

DATE: 10/15/2019
BID NO.: 50-00128200

INVITATION TO BID
THIS IS NOT AN ORDER

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JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

BUYER: DMEVANS@jeffparish.net

BIDS WILL BE RECEIVED IN THE WEST BANK PURCHASING DEPT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETNA, LA 70053 UNTIL 2:00 PM, 10/31/2019 AND PUBLICLY OPENED THEREAFTER. For convenience, bidders may also submit bids in the East Bank Purchasing Department, Suite 404, Jefferson Parish Joseph S. Yenni Building, 1221 Elmwood Park Blvd., Jefferson LA 70123. However, if submitting bids on the day of bid opening, bidders must submit at the West Bank location only. All bids will be publicly opened at the West Bank location.

At no charge, bidders may also submit via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net to register for this free site. Additional instructions are included in the text box highlighting electronic procurement.

LATE BIDS WILL NOT BE ACCEPTED

Unless submitting via online (see Page 3), each bid must be submitted in a sealed envelope bearing on the outside; the name of the Bidder, his address, and the name of the project for which the bid is submitted and the bid number.

NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 113646 and/or Resolution No. 113647.

Jefferson Parish adheres to the Louisiana Code of Governmental Ethics, contained in Louisiana Revised Statutes Annotated, R.S. 42:1101, et seq. Vendor/Proposer by this submission, warrants that there are no "conflicts of interest" related to this procurement that would violate applicable Louisiana Law. Violation of the Louisiana Code of Governmental Ethics may result in rescission of contract, permit or licenses, and the imposition of fines and/or penalties, without contractual liability to the public in accordance with applicable law.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from <http://purchasing.jeffparish.net> and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Further, a current W-9 form and respective Tax Identification number must be supplied upon contract execution, should you be awarded a contract and/or issued purchase order. Failure to do so may result in delay of payment.

All quotations shall be based on F.O.B. Agency warehouse or job site, anywhere within the Parish as designated by the Purchasing Department. This provision does not apply to public works projects

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alterations from the specifications must be indicated and/or supporting documentation supplied with bid submission.

Bidders should submit all questions in writing via email to the buyer's email address as indicated above, no later than Five (5) working days prior to the bid opening. Bid numbers should be mentioned in all requests. If submitting online, vendors may send questions via the E-Procurement site no later than Five (5) working days prior to the bid opening.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum. Please note that all official communication will be expressed in the form of an addendum.

Visit our website at [HTTP://PURCHASING.JEFFPARISH.NET](http://PURCHASING.JEFFPARISH.NET)

All formal Addenda require written acknowledgement on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. Vendors must not alter the bid forms. Doing so will cause the bid to be rejected.

A corporate resolution or written evidence of the individual signing the bid having such authority must be submitted with the bid. Failure to comply will cause bid to be rejected. For corporate entities, such written evidence may be a printout of the Louisiana Secretary of State's website listing the signatory as an officer. Such printout shall be included with the bid submission. Bids submitted by Owners or Sole Proprietors must include certification that he or she owns the entity for which the bid is signed. This documentation must be submitted with the bid. Failure to do so will result in bid rejection.

NOTE: A sample corporate resolution can be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document. A sample certification of sole proprietorship can also be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

A. AWARD OF CONTRACT: JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE AND RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE. SPLIT AWARDS MADE TO SEVERAL VENDORS WILL ONLY BE GRANTED TO THOSE DEEMED RESPONSIVE AND RESPONSIBLE.

All bid prices shall remain valid for 45 days. Jefferson Parish and the lowest responsive and responsible bidder(s) by mutual written consent may mutually agree to extend the deadline for award by one (1) or more extensions of thirty (30) calendar days.

PROTESTS: Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

PREFERENCE: Unless federal funding is directly spent by Jefferson Parish for this purchase, preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state. "LSA – R.S. 38:2251-2261"

B. USE OF BRAND NAMES AND STOCK NUMBERS: Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

C. CANCELLATION OF CONTRACT: JEFFERSON PARISH reserves the right to cancel all or any part if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel any contract at anytime and for any reason by issuing a THIRTY (30) day written notice to the contractor.

For good cause and as consideration for executing a contract with Jefferson Parish, vendor conveys, sells, assigns and transfers to Jefferson Parish or its assigns all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Louisiana, relating to the particular good or services purchased or acquired by Jefferson Parish.

D. PRICES: Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and Parish taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A17.1-1961).

Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's and SBE's) to stimulate participation in procurement and assistance programs.

DATE: 10/15/2019

BID NO.: 50-00128200

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

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The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, operating supplies and/or equipment listed in this bid proposal. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications.

Advertised bids will be tabulated and a copy of the tabulation will be forwarded to each responding bidder.

IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online. This is a secure site and authorized personnel have limited read access only. Bidders are encouraged to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at www.jeffparishbids.net to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at <http://purchasing.jeffparish.net>.

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 dated 12/09/09. The general conditions adopted by this resolution shall be considered as much a part of this document as if they were written wholly herein. A copy may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at <http://purchasing.jeffparish.net> and clicking on Online Forms.

ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE
CORRESPONDING INSTRUCTIONS BELOW.

10,12,13,15

1. All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(l), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.
3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Inspection and Code Enforcement. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Inspection and Code Enforcement. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.
4. A LA State Contractor's License will be required in accordance with LSA R.S. 37:2150 et. seq. and such license number will be shown on the outside of the bid envelope. Failure to comply will cause the bid to be rejected. Additionally if submitting the bid electronically, then the license number must be entered in the appropriate field in the Electronic Procurement system. Failure to comply will cause the bid to be rejected.
5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.
6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precautions must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

7. PUBLIC WORKS BIDS: All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise stated in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. NON-PUBLIC WORKS BIDS: A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. NON-PUBLIC WORKS BIDS: A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Prior to contract executions/purchase order issuance, the successful bidder will be required to provide final insurance certificates which shall name Jefferson Parish as an additional insured in accordance with the instructions in the aforementioned "Standard Insurance Requirements" sheet.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. Acceptable forms shall be limited to cashier's check, certified check, or surety bid bond. All sureties must be in original format (no copies). If submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. PUBLIC WORKS BIDS - Completed, Signed and Properly Notarized Affidavits Required: This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
15. NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits Required in conformity with the provisions contained in LSA - RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.
17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owned on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session - Louisiana Revised Statute 47:301(8)(c). Owner will furnish contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment.

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission: and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to Jefferson Parish Code of Ordinances Section 2-155.10(19). By submitting a bid, vendor acknowledges this and will abide by all provisions of the referenced Jefferson Parish Code of Ordinances.

See Page 1 for Conflicts of Interest Statement

BID FORM
Non Public Works

All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES ☒ NO ☐

MAXIMUM ESCALATION PERCENTAGE REQUESTED _____ %

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF 10/30/2020

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

DELIVERY: FOB JEFFERSON PARISH

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

Stock - 4 weeks

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) _____

THIS SECTION MUST BE COMPLETED BY BIDDER:

FIRM NAME: Cimseo Inc.
ADDRESS: 1840 LG'A Road
CITY, STATE: Metairie, LA ZIP: 70001
TELEPHONE: () 504-835-7319 FAX: () 504-832-0820
EMAIL ADDRESS: Aaron@cimseoinc.com

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: N/A

NUMBER: _____

NUMBER: _____

NUMBER: _____

TOTAL PRICE OF ALL BID ITEMS: \$ \$1588,850.92

AUTHORIZED

SIGNATURE: Aaron RooneyTITLE: Sales

Printed Name

Aaron Rooney

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

NOTE: All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00128200

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	1.00	EA	ONE YEAR CONTRACT FOR A SUPPLY OF GATE AND BUTTERFLY VALVES FOR THE JEFFERSON PARISH DEPARTMENT OF PUBLIC WORKS- ALL WATER DISTRICTS AND ALL JEFFERSON PARISH AGENCIES AND MUNICIPALITIES 0020 - 3 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62201A)	341 ⁰⁰ ₀₀	341 ⁰⁰ ₀₀
2	15.00	EA	ONE (1) YEAR CONTRACT FOR A SUPPLY OF GATE AND BUTTERFLY VALVES FOR THE JEFFERSON PARISH DEPARTMENT OF PUBLIC WORKS, ALL WATER DISTRICTS AND ALL JEFFERSON PARISH AGENCIES AND MUNICIPALITIES 0050 - 4 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62402A)	391 ⁰⁰ ₀₀	5940 ⁰⁰ ₀₀
3	60.00	EA	0090 - 6 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62405A)	557.62	33,457.20
4	80.00	EA	0120 - 8 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62408A)	858 ⁰⁰ ₀₀	68,640 ⁰⁰ ₀₀
5	3.00	EA	0150 - 10 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62411A)	1100 ⁰⁰ ₀₀	3300 ⁰⁰ ₀₀
6	5.00	EA	0180 - 12 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62414A)	1675 ⁰⁰ ₀₀	8375 ⁰⁰ ₀₀
7	1.00	EA	0210 - 14 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62416)	3100 ⁰⁰ ₀₀	3100 ⁰⁰ ₀₀
8	1.00	EA	0240 - 3 INCH RESILIENT SEAT GATE VALVE, FLANGE (62201)	360 ⁰⁰ ₀₀	360 ⁰⁰ ₀₀
9	1.00	EA	0270 - 4 INCH RESILIENT SEAT GATE VALVE, FLANGE (62400A)	395 ⁰⁰ ₀₀	395 ⁰⁰ ₀₀
10	50.00	EA	0300 - 6 INCH RESILIENT SEAT GATE VALVE, FLANGE (62403A)	517 ⁰⁰ ₀₀	25,850 ⁰⁰ ₀₀

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SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
11	10.00	EA	0330 - 8 INCH RESILIENT SEAT GATE VALVE, FLANGE (62406A)	8330 ⁰⁰ —	8330 ⁰⁰ —
12	1.00	EA	0360 - 10 INCH RESILIENT SEAT GATE VALVE, FLANGE (62409)	1260.72	1260.72
13	1.00	EA	0390 - 12 INCH RESILIENT SEAT GATE VALVE, FLANGE (62412)	1400 ⁰⁰ —	1400 ⁰⁰ —
14	1.00	EA	0420 - 14 INCH RESILIENT SEAT GATE VALVE, FLANGE	3100 ⁰⁰ —	3100 ⁰⁰ —
15	1.00	EA	0450 - 3 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE	341 ⁰⁰ —	341 ⁰⁰ —
16	5.00	EA	0480 - 4 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62636A)	3970 ⁰⁰ —	1985 ⁰⁰ —
17	100.00	EA	0510 - 6 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62637A)	557.00 ⁰⁰ —	55,700 ⁰⁰ —
18	20.00	EA	0540 - 8 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62638A)	8430 ⁰⁰ —	16,860 ⁰⁰ —
19	1.00	EA	0570 - 10 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62639)	1100 ⁰⁰ —	1100 ⁰⁰ —
20	1.00	EA	0600 - 12 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62640)	1400 ⁰⁰ —	1400 ⁰⁰ —
21	1.00	EA	0630 - 14 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE	3100 ⁰⁰ —	3100 ⁰⁰ —
22	1.00	EA	0640 - 6 INCH BUTTERFLY VALVE, MECHANICAL JOINT	700 ⁰⁰ —	700 ⁰⁰ —

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00128200

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
23	1.00	EA	0650 - 8 INCH BUTTERFLY VALVE, MECHANICAL JOINT	825 ⁰⁰ ==	825 ⁰⁰ ==
24	1.00	EA	0660 - 10 INCH BUTTERFLY VALVE, MECHANICAL JOINT	1075 ⁰⁰ ==	1075 ⁰⁰ ==
25	10.00	EA	0670 - 12 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62360)	1250 ⁰⁰ ==	12,500 ⁰⁰ ==
26	2.00	EA	0680 - 14 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62361)	1900 ⁰⁰ ==	3800 ⁰⁰ ==
27	1.00	EA	0690 - 16 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62365)	2450 ⁰⁰ ==	2450 ⁰⁰ ==
28	10.00	EA	0700 - 18 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62367)	3195 ⁰⁰ ==	31,950 ⁰⁰ ==
29	1.00	EA	0710 - 20 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62372)	3900 ⁰⁰ ==	3900 ⁰⁰ ==
30	1.00	EA	0720 - 24 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62349)	7100 ⁰⁰ ==	7100 ⁰⁰ ==
31	1.00	EA	0730 - 30 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62374)	11,500 ⁰⁰ ==	11,500 ⁰⁰ ==
32	1.00	EA	0740 - 36 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62375)	16,100 ⁰⁰ ==	16,100 ⁰⁰ ==
33	1.00	EA	0750 - 42 INCH BUTTERFLY VALVE, MECHANICAL JOINT	20,500 ⁰⁰ ==	20,500 ⁰⁰ ==
34	1.00	EA	0755 - 48 INCH BUTTERFLY VALVE, MECHANICAL JOINT	24,500 ⁰⁰ ==	24,500 ⁰⁰ ==
35	1.00	EA	0760 - 6 INCH BUTTERFLY VALVE, FLANGE (62356)	700 ⁰⁰ ==	700 ⁰⁰ ==

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00128200

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
36	1.00	EA	0770 - 8 INCH BUTTERFLY VALVE, FLANGE (62357)	825 ⁰⁰	825 ⁰⁰
37	1.00	EA	0780 - 10 INCH BUTTERFLY VALVE, FLANGE (62358)	1075 ⁰⁰	1075 ⁰⁰
38	1.00	EA	0790 - 12 INCH BUTTERFLY VALVE, FLANGE (62359)	1450 ⁰⁰	1450 ⁰⁰
39	1.00	EA	0800 - 14 INCH BUTTERFLY VALVE, FLANGE (62362)	1925 ⁰⁰	1925 ⁰⁰
40 41	1.00 .00	EA	0810 - 16 INCH BUTTERFLY VALVE, FLANGE (62366)	2600 ⁰⁰	2600 ⁰⁰
42	1.00	EA	0820 - 18 INCH BUTTERFLY VALVE, FLANGE (62370)	3300 ⁰⁰	3300 ⁰⁰
43	1.00	EA	0830 - 20 INCH BUTTERFLY VALVE, FLANGE (62371)	3800 ⁰⁰	3800 ⁰⁰
44	1.00	EA	0840 - 24 INCH BUTTERFLY VALVE, FLANGE (62348)	7100 ⁰⁰	7100 ⁰⁰
45	1.00	EA	0850 - 30 INCH BUTTERFLY VALVE, FLANGE (62347)	12,000 ⁰⁰	12,000 ⁰⁰
46	1.00	EA	0860 - 36 INCH BUTTERFLY VALVE, FLANGE (62346)	18,500 ⁰⁰	18,500 ⁰⁰
47	1.00	EA	0870 - 42 INCH BUTTERFLY VALVE, FLANGE (62345)	21,500 ⁰⁰	21,500 ⁰⁰
48	1.00	EA	0875 - 48 INCH BUTTERFLY VALVE, FLANGE	26,500 ⁰⁰	26,500 ⁰⁰

BID NO.: 50-00128200

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
49	6.00	EA	(62344) 0880 - 3 INCH DOUBLE DISC GATE VALVE, FLANGE (62629)	916 ⁰⁰ ==	5796 ⁰⁰ ==
50	6.00	EA	0890 - 4 INCH DOUBLE DISC GATE VALVE, FLANGE (62632)	1300 ⁰⁰ ==	7800 ⁰⁰ ==
51	16.00	EA	0900 - 6 INCH DOUBLE DISC GATE VALVE, FLANGE (62242)	1391 ⁰⁰ ==	22,256 ⁰⁰ ==
52	12.00	EA	0910 - 8 INCH DOUBLE DISC GATE VALVE, FLANGE (62244)	2300 ⁰⁰ ==	27,600 ⁰⁰ ==
53	6.00	EA	0920 - 10 INCH DOUBLE DISC GATE VALVE, FLANGE (62246)	2900 ⁰⁰ ==	17,400 ⁰⁰ ==
54	1.00	EA	0930 - 12 INCH DOUBLE DISC GATE VALVE, FLANGE (62350)	3995 ⁰⁰ ==	3995 ⁰⁰ ==
55	1.00	EA	0940 - 14 INCH DOUBLE DISC GATE VALVE, FLANGE (62355)	900 ⁰⁰ ==	900 ⁰⁰ ==
56	1.00	EA	0950 - 16 INCH DOUBLE DISC GATE VALVE, FLANGE (62247)	12,500 ⁰⁰ ==	12,500 ⁰⁰ ==

Non-Public Works Bid

AFFIDAVIT

STATE OF LA.

