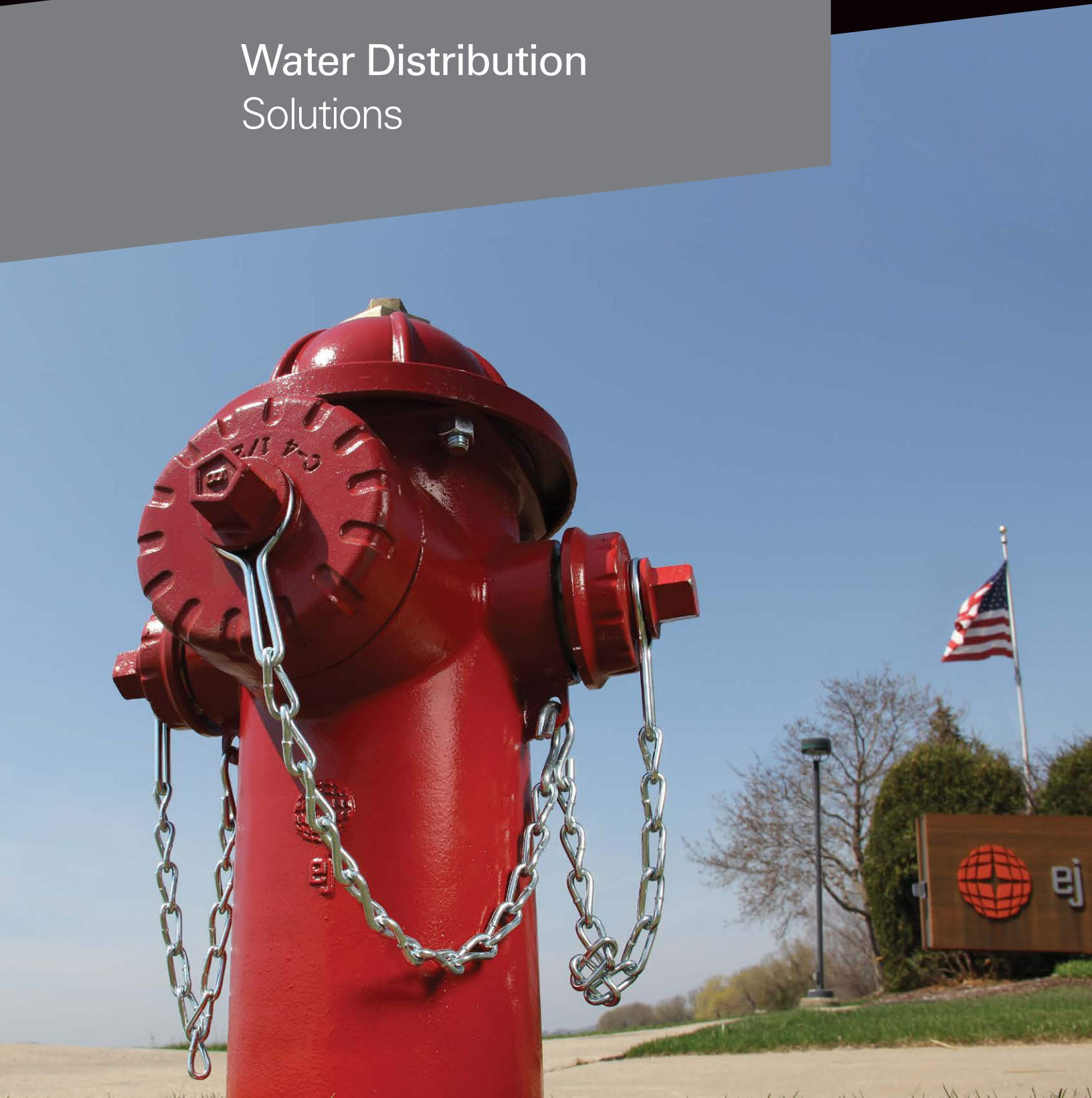
Water Distribution
Solutions



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Water Distribution Solutions

EJ recognizes the importance of a reliable water distribution system.

Proudly engineered, cast and assembled in the USA, our water distribution solutions have been protecting communities since the 1920s. From product design through installation and maintenance, EJ personnel are committed to providing unparalleled customer service.

WaterMaster® 5CD250 Fire Hydrants

WaterMaster® 5BR250 Fire Hydrants

FlowMaster® Resilient Wedge Gate Valves

Valve Boxes

Meter Boxes

WaterMaster® Fire Hydrants

EJ has earned a reputation for dependable, quality products for over 130 years. We are committed to providing unparalleled customer service and satisfaction. From product design through installation and maintenance, EJ personnel strive to deliver municipal infrastructure solutions that exceed your expectations.

WaterMaster Fire Hydrants have set the standard for reliability and ease of maintenance. Computer aided design and analysis, along with ductile iron construction, ensures superior performance.

All cast components are made and assembled in the USA. Each hydrant is pressure tested to twice the rated working pressure.

WaterMaster 5CD250 and 5BR250 Fire Hydrants meet or exceed the requirements of ANSI/AWWA C502 Standard for Dry-Barrel Fire Hydrants, Underwriters Laboratories Standard UL246, and Factory Mutual 1510.

WaterMaster 5CD250 and 5BR250 Fire Hydrants are certified as compliant with NSF/ANSI Standard 61 & 372.

Fire Hydrant Options

Most hydrant options are available in both the 5BR250 and 5CD250 designs.

Standard Features:
- UL Listed FM Approved
- Pressure rated for 250 psi
- Ductile iron body
- All bolts below grade are 304 stainless steel
- Certified to NSF 372 requirements for lead free design
- Paint: SPECTRACRON® High Solids Epoxy Primer, with PSX1001 top coat for high gloss with improved UV gloss retention and corrosion protection
- 5 1/4" valve opening

Options:
- 5BR250 or 5CD250 design
- Three way, two way, or single nozzle configuration
- Variable nozzle size (2 1/2" – 5")
- 4 1/2" valve opening
- Operating nut (square, pentagon, t-style, handwheel, dust cap)
- Direction of opening (right or left)
- Depth of Bury (2' 6" – 10')
- Color
- Shoe connection (flanged, flanged with MJ valve, mechanical joint, mechanical joint - bored out for sand casting, plain end with gland)
- Extension kits, breakaway kits, and flange kits available

10 Year Limited Warranty
Made in the USA

WaterMaster CD250 Fire Hydrant

5CD250 three way nozzle with standard operating nut

5CD250 two way nozzle with optional dust cap

5CD250 single pumper nozzle

4 1/2" CD250 with three way nozzle configuration

WaterMaster 5BR250 Fire Hydrant

5BR250 three nozzle with standard operating nut

5BR250 two nozzle with standard operating nut

5BR250 with snow barrel

Shoe Options

Valve assembly is not compromised by shoe replacement.

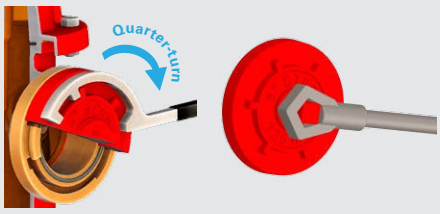
6" plain end with integral gland. Optional with auxiliary valve attached

6" TYTON® fittings

TYTON® is a registered trademark of U.S. Pipe

6" mechanical joint ANSI/AWWA C111/ A21.11

6" flanged joint ANSI/ AWWA C115/21.15 Optional with auxiliary valve attached

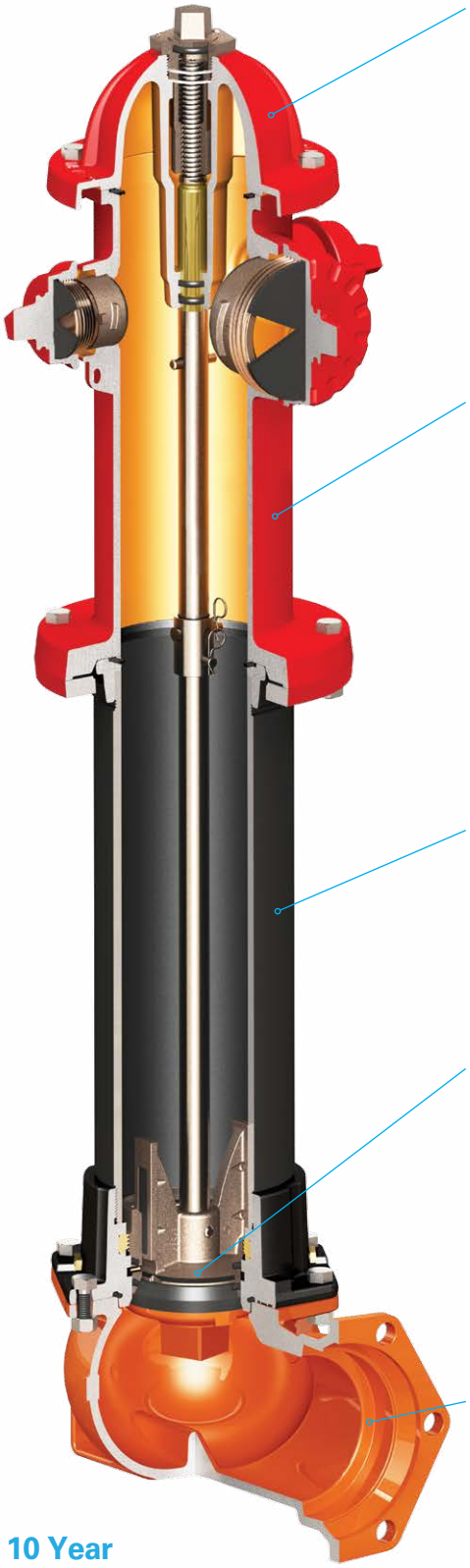


The Storz Nozzle cap can be removed with a standard hydrant wrench or Storz spanner wrench.

Storz Nozzle Connection

The Storz nozzle connection provides a quarter-turn pumper nozzle attachment, matched with a ductile iron cap. Remove or install the cap using standard square or pent operating nut wrenches, or use a standard Storz spanner wrench. Existing WaterMaster Fire Hydrants can be retrofitted with a new Storz connection nozzle in both 4" and 5" sizes. The design provides consistent cap appearance and colors, with the convenience of a Storz connection.

