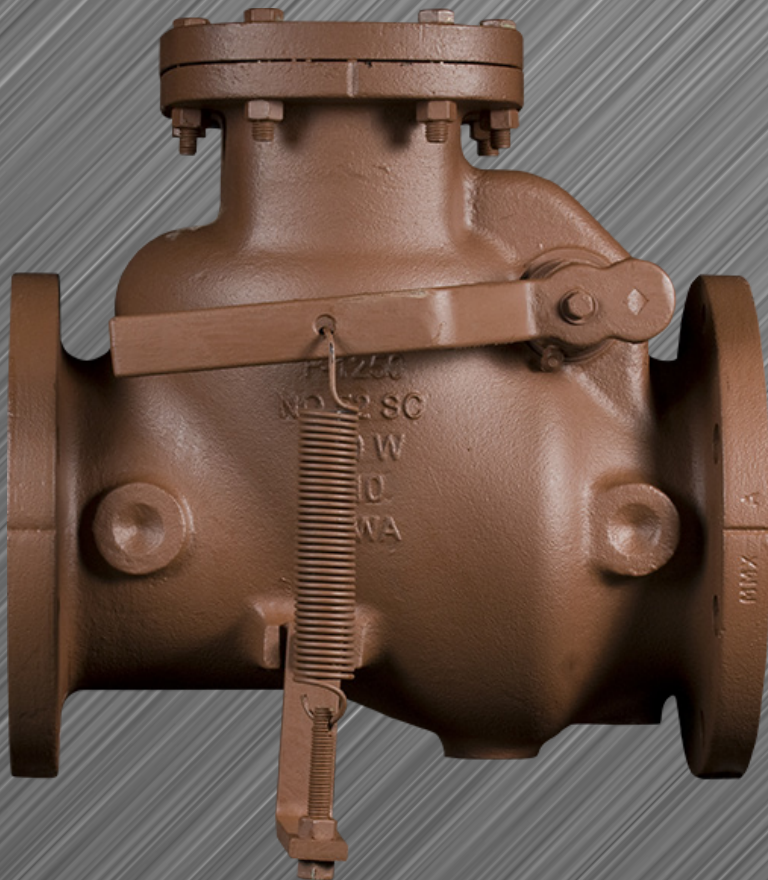
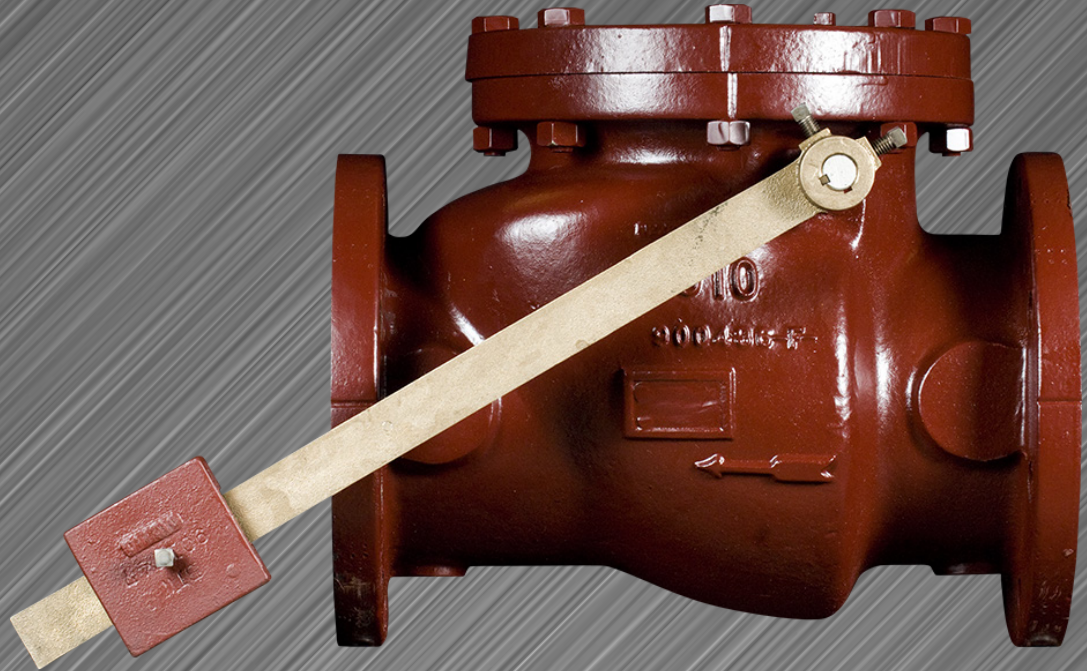


