# Lead Valve®

# GATE VALVE



Resilient Seated
Solid Wedge

**Size: 2" - 108"** 

**AWWA C509/C515** 







## **Lead Valve - Benefiting Customers!**

Our experience working on major waterworks projects throughout the world sets us apart from other companies. We offer a full range of waterworks valves for all types of waterworks projects. As knowledgeable, experienced valve professionals; our staff simplifies the process of valve selection and valve purchasing.

Valve manufacturers play an important role in the success of designing and building projects. The experienced staff at lead valve has the technical valve expertise with waterworks projects; collaboration with lead valve ensures success. We offer quality valves at competitive prices.







## **Lead Valve Facilities**

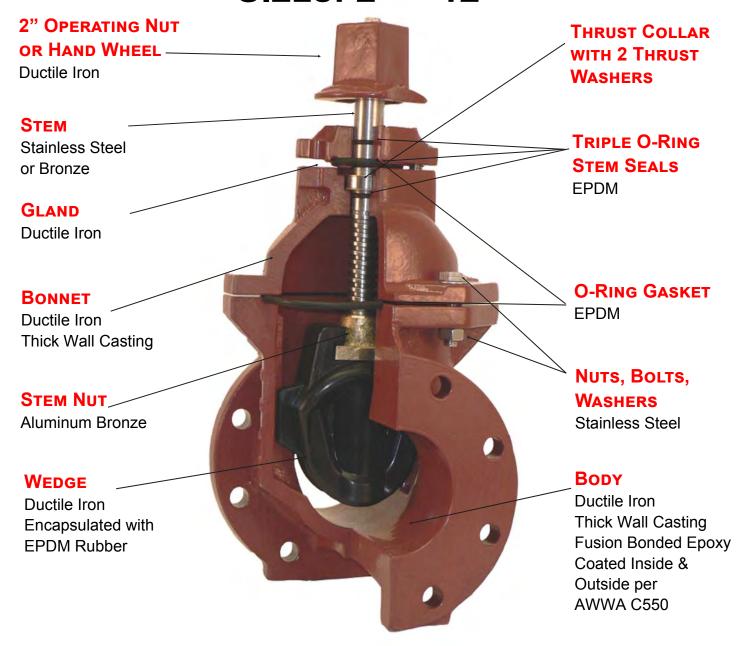




# RESILIENT SEATED SOLID WEDGE GATE VALVE

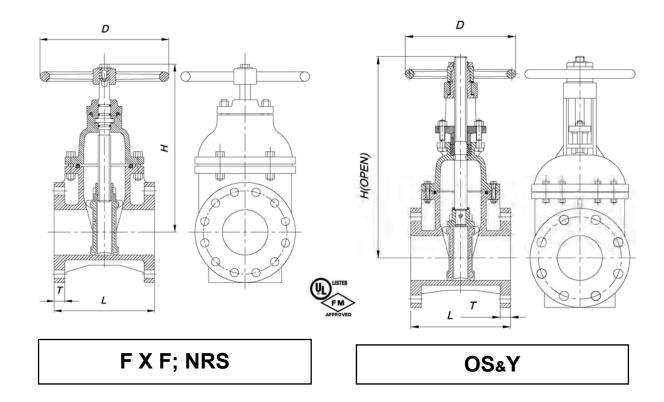
**SERIES 6000 - AWWA C509** 

SIZES: 2" - 12"





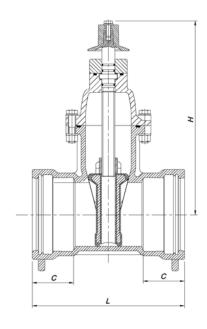
## **INSTALLATION DIMENSIONS**



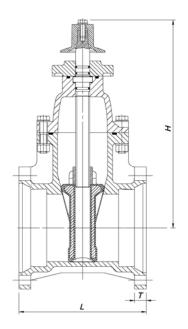
DIMENSIONS SERIES 6000 NRS GATE VALVE:						
Size	Model	L	Н	D	T	
2"	6802	7"	101/8"	7½"	5/8"	
2.5"	6825	7½"	11¾"	7½"	3/4"	
3"	6803	8"	13¾"	10"	3/4"	
4"	6804	9"	15 <sup>7</sup> ⁄8"	10"	1"	
5"	6805	10"	17¼"	12"	1"	
6"	6806	10½"	191/8"	12"	1"	
8"	6808	11½"	23½"	14"	11/8"	
10"	6810	13"	26¼"	17½"	11/4"	
12"	6812	14"	30¾"	17½"	11⁄4"	