WATERMASTER® 5CD250 FIRE HYDRANT



Bonnet Section

- Ductile iron castings increase strength and durability while reducing overall weight.
- WaterMaster hydrant is lubricated with grease for ease of maintenance.
- Anti-friction washers (5) above and below the thrust collar of the operating nut allow for ease of operation.
- Heavy duty bronze operating nut (1) with Acme threads is stronger and more durable than V-threads.
- Only four bolts (17) are required to remove bonnet and perform maintenance on the hydrant.
- Simple operating mechanism, consisting of a hold down nut (2), operating nut, and stem (6) allow for ease of maintenance.
- Nozzles are easy to replace. Our quarter-turn design provides a visual indication that the nozzle is in its proper position. A single pipe plug (38) prevents the nozzle from rotating.

Nozzle Standpipe Section

- Lightweight ductile iron nozzle standpipe (19) allows one person to install a hydrant extension.
- The nozzle standpipe is self-centering when setting on the lower standpipe or an extension. This prevents o-ring damage.
- O-ring groove is in the bottom of each joint. The Quad Rings® (16) set securely in place during maintenance and require no taping or gluing of gaskets to the underside of nozzle standpipe when assembling.
- Installation of hydrant extension requires removal of only six bolts (20).
- Breakable swivel flanges (21) are located at the bottom of the ground line joint. This helps prevent debris from falling into lower standpipe upon vehicular impact.
- No tools are required to remove stem coupling (22). Simply remove the cotter key and pin (23).
- Quad Rings® have two sealing surfaces per side and remain in the groove better than round o-rings.

Lower Standpipe Section

- Standpipe (24) is ductile iron and provides extra strength in case of vehicular impact.
- Large diameter o-ring seal located between standpipe and shoe inlet.
- Joint has a full-face metal-to-metal connection. This provides increased stability and ensures breakage at the ground line in case of vehicular impact.
- The simplified lower standpipe design has fewer joints and less potential points of leakage than other designs.

Valve Design

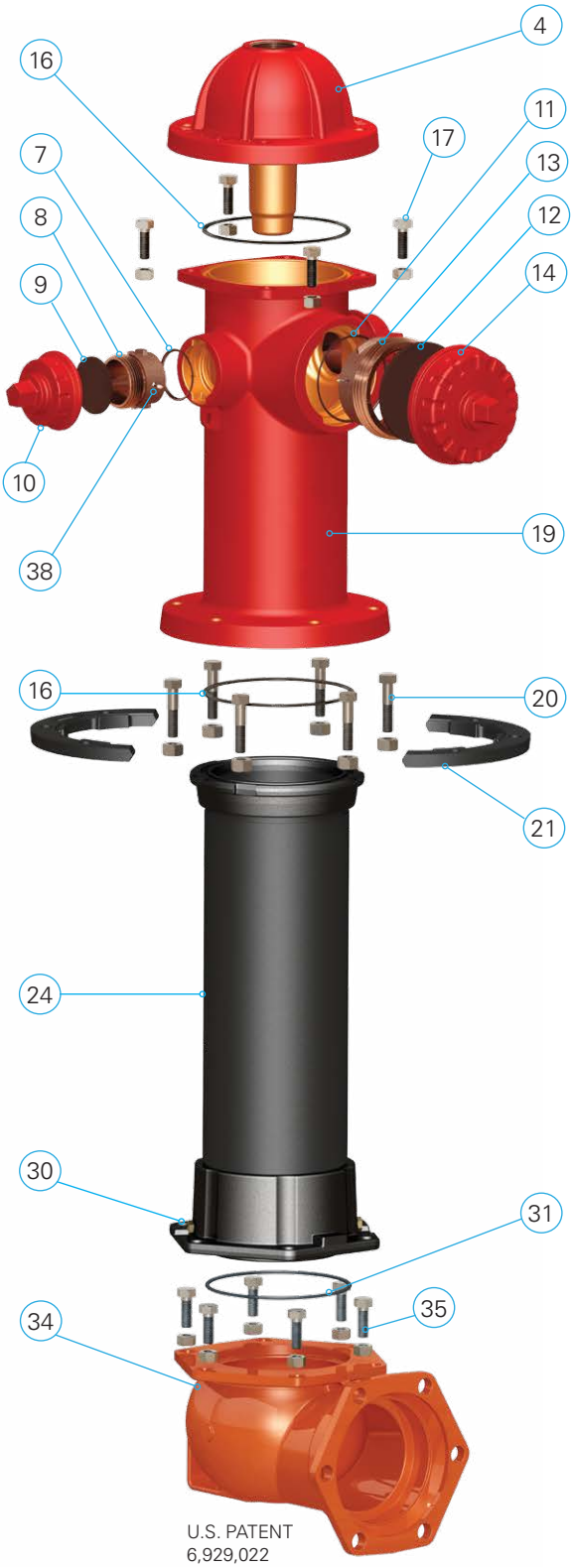
- Heavy duty drip shut-off (26) prevents breakage during maintenance.
- The ductile iron lower valve washer (33), with a 2" integral nut, simplifies maintenance with less parts.
- The bronze liner allows for easy removal of the valve seat (28).
- Large 3/8" diameter drain hole has 50% more cross sectional area than a 1/4" diameter opening.
- Dual drains are power flushed during the first four turns when opening the hydrant.
- Two large diameter o-rings (29) seal the valve seat and are less likely to be damaged during maintenance.

Shoe/Bottom Inlet

- Bottom inlet (34) and valve washer have fusion bonded epoxy coating per ANSI/AWWA C550.
- Large thrust block area helps set and hold hydrant in place during installation.
- Ductile iron shoe provides strength and durability.
- Stainless steel bolts (35) are standard between shoe and standpipe for corrosion resistance.
- All bolts are 5/8" diameter for superior strength and ease of maintenance.

10 Year Limited Warranty

WaterMaster® 5CD250 Hydrant Parts

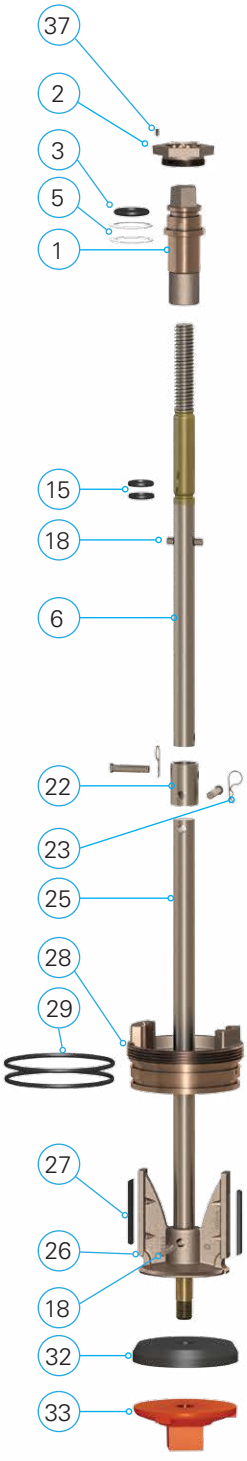


U.S. PATENT
6,929,022

WaterMaster Hydrant Parts (Three Nozzle)

No.	Part Description	Qty.	Part Material
1	Operating Nut	1	Bronze
2	Hold Down Nut	1	Bronze
3	Weather Seal O-Ring	1	Rubber, Buna-N
4	Top Bonnet	1	Ductile Iron
5	Thrust Washers	2	Delrin
6	Operating Stem Top 24 1/4"	1	Steel with Brass Collar
7	Hose Nozzle O-Rings	2	Rubber, Buna-N
8	Hose Nozzles	2	Bronze
9	Hose Nozzle Gaskets	2	Rubber
10	Hose Nozzle Caps	2	Cast Iron
11	Pumper Nozzle O-Ring	1	Rubber, Buna-N
12	Pumper Nozzle Gasket	1	Rubber
13	Pumper Nozzle	1	Bronze
14	Pumper Nozzle Cap	1	Cast Iron
15	Reservoir O-Rings	2	Rubber, Buna-N
16	Quad-Seal Rings	2	Rubber, Buna-N
17	Top Bonnet Bolts & Nuts	4	Zinc Plated Steel
18	Drive-Loc Pins	2	Stainless Steel
19	Nozzle Standpipe	1	Ductile Iron
20	Safety Flange Bolts & Nuts	6	Zinc Plated Steel
21	Swivel Flange (Frangible)	1	Cast Iron
22	Stem Coupling (Frangible)	1	Galvanized Steel
23	Coupling Pins & Cotter Keys	2	Stainless Steel
24	Standpipe Lower Section	1	Ductile Iron with Bronze Liner
25	Operating Stem Lower	1	Steel
26	Drip Shut Off	1	Bronze
27	Inserts	2	Rubber
28	Valve Seat	1	Bronze
29	Valve Seat O-Rings	2	Rubber, Buna-N
30	Brass Drain Hole Bushings	2	Brass
31	Inlet Flange O-Ring	1	Rubber, Buna-N
32	Seating Valve Rubber	1	Rubber
33	Valve Washer	1	Ductile Iron/Epoxy
34	Bottom Inlet	1	Ductile Iron/Epoxy
35	Inlet Flange Bolts & Nuts	6	Stainless Steel
36	Chains *	3	Zinc Plated Steel
37	Set Screw 1/4-20 SS Cone Pt.	1	Stainless Steel
38	Pipe Plugs 1/4 NPTF SS HX *	3	Stainless Steel

* Not Shown

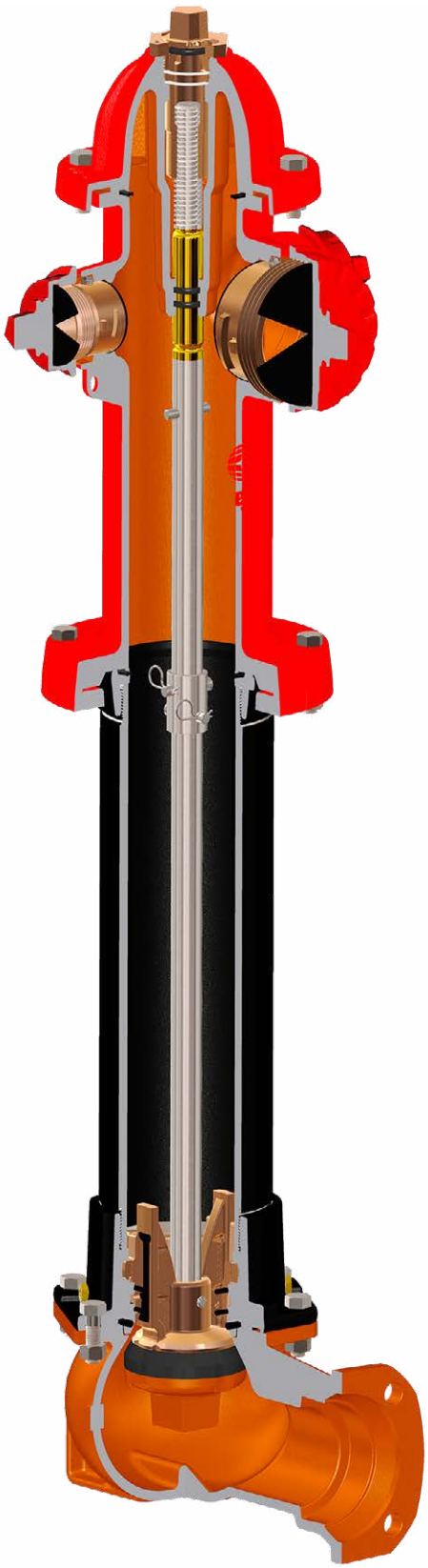


Conforms to ANSI/AWWA Standard C502 Underwriters Laboratories Listed Factory Mutual Approved NSF/ANSI 61 & 372 Certified

WaterMaster® 4 1/2" CD250 Fire Hydrant

WaterMaster® Fire Hydrants have set the standard for reliability and ease of maintenance, and they are now available in a 4 1/2" valve opening size. All ductile iron construction supported by 3D modeling software and operation analysis ensures superior performance. Each hydrant is rated for 250 psi working pressure and tested to 500 psi working pressure. All hydrant parts are cast and assembled in the USA.