**SERIES 52-SC & SERIES 600 SWING CHECK VALVES
BY AMERICAN FLOW CONTROL®**



AMERICAN®
FLOW CONTROL
THE RIGHT WAY

SERIES 52-SC FEATURES/BENEFITS

BODIES AND BONNETS

Valve bodies and bonnets are made of gray iron. Generous clearances are provided between the disc circumference and body, as well as the clapper hub and body, which help prevent binding. Internal contours are specifically designed to provide a smooth flow passage and help reduce head loss through the valve. The entire clapper arm and disc assembly are easily removed through the bonnet opening while the valve is installed in the line.

DISCS

Discs on check valves 4" and larger are made of gray iron with bronze disc rings securely fastened into grooves machined in the disc. The connection between the disc and clapper arm is designed with sufficient clearance to allow the disc to adjust to the seat.

CLAPPER ARMS

The clapper arms are made of ductile iron. The clapper arm shaft hole and disc stud hole are bushed for wear and corrosion resistance.

CLAPPER ARM SHAFTS

Clapper arm shafts are made of high tensile strength, corrosion-resistant stainless steel.

RETAINING PLUGS

Clapper arm shafts are retained and located in retaining plugs made of bronze. These plugs act as bearings for the clapper arm shaft. The plug design incorporates straight threading, gasketing, and a hexagon hold to allow easy removal in the field for disassembly of internal parts from the valve.

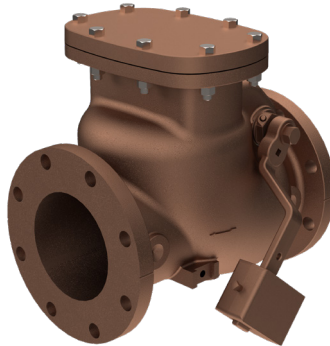
AMERICAN Flow Control Series 52-SC Swing Check Valves have these additional features:

- Compliance with ANSI/AWWA C508
- Certified to NSF/ANSI/CAN 372
- Full Diameter Waterway
- Optional Fusion-Bonded Epoxy Coating Inside and Out
- Optional Rubber Faced Disc

AVAILABLE CONFIGURATIONS



Standard



Lever & Weight



Lever & Spring

SAMPLE SPECIFICATION

Swing check valves shall be manufactured from gray iron meeting or exceeding ASTM A126 Grade B. Valves are to comply with ANSI/AWWA C508, latest revision. The rated working pressure of check valves 3"-12" shall be 200 psig with a test pressure of 400 psig. The rated working pressure of check valves larger than 12" shall be 150 psig with a test pressure of 300 psig. Valves shall be designed to permit a clear waterway opening for utilization of pipeline cleaning apparatus. Clapper arm shall be made of ductile iron conforming to ASTM A536. The disc shall not contact the body when the valve is in the full open position.

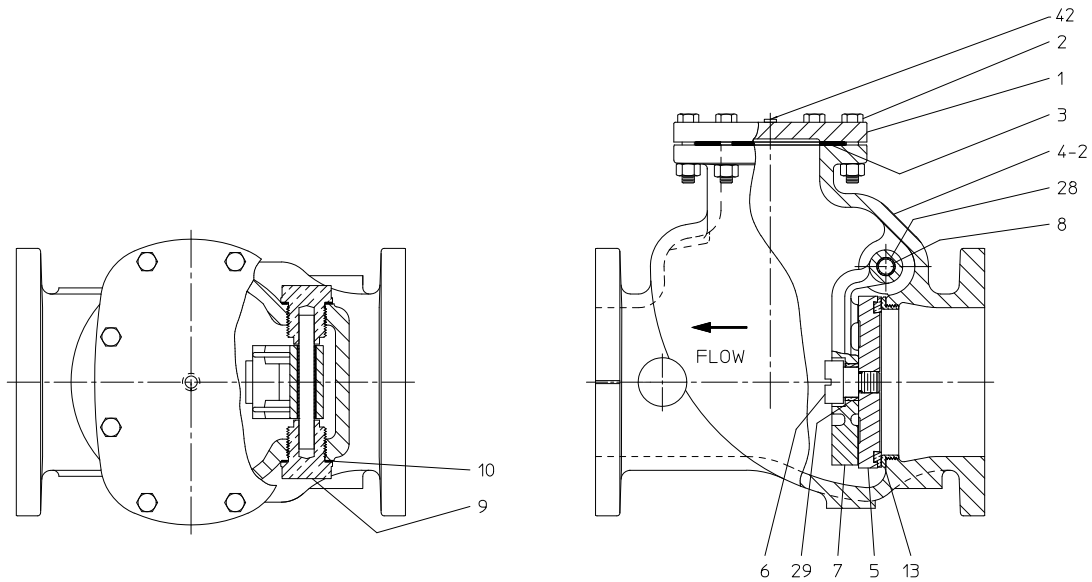
Check valve shafts are to be stainless steel with corrosion-resistant bearings provided at each end. Shaft and bearings are to be completely replaceable, if necessary, with valve remaining

