

WATTS

009/ 009M1/ 009 M2/ 009 M3

LF009

SIZE

1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3"

DESCRIPTION

This is a reduced pressure assembly. Production began in 1989. All versions in the 1/2"-2" sizes utilize a bronze body design. In 2010 the LF model was introduced which utilizes a lead free bronze body design. The check modules and relief stem assembly can be removed from the top through a single cover. The checks are a modular in-line design and are held in the body by a retainer. All seats are replaceable. Check springs are contained when the modules are removed from the body. Spring tension had to be released to perform a proper repair. There is spring tension exerted on the cover from the relief valve spring. There have been several modifications over the years but all versions utilize a similar construction. Be sure which version and size you have because repair parts are different. The 009 was the original model that was produced from 1989-1991. It was modified in 1991 to the 009 M1 model in sizes 1 1/4"-2" which was produced from 1991-1992. In the 009 M1 model there was a change in the check seat dimensions. The 009 M2 design began in 1992. The major difference in the M2 design was the downsizing of the body and the internal repair parts. Relief valve sensing line is internal on all models. Internal check hardware is mostly plastic. The 1/2" model 009 was introduced in 1992. The 3/4" 009M3 began in 1998. A model U009 was developed in sizes 1/2"-2". This unit incorporates a union end into the body. The U009A utilizes the same union with a 90 degree elbow for an up and down piping orientation. The model 009 PC is a polymer coated bronze assembly available in sizes 3/4"-2". The model SS 009 is available in 1/4"-1" sizes and is similar to the 009 except the body is made of stainless steel instead of bronze. The 2 1/2"-3" have the same features as the smaller 009 except the body is made of fused epoxy coated cast iron. The relief valve sensing line is external on 2 1/2"-3". The internal check and RV hardware are mostly bronze. In 2010 a LF model was introduced in sizes 2 1/2"-3" which replaced the leaded bronze parts with plastic and stainless steel to make it a lead free assembly.

BASIC REPAIR KIT

The repair kit contains all disc holders or discs, diaphragms, and O-rings

<u>SIZE</u>	<u>KIT NO</u>				<u>AIR GAP</u>
	<u>009</u>	<u>009M1</u>	<u>009M2</u>	<u>009M3</u>	<u>DRAIN</u>
1/4"-1/2"	009-RT050	N/A	N/A	N/A	AGA
3/4"	009-RT075	N/A	009M2-RT075	009M3-RT075	AGC or A
1"	009-RT075	N/A	009M2-RT100	N/A	AGC
1 1/4"	009-RT125	009M1-RT125	009M2-RT125	N/A	AGF
1 1/2"	009-RT125	009M1-RT125	009M2-RT125	N/A	AGF
2"	009-RT125	009M1-RT125	009M2-RT200	N/A	AGF
2 1/2"	LF009-RT250	N/A	N/A	N/A	AGF
3"	LF009-RT250	N/A	N/A	N/A	AGF

IMPORTANT FEATURES

- ~1/2"-2" bronze body
- ~2 1/2"-3" fused epoxy cast iron body
- ~Replaceable seats
- ~Spring tension when cover is removed
- ~Contained check springs
- ~Factory repair information enclosed