DIMENSIONS SERIES 6000 OS&Y GATE VALVE:							
Size	Model	L	H (Open)	D	T		
2"	6702	7"	15¾"	7½"	5/8"		
2.5"	6725	7½"	16½"	7½"	3/4"		
3"	6703	8"	19½"	10"	3/4"		
4"	6704	9"	231/8"	10"	1"		
5"	6705	10"	291/8"	12"	1"		
6"	6706	10½"	31½"	12"	1"		
8"	6708	11½"	39½"	14"	11/8"		
10"	6710	13"	46¾"	17½"	11/4"		
12"	6712	14"	56"	17½"	11/4"		

## Installation Dimensions



Push-On; NRS



MJ X MJ

NOTE: PUSH-ON X FLG, NRS AND PUSH-ON BY PUSH-ON, NRS; AVAILABLE - SEE WEBSITE FOR DRAWINGS

DIMENSIONS SERIES 6000 PUSH ON GATE VALVE:							
Size	Model	С	L	Н			
4"	6504	3½"	12¾"	15¾"			
6"	6506	4"	14¾"	19⅓"			
8"	6508	4½"	17 <sup>7</sup> /s"	23½"			
10"	6510	4½"	18½"	26¼"			
12"	6512	5"	18%"	30¾"			

DIMENSIONS SERIES 6000 MJ GATE VALVE:							
Size	Model	L	Н	Т			
2"	6902	8"	101/%"	7/8"			
2.5"	6925	8½"	11%"	7/8"			
3"	6903	9"	13¾"	7/8"			
4"	6904	10"	15 <sup>7</sup> ⁄8"	1"			
5"	6905	11"	17¼"	1"			
6"	6906	11½"	191⁄%"	1"			
8"	6908	12½"	23½"	11/8"			
10"	6910	14¾"	26¼"	11/4"			
12"	6912	141/8"	30¾"	11/4"			

# RESILIENT SEATED SOLID WEDGE GATE VALVE

**SERIES 6000 - AWWA C509** 

SIZES: 14" - 48"



#### **BODY**

**Ductile Iron** 

#### **BONNET**

**Ductile Iron** 

#### GLAND

**Ductile Iron** 

#### WEDGE

Ductile Iron
Encapsulated with EPDM Rubber

#### **STEM**

Stainless Steel (Bronze Available)

#### **STEM SEALS**

**EPDM O-rings** 

#### **STEM NUT**

**Aluminum Bronze** 

### **BODY GASKET**

**EPDM** 

### **NUTS, BOLTS, WASHERS**

Corrosive Resistant

#### COATING

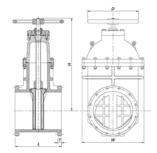
Fusion Bonded Epoxy Coated Inside & Outside per AWWA C550

#### Type

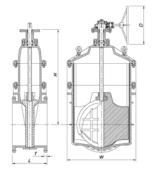
Non Rising Stem (NRS) or Outside Screw & Yoke (OS&Y)

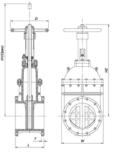
## **INSTALLATION DIMENSIONS**

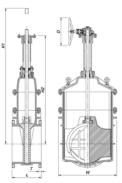
FXF, NRS 14" & 16"



FXF, BG 18" - 48"







OS&Y 14" & 16"

> OS&Y 18" - 48"

DIMENSIONS SERIES 6000 NRS GATE VALVE:							
Size	Model	L	Н	T	W	D	
14"	6814	15"	34"	13/8"	23½"	21"	
16"	6816	16"	401/8"	1½"	27½"	21"	
18"	6818	17"	44"	1%"	27½"	235/8"	
20"	6820	18"	52"	13/4"	32"	235/8"	
24"	6824	20"	58"	11/8"	39¼"	235/8"	
30"	6830	24"	70"	21/8"	47¾"	235/8"	
36"	6836	28"	81"	23/8"	541⁄4"	235/8"	
42"	6842	36"	86"	25/8"	66¾"	235/8"	
48"	6848	44"	96"	23/4"	75½"	235/8"	

