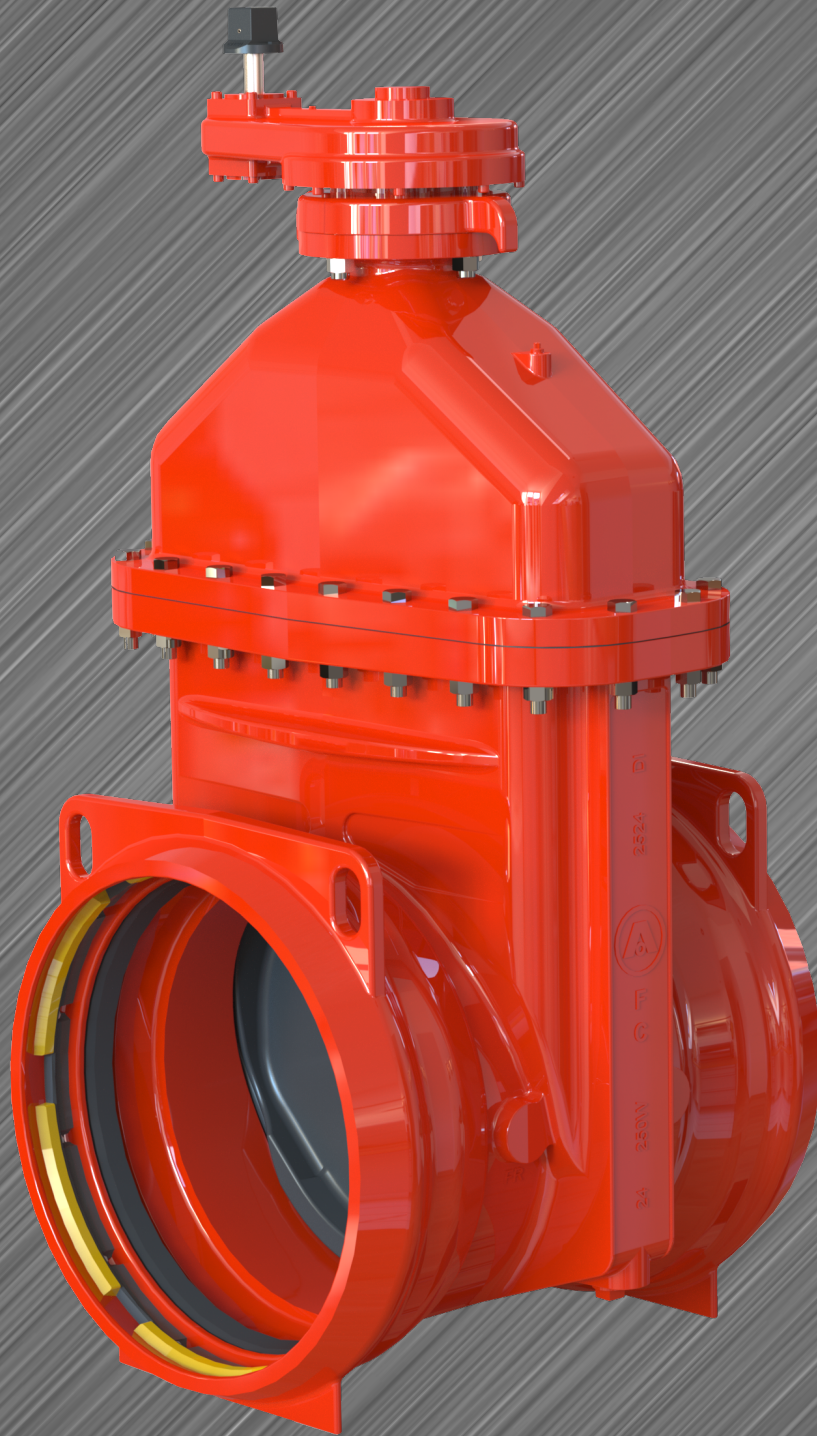


16"-60" SERIES 2500 RW GATE VALVES WITH FLEX-RING® ENDS
BY AMERICAN FLOW CONTROL®

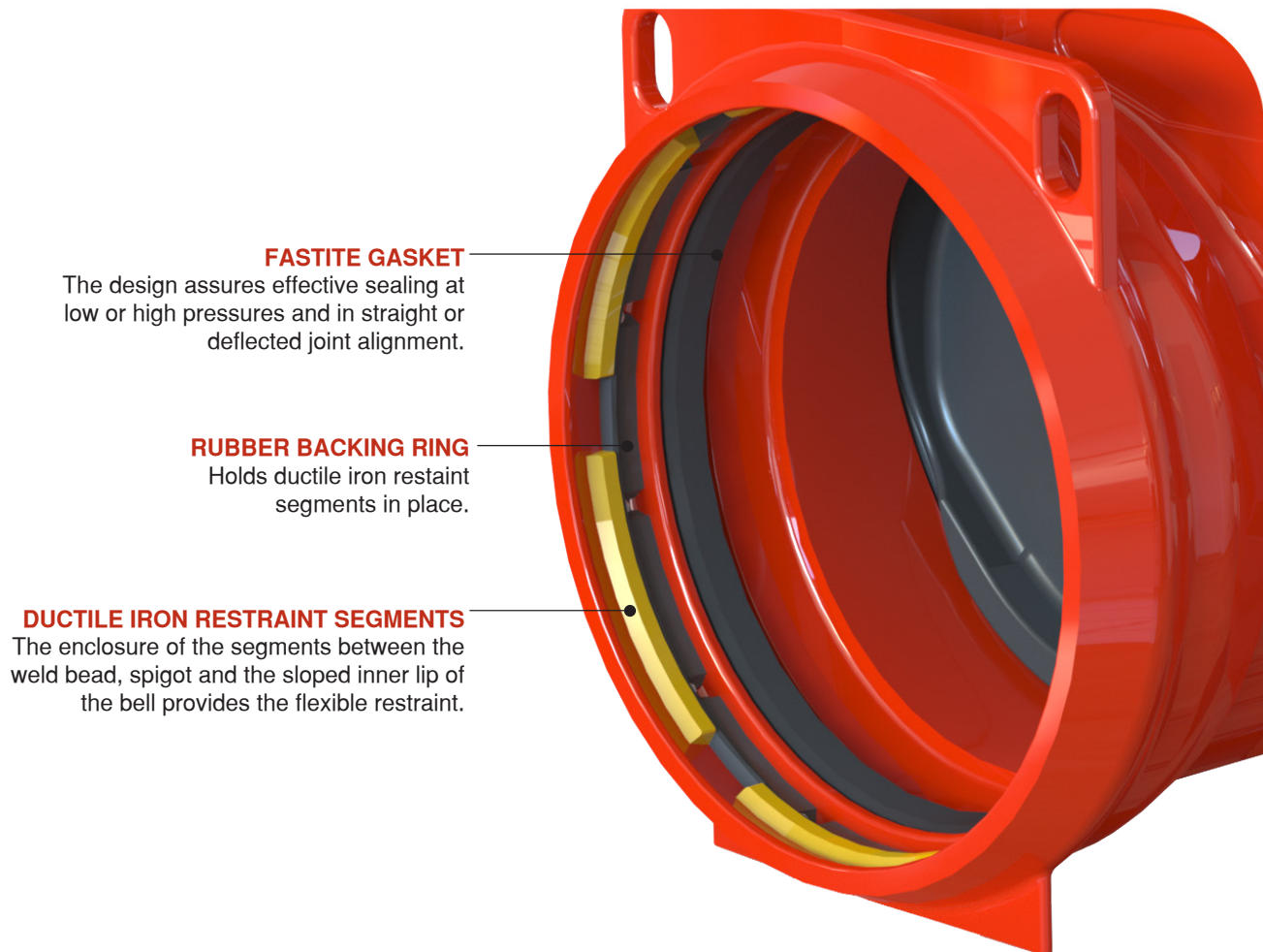


AMERICAN
FLOW CONTROL
THE RIGHT WAY

CONSTRUCTION

AMERICAN FLEX-RING® BOLTLESS RESTRAINED JOINT

Available on 16"- 60" AMERICAN Series 2500 RW Gate Valves.



FEATURES

AMERICAN Flow Control's 16"- 66" Series 2500 Ductile Iron Resilient Wedge Gate Valves with Flex-Ring Ends have a long history of use in potable water, fire protection systems and wastewater applications. These valves have a rated working pressure of 250 psig with zero leakage. The waterway is clear and unobstructed.