PARISH/COUNTY OF Jefferson

BEFORE ME, the undersigned authority, personally came and appeared: _____

Aaron Rooney, (Affiant) who after being by me duly sworn, deposed and said that he/she is the fully authorized Representative of Consco Inc (Entity), the party who submitted a bid in response to Bid Number SO-0018200, to the Parish of Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B ✓ there are **NO** campaign contributions made which would require disclosure under Choice A of this section.

Debt Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____

Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

Choice B _____

There are NO debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

[The remainder of this page is intentionally left blank.]

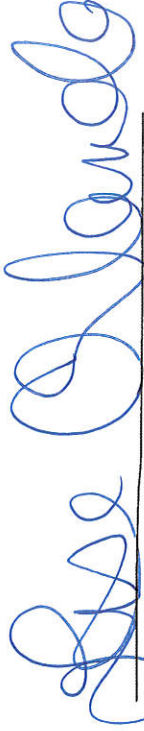
That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.


Signature of Affiant

Aaron Rooney
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME

ON THE 21st DAY OF OCTOBER, 20 19


Notary Public

LISA ORLANDO
Printed Name of Notary

30612
Notary/Bar Roll Number

My commission expires upon death



OFFICIAL SEAL
LISA ORLANDO
NOTARY PUBLIC
STATE OF LOUISIANA BAR NO. 36612
COMMISSION ISSUED FOR LIFE

Gate and Butterfly Valves

Contract

Items included in this contract:

1. Resilient Seat Gate Valve (Mechanical Joint End)
2. Resilient Seat Gate Valve (Flanged Joint End)
3. Resilient Seat Gate Valve (Mechanical By Flange Joint End)
4. Butterfly Valve (Mechanical Joint End)
5. Butterfly Valve (Flange Joint End)

Contract Terms:

A one (1) year contract for a supply of Gate and Butterfly Valves, for the Jefferson Parish Department of Public Works- all water districts and all Jefferson Parish agencies and municipalities.

Warranty:

Products shall be warranted that they are manufactured in accordance with the applicable material specifications and are free from defects in workmanship and materials for one year after delivery. Any defective items sold under this contract shall be replaced at no cost to the purchaser.

General Specifications:

This specification is prepared for the acquisition of gate valves (Items 0020, 0050, 0090, 0120, 0150, 0180 and 0210; Items 0240, 0270, 0300, 0330, 0360, 0390 and 0420; Items 0450, 0480, 0510, 0540, 0570, 0600, 0630 and 0880 thru 0950) and butterfly valves (Items 0640 thru 0755; Items 0760 thru 0875)

All items in this bid must be of domestic United States manufacture and meet all criteria set forth by AWWA, ASTM, ANSI, and federal and as specified hereafter.

All pertinent technical specifications and literature may be required upon request. Should technical specifications and literature be requested, bidder(s) will be required to submit said technical specifications and literature within ten (10) days of the request.

Clarification of Terms:

Terms such as “Domestic United States of America Manufacture” and/or “Made in United States” shall mean that every components of these products or items are 100% made, manufactured, assembled, etc. in the United States of America.

The quantities shown on the proposal guide are approximate quantities to be acquired by Jefferson Parish over a one (1) year period. Actual usage will be on an “as needed” basis.

Bid delivery shall include all freight and delivery costs to Jefferson Parish warehouse locations on the East and West Banks of Jefferson Parish.

Technical Specifications:

1. Items 0020, 0050, 0090, 0120, 0150, 0180 and 0210 are resilient seat gate valves, mechanical joint, domestically produced, AWWA C515
2. Items 0240, 0270, 0300, 0330, 0360, 0390 and 0420 are resilient seat gate valves, flanged end, and domestically produced, AWWA C515.
3. Items 0450, 0480, 0510, 0540, 0570, 0600 and 0630 are resilient seat gate valves, mechanical joint by flanged end, domestically produced, AWWA C515.
4. Items 0640 thru 0755 are butterfly valves, mechanical joint, domestically produced, AWWA C504 and Class 150B
5. Items 0760 thru 0875 are butterfly valves, flanged end, domestically produced, AWWA C504 Class 150B
6. Items 0880 thru 0950 are double disc gate valves, flanged end, and domestically produced, AWWA C500.

I. Resilient Seat Gate Valves:

Resilient seat gate valves shall be domestically produced cast or ductile iron and conform to the latest revision of AWWA resilient seated gate valve standard C515 (ductile iron only), be UL listed and FM approved for service to 250 psi, cold water, non-shock water works service and 200 psi fire protection service. Resilient seat gate valves having standard mechanical joint ends shall have dimensions complying with AWWA C111 and ANSI A21.11 to be used with cast iron, ductile iron and Class 200 cast iron O.D. PVC pipe.

Resilient seat gate valves with flanged ends shall have dimensions and drilled connections complying with ANSI B-16.1, Class 125#.

NRS stems shall be case bronze with integral collars in compliance with AWWA. The NRS stuffing box shall have two O-ring seals above the thrust collar and one below. The top two O-rings shall be field replaceable without removing the valve from service.

The operating nut is to be 2" square nut, counterclockwise operation and shall be independent of the wedge and of solid bronze.

Stuffing box shall be attached to the bonnet and bonnet to the body with factory installed type 316 stainless steel bolts and nuts. Blind bolts threaded directly into the body or bonnet will not be acceptable.

The body and bonnet shall be coated both interior and exterior with a fusion bonded heat cured thermo setting material meeting all the application and performance requirements of AWWA C550.

The gasket seal between two surfaces shall employ the use of composition ring type gaskets retained to prevent the possibility of blow out.

Each valve shall be hydrostatically tested at 500 psi and must meet the requirements of both AWWA and UL/FM and be rated for 250 psi AWWA service.

All valves must have ten year published manufacturer's warranty.

Valves shall be as manufactured by Mueller, American Flow Control, M&H, U.S. Pipe, Clow, ARD, Kennedy or Crispin.

II. Butterfly Valves:

All butterfly valves shall be domestically produced and conform to the latest revision of AWWA standard C504 "rubber-seated butterfly valves", Class 150B. All butterfly valves shall operate so that the valve will open when turning the two (2) inch operating nut in a counter-clockwise direction.

Valves bodies shall be cast iron, ASTM A-126, Class B. Valves shall be short body design with mechanical joint ends or flanged ends, Class 150B. Valves shall be furnished complete without accessories.

Valves shafts shall be manufactured of 304 stainless steel and shall be of the "stub shaft" or "through shaft" type. If a stub shaft is used, it shall be inserted into the valve disc hubs for a distance of at least 1-½ shaft diameters. The disc/shaft connection shall be achieved with a pin that penetrates completely through the center of the valve shaft. The valve shaft diameter extending through the valve bearings into the valve disc shall be not less than specified in table 4 of the AWWA C504-80. The shaft shall have a packing gland or O-ring in the top trunnion of the valve body where the shaft protrudes for the operator connection. Where a packing gland is used, packing shall be of the self-adjusting "V" type, or approved equal. Packing gland and packing must be accessible without valve disassembly.

The disc shall be cast or ductile iron with disc edges of type 316 stainless steel. On valves 30" or larger, the disc shall be a flow through design and shall have an offset design to provide 360 degree uninterrupted seating.

The valve seats shall be Buna-N or natural rubber and shall be secured to either the valve body or disc. Rubber seats on the disc shall be bonded and vulcanized to stainless steel disc ring to insure proper alignment. On valves 30" and larger, valve seats shall be designed to permit mechanical adjustment or replacement in the field. If the rubber seat is on the disc, the 316 stainless steel body seat shall have an O-ring behind it to ensure bi-directional shut off at 150 psi.

The valve shall be equipped with a manual actuator consisting of a totally enclosed traveling nut type mechanism set on the side of the valve for operating with a 2-inch operating nut set in the vertical position. Valves utilizing actuators with right angle drives will not be permitted. The manual operator shall be of a design by the valve manufacturer complying with the latest revision of AWWA C504, and capable of withstanding 450 foot pound actuator input torque against the stops.

All interior and exterior surfaces of the butterfly valves are to be coated by manufacturer prior to shipment with a fusion bonded heat cured thermo setting material meeting all performance and application requirements conforming to AWWA C550.

316 stainless steel nuts and bolts shall be supplied for the valve body and stuffing box.

Valves shall be as manufactured by Mueller, M&H, Clow, ARD, Kennedy, Crispin, APCO/Dezurik or Henry Pratt.

III. Double Disc 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 (MJ, 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, hand wheel), with arrow cast in metal to indicate direction of opening.

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 bushing meeting ASTM B584.

Valves will be bottom wedging type with two part floating wedge contact. The wedge and hook shall be separate castings and not a one piece casting in valves 4"-36".

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

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

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.

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 hand wheels 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 hand wheel.

Valves shall be as manufactured by Mueller, M&H, Clow, ARD, Kennedy, Crispin, APCO/Dezurik or Henry Pratt.

Valve Comparison Chart

	Manufacturer	Gate Valves	Butterfly Valves
1	Mueller	A-2360	Lineal III, Lineal XPll, Lineal XP
2	Clow	2639	4500 & 1450
3	American Flow Control	Series 2500	
4	M&H	Series 4000 & 7000	450&1450
5	ARD	2640	450 & 1450
6	Kennedy	8571	450&1450
7	Crispin		500 &47
8	U.S. PIPE		
9	Apco/Dezurik		BAW
10	Henry Pratt		Groundhog, Triton XR-70, 2FI, 2MII, MKII, HP 250II, HP250

STANDARD INSURANCE REQUIREMENTS FOR BIDDING PURPOSES

All required insurance under this bid shall conform to Jefferson Parish Resolution No. 113646 or No. 113647, as applicable. Contractors may not commence any work under any ensuing contract unless and until all required insurance and associated evidentiary requirements thereto have been met, along with any additional specifications contained in the **Invitation to Bid**. Except as where otherwise precluded by law, the Parish Attorney or his designee, with the concurrence of the Director of Risk Management or his designee, may agree on a case-by-case basis, to deviate from Jefferson Parish's standard insurance requirements, as provided in this Section. Vendors requesting deviation therefrom shall submit such requests in writing, along with compelling substantiation, to the Purchasing Department prior to the bid's due date. Any changes to the insurance requirements will be reflected in the bid specifications and addenda. Prior to contract execution and at all times thereafter during the term of such contract, contractors must provide and continuously maintain all coverages as required by the foregoing Resolutions, and the contract documents. Failure to do so shall be grounds for suspension, discontinuation or termination of the contract.

For bidding purposes, bidders must submit with bid submission a current (valid) insurance certificate evidencing the required coverages. Failure to comply will cause bid to be rejected. The current insurance certificate will be used for proof of insurance at time of evaluation. Thereafter, and prior to contract execution, the low bidder will be required to provide final insurance certificates to the Parish which shall name **the Jefferson Parish, its Districts Departments and Agencies under the direction of the Parish President and the Parish Council** as additional insureds regarding negligence by the contractor for the Commercial General Liability, Workmen's Compensation Insurance and the Comprehensive Automobile Liability policies. Additionally, said certificates should reflect the name of the Parish Department receiving goods and services and reference the respective Jefferson Parish bid number.

JEFFERSON PARISH REQUIRED STANDARD INSURANCE

☐ WORKER'S COMPENSATION INSURANCE

As required by Louisiana State Statute, exception; Employer's Liability, Section B shall be \$1,000,000 per occurrence when Work is to be over water and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act, otherwise this limit shall be no less than \$500,000 per occurrence.

Note: If your company is not required by law to carry workmen's compensation insurance, i.e. not a Louisiana company, sole employee of the company, then bidders must request a workmen's compensation insurance declaration affidavit prior to the bid opening date. This insurance declaration affidavit must be fully completed, signed, properly notarized and submitted with the bid. A scanned copy may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being

rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

☐ COMMERCIAL GENERAL LIABILITY

Shall provide limits not less than the following: \$1,000,000.00 Combined Single Limit per Occurrence for bodily injury and property damage.

☐ COMPREHENSIVE AUTOMOBILE LIABILITY

Bodily injury liability \$1,000,000.00 each person; \$1,000,000.00 each occurrence.
Property Damage Liability \$1,000,000.00 each occurrence.

