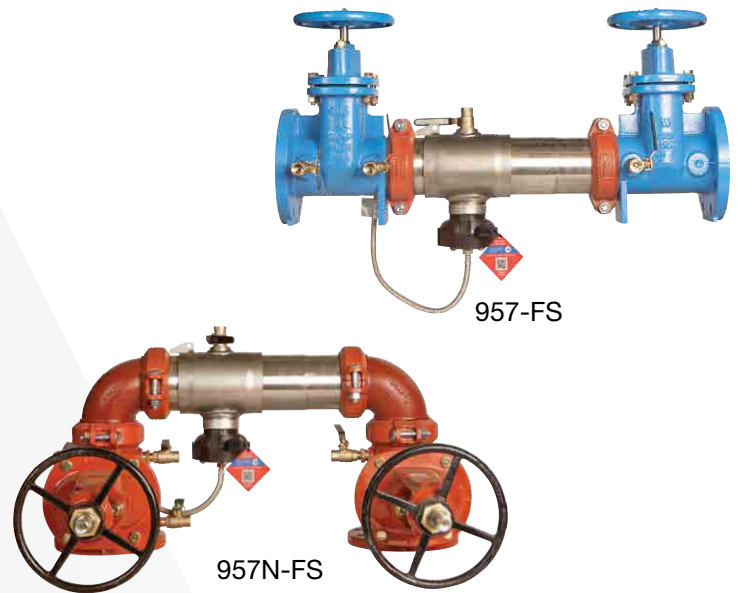
- Sensor on the relief valve for flood protection
- Flood alerts feature activated with add-on sensor connection kit
- Body construction fused epoxy coated cast iron
- Replaceable bronze seats
- Maximum flow at low pressure drop
- Compact, for economy combined with performance
- Design simplicity to ease maintenance
- 909RPDA furnished with 5/8" x 3/4" meter
- Continuous pressure
- Size: 2½" – 10"



LEARN MORE ABOUT  
FLOOD PROTECTION

## Series 957, 957RPDA, LF957RPDA

- Sensor on the relief valve for flood protection
- Flood alerts feature activated with add-on sensor connection kit
- Replaceable check disc rubber
- Extremely compact design
- 70% lighter than traditional designs
- 304 (Schedule 40) stainless steel housing and sleeve
- Groove fittings allow integral pipeline adjustment
- Patented torsion spring checks provide lowest pressure loss
- Unmatched ease of serviceability
- Bottom mounted cast stainless steel relief valve
- Available with grooved butterfly valve shutoffs
- Available in N and Z patterns
- Size: 2½", 3", 4" available with quarter turn ball valve shutoffs



## Small Diameter Testable Backflow Preventers

The superior performance of Watts large diameter backflow preventers is also a feature of its small diameter double check valve and reduced pressure zone assemblies. Sensor technology on select devices does not affect assembly function or certification.

### Double Check Valve Assemblies

#### Series LF007

Series LF007 compact Double Check Valve assemblies are built to protect potable water from backsiphonage in non-health hazard applications. They feature in-line, modular checks and a single access cover.

- Series 007 includes a sensor on one test cock for freeze detection; freeze alerts feature activated with add-on sensor connection kit; sizes ½" to 2"
- Integrated sensors for pressure measuring on Model IOT with NRS gate valves, sizes 2½" and 3" (Suitable for non-fire protection applications.)
- Pressure data collected with add-on monitoring connection kit (BMS only.)
- For non-health hazard applications
- Ease of maintenance — only one cover and top entry
- Size: ¼" – 2" lead free cast bronze; 2½" and 3" fused epoxy coated cast iron
- Size: ½" – 2" available with press end connections



LF007-FZ



LF007-NRS-IOT

### Reduced Pressure Zone Assemblies

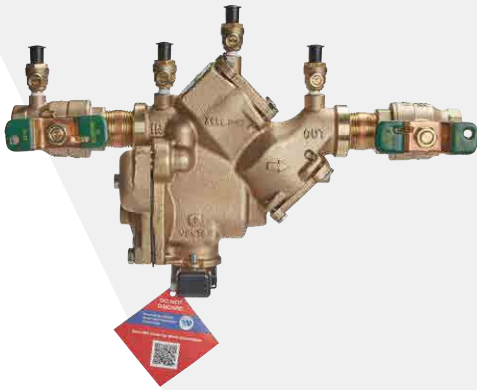
#### Series LF009

Series LF009 Reduced Pressure Zone assemblies are designed to protect high hazard applications from backpressure and backsiphonage.