ADVANTAGES OVER BUTTERFLY VALVES

- No disc in waterway to restrict flow or to increase pumping costs.
- Allows passage of pigging devices.
- Internal parts can be serviced without cutting valve out of pipeline.
- 250 psig rating provides for future pressure increases over the 150 psig pressure rating found on most butterfly valves.

ADVANTAGES OVER DOUBLE DISC GATE VALVES

- Zero allowable leakage.
- Lower torque requirements to operate valve.
- 250 psig pressure rating compared to the 150 psig rating found on traditional double disc gate valves.
- Epoxy coated inside and out.
- Lighter total valve weight.
- Single gate construction. Double disc gate valves have multiple parts that can bind.
- Bypasses and rollers, tracks and scrapers are not needed.

The 16"- 60" Series 2500 Resilient Wedge Gate Valves with Flex-Ring Ends have these standard benefits:

- Positive joint restraint instead of friction-based restraint.
- Significant labor savings with less installation time.
- Twice the deflection compared to MJ-style restrainers.
- No bolts or nuts to inventory or keep track of on jobsite.
- No point loads or digging into the connecting pipe wall.
- Flex-Ring offers a more even distribution of thrust loads.
- Restraining components protected by bell socket.
- Ideal for installation near structures where differential settlement may occur.
- No restraining hardware to corrode.

BENEFITS

BOLTLESS RESTRAINT

The only joint components needed to assemble the Flex-Ring Joint are a gasket and a single ring. No loose lugs, heavy wedges or rubber tubes are necessary. Also, there is no need to orient bells to ensure proper installation.

INCREASED DEFLECTION

The Flex-Ring joint's liberal deflection allowance facilitates installation and accommodates settlement. Flex-Ring continues to allow deflect even after the joint is assembled. Typical MJ restrainers become fixed after assembly.

PROTECTED RESTRAINT COMPONENTS

Unlike traditional restraints, the joint restraint components reside inside the bell and are protected from impact damage during installation and backfilling.

POSITIVE JOINT RESTRAINT

Flex-Ring uses a positive stop in the restraint mechanism, unlike traditional MJ-type restrainers which rely on friction.

SIGNIFICANT LABOR SAVINGS

Compared to traditional mechanical joint restraint, the elimination of T-head and wedge-type bolts means no extra time spent pre-assembling hardware prior to installation.

NO POINT LOADING THE PIPE

Flex-Ring relies on a positive mechanism to achieve joint restraint. The footprint of each Flex-Ring ductile iron segment is significantly larger than that of a wedge bolt. Limited access to lower MJ wedge fasteners can also result in improper joint assembly and alignment.

SAMPLE SPECIFICATION

Valves 16"- 60" shall be resilient wedge type rated for 250 psig cold water working pressure and employ the use of a boltless positive joint restraint equal to the Flex-Ring joint. Friction style restrainers will not be allowed. All cast ferrous components shall be ductile iron, ASTM A536. Valves 16"- 60" shall meet or exceed all applicable requirements of ANSI/AWWA C515. The words "Ductile Iron" or "D.I." shall be cast on the valve. The wedge shall be constructed of ductile iron fully encapsulated with EPDM rubber.

