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RESILIENT SEATED GATE VALVES

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AWWA C515 SIZES 2"-54"

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Scan for detailed drawings



RESILIENT SEATED GATE VALVES

C515 2"-54"



PRODUCT OVERVIEW

Resilient seated gate valves were introduced to the waterworks industry in the 1980s and became a dominant preference for use in distribution systems. Valves comply with AWWA C515 reduced wall standard. The valve contains a wedge fully encapsulated with EPDM rubber that is permanently bonded to the wedge and meets ASTM D429. The valve body, bonnet, and stuffing plate are coated with fusion bonded epoxy (FBE) and applied in accordance with AWWA C550 and is ANSI/NSF 61/372 certified. Optional configurations also include non-rising stem (NRS) or outside screw and yoke (OS&Y) and can be ordered with a spur or bevel gear.

KEY CHARACTERISTICS	
Size Range	2"-54"
Materials	Body/Bonnet/Stuffing Box ATSM A-536 Ductile Iron, Fully Encapsulated EPDM wedge
Stem materials	Bronze, 304 SS, 316 SS
Pressure Range	250 PSI Working Pressure
Temperature Range	33ºF- 125 ºF
Body Style	NRS or OS&Y, FLG, MJ or MJ x FLG and MJ x Tap
Actuator Types	Spur or Bevel Gearing, Electric Motor Operator upon request
Standards	AWWA C509, AWWA C515, ANSI/NSF 61/372 Certified

RESILIENT SEATED GATE VALVES FEATURES & BENEFITS

STANDARD FEATURES

- Body/Bonnet/Stuffing Box: ASTA A-536 Grade 70-50-5 Ductile Iron
- Wedge: Fully encapsulated with EPDM meets ASTM D249
- 250 PSI working pressure
- Valves available in NRS and OS&Y
- Manganese bronze stem (NRS 2"-12" and 14"-24" OS&Y)
- 2"-12" OS&Y 304 SS stem
- 304 SS Fasteners
- 18" and above require gearing
- 30" and above come standard with CleanTrack™ Technology; a roller, track and scraper system

ADDITIONAL FEATURES

- Low Ease of Maintenance: Provides long service life without the need to cycle more than once a year. All internal parts are accessible without removing the valve body from the line.
- Minimal Flow Loss: All valves are smooth, unobstructed & free of pockets, cavities, & depressions in the seat area allowing minimal flow loss and lower pumping costs.
- Corrosion Resistant: Fusion bonded epoxy coating protects both the interior and exterior of the valve. Exterior is suitable for overcoating for matching color coordination in plant settings or buried service applications.
- ANSI/NSF 61/372 certified
- Suitable for potable water
- Tamper/Supervisory Switch available on 2.5" 12" OS&Y
- Post Plates available 3" 24"



RESILIENT SEATED GATE VALVES FEATURES & BENEFITS

RESILIENT WEDGE GATE VALVE WITH CLEANTRACK™ TECHNOLOGY

In America today, systems are increasing their demand for larger-sized water lines. With these growing demands, Kennedy has made the commitment to meet and surpass previous large resilient seated gate valve requirements with a new concept- CleanTrack[™] Technology.

Sediment buildup in valves has been a costly problem since the first water valves were created. In years past, systems with sediment-laden valves faced time consuming and costly valve removal or repair. Advanced large double disc technologies of decades past used various methods to clear the line of debris prior to closing.

MPIs 24"-54" gate valves have taken the best of the century-old double disc design and integrated it with the best of the latest resilient seated gate valve design and technology, to create valves with CleanTrack[™] technology. CleanTrack[™] uses a unique roller-scraper system that automatically cleans the track in the valve body when the valve is closing. Less sediment buildup makes for improved performance which means reduced maintenance and lower potential replacement costs.



ADDITIONAL PARTS OPTIONS & ACCESSORIES

BYPASS VALVES

The main purpose of a Bypass Valve is to help with direct pressure on the wedge seat, preventing damaging the main valves seat when opening the Bypass Valve prior to the main valve. A Bypass Valve is available on size 30" and up.

GEARING

Bevel or Spur gears optional on 14" & 16" valves and required 18" & up for proper operation.

INDICATOR POSTS

Indicator Posts provide the reliable way of operating a buried or inaccessible gate valve for opening or closing purposes. Indicator Posts come with a handwheel. As an option an "L" shaped handle is available which can be fitted with a secure lock. Several models are available.

T-HANDLES

Light weight and portable t-wrench available in steel or stainless steel.