- Single access cover and modular check construction for ease of maintenance
- Internal relief valve for reduced installation clearances
- Large body passages provide low pressure drop
- Health hazard applications
- Continuous pressure
- Size: ¼" – 2" lead free cast bronze; 2½" and 3" fused epoxy coated cast iron
- Size: ½" – 3" include a sensor on the relief valve for flood protection; flood alerts feature activated with add-on sensor connection kit (Also available with press end connections.)



LF009-QT-FS



LF909-FS



LF919-FS



LF800M4QT-FZ



LF800M4FR-FZ

## Series LF909

Series LF909 Reduced Pressure Zone assemblies are designed to provide superior cross-connection protection in health hazard applications.

- Sensor on the relief valve for flood protection
- Flood alerts feature activated with add-on sensor connection kit
- Dual cover check access
- Independent relief valve section
- Y pattern
- Air-in/water-out relief valve for maximum safety
- Lead Free\*
- Modular, compact design for ease of installation and maintenance
- Replaceable seats
- Approved for vertical up flow on sizes ¾" and 1"
- Continuous pressure
- Size: ¾" – 2"



LEARN MORE ABOUT FLOOD PROTECTION

## Series LF919

Series LF919 Reduced Pressure Zone assembly protects potable water supplies in a variety of installations, including prevention of health hazard cross-connections or containment at the service line entrance. Lead Free\* construction to comply with Lead Free\* installation requirements.

- Sensor on the relief valve for flood protection
- Flood alerts feature activated with add-on sensor connection kit
- Separate access covers for the check valves and relief valve to ease maintenance
- Compact, space saving design
- NPT body connections
- Size: ½" – 2"

## Pressure Vacuum Breakers

Sensor technology on select devices does not affect assembly function or certification.

## Series LF800M4QT, LF800M4FR

Series LF800M4QT Pressure Vacuum Breakers are designed to prevent backsiphonage of contaminated water into a potable water supply. The valve is ideally suitable for irrigation systems, industrial process water systems and other continuous pressure piping system applications where the water enters the equipment at or below its flood rim.

- Replaceable plastic seat
- Sensor mounted to test cock signals when temperature nears the freezing point
- Freeze alerts feature available with add-on connection kit for building/irrigation management system
- Lead Free\*
- Easy maintenance of internal parts
- Acetal bonnet acts as "freeze plug" to prevent body damage
- O-ring bonnet seal for less possibility of fouling
- Standardly equipped with tee handle quarter turn ball valve shutoffs on sizes ½" to 1"; sizes 1¼" to 2" feature lever handles
- Available with a unique built-in relief valve to relieve pressure caused by ice formation (LF800M4FR)
- Size: ½" – 2"

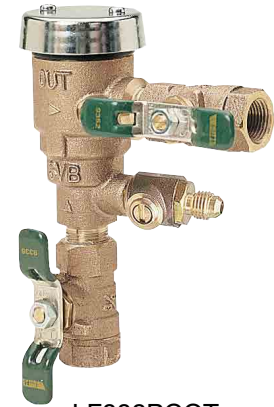


LEARN MORE ABOUT FREEZE DETECTION

## Series LF008PCQT

Series LF008PCQT Pressure Vacuum Breakers are designed for indoor point-of-use applications to prevent backsiphonage of contaminated water back into the potable water supply. Separation of the water supply from the air inlet is accomplished by means of a diaphragm seal. This feature protects against any spillage during start-up or operation.

- Supplied with internal polymer coating and tee handles as standard
- Available less tee handle with stem wrench flats (For use where space is limited.)
- Available in left-handed or right-handed outlet
- Spill-resistant design for indoor use
- Modular cartridge for ease of service
- Vent uses an O-ring for reliable operation
- Bronze body for durability
- Compact space saving design
- Satin chrome finish available
- Available with strainer
- Size:  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1"



LF008PCQT

## Non-Testable Backflow Preventers

### Hose Bibb Vacuum Breakers

#### Series 8

Series 8 Vacuum Breakers are specially made to permit the attachment of portable hoses to hose thread faucets. Designed to prevent the flow of contaminated water back into the potable water supply, these devices require no plumbing changes, and screw directly onto a sill cock.