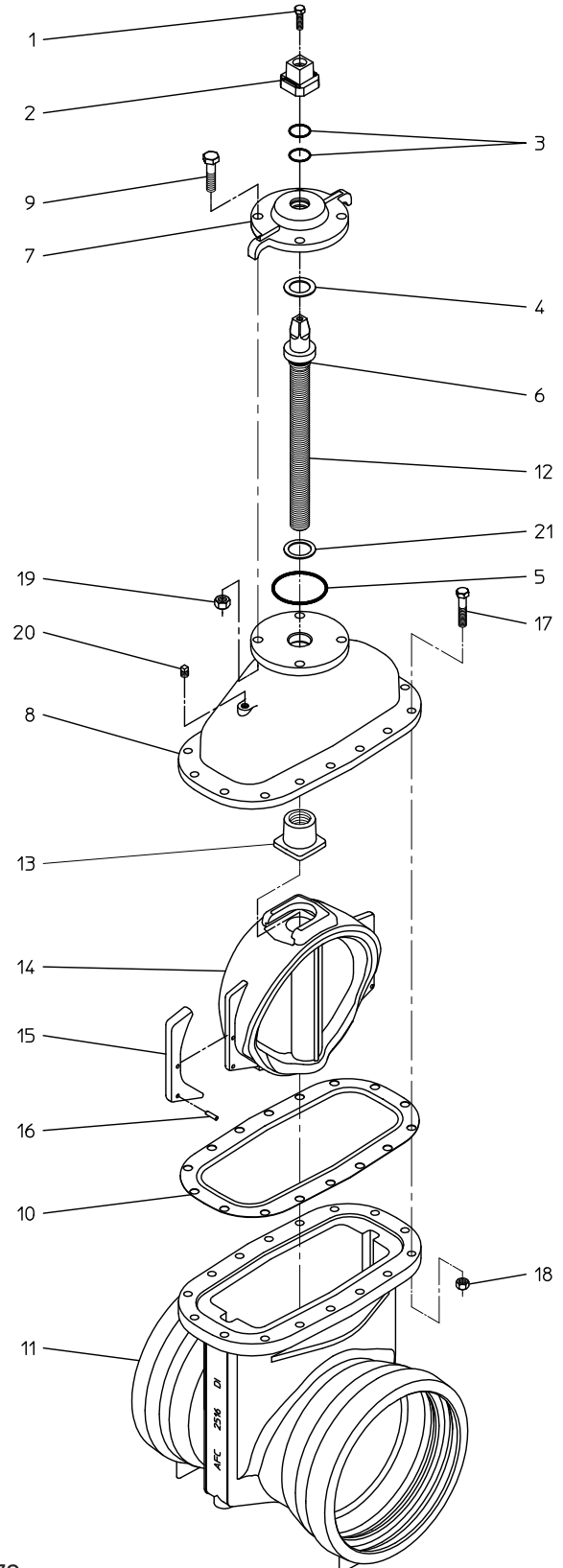
The wedge shall be symmetrical and seal equally well with flow in either direction. Wedge guides shall be equipped with male guide covers. The use of auxiliary bronze rollers and plow-style shoes are not acceptable. The wedge nut shall be independent of the wedge and held in place on three sides by the wedge to prevent possible misalignment. When required valves 16" and larger shall be furnished with spur gears for vertical installations and bevel gears for horizontal installations.

Valves shall be Certified to NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372.

Body bolting material shall be 304 stainless steel unless otherwise specified. Bolts may have either regular square or hexagonal shaped heads with dimensions conforming to ANSI B18.2.1. Metric size and/or socket head cap screws, or bolts, are not allowed. The operating nut shall be constructed of ductile iron. All gaskets shall be pressure energized O-ring type seals. Stem shall be sealed by three O-rings. O-rings set in a cartridge shall not be allowed. The valve shall have thrust washers located with 1 above and 1 below the thrust collar to assist operation of the valve. All internal and external surfaces of the valve body and bonnet shall have an epoxy coating, complying with ANSI/AWWA C550. Valves shall be **Series 2500 Resilient Wedge Gate Valves with Flex-Ring® Ends** by AMERICAN Flow Control®.

STANDARD 14"-24" NRS PARTS LIST

Ref	Description	Material
1	Hex head bolt	304 Stainless steel
2	Wrench nut	Ductile iron ASTM A536
3	O-ring	Rubber
4	Upper thrust washer	Delrin
5	Stuffing box gasket	Rubber O-ring
6	O-ring	Rubber
7	Stuffing box	Ductile iron ASTM A536
8	Bonnet	Ductile iron ASTM A536
9	Hex head bolt	304 Stainless steel
10	Throat flange gasket	Rubber
11	Valve body	Ductile iron ASTM A536
12	Stem	Bronze (Stainless steel optional)
13	Wedge nut	Bronze
14	Resilient wedge	Ductile Iron with EPDM rubber
15	Wedge cover	Polymer
16	Wedge cover pin	Polymer
17	Hex head bolt	304 Stainless steel
18	Hex nut	304 Stainless steel
19	Hex nut	304 Stainless steel
20	Pipe plug	Stainless steel
21	Lower thrust washer	Delrin



NOTES:

1. End connection is AMERICAN FLEX-RING® Joint.
2. Standard internal and external coating is fusion-bonded epoxy and meets requirements of ANSI/AWWA C550.
3. Working pressure is 250 psig.
4. Valve meets requirements of ANSI/AWWA C515.
5. Valve is Certified to NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372.
6. 16"- 24" valves may be ordered in configurations that are UL Listed and FM Approved and have 250 psig rated working pressure.

