

# KENNEDY CHECK VALVES

#### **CERTIFICATIONS**

ISO 9001

ISO 14001

ISO 45001

#### AWWA







\*Listings specific to product

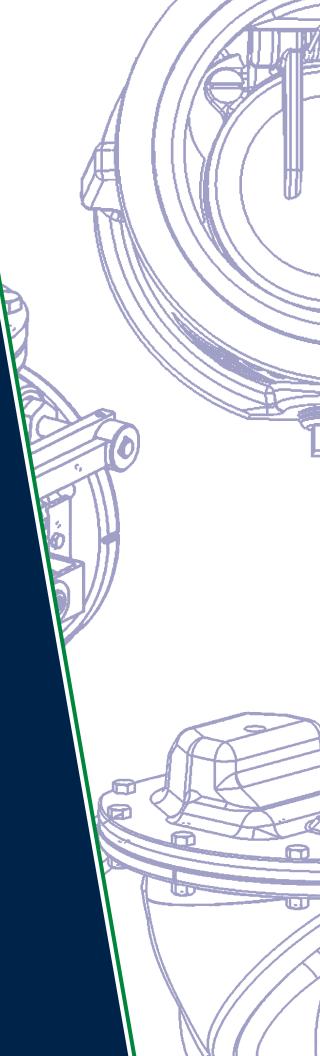




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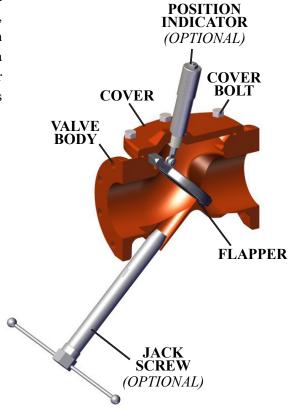


#### **KEN-FLEX CHECK VALVE - FIGURE 506**

The Ken-Flex Resilient Hinged Check Valve eliminates most problems associated with swing check valves. Because of its simplicity, it is ideal for "dirty water" applications. The addition of the position indicator not only provides flapper location feedback but also acts as a surge preventer. The position indicator is spring loaded, causing the flapper to quickly close in the event of loss of flow. The Jack Screw option allows the Check Valve to be back flushed, clearing the waterway.

### **FEATURES**

- 3"-12" sizes available
- A.W.W.A. C508
- ASME B16.1 Class 125 Flanges
- 100% Flow Area
- Ductile Iron Body and Cover
- Weighted Disc
- Quiet Operation with non-slam Design
- Optional Position Indicator provides continuous feedback of flapper positions (506-SP)
- Back flushing through the use of optional Jack Screw



### NEW! KEN-FLEX SPRING-LOADED CHECK VALVE | AVAILABLE IN 16" & 24"

The AWWA C508 Ken-Flex Spring-Loaded Check Valve features buckling springs to aid in eliminating water hammer (Patent Pending). Buckling springs produce their highest load when extended, where it's most valuable, when the check valve is closed. Opposite, leaf spring loaded Flex Check Valves have their highest load when fully open and lowest at closed. As a result, buckling springs offer a superior solution when dealing with water hammer.

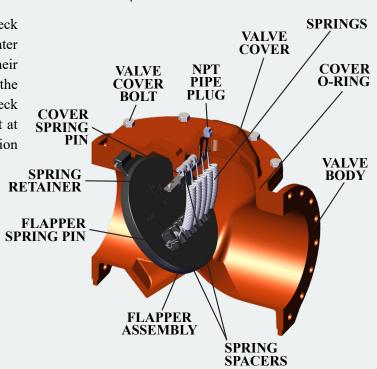
**RATED PRESSURE: 250 PSI** 

TEST PRESSURE: Seat 400 PSI, Shell 500 PSI

#### **FEATURES**

- 100% Flow Area
- Quiet operation with non-slam design
- No external moving parts
- 1 spring standard; more available upon special request.

Short Stroke, Weighted Disc, and Springs combined to close the Ken-Flex faster to diminish water momentum.