The 8 series is available in the following models:

- 8 – standard set screw
- 8A – non-removable model
- 8B – Break-away set screw
- NF8 – Permits manual draining
- 8P – reinforced thermoplastic, tamper-proof
- 8FR – with freeze relief feature
- 8C/8AC/8BC/NF8C – chromed versions
- Standard and Lead Free\* available
- Size:  $\frac{3}{4}$ " hose thread



**LF8A**  
Non-Removable Model



**LFNF8**  
Permits Manual Drain



**8P**  
Tamper-Proof Feature



**LF8**  
Secured with allen head set screw



**LF8B**  
Break-away set screw



**LF8FR**  
Freeze relief feature

### Atmospheric Vacuum Breakers

#### Series 188A, LF288A, LF289, LFN388

Watts Anti-Siphon Vacuum Breakers all come with durable silicone discs for heat, chemical, and water hammer shock resistance and lightweight disc floats to avoid spilling

- 188A – Leaded atmospheric vacuum breaker,  $\frac{3}{4}$ " – 2"
- LF288A – Lead Free\* with full size orifice,  $\frac{1}{4}$ " – 3"
- LF289 – Lead Free\* spill resistant,  $\frac{1}{2}$ " and  $\frac{3}{4}$ "
- LFN388 – Lead Free\* N-pattern,  $\frac{1}{4}$ " and  $\frac{3}{8}$ "



188A



LF288A



LF289



LFN388

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

## Dual Checks/Dual Checks with Atmospheric Vents

### Series LF7R



LF7R

Series LF7R Dual Check Valves are designed for non-health hazard residential water system containment and continuous pressure applications, such as the drinking water supply service entrance or individual outlets. Series LF7R uses two compact check modules and is typically installed immediately downstream of the residential water meter. The LF7R features Lead Free\* construction to comply with Lead Free\* installation requirements.

- Designed for residential water system containment, such as drinking water supply service lines
- Continuous pressure
- For non-health hazard applications
- Available with a variety of inlet/outlet connection options
- Size: 1/2" – 1"

### Series 9D



9D

Series 9D and LF9D are specially made for smaller supply lines and ideally suited for laboratory equipment, processing tanks, sterilizers, dairy equipment, and specifically boiler feed lines.

- True line-sized construction allows the check modules to open further allowing dirt and debris to pass more freely reducing check fouling
- Stainless steel internal parts
- Maximum flow at low pressure drop
- Furnished with union connections to facilitate removal and replacement for maintenance
- Can be installed vertically or horizontally
- Integral stainless steel strainer
- Size: 1/2" M3, 3/4" M2

### Series BD911



BD911

Series BD911 combination fill valve and backflow preventer consists of a Model 9D backflow preventer and Model BD1156F feed water pressure regulator in one pre-assembled unit. This valve is a high capacity valve designed for use on boiler feed lines to provide make-up water to the boiler and prevent backflow when supply pressure fails below system pressure and incorporates a unique push-button fast fill engagement with auto-stop that prevents over-pressurization.

- Pre-assembled for ease of installation
- Push button fast fill with auto-stop to prevent system over-pressurization
- Dial indicator eliminates need for pressure gauge
- Same lay length as Watts Series 911
- High capacity fill valve for quick system filling and purging
- Size: 1/2"

## Approvals



Backflow Preventer assemblies Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC).

Refer to product specification sheets for full list of industry certification and approvals.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

\*\*Assembly configured with UL Classified and FM Approved OS&Y RW Gate Valves. Less gate valve assemblies are not UL Classified and FM Approved configurations.



## Accessories

### Backflow Preventer Test Kits

Backflow preventer test kits such as the TK-9A, TK-99E, and TK-7 are for testing backflow preventers such as pressure vacuum breakers, double check valve assemblies, and reduced pressure zone assemblies. Designed for simplified operation and rugged reliability, each kit is compact for ease of handling and accessibility so you can get the job done.

Some features include:

- Color-coded valves and hoses, hose adapters, shock cord for easy mounting (TK-9A and TK-99E)
- Supply pressure gauge (TK-99E)
- Durable, shatterproof tubing (TK-7)
- Plastic carrying case to protect kit and ease transportation (TK-9A and TK-99E)
- Compact leather carrying case (TK-7)

*Visit the Watts website to learn more about each backflow preventer test kit.*



### Air Gaps

An air gap provides the unobstructed, physical separation between the discharge end of a potable water supply line and an open receiving vessel.

The installation of an air gap and drain line on the relief valve of reduced pressure zone assemblies is recommended.

### Series WVS

Series WVS Valve Setters are designed to augment the installation of the "N" series backflow prevention valves. The Series WVS are available in three connection options, Flange by Flange, Mechanical Joint by Flange, and Mechanical Joint by Mechanical Joint.

