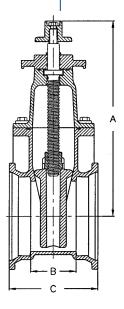
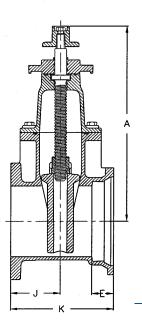
# **LUDLOW-RENSSELAER**

## **AWWA C-515**

# RESILIENT WEDGE GATE VALVE



 $M.J. \times M.J.$ 



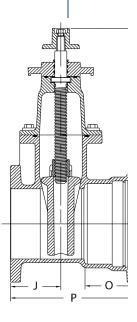
M.J. x FLANGE

PO Box 411 Berwick, PA 18603

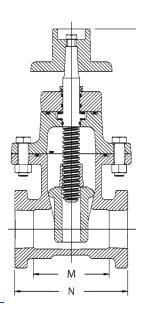


VALVES FROM 2" THRU 24"





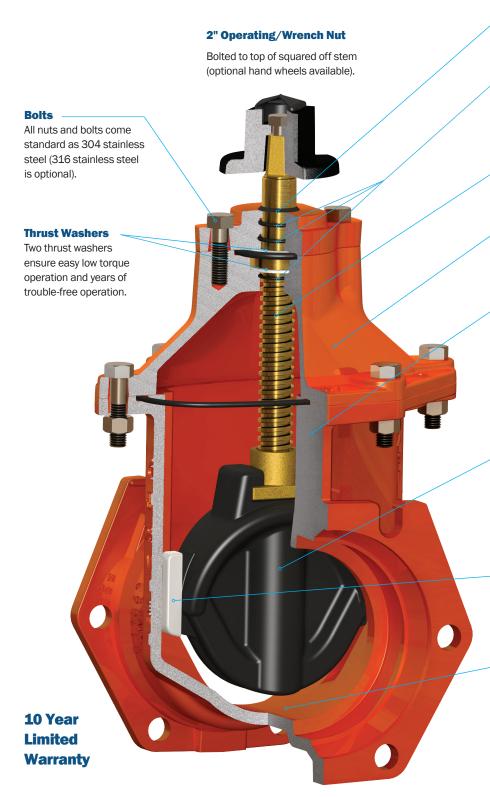
TYTON® x FLANGE



THD. x THD.

570-752-4524 www.crispinvalve.com

## 2" - 16" LUDLOW-RENSSELAER RESILIENT WEDGE GATE VALVE



#### **End Connections**

Available in 2" - 24" sizes. See page 15 for available end connections.

#### **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.

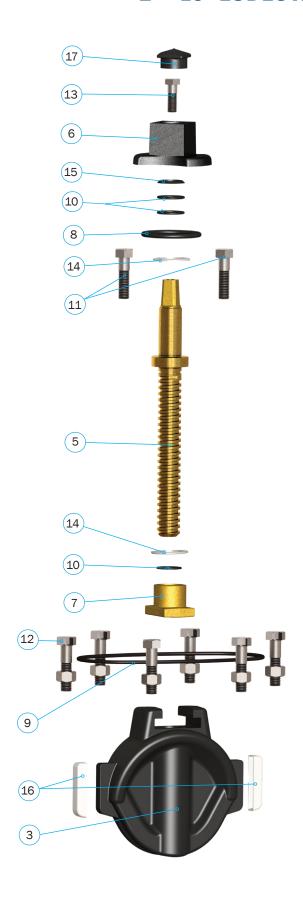
#### **UL/FM**

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.

## 2" - 16" LUDLOW-RENSSELAER VALVE PARTS



Ludlow-Rensselaer 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 0-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						

<sup>\*</sup> Not Shown



Ludlow-Rensselaer valves incorporate quality parts and a simple design. Each valve is inspected and individually tested.

All Ludlow-Rensselaer valves are made and assembled in the USA.

### 20" & 24" LUDLOW-RENSSELAER 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**

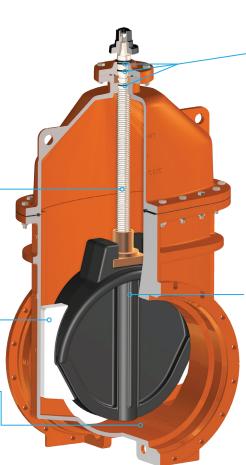
The stem is made of high strength 304 stainless steel and is lead free.

#### **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.



## 10 Year Limited Warranty

#### **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.

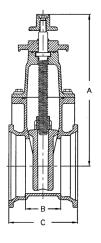
#### **Ductile Wedge**

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.

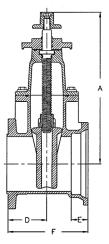
#### **Bolts**

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

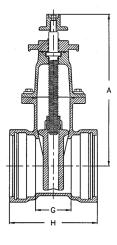
## **LUDLOW-RENSSELAER GATE VALVE DIMENSIONS AND AVAILABLE END CONNECTIONS**



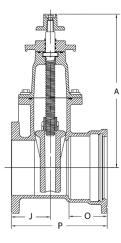
M.J. x M.J.



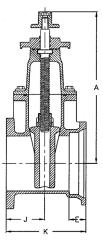
M.J. x TAPPING



TYTON® x TYTON®



TYTON® x FLANGE



M.J. x FLANGE

С

14 1/2 21 3/4

18

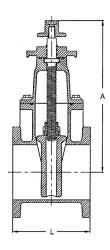
23

Size A

16"

20"

24"



FLANGE x FLANGE

F

G

**Ludlow-Rensselaer Gate Valve Dimensions and Available End Connections** Ε

D

8 1/2

9

10

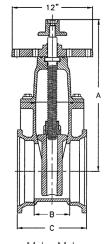
3 1/2

3 1/2

193/8

18

3 1/2 21 1/2



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

K

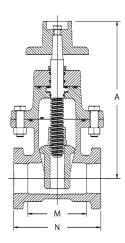
193/8

21 1/2

18

17

18



THD. x THD.

																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	113/4	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	67/8	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

8 1/2

10 5/8 21

Н

Note: All dimensions are in inches.

48 7/16 | 11

39 1/2

57

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

16

\* 4" TYTON® x FLANGE is 4 1/2"

Open

51

62

74

#### 2" - 16" LUDLOW-RENSSELAER RESILIENT WEDGE GATE VALVES SAMPLE SPEC

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 Ludlow-Rensselaer.

#### 20" & 24" LUDLOW-RENSSELAER RESILIENT WEDGE GATE VALVES SAMPLE SPEC

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 Ludlow-Rensselaer.