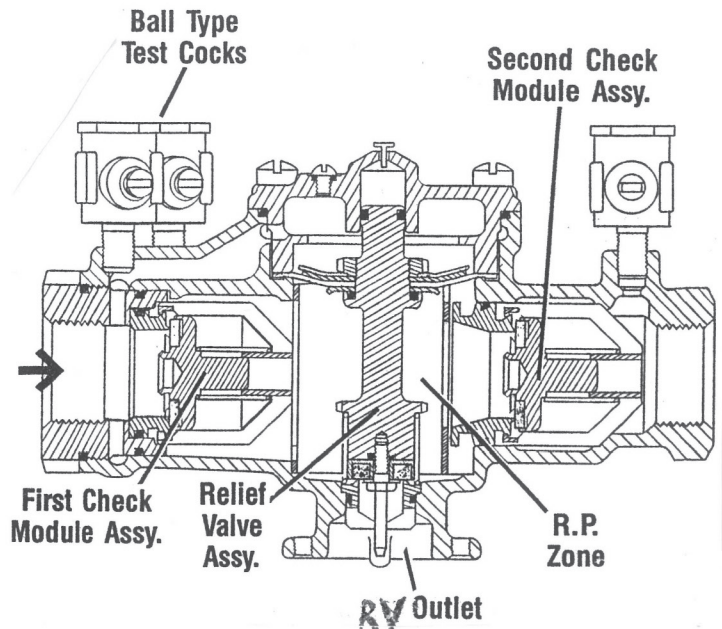
Series 009QT

REDUCED PRESSURE ZONE BACKFLOW PREVENTER

Sizes: 1/2" - 2"

The Watts Series 009QT Reduced Pressure Zone Backflow Preventers are designed to provide protection of the potable water supply in accordance with national plumbing codes and water utility authority requirements. This series can be utilized in a variety of installations, including high hazard cross connections in piping systems or for containment at the service line entrance.

This series features two in-line, independent check valves, captured springs and replaceable check seats with an intermediate relief valve. A compact modular design concept facilitates easy maintenance and assembly access. All sizes are constructed with NPT body connections and standardly furnished with ball type test cocks. Series 009QT has quarter turn, full port, resilient seated, bronze ball valve shut-offs. 1/2", 3/4" and 1" shutoffs have tee handles.



FEATURES

- Single access cover and modular check construction for ease of maintenance
- Top entry - all internals immediately accessible
- Captured springs for safe maintenance
- Internal relief valve for right and left hand installations
- Replaceable seats for economical repair
- Bronze body construction for durability
- Ball valve test cocks - screwdriver slotted
- Large body passages provides low pressure drop
- Compact, space saving design
- No special tools required for servicing

MATERIALS

Bronze body construction, silicone rubber for drip tight disc material in the first and second check plus the relief valve. Replaceable polymer check seats for first and second checks. Removable stainless steel relief valve seat. Stainless steel cover bolts. Standardly furnished with NPT body connections. For optional bronze union inlet and outlet connections, specify prefix U (3/4" - 2"). Series 009QT furnished with quarter turn, full port, resilient seated, bronze ball valve shutoffs.

PRESSURE-TEMPERATURE

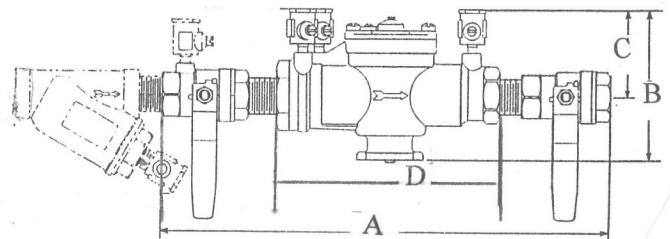
Series 009QT is suitable for supply pressure up to 175 PSI and water temperatures up to 140°F constant and 180°F intermittent.

STANDARDS

USC Manual 8th Edition†

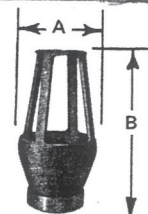
Tested and certified under the following standards for reduced pressure zone backflow preventers: ASSE No. 1013; AWWA C511-89; CSA B64.4; IAPMO Listed, File No. 1563.

† Does not indicate approval status. See below for approved models.