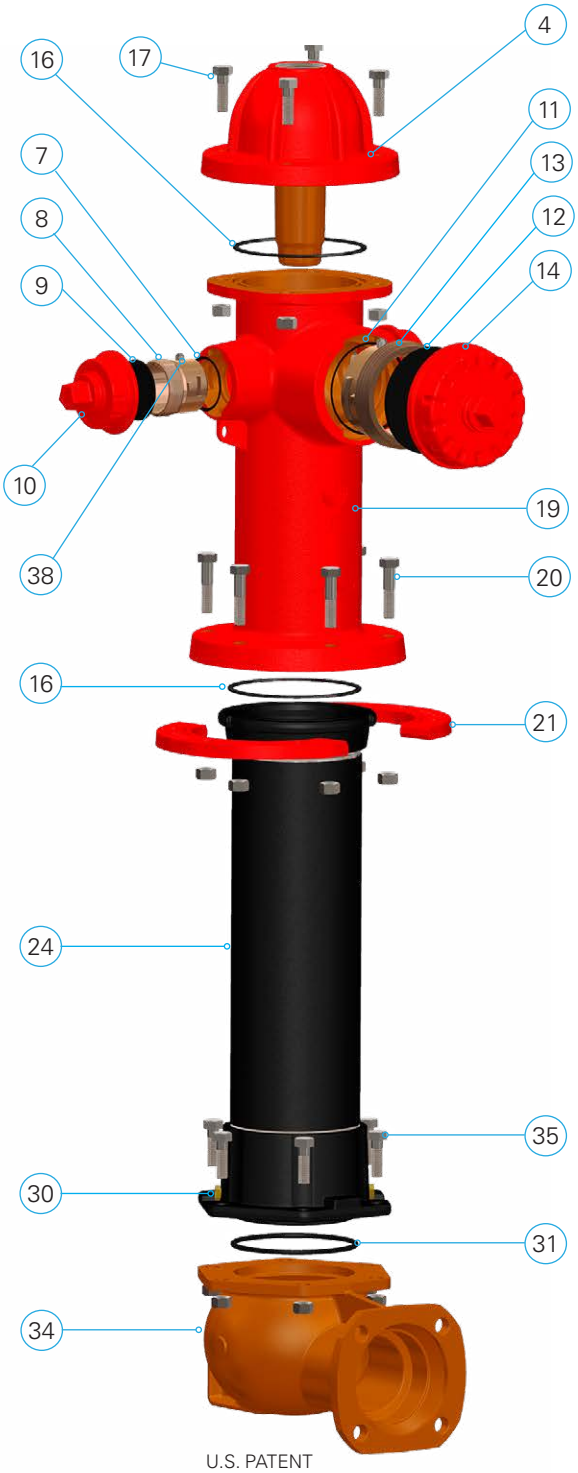
Standard Features:
- UL Listed (6" shoe connection)
- Pressure rated for 250 psi
- Ductile iron body
- All bolts below grade are 304 stainless steel
- Designed to meet NSF 372 requirements for lead free design
- Paint: SPECTRACRON® High Solids Epoxy Primer, with PSX1001 top coat for high gloss with improved UV gloss retention and corrosion protection
- 4 1/2" valve opening
- 4" and 6" mechanical joint shoe connection



Options:
- Three way or two way nozzle configuration
- Variable nozzle size (2 1/2" – 5")
- Operating nut (square, pentagon, t-style, handwheel, dust cap)
- Direction of opening (right or left)
- Depth of Bury (2' 6" – 10')
- Color
- Breakaway kits and flange kits available

10 Year Limited Warranty
Made in the USA

WaterMaster® 4.5CD250 Hydrant Parts

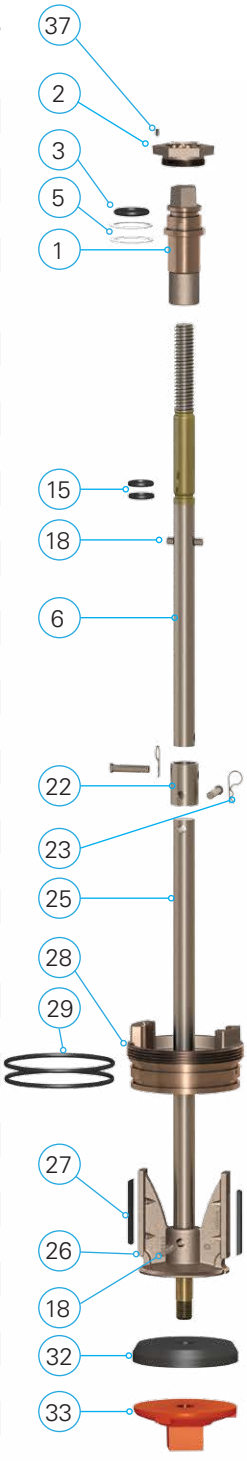


U.S. PATENT
6,929,022

WaterMaster Hydrant Parts (Three Nozzle)

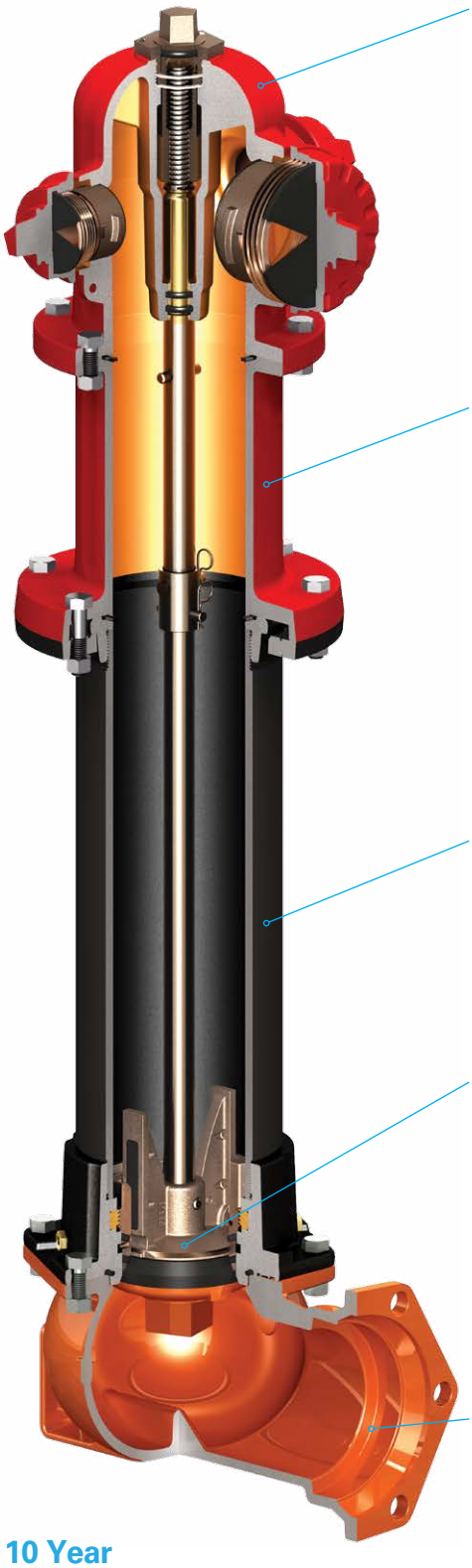
No.	Part Description	Qty.	Part Material
1	Operating Nut	1	Bronze
2	Hold Down Nut	1	Bronze
3	Weather Seal O-Ring	1	Rubber, Buna-N
4	Top Bonnet	1	Ductile Iron
5	Thrust Washers	2	Delrin
6	Operating Stem Top 24 1/4"	1	Steel with Brass Collar
7	Hose Nozzle O-Rings	2	Rubber, Buna-N
8	Hose Nozzles	2	Bronze
9	Hose Nozzle Gaskets	2	Rubber
10	Hose Nozzle Caps	2	Cast Iron
11	Pumper Nozzle O-Ring	1	Rubber, Buna-N
12	Pumper Nozzle Gasket	1	Rubber
13	Pumper Nozzle	1	Bronze
14	Pumper Nozzle Cap	1	Cast Iron
15	Reservoir O-Rings	2	Rubber, Buna-N
16	Quad-Seal Rings	2	Rubber, Buna-N
17	Top Bonnet Bolts & Nuts	4	Zinc Plated Steel
18	Drive-Loc Pins	2	Stainless Steel
19	Nozzle Standpipe	1	Ductile Iron
20	Safety Flange Bolts & Nuts	6	Zinc Plated Steel
21	Swivel Flange (Frangible)	1	Cast Iron
22	Stem Coupling (Frangible)	1	Galvanized Steel
23	Coupling Pins & Cotter Keys	2	Stainless Steel
24	Standpipe Lower Section	1	Ductile Iron with Bronze Liner
25	Operating Stem Lower	1	Steel
26	Drip Shut Off	1	Bronze
27	Inserts	2	Rubber
28	Valve Seat	1	Bronze
29	Valve Seat O-Rings	2	Rubber, Buna-N
30	Brass Drain Hole Bushings	2	Brass
31	Inlet Flange O-Ring	1	Rubber, Buna-N
32	Seating Valve Rubber	1	Rubber
33	Valve Washer	1	Ductile Iron/Epoxy
34	Bottom Inlet	1	Ductile Iron/Epoxy
35	Inlet Flange Bolts & Nuts	6	Stainless Steel
36	Chains *	3	Zinc Plated Steel
37	Set Screw 1/4-20 SS Cone Pt.	1	Stainless Steel
38	Pipe Plugs 1/4 NPTF SS HX *	3	Stainless Steel

* Not Shown



Conforms to ANSI/AWWA Standard C502 Underwriters Laboratories Listed (6" shoe connection)

WATERMASTER® 5BR250 FIRE HYDRANT



10 Year Limited Warranty

Bonnet Section

- Ductile iron castings increase strength and durability while reducing overall weight.
- WaterMaster hydrant is lubricated with grease for ease of maintenance.
- Anti-friction washers (5) above and below the thrust collar of the operating nut allow for ease of operation.
- Heavy duty bronze operating nut (1) with Acme threads is stronger and more durable than V-threads.
- Only six bolts (17) are required to remove bonnet and perform maintenance on the hydrant.
- Simple operating mechanism, consisting of a hold down nut (2), operating nut, and stem (6) allow for ease of maintenance.
- Nozzles are easy to replace. Our quarter-turn design provides a visual indication that the nozzle is in its proper position. A single pipe plug (38) prevents the nozzle from rotating.