in the pipeline. If the valve shaft is extended outside the body, a double-O-ring seal fully contained within the shaft bearing shall be provided. There shall be a grease fitting for lubrication between the O-rings to help prevent foreign matter from reaching bearing surfaces. Different lever orientation shall be possible in the field in increments of 45 degrees without shaft modifications or extra drilling.

Check valve seating surfaces shall be bronze. Valve design shall be such that the valve remains in the closed position when installed in a horizontal pipeline under no-flow condition.

Check valves to have all internal ferrous surfaces coated with an NSF 61 Certified coating. Valves to be **Series 52-SC Swing Check Valves by AMERICAN Flow Control®**.

52-SC STANDARD PARTS LIST



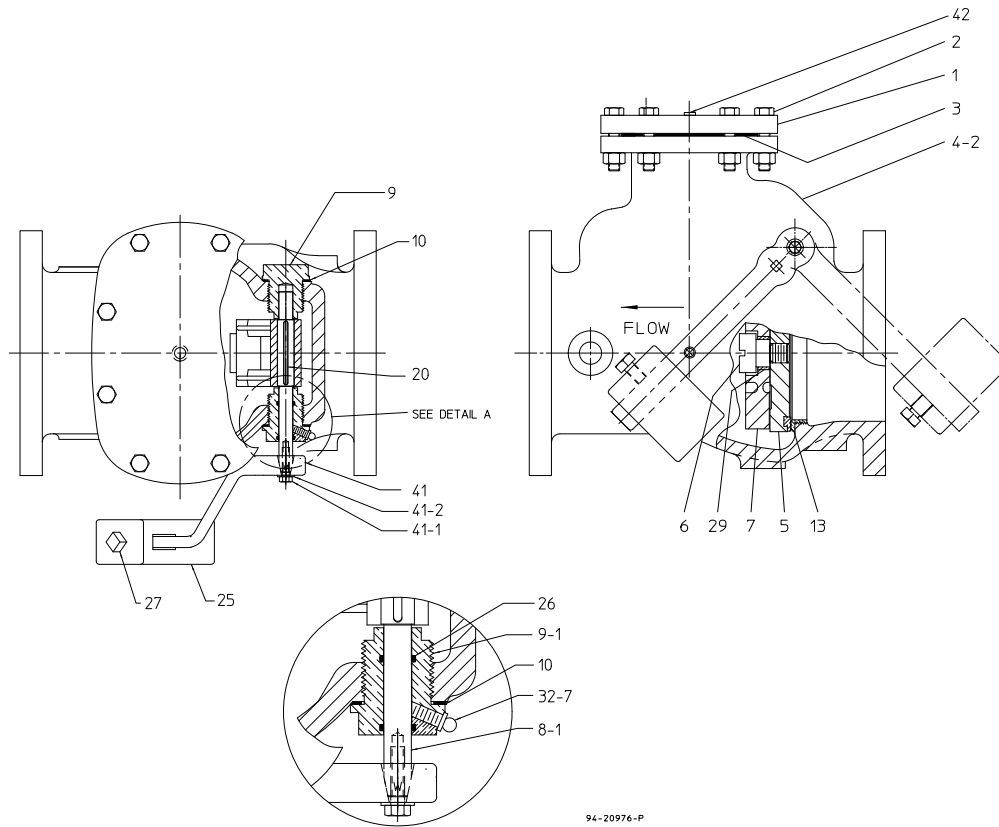
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Ref. No.	Description	Material	Quantity
1	Bonnet	Gray Iron (See Note 4)	1
2	Bonnet Bolt & Nut	Stainless Steel	Varies
3	Bonnet Gasket	Composition Rubber	1
4-2	Flanged End Case	Gray Iron (See Note 4)	1
5	Disc	See Note 5	1
6	Disc Stud	Bronze	1
7	Clapper Arm	Ductile Iron	1
8	Clapper Arm Shaft	Stainless Steel	1
9	Retainer Plug	Bronze	2
10	Retainer Plug Gasket	Composition Rubber	2
13	Seat Ring	Bronze	1
28	Shaft Bushing	Bronze (See Note 6)	1
29	Disc Stud Bushing	Bronze	1