Note: This category may be omitted if bidders do not/will not utilize company vehicles for the project or do not possess company vehicles. Bidder must request an automobile insurance declaration affidavit prior to the bid opening date. This insurance declaration affidavit must be fully completed, signed, properly notarized and submitted with the bid. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

DEDUCTIBLES - The Parish Attorney with concurrence of the Director of Risk Management have waived the deductible section of the Terms and Conditions for all Invitations to Bid, until further notice.

UMBRELLA LIABILITY COVERAGE

An umbrella policy or excess may be used to meet minimum requirements.

FOR CONSTRUCTION AND RENOVATION PROJECTS:

The following are required unless otherwise specified in the bid. Such insurance is due upon contract execution.

1) **OWNER'S PROTECTIVE LIABILITY**

To be for the same limits of liability for bodily injury and property damage liability established for commercial general liability.

2) **BUILDER'S RISK INSURANCE**

The contractor shall maintain Builder's Risk Insurance at his own expense to insure both the owner (Parish of Jefferson) and contractor as their interest may appear.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
9/30/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		CONTACT Darly Oser	
E B Ducasse Insurance Agency, Inc		NAME:	
3200 Ridgelake Dr, Suite 401		PHONE (A/C, No. Ext): (504) 840-9883	FAX (504) 840-9889
		E-MAIL ADDRESS: doser@ebducasse.com	
		INSURER(S) AFFORDING COVERAGE	
Metairie LA 70002		INSURER A: United Fire and Indemnity Co	NAIC # 19496
INSURED		INSURER B: Technology Insurance Co	42376
Cimsco Inc		INSURER C:	
1840 L & A Road		INSURER D:	
		INSURER E:	
Metairie LA 70001-6237		INSURER F:	

REVISION NUMBER:

CERTIFICATE NUMBER: CL1983002598

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL SUBROGATION	INSURANCE	POLICY NUMBER	POLICY EFFECT DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		60418952		9/1/2019	9/1/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 Liquor Liability Exclusion \$ COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ EACH OCCURRENCE \$ AGGREGATE \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED TTOS <input type="checkbox"/> NON-OWNED AUTOS		60418952		9/1/2019	9/1/2020	
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> RETENTION \$						
B	<input type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	TWC3814081		9/1/2019	9/1/2020	E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101. Additional Remarks Schedule, may be attached if more space is required)

The Parish of Jefferson, its districts, departments, and agencies under the direction of the Parish President and Parish Council are named as additional insured on the general liability and auto liability policies when required by written contract. The general liability and workers comp insurers will have no right of recovery or subrogation against the Parish of Jefferson, its Districts, Departments and Agencies under the direction of the Parish President and Parish Council, it being the intention of the parties that the General Liability and Workers Compensation policies described above shall protect both parties and be primary coverage for any and all losses covered by the described insurance.

CERTIFICATE HOLDER

The Parish of Jefferson, its Districts
Department & Agencies under the direction
Parish President & Parish Council
1221 Elmwood Park Blvd
Suite 802
Jefferson, LA 70123

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

E Ducasse Sr. /DARLY

Edward B. Ducasse, Sr.

ACORD 25 (2014/01)

INS025 (201401)

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COMMENTS/REMARKS

Bid #5000128200

OFREMARK

COPYRIGHT 2000, AMS SERVICES INC.

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF
CIMSCO, INC.

INCORPORATED.

AT THE MEETING OF DIRECTORS OF CIMSCO, INC.
INCORPORATED, DULY NOTICED AND HELD ON February 5, 2019,
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT
WAS:

RESOLVED THAT Aaron Rooney, BE AND IS HEREBY
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS
AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES,
DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE
EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES,
CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES
ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-
FACT.

I HEREBY CERTIFY THE FOREGOING TO BE
A TRUE AND CORRECT COPY OF AN
EXCERPT OF THE MINUTES OF THE ABOVE
DATED MEETING OF THE BOARD OF
DIRECTORS OF SAID CORPORATION, AND
THE SAME HAS NOT BEEN REVOKED OR
RESCINDED.

Ashley Kware
SECRETARY-TREASURER

10/20/19
DATE



KENNEDY VALVE

Division of McWane, Inc.
1021 East Water Street
P.O. Box 931
Elmira, New York 14902-0931
Telephone (607) 734-2211
Fax (607) 734-1003

September 26, 2018

Jefferson Parish, Department of Engineering
1221 Elmwood Park Blvd. Suite 801
Jefferson, LA 70123

Reference: Domestic Made Products

To Whom It May Concern;

This letter is to certify that for Kennedy Valve products marked as "100% Domestic" all components of these products have been manufactured (cast, wrought or molded), machined, coated and assembled in the U.S.A. This includes all iron and steel components (including all fasteners), all brass components and all non-metal components (including O-rings and seals).

100% Domestic products are available in Resilient Seated Gate Valves (sizes 2" thru 12"), Butterfly Valves (sizes 3" thru 48"), and Double Disc Gate Valves (sizes 3" thru 16").

If you have any other questions or concerns about this, please let me know.

Thanks,

Ray A. Smith

Ray A. Smith

ISO Qualified

ISO 9001:2008 & 14001 Certified

KENNEDY VALVE

Ph: (607) 673-9344

Cell: (607) 742-0712

Ray.Smith@kennedyvalve.com

Date



M&H VALVE COMPANY

605 West 23rd Street, Anniston, Alabama 36201 (P) 256-237-3521 (F) 256-741-6253

September 25, 2018

Jefferson Parish, Department of Engineering
1221 Elmwood Park Blvd. Suite 801
Jefferson, LA 70123

Reference: Domestic Made Products

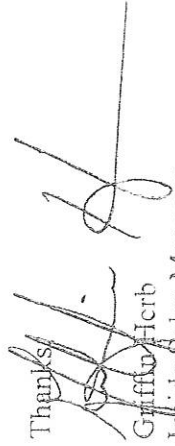
To Whom It May Concern;

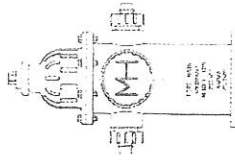
This letter is to certify that for M&H products marked as "100% Domestic" all components of these products have been manufactured (cast, wrought or molded), machined, coated and assembled in the U.S.A. This includes all iron and steel components (including all fasteners), all brass components and all non-metal components (including O-rings and seals).

100% Domestic products are available in Resilient Seated Gate Valves (sizes 2" thru 14"), Butterfly Valves (sizes 3" thru 48"), and Double Disc Gate Valves (sizes 3" thru 16").

If you have any other questions or concerns about this, please let me know.

Thanks,


Griffin Hcrb
Inside Sales Manager
M&H Valve Co.





250 Riverside Ave N 320-259-2000 P
Sartell, MN 56377 USA 320-259-2227 F

September 26, 2018

Subject: American Iron and Steel Certification for Dezurik BAW Valves

I, Clarence Jarnot, certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for manufacturing the following products and/or materials shipped or provided for the subject project is in full compliance with American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or materials:

Model BAW, AWWA Butterfly Valves with AIS designation in the ordering code.

Model PEC, Eccentric Plug Valves with AIS designation in the ordering code
Manufacturing processes of the above products take place at the following location:

DeZURIK - Sartell Plant
250 Riverside Ave North
Sartell, Minnesota 56377
320-259-2000

A handwritten signature in black ink, appearing to read 'Clarence Jarnot'.

Clarence Jarnot
Application Engineer, Municipal Sales

DeZURIK | APCO | Hilton
250 Riverside Avenue North
Sartell, MN 56377, USA
Phone: 320-259-2092
Cell: 320-761-5694
Fax: 320-259-2379
clarence.jarnot@dezurik.com
www.dezurik.com



KENNEDY VALVE KS-RW RESILIENT WEDGE VALVES

KENNEDY VALVE

KENNEDY VALVE AWWA C515 Resilient Wedge Gate Valves

Meet or Exceed the Requirements of

AWWA Standard C515

UL-262/FM-1120/1130

ULC-Underwriters' of Canada

Size Range	Water Working Pressure psi	Seat Test psi	Hydrostatic Shell Test psi
AWWA 2" - 12"	250 Water Works	250 & 400	500
ULFM 2 1/2" - 12"	200 Fire Protection	250 & 400	500

Available in either non-rising stem or outside screw & yoke.

Figure No. Available End Connections & Size Range		Figure No. with (STD)	Post Plate
Fig. End (NRS)	2" - 12"	7561SS	7701SS (3" - 12")
M.J.	2" - 12" (except 2 1/2")	7571SS	7071SS (3" - 12")
Fig. & M.J.	3" - 12"	7572SS	7702SS (3" - 12")
Push-on for PVC (SDR)	2" - 8"	7597SS	7597PSS (3" - 8")
Fig. End (OS & Y)	2" - 12"	7068A	N/A
M.J. for Tapping	4" - 12"	7950SS	7950PSS
Push-on for D.I. & C900 PVC	4" - 12"	7901SS	7901PSS
M.J. Cutting-in	4" - 12"	7576SS	(Consult K.V.)
Push-on D.I. X Flg.	4" - 12"	7902SS	7902PSS
Threaded (NRS)	2" - 3"	7057SS	7057PSS (3" only)
Threaded (OS&Y)	2" - 3"	7067	
FLG & GRV OS&Y	2 1/2" - 10"	7092ABF	-----
GRV & GRV OS&Y	2 1/2" - 10"	7093ABF	-----
FLG & GRV NRS	2 1/2" - 10"	7592ABF	7592PABF
GRV & GRV NRS	2 1/2" - 10"	7593ABF	7593PABF

Accessories

Indicator Posts

"T" Handles

Stem Guides

2" Sq. Operating Nuts

Floorstands (non-rising stem

Handwheels

Extension Stems

Chain Wheels

NOTE: 2" OS&Y Flanged and Threaded versions are UL Listed

NOTE: All RSGV's 18" and larger will be furnished with either spur gearing (vertical) or or bevel gearing (horizontal)

NOTE: 2" to 3" sizes full wall ductile iron (per AWWA C509 dimensions)



Certified to
NSF/ANSI 61-G
NSF/ANSI 372

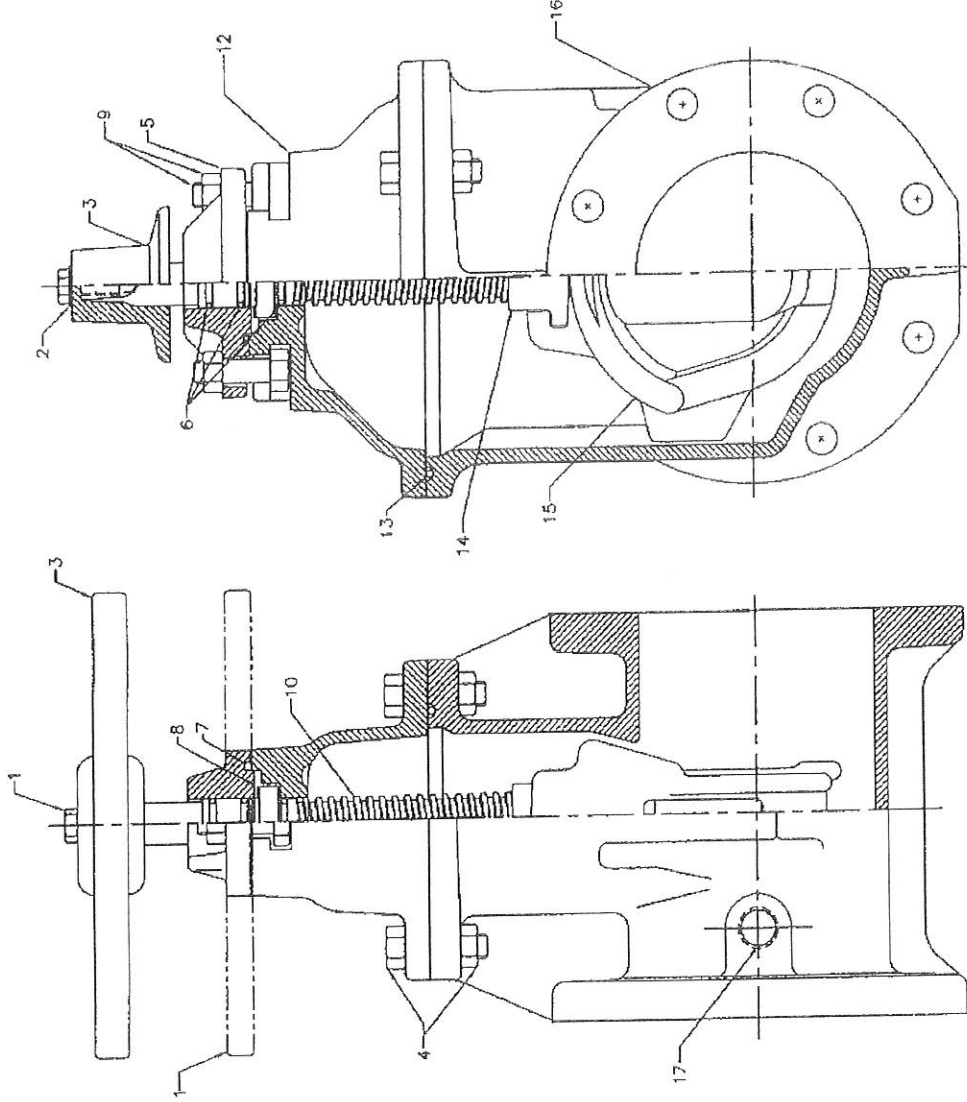
Sizes 2" - 12"



2" - 12" R/S VALVE NRS MATERIAL LIST

KENNEDY VALVE MODEL KS-RW

Complies with applicable requirements of AWWA C515



ITEM	DESCRIPTION	MATERIAL	ASTM SPEC.
1	Hex Head Bolt	Stainless Steel	ASTM F593C
2	Flat Washer	Stainless Steel	ASTM F593C
3	Operating Nut or Handwheel	Gray Iron	ASTM A126 Class B
4	Hex Head Bolts & Nuts	Stainless Steel	ASTM F593/F594
5	Stuffing Box	2-12" Ductile Iron	ASTM A536 Grade 70-50-5
6	Stem O-Ring	Buna-N	ASTM D2000
7	Stuffing Box O-Ring/gasket	Buna-N	ASTM D2000
8	Thrust Washer Bearing	Delrin	-----
9	Hex Head Bolts & Nuts	Stainless Steel	ASTM F593C/F594
10	Stem	Bronze	ASTM B584, C86700
11	Indicator Post Plate (Optional 3-12")	Ductile Iron	ASTM A536 Grade 70-50-5
12	Cover	Ductile Iron	ASTM A536 Grade 70-50-5
13	Cover O-Ring	Buna-N	-----
14	Stem Nut	Bronze (NDZ)	ASTM B763, C99500
15	Wedge (EPDM Encapsulated)	Ductile Iron	ASTM A536 Grade 70-50-5
16	Body - all types	Ductile Iron	ASTM A536 Grade 70-50-5
17	Pipe Plug 1/2"; 2 1/2"-4" --3/4"; 6-12"	Galvanized Steel	-----