Nozzle Standpipe Section

- Lightweight ductile iron nozzle standpipe (19) allows one person to install a hydrant extension.
- The nozzle standpipe is self-centering when setting on the lower standpipe or an extension. This prevents o-ring damage.
- O-ring groove is in the bottom of each joint. The Quad Rings® (16) set securely in place during maintenance and require no taping or gluing of gaskets to the underside of nozzle standpipe when assembling.
- Installation of hydrant extension requires removal of only six bolts (20).
- Breakable swivel flanges (21) are located at the bottom of the ground line joint. This helps prevent debris from falling into lower standpipe upon vehicular impact.
- No tools are required to remove stem coupling (22). Simply remove the cotter key and pin (23).
- Quad Rings® have two sealing surfaces per side and remain in the groove better than round o-rings.

Lower Standpipe Section

- Standpipe (24) is ductile iron and provides extra strength in case of vehicular impact.
- Large diameter o-ring seal located between standpipe and shoe inlet.
- Joint has a full-face metal-to-metal connection. This provides increased stability and ensures breakage at the ground line in case of vehicular impact.
- The simplified lower standpipe design has fewer joints and less potential points of leakage than other designs.

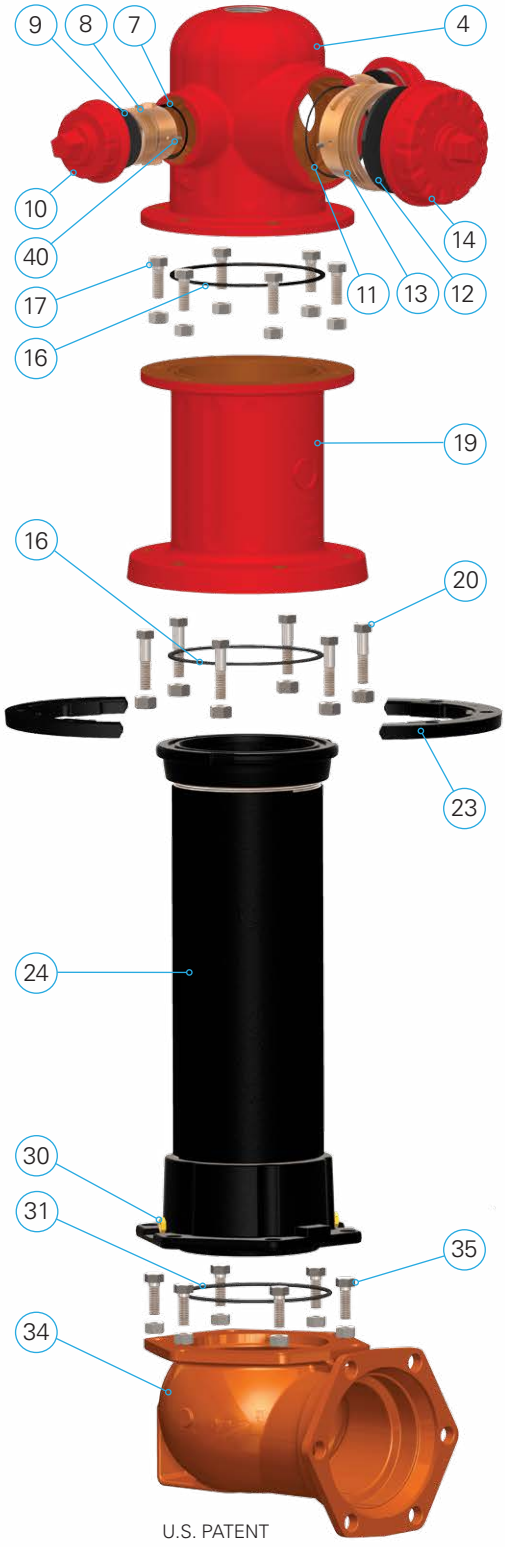
Valve Design

- Heavy duty drip shut-off (26) prevents breakage during maintenance.
- The ductile iron lower valve washer (33), with a 2" integral nut, simplifies maintenance with less parts.
- The bronze liner allows for easy removal of the valve seat (28).
- Large 3/8" diameter drain hole has 50% more cross sectional area than a 1/4" diameter opening.
- Dual drains are power flushed during the first four turns when opening the hydrant.
- Two large diameter o-rings (29) seal the valve seat and are less likely to be damaged during maintenance.

Shoe/Bottom Inlet

- Bottom inlet (34) and valve washer have fusion bonded epoxy coating per ANSI/AWWA C550.
- Large thrust block area helps set and hold hydrant in place during installation.
- Ductile iron shoe provides strength and durability.
- Stainless steel bolts (35) are standard between shoe and standpipe for corrosion resistance.
- All bolts are 5/8" diameter for superior strength and ease of maintenance.

WaterMaster® 5BR250 Hydrant Parts

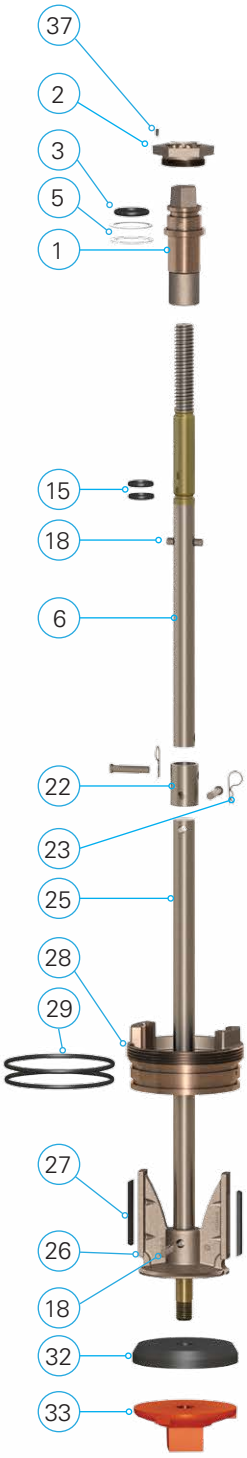


U.S. PATENT
6,929,022

WaterMaster 5BR250 Hydrant Parts (Three Nozzle)

No.	Part Description	Qty	Part Material
1	Operating Nut	1	Bronze
2	Hold Down Nut	1	Bronze
3	Weather Seal O-Ring	1	Rubber, Buna-N
4	Bonnet	1	Ductile Iron
5	Thrust Washers	2	Delrin
6	Operating Stem Top 21 1/2"	1	Steel with Brass Collar
7	Hose Nozzle O-Rings	2	Rubber, Buna-N
8	Hose Nozzles	2	Bronze
9	Hose Nozzle Gaskets	2	Rubber
10	Hose Nozzle Caps	2	Cast Iron
11	Pumper Nozzle O-Ring	1	Rubber, Buna-N
12	Pumper Nozzle Gasket	1	Rubber
13	Pumper Nozzle	1	Bronze
14	Pumper Nozzle Cap	1	Cast Iron
15	Reservoir O-Rings	2	Rubber, Buna-N
16	Quad Rings®	2	Rubber, Buna-N
17	Bonnet Bolts & Nuts	6	Zinc Plated Steel
18	Drive-Loc Pins	2	Stainless Steel
19	Traffic Standpipe Upper	1	Ductile Iron
20	Safety Flange Bolts & Nuts	6	Zinc Plated Steel
21	Swivel Flanges (Frangible)	1	Cast Iron
22	Stem Coupling (Frangible)	1	Galvanized Steel
23	Coupling Pin & Cotter Keys	2	Stainless Steel
24	Standpipe Lower Section	1	Ductile Iron with Bronze Liner
25	Operating Stem Lower	1	Steel
26	Drip Shut Off	1	Bronze
27	Inserts	2	Rubber
28	Valve Seat	1	Bronze
29	Valve Seat O-Rings	2	Rubber, Buna-N
30	Brass Drain Hole Bushings	2	Brass
31	Inlet Flange O-Ring	1	Rubber, Buna-N
32	Seating Valve Rubber	1	Rubber
33	Valve Washer	1	Ductile Iron/Epoxy
34	Bottom Inlet	1	Ductile Iron/Epoxy
35	Inlet Flange Bolts & Nuts	6	Stainless Steel
36	Chains *	3	Zinc Plated Steel
37	Set Screw 1/4 - 20 SS Cone Pt.	1	Stainless Steel
38	Pipe Plugs 1/4 NPTF SS HX *	3	Stainless Steel

* Not Shown



Conforms to ANSI/AWWA Standard C502 Underwriters Laboratories Listed Factory Mutual Approved NSF/ANSI 61 & 372 Certified

WATERMASTER® HYDRANT SAMPLE SPECIFICATION

Testing and Performance
- Hydrants shall meet ANSI/AWWA C502 (latest version).
- Rated working pressure shall be 250 psi.
- Each hydrant shall be hydrostatically tested at 75 and 500 psi.
- Hydrants shall meet or exceed the requirements of UL 246 and FM 1510
- Hydrants shall be certified to NSF/ANSI 61 & 372.
- All castings shall be made and assembled in the USA.