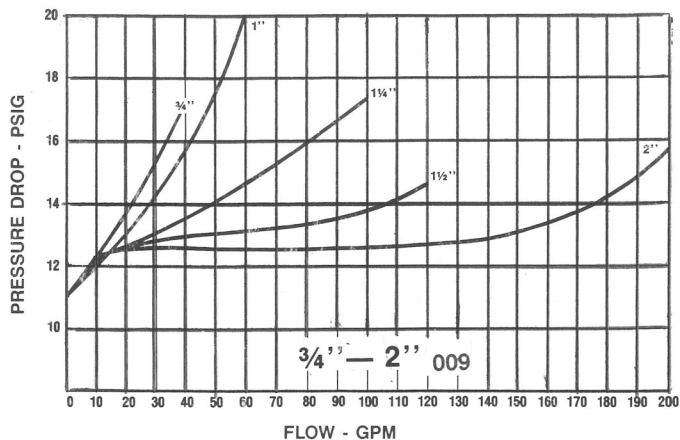


Size	Model	A	B	C	D	Weight lbs
1/4"	009	10"	4 5/8"	3 3/8"	5 1/2"	4.5
3/8"	009	10"	4 5/8"	3 3/8"	5 1/2"	4.5
1/2"	009	10"	4 5/8"	3 3/8"	5 1/2"	4.5
3/4"	009	14 3/4"	5 1/2"	3 1/8"	9 1/2"	11.0
3/4"	009M2	10 3/4"	5"	3 1/2"	6 3/4"	5.75
3/4"	009M3	10 3/4"	5"	3 1/2"	6 3/4"	5.75
1"	009	14 1/2"	5 1/2"	3 1/8"	9 1/2"	12.25
1"	009M2	14 1/2"	5 1/2"	3"	9 1/2"	12.25
1 1/4"	009	21 1/8"	7 3/4"	4 1/4"	-	28.12
1 1/4"	009M1	22 1/8"	7 3/4"	4 1/4"	-	26.5
1 1/4"	009M2	17 3/8"	6"	3 1/2"	11 3/8"	14.62
1 1/2"	009	22"	7 3/4"	4 1/4"	-	30.25
1 1/2"	009M1	20 1/4"	7 3/4"	4 1/4"	-	28.25
1 1/2"	009M2	17 7/8"	6"	3 1/2"	11 3/8"	16.32
2"	009	23 3/4"	7 3/4"	4 1/4"	-	34.25
2"	009M1	21 3/8"	7 3/4"	4 1/4"	-	32.25
2"	009M2	21 3/8"	7 3/4"	4 1/2"	13 1/2"	30.00

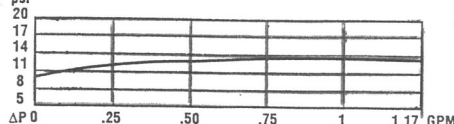
AIR GAPS



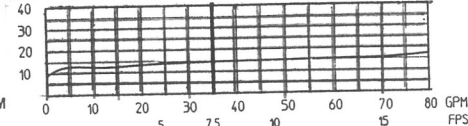
Part No	Model	Drain Size	A	B	wt lbs
AGA	1/4-1/2" 009 3/4" 009M2/M3	1/2"	2 3/8"	3 1/8"	5/8
AGC	3/4 - 1" 009 1 1/4-1 1/2" 009M2	1"	3 1/4"	4 7/8"	1 1/2
AGF	1 1/4 - 3" 009 1 1/4-2" 009M1 2" 009M2	2"	4 3/8"	8"	3 1/4



