# IT'S WHAT WE KNOW













DUCTILE IRON 250 P.S.I.G.

2"-12" SERIES 2500 RESILIENT WEDGE VALVE



AMERICAN FLOW CONTROL

# SERIES 2500 RESILIENT WEDGE VALVE





**SERIES 2500 RESILIENT WEDGE** 



### SERIES 2500-STANDARD NRS DIMENSIONS, 2"-12" SIZES



HANDWHEEL DIA-

SHOWN WITH OPTIONAL HANDWHEEL

IL1442

DIMENSION	VALVE SIZE								
	2″	2-1/2″	3″	4″	6″	8″	10″	12″	
A	9.25	11.03	11.84	13.72	16.75	20.19	24.12	27.69	
В	10.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
End to End - MJ/MJ	8.25	N/A	8.62	11.00	12.00	12.50	14.75	16.62	
Lay Length - MJ/MJ	3.25	N/A	3.62	6.00	7.00	7.50	9.75	11.62	
End to End - FL/FL (Class 125)	7.00	7.50	8.00	9.00	10.50	11.50	13.00	14.00	
End to End - FL/FL (Class 250)	N/A	N/A	11.12	12.00	15.88	16.50	18.00	19.75	
End to End - TY/TY	N/A	N/A	N/A	13.50	16.88	18.50	20.50	22.38	
End to End - PO/PO (Push-On)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
End to End - FL/MJ (Class 125)	N/A	N/A	N/A	10.00	11.25	12.62	13.88	15.31	
End to End - FL/TY (Class 125)	N/A	N/A	N/A	11.25	13.69	15.00	16.75	18.19	
End to End - PVC/PVC	10.75	11.12	11.38	13.50	16.88	18.50	N/A	N/A	
End to End - Threaded	6.25	7.38	7.38	N/A	N/A	N/A	N/A	N/A	
Handwheel Diameter	8.00	8.00	8.00	10.00	12.00	14.00	16.00	16.00	
No. of Turns to Open	9	11	13	13	19	26	32	38	

1. Valves 2"-12" meet or exceed requirements of ANSI/AWWA C515.

2. 250 p.s.i.g. AWWA rated working pressure. 500 p.s.i.g. test pressure.

3. 2" through 16" valves may be ordered in configurations which are UL Listed and/or FM Approved.

4. Fusion-bonded epoxy coating meets or exceeds requirements of ANSI/AWWA C550.

5. Flanged ends are in accordance with ANSI/AWWA C110/A21.10 (ANSI B16.1, Class 125).

6. Threaded ends are in accordance with ANSI B16.4, Class 125.

7. Mechanical joint ends are in accordance with ANSI/AWWA C111/A21.11.

8. Tyton® ends and push-on ends are in accordance with ANSI/AWWA C111/A21.11 for use with ductile iron pipe.

9. PVC ends are suitable for use on steel (IPS) sizes of PVC or steel pipe.

10. 2" through 12" valves are certified to ANSI/NSF Standard 61.

11. It is recommended that stems be vertical in raw sewage applications.

12. 2"-8" AWWA and UL/FM Pressure Rating 250 p.s.i.g., 10"-16" UL/FM Pressure Rating 200 p.s.i.g.

# AMERICAN FLOW CONTROL SERIES 2500 RESILIENT WEDGE VALVE



Reference Description		Material		
1	Hex Head Bolt, 5/8-11 x 1"	Zinc Plated Steel		
2	Operating Nut, 2" Square	Ductile Iron		
3	O-ring	Nitrile Rubber		
4	Lower Thrust Washer	Nylon		
5	Stuffing Box Gasket	Nitrile Rubber O-ring		
6	Hex Head Bolt, 5/8-11 x 1-3/4"	Zinc Plated Steel		
7	Stuffing Box	Ductile Iron		
8	Valve Bonnet	Ductile Iron		
10	Throat Flange Gasket	EPDM Rubber		
11	Valve Body	Ductile Iron		
12	Stem	Manganese Bronze		
13	Wedge Nut	Manganese Bronze		
14	Resilient Wedge	Ductile Iron, Coated with EPDM Rubber		
15	Hex Nut, 5/8–11	Zinc Plated Steel		
17	Handwheel	Ductile Iron		
19	Hex Head Bolt, 5/8-11 x 2-1/4"	Zinc Plated Steel		
21	Hex Head Bolt, 5/8-11 x 2-1/2"	Zinc Plated Steel		
29	Flat Washer, 5/8	Zinc Plated Steel		
40	UL/FM Label	Pressure Sensitive Acrylic Film		
49	O-ring	Nitrile Rubber		
65	Upper Thrust Washer	Stainless Steel		
69	Wedge Guide Cover	Acetal		
		1		