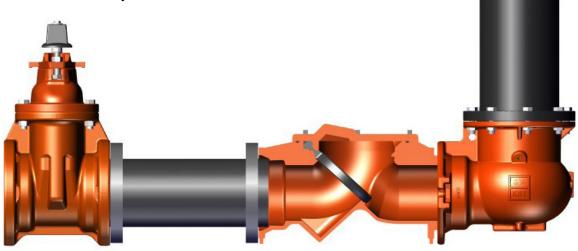


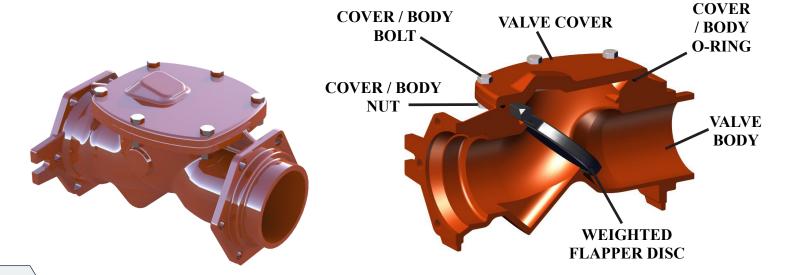
Threats to water supply can come from either accidental or deliberate acts. Our nation's water superintendents have safeguarded nearly all of the access points to our drinking water. At this time one critical access point left unprotected is the fire hydrant.

The Figure 507 Patriot II <sup>TM</sup> Security Check Valve prevents reverse flow through the fire hydrant, safely protecting our drinking water while providing a full port unobstructed waterway that allows our firefighters the water they need when needed.

Unlike locks and special external devices, the Patriot II <sup>TM</sup> Check Valve is installed underground which prevents tampering and allows the hydrant to be operated the moment the firefighters arrive on the scene.

A removable Top Cover allows easy maintenance to the Patriot II <sup>TM</sup> Security Check Valve when needed. Kennedy Valve's Security Check Valve has an MJ x Stab end connection and can be installed on any 6" mechanical Joint Connection ensuring compatibility with all hydrant brands providing the flexibility and cost effectiveness you demand.





#### A.W.W.A. SWING CHECK VALVE FIG. 1106 & 106

Kennedy Swing Check Valves are designed and manufactured in conformance with A.W.W.A. C508. Under certain circumstances where it is desirable to have more positive control of the closing on the disc, the valves can be supplied with either level-and-spring or level-and-weight. For restricted spacing requirements Kennedy Valve manufactures a wafer check valve (see Fig. 806 on Page 13) that also helps to control water hammer.

Figure 1106 Series	2"-12"
Test Pressure- Seat and Shell	400 PSI
Working Pressure- Non-shock CWP	200 PSI
Figure 106 Series	14"-36"
Figure 106 Series Test Pressure- Seat and Shell	<b>14"-36"</b> 300 PSI
O	

# **SWING CHECK VALVE -** A.W.W.A.

- Figure 1106 Series NSF Listed.
- Stainless steel hinge pin.
- Working parts are removable through the top of the valve.
- Tapped bosses available.
- Available with optional lever-and-spring or level-and-weight.
- Bronze side plug or seal gland nut construction.
- Bodies are made of high strength cast iron with reinforced flanges- ANSI B 16.1/125 # flanges.
- May be installed in a vertical line with the flow up.

#### **AVAILABLE CONFIGURATIONS**

- Figure 1106 Bronze Seated (Plain)
- Figure 1106LW Bronze Seated (with Lever and Weight)
- Figure 1106LS Bronze Seated (with Lever and Spring)
- Figure 1106A Resilient Seated (Plain)
- Figure 1106AW Resilient Seated (with Lever and Weight)
- Figure 1106AS Resilient Seated (with Lever and Spring)