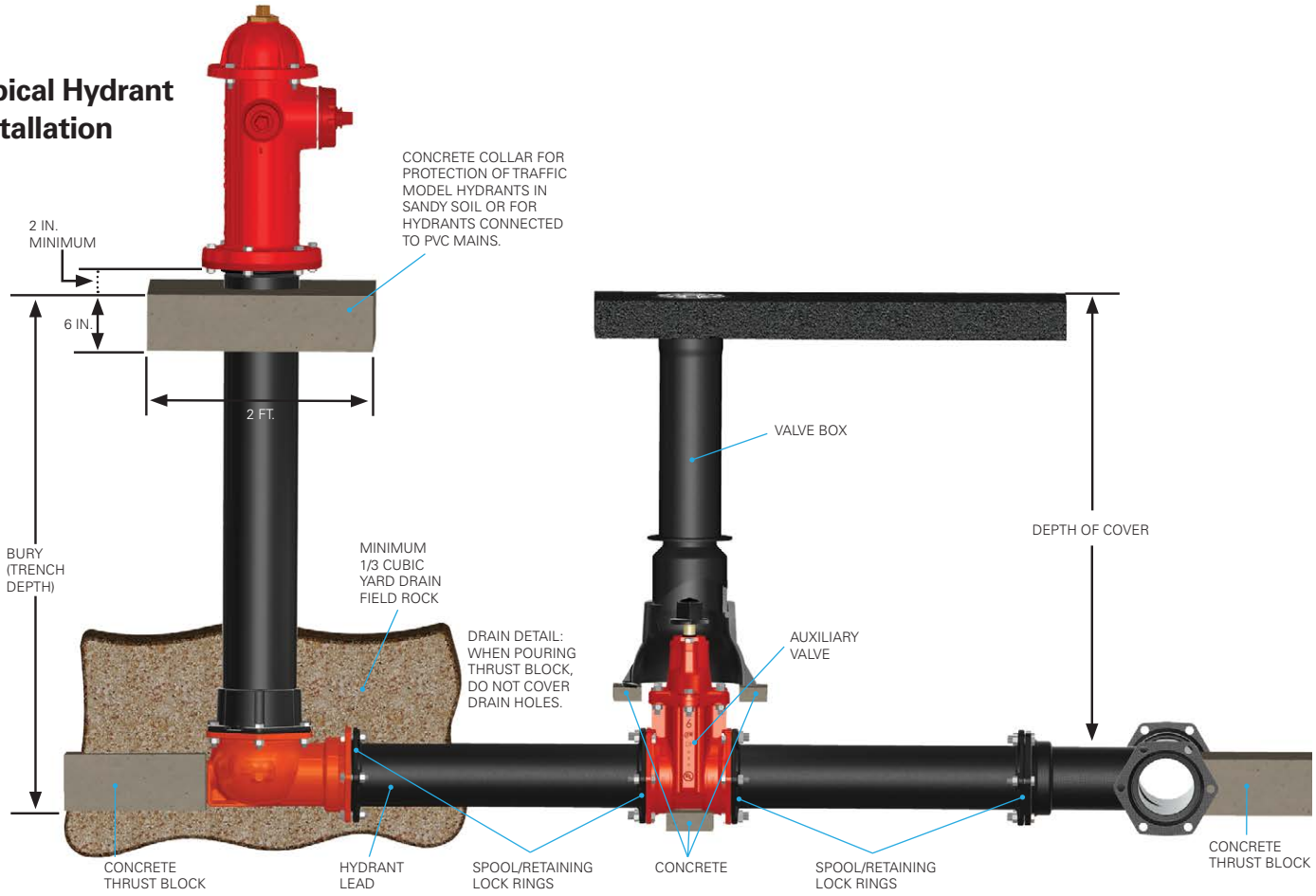
General Design
- Hydrants shall have a full 5 1/4" valve opening.
- Nozzles shall be quarter turn integral lug style secured with a stainless steel locking screw.
- Bonnet, standpipe, barrel, flanges, and inlet shall be ductile iron.
- Nozzle section shall be able to be rotated 360 degrees to align pumper nozzle with the desired direction.
- Inlet/shoe and lower valve plate shall be coated with a fusion bonded epoxy meeting ANSI/AWWA C550.
- All fasteners below grade shall be 304 stainless steel.

Operating Mechanism
- Operating nuts shall be one piece and made from high strength manganese bronze.
- Low friction thrust washers shall be above and below the thrust collar of the operating nut.
- Actuating threads shall be Acme type and permanently lubricated with food grade grease.
- Lubrication reservoir shall be sealed by dual o-rings.
- Travel stop shall be located in the inlet of the shoe and not allowed in the bonnet area.

Breakaway Section
- Breakaway flanges shall be on the bottom of the joint to prevent pieces from falling in when broken.
- O-rings shall be Quad-Rings® and be installed in a groove on the bottom of joint so that taping or gluing to standpipe or extension is not required.
- Upper standpipe and extensions shall be self centering.

Valve and Drain Mechanism
- Heavy duty drip shutoff (top plate) and valve seat shall be high strength manganese bronze.
- Valve seat shall be installed in a bronze seat ring.
- Drains shall be bronze lined and 3/8" diameter minimum.
- They shall operate without the use of springs, toggles, tubes, levers, or other intricate synchronizing mechanisms.
- Lower valve plate shall be a one piece ductile iron casting and not require a separate cap nut.
- Drains shall be open and flushed during the first 4 turns of opening the hydrant before positively closing while operating the hydrant.

Typical Hydrant Installation



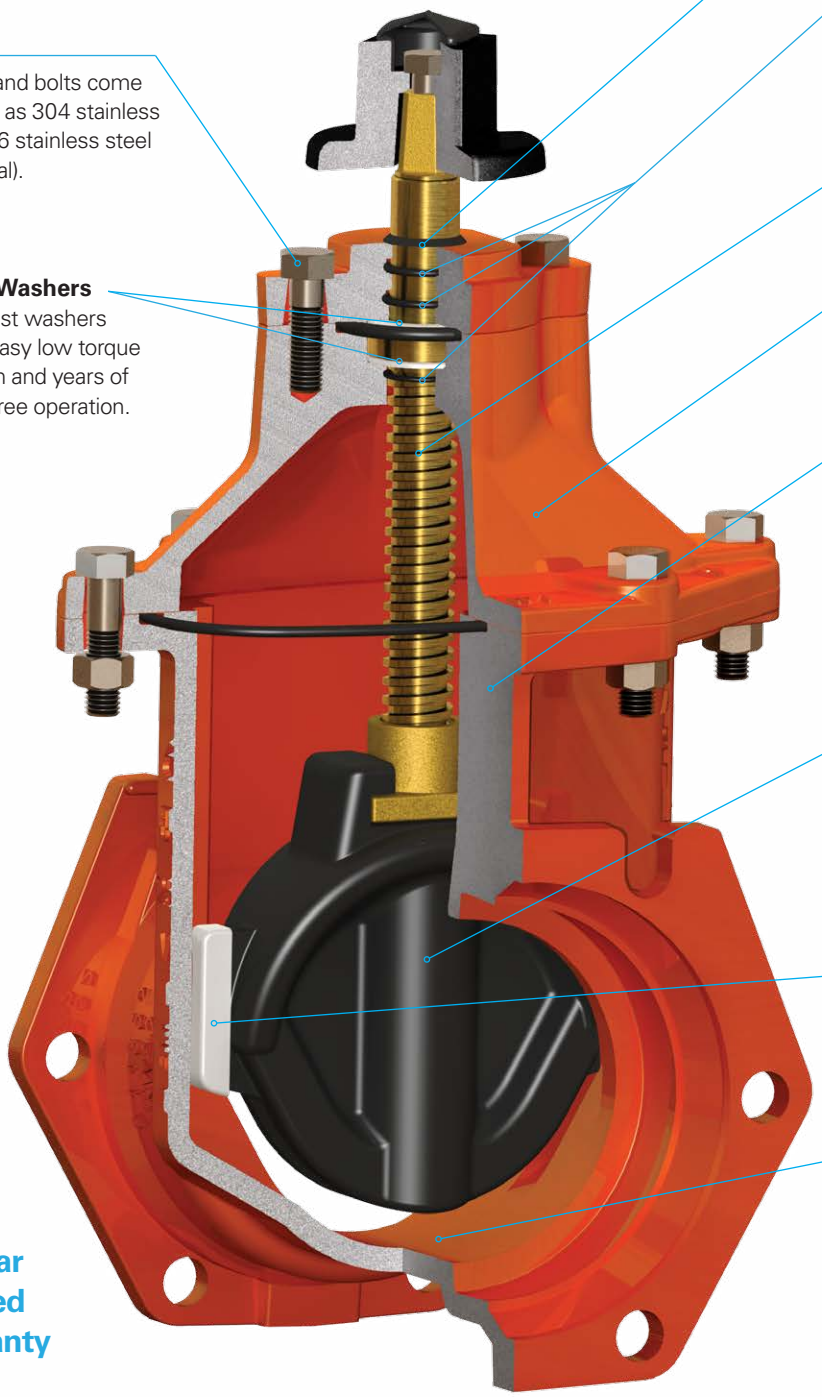
FlowMaster®
Resilient Wedge Gate Valves

2"–16" FLOWMASTER® RESILIENT WEDGE GATE VALVE

2" Operating/Wrench Nut
Bolted to top of squared off stem (optional hand wheels available).

Bolts
All nuts and bolts come standard as 304 stainless steel (316 stainless steel is optional).

Thrust Washers
Two thrust washers ensure easy low torque operation and years of trouble-free operation.



External Stem Seal
Designed to prevent sand or grit from working between the stem and seal plate.

Triple O-Ring Seal
Three stem seal o-rings; two in the seal plate, which are replaceable with the valve in the full open position at rated working pressure, and one under the stem thrust collar.

Stem
2" - 16" have high strength manganese bronze stem (with integral thrust collar) and stem nut.

Epoxy Coating
Fusion bonded epoxy coating provides outstanding corrosion resistance on all surfaces inside and out per AWWA C550.

C515 Ductile Iron Construction
All ductile iron body, bonnet and seal plate features the corrosion resistance and long service life of gray iron, but also increased strength, toughness and impact resistance with less weight. Pressure rated for 250 psi and tested for 500 psi performance, which meets or exceeds AWWA C515. All cast components are made in the USA.