STEM GUIDES

Stem guides are installed as wall brackets to support extension arms. They are available in three sizes. They are fully adjustable and are made of high strength ductile iron or stainless steel. They should be installed at a height which does not permit the stem to be unsupported through a length or more than 10 feet.

ELECTRIC MOTOR OPERATORS

A variety of electric motor operators are available to meet your specifications.

EXTENSION STEMS

Valve extension stems are available in steel, or bronze and are provided with a 2" square nut or handwheel as specified. When ordering extension stems state the length and give distance from bottom face of flange to top of handwheel or nut, or to base of floor stand.

FLOOR BOXES

Floor boxes are designed for use with non-rising stem valves. Installed in concrete floors or slabs they provide support for the extension stem and a cover for the operating nut on the stem.

CHAINWHEELS

Chainwheels are normally used for operation of valves located overhead. They are provided with chain guides to prevent chain from slipping off the wheel. They can be furnished rust proof if specified. Chain wheels are mounted directly on the handwheel and are of approximately the same diameter.

ENGINEERING FEATURES

GEARING

Horizontal & vertical gearing available. 18"-24" recommended. 30" and up required

BRONZE STEM

Long, trouble-free life with high strength,non-corrosive bronze stem and stem nut.

STAINLESS STEEL HARDWARE Stainless steel nuts and bolts provide long-life corrosion protection.

100% COATED WEDGE 100% coated wedge ensures bubble-tight seal every time up to 250 PSI. With twin seal design.

(See Figure 1)

ACCEPT TAPPING Cutter Valves accept full-size tapping cutter (24"-48").

REPLACEABLE O-RINGS

Two O-ring seals are replaceable with the valve fully open and subjected to full-rated

THRUST BEARINGS Plastic thrust bearings above and below the thrust collar reduce friction and minimize operating torques.

EPOXY COATING

Corrosion resistant fusion-bonded epoxy coating, conforming to AWWA C550 and NSF 61 certified, protects both inside and outside of valve.

NO FLAT GASKETS

O-ring seals at stuffing box and bonnet to body flanges ensures the best possible seal. There are no flat gaskets.

STAINLESS STEEL TRACK

FIG 1: CLEANTRACK[™] TECHNOLOGY

BRONZE SCRAPER Bronze scraper affixed to resilient wedge wing designed for long life performance.



BRONZE ROLLERS Rollers into scraper protect valve body from damage.

STAINLESS STEEL TRACK 316 stainless steel track for corrosion and wear resistance.

*Rollers, Tracks & Scrapers (RTS) standard on valves 24" & up.

RECOMMENDED SPECIFICATIONS RESILIENT WEDGE GATE VALVES 2"-54"

GENERAL

The valves shall be either non-rising or rising stem, opening by turning left to right, and provided with 2" square operating nut or a handwheel with the "open" and an arrow cast in the metal to indicate the direction to open.

The body, bonnet and stuffing plate shall be coated with fusion bonded epoxy, both interior and exterior on body and bonnet. Epoxy shall be applied in accordance with AWWA C550 and be NSF61 and NSF372 certified. Position Indicator Valve plates shall be painted black.

Waterway shall be smooth, unobstructed & free of pockets, cavities, & depressions in the seat area. Valves shall be able to accept a full-size tapping cutter.



REFERENCE STANDARDS

Resilient Seated Gave Valves shall conform to the latest version of AWWA Standard C515 covering Resilient Seated Gate Valves for water supply service. Valves used in portable water service shall be certified to NSF/ANSI 61 "Drinking Water System Components- Health Effects" and certified to be lead free in accordance with NSF/ANSI 372.

VALVE BODY

The AWWA C515 valves shall have ductile iron body. The valve body shall be cast and manufactured to ASTM A-536 Grade 70-50-5 ductile iron. The wedge and disc shall be totally encapsulated with rubber. The sealing rubber shall be permanently bonded to the wedge to meet ASTM tests for rubber metal bond ASTM D249. The valve body interior and exterior shall be coated with fusion bonded epoxy suitable for overcoating when required.

VALVE BONNET

The AWWA C515 valves shall be cast and manufactured to ASTM A-536 Grade 70-50-5 ductile iron. The valve bonnet shall be cast and manufactured to ASTM A-536 Grade 70-50-5 ductile iron. The valve bonnet interior and exterior shall be coated with fusion bonded epoxy suitable for overcoating when required.

VALVE WEDGE

Valve wedge shall feature a metal insert fully encapsulated with EPDM meeting ASTM D249.

TESTING

All valves should be tested in accordance with AWWA C515 requirements. Manufacturers shall provide written confirmation of testing when requested by customer.



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