KENNEDY AWWA DBL. DISC PARALLEL SEAT IBBM GATE VALVES

KENNEDY VALVE

KENNEDY VALVE AWWA Dbl. Disc Parallel Seat IBBM Gate Valves Meet or Exceed the Requirements of AWWA C500

| Size Range | 3"-48" | |
|------------|-------------------------------|-------------------------|
| | Water working Pressure psi | Hydrostatic Test psi |
| 3"-12" | 200 | 400 |
| 14"-48" | 150 | 300 |

Available in either, NRS, or OS&Y.

| Available End Connections & | Size Range | Figure No. |
|-----------------------------|------------|------------|
| FigNRS | 3"-48" | F-5070 |
| FigOS&Y | 14"-36" | F-5072 |
| M.J. | 3"-36" | F-5065 |
| M J Cutting End | 4"-12" | F-5067 |
| Fig. & M.J. | 4"-36" | F-5066 |
| Push-on Ends for PVC | 3"-10" | F-5085 |

Accessories

| By-Pass Valves |
|--|
| Enclosed Gearing(Grease Case) |
| Position Indicators |
| Tracks, Rollers, & Scrapers for |
| Valves 14" or larger |
| Horizontal Position in Horizontal Line |
| Handwheels |
| Extension Stems |
| |

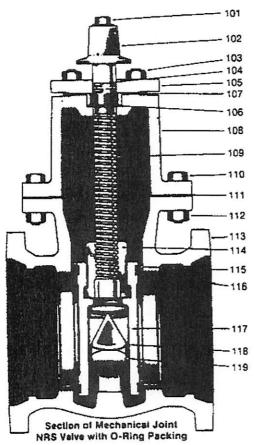
Floor Boxes

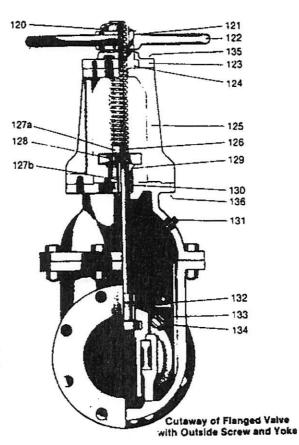
^{*}Note: Call Factory For Special Applications

AWWA DOUBLE DISC GATE VALVES PARTS LIST

KENNEDY VALVE

*Recommended Spare Parts

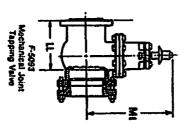


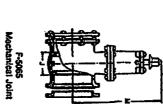


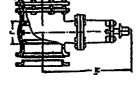
| DET. | QTY. | DESCRIPTION | MATERIAL |
|------|------|---------------------------|----------------------|
| 101 | 1 | Cap Screw | Steel |
| 102 | 1 | Operating Nut | Cast Iron |
| *103 | | O-Ring Plate Bolts & Nuts | Steel |
| *104 | 2 | 0-Rings | Rubber |
| 105 | 1 | O-Ring Plate | Cast Iron |
| 106 | 1 | Low Torque Bearing | |
| *107 | 1 | Stuffing Box Gasket | |
| 108 | 1 | Cover | Cast Iron |
| *109 | 1 | Non-Rising Stem | Bronze |
| *110 | | Neck Flange Bolts | Steel - Rust-Proofed |
| *111 | 1 | Neck Flange Gasket | Composition |
| *112 | | Neck Flange Bolt Nuts | Steel |
| 113 | 1 | Body | Cast Iron |
| *114 | 1 | Gate Nut | Bronze |
| 115 | 2 | Gate Ring | |
| 116 | 2 | Case Ring | Bronze |
| *117 | 2 | Gate | Cast Iron |
| *118 | 2 | Wedge | Bronze |
| *119 | 2 | Hook | Cast Iron |

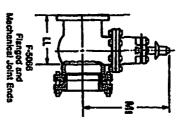
| DET. | QTY. | DESCRIPTION | MATERIAL | | |
|------|------|------------------------|--|--|--|
| *120 | 1 | Hold Down Nut | Bronze | | |
| 121 | 1 | Handwheel Key | Steel | | |
| 122 | 1 | Handwheel | Cast Iron | | |
| 123 | 1 | OS&Y Retainer Plate | Cast Iron | | |
| *124 | 1 | OS&Y Stem Nut | Bronze | | |
| 125 | 1 | OS&Y Yoke | Cast Iron | | |
| *126 | 1 | Rising Stem | Bronze | | |
| 127A | 2 | Follower Nuts | Bronze | | |
| 127B | 2 | Follower Studs | Steel - Rust-Proofed | | |
| 128 | 1 | Follower Plate | Cast Iron | | |
| 129 | 1 | Follower Gland | Bronze | | |
| *130 | | Packing | Acrylic Graphite | | |
| 131 | 1 | Test Plug | Teflon-Coated Steel | | |
| *132 | 1 | Stem Nut Pin | Bronze | | |
| *133 | 4 | Pegs | Bronze | | |
| *134 | 2 | Straps | *Stainless or Bronze | | |
| *135 | | OS&Y Cap Screws | Stainless 10"&12" Only Steel – Rust-Proofed | | |
| 136 | | OS&Y Yoke Bolts & Nuts | Steel - Rust-Proofed | | |

| VALVE SIZE | A | В | G | J | К | M ₁ | Р | S | LL | Turns to Open | Diam. of Stem |
|---------------|-------|-------------|-------|-------|------|----------------|------|------|----------|------------------|------------------|
| 2 . | 7 | | 101/4 | 31/4 | _ | 101/4 | _ | 71/4 | | 5 | 7/8 |
| 21/4 | 71/2 | · | 101/4 | 31/4 | | 101/4 | _ | 71/4 | - | 5 | 7/8 |
| 21/2 | 71/2 | | 113/0 | - | | 113/8 | _ | 71/4 | | 6 7 | 7/8 |
| 3 | 8 | | 121/4 | 31/2 | | 121/2 | | 71/4 | - | 7 | 7/8 |
| 4 | 9 | i <u>-</u> | 14 | 43/4 | 51/4 | 14 | 41/2 | 10 | 67/8 | 15 | 11/8 |
| J5 | 10 | L | 151/2 | 1 = | | 151/2 | | 10 | | 18 | 11/8 |
| L6 | 101/2 | | 18 | 51/4 | 61/2 | 18 | 51/4 | 12 | - 8 | 21 | 11/4 |
| 8 | 111/2 | i = | 22 | 61/2 | 7 | 22 | 61/4 | 14 | 9 | . 27 | 13/8 |
| 10 | 13 | <u>L</u> | 255/8 | 63/4 | 71/4 | 255/8 | 61/2 | 18 | 97/8 | _33 | 11/2 |
| 12 | 14 | | 291/8 | L.7 | 73/4 | 291/8 | | . 18 | 101/2 | 39 | 11/2 |
| 14 _ | 153/4 | 23 | 381/2 | 71/4 | | 393/4 | _ | 22 | 111/2 | 45_ | 17/a |
| 16 | 17 | 23 | 403/4 | 91/4 | | 431/2 | _ | 22 | 153/8 | 52 | 17/8 |
| _ 18 | 1.9_ | . 24 | 431/4 | 91/4 | ı | 46 | _ | 26 | 161/2 | 58 | 21/6 |
| | 20 | 24 | 471/4 | 10 | | 50 | _ | 26 | 183/8 | 64 | 21/8 |
| 24 | _23 | 281/2 | 55 | 16 | - | 563/4 | _ | 30 | 22 | 76 | 21/2 |
| 30 | 25 | 321/2 | 643/4 | 121/2 | - | 661/2 | _ | 30 | <u> </u> | <u>6</u> 3 | 23/4 |
| 3 <u>6</u> | 27 | 36 | 753/8 | 233/4 | _ | 773/8 | | 36 | | 75 | 3 |
| 42 | 34 | 34 | | | | | _ | 30 | ! | 88 | 31/2 |
| 48 | 451/2 | 451/2 | _ | _ | _ | | - | 30 | _ | 100 | 4 |