PIPE PLUG STANDARD ON FLANGE & GROOVE VALVES @ POSITION "A"

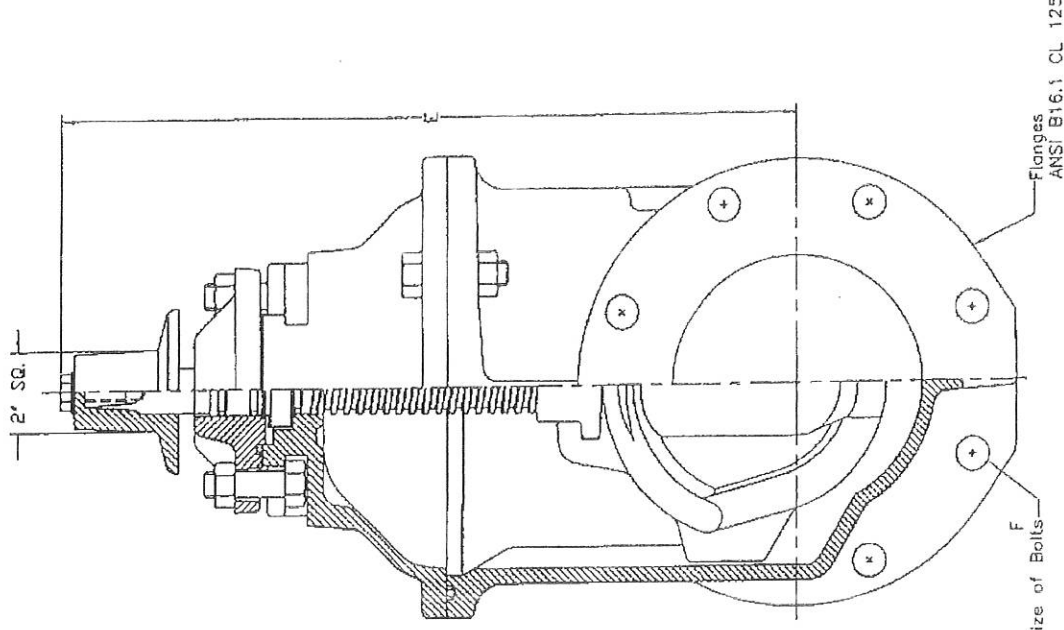
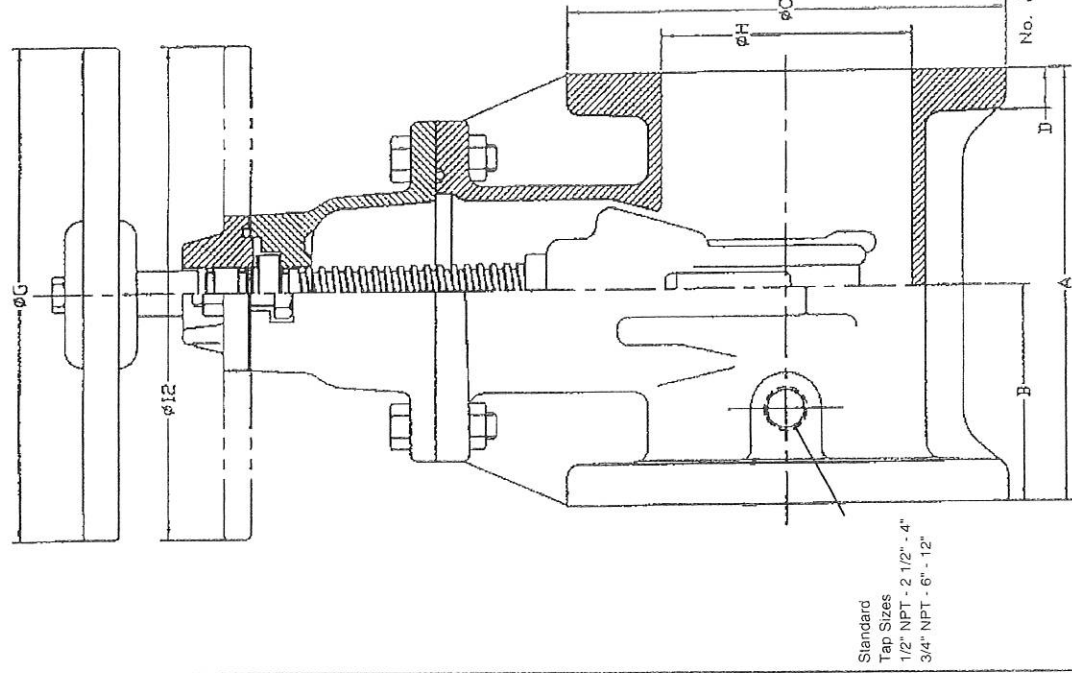


Complies with applicable requirements of AWWA C515

2" - 12" R/S VALVE NRS FLANGED ENDS GENERAL DIMENSIONS

KENNEDY VALVE MODEL KS-RW

7561ASS	W/HANDWHEEL
7561ANSS	W/NUT
7701ASS	W/POST PLATE (3-12")



* Face to face dimensions (inch) conform to ASME B16.10

ALL FLANGE VALVES ARE TAPPED & PLUGGED @ POSITION "A"

VALVE SIZE		* A		B		C		D		E		F			G		H	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	#	inch	mm	inch	mm	inch	mm
2	50	7	178	3 1/2	89	6	150	5/8	16	10 7/8	276	4	5/8	16	7 1/4	184	2	50
2 1/2	60	7 1/2	191	3 3/4	95	7	180	11/16	17	11 3/8	289	4	5/8	16	7 1/4	184	2 1/2	60
3	80	8	203	4	102	7 1/2	190	3/4	19	12 3/8	314	4	5/8	16	10	254	3	80
4	100	9	229	4 1/2	114	9	230	15/16	24	14 3/4	375	8	5/8	16	10	254	4 1/4	110
6	150	10 1/2	267	5 1/4	133	11	280	1	25	19	483	8	3/4	19	12	305	6 1/4	160
8	200	11 1/2	292	5 3/4	146	13 1/2	340	1 1/8	29	22 1/2	572	8	3/4	19	14	356	8 1/4	210
10	250	13	330	6 1/2	165	16	410	1 3/16	30	26 1/2	673	12	7/8	22	18	457	10 1/4	260
12	300	14	356	7	178	19	480	1 1/4	32	30	762	12	7/8	22	18	457	12 1/4	310



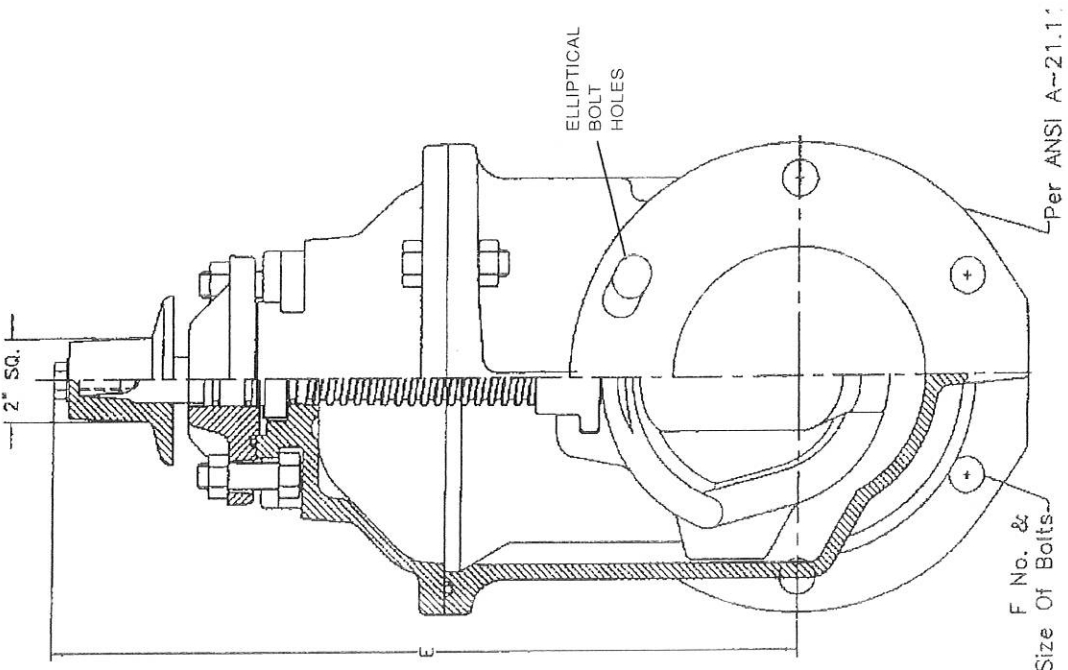
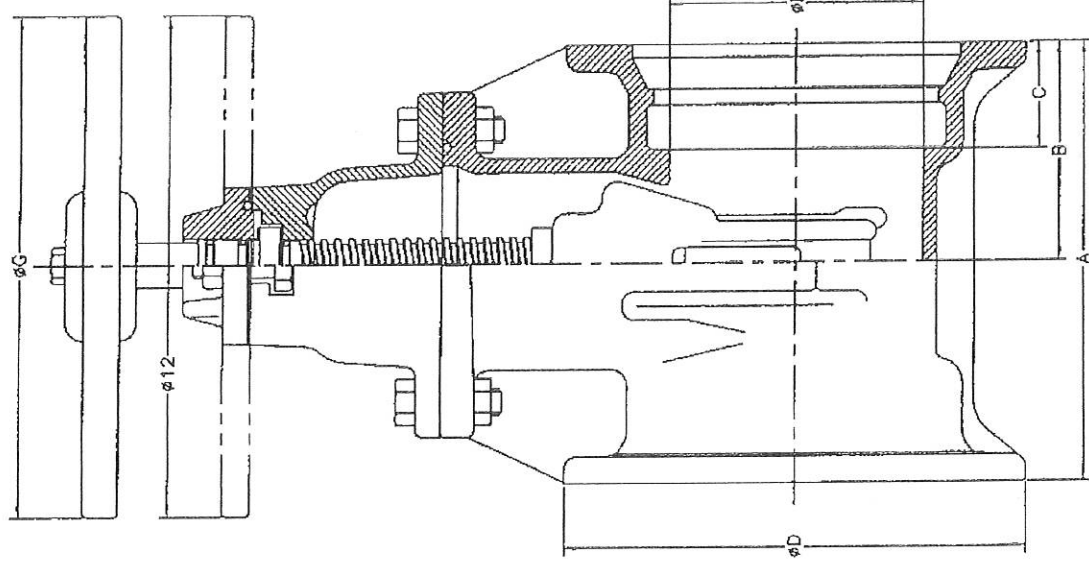
2"-12" R/S VALVE MECHANICAL JOINT ENDS GENERAL DIMENSIONS

KENNEDY VALVE MODEL KS-RW

Complies with applicable requirements of AWWA C515

7571SS
7071SS

STANDARD
W/POST PLATE (3-12")



VALVE SIZE	A	B	C	D	E	F	G	H
2	8 1/4	4 1/8	2 1/2	4 1/2	10 7/8	2 5/8	7 1/4	2
2 1/2	—	—	—	—	—	—	—	—
3	8 1/2	4 1/4	2 1/2	7 3/4	12 3/8	4 5/8	10	3
4	9 1/2	4 3/4	2 1/2	9 1/8	14 3/4	4 3/4	10	4 1/4
6	10 1/2	5 1/4	2 1/2	11 1/8	19	6 3/4	12	6 1/4
8	13 1/8	6 9/16	2 1/2	13 3/4	22 1/2	6 3/4	14	8 1/4
10	15 1/2	7 3/4	2 1/2	15 3/4	26 1/2	8 3/4	18	10 1/4
12	16	8	2 5/8	18	30	8 3/4	18	12 1/4