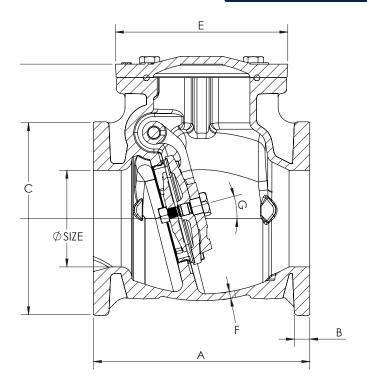


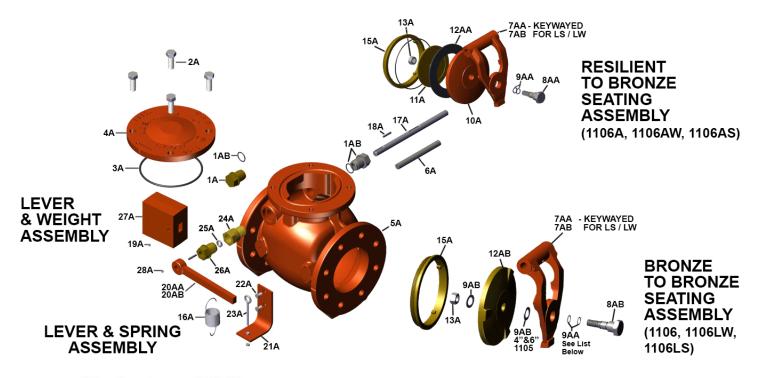
Figure 1106 Standard Dimensions

SIZE	A	В	C	D	E	F	G
2"	8.0	0.65	6.0	6.00	6.56	0.34	10
2-1/2"	8.5	0.69	7.0	6.44	6.56	0.41	8
3"	9.5	0.78	7.5	6.85	6.56	0.44	8
4"	11.5	1.00	9.0	8.69	9.00	0.41	12
6"	14.0	1.03	11.0	10.51	11.00	0.43	15
8"	19.5	1.25	13.5	12.56	13.50	0.75	15
10"	24.5	1.31	16.0	14.07	16.75	0.81	15
12"	27.5	1.38	19.0	16.13	19.00	0.87	15



6" LEVER & SPRING Shown

#### SWING CHECK VALVE COMPONENTS



#### Disc Arrangement 2"-3"



Resilient/Bronze - Figure # 1106A, 1106AW, 1106AS Bronze/Bronze - Figure # 1106, 1106LW, 1106LS

No.	DESCRIPTION	MATERIAL	No.	DESCRIPTION	MATERIAL
1AB	Side Plug with O-Ring	Bronze	14A	Disc Ring (4"-12") - (2"-3")	Bronze
2A	Cap Bolts	Stainless Steel	15A	Seat Ring	Bronze
3A	O-Ring	Syn. Rubber	16A	Spring	Steel
4A	Cap	Cast Iron	17A	Extended Hinge Pin for LS/LW	Stainless Steel
5A	Body	Cast Iron	18A	Key for LS/LW	Stainless Steel
6A	Hinge Pin	Stainless Steel	19A	Set Screw	Steel
7AA	Hinge	Bronze	20AA	Lever Arm for LS	Steel
7AB	Hinge w/ Keyway for LS/LW	Bronze	20AB	Lever Arm for LW	Steel
8AA	Disc Bolt (4"-12")	Bronze	21A	Bracket	Steel
8AB	Disc Bolt (4"-12")	Bronze	22A	Hex Head Bracket Bolt	Steel
9AA	Disc Bolt O-Ring (4"-12" 1106A, 8"-12" 1106)	Syn. Rubber	23A	Eye Bolt w/ 2 Hex Nuts	Steel
9AB	Disc Bolt Gasket (4" & 8" 1106)		24A	Stuffing Box	Bronze
10A	Disc Holder	Bronze, Cast Iron	25A	Packing	Graphite Filled
11A	Disc Plate	Bronze	26A	Gland	Bronze
12AA	Disc	Nitrile (Buna N) Rubber	27A	Weight	Cast Iron
12AB	Disc	Bronze (2"-3"), Cast Iron (4"-12")	28A	Set Screw	Steel
13A	Disc Nut	Stainless Steel			

Kennedy Swing Check Valves are for use to ensure flow in one direction. The bronze-to-bronze seat (1126) is designed with ample tolerances to compensate for seat ring wear. The rotating action of the disc creates a self-cleaning effect that cleans the seat ring of foreign particles. The disc is also self-adjusting. The resilient seated (1126A) works as an "absolute seal" and softens the closing effect. Metal seats are bronze to bronze, minimizing wear and corrosion problems.

Kennedy Valve check valves can be installed in the horizontal or vertical orientation (with the flow going upwards). The 1126 and 1126A are available tapped for easy installation of gauges at up to six locations. The cover allows for simple inspection or service utilizing a tapped body, avoiding the use of nuts. The cover is sealed to the body by a dependable o-ring.

NYC MEA approved.