Ductile Wedge
The wedge is ductile iron and is fully rubber encapsulated meeting the requirements of ASTM D429. A ductile wedge is better able to handle waterline pressure and surges, while the permanent rubber coating ensures a watertight seal.

Wedge Guides
Specially designed to reduce input torque required for operation and resist interference from debris in the waterway and protects the wedge from wear after years of service.

Full Diameter Waterway
Oversized for smooth unobstructed flow and will accommodate full sized shell cutter.

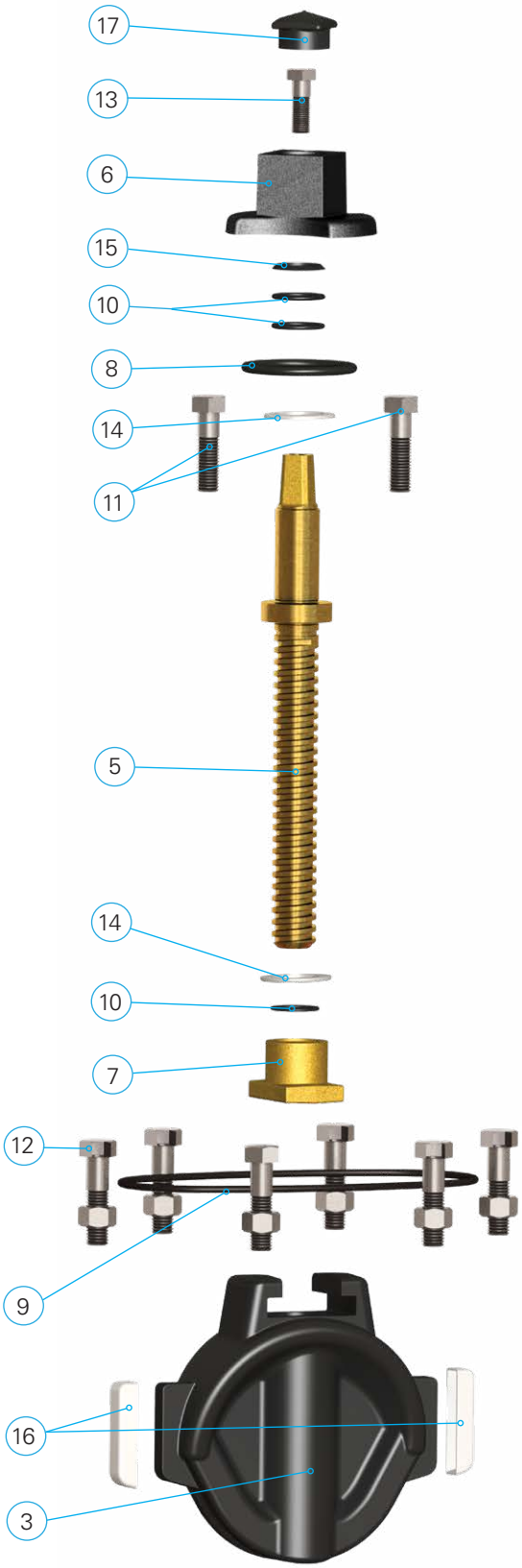
UL/FM
All valves are manufactured to meet Underwriters Laboratories 262 and Factory Mutual 1130. 4", 6", 8" valves are UL listed and 4" - 12" are FM approved.

NSF
Certified to NSF/ANSI Standard 61 & 372.

10 Year Limited Warranty

End Connections
Available in 2" - 24" sizes. See page 17 for available end connections.

2"–16" FlowMaster® Valve Parts



FlowMaster® Valve Parts

Item No.	Qty.	Part Name and Description	Material
1*	1	Body	Ductile Iron
2*	1	Bonnet	Ductile Iron
3	1	Rubber Encapsulated Ductile Wedge	Ductile Iron/ Synthetic Rubber
4*	1	Seal Plate	Ductile Iron
5	1	Stem	Manganese Bronze
6	1	Operating Nut	Gray Iron
7	1	Stem Nut	Manganese Bronze
8	1	Seal Plate O-ring	Rubber, Buna-N
9	1	Bonnet O-ring	Rubber, Buna-N
10	3	Stem O-rings	Rubber, Buna-N
11	1	Seal Plate Bolts	Stainless Steel
12	1	Bonnet Bolts/Nuts	Stainless Steel
13	1	Large Hex Cap Screw	Stainless Steel
14	2	Thrust Washers	Polymer
15	1	External Stem Seal	Rubber, Buna-N
16	1	Wedge Guides	Polymer
17	1	Dust Cap	Rubber

* Not Shown

Options
- Handwheel
- Bevel gear operator - 16" only
- Spur gear operator - 16" only
- 2" AWWA operating nut

End Connections
- MJ x MJ
- FE x FE
- MJ x FE
- MJ x TAP
- TY x TY
- TY x FE
- THD x THD

FlowMaster valves incorporate quality parts and a simple design.

Each valve is inspected and individually tested.

All FlowMaster valves are made and assembled in the USA.

20" AND 24" FLOWMASTER® RESILIENT WEDGE GATE VALVE

Options
- Bevel gear operator
- Spur gear operator
- Handwheel
- 2" AWWA operating nut

End Connections
- MJ x MJ
- FE x FE
- MJ x FE
- MJ x TAP

Installation of 24" Resilient Wedge Gate Valve

AWWA C515

The all ductile iron body, bonnet and seal plate resists corrosion and offers the same long service life as gray iron, but with less weight. It has increased strength, toughness and impact resistance. Each valve is pressure rated for 250 psi and tested for 500 psi performance which meets or exceeds AWWA C515.

Stem

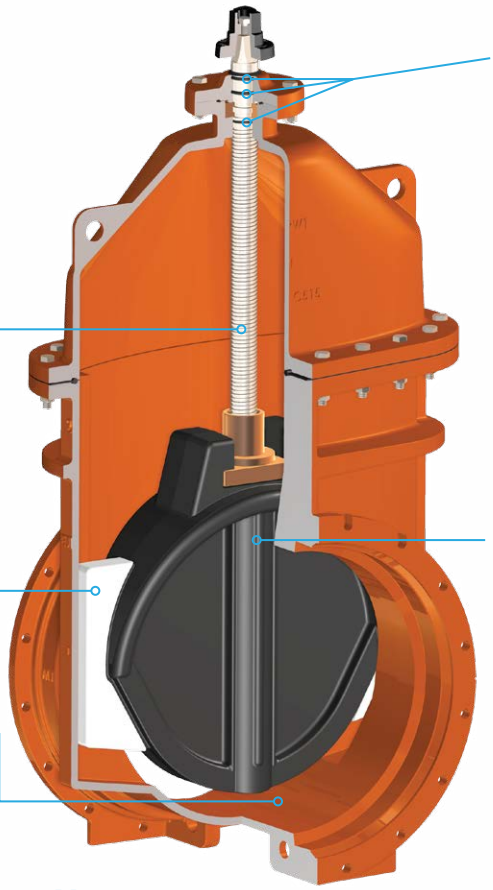
The stem is made of high strength 304 stainless steel and is lead free.

Wedge Guides

Specially designed wedge guides reduce input torque required for operation. The guides also resist interference from debris in the waterway and protect the wedge from wear after years of service.

Full Diameter Waterway

The full diameter waterway is oversized providing a smooth unobstructed flow and also accommodates a full sized shell cutter.



Triple O-Ring Seal

Three stem seal o-rings; two in the seal plate, which are replaceable with the valve in the full open position at rated working pressure, and one under the stem thrust collar.

Epoxy Coating

Fusion bonded epoxy coating provides outstanding corrosion resistance on all surfaces inside and out per AWWA C550 and is NSF 61 certified.

Ductile Wedge

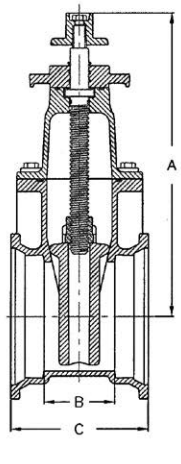
The ductile iron wedge is rubber encapsulated which meets the requirements of ASTM D429. A ductile wedge is better able to handle waterline pressure and surges, while the permanent rubber coating ensures a watertight seal.

Bolts

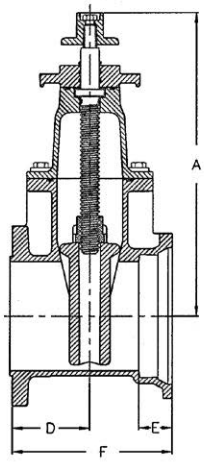
All standard nuts and bolts are made of 304 stainless steel (316 stainless steel is optional).

10 Year Limited Warranty

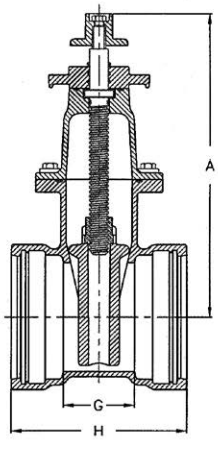
FLOWMASTER® GATE VALVE DIMENSIONS AND AVAILABLE END CONNECTIONS



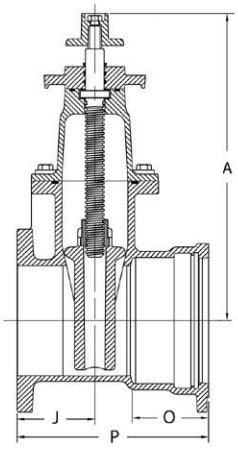
M.J. x M.J.



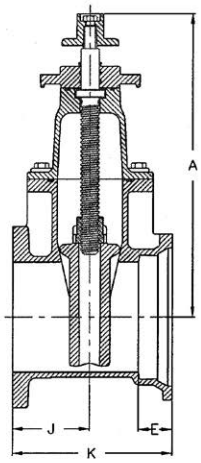
M.J. x TAPPING



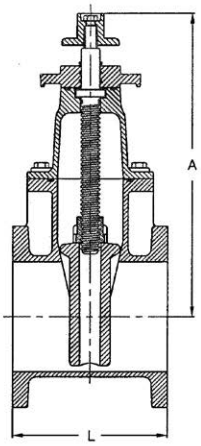
TYTON® x TYTON®



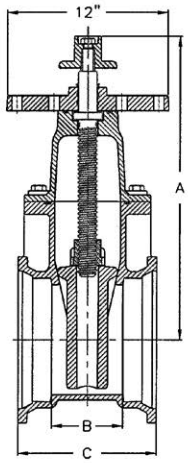
TYTON® x FLANGE



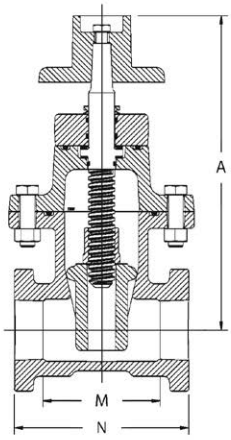
M.J. x FLANGE



FLANGE x FLANGE



M.J. x M.J.
INDICATOR POST VALVE



THD. x THD.