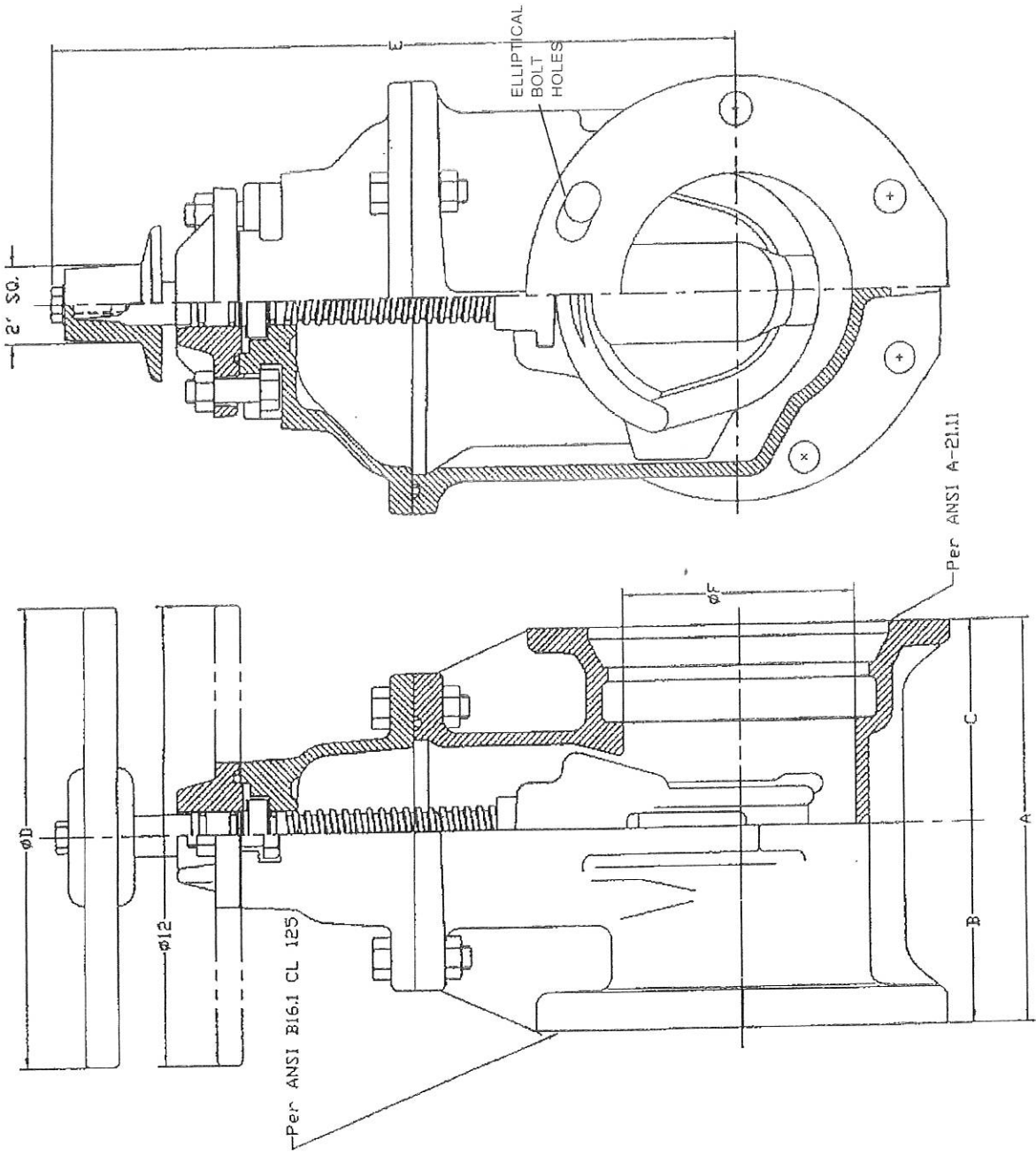


3"-12" R/S VALVE NRS FLANGED X MECHANICAL JOINT ENDS GENERAL DIMENSIONS

KENNEDY VALVE MODEL KS-RW

Complies with applicable requirements of AWWA C515

7572SS STANDARD
7702SS W/POST PLATE



ELLIPTICAL BOLT HOLE DESIGN ELIMINATES THE NEED FOR ANTI-ROTATIONAL BOLTS

VALVE SIZE	A	B	C	D	E	F
3	8 1/4	4	4 1/4	10	12 3/8	3
4	9 1/4	4 1/2	4 3/4	10	14 3/4	4 1/4
6	10 1/2	5 1/4	5 1/4	12	19	6 1/4
8	12 5/16	5 3/4	6 9/16	14	22 1/2	8 1/4
10	14 1/4	6 1/2	7 3/4	18	26 1/2	10 1/4
12	15	7	8	18	30	12 1/4



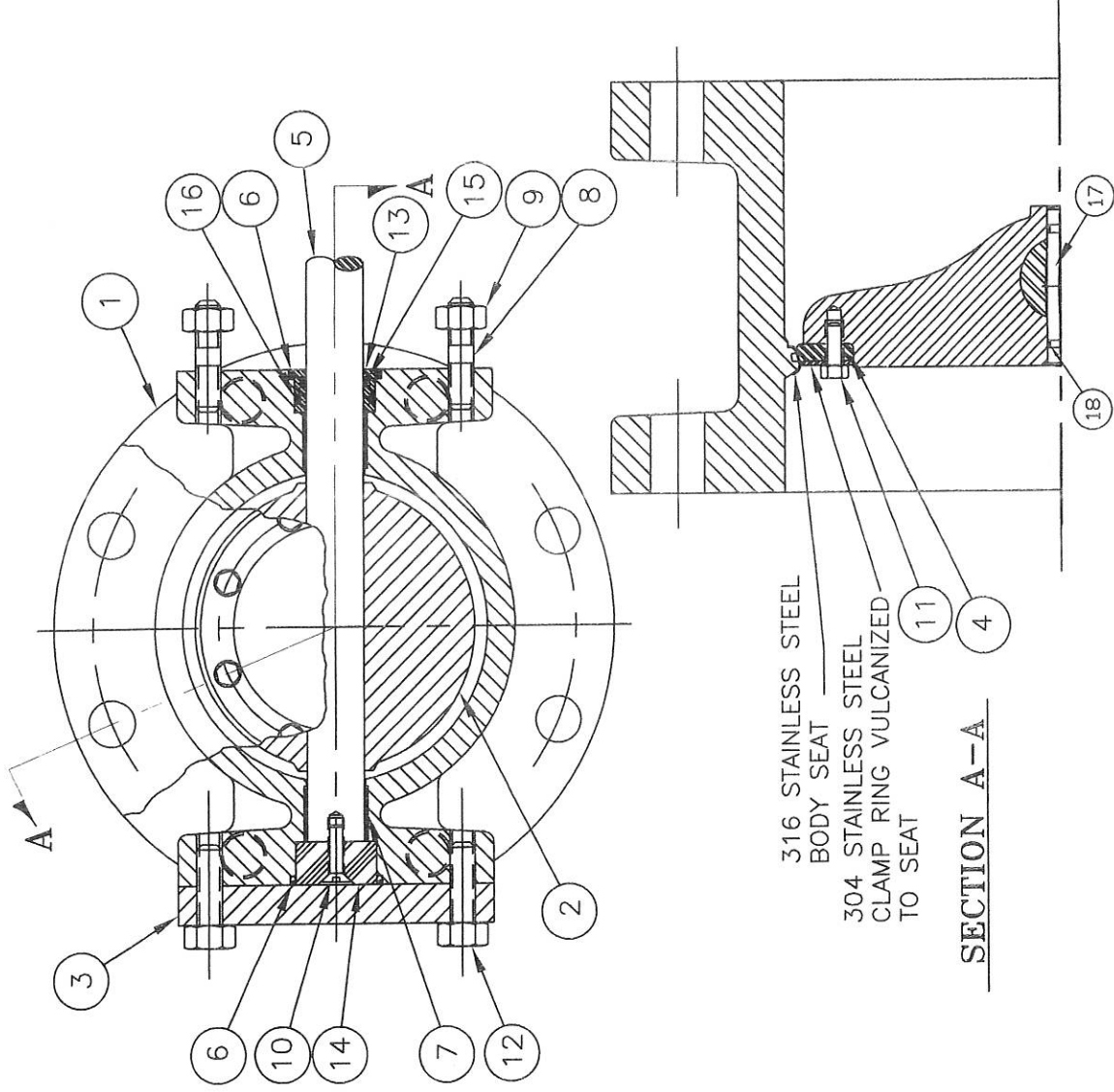
Kennedy Valve

A DIVISION OF MCWANE, INC.

www.kennedyvalve.com

1021 E. Water Street • Elmira, New York 14901
P.O. Box 981

PHONE: (607) 734-2211 • FAX: 1-800-952-4771



SECTION A-A

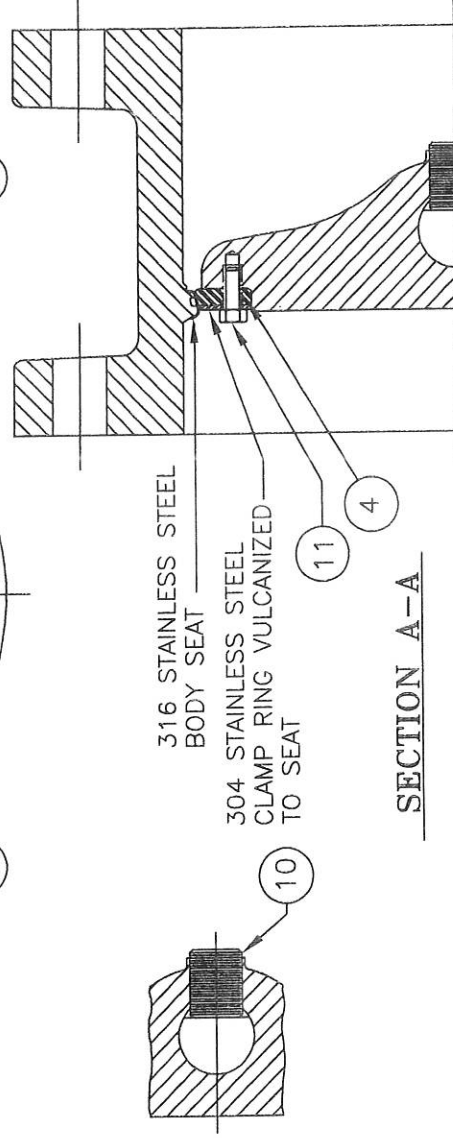
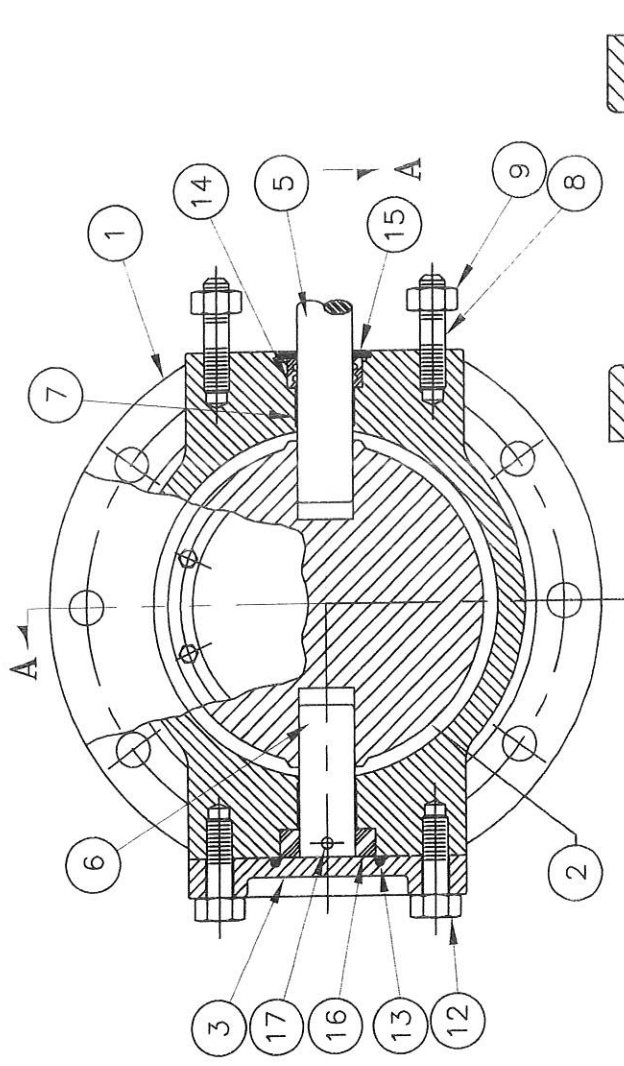
ITEM #	DESCRIPTION	MATERIAL
1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 316 STAINLESS STEEL SEAT
2	VANE	CAST IRON, A-126, CLASS B
3	COVER, END	CAST IRON, A-126, CLASS B
4	SEAT RING, VANE	EPDM WITH 304 STAINLESS STEEL INSERT
5	SHAFT	304 STAINLESS STEEL, ASTM A-276
6	O-RING, BODY	BUNA-N
7	BEARING, BODY	NYLATRON GS NYLON
8	STUD	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
9	NUT, HEAVY HEX	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
10	SOCKET SCREW, FLAT HEAD HEX	STAINLESS STEEL, 18-8
11	CAPSCREW, HEX	STAINLESS STEEL, 18-8 WITH NYLOK INSERT
12	CAPSCREW, HEX	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
13	CARTRIDGE SEAL	ACETAL
14	THRUST DISK	ACETAL
15	"O" RING CARTRIDGE, INSIDE	BUNA-N
16	"O" RING CARTRIDGE, OUTSIDE	BUNA-N
17	GROOVED PIN	303 STAINLESS STEEL
18	O-RING, GROOVED PIN	BUNA-N



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL
DATE: 5/22/17
DWG. NO.
CAT914C10011-01

3" THRU 12" STYLE 4500
CLASS 150 BUTTERFLY VALVE
SUB-ASSEMBLY / MATERIAL LIST
FLANGED ENDS



SECTION A-A

ITEM #	DESCRIPTION	MATERIAL
*1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 316 STAINLESS STEEL SEAT
*2	VANE	CAST IRON, A-126, CLASS B
3	COVER, END	CAST IRON, A-126, CLASS B
4	SEAT RING, VANE	EPDM WITH 304 STAINLESS STEEL INSERT
5	SHAFT, OPERATOR	304 STAINLESS STEEL, ASTM A-276
6	SHAFT, THRUST	304 STAINLESS STEEL, ASTM A-276
7	BUSHING	REINFORCED TEFLON
8	STUD	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
9	NUT, HEX	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
10	TORQUE PLUG, SHAFT	304 STAINLESS STEEL, ASTM A-276
11	CAPSCREW, HEX	STAINLESS STEEL, 18-8 WITH NYLON INSERT
12	BOLT, HEX HEAD	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
13	O-RING, END COVER	BUNA-N
14	SHAFT SEAL	BUNA-S
15	SEAL RING	STEEL, C-1018
16	THRUST COLLAR	BRONZE ALLOY UNS C93200
17	ROLL PIN	STAINLESS STEEL, A.I.S.I. 420