### **Seat Construction**

- 1126 Bronze Seated, UL/FM Approved
- 1126A Resilient Seated, UL/FM Approved

## **Working Pressure**

Cold Water, Non-Shock, 175 lbs. (2-12"-12")

#### **Hydrostatic Test Pressure**

Seat and Shell, 350 PSI. (2-1/2"-12")

#### UL & ULC Listed, FM Approved



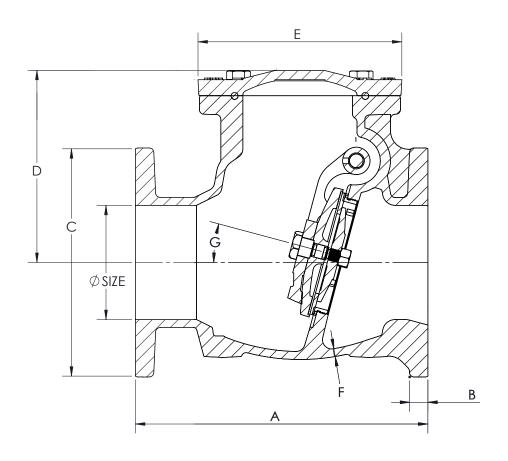


FIGURE 1126	& 1126A	STANDARD DIMENSIONS	WEIGHT
		3   A   1   1   A   N   1   1   1     N   N   1   3   1   1   1   1   1   1   1   1	

SIZES	A	В	C	D	E	F	G	1126	1126A
2-1/2	10	11/16	7	6	7	13/32	10.0	52 lbs.	53 lbs.
3	10-1/4	3/4	7-1/2	7	7-1/2	7/16	8.0	62 lbs.	62 lbs.
4	13	15/16	9	8-3/4	9	13/32	8.0	114 lbs.	117 lbs.
6	16	1	11	10-5/8	11	7/16	12.0	193 lbs.	196 lbs.
8	19	1-1/8	13-1/2	12-5/8	13-1/2	3/4	15.0	319 lbs.	322 lbs.
10	22	1-3/16	16	14-1/8	16-3/4	13/16	15.0	475 lbs.	480 lbs.
12	26	1-1/4	19	16-1/8	19	7/8	15.0	680 lbs.	685 lbs.

All dimensions shown in inches.

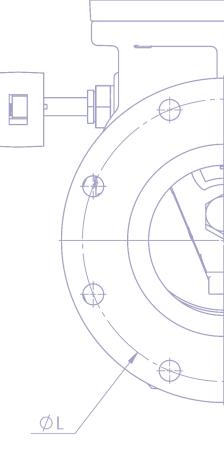
The Kennedy Valve Figure 1306 Increasing Check Valve utilizes the same components as Figures 1106 Check Valves. The 1306 adapts from a smaller to a larger diameter pipe, using a threaded adapter that is also welded in place.

### **FEATURES**

- A.W.W.A. C508
- NSF Listed
- 200 PSI Working Pressure / 400 PSI Test Pressure
- Available in sizes: 4x6, 4x8, 6x8, 6x10, 8x10, 8x12, 10x12
- Resilient Seat (Rubber Disk, Bronze Seat) Ring

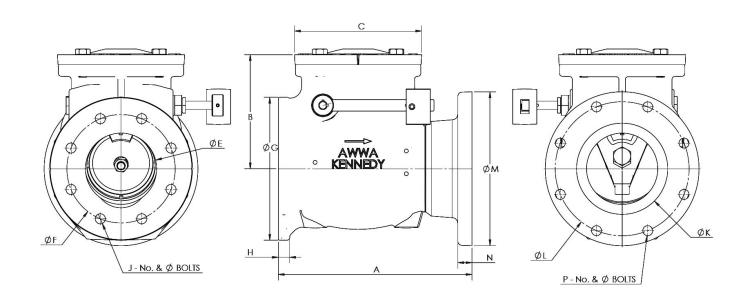
# **AVAILABLE CONFIGURATIONS**

- Figure 1306 Bronze Seated (Plain)
- Figure 1306LW Bronze Seated (with Lever and Weight)
- Figure 1306LS Bronze Seated (with Lever and Spring)
- Figure 1306A Resilient Seated (Plain)
- Figure 1306AW Resilient Seated (with Lever and Weight)
- Figure 1306AS Resilient Seated (with Lever and Spring)









#### INCREASING CHECK VALVE STANDARD DIMENSIONS

SIZE	A	В	C	D	E	F	G	Н	J	K	L	M	N	P
4x6	13.50	8.31	9.00	8.19	4.00	7.50	9.00	0.94	8-0.63	6.00	9.50	11.00	1.00	8-0.75
4x8	15.00	8.31	9.00	8.19	4.00	7.50	9.00	0.94	8-0.63	8.00	11.75	13.50	1.13	8-0.75
6x8	17.00	10.06	11.00	9.00	6.00	9.50	11.00	1.00	8-0.75	8.00	11.75	13.50	1.13	8-0.75
6x10	17.50	10.06	11.00	9.00	6.00	9.50	11.00	1.00	8-0.75	10.00	14.25	16.00	1.19	12-0.88
8x10	20.00	12.38	13.50	10.19	8.00	11.75	13.50	1.13	8-0.75	10.00	14.25	16.00	1.19	12-0.88
8x12	21.00	12.38	13.50	10.19	8.00	11.75	13.50	1.13	8-0.75	12.00	17.00	19.00	1.25	12-0.88
10x12	22.50	13.93	16.75	11.63	10.00	14.25	16.00	1.19	12-0.88	12.00	17.00	19.00	1.25	12-0.88

All dimensions shown in inches.