STANDARD 16" NRS PARTS LIST WITH BEVEL/SPUR GEARING

Ref	Description	Material
3	O-ring	Rubber
4	Upper thrust washer	Delrin
5	Stuffing box gasket	Rubber
6	O-ring	Rubber
7	Stuffing box	Ductile iron ASTM A536
8	Bonnet	Ductile iron ASTM A536
9	Hex HD Bolt	Stainless steel
10	Throat flange gasket	Rubber
11	Valve body	Ductile iron ASTM A536
12	Stem	Bronze (Stainless steel optional)
13	Wedge nut	Bronze
14	Resilient wedge	Ductile iron with EPDM rubber
15	Wedge cover	Polymer
16	Wedge cover pin	Polymer
17	Hex head bolt	304 Stainless steel
18	Hex nut	304 Stainless steel
19	Hex nut	304 Stainless steel
20	Pipe plug	Stainless steel
21	Lower thrust washer	Delrin
22	Stud	304 Stainless steel
23	Hex nut	304 Stainless steel
24	Spur gear actuator	AFC or Rotork Gearing (2:1)
25	Key	Hardened steel
27	Bevel gear actuator	AFC or Rotork Gearing (2:1)
30	Hex head bolt	Plated steel
31	Washer	Plated steel
83	Actuator gasket	Rubber

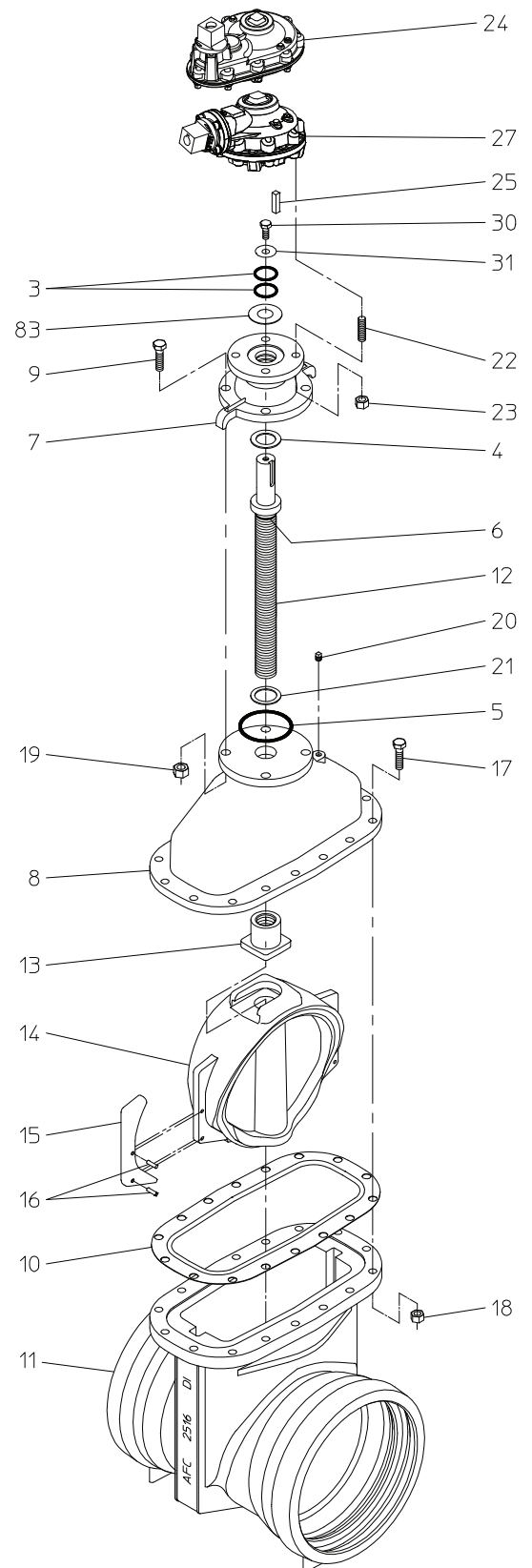


Illustration shown with bevel and spur gear actuator.

IT IS CONSIDERED GOOD PRACTICE THAT WHEN DEPTH OF BURY AND APPLICATIONS ALLOW, GATE VALVES BE INSTALLED IN THE VERTICAL POSITION.