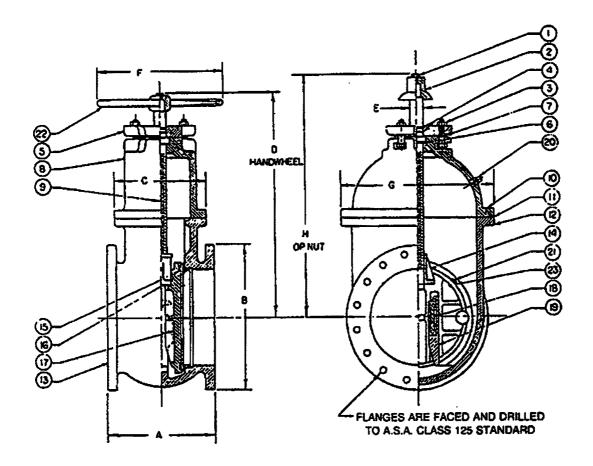


DIMENSIONS-INCHES
FLANGES ARE FACED AND DRILLED TO ANSI 125 POUND
TEMPLATE, UNLESS OTHERWISE SPECIFIED

TURNS TO OPEN ARE FOR VALVES WITHOUT GEARING

KENNEDY VALVE AWWA GATE VALVES
UNDERGROUND AND PLANT PIPING SYSTEMS KENNEDY VALVE

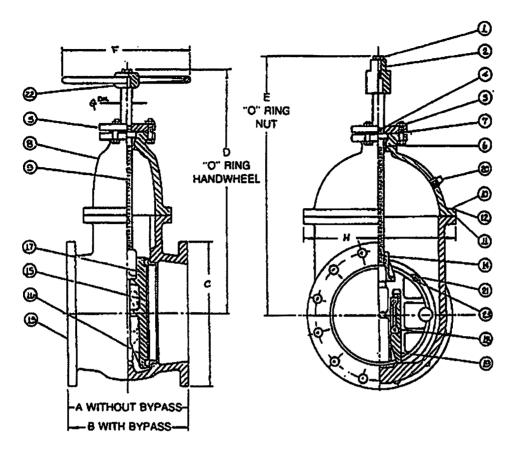
3"-12" FLANGED END C561/F-5070 GATE VALVE



| SEQ. | QTY. | DESCRIPTION | MATERIAL |
|------|------|-----------------------------------|-----------------|
| 1 | 1 | Capscrew | Steel |
| 2 | 1 | Operating Nut | Cast Iron |
| 3 | | Bolts & Nuts | Stainless Steel |
| 4 | 2 | 0-Rings | Rubber |
| 5 | 1 | 0-Ring Plate | Cast Iron |
| 6 | 1 | Low Torque Bearing | Delrin 1 |
| 7 | . 1 | Stuffing Box Gasket | Composition |
| 8 | 1 | Cover | Cast Iron |
| 9 | 1 | Non-Rising Stem | Bronze |
| 10 | | Neck-Flange Bolts | Stainless Steel |
| 11 | 1 | Neck-Flange Gaskets | Composition |
| 12 | | Neck-Flange Nuts | Stainless Steel |
| 13 | 1 | Body | Cast Iron |
| 14 | 1 | Gate Nut | Bronze |
| 15 | 2 | Gate Ring | Bronze |
| 16 | 2 | Case Ring | Bronze |
| 17 | 2 | Gate | Cast Iron |
| 18 | 2 | Wedge | Bronze |
| 19 | 2 | Hook | Cast Iron |
| 20 | 1 | Pipe Plug | Cast Iron |
| 21 | 4 | Pegs - On 10", 12" & 14" Valves | Bronze |
| 22 | 1 | Handwheel | Cast Iron |
| 23 | 2 | Straps - On 10", 12" & 14" Valves | Stainless Steel |

| VALVE SIZE | А | В | С | D | E | F | G | н | Weight | Turns to Open |
|---------------|-------|-------|--------------------|-------|------|------|--------------------|--------------------------------|--------|------------------|
| 3 | 8 | 71/2 | 51/2 | 14 | 7/8 | 71/4 | 71/8 | 14 | 50 | 7 |
| 4 | 9 | 9 | 7 | 151/4 | 11/8 | 10 | 9 | 151/4 | 90 | 15 |
| 5 | 10 | 10 | 73/4 | 163/4 | 11/8 | 10 | 10 ⁷ /8 | 163/4 | 120 | 18 |
| 6 | 101/2 | 11 | 9 | 181/2 | 11/4 | 12 | 12 ⁵ /8 | 18 ¹ / ₂ | 166 | 21 |
| 8 | 111/2 | 131/2 | 10 | 215/8 | 13/8 | 14 | 151/4 | 21 ⁵ /8 | 288 | 27 |
| 10 | 13 | 16 | 10 ⁵ /8 | 281/4 | 11/2 | 18 | 181/4 | 281/4 | 405 | 33 |
| 12 | 14 | 19 | 111/4 | 303/4 | 11/2 | 18 | 201/4 | 303/4 | 565 | 39 |