NOTES:

1. Construction, materials and testing comply with ANSI/AWWA C508.
2. Bolt patterns of Class 125 flanged ends are in accordance with ANSI/AWWA C110/A21.10 (ASME B16.1 Class 125).
3. Valves have manufacturer's name, pressure class and year of manufacture cast on side of case.
4. All gray iron is ASTM A126 Class B.
5. Discs on 3" are bronze, 4" and above are gray iron with bronze face disc that has lug on O.D. to prevent rotation.
6. Shaft bushings for valves 3"-10" are bronze, 12"-16" are nylon with molybdenum disulphide uniformly dispersed.

52-SC LEVER & WEIGHT PARTS LIST



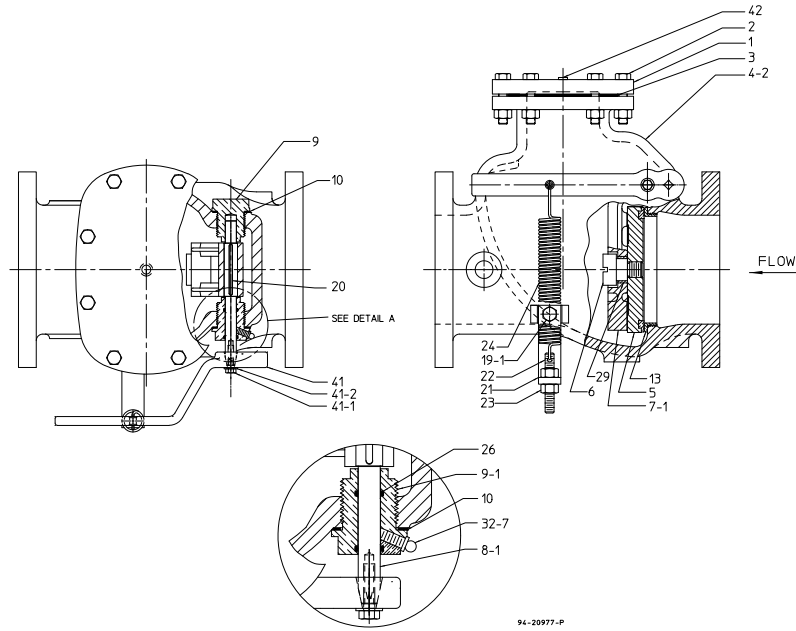
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Ref. No.	Description	Material	Qty.
1	Bonnet	Gray Iron	1
2	Bonnet Bolt & Nut	Stainless Steel	Varies
3	Bonnet Gasket	Composition Rubber	1
4-2	Flanged Ends Case	Gray Iron	1
5	Disc	(See Note 6)	1
6	Disc Stud	Bronze	1
7-1	Clapper Arm for Lever	Ductile Iron	1
8-1	Clapper Arm Shaft Assembly	Stainless Steel (See Note 5)	1
9	Retainer Plug	Bronze	1
9-1	Retainer Plug for Lever	Bronze	1
10	Retainer Plug Gasket	Composition Rubber	2
13	Seat Ring	Bronze	1
20	Shaft Key	Stainless Steel	1
25	Weight for Lever	Gray Iron	1
26	O-ring	Rubber	2
27	Weight Set Screw	Steel	1
29	Disc Stud Bushing	Bronze	1
32-7	Grease Fitting	Steel	1
41	Lever	Ductile Iron	1
41-1	Lever Bolt	Stainless Steel	1
41-2	Lever Washer	Stainless Steel	1

Notes:

- Construction, materials and testing comply with ANSI/AWWA C508.
- Bolt patterns of Class 125 flanged ends are in accordance with ANSI/AWWA C110/A21.10 (ASME B16.1 Class 125).
- Valves have manufacturer's name, pressure class and year of manufacture cast on side of case.
- All gray iron is ASTM A126 Class B.
- Clapper arm shaft is stainless steel. Assembly includes lever, key, lever bolt and lever washer.
- Discs on 3" are bronze; 4" and above are gray iron with bronze face disc. Disc has lug on O.D. to prevent rotation.
- Lever is furnished on side and position shown unless otherwise specified for lever and weight. Lever shown by dot and dash lines is the position furnished when valve is to be installed in a vertical line with upward flow for lever and weight.