*NOTE: 18" THRU 24" DUCTILE IRON



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

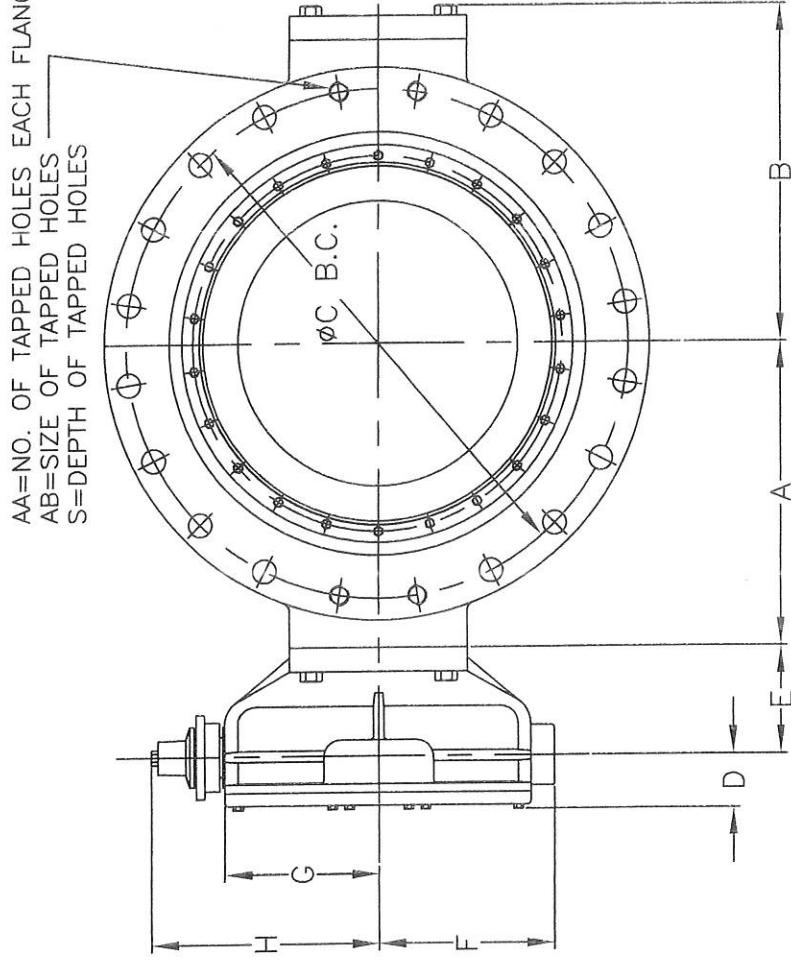
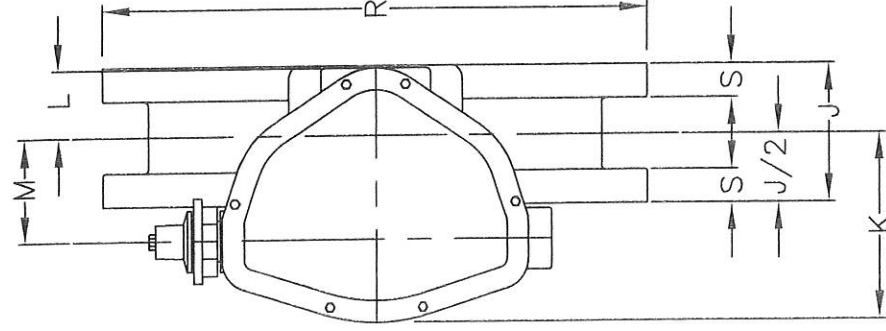
DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10012-01

14" THRU 24" STYLE 4500
CLASS 150 BUTTERFLY VALVE
SUB-ASSEMBLY / MATERIAL LIST
FLANGED ENDS



VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
3" & 4"	65	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
6"	150	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
8"	250	2 1/8	3 11/16	4 1/4	3 7/8	8 3/4	4 1/2	2 3/8	2	24
10" & 12"	510	2 3/8	4 1/2	5 9/16	5 3/16	10 1/2	6 1/8	2 3/4	3 1/8	36
14", 16", 18" & 20"	1250	3 3/16	5 3/4	8 3/8	7	12 5/16	7 7/8	3 1/4	4	48
24"	2200	3 3/16	6 1/4	10 3/8	9	14 5/16	10 3/4	3 7/8	6	72

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
3"	4	5 1/8	6	5	4	5/8	9	15/16	4	5/8-11	75
4"	4	5 1/8	7 1/2	5	8	5/8	9	15/16	4	5/8-11	75
6"	5	6 1/8	9 1/2	5	8	3/4	11	1	4	3/4-10	95
8"	6	7 3/8	11 3/4	6	8	3/4	13 1/2	1 1/8	4	3/4-10	140
10"	7 3/4	9 1/2	14 1/4	8	12	7/8	16	1 3/16	-	-	232
12"	9 1/2	10 7/8	17	8	12	7/8	19	1 1/4	-	-	300
14"	10 7/16	12 3/16	18 3/4	8	12	1	21	1 3/8	4	1-8	485
16"	12 3/16	13 15/16	21 1/4	8	16	1	23 1/2	1 7/16	4	1-8	570
18"	13 5/16	15 1/16	22 3/4	8	16	1 1/8	25	1 9/16	4	1 1/8-7	735
20"	14 7/8	16 5/8	25	8	20	1 1/8	27 1/2	1 11/16	4	1 1/8-7	860
24"	17 19/32	19 5/16	29 1/2	8	20	1 1/4	32	1 7/8	4	1 1/4-7	1165

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: RATED AND TESTED FOR 150 PSI WORKING PRESSURE.



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

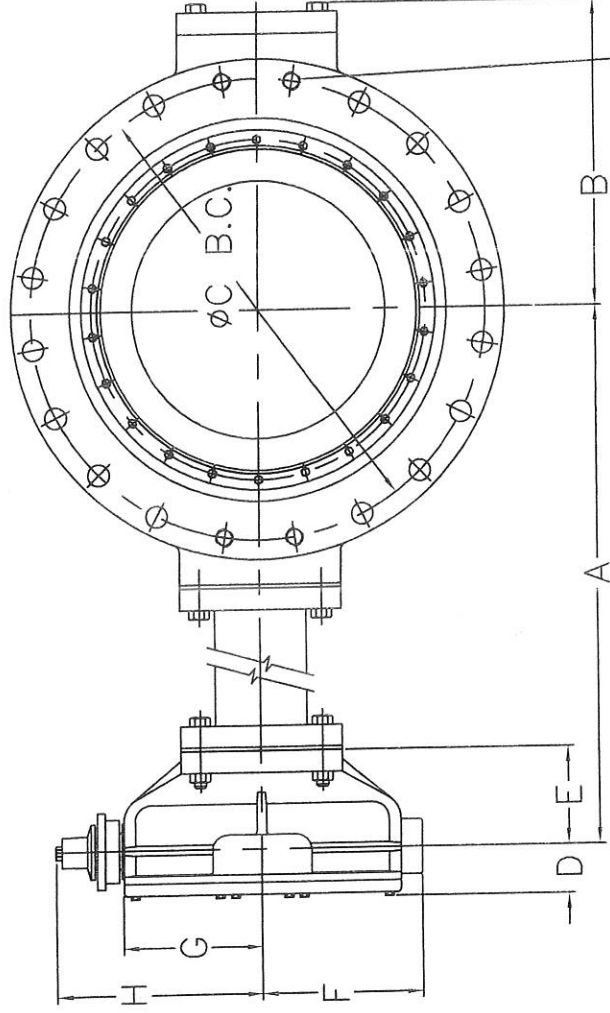
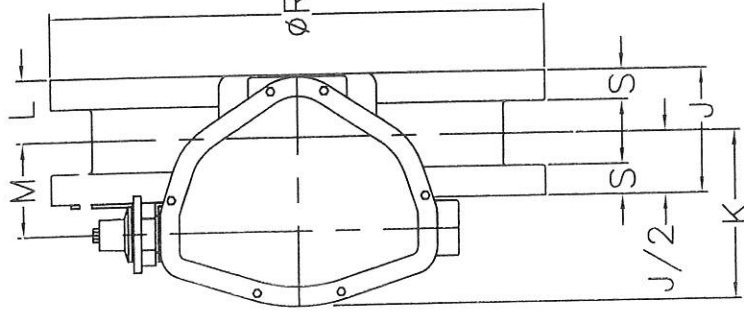
DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10013-01

3" THRU 24" STYLE 4500
CLASS 150 BUTTERFLY VALVE
BURIED OPERATOR
FLANGED ENDS



VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
6"	150	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
8"	250	2 1/8	3 11/16	4 1/4	3 7/8	8 3/4	4 1/2	2 3/8	2	24
10" & 12"	510	2 3/8	4 1/2	5 9/16	5 3/16	10 1/2	6 1/8	2 3/4	3 1/8	36
14", 16", 18" & 20"	1250	3 3/16	5 3/4	8 3/8	7	12 5/16	7 7/8	3 1/4	4	48
24"	2200	3 3/16	6 1/4	10 3/8	9	14 5/16	10 3/4	3 7/8	6	72

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
3"	NOTE AA	5 1/8	6	5	4	5/8	9	15/16	4	5/8-11	75
4"	NOTE AA	5 1/8	7 1/2	5	8	5/8	9	15/16	4	5/8-11	75
6"	NOTE AA	6 1/8	9 1/2	5	8	3/4	11	1	4	3/4-10	95
8"	NOTE AA	7 3/8	11 3/4	6	8	3/4	13 1/2	1 1/8	4	3/4-10	140
10"	NOTE AA	9 1/2	14 1/4	8	12	7/8	16	1 3/16	-	-	232
12"	NOTE AA	10 7/8	17	8	12	7/8	19	1 1/4	-	-	300
14"	NOTE AA	12 3/16	18 3/4	8	12	1	21	1 3/8	4	1-8	485
16"	NOTE AA	13 15/16	21 1/4	8	16	1	23 1/2	1 7/16	4	1-8	570
18"	NOTE AA	15 1/16	22 3/4	8	16	1 1/8	25	1 9/16	4	1 1/8-7	735
20"	NOTE AA	16 5/8	25	8	20	1 1/8	27 1/2	1 11/16	4	1 1/8-7	860
24"	NOTE AA	19 5/16	29 1/2	8	20	1 1/4	32	1 7/8	4	1 1/4-7	1165

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: MAXIMUM LENGTH OF TORQUE TUBE (15 FEET)--BONNET SUPPORTS SHOULD BE USED ON ALL BONNETS EXCEEDING 6 FEET CENTERLINE OF VALVE TO CENTERLINE OF OPERATOR. ALL BONNET SUPPORTS SHALL BE SUPPLIED BY CUSTOMER

NOTE AA: "A" VARIES TO ENGINEER SPECIFICATIONS

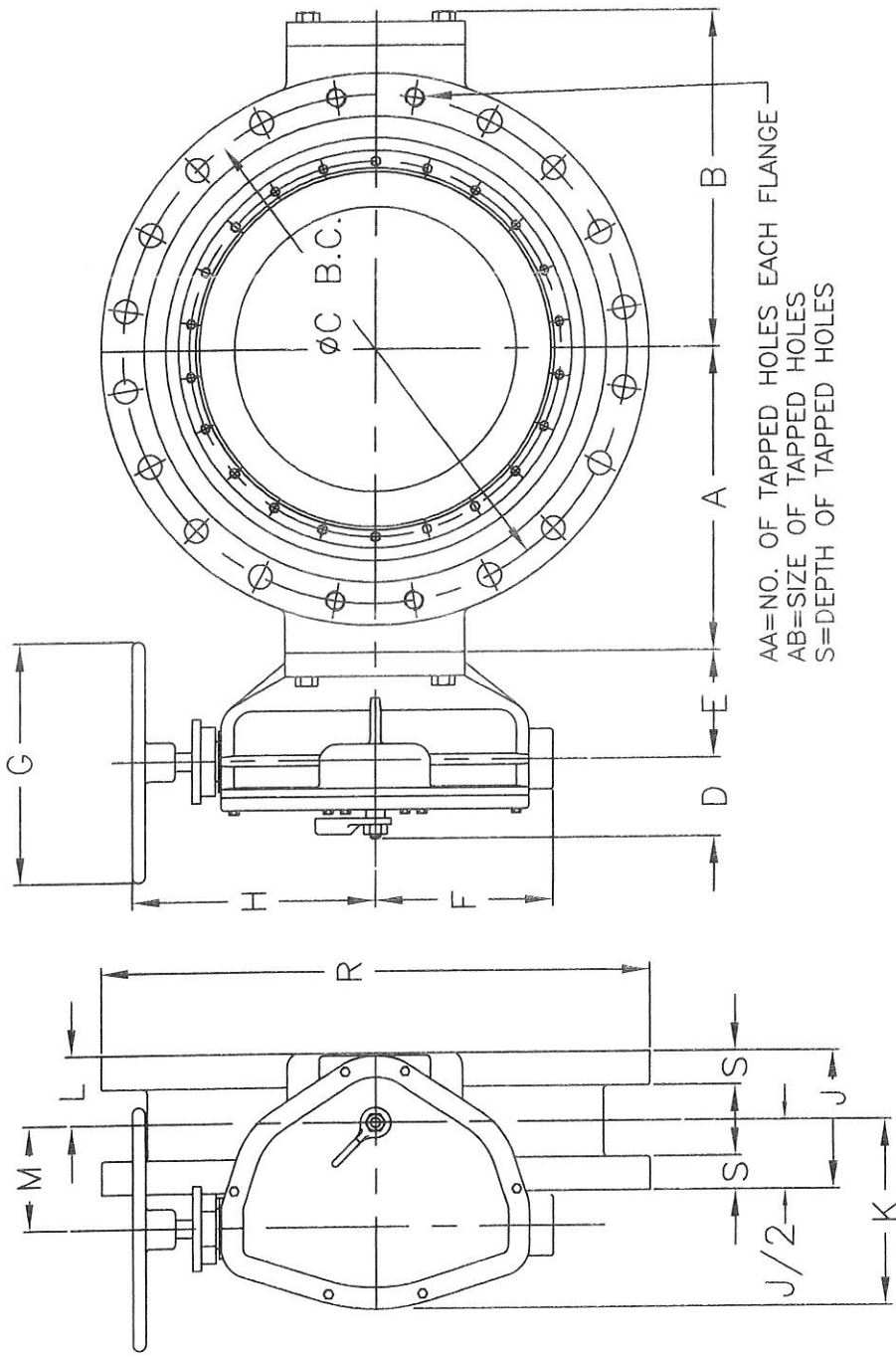
*NOTE AB: APPROXIMATE WEIGHT PER EACH FOOT OF EXTENDED BONNET 25LBS(3"-12"), 50LBS(14"-16"), 80LBS(18"-24")



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET EL MIRA, NEW YORK 14901

DWN: D SKAKAL
DATE: 5/22/17
DWG. NO.
CAT914C10014-01

3" THRU 24" STYLE 4500
CLASS 150 BUTTERFLY VALVE
EXTENDED BONNET
BURIED OPERATOR
FLANGED ENDS



AA=NO. OF TAPPED HOLES EACH FLANGE
AB=SIZE OF TAPPED HOLES
S=DEPTH OF TAPPED HOLES

VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2 15/16	3 9/16	3 5/8	7 1/2	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
6"	150	2 15/16	3 9/16	3 5/8	7 1/2	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
8"	250	3	3 11/16	4 1/4	14	8 3/4	4 1/2	2 3/8	2	24
10" & 12"	510	3 3/16	4 1/2	5 9/16	14	10 1/2	6 1/8	2 3/4	3 1/8	36
14", 16", 18" & 20"	1250	4 3/16	5 3/4	8 3/8	18	12 5/16	7 7/8	3 1/4	4	48
24"	2200	4 3/16	6 1/4	10 3/8	18	14 5/16	10 3/4	3 7/8	6	72