14"-36" FLANGED END C561/F-5070 GATE VALVE

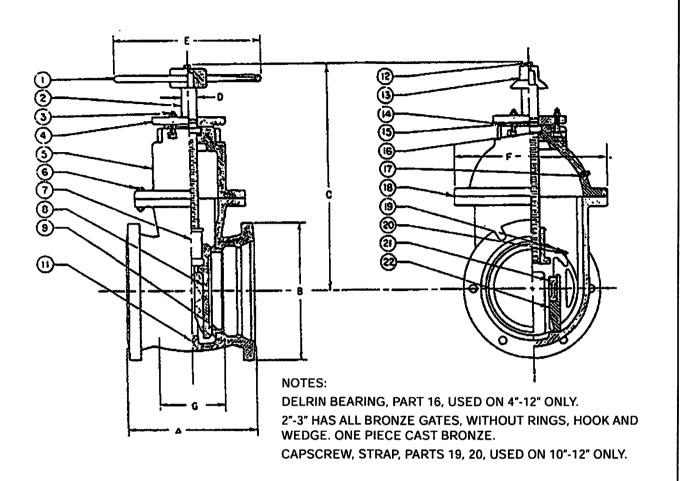


| ITEM | QTY. | DESCRIPTION | MATERIAL |
|------|------|-----------------------------------|-----------------|
| 1 | 1 | Capscrew | Steel |
| 2 | 1 | Operating Nut | Cast Iron |
| 3 | | Bolts & Nuts | Stainless Steel |
| 4 | 2 | 0-Rings | Rubber |
| 5 | 1 | O-Ring Plate | Cast Iron |
| 6 | 1 | Low Torque Bearing | Bronze |
| 7 | 1 | Stuffing Box Gasket | Composition |
| 8 | 1 | Cover | Cast Iron |
| 9 | 1 | Non-Rising Stem | Bronze B-584 |
| 10 | | Neck-Flange Bolts | Stainless Steel |
| 11 | 1 | Neck-Flange Gaskets | Composition |
| 12 | | Neck-Flange Nuts | Stainless Steel |
| 13 | 1 | Body | Cast Iron |
| 14 | 1 | Gate Nut | Bronze |
| 15 | 2 | Gate Ring | Bronze |
| 16 | 2 | Case Ring | Bronze |
| 17 | 2 | Gate | Cast Iron |
| 18 | 2 | Wedge | Bronze |
| 19 | 2 | Hook | Cast Iron |
| 20 | 1 | Pipe Plug | Cast Iron |
| 21 | 4 | Pegs - On 10", 12" & 14" Valves | Bronze |
| 22 | 1 | Handwheel | Cast Iron |
| 23 | 2 | Straps - On 10", 12" & 14" Valves | Stainless Steel |

| VALVE SIZE | А | В | С | D | E | F | G | н | Weight | Turns to Open |
|---------------|-------|-------|-------|-------|-------|----|------|--------------------|--------|------------------|
| 14 | 153/4 | 23 | 21 | 361/2 | 383/4 | 22 | 17/8 | 23³/ _B | 876 | 45 |
| 16 | 17 | 23 | 231/2 | 403/4 | 431/2 | 22 | 17/8 | 253/4 | 1155 | 52 |
| 18 | 18 | 24 | 25 | 431/4 | 46 | 26 | 21/8 | 273/4 | 1460 | 58 |
| 20 | 20 | 24 | 271/2 | 471/4 | 50 | 26 | 21/8 | 32 ⁷ /8 | 1980 | 64 |
| 24 | 23 | 281/2 | 32 | 55 | 563/4 | 30 | 21/2 | 353/4 | 2730 | 76 |
| 30 | 25 | 321/2 | 383/4 | 643/4 | 661/2 | 30 | 23/4 | 453/4 | 4784 | 63 |
| 36 | 27 | 36 | 46 | 75³/s | 77³/8 | 36 | 3 | 561/4 | 5301 | 75 |

3"-12" MECHANICAL JOINT C571/F-5065 GATE VALVE

KENNEDY VALVE

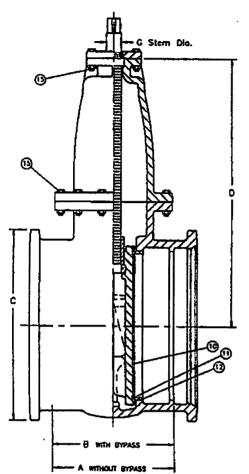


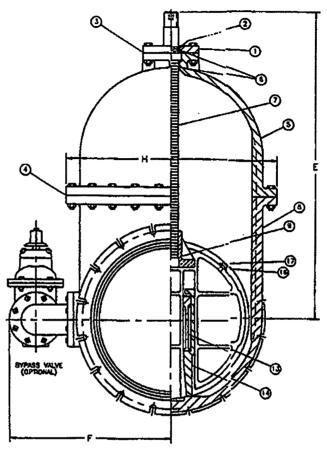
NOTE: MECH. JOINT ENDS MEET SPECS. A.S.A. A-21-11

| VALVE SIZE | A | В | С | D | Ε | F | G | Weight | Turns to Open |
|---------------|---------------------|--------------------|--------------------|------|------|--------------------------------|------|--------|------------------|
| 3 | 93/4 | 73/4 | 121/4 | 7/8 | 71/4 | 71/8 | 31/2 | 75 | 7 |
| 4 | 103/4 | 9¹/8 | 14 | 11/8 | 10 | 9 | 43/4 | 95 | 15 |
| 6 | 10 ¹ /2A | 11 ¹ /8 | 18 | 11/4 | 12 | 12 ⁵ /8 | 51/4 | 180 | 21 |
| 8 | 12 | 133/4 | 22 | 13/8 | 14 | 15 ¹ / ₄ | 61/2 | 265 | 27 |
| 10 | 121/2 | 153/4 | 25 ⁵ /8 | 11/2 | 18 | 18¹/₄ | 63/4 | 430 | 33 |
| 12 | 13 | 18 | 291/8 | 11/2 | 18 | 201/4 | 71/2 | 557 | 39 |

| SEQ. | QTY. | DESCRIPTION | MATERIAL |
|------|------|-------------------------------|-------------------|
| 1 | 1 | Handwheel | Cast Iron |
| 2 | 1 | Non-Rising Stem | Low Zinc Bronze |
| 3 | | Bolts/Nuts | Stainless Steel |
| 4 | 1 | 0-Ring Plate | Cast Iron |
| 5 | 1 | Cover | Cast Iron |
| 6 | | Bolts & Nuts | Stainless Steel |
| 7 | 1 | Stem Nut | Bronze |
| 8 | 2 | Gate | Bronze |
| 9 | 2 | Case Ring | Bronze |
| 11 | 1 | Body, SMJ | Cast Iron |
| 12 | 1 | Capscrew-Washer | Steel-Zinc Coated |
| 13 | 1 | Operating Nut | Cast Iron |
| 14 | 1 | Gasket, Stuffbox | Composition |
| 15 | 2 | 0-Rings | Rubber |
| 16 | 1 | Low Torque Bearing | Delrin |
| 17 | 1 | Sq. Hd. Pipe Plugstl w/Teflon | |
| 18 | 1 | Gasket, Neck Flange | Composition |
| 19 | 4 | Capscrew | Sil. Bronze |
| 20 | 2 | Strap | Stainless Steel |
| 21 | 2 | Wedge | Bronze |
| 22 | 2 | Hook | Bronze |