#### AIR CUSHION CHECK VALVE - FIG. 1206

Where water hammer cannot be eliminated through system design, the Kennedy 1206A Air Cushion check serves as a suitable option. The 1206A Air Cushion check valve features a pneumatic cylinder that reduces check valve slam and the accompanying pressure surge. This is accomplished by a cylinder and adjustable needle valve, which allow the valve to open freely during normal flow conditions, yet close slowly when flow reverses.

The Kennedy Valve Figure 1206A Air Cushion Valve complies with AWWA C508 specifications and may be ordered from the factory for horizontal or vertical installation. Unless specified otherwise, the cylinder arrangement shall be supplied on the right side (when facing the inlet) and for horizontal flow. The valve features a resilient seat and a hinge pin constructed of durable, heat treated 431 stainless steel.

- Resilient Seated "1206A" Standard

(Must specify vertical or horizontal installation when ordering)

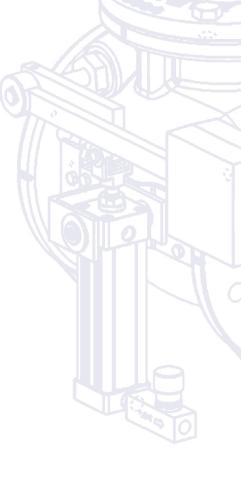
# PRESSURE SEATED

**Test Pressure (Seat and Shell)** - 400 PSI **Working Pressure** - 200 PSI

# **FEATURES**

- Available in sizes 4"-12"
- A.W.W.A. C508
- NSF Listed
- \* Refer to Page 5 for Standard Dimensions





The purpose of the introduction of an oil cushion on a swing check valve is to reduce line surge and water hammer. This is accomplished by having the disc stroke speed fully controllable from adjustment of the flow control valve. As the disc changes position, oil flowing through the closed system with accumulator causes cushioning of the disc as it closes. Although the closing speed is fully adjustable, many customers prefer a fast closing operation to deter the water momentum back against the closing disc.

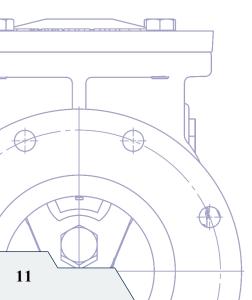
#### \* Refer to Page 5 for Standard Dimensions

# **FEATURES**

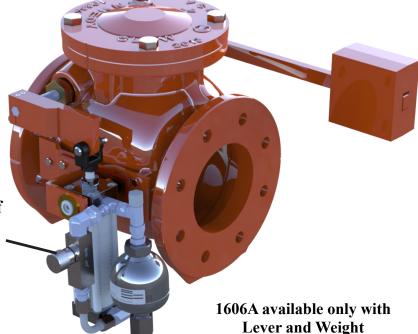
- 3"-12" sizes available
- A.W.W.A. C508
- NSF Listed
- ASME B16.1 Class 125 Flanges
- Full waterway
- High strength corrosion-resistant hinge pin
- Valve may be installed in vertical line (Flow Up)
- Internal working parts are removable through top of valve
- Interior / exterior fusion-bonded epoxy
- Enclosed oil cushion system with accumulator
- Disc movement controlled through closed oil system with adjustable speed control valve when closing
- Opens freely as reversible oil flow passes through check / flow control valve
- Close speed adjustable through flow control valve
- Stainless steel hardware throughout system
- Resilient Seated "1606A" Standard