SHOWN WITH 2" OPERATING NUT

OS & Y Parts List



Ref No.	Description	Material			
2	Stem Nut	Bronze			
3	O-ring	Nitrile Rubber			
4	Handwheel Washer	Brass			
5	Stuffing Box Gasket	Nitrile Rubber			
8	Bonnet	Ductile Iron			
9	Hex Head Bolt, 5/8- 11 x 2"	Zinc Plated Steel			
10	Throat Flange Gasket	EPDM Rubber			
11	Valve Body	Ductile Iron			
12	Stem	Free Cutting Brass			
13	Wedge Nut	Ductile Iron			
14	Resilient Wedge	Ductile Iron, Coated with EPDM Rubber			
15	Hex Nut, 5/8 -11	Zinc Plated Steel			
16	Hex Nut, 5/8 -11	Brass			
17	Handwheel	Ductile Iron			
18	Groove Pin	Stainless Steel			
19	Hex Head Bolt, 5/8 - 11 x 2-1/4"	Zinc Plated Steel			
20	Gland Follower	Ductile Iron			
21	Hex Head Bolt, 5/8"- 11 x 2-1/2"	Zinc Plated Steel			
22	Hex Head Bolt, 5/8"- 11 x 2-3/4"	Zinc Plated Steel			
23	Gland	Sintered Bronze, Oil Impregnated			
24	Packing Ring	Tallow Impregnated Flax			
25	Yoke	Ductile Iron			
40	UL/FM Label	Pressure Sensitive Acrylic Film			
69	Wedge Guide Cover	Acetal			

## FEATURES/BENEFITS

## **SPECIFICATIONS**

## SERIES 2500 RESILIENT WEDGE VALVE

## **FEATURES**

The **Series 2500** Ductile Iron 250 p.s.i.g. AWWA Resilient Wedge Gate Valve is designed for use in drinking water, sewage and fire protection systems as well as irrigation and backflow control systems.

#### **Ductile Iron Construction**

The ductile iron body, bonnet and wedge provide strength and a pressure rating that meets or exceeds the requirements of AWWA C515. Strength more than doubles that provided by cast iron designs, and the pressure rating is 250 p.s.i.g. All this strength and higher pressure rating is provided in a compact, lightweight, and easy-tohandle ductile valve.

#### **Fusion-Bonded Epoxy**

The **Series 2500** valve is fully epoxy coated both on the interior as well as the exterior. The fusion-bonded coating is applied prior to assembly so that even the bolt holes and body-to-bonnet flange surfaces are fully epoxy coated. **Triple O-ring Stem Seals** 

This valve features triple O-ring stem seals. Two O-rings are located above, and one O-ring is located below the thrust collar. The lower two O-rings provide a permanently sealed lubrication chamber that will make the valve easier to operate over a longer period of time. The upper O-ring assures that sand, dirt or grit cannot enter the valve to cause damage to the lower O-rings. This is especially important for buried and sewage service applications.

#### **Thrust Washers**

Two thrust washers are used. One is located above and one is located below the thrust collar. These thrust washers assure easy operation at all times.

#### No Flat Gaskets

The body-to-bonnet and bonnetto-bonnet cover seals are pressure energized O-rings. This eliminates the need for excessive bolt loading which is required by designs that use flat gaskets. The O-rings are reusable which eliminates down time during any needed repair.

The **Series 2500** Resilient Wedge Gate Valve is furnished in configurations that are listed by Underwriters Laboratories, Inc. and approved by Factory Mutual Research Corp.

The **Series 2500 Ductile Iron Resilient Wedge Gate Valve** has these standard features:

- UL Listed-FM Approved
- Seat Tested 250 p.s.i.g.
- Fusion-Bonded Epoxy Coating Complies With ANSI/AWWA C550
- 250# Raised Face Flanges Available
- Ductile Iron Body, Bonnet and Wedge, Operating Nut
- · Shell Tested 500 p.s.i.g.
- · 250 p.s.i.g. AWWA Pressure Rating
- Rubber Encapsulated Wedge
- Triple O-ring Stem Seals
- Smooth (No Pocket) Waterway
- 100% Leak-Tight Closure
- NSF Standard 61 Certified
- · AWWA C515



## **SPECIFICATIONS**

Valves 2"-36" shall be resilient wedge type rated for 250 p.s.i.g. cold water working pressure. All ferrous components shall be ductile iron. Valves 3"-36" shall be in full compliance with AWWA C515. The words "D.I." or "Ductile Iron" shall be cast on the valve or stamped on a permanently attached corrosion resistant metal tag. The wedge shall be ductile iron encapsulated with rubber.

The wedge shall be symmetrical and seal equally well with flow in either direction.

Valves shall be NSF Standard 61 certified.

Bolting materials shall develop the physical strength requirements of ASTM A307 and may have either regular square or hexagonal heads with dimensions conforming to ANSI B18.2.1. Metric size socket head cap screws, therefore, are not allowed.

Operating nut shall be constructed of ductile iron and shall have four flats at stem connection to assure even input torque to the stem.

All gaskets shall be pressure energized O-rings.

Stem shall be sealed by three O-rings. The top two O-rings shall be replaceable with valve fully open and while subject to full rated working pressure. O-rings set in a cartridge shall not be allowed.

Valve shall have thrust washers located with (1) above and (1) below the thrust collar to assure trouble-free operation of the valve.

All internal and external surfaces of the valve body and bonnet shall have a fusion-bonded epoxy coating, complying with ANSI/AWWA C550, applied electrostatically prior to assembly.

Valves shall be American Flow Control's Series 2500 Ductile Iron Resilient Wedge Gate Valve.

















# **American Flow Control®** American-Darling Valve and Waterous A Division of American Cast Iron Pipe Company

http://www.acipco.com/afc

# **American-Darling Valve**

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