14"-36" MECHANICAL JOINT C571/F-5065 GATE VALVE





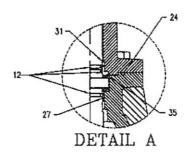
| VALVE SIZE | А | В | С | D | E | F | G | н |
|---------------|-------|--------------------------------|-------|-------|-------|--------------------|------|--------------------|
| 14 | 71/4 | 15½ | 201/4 | 281/4 | 351/4 | 191/4 | 17/8 | 25 ⁵ /8 |
| 16 | 91/8 | 133/4 | 221/2 | 321/4 | 391/4 | 201/2 | 17/8 | 253/4 |
| 18 | 91/4 | 14 | 243/4 | 353/8 | 42³/8 | 221/2 | 21/8 | 273/4 |
| 20 | 10 | 16 ³ / ₄ | 27 | 39 | 46 | 24 | 21/8 | 327/8 |
| 24 | 16 | 21 | 32 | 45³/8 | 52³/s | 28 | 21/2 | 353/4 |
| 30 | 121/2 | 201/4 | 39¹/s | 553/4 | 623/4 | 31 ¹ /2 | 23/4 | 453/4 |
| 36 | 233/4 | 233/4 | 46 | 651/4 | 721/4 | 40 | 3 | 561/4 |

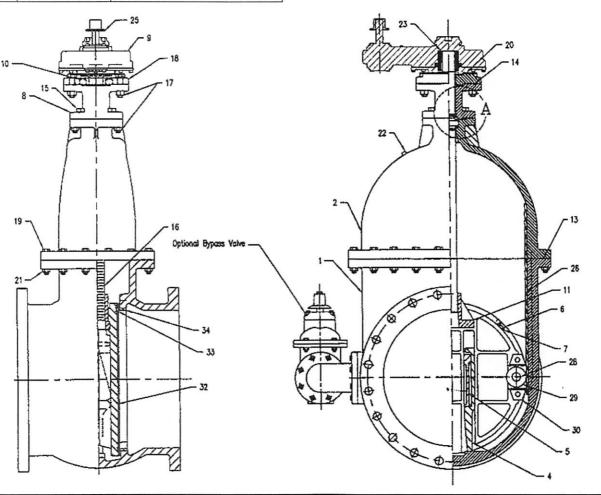
| SEQ. | QTY. | DESCRIPTION | MATERIAL |
|------|------|---------------------|--------------------------------|
| 1 | 1 | O-Ring Plate | Cast Iron, ASTM A126 Class B |
| 2 | 2 | O-Ring | Buna N |
| 3 | 1 | Stuffing Box Gasket | Composition |
| 4 | 1 | Neck Flange Gasket | Buna-N |
| 5 | 1 | Cover | Cast Iron, ASTM A126 Class B |
| 6 | 2 | Bushing | Bronze; ASTM B584 Alloy 844 |
| 7 | 1 | Stem | Bronze; ASTM B584 Alloy 867 |
| 8 | 1 | Body | Cast Iron, ATSM A126 Class B |
| 9 | 1 | Stem Nut | Bronze, ASTM B584 Alloy 844 |
| 10 | 2 | Gate | Cast Iron, ASTM A126 Class B |
| 11 | 2 | Gate Ring | Bronze, ASTM B584 Alloy 844 |
| 12 | 2 | Case Ring | Bronze, ASTM B584 Alloy 844 |
| 13 | 2 | Wedge | Bronze, ASTM B584 Alloy 844 |
| 14 | _2 | Hook | Cast Iron, ASTM A126 Class B |
| 15 | | Bolts & Nuts | Stainless Steel, ASTM F593-304 |
| 16 | 2 | Strap | Bronze, ASTM B584 Alloy 844 |
| 17 | 4 | Peg | Bronze, ASTM B584 Alloy 844 |

| DET | QTY | Description | MATERIAL |
|-----|-----|------------------------------|----------------------------------|
| 1 | 1 | Body | Gray Iron, ASTM A126 Class B |
| 2 | 1 | Cover | Gray Iron, ASTM A126 Class B |
| 3 | 1 | Сар | |
| 4 | 2 | Hook | Gray Iron, ASTM A126 Class B |
| 5 | 2 | Wedge | Bronze, ASTM B584 C83600 |
| 6 | 4 | Gate Peg | Bronze, ASTM B584 C83600 |
| 7 | 2 | Strap | Bronze, ASTM B584 C83600 |
| 8 | 1 | Extension | Ductile Iron, ASTM A536 65-45-12 |
| 9 | 1 | Actuator 2:1 Actuator 3:1 | 14"-16" Only 18"-24" Only |
| 10 | 4 | Socket Head Bolt | Alloy Steel |
| 11 | 1 | Stem Nut | Bronze, ASTM B584 C83600 |
| 12 | 3 | Oring-Stem | NBR |
| 13 | 2 | Oring-Cover | NBR |
| 14 | 1 | Oring-Extension | NBR |
| 15 | 4 | Capscrew | Stainless Steel, ASTM F593-304 |
| 16 | 1 | Stem | Bronze, ASTM B584 C86700 |
| 17 | 8 | Nut | Stainless Steel, ASTM F593-304 |
| 18 | 1 | Adaptor Plate | Ductile Iron, ASTM A536 65-45-12 |
| 19 | 18 | Capscrew | Zinc Chromate |
| 20 | 1 | Gasket-Actuator | Buna-N |
| 21 | 18 | Nut | Stainless Steel, ASTM F593-304 |
| 22 | 1 | Pipe Plug | Steel |
| 23 | 1 | Key | Steel |
| 24 | 1 | Oring-Cover Top | NBR |
| 25 | 1 | Op Nut | Ductile Iron, ASTM A536 65-45-12 |
| 26 | 1 | Track | Bronze, ASTM B584 C83600 |
| 27 | 1 | Bushing | Bronze, ASTM B584 C83600 |
| 28 | 1 | Shaft | Bronze, ASTM B584 C83600 |
| 29 | 1 | Roller | Bronze, ASTM B584 C83600 |
| 30 | 2 | Scraper | Bronze, ASTM B584 C83600 |
| 31 | 1 | Bushing | Bronze, ASTM B584 C83600 |
| 32 | 2 | Gate | Gray Iron, ASTM A126 Class B |
| 33 | 2 | Gate Ring | Bronze, ASTM B584 C83600 |
| 34 | 2 | Case Ring | Bronze, ASTM B584 C83600 |
| 35 | 1 | Thrust Washer | Delrin (18"-24") |