## PRESSURE SEATED

**Test Pressure (Seat and Shell)** - 400 PSI **Working Pressure** - 200 PSI



Needle Relief Valve for In-Service Adjustment

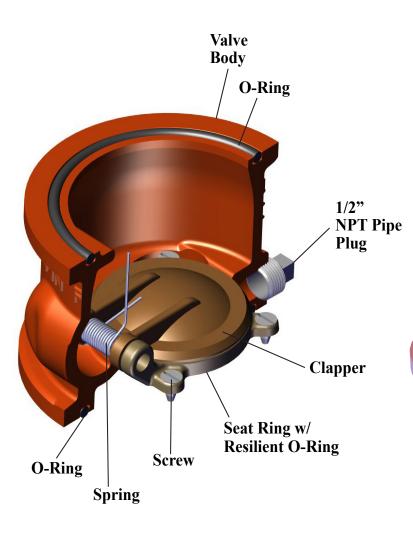


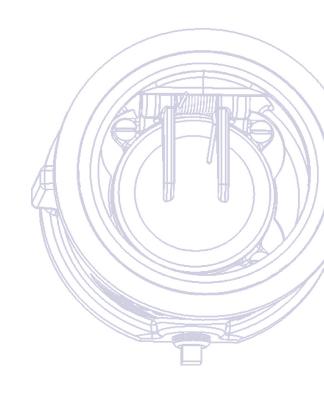
The Kennedy Wafer Check Valve is a compact design for installation between standard ASME B16.1 class 125 or class 150 flanges. A spring loaded aluminum bronze clapper, resilient seat, and O-ring design are used to ensure a quality seal at the seat. Wafer Check Valves sizes are available in 4 in., 6 in., and 8 inch.

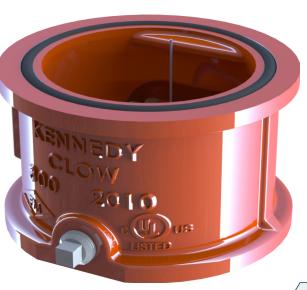
- UL Listed / FM Approved

# WORKING & HYDROSTATIC TEST PRESSURES

**Test Pressure (Seat and Shell)** - 600 PSI Non-Shock **Working Pressure** - 300 PSI







# CHECK VALVE

The Kennedy Valve Figure 726 Grooved End Check Valve is a lightweight unit that is intended to be easily installed with approved IPS grooved couplings. They may be installed either with the flow in a vertical position (flow up) or horizontally Upon request valves can have a 1/2" NPT connection on the inlet side for installation of a 1/2" ball drip.

- UL Listed and FM Approved

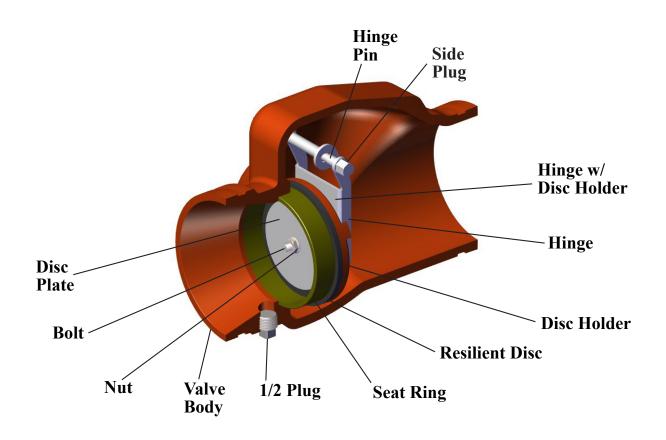
# **SIZES & WEIGHT**

- 2-1/2" 15 lbs.
- 3" 20 lbs.
- 4" 25 lbs.
- 6" 50 lbs.
- 8" 68 lbs. (requires lifting lug)



### WORKING PRESSURE

Working Pressure - 300 PSI







# ORDERING INFORMATION

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#### KENNEDY VALVE

1021 E. WATER ST. ELMIRA, NY 14902-1516

Kennedy Valve began operations in 1877 in Lower Manhattan, N.Y. In 1890, the operation was moved to Coxsackie, and then in 1907, Kennedy Valve moved to Elmira, N.Y., where it remains a cornerstone of the community.

In the 135 plus years since its founding, Kennedy Valve has expanded to be a full-line waterworks valve and hydrant manufacturer, supplying resilient seated gate valves, fire hydrants, check valves, butterfly valves, indicator posts, grooved butterfly valves and an assortment of related products and appurtenances.

Kennedy Valve and its employees are dedicated to supplying quality products that meet or exceed current specifications to ensure customer satisfaction. We pride ourselves on being easy to do business with and providing superior customer service backed by knowledgeable and courteous employees.

Kennedy Valve products stand the test of time in reliability. Our goal is to supply the highest quality products with the shortest lead times at a competitive price, while at the same time remaining a good steward of the environment and maintaining a safe workplace for our most valued asset, Kennedy Valve's employees.