- Corrosion resistant fusion epoxy coated.
- Eliminates the need for thrust blocks or other restraints at the point of installation.
- Flange: ANSI B16.1 Class 125 (Standard)  
ANSI AWWA C153 A21.53-88





## Series W-SPL

Series W-SPL "Make Up" Spools are used when retrofitting a backflow preventer into an installation where an existing backflow preventer is being replaced. Available in Lightweight 300 series Stainless Steel or Epoxy coated Carbon Steel. AWWA 150# Class "D" Carbon Steel Flanges offered as standard. 150# Class "D" Stainless Steel Flanges upon special request.



## Model RK-EZ-STD

Model RK-EZ-STD Valve and Meter Support Stands allow for quick and easy installation and allows the height to be field adjustable. The support stand is of all-welded construction and incorporates a corrosion-resistant coating.

- One stand adapts to fit varying installation heights
- Corrosion-resistant coating on bars
- Epoxy coated yoke and mounting plate
- Size: 10" – 38"

## Automatic Control Valves

### Commerical Market

#### Series LFM115

Series LFM115 Pressure Reducing Automatic Control Valves reduce high inlet pressure to constant, lower, outlet pressure across a broad range of flow.

- Valves can be installed in parallel or series configurations for extended flow range or staged pressure reduction
- Field-adjustable downstream pressure set point
- Common feature combinations include pressure reducing with hydraulic check, solenoid on/off, downstream surge protection, or upstream pressure sustaining



LFM115

#### Series LFM116

Series LFM116 Pressure Relief/Sustaining Automatic Control Valves open when inlet pressure is above the set point, and throttle when pressure is below the field-adjustable set point.

- Valves maintain desired settings with close pressure tolerances
- UL Listed fire versions available
- Multiple set pressures
- Differential relief version available



LFM116

## Series LFM110

Series LFM110 Float Automatic Control Valves are available for either on/off or modulating service.

- On/off type valves controlled by float pilot equipped with adjustable high- and low-level stop collars allow for calculated level draw-down
- Modulating-type valves maintain constant water level proportional with tank draw
- Valve- or remote-mounted float controls
- Level operation can be reversed for special applications
- Additional feature combinations include pressure sustaining and solenoid on/off



LFM110

## Series LFM113

Series LFM113 Solenoid Automatic Control Valves can be configured for either on/off or electric positioning service.

- Electric positioning type valve interfaces with SCADA systems and throttles open or closed to maintain desired process variable
- Valves can be configured to open, close, or hold-last-position with loss of electrical signal
- Common applications include pressure, level, or flow control
- Valves can be equipped with limit switches or 4-20 mA position feedback device



LFM113

## Strainers

### Small Diameter Strainers, Brass and Bronze

#### Series LF777, LF777S, LF777SI

Series LF777, LF777S, and LF777SI Wye-pattern Lead Free\* cast copper silicon alloy Strainers are designed to protect system components from dirt, rust and other damaging debris in the piping system. This series features a solid retainer cap with gasket. Series LF777 and LFS777 feature Lead Free\* construction to comply with Lead Free\* installation requirements.

- LF777 — Lead Free\* Wye-pattern, Lead Free\* bronze strainer, 1/4" – 4"
- LF777S — Lead Free\* Wye-Pattern bronze strainers, 1/2" – 4"
- LF777SI — Lead Free\* brass, Wye-pattern strainers with tapped retainer cap, 3/8" and 3"



LF777



LF777S



LF777SI

### Large Diameter Strainers, Cast Iron and Ductile Iron

#### Series LF77F-DI-125, LF77F-DI-250, LF77F-DI-FDA

Series LF77F-DI-125, LF77F-DI-250, LF77F-DI-FDA-125 Flanged, Wye-pattern, Cast Iron Strainers feature 304 stainless steel perforated screens, a cast iron flanged retainer cap and a drain/blowoff connection furnished with a closure plug. Series 77F-DI-FDA-125 also features a double coated, heat fused epoxy coating on the interior and exterior for FDA Approved sanitary applications.

- LF77F-DI-125 — Cast iron, Class 125 flanged end, Wye-pattern strainers, 2" – 12"
- LF77F-DI-250 — Ductile iron, Class 250 flanged end, Wye-pattern strainers, 2" – 12"
- LF77F-DI-FDA-125 — Cast iron, Class 125 flanged end, Wye-pattern strainers with FDA epoxy coating, 2" – 12"



LF77F-DI-125



LF77F-DI-250



LF77F-DI-FDA-125

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption. These Watts pressure reducing valves are serviceable in-line.