52-SC LEVER & SPRING PARTS LIST



Ref. No.	Description	Material	Qty.
1	Bonnet	Gray Iron	1
2	Bonnet Bolt & Nut	Stainless Steel	Varies
3	Bonnet Gasket	Composition Rubber	1
4-2	Flanged Ends Case	Gray Iron	1
5	Disc	(See Note 6)	1
6	Disc Stud	Bronze	1
7-1	Clapper Arm for Lever	Ductile Iron	1
8-1	Clapper Arm Shaft Assembly	Stainless Steel (See Note 5)	1
9	Retainer Plug	Bronze	1
9-1	Retainer Plug for Lever	Bronze	1
10	Retainer Plug Gasket	Composition Rubber	2
13	Seat Ring	Bronze	1
19-1	Bracket Cap Screw	Steel	1
20	Shaft Key	Stainless Steel	1
21	Spring Bracket	Steel	1
22	Spring Link	Plated Steel	1
23	Link Nut	Plated Steel	2
24	Spring for Lever	Steel	1
26	O-ring	Rubber	2
29	Disc Stud Bushing	Bronze	1
32-7	Grease Fitting	Steel	1
41	Lever	Ductile Iron	1
41-1	Lever Bolt	Stainless Steel	1
41-2	Lever Washer	Stainless Steel	1

Notes:

- Construction, materials and testing comply with ANSI/AWWA C508.
- Bolt patterns of Class 125 flanged ends are in accordance with ANSI/AWWA C110/A21.10 (ASME B16.1 Class 125).
- Valves have manufacturer's name, pressure class and year of manufacture cast on side of case.
- All gray iron is ASTM A126 Class B.
- Clapper arm shaft is stainless steel. Assembly includes lever, key, lever bolt and lever washer.
- Discs on 3" are bronze; 4" and above are gray iron with bronze face disc. Disc has lug on O.D. to prevent rotation.
- Lever is furnished on side and position shown unless otherwise specified for lever and spring.

SERIES 600 FEATURES/BENEFITS

RESILIENT SEATED DISC

The disc is constructed of high-strength bronze with a rubber seal recessed into the disc to assure a positive seal even under low pressure.

Series 600 Swing Check Valves are available in sizes 3" -12" and are available with lever and spring or lever and weight for applications where rapid flow reversals may be encountered.

CORROSION RESISTANT

The clapper arm is made of high-strength bronze. The check valve disc and clapper arm assembly use corrosion-resistant bearings, bushings, and washers to help reduce wear and help increase operating life.