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
3"	4	5 1/8	6	5	4	5/8	9	15/16	4	5/8-11	75
4"	4	5 1/8	7 1/2	5	8	5/8	9	15/16	4	5/8-11	75
6"	5	6 1/8	9 1/2	5	8	3/4	11	1	4	3/4-10	95
8"	6	7 3/8	11 3/4	6	8	3/4	13 1/2	1 1/8	4	3/4-10	140
10"	7 3/4	9 1/2	14 1/4	8	12	7/8	16	1 3/16	—	—	232
12"	9 1/2	10 7/8	17	8	12	7/8	19	1 1/4	—	—	300
14"	10 7/16	12 3/16	18 3/4	8	12	1	21	1 3/8	4	1-8	485
16"	12 3/16	13 15/16	21 1/4	8	16	1	23 1/2	1 7/16	4	1-8	570
18"	13 5/16	15 1/16	22 3/4	8	16	1 1/8	25	1 9/16	4	1 1/8-7	735
20"	14 7/8	16 5/8	25	8	20	1 1/8	27 1/2	1 11/16	4	1 1/8-7	860
24"	17 19/32	19 5/16	29 1/2	8	20	1 1/4	32	1 7/8	4	1 1/4-7	1165

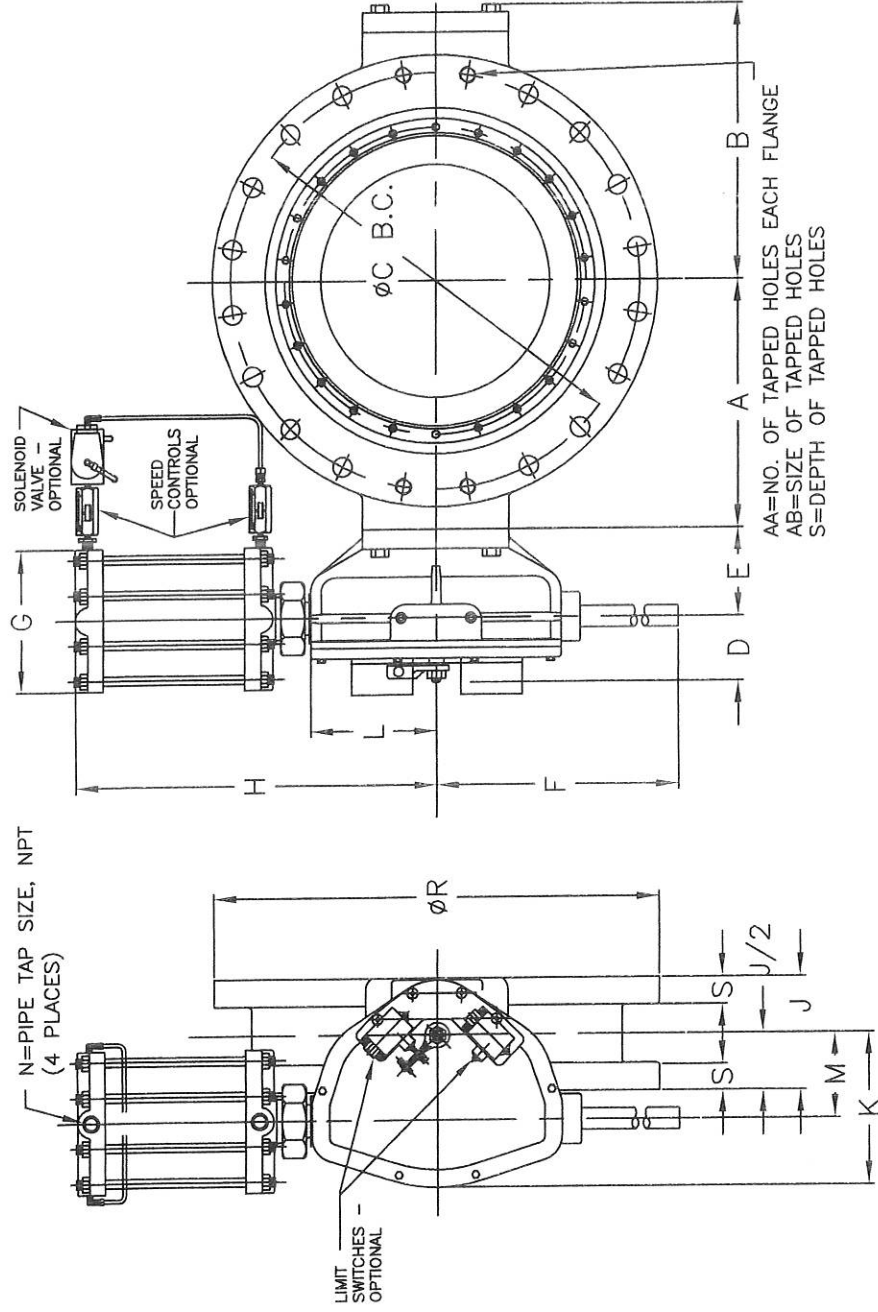
NOTE 1: FLOW MAY BE IN EITHER DIRECTION
NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.
NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)
NOTE 4: "N" = NUMBER OF TURNS TO CLOSE
NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE
NOTE 6: "Q" = DIAMETER OF BOLTS



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET EL MIRA, NEW YORK 14001

DWN: D SKAKAL 3" THRU 24" STYLE 4500
DATE: 5/22/17 CLASS 150 BUTTERFLY VALVE
DWG. NO. POSITION INDICATOR
CAT914C10015-01 HANDWHEEL OPERATOR
FLANGED ENDS

N=PIPE TAP SIZE, NPT
(4 PLACES)



AA=NO. OF TAPPED HOLES EACH FLANGE
AB=SIZE OF TAPPED HOLES
S=DEPTH OF TAPPED HOLES

VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2 15/16	3 9/16	7 1/4	5 1/2	12 1/4	3 7/16	3	1 3/8	3/8 -18
6"	150	2 15/16	3 9/16	7 1/4	5 1/2	12 1/4	3 7/16	3	1 3/8	3/8 -18
8"	250	3	3 11/16	9 1/8	5 1/2	14 1/2	4 1/2	3 7/8	2	3/8 -18
10" & 12"	510	3 3/16	4 1/2	12 5/8	6 1/2	18 3/8	6 1/8	5 1/4	3 1/8	1 1/2 -14
14", 16", 18" & 20"	1250	4 1/16	5 3/4	17	10	24	7 7/8	7	4	3/4 -14
24"	2200	4 1/16	6 1/4	23	10	30	10 3/4	9	6	3/4 -14

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB
3"	4	5 1/8	6	5	4	5/8	9	15 7/16	4	5/8-11
4"	4	5 1/8	7 1/2	5	8	5/8	9	15 7/16	4	5/8-11
6"	5	6 1/8	9 1/2	5	8	3/4	11	1	4	3/4-10
8"	6	7 3/8	11 3/4	6	8	3/4	13 1/2	1 1/8	4	3/4-10
10"	7 3/4	9 1/2	14 1/4	8	12	7/8	16	1 3/16	-	-
12"	9 1/2	10 7/8	17	8	12	7/8	19	1 1/4	-	-
14"	10 7/16	12 3/16	18 3/4	8	12	1	21	1 3/8	4	1-8
16"	12 3/16	13 15/16	21 1/4	8	16	1	23 1/2	1 7/16	4	1-8
18"	13 5/16	15 1/16	22 3/4	8	16	1 1/8	25	1 9/16	4	1 1/8-7
20"	14 7/8	16 5/8	25	8	20	1 1/8	27 1/2	1 11/16	4	1 1/8-7
24"	17 19/32	19 5/16	29 1/2	8	20	1 1/4	32	1 7/8	4	1 1/4-7

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

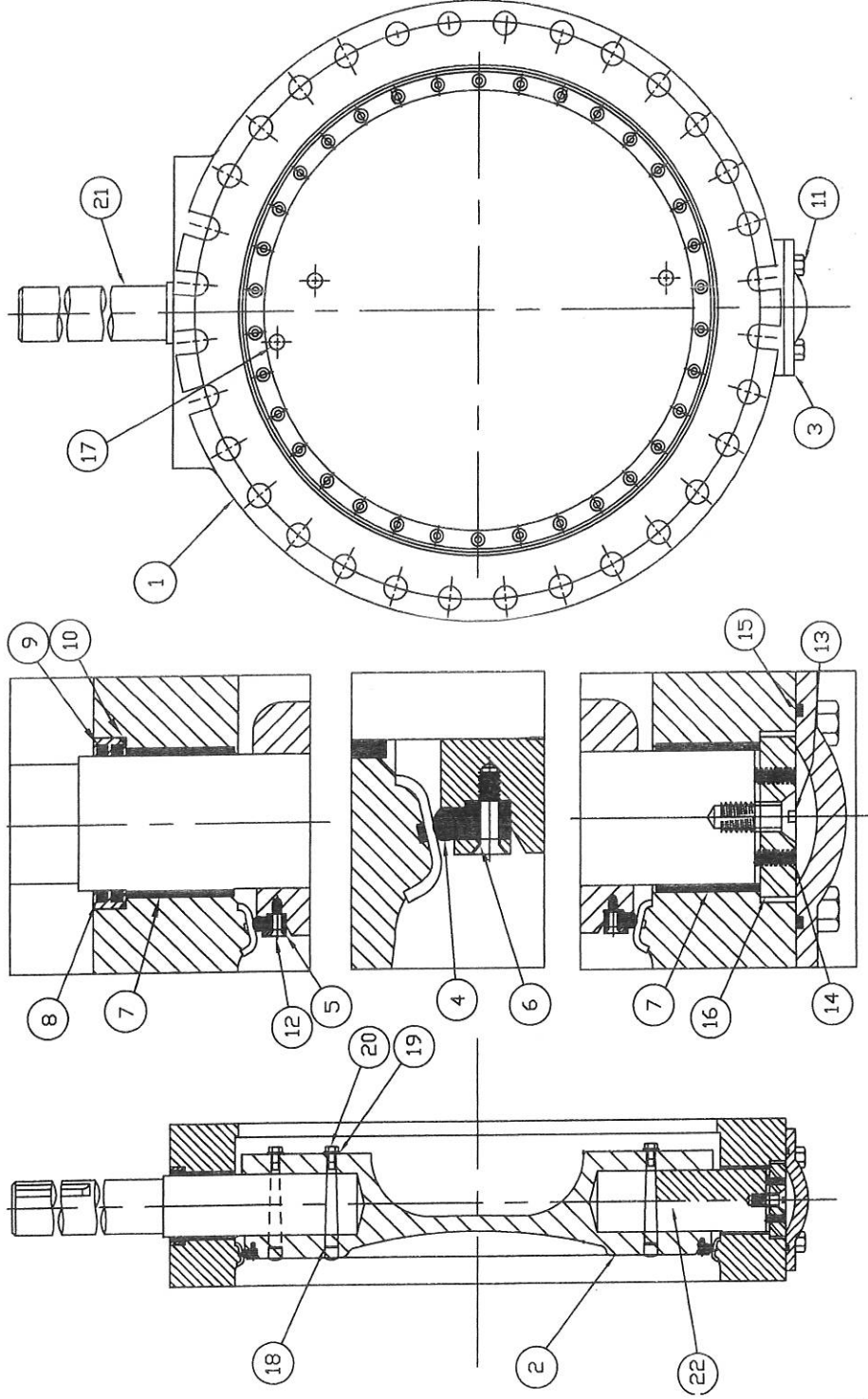
NOTE 4: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 5: "Q" = DIAMETER OF BOLTS



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL 3" THRU 24" STYLE 4500
DATE: 5/22/17
DWG. NO. CLASS 150 BUTTERFLY VALVE
POSITION INDICATOR
CYLINDER OPERATOR
CAT914C10019-01 FLANGED ENDS



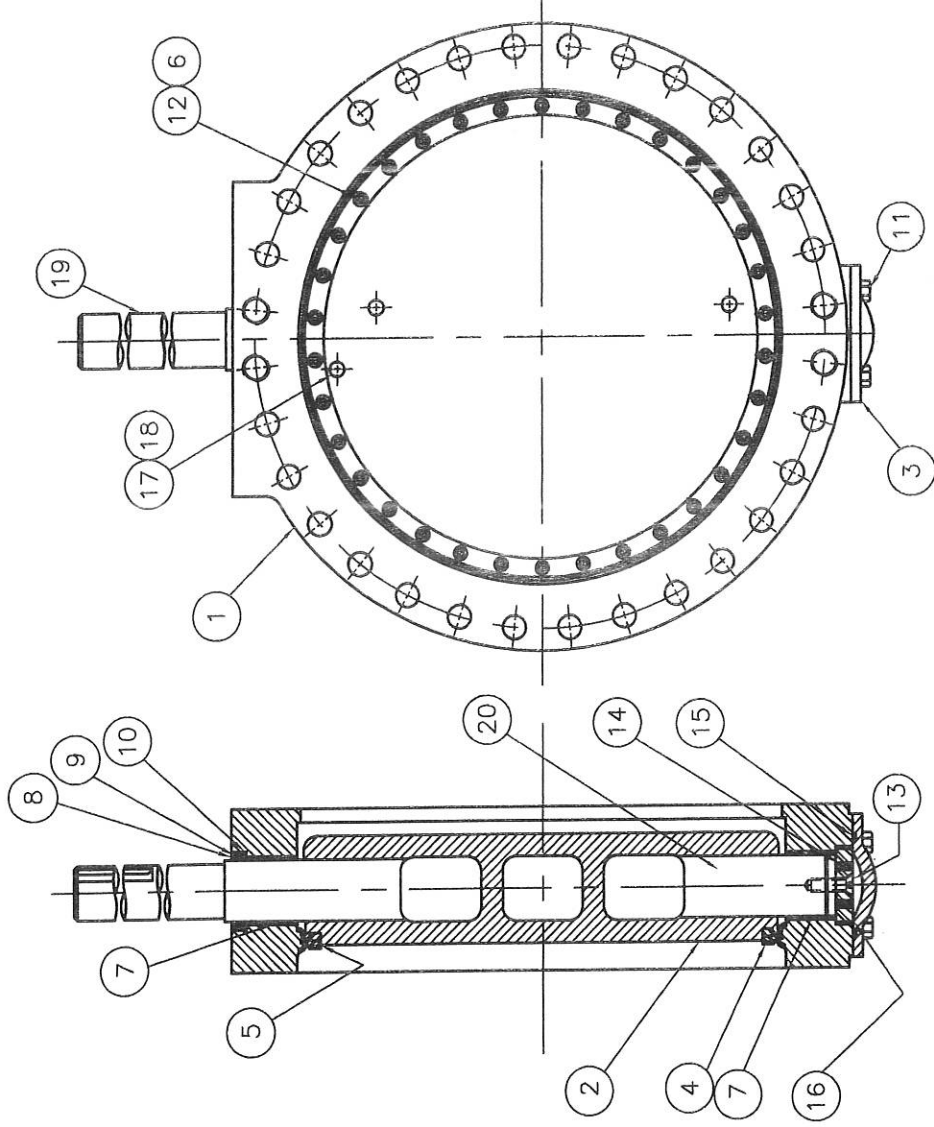
ITEM #	DESCRIPTION	MATERIAL
1A	VALVE BODY	DUCTILE IRON, ASTM A-536, Grade 70-50-05
1B	BODY RING (Permanently Attached)	316 STAINLESS STEEL
1C	BODY O-RING (Permanently Attached)	BUNA-N
2	VANE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
3	END COVER PLATE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
4	RUBBER VANE SEAT RING	EPDM
5	SEGMENTED CLAMP RING (4)	304 STAINLESS STEEL, ASTM A-276
6	SEALING WASHER	NYLON
7	SHAFT SLEEVE BEARING	FIBERGLIDE BACKED WITH STAINLESS STEEL
8	SHAFT O-RING CARTRIDGE	BRONZE
9	O-RING SHAFT SEALS (2)	BUNA-N
10	OUTSIDE O-RING CARTRIDGE SEAL	BUNA-N
11	END COVER PLATE HEX BOLTS	A307 STEEL (STANDARD)/304 SS/316 SS
12	FLAT HEAD SOCKET SCREW (For Rubber Vane Seat Ring)	18-8 STAINLESS STEEL (WITH LOCTITE)
13	FLAT HEAD SOCKET SCREW (For Thrust Bearing)	18-8 STAINLESS STEEL (WITH NYLOK INSERT)
14	ALLEN HEAD SET SCREW (For Thrust Bearing)	18-8 STAINLESS STEEL (WITH NYLOK INSERT)
15	END COVER PLATE O-RING	BUNA-N
16	THRUST BEARING	BRONZE
17	TAPER PIN (3)	416 STAINLESS STEEL
18	TAPER PIN O-RING (3)	BUNA-N
19	TAPER PIN WASHER (3)	416 STAINLESS STEEL
20	TAPER PIN BOLT (3)	304 STAINLESS STEEL
21	SHAFT (OPERATOR)	304 STAINLESS STEEL
22	SHAFT (THRUST SIDE)	304 STAINLESS STEEL