## Pressure Reducing Valves

### Series LF25AUB-Z3

Suitable for water supply pressures up to 300 psi (20.7 bar). Can be adjusted from 25 to 75 psi (172 to 517 kPa).



LF25AUB-Z3

- Standard construction includes Z3 sealed spring cage and stainless steel corrosion resistant adjusting and cage screws
- Union inlet connection
- Integral, independently serviceable stainless steel strainer
- End Connection options include threaded, solder, PEX, Quick-connect, CEF, and Press
- Replaceable seat module
- Lead Free\* cast copper silicon alloy construction
- Bypass feature controls thermal expansion pressure\*\*\*
- High temperature resistant reinforced diaphragm for hot water
- Size: 1/2" – 2"

### Series LF223, LF223S

Suitable for water supply pressures up to 300 psi (20.7 bar). Can be adjusted from 25 to 75 psi (172 to 517 kPa). The standard setting is 50 psi (345 kPa).



LF223

- Enlarged diaphragm, spring cage, and seat orifice for super capacity performance
- Lead Free\* brass body construction (except 2 1/2" which is iron)
- Series LF223S furnished with separate strainer
- Optional bypass feature controls thermal expansion pressure\*\*\*
- Sealed spring cage on all models for accessible outdoor or pit installation
- Size: 1/2" – 2 1/2"

### Series LFN45B-M1

Suitable for water supply pressures up to 400 psi (27.6 bar). Can be adjusted from 25 to 75 psi (172 to 517 kPa). The standard setting is 50 psi (345 kPa).



LFN45B-M1

- Integral stainless steel strainer
- Thermoplastic seat and cage
- Lead Free\* cast copper silicon alloy body construction
- Bypass feature controls thermal expansion pressure\*\*\*
- End Connection options include threaded, solder, PEX, Quick-connect, CEF, Press, and CPVC
- Sealed spring cage on all models for accessible outdoor or pit installations
- Size: 1/2" – 1"

### Series LFN55B-M1

Suitable for water supply pressures up to 400 psi (27.6 bar). Can be adjusted from 25 to 75 psi (172 to 517 kPa).



LFN55B-M1

- Integral stainless steel strainer
- Thermoplastic seat
- Lead Free\* brass body construction
- Bypass feature controls thermal expansion pressure\*\*\*
- End Connection options include threaded, solder, PEX, Quick-connect, CEF, Press, and CPVC
- Sealed spring cage on all models for accessible outdoor or pit installations
- Size: 1/2" – 1"

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

\*\*\*The bypass feature does not prevent the pressure relief valve from opening on the hot water supply system with pressure above 150 psi (10.3 bar).

## Shutoff Valves

### Series LFB6080G2, LFB6081G2

Series LFB6080G2 and LFB6081G2 ball valves are used in commercial and industrial applications for a full range of liquids and gases. They feature a blowout-proof pressure full-port orifice which ensures minimal pressure drop. Model LFB6080G2 has threaded NPT end connections and Model LFB6081G2 has solder end connections. Pressure rating for 1/4" to 2": 600 psi WOG (non-shock) 150 psi WSP.

- Lead Free\* forged bronze body and adapter
- Stainless steel ball-and-stem option
- Minimal pressure drop due to large ports
- Blowout-proof, pressure-retaining stem
- Adjustable stem packing gland
- Size: 1/4" – 2"



LFB6081G2



LFB6080G2

### Series LFBV-3-Press-M1, LFFBV-3-Press-XLC

#### 2-Piece, Full Port, Lead Free\* Brass Ball Valves with Integral Press Fitting End Connection

Designed for use in ProPress® Piping Systems

- Lead Free\* brass body
- Press connection rated to 250 psi CWP up to 210°F (13.4 bar to 99°C)
- Bottom-loaded, blowout-proof stem with stem O-ring seal
- Size: 1/2" – 4"



LFFBV-3-Press-M1



LFFBV-3-Press-XLC 2 1/2" - 4"

### Series LFFBV-3C, LFFBVS-3C, LFFBV-3C-QC

Standard material FBV-3C and FBVS-3C are available for non-potable applications.