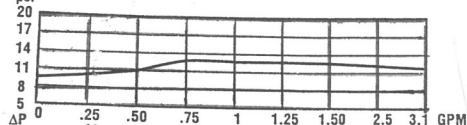
1/4" (6mm) 009QT



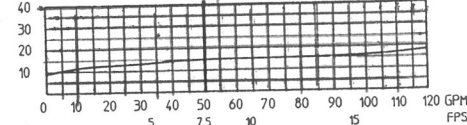
1 1/4" 009M1QT



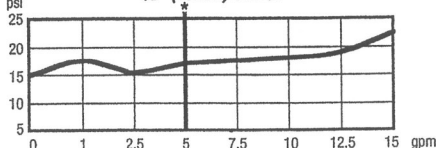
3/8" (9mm) 009QT



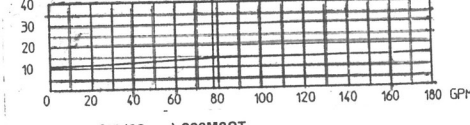
1 1/2" 009M1QT



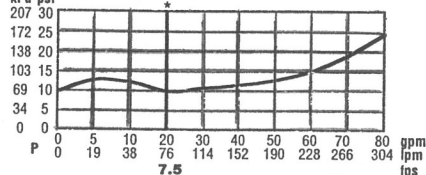
1/2" (15mm) 009QT



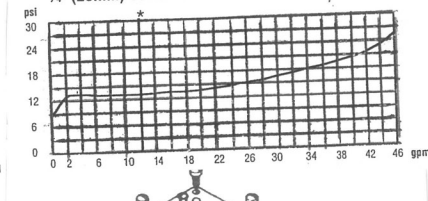
2" 009M1QT



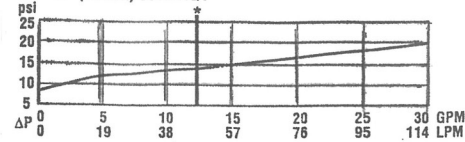
1" (25mm) 009M2QT



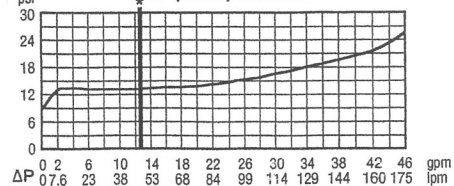
3/4" (20mm) 009M3QT



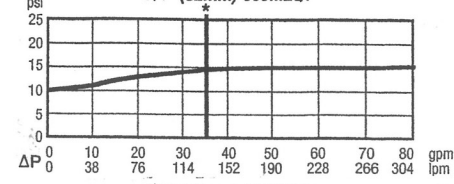
3/4" (19mm) 009M2QT



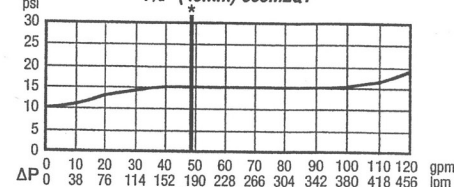
3/4" (20mm) 009M3QT



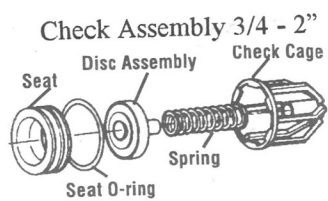
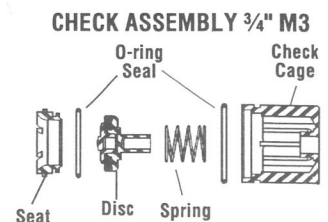
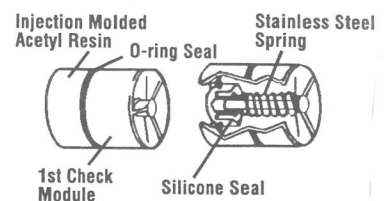
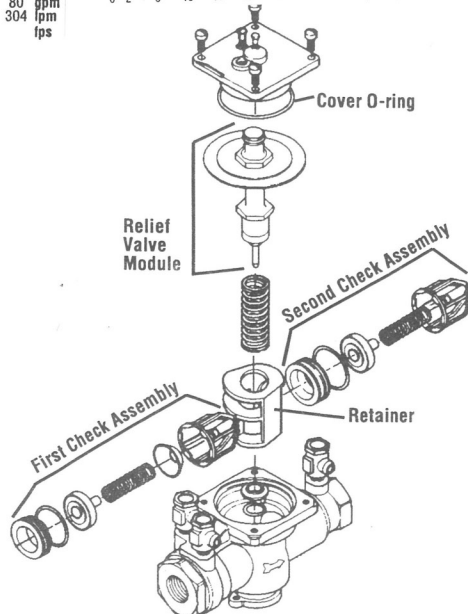
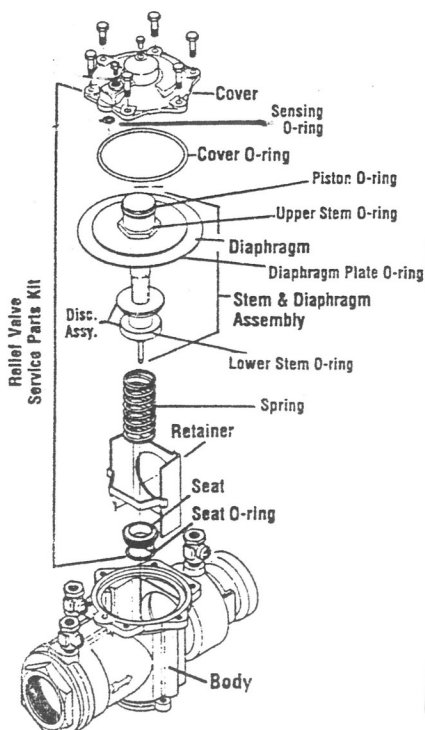
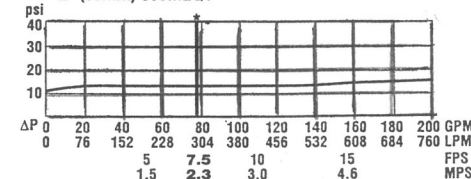
1 1/4" (32mm) 009M2QT