14" - 24" DOUBLE DISC SPUR GEAR MATERIAL LIST

KENNEDY VALVE

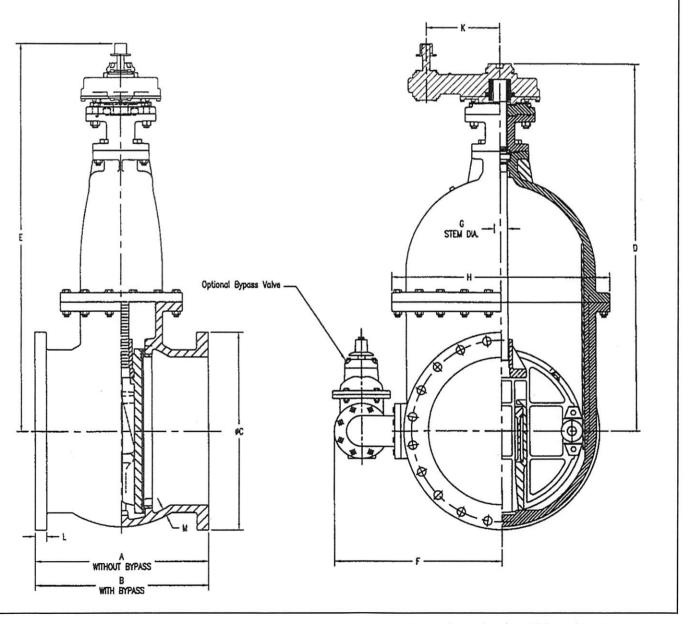




14" - 24" DOUBLE DISC SPUR GEAR FLANGE END DIMENSIONAL LIST

KENNEDY VALVE

| VALVE SIZE | 14 | 16 | 18 | 20 | 24 |
|------------------|--------|--------|--------|---------|--------|
| Α | 15-3/4 | 17 | 19 | 20 | 23 |
| В | 23 | 23 | 24 | 24 | 28-1/2 |
| С | 21 | 23-1/2 | 25 | 27-1/2 | 32 |
| D | 38-3/4 | 42-3/4 | 48-7/8 | 52-1/2 | 59 |
| Е | 42-1/2 | 46-1/2 | 52-1/2 | 56 | 62-1/2 |
| F | 19-1/4 | 20-1/2 | 22-1/2 | 24 | 28 |
| G | 1-7/8 | 1-7/8 | 2-1/8 | 2-1/8 | 2-1/2 |
| Н | 23-5/8 | 25-3/4 | 27-3/4 | 32-7/8 | 35-3/4 |
| К | 8 | 8 | 12 | 12 | 12 |
| L | 1-3/8 | 1-7/16 | 1-9/16 | 1-11/16 | 1-7/8 |
| М | 7/8 | 7/8 | 15/16 | 1 | 1-1/8 |
| TURNS TO OPEN | 90 | 104 | 174 | 192 | 228 |

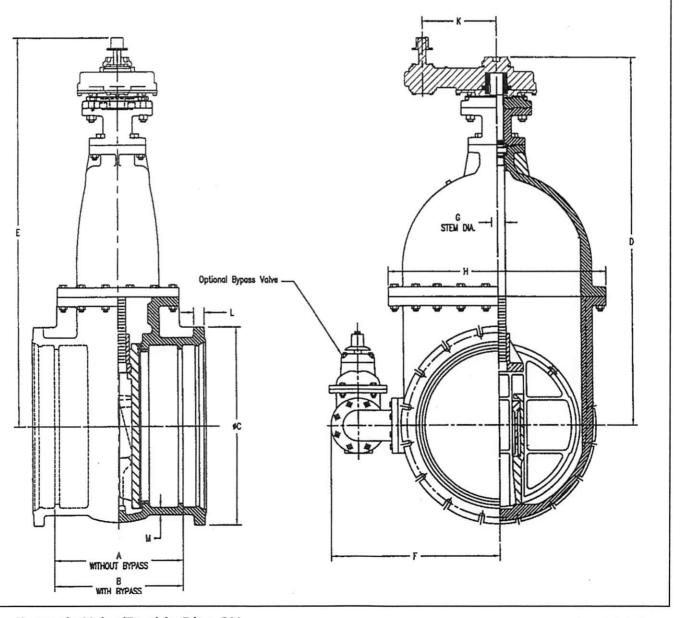


14" - 24" DOUBLE DISC SPUR GEAR MJ DIMENSIONAL LIST

KENNEDY VALVE

C571/F5065

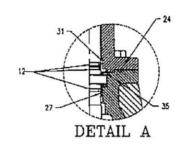
| VALVE SIZE | 14 | 16 | 18 | 20 | 24 |
|------------------|--------|--------|--------|---------|--------|
| Α | 7-1/4 | 9-1/8 | 9-1/4 | 10 | 16 |
| В | 15-1/2 | 13-3/4 | 14 | 16-3/4 | 21 |
| С | 20-1/4 | 22-1/2 | 24-3/4 | 27 | 32 |
| D | 38-3/4 | 42-3/4 | 48-7/8 | 52-1/2 | 59 |
| E | 42-1/2 | 46-1/2 | 52-1/2 | 56 | 62-1/2 |
| F | 19-1/4 | 20-1/2 | 22-1/2 | 24 | 28 |
| G | 1-7/8 | 1-7/8 | 2-1/8 | 2-1/8 | 2-1/2 |
| Н | 23-5/8 | 25-3/4 | 27-3/4 | 32-7/8 | 35-3/4 |
| К | 8 | 8 | 12 | 12 | 12 |
| L | 1-3/8 | 1-7/16 | 1-9/16 | 1-11/16 | 1-7/8 |
| М | 7/8 | 7/8 | 15/16 | 1 | 1-1/8 |
| TURNS TO OPEN | 90 | 104 | 174 | 192 | 228 |