- Lead Free\* forged copper silicon alloy body and adapter
- Certified to NSF/ANSI Standard 61/8
- CSA Approved threaded valves only, 1/4" – 3"
- Fluorocarbon elastomer stem O-ring prevents stem leaks
- Adjustable stem packing gland
- PTFE stem packing seal, thrust washer, and seats
- Bottom-loaded blowout-proof stem
- Machined chrome-plated Lead Free\* brass ball
- Sizes: 1/4" – 4"



LFFBV-3C



LFFBVS-3C



LFFBV-3C-QC

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



LFFBV-PEX

## Series LFFBV-PEX

Series LFFBV-PEX ball valves with PEX ends are designed for use in PEX piping systems and have a Lead Free\* brass body. They feature Lead Free\* brass PEX end tailpieces designed for easy crimping into a PEX piping system.

- 2-piece, full port design
- Forged Lead Free\* brass body
- Valve rated to 400 WOG
- Crimp connection rated to 160 psi at 73°F (23°C)
- Size: 1/2" – 1"



LFBRVPM1  
PEX x PEX x  
Compression



LFBRVTM1  
THD x THD x  
Compression



LFBRVM1  
S x S x BARB



LFBRVM1PxTxP  
PEX x THD x PEX

## Series LFBRVM1

Series LFBRVM1 Combination Ball Valve and Relief Valve are an easy to install two-in-one device designed to provide both a means to shut off the water supply to the water heater and to provide protection against excess water pressure caused by thermal expansion. It features Lead Free\* construction to comply with Lead Free\* installation requirements.

- Easy Installation – Installs in any position
- Low profile design
- Full port ball valve with virgin PTFE seats
- Blowout-proof stem
- Size: 3/4"

## Models

INLET	OUTLET	RELIEF OUTLET	RELIEF PRESSURE
Sweat	Sweat	PEX	80
Sweat	Sweat	Compression	125
Sweat	Sweat	Barb	125
Thread	Thread	Compression	80 or 125
Thread	Thread	Barb	125
PEX	PEX	Compression	125
PEX	PEX	PEX	125
PEX	PEX	Barb	125



Series BF-03-M2  
Full Lug



Series BF-04-M2  
Wafer

## Series BF-03-M2 Full Lug, BF-04-M2 Wafer

Series BF butterfly valves are designed and manufactured for use with ANSI 125 or 150 Class flanges and comply with API 609 and MSS-SP 67 standards to meet the stringent requirements of HVAC, irrigation, OEM, commercial, institutional, and industrial applications.

- 200 psi (13.8 bar) pressure rating for 2" – 12", and 150 psi (10.3 bar) pressure rating for 14" – 24"
- Standard ductile iron body; options include aluminum bronze and 316 stainless steel discs and 416 stainless steel or 316 stainless steel shaft
- Phenolic-backed seat 2"– 12", or aluminum-backed seat 14" – 24" that prevents the seat from collapsing or dislodging
- Size: 2" – 24" in wafer or lug body design

## Series 405-NRS-RW

Series 405-NRS-RW Non-Rising Stem Resilient Wedge Gate Valves are available in sizes 2" to 12" flanged by flanged and 2½" to 10" flanged by grooved configurations. The valve body is epoxy coated internally and externally. The valve is operated by a handwheel or an operating nut and valve key. The resilient wedge disc design offers both positive seating and resistance against high differential pressure. Series 405-NRS-RW is best suited for service in either the fully open or closed position but is suitable for use as a throttling valve. This series is recommended for irrigation, potable water, water distribution service, feed lines, and sewage disposal facilities.

- ASTM A126 Class B Iron (flanged x flanged)
- ASTM A536 65-45-12 Ductile Iron (flanged x groove)
- Full port flow, low head loss
- Epoxy coated, internal and external
- Vulcanized encapsulated resilient wedge
- In-line serviceable
- Boss-tapped and plugged
- Size: 2" – 12" (epoxy coated)



405-NRS-RW

## Series 408-OSYRW

Series 408-OSYRW Outside Stem and Yoke Resilient Wedge Flanged Gate Valves are fusion bonded powder coated cast iron and operated by a handwheel. The resilient wedge disc design offers positive seating and resistance against high differential pressure. Series 408-OSYRW is best suited for service in either the fully open or closed position. It is also suitable for use as a throttling valve. This series is recommended for fire main shutoff and distribution service. The 408-OSYRW features Lead Free\* construction to comply with Lead Free\* installation requirements.

- ASTM A126 Class B Cast Iron
- Full port flow, low head loss
- Fusion bonded coating, internal and external
- Encapsulated resilient wedge
- Easy in-line service
- Replaceable disc
- Boss tapped and plugged
- MSS-SP-70 conformance
- Size: 2½" – 12" (epoxy coated)



405-OSY-RW

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

## Watts Family of Brands

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