DIMENS	DIMENSIONS SERIES 6000 OS&Y GATE VALVE:							
Size	Model	L	H1(Open)	H2	Т	W		
14"	6714	15"	641/8"	495/8"	13/8"	23½"		
16"	6716	16"	761/8"	561/4"	1½"	27½"		
18"	6718	17"	80½"	585/8"	15⁄8"	27½"		
20"	6720	18"	96"	70"	13/4"	32"		
24"	6724	20"	110½"	80"	1½"	391/4"		
30"	6730	24"	1361/8"	101%"	21/8"	473/4"		
36"	6736	28"	1591⁄8"	1181⁄8"	23/8"	54½"		
42"	6742	36"	177½"	1331/8"	25/8"	66¾"		
48"	6748	44"	215%"	160"	23/4"	75½"		

# RESILIENT SEATED SOLID WEDGE GATE VALVE

**SERIES 6000** 

SIZES: 54" - 108"



#### **BODY**

Ductile Iron

#### **BONNET**

Ductile Iron

#### GLAND

Ductile Iron

#### WEDGE

Ductile Iron with Mechanically Retained EPDM Double Seat

#### STEM

Stainless Steel (Other Materials Available)

## STEM SEALS

**EPDM O-rings** 

#### **STEM NUT**

Aluminum Bronze
BODY GASKET

**EPDM** 

## NUTS, BOLTS, WASHERS

Corrosive Resistant

#### COATING

Fusion Bonded Epoxy Coated Inside & Outside per AWWA C550

#### **TYPE**

Non Rising Stem (NRS) Or Outside Screw & Yoke (OS&Y)

### **SEATS**

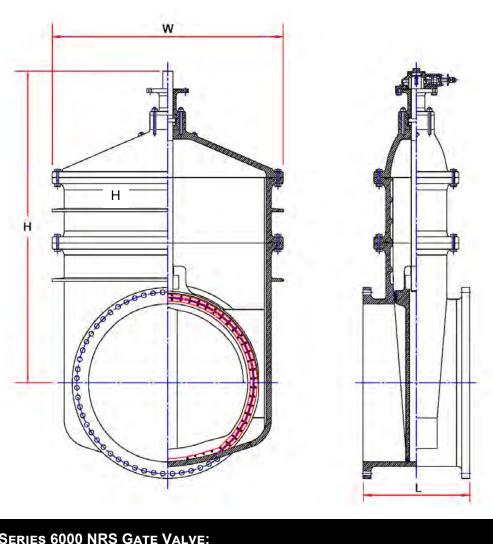
Mechanically Retained EPDM Rubber Seat On both sides of Wedge

(Field Adjustable & Replaceable)





## Installation Dimensions

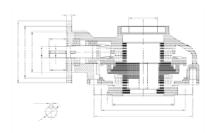


DIMENSIONS SERIES 6000 NRS GATE VALVE:						
Size	Model	L	Н	W		
54"	6854	42"	109"	83½"		
60"	6860	44"	1271/8"	84"		
72"	6872	48"	150"	104¾"		
84"	6884	48"	174½"	124"		
90"	6890	54"	187½"	130"		
96"	6896	54"	200"	138"		
102"	68102	57½"	211"	145½"		
108"	68108	57½"	223"	154½"		

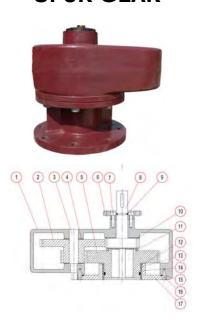
## **ACTUATION**

#### BEVEL GEAR





### SPUR GEAR



### **ELECTRIC ACTUATION**



#### **BEVEL GEARS:**

- 90° intersecting shaft applications provide highly efficient operation
- The Coniflex® tooth form extends operating life and offers smoother, quieter operation
- Spiral bevel gears handle higher speeds and greater torque loads more smoothly and quietly than ever before
- · Hardened or unhardened teeth offer versatility
- Bevel gears provide the flexibility of 1-1/2:1 to 18:1 ratios
- Fusion bonded epoxy coated in accordance with AWWA C550