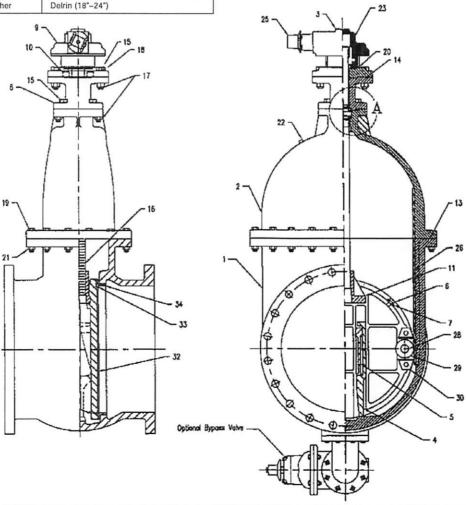


| DET | QTY | Description | MATERIAL |
|-----|-----|------------------------------|----------------------------------|
| 1 | 1 | Body | Gray Iron, ASTM A126 Class B |
| 2 | 1 | Cover | Gray Iron, ASTM A126 Class B |
| 3 | 1 | Сар | |
| 4 | 2 | Hook | Gray Iron, ASTM A126 Class B |
| 5 | 2 | Wedge | Bronze, ASTM B584 C83600 |
| 6 | 4 | Gate Peg | Bronze, ASTM B584 C83600 |
| 7 | 2 | Strap | Bronze, ASTM B584 C83600 |
| 8 | 1 | Extension | Ductile Iron, ASTM A536 65-45-12 |
| 9 | 1 | Actuator 2:1 Actuator 3:1 | 14"–16" Only 18"–24" Only |
| 10 | 4 | Socket Head Bolt | Alloy Steel |
| 11 | 1 | Stem Nut | Bronze, ASTM B584 C83600 |
| 12 | 3 | Oring-Stem | NBR |
| 13 | 2 | Oring-Cover | NBR |
| 14 | 1 | Oring-Extension | NBR |
| 15 | 4 | Capscrew | Stainless Steel, ASTM F593-304 |
| 16 | 1 | Stem | Bronze, ASTM B584 C86700 |
| 17 | 8 | Nut | Stainless Steel, ASTM F593-304 |
| 18 | 1 | Adaptor Plate | Ductile Iron, ASTM A536 65-45-12 |
| 19 | 18 | Capscrew | Zinc Chromate |
| 20 | 1 | Gasket-Actuator | Buna-N |
| 21 | 18 | Nut | Stainless Steel, ASTM F593-304 |
| 22 | 1 | Pipe Plug | Steel |
| 23 | 1 | Key | Steel |
| 24 | 1 | Oring-Cover Top | NBR |
| 25 | 1 | Op Nut | Ductile Iron, ASTM A536 65-45-12 |
| 26 | 1 | Track | Bronze, ASTM B584 C83600 |
| 27 | 1 | Bushing | Bronze, ASTM B584 C83600 |
| 28 | 1 | Shaft | Bronze, ASTM B584 C83600 |
| 29 | 1 | Roller | Bronze, ASTM B584 C83600 |
| 30 | 2 | Scraper | Bronze, ASTM B584 C83600 |
| 31 | 1 | Bushing | Bronze, ASTM B584 C83600 |
| 32 | 2 | Gate | Gray Iron, ASTM A126 Class B |
| 33 | 2 | Gate Ring | Bronze, ASTM B584 C83600 |
| 34 | 2 | Case Ring | Bronze, ASTM B584 C83600 |
| 35 | 1 | Thrust Washer | Delrin (18"-24") |

14" - 24" DOUBLE DISC BEVEL GEAR MATERIAL LIST

KENNEDY VALVE

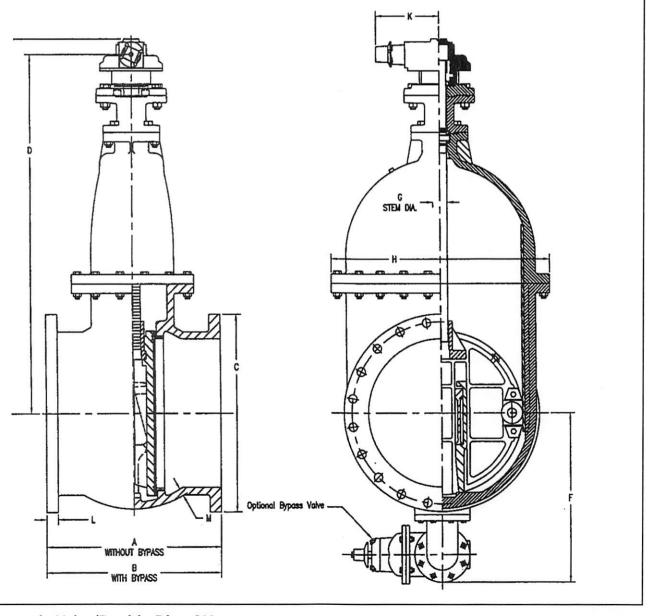




14" - 24" DOUBLE DISC BEVEL GEAR FLANGE END DIMENSIONAL LIST

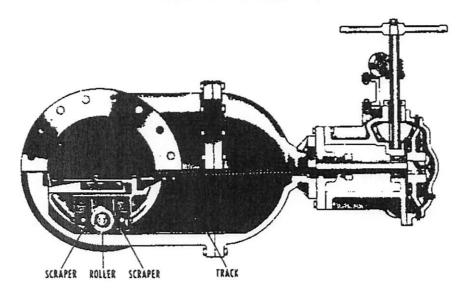
KENNEDY VALVE

| VALVE SIZE | 14 | 16 | 18 | 20 | 24 |
|------------------|--------|--------|--------|---------|--------|
| Α | 15-3/4 | 17 | 19 | 20 | 23 |
| В | 23 | 23 | 24 | 24 | 28-1/2 |
| С | 21 | 23-1/2 | 25 | 27-1/2 | 32 |
| D | 37 | 41 | 47-7/8 | 51-1/2 | 58 |
| Е | 39-1/4 | 43-1/4 | 50-3/8 | 54 | 60-1/2 |
| F | 19-1/4 | 20-1/2 | 22-1/2 | 24 | 28 |
| G | 1-7/8 | 1-7/8 | 2-1/8 | 2-1/8 | 2-1/2 |
| Н | 23-5/8 | 25-3/4 | 27-3/4 | 32-7/8 | 35-3/4 |
| K | 9-1/4 | 9-1/4 | 10-1/4 | 10-1/4 | 10-1/4 |
| L | 1-3/8 | 1-7/16 | 1-9/16 | 1-11/16 | 1-7/8 |
| М | 7/8 | 7/8 | 15/16 | 1 | 1-1/8 |
| TURNS TO OPEN | 90 | 104 | 174 | 192 | 228 |



KENNEDY VALVE

For 14-inch and Larger Diameter Gate Valves Installed Horizontally

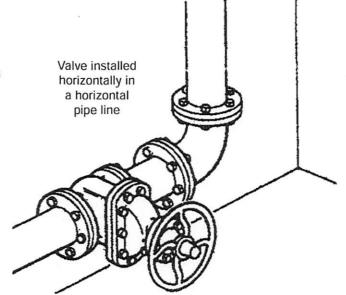


Cutaway view of valve showing rollers, tracks, and scrapers

Rollers, Tracks and Scrapers

Valves 14" and larger installed in a horizontal pipe line with their stems horizontal should be equipped with rollers, tracks and scrapers, as illustrated. The rollers assist the travel of the gate assembly along tracks set into the valve body, retaining it in alignment, and promoting ease of operation, not otherwise possible. Scrapers are provided ahead of the rollers to clear the track of obstruction or foreign matter.

When required, rollers, tracks and scrapers are bronze.