FlowMaster Gate Valve Dimensions and Available End Connections

Size	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Open Turns
2"	10 5/8	3 1/2	8 1/2									3 7/8	5 7/8			10
3"	13 1/8	4 3/4	9 3/4													14
4"	15	4 5/16	9 5/16	5 1/16	2 1/2	10 5/16	4 3/8	11	5 1/16*	10 5/16	9			4 1/8	10 15/16	17
6"	18 9/16	4	9	5 1/4	2 1/2	11 1/4	4	11 1/8	5 1/4	11 1/4	10 1/2			4 3/8	11 3/4	20
8"	22 11/16	5 1/4	10 1/4	5 3/4	2 1/2	11 7/8	5 1/4	13	5 3/4	11 7/8	11 1/2			5 5/8	14 1/8	26
10"	27	6 7/8	11 5/8	6 1/2	3 1/2	13 1/2	6 7/8	15 5/8	6 1/2	13 1/2	13			5 5/8	15 9/16	32
12"	31 1/8	8	13	7	2 1/2	14 3/4	8	16 1/2	7	14 3/4	14			5 5/8	16 11/16	38
16"	39 1/2	14 1/2	21 3/4	8 1/2	3 1/2	19 3/8	10 5/8	21	8 1/2	19 3/8	17					51
20"	48 7/16	11	18	9	3 1/2	18				18	18					62
24"	57	16	23	10	3 1/2	21 1/2				21 1/2	20					74

Note: All dimensions are in inches.
TYTON® is a registered trademark of U.S. Pipe.
* 4" TYTON® x FLANGE is 4 1/2"

2" - 16" FLOWMASTER® RESILIENT WEDGE GATE VALVES SAMPLE SPECIFICATION

Valves shall be manufactured and tested to meet the requirements of ANSI/AWWA C515. Valves shall meet or exceed the requirements of Underwriters Laboratories Standard UL262 and Factory Mutual Standard 1130.

Valves shall be certified to NSF/ANSI 61 & 372.

The rated working pressure of the valve shall be 250 psi.

All valve component castings shall originate in the USA.

The body, bonnet, wedge and seal plate shall be made of ductile iron in accordance with ASTM A536. The wedge shall be totally encapsulated in rubber. This rubber coating shall be permanently bonded to the ductile iron wedge casting and shall meet ASTM D429 tests for rubber to metal bonding. No paint shall be allowed in the wedge and the wedge must not be hollow. Containment of the stem nut must only be on two sides to facilitate easy removal.

There shall be three stem seal o-rings; two in the seal plate which shall be replaceable with the valve in the full open position at rated working pressure, and one under the stem thrust collar. All gaskets shall be o-ring seals. O-rings set in a cartridge shall not be allowed. A grit seal must be present above the seal plate to prevent dirt intrusion.

Valves are to be open left (OL) or open right (OR). Operating nuts are to be painted black (OL) or painted red (OR). The NRS valves shall be provided with a 2" square operating nut (2"-24").

2" - 16" valves must have two polymer thrust washers — one above and one below the thrust collar. Stainless steel thrust washers are not acceptable.

All fasteners are to be 304 stainless steel. Socket head bolts shall not be allowed. If only two bolts are used to secure the seal plate, the bolts must be fastened to the bonnet with a drilled and tapped hole in the bonnet.

The body, bonnet and seal plate shall be epoxy coated in accordance with ANSI/AWWA C550 certified to NSF 61. This coating shall be on the interior and the exterior of the valve. The manufacturers name, valve size, year of manufacture, pressure rating ("250W"), C515 and "DI" shall be cast on the valve.

Each valve shall be tested in accordance with ANSI/AWWA C515, UL262 and FM1130. This shall include hydrostatic pressure testing at 500 psi. A certification of manufacture and testing shall be provided at the municipality's request.

All parts of valves to be considered must be manufactured, assembled and tested in the contiguous USA, and letters of certification must accompany any and all products at the request of municipality.

Valves shall be FlowMaster.

20" AND 24" FLOWMASTER® RESILIENT WEDGE GATE VALVES SAMPLE SPECIFICATION

Valves shall be manufactured and tested to meet the requirements of ANSI/AWWA C515. Valves shall meet or exceed the requirements of Underwriters Laboratories Standard UL262 and Factory Mutual Standard 1130.

The rated working pressure of the valve shall be 250 psi.

All valve component castings shall originate in the USA.

The body, bonnet, wedge and seal plate shall be made of ductile iron in accordance with ASTM A536. The wedge shall be totally encapsulated in rubber. This rubber coating shall be permanently bonded to the ductile iron wedge casting and shall meet ASTM D429 tests for rubber to metal bonding. No paint shall be allowed in the wedge and the wedge must not be hollow. Containment of the stem nut must only be on two sides to facilitate easy removal.

There shall be three stem seal o-rings; two in the seal plate which shall be replaceable with the valve in the full open position at rated working pressure, and one under the stem thrust collar. All gaskets shall be o-ring seals. O-rings set in a cartridge shall not be allowed. A grit seal must be present above the seal plate to prevent dirt intrusion.

Valves are to be open left (OL) or open right (OR). Operating nuts are to be painted black (OL) or painted red (OR). The NRS valves shall be provided with a 2" square operating nut (2"-24").

All valves 20" or larger must incorporate a high strength 304 stainless steel stem that is lead free.

All fasteners are to be 304 stainless steel. Socket head bolts shall not be allowed. If only two bolts are used to secure the seal plate, the bolts must be fastened to the bonnet with a drilled and tapped hole in the bonnet.

The body, bonnet and seal plate shall be epoxy coated in accordance with ANSI/AWWA C550 certified to NSF 61. This coating shall be on the interior and the exterior of the valve. The manufacturers name, valve size, year of manufacture, pressure rating ("250W"), C515 and "DI" shall be cast on the valve.

Each valve shall be tested in accordance with ANSI/AWWA C515, UL262 and FM1130. This shall include hydrostatic pressure testing at 500 psi. A certification of manufacture and testing shall be provided at the municipality's request.

All parts of valves to be considered must be manufactured, assembled and tested in the contiguous USA, and letters of certification must accompany any and all products at the request of municipality.

Valves shall be FlowMaster.

Valve Boxes

Made in the USA

Meets Buy America requirements

6800 VALVE BOX DROP LIDS

Standard Features

Fits all 8550, 8555 and 8560 series valve boxes
ASTM A48, Class 35B
85% minimum recycled content
Made in USA

Options

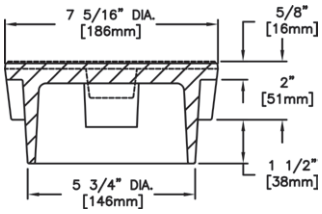
Special lettered covers
Logo covers
Locking lid
Extra deep covers for high traffic areas
Uncoated and coated

6800 Valve Box Drop Lids–Water lettering

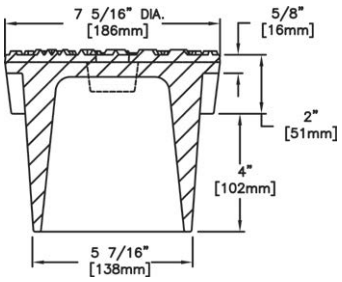
Skirt	Weight	Product No.
1 1/2	14	06800001U
1 1/2, Locking	15	06800025U
2	15	06800007U
2 1/2	20	06800019U
4	24	06800045U

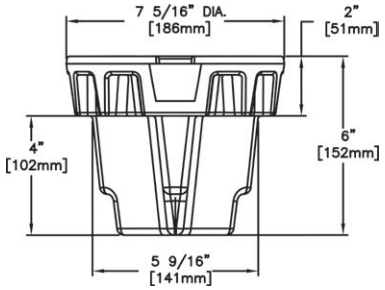
Note: All dimensions are in inches and weights are in pounds. Product numbers are for "Water" lettering, contact your Sales Representative for additional lettering options.

Non-Locking Lid

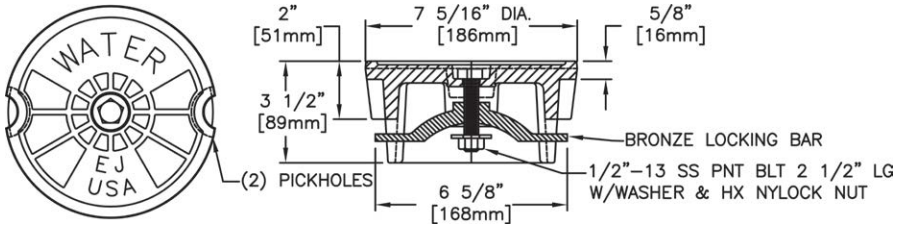


Extra deep covers for high traffic areas





Locking Lid



The top section of the valve box includes a lock bar pocket to secure the lid. The pocket is standard on the top section of all 8550 and 8555 valve boxes.

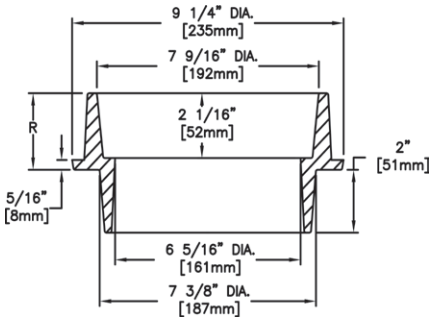
8500 VALVE BOX RISERS

Fits all 8550, 8555 and 8560 series valve boxes
Raises valve box lid to adapt to a new grade
ASTM A48, Class 35B
Uses standard drop lid
85% minimum recycled content
Made in USA

8500 Valve Box Risers

Skirt	Weight	Product No.
1	6	85008010
1 1/2	8	85008015
2	10	85008020
2 1/2	12	85008025
3	14	85008030
4	18	85008040
6	27	85008060

Note: All dimensions are in inches and weights are in pounds.