#### SPUR GEARS:

- Used in parallel shaft applications
- · High load capacity
- Higher contact ratio provides a smoother, quieter operation
- Fusion bonded epoxy coated in accordance with AWWA C550

#### **ELECTRIC ACTUATORS:**

Electric Actuators can be easily adapted to the valve allowing the valve to become integrated with the system while also allowing for remote operation. The actuators are built in accordance with AWWA Standard C542 for Electric Actuators and are equipped with thermal overloads, torque switches and limit switches to protect the actuator and valve. lead valve prefers to supply "smart" actuators which offer features that are ideal for the digital world.

## **SPECIFICATION**

## **AWWA C509 - RESILIENT SEATED GATE**

#### SCOPE

This specification covers design, manufacturing and testing of 2" - 108" Resilient Seated Gate Valves.

#### **STANDARDS**

Valves where applicable are designed and manufactured in compliance with AWWA C509 and C515, valves shall be ANSI NSF61 Certified.

#### **CONNECTIONS**

Valves 2" - 48" shall have flange, mechanical joint or flange by mechanical joint end connections. 54" and larger valve shall be flange in accordance with ASME B16.1.

#### DESIGN

Valves shall be non-rising stem (NRS) or outside screw and yoke (OS&Y).

#### **TESTING**

Valves shall be tested in accordance with AWWA C509 & C515.

#### **MATERIAL**

Body, Bonnet, Wedge and Gland shall be cast of ASTM A536 Grade 65-45-12 ductile iron. Stem material, body bolts and bonnet bolts shall be stainless steel. The wedge on 2" - 48" shall be encapsulated with synthetic rubber to allow zero leakage at the rated pressure. 54" and larger shall have a mechanically retained rubber seat on both sides of the wedge. The rubber seat shall be retained with a stainless steel ring with stainless steel bolts. All gaskets and o-rings are to be EPDM. OS&Y Valves shall have multiple rings of packing and a stuffing box. 30" and larger valves shall have a 316 stainless steel track on both sides of the body which maintains a smooth surface between the rubber seating area and the iron body of the valve.

#### **COATINGS**

Valve internal and external coatings shall be NSF 61 Certified Epoxy Coating.

#### QUALITY

Resilient Seated Gate Valves 2" - 108" shall be manufactured by lead valve uk ltd in uk or chinese manufacturering site

# Lead Valve















# **Improving the Industry Standard!**Giving More to the End Users!

**Lead VALVE** manufactures Gate Valves which "Improve the Industry Standards". The American Water Works Association (AWWA) Standards C509 establishes the minimum design and testing requirements for gate valves. Other gate valve manufacturers strive to design their valve as close to the minimum as possible and still be in compliance with the AWWA standards. lead manufactures with materials that exceed the minimum set out by the AWWA standards.

The AWWA C509 Standard (the Standard for Resilient Gate Valves) sets the minimum thickness of the body and bonnet and states that the valve can be made of cast grey iron or ductile iron. lead valve improves the standard by exceeding the minimum thickness stated in C509 and manufacturing cast components of ductile iron (including the body, bonnet, wedge, seal plate, and operating nut). The tensile strength of the lead cast ductile iron is 65,000 psi with a 12% elongation property. The tensile strength of most cast grey iron is 30,000 psi with less than 1% elongation.

**Our Commitment** is to provide a higher quality gate valve to the water works industry. This is why we use a higher strength materials than the minimum required by the AWWA standards. lead Resilient Seated Gate Valve materials feature a large diameter stainless steel stem, a thicker aluminum bronze stem nut, fusion bonded epoxy coatings inside and outside, corrosive resistant bolts, and EPDM rubber components. lead give the customers a stronger more robust, extra heavy duty, more reliable and longer lasting gate valve. In addition, lead offers the most experience in production of 72" Resilient Seated Gate Valves in the world. lead maintains a finished goods inventory of valves 2" - 48" to service our customers like no other valve manufacturer. lead has the most complete line of AWWA Resilient Seated Gate Valves as well as Metal Seated Gate Valves in the world.

# Install Reliability Install Lead Valve

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