KENNEDY LIST 16 EXTRA HEAVY PRESSURE DBL. DISC, PARALLEL **SEAT IBBM GATE VALVES**

KENNEDY VALVE

KENNEDY VALVE LIST 16 Dbl. Discs Parallel Seat IBBM Gate Valves Meet or Exceed the requirements of AWWA C500

| Size Range | 4″-30″ |
|------------|--------|

| | Water Working | Hydrostatic |
|---------|---------------|-------------|
| | Pressure psi | Test psi |
| 4″-20″ | 250 | 500 |
| 24"-30" | 225 | 450 |

Available in either, NRS or OS&Y.

Available End Connections & Size Range

Figure No. F-5300

Fig. (NRS) 4"- 48"

Fig. (OS&Y) 14" - 48"

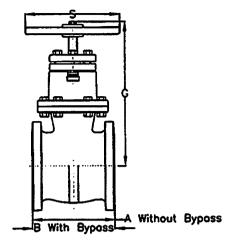
F-5305

Accessories

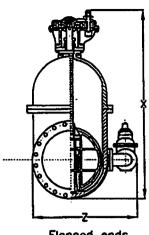
Same as listed for Kennedy Valve AWWA Dbl. Disc Parallel Seat IBBM Gate Valves

Flanges are faced and drilled to ANSI Class 250 Standard

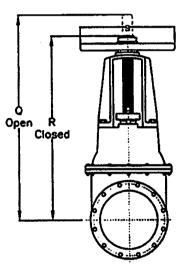
LIST 16 EXTRA HEAVY DOUBLE DISC GATE VALVES GENERAL DIMENSIONS



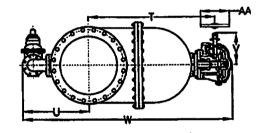
Flonged Ends, NRS



Flanged ends NRS Spur Gear By-Pass



Flonged Ends, OS&Y



Flonged ends, NRS, with Bevel Geors, By-Poss

| VALVE SIZE | А | В | G | Q | R | s | т | U | V | w | х | Y | Z | AA | Turns to Open | Diam. of Stem |
|---------------|-------------------|-------|--------------------|--------|-------|----|--------------------|-------|-------|--------|--------------------------------|-------------------|-------|----|------------------|-------------------|
| 4 | 9 ⁵ /8 | _ | 14 | 24 | 193/4 | 10 | _ | _ | _ | _ | _ | _ | _ | _ | 15 | 1 ¹ /8 |
| 6 | 111/2 | _ | 18 | 321/2 | 251/2 | 12 | _ | _ | _ | _ | _ | _ | _ | _ | 21 | 11/4 |
| 8 | 121/2 | _ | 22 | 401/2 | 311/2 | 14 | _ | _ | | _ | | _ | _ | _ | 27 | 1³/e |
| 10 | 141/2 | | 25 ⁵ /8 | 471/4 | 361/4 | 18 | _ | _ | | _ | _ | _ | | _ | 33 | 11/2 |
| 12 | 17 | _ | 291/8 | 581/4 | 45³/4 | 18 | 275/8 | _ | 13 | _ | 36¹/a | 8 | | 18 | 39 | 11/2 |
| 14 | 171/2 | 261/4 | 361/4 | 673/4 | 523/4 | 22 | 33 | 21 | 13 | 581/4 | 41 | 8 | 33 | 18 | 45 | 1 ⁷ /8 |
| 16 | 19 | 271/2 | 401/4 | 743/4 | 573/4 | 26 | 36 ⁷ /8 | 22 | 13 | 64 | 45 | 8 | 351/4 | 18 | 52 | 2 |
| 18 | 21 | 271/2 | 433/8 | 821/2 | 631/2 | 26 | 39 ⁷ /8 | 24 | 13 | 693/4 | 48 | 8 | 381/2 | 18 | 58 | 21/8 |
| 20 | 211/2 | 28 | 48 | 901/4 | 691/4 | 30 | 433/4 | 243/4 | 13 | 74 | 51 ³ / ₄ | 8 | 411/2 | 18 | 64 | 21/4 |
| 24 | 26 | 34 | 54³/s | 105 | 793/4 | 30 | 52 ⁷ /8 | 291/2 | 171/2 | 89 | 60 ⁵ /8 | 10 | 471/4 | 18 | 51 | 21/4 |
| 30 | 30 | 34 | 65³/s | 1281/4 | 97 | 36 | 64 ¹ /8 | 331/2 | 233/4 | 1051/2 | 79¹/s | 13³/ ₈ | 571/2 | 22 | 63 | 3 |

FLANGES ARE FACED AND DRILLED TO ANSI CLASS 250 STANDARD Note: 36", 42", and 48" Dimensions Contact Factory

KENNEDY VALVE AWWA DOUBLE DISC GATE VALVES IRON BODY, BRONZE MOUNTED, PARALLEL SEAT

KENNEDY VALVE

Description and Advantages

Kennedy Valve AWWA Gate Valves are designed primarily for flow control of water in underground pipe lines. They equal or exceed the requirements established by standards of the American Water Works Association and conform to Federal Specifications WW-V-58B, Type II, Class I.

Kennedy Valve AWWA Gate Valves are specifically designed for heavy pressure service. Neck, flanges, and bell are made extra heavy to withstand pipe strain and possible shifting. Body, cover, gates, and stem are built for extra strength, with clean and simple internal construction, to assure long service and low maintenance.

Operation of the Valve

Turning the stem releases the wedging pressure on the gates allowing them to move away from their seats before starting upward travel. Further turning of the stem raises the gates into the fully opened position.

When closing the valve, the gates move freely downward without friction, to a position opposite their seats.

As the gates approach the bottom of the valve, the iron hooks come into contact with stops which prevent further downward movement of the hooks. The bronze wedges riding on these hooks spread the gates apart and force them against their seats.

Construction

Body: Cast iron, bronze mounted. Sturdy proportions provide protection against damage.

Stem: Manganese bronze of high tensile and torsional strength, with accurate, perfectly machined threads. Ample diameters assure smooth valve movements.

Stem Nut: Solid bronze. Independent of hooks, gates, and wedges. Stem or stem nut will not bind or spring out of line, as can happen when stem nut is attached to wedges.

Wedges: Independent, solid bronze, 2"-3" valves have integral hook and wedge. 4"-8" have independent solid bronze wedges placed loosely in iron hooks, and are free

to adjust to varying positions of the gates. In 10" and larger valves, each wedge has one long and one short surface. The bottom of each wedge forms a rocker bearing on the iron hooks, letting wedges adjust to varying positions of the gates in closing. The long side is used in closing the valve and the short side in opening it.

Low Torque Trust Bearing: Valves 4"-12" are fitted below the stem collar with an exclusive Low Torque Thrust Bearing which provides high load capacity and low friction. This bearing reduces operating torque up to 50% yet seals perfectly for repacking under pressure.