IT IS RECOMMENDED THAT THE MAIN VALVE STEM BE IN THE VERTICAL POSITION FOR RAW SEWERAGE APPLICATIONS.

94-22522

STANDARD 20" - 36" NRS PARTS LIST WITH BEVEL/SPUR GEARING

Ref	Description	Material
3	O-ring	Rubber
4	Upper thrust washer	Delrin
5	Stuffing box gasket	Rubber
6	O-ring	Rubber
7	Stuffing box	Ductile iron ASTM A536
8	Bonnet	Ductile iron ASTM A536
10	Throat flange gasket	Rubber
11	Valve body	Ductile iron ASTM A536
12	Stem	Bronze (Stainless steel optional)
13	Wedge nut	Bronze
14	Resilient wedge	Ductile iron with EPDM rubber
15	Wedge cover	Polymer
16	Wedge cover pin	Polymer
17	Hex head bolt	304 Stainless steel
18	Hex nut	304 Stainless steel
20	Pipe plug	300 Series stainless steel
21	Lower thrust washer	Delrin
22	Stud	304 Stainless steel
23	Hex nut	304 Stainless steel
24	Spur gear actuator	See table below
25	Key	Hardened steel
27	Bevel gear actuator	See table below
28	Socket head capscrew	304 Stainless steel
30	Hex head bolt	Plated steel
31	Washer	Plated steel
83	Actuator gasket	Rubber

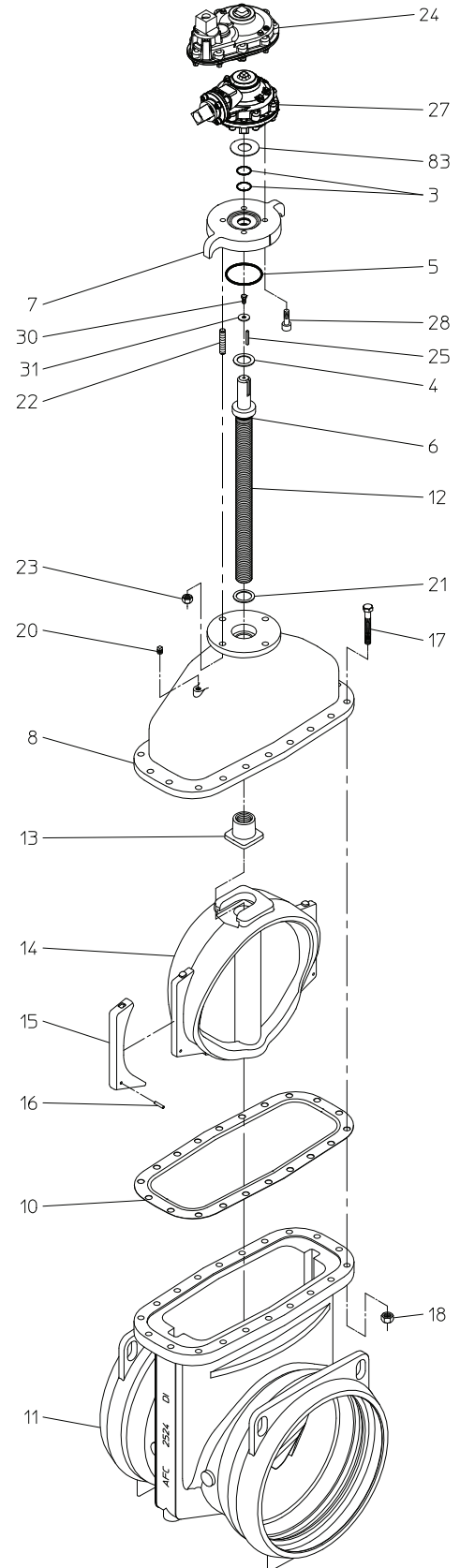
Size	Ref	Actuator
20	24	AFC or Rotork Gearing (3:1)
24	24	AFC or Rotork Gearing (3:1)
30	24	AFC or Rotork Gearing (4:1)
36	24	AFC or Rotork Gearing (4:1)

Size	Ref	Actuator
20	27	AFC or Rotork Gearing (3:1)
24	27	AFC or Rotork Gearing (3:1)
30	27	AFC or Rotork Gearing (4:1)
36	27	AFC or Rotork Gearing (4:1)

Illustration shown with bevel and spur gear actuator.