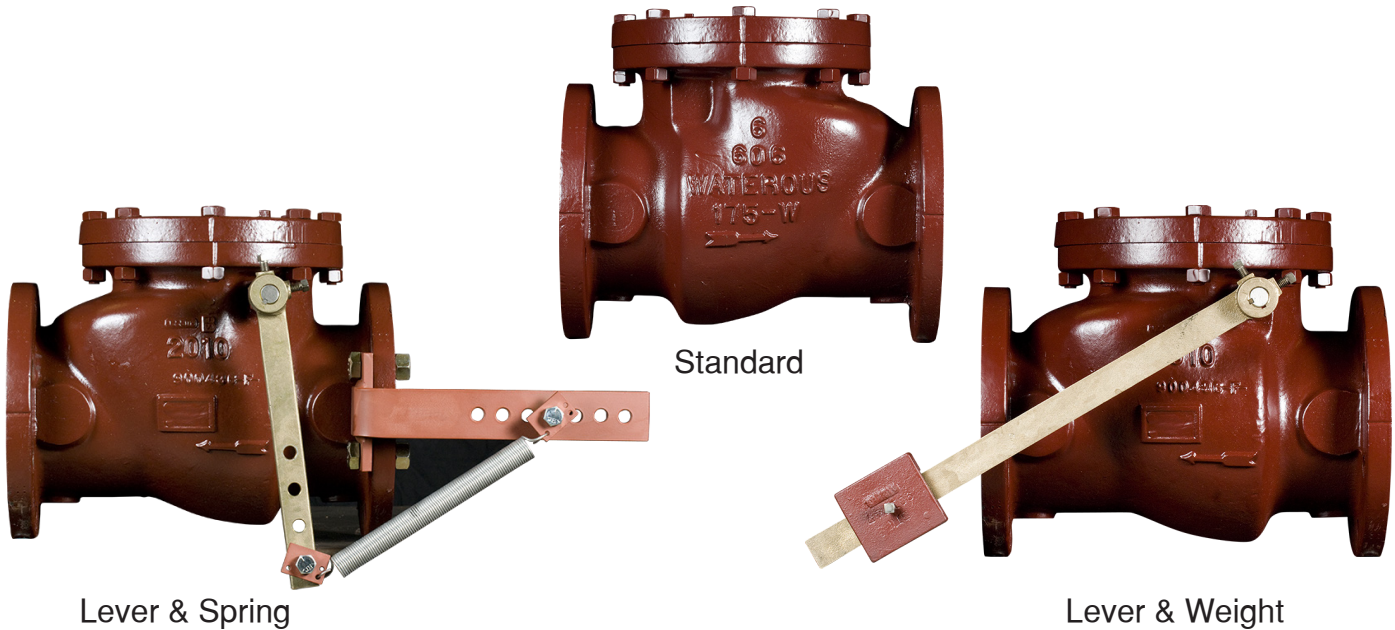
FULL WATERWAY

The check valves are designed to provide a "Full Waterway" per MSS SP-71, Type I.

AMERICAN Flow Control Waterous Series 600 Swing Check Valves have these additional features:

- Comply with ANSI/AWWA C508
- Certified to NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372
- Stainless Steel Clapper Arm Shaft
- Bronze Clapper Arm
- Stainless Steel Body to Bonnet Bolting
- Available with UL Listing
- Fusion-Bonded Epoxy Coated

AVAILABLE CONFIGURATIONS



SAMPLE SPECIFICATION

Swing Check Valves shall be AMERICAN Flow Control Series 600. Check valves shall be manufactured from gray iron meeting or exceeding ASTM A126, Grade B.

Check valves shall comply with ANSI/AWWA C508, latest revision, be UL Listed and include the following features:

Check valves shall be designed with full waterway opening per Type I of MSS SP-71.

Check valve disc and clapper arm assembly shall be removable from the check valve body without having to remove the check valve from the pipeline.

All body to bonnet fasteners shall be Type 304 Stainless Steel. Disassembly of valve internals shall require no special tools other than standard socket wrenches.

Check valve disc and clapper arm assembly shall be assembled using corrosion-resistant bearings, bushings and washers to help reduce wear and help increase service life.

Clapper arm shall be constructed of high-strength bronze.

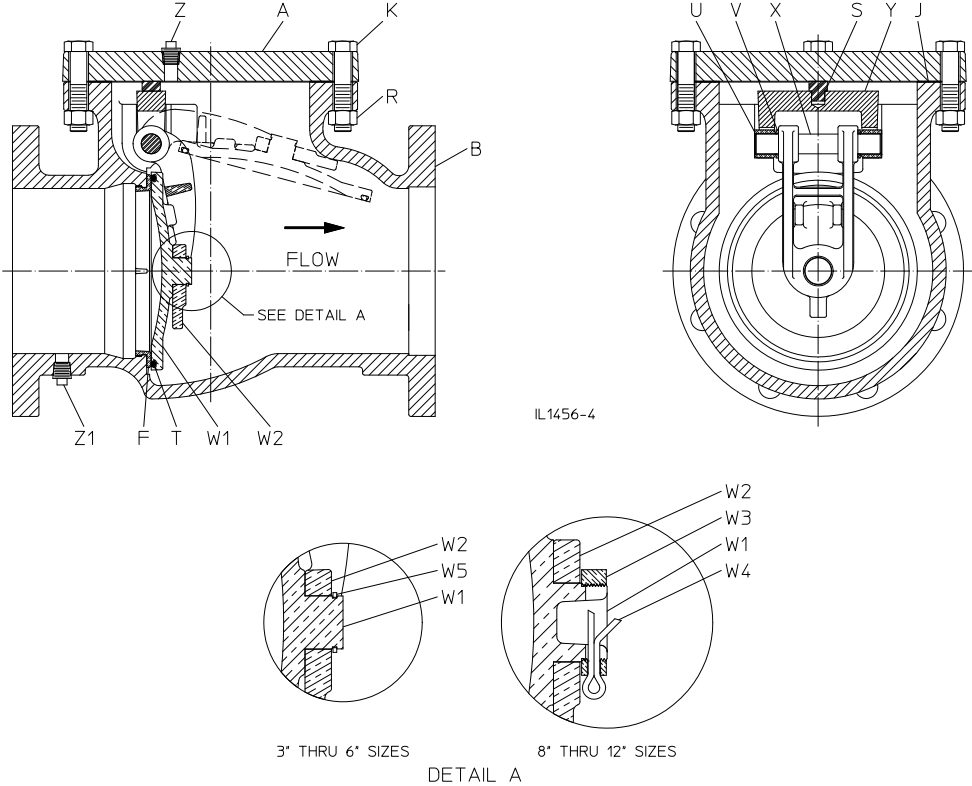
Clapper arm shaft shall be stainless steel.