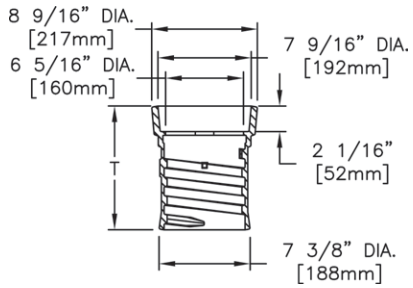


8550 SERIES, TWO PIECE SCREW TYPE

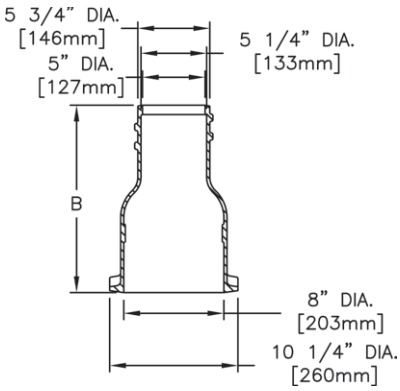
Accommodates 2" through 12" valves
5 1/4" clear opening
ASTM A48, Class 35B
85% minimum recycled content
Made in USA

Extensions allow for a wide range of bury depths.

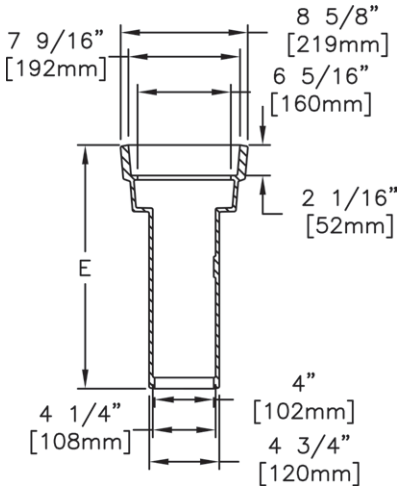
Top



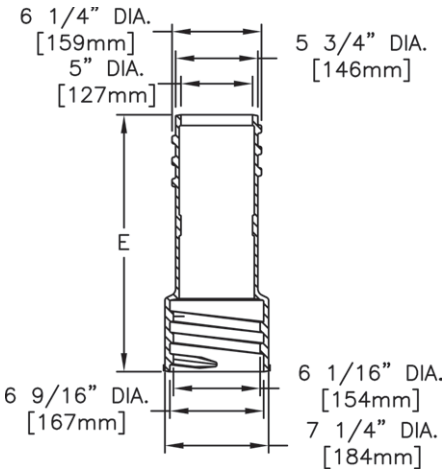
Bottom



Riser



Extension



8550 Series, Two Piece Screw Type

Product No.	Ref. No.	Ext. Range	Assy. Wt. w/Lid	Top Section Dim. T	Top Section Weight	Bottom Section Dim. B	Bottom Section Weight	Extensions Type	Extensions Wt.
85501922	461-S	19 - 22	69	10	26	15	28		
85502732	462-S	27 - 32	80	10	26	24	39		
85502737	562-S	27 - 37	90	16	36	24	39		
85503343	563-S	33 - 43	91	16	36	30	40		
85503950	564-S	39 - 50	102	16	36	36	51		
85503652	662-S	36 - 52	106	26	51	30	40		
85503860	664-S	39 - 60	117	26	51	36	51		
85505171	666-S	51 - 71	146	26	51	24	39	#60	41
85506282	668-S	62 - 82	158	26	52	36	50	#60	41

8550 Risers

Product No.	Ref. No.	Dim. E	Ht. Increase	Wt.
85508009	#69	16 1/2	2 1/2- 9	28
85508018	#18A	22 1/2	2 1/2 - 18	34
85508024	#24A	28 1/2	2 1/2- 24	41

8550 Extensions

Product No.	Ref. No.	Dim. E	Ht. Increase	Wt.
85606018	#58*	18	14	30
85606024	#59*	24	18	36
85606030	#60*	30	24	41

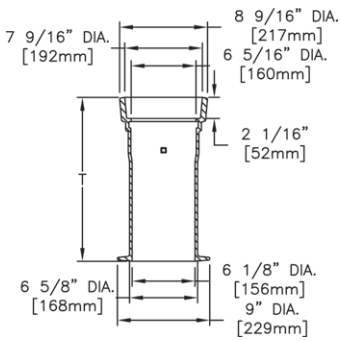
Note: All dimensions are in inches and weights are in pounds.
*Used as bottom sections on the 8560 Series

8555 SERIES, TWO PIECE SLIP TYPE

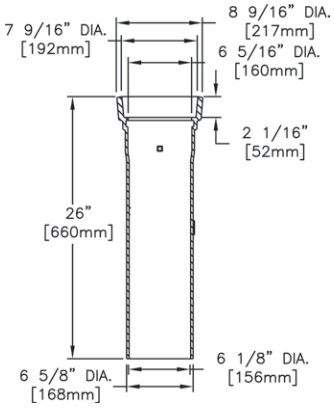
Accommodates 2" through 12" valves
5 1/4" clear opening
ASTM A48, Class 35B
85% minimum recycled content
Made in USA

Extensions allow for a wide range of bury depths.

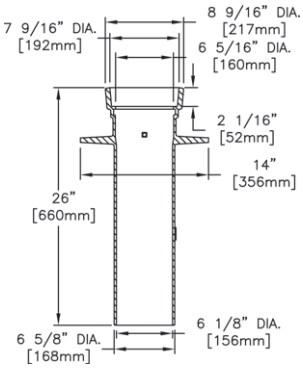
Top



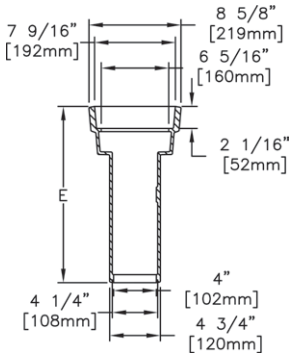
26" Top Without Bottom Flange (85557126)



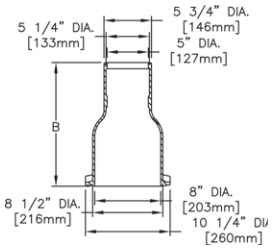
26" Top with Mid-Flange (85557226)



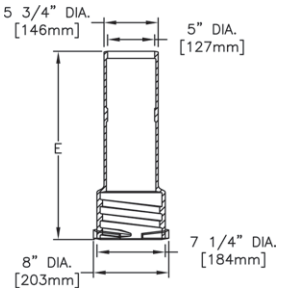
Riser



Bottom



Extension



8555 Series, Two Piece Slip Type

Product No.	Ref. No.	Ext. Range	Assy. Wt. w/Lid	Top Section Dim. T	Top Section Weight	Bottom Section Dim. B	Bottom Section Weight	Extensions Type	Extensions Wt.
85551922	461-A	19 - 22	63	10	22	15	26		
85552732	462-A	27 - 32	73	10	22	24	36		
85552737	562-A	27 - 37	80	16	29	24	36		
85553343	563-A	33 - 43	86	16	29	30	42		
85553950	564-A	39 - 50	95	16	29	36	51		
85553652	662-A	36 - 52	99	26	42	30	42		
85553960	664-A	39 - 60	108	26	42	36	51		
85555171	666-A	51 - 71	133	26	42	24	36	#60-A	40
85556282	668-A	62 - 82	148	26	42	36	51	#60-A	40

Note: All dimensions are in inches and weights are in pounds.

8555 Risers

Product No.	Ref. No.	Dim. E	Ht. Increase	Wt.
85558009	#69	16 1/2	2 1/2- 12	25

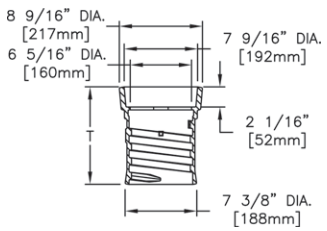
8555 Extensions

Product No.	Ref. No.	Dim. E	Ht. Increase	Wt.
85556518	#58-A	18	14	27
85556524	#59-A	24	18	29
85556530	#60-A	30	24	40

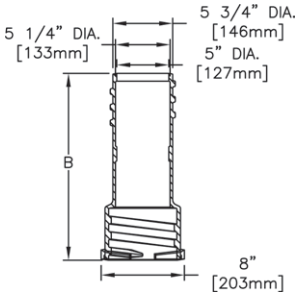
8560 SERIES, THREE PIECE SCREW TYPE

Accommodates 2" through 24" valves
5 1/4" clear opening
ASTM A48, Class 35B
Uses 8550 series top section
85% minimum recycled content
Made in USA

Top



Bottom/Extension



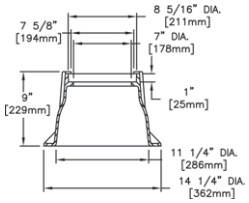
Extensions allow for a wide range of bury depths.

8560 Series, Three Piece Screw Type

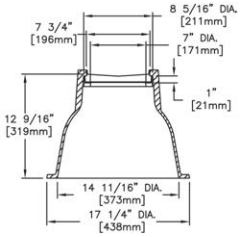
Product No.	Ref. No.	Ext. Range	Assy. Wt. w/Lid	Top Section Dim. T	Top Section Weight	Bottom Section Dim. B	Bottom Section Weight	Extensions Type	Extensions Wt.
85603342	A	33 - 42	110	16	36	18*	30		
85603949	B	39 - 49	116	16	36	24*	36		
85604554	C	45 - 54	121	16	36	30*	41		
85605060	CC	51 - 60	124	16	36	36	44		
85604566	D	45 - 66	136	26	51	30*	41		
85605172	DD	51 - 72	139	26	51	36	44		
85606372	E	63 - 72	157	16	36	24*	36	30*/#60	41
85606384	F	63 - 84	172	26	51	24*	36	30*/#60	41
85607493	G	74 - 94	180	26	52	36	44	30*/#60	41

Note: All dimensions are in inches and weights are in pounds.
*Used as extensions on the 8550 Series

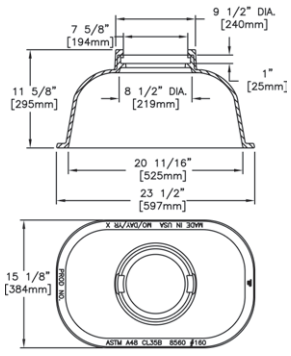
#4 Base
Accommodates up to 6" valves



#6 Base
Accommodates 8–10" valves



#160 Base
Accommodates 12" and above valves



8560 Bases

Product No.	Ref. No.	Height	Weight
85605004	#4	8	29
85605006	#6	11	48
85605160	#160	10	68

#4 Base standard with all assemblies above

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