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IT IS RECOMMENDED THAT THE MAIN VALVE STEM BE IN THE VERTICAL POSITION FOR RAW SEWERAGE APPLICATIONS.



STANDARD 42" & 48" NRS PARTS LIST WITH BEVEL/SPUR GEARING

Ref	Description	Material
3	O-ring	Rubber
4	Upper thrust washer	Delrin
5	Stuffing box gasket	Rubber
6	O-ring	Rubber
7	Stuffing box	Ductile iron ASTM A536
8	Bonnet	Ductile iron ASTM A536
10	Throat flange gasket	Rubber
11	Valve body	Ductile iron ASTM A536
12	Stem	Bronze (Stainless steel optional)
13	Wedge nut	Bronze
14	Resilient wedge	Ductile iron with EPDM rubber
15	Wedge cover	Polymer
16	Wedge cover pin	Polymer
17	Hex head bolt	304 Stainless steel
18	Hex nut	304 Stainless steel
20	Pipe plug	300 Series stainless steel
21	Lower thrust washer	Delrin
22	Stud	304 Stainless steel
23	Hex nut	304 Stainless steel
24	Spur gear actuator	AFC or Rotork Gearing (8:1)
25	Key	Hardened steel
27	Bevel gear actuator	AFC or Rotork Gearing (8:1)
28	Socket head capscrew	304 Stainless steel
29	Actuator gasket	Rubber
30	Hex head bolt	Plated steel
31	Washer	Steel
83	Actuator gasket	Rubber

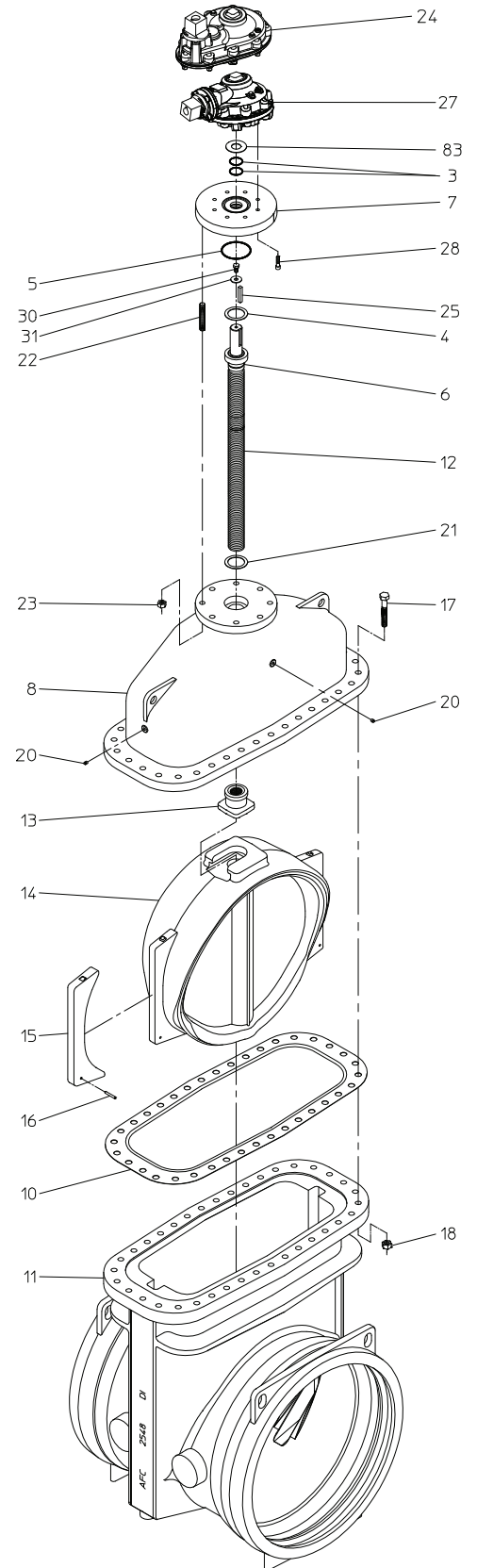


Illustration shown with bevel and spur gear actuator.

IT IS CONSIDERED GOOD PRACTICE THAT WHEN DEPTH OF BURY AND APPLICATIONS ALLOW, GATE VALVES BE INSTALLED IN THE VERTICAL POSITION.