Disc shall be constructed of bronze with a rubber seal recessed into the disc face to provide a positive seal against the mating bronze body seat ring.

Check valves can be furnished with outside lever and weight or spring.

All internal and external ferrous cast surfaces of the valve body shall have an epoxy coating.

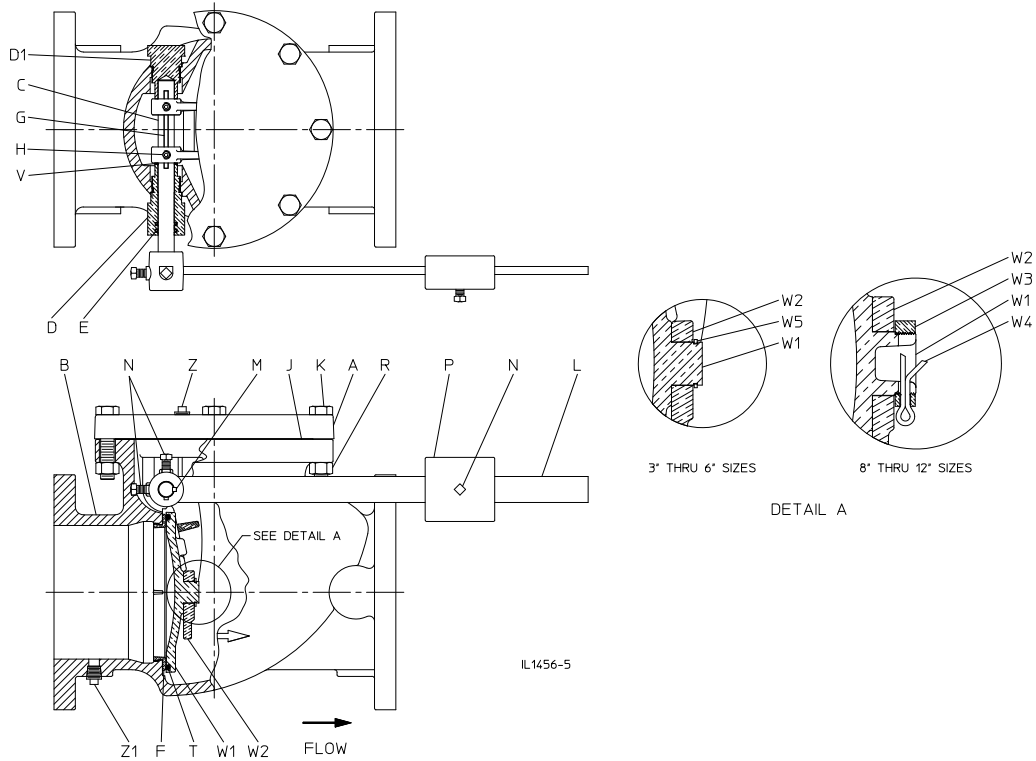
600 STANDARD PARTS LIST



Ref.	Description	Material
A	Cover	Gray Iron
B	Valve Body	Gray Iron
F	Body Seat Ring	Bronze
J	Cover Gasket	Synthetic Fiber with Elastomeric Rubber
K	Hex Head Bolt	Stainless Steel
R	Hex Nut	Stainless Steel
S	Bumper	Rubber
T	O-ring	Rubber
U	Bushing	Brass
V	Shim Washer	Brass
W1	Disc	Bronze
W2	Arm	Bronze
W3	Locknut	Bronze
W4	Cotter Pin	Stainless Steel
W5	Snap Ring	Stainless Steel
X	Shaft	Stainless Steel
Y	Yoke	Gray Iron
Z	Pipe Plug	Stainless Steel
Z1	Pipe Plug	Bronze