1 1/2" (40mm) 009M2QT



2" (50mm) 009M2QT



Series 009 2½" - 3"

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER

The Watts 009 Series Reduced Pressure Principle Backflow Preventers are designed to provide protection of the safe drinking water supply in accordance with national plumbing codes and containment control water utility authority requirements. This series can be utilized in a variety of installations, including high hazard cross-connections in plumbing systems or for containment at the service line entrance. Furnished with non-rising stem (NRS) gate valve shut-offs.

FEATURES

- Body construction fused epoxy coated cast iron
- Removeable bronze seats
- Stainless steel internal parts
- Maximum flow at low pressure drop
- Compact for economy combined with performance
- Design simplicity for easy maintenance

OPTIONS

(Options can be combined)

Suffix

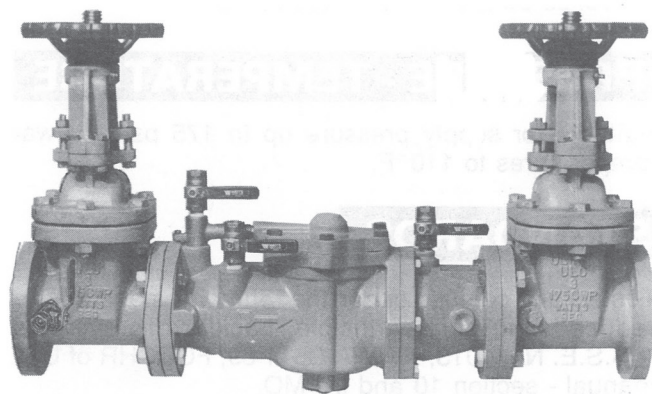
- S - with strainer, FDA approved epoxy coating.
- OSY - with OS&Y gate valve shut-offs.
- QT - with quarter-turn, full port, resilient seated, ball valve shut-offs.
- QT-FDA - for FDA epoxy coated ball valve shut-offs.
- RW - with resilient wedge epoxy coated shut-off valves.
- LF - without shut-off valves.

NOTE: The installation of a drain line is recommended. When installing a drain line, an air gap is necessary. (See 909AG back page.)