IT IS RECOMMENDED THAT THE MAIN VALVE STEM BE IN THE VERTICAL POSITION FOR RAW SEWERAGE APPLICATIONS.

STANDARD 60" NRS PARTS LIST WITH BEVEL/SPUR GEARING

Ref	Description	Material
3	O-ring	Rubber
4	Upper thrust washer	Delrin
5	Stuffing box gasket	Rubber
6	O-ring	Rubber
7	Stuffing box	Ductile iron ASTM A536
8	Bonnet	Ductile iron ASTM A536
10	Throat flange gasket	Rubber
11	Valve body	Ductile iron ASTM A536
12	Stem	Stainless steel
13	Wedge nut	Bronze
14	Resilient wedge	Ductile iron with EPDM rubber
15	Wedge cover	Polymer
16	Wedge cover pin	Polymer
17	Hex head bolt	304 Stainless steel
18	Hex nut	304 Stainless steel
20	Pipe plug	300 Series stainless steel
21	Lower thrust washer	Delrin
22	Stud	304 Stainless steel
23	Hex nut	304 Stainless steel
24	Spur gear actuator	AFC Gearing (8:1)
25	Key	Hardened steel
27	Bevel gear actuator	AFC Gearing (8:1)
28	Socket head capscrew	304 Stainless steel
29	Actuator gasket	Rubber
30	Hex head bolt	304 Stainless steel
31	Washer	Steel
55	Blind flange**	Ductile iron
56	Studs	Stainless steel
57	Nuts	Stainless steel
83	Blind flange**	Ductile iron
84	Actuator gasket	Rubber

** On horizontal configurations, the blind flange (Ref. # 55) will be located on the bottom of the valve guide track, opposite the direction in which the bevel gear input shaft is installed.

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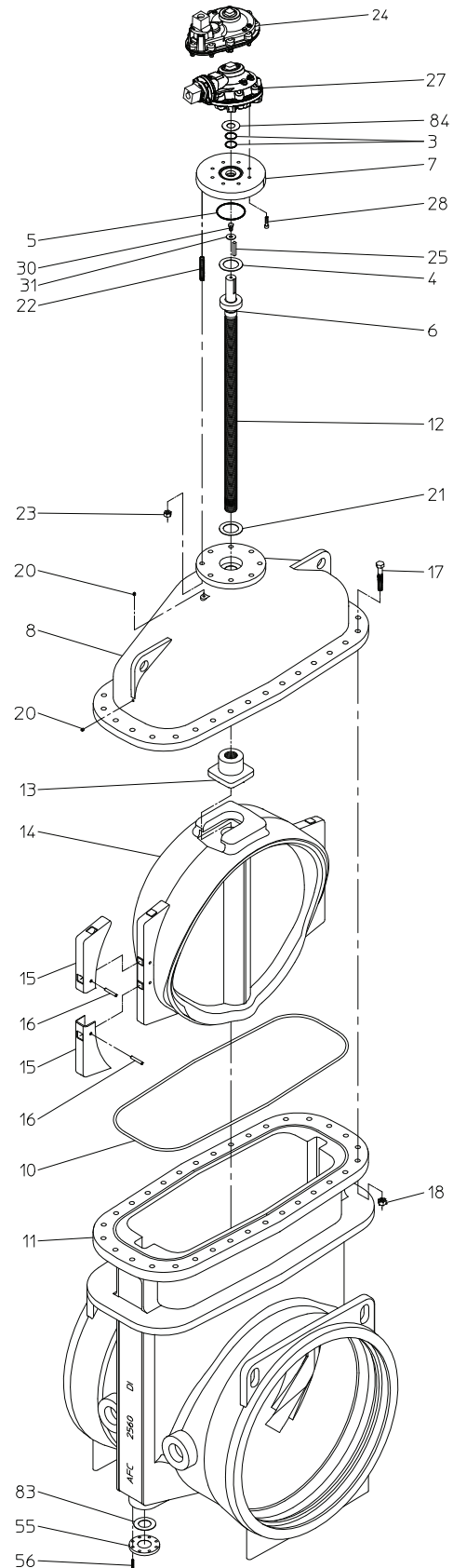


Illustration shown with bevel and spur gear actuator.

NOTES



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