Gates and Gate Rings: Gates 3" and smaller are bronze. Gates 4" and larger are high strength cast iron with bronze gate rings rolled into machined and dovetailed grooves under pressure to make gate and ring one inseparable unit. After fitting, gate rings are accurately machined.

Case Rings. Bronze case rings are screwed into place and machined. They can be removed and replaced if necessary.

Packing: O-Ring packing is standard on all non-rising stem gate valves. Rising stem and geared valves are furnished with conventional packing.

Operating Nut and Handwheel: All valves except flanged valves and outside screw and yoke valves are supplied with 2" square operating nuts of high strength cast iron unless otherwise specified. Flanged valves and outside screw and yoke valves are supplied with handwheels of high strength cast iron unless otherwise specified. Direction of opening is indicated by arrow cast on operating nut skirt or on the rim of the handwheel.

Yoke: Yokes for outside screw and yoke valves are of rugged cast iron. Careful machining assures accurate stem alignment.

Accessories: Valves may be fitted with any large number of accessories: cylinders, electric motor operators, gearing, by-passes, etc.

Rollers, Tracks and Scrapers: Recommended for 14" and larger diameter valves carry weight of the gates for valves installed in a horizontal line in a vertical line.

NOTE: All valves open to the left (counter clockwise) unless otherwise specified.

SAMPLE GATE VALVE SPECIFICATION KENNEDY VALVE CAST IRON GATE VALVE

KENNEDY VALVE

Gate Valves:

Valves shall be manufactured in accordance with AWWA Standard C500-93. Valves 12" and smaller shall be designed for 200 psi water working pressure and 150 psi for valves 14"-48" inclusive. Valves shall have (M/J, Flanged or as indicated on plans) ends and shall have clear waterway equal to the full nominal diameter of the valve. Valves shall be double disc parallel seat type with (non-rising, rising) stems, opening by turning (left, right) and provided with (2" square nuts, handwheel), with arrow cast in metal to indicate direction of opening.

Manufacturer of 2"-48" gate valves must have the full range of valves in both NRS and OS&Y styles.

Each manufacturer shall provide certification that they have manufactured 2" through 48" valves for a minimum of ten years.

Each valve shall have manufacturer's name, pressure rating and year in which manufactured cast on body. Prior to shipment from the factory each valve shall be hydrostatically shell tested at a pressure of 400 psig in sizes 12" and smaller and 300 psig in sizes 14" and larger. In addition each valve shall be hydrostatically seat tested at a pressure of 200 psig in sizes 12" and smaller and 150 psig in sizes 14" and larger. Valves shall be Kennedy Valve AWWA valves as furnished by Kennedy Valve, Elmira, New York.

Stuffing Boxes:

Stuffing Boxes shall be "O" ring seal type with two O-rings located in stem above thrust collar in valves without gearing. Sizes 14" through 48" there shall be a bronze busing meeting ASTM B584.

Bolts and Nuts:

Body and cover bolts and nuts shall meet specification ASTM F593-304 Stainless Steel.

Wedging:

Valves will be bottom wedging type with two part floating wedge contact. The wedge and hook shall be separate coatings and not a one piece casting in valves 4" through 36". In valves 42" and 48" the hooks and wedges shall be one piece design with the outside of the wedge area covered with a bronze shoe. No side wedging will be acceptable.

Stems:

Stems shall be in full conformance with AWWA Specs. Sizes 14" through 36" bronze ASTM B584 with 80,000 tensil strength, and cast integral stem collar. 42" and 48" shall be type 304 stainless steel.

Stem Nuts:

Stem nuts shall be made of solid bronze independent of hooks, gates and wedges. No pins will be allowed to retain gates to stem nuts.

Gates and Gate Rings:

Gates shall be high strength cast iron, sturdily proportioned without pockets on backs. Cam surfaces shall open to bottom. Gate rings shall be rolled into dovetailed grooves under pressure to make one inseparable unit. The gate ring face shall be machined to a smooth finish.

Case Rings:

Bronze case rings shall be screwed into place and the contact face machined to a smooth finish. Use of screws, rivets or other means of retention will not be acceptable.

Valves 14" and Larger:

Valves installed with stem horizontal shall be equipped with bronze rollers, tracks, scrapers.

Bypasses:

Bypasses shall be provided on 16" and larger valves where indicated and mounted directly to valve body with cast iron flanged connections. Bypass valves shall be resilient seated AWWA and ULFM approved as furnished by Kennedy Valve for sizes through 36" and integral double disc type bypass valves for 42" and 48" sizes.

Gearing:

Enclosed spur or bevel gearing with extended type gear cases will be provided where indicated on plans. Side cover plates will be provided to completely enclose stem and stuffing box. Manufacturer must be able to supply open and enclosed gearing as standard.

KENNEDY VALVES ORDERING INFORMATION

KENNEDY VALVE

Use Figure Number wherever possible to identify product wanted.

When placing orders or making inquiries, please furnish the following information. This information will enable us to answer your questions, prepare quotations, and fill your order promptly. Lack of essential information is almost sure to cause delays.

- 1. Quantity
- 2. Size
- 3. Working pressure: Refer to tables of pressure ratings.
- 4. End type or types: Gate valves are furnished with many end types.
- **4A.Flanged valves:** Furnished with ANSI 125 pound Standard flanges with bolt holes stradding center lines.
- **4B.Mechanical Joint valves:** Normally furnished with standardized mechanical joints with plain rubber gaskets. Cutting-in type mechanical joints also available for use in existing cast iron pipe lines.
- 5. **Direction of opening:** Must be specified. Open left (counterclockwise); or open right (clockwise).
- 6. **Type of stem:** State whether non-rising stem or rising stem with outside screw and yoke.
- 7. Installation position: Indicate position in which valve will be installed (vertically, horizontally, or otherwise).
- 8. Operating nut or handwheel: All flanged valves and all rising stem valves with outside screw and yoke are furnished with handwheels unless otherwise specified. Other valves are furnished with a 2-inch square operating nut unless otherwise specified.

- Stuffing box: Whether conventional or O-ring. Unless otherwise specified, we regularly furnish NRS valves with O-ring packing; other valves are regularly furnished with conventional stuffing box packing.
- 10. Indicator posts and valves: State depth of trench (distance from ground line to bottom of the pipe line); size and shape of operating nut, if other than standard. For valves already in place, state whether valve is equipped with a flange for post support; if so, give flange dimensions, and distance from centerline of valve to top of flange.
- By-pass Valves: State location, whether manually operated by-pass will have handwheel or operating nut, and any special instructions necessary.
- 12. Parts: Always order parts by number.





www.kennedyvalve.com

1021 E. Water Street • Elmira, New York 14901 P.O. Box 981 PHONE: (607) 734-2211 • FAX: 1-800-952-4771