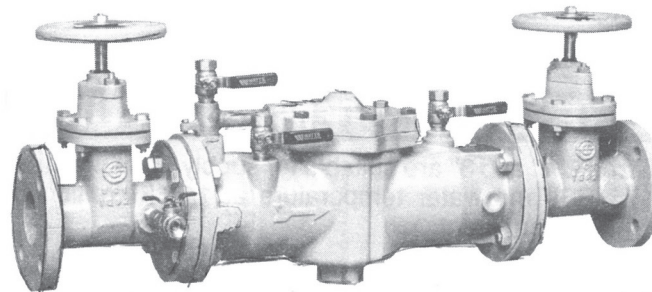
SPECIFICATIONS

For Reduced Pressure Principle Backflow Preventers

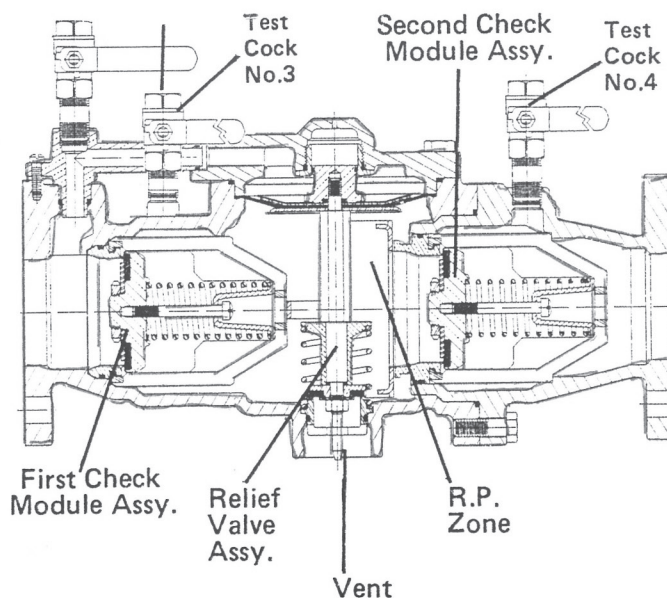
A reduced pressure principle backflow preventer shall be installed at each cross connection to prevent back-siphonage and backpressure backflow of hazardous materials into the safe drinking water supply. The assembly shall consist of a pressure differential relief valve located in a zone between two positive seating check valves. The assembly shall include two tightly closing shut-off valves before and after the device and test cocks. All servicing shall be through a single access cover on the top of the valve. The device shall meet the requirements of A.S.S.E. Std. 1013; AWWA Std. C506. Watts Regulator Company Series 009 or equivalent.



No. 009-OSY (3") shown



• Unibody No. 009-

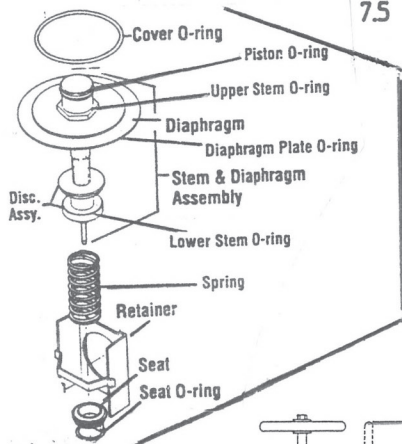
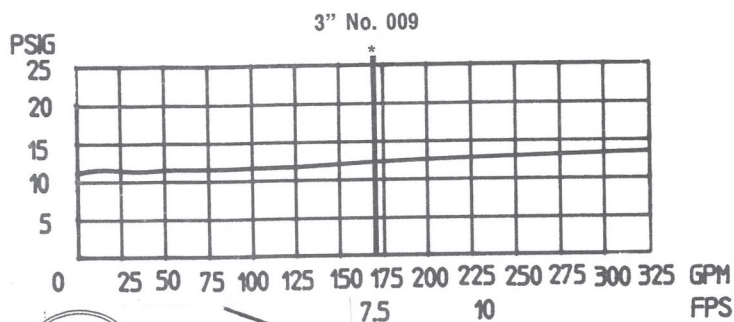
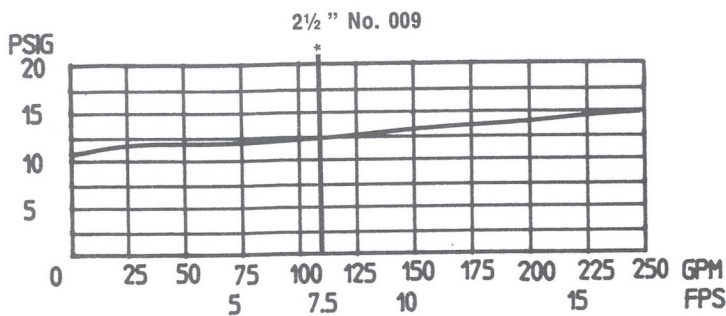


MATERIALS

- (FDA approved) Epoxy coated cast iron unibody with bronze seats
- Relief valve with stainless steel seat and trim
- Bronze body ball valve test cocks.