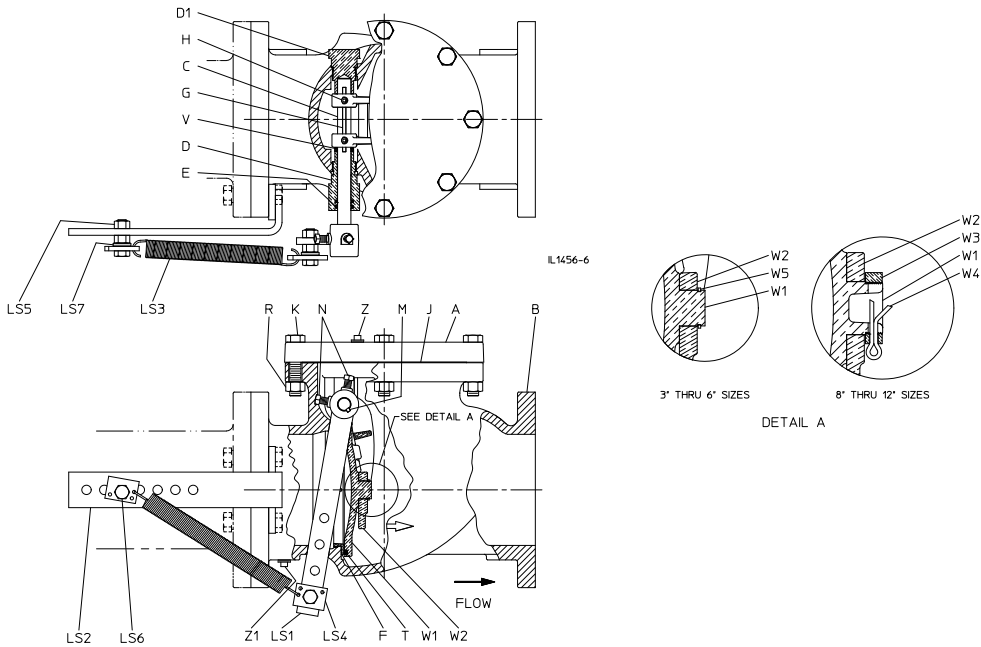
1. Series 600 valves meet or exceed requirements of ANSI/AWWA C508.
2. 175 psig rated working pressure.
3. May be furnished in configurations that are UL Listed.

600 LEVER & WEIGHT PARTS LIST



Ref.	Description	Material
A	Cover	Gray Iron
B	Valve Body	Gray Iron
C	Shaft	Stainless Steel
D	Shaft Support	Bronze
D1	Shaft Retainer	Bronze
E	O-ring	Rubber
F	Body Seat Ring	Bronze
G	Arm Key	Stainless Steel
J	Cover Gasket	Synthetic Fiber with Elastomeric Rubber
K	Hex Head Bolt	Stainless Steel
L	Weight Lever	Bronze
M	Lever Key	Stainless Steel
N	Square Head Set Screw	Steel
P	Weight	Gray Iron
R	Hex Nut	Stainless Steel
T	O-ring	Rubber
V	Shim Washer	Brass
W1	Disc	Bronze
W2	Arm	Bronze
W3	Locknut	Bronze
W4	Cotter Pin	Stainless Steel
W5	Snap Ring	Stainless Steel
Z	Pipe Plug	Stainless Steel
Z1	Pipe Plug	Bronze

600 LEVER & SPRING PARTS LIST



Ref.	Description	Material
A	Cover	Gray Iron
B	Valve Body	Gray Iron
C	Shaft	Stainless Steel
D	Shaft Support	Bronze
D1	Shaft Retainer	Bronze
E	O-ring	Rubber
F	Body Seat Ring	Bronze
G	Arm Key	Stainless Steel
H	Socket Head Set Screw	Steel
J	Cover Gasket	Synthetic Fiber with Elastomeric Rubber
K	Hex Head Bolt	Stainless Steel
LS1	Spring Lever	Bronze
LS2	Bracket	Steel
LS3	Spring	Stainless Steel
LS4	Spring Plate	Steel
LS5	Hex Nut	Plated Steel
LS6	Hex Head Bolt	Plated Steel
LS7	Spacer	Steel
M	Lever Key	Stainless Steel
N	Square Head Set Screw	Steel
R	Hex Nut	Stainless Steel
T	O-ring	Rubber
V	Shim Washer	Brass
W1	Disc	Bronze
W2	Arm	Bronze
W3	Locknut	Bronze
W4	Cotter Pin	Stainless Steel
W5	Snap Ring	Stainless Steel
Z	Pipe Plug	Stainless Steel
Z1	Pipe Plug	Bronze



AMERICAN[®]

FLOW CONTROL

THE RIGHT WAY

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