PRESSURE - TEMPERATURE

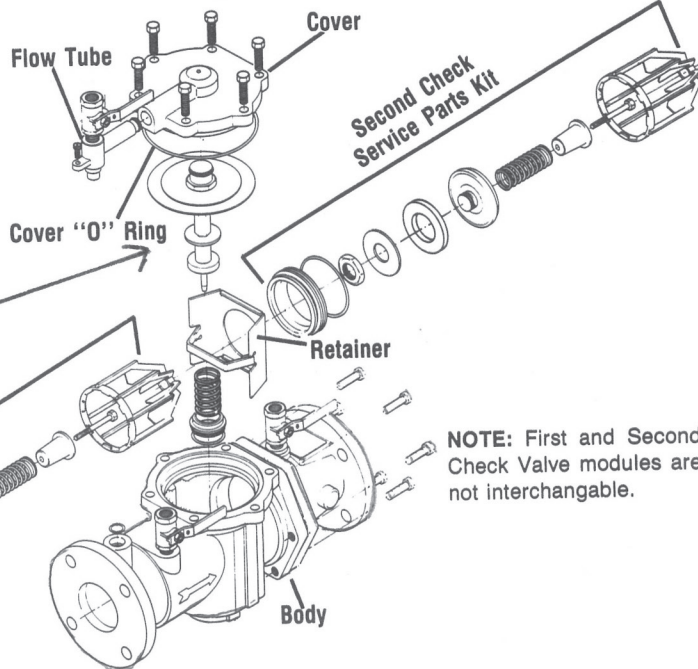
Sizes 2½" and 3" are suitable for supply pressures up to 175 PSI and water temperature at 110°F continuous, 140°F intermittent.



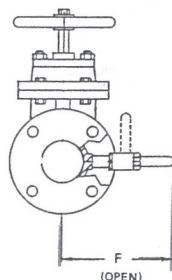
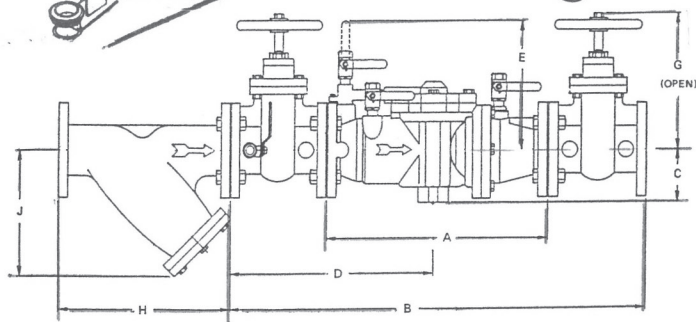
Relief Valve
Service Parts Kit

First Check
Service Parts Kit

Second Check
Service Parts Kit



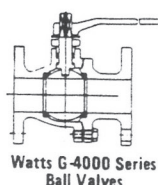
NOTE: First and Second
Check Valve modules are
not interchangeable.



STRAINER SIZE	H	J	WGT.(lbs.)
2½"	9¾	9¾	28
3"	10	10	34

No. 009 Dimensions in inches (Wgt. in lbs.)

SIZE	TYPE	A	B	C	D	E	F	G	WGT.(lbs.)
2½"	009-LF	18 1/8		4 1/2		10 5/8			82
	009-OSY	18 1/8	33 1/4	4 1/2	16 3/8	10 5/8	7 1/4	15 7/8	166
	009-NRS	18 1/8	33 1/4	4 1/2	16 3/8	10 5/8	7 1/4	11 3/8	163
3"	009-LF	18 1/8		4 1/2		10 5/8			82
	009-OSY	18 1/8	34 1/4	4 1/2	16 5/8	10 5/8	8 1/4	18 1/2	198
	009-NRS	18 1/8	34 1/4	4 1/2	16 5/8	10 5/8	8 1/4	12 1/4	193
2½"	009-QT	18 1/8	33 1/4	4 1/2	16 3/8	10 5/8	7 1/4	6	150
3"	009-QT	18 1/8	34 1/4	4 1/2	16 5/8	10 5/8	8 1/4	7	158



QT

Iron Body No.	Desc.	For No. 009 Sizes	Drain Outlet Size	Dimensions A B	Weight
AG-F	Air Gap	2½" thru 3"	2"	4 3/8" 6 3/4"	3 1/4 lbs.

No. 909AG Series AIR GAPS

When installing a drain line use 909AG series
Air Gaps on No. 009 backflow preventers.