KENNEDY VALVE
 Division of McWane, Inc.
 1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL
 DATE: 6/21/17
 DWG. NO. CAT914C10020-01

30" & 36" STYLE 1450
 CLASS 150 BUTTERFLY VALVE
 SUB-ASSEMBLY / MATERIAL LIST
 (NON-ADJUSTABLE PACKING)
 FLANGED ENDS

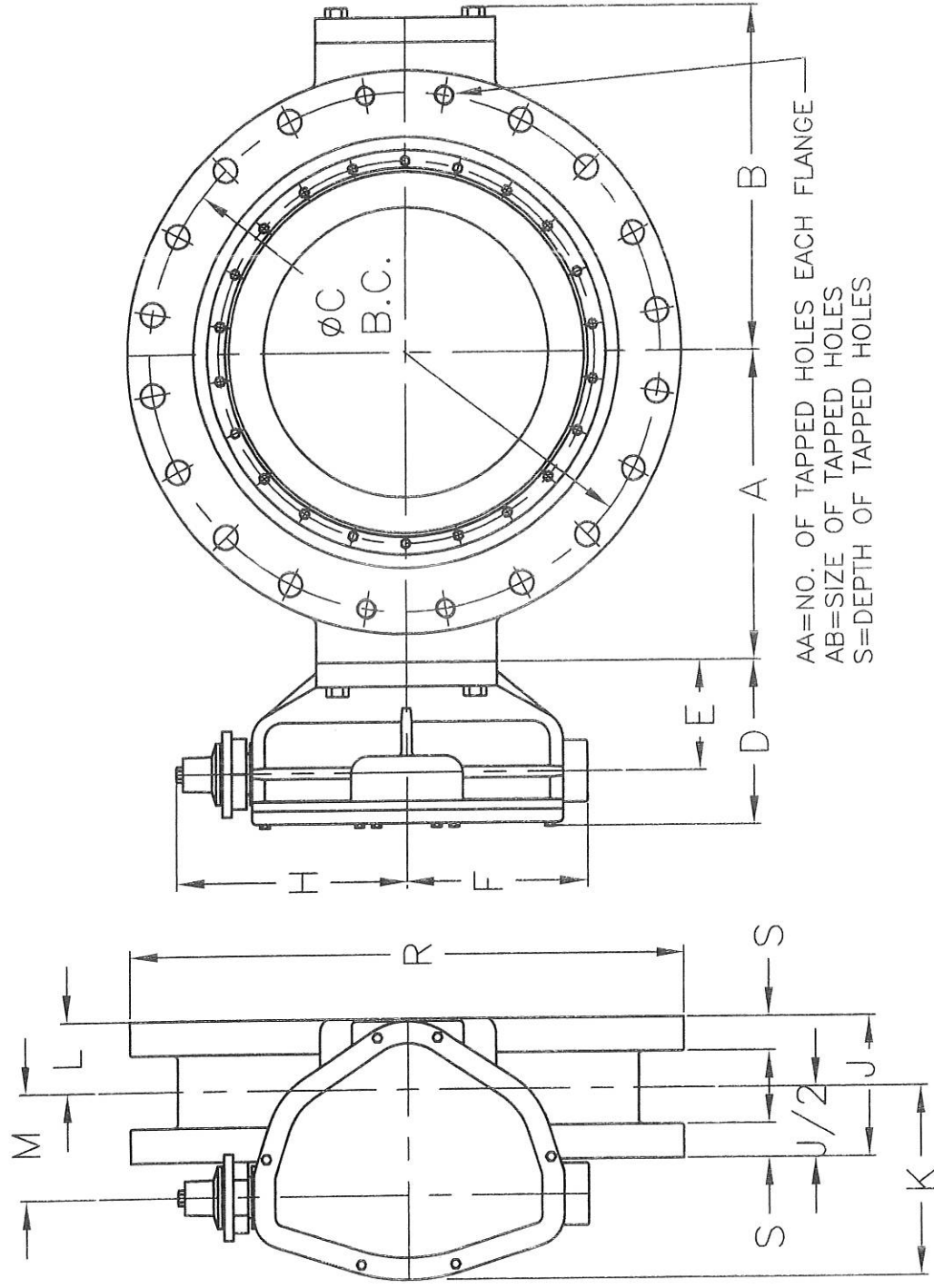


ITEM NO.	DESCRIPTION	MATERIAL
1	BODY, VALVE	DUCTILE IRON, ASTM A-536, GR. 70-50-05 W/316 STN. STL. SEAT
2	VANE	DUCTILE IRON, ASTM A-536 GR. 70-50-05
3	END COVER	DUCTILE IRON, ASTM A-536 GR. 70-50-05
4	SEAT RING, VANE	EPDM
5	CLAMP RING, SEAT	304 STAINLESS STEEL
6	SEALING WASHER	NYLON
7	BUSHING, BODY	FIBERGLIDE
8	CARTRIDGE, SHAFT	BRONZE
9	SEAL, SHAFT	BUNA-N
10	SEAL, CARTRIDGE	BUNA-N
11	BOLT, END COVER	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
12	SOCKET SCREW ~ FLAT HEAD	18-8 STAINLESS STEEL W/NYLOK INSERT
13	SOCKET SCREW ~ FLAT HEAD	18-8 STAINLESS STEEL W/NYLOK INSERT
14	SET SCREW ~ FLAT POINT	18-8 STAINLESS STEEL W/NYLOK INSERT
15	END COVER SEAL	BUNA-N
16	THRUST BEARING PLATE	BRONZE
17	TAPER PIN	416 STAINLESS STEEL
18	TAPER PIN BOLT	18-8 STAINLESS STEEL
19	SHAFT (OPERATOR)	304 STAINLESS STEEL
20	SHAFT (THRUST)	304 STAINLESS STEEL



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET EL MIRA, NEW YORK 14901

DWN: D SKAKAL 42" & 48" STYLE 1450
CLASS 150 BUTTERFLY VALVE
DATE: 5/22/17
DWG. NO. SUB-ASSEMBLY / MATERIAL LIST
CAT914C10021-01 (NON-ADJUSTABLE PACKING)
FLANGED ENDS



AA=NO. OF TAPPED HOLES EACH FLANGE
AB=SIZE OF TAPPED HOLES
S=DEPTH OF TAPPED HOLES

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
30" & 36"	20.625	21.50	36	12	28	1.250	38.750	2.125	4	1.250-7	1790
42"	24.250	25.06	42.750	12	32	1.500	46	2.375	4	1.500-6	2515
	28.250	28.88	49.500	12	36	1.500	53	2.625	4	1.500-6	4405

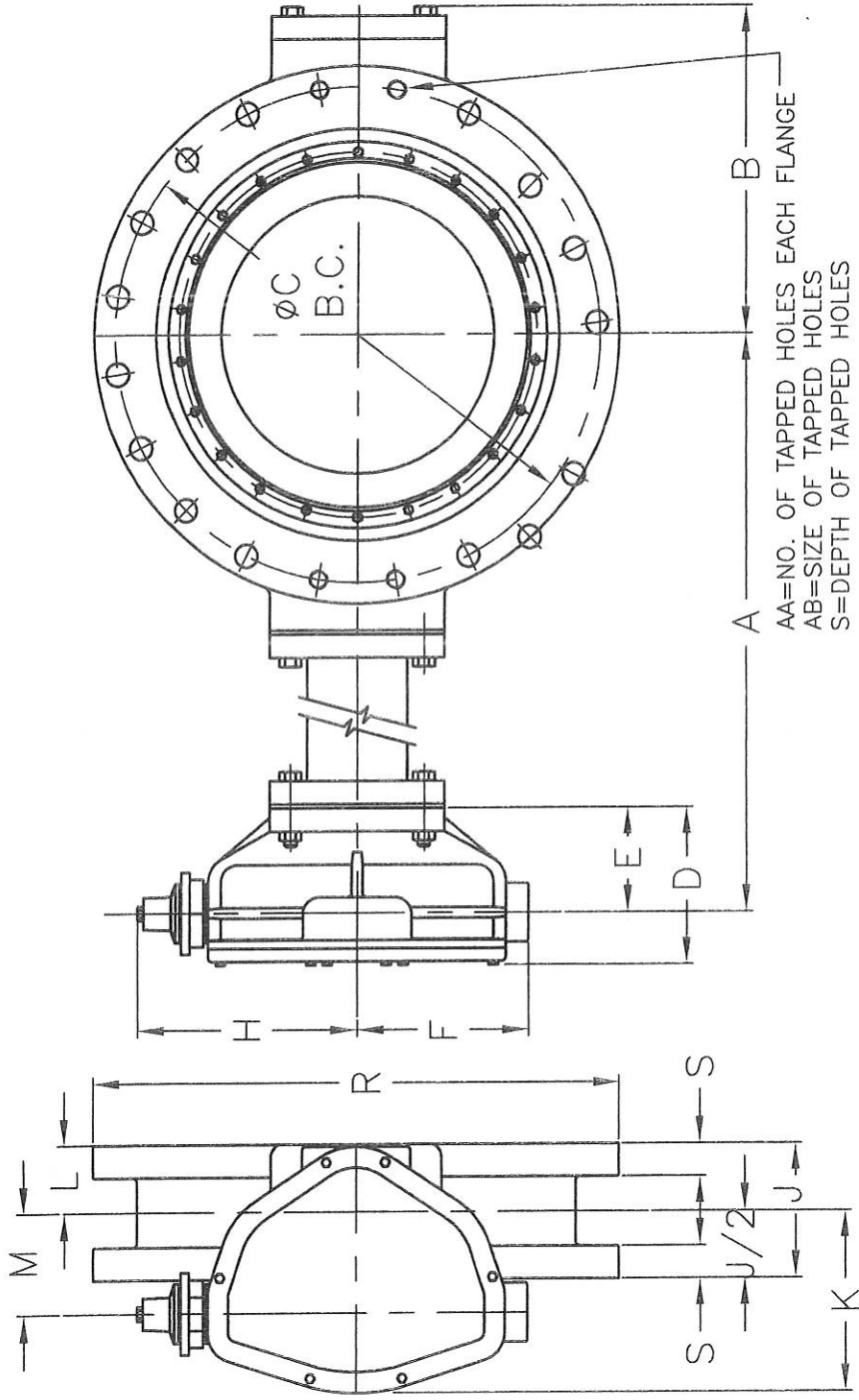
- NOTE 1: FLOW MAY BE IN EITHER DIRECTION
NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.
NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)
NOTE 4: "N" = NUMBER OF TURNS TO CLOSE
NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE
NOTE 6: "Q" = DIAMETER OF BOLTS
NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL
DATE: 5/22/17
DWG. NO.
CAT914C10022-01

30" THRU 42" STYLE 1450
CLASS 150 BUTTERFLY VALVE
BURIED OPERATOR
FLANGED ENDS



VALVE SIZE	OPERATOR MODEL	D	E	F	H	K	L	M	N
30" & 36"	2200	9 1/16	6 1/4	10 3/8	14 5/16	10 3/4	3 7/8	6	72
42"	4350	10 3/16	6 1/16	14 5/16	18	13 5/16	4 3/16	7 1/2	90

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
30"	NOTE AA	21.50	36	12	28	1.250	38.750	2.125	4	1.250-7	1790
36"	NOTE AA	25.06	42.750	12	32	1.500	46	2.375	4	1.500-6	2515
42"	NOTE AA	28.88	49.500	12	36	1.500	53	2.625	4	1.500-6	4405

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-111 (A.N.S.I. A21-11)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: 2200 OPERATOR ON 30" & 36"---4350 OPERATOR ON 42"

NOTE 9: MAXIMUM LENGTH OF TORQUE TUBE (15 FEET)---BONNET SUPPORTS SHOULD BE USED ON ALL BONNETS EXCEEDING 6 FEET CENTERLINE OF VALVE TO CENTERLINE OF OPERATOR. ALL BONNET SUPPORTS SHALL BE SUPPLIED BY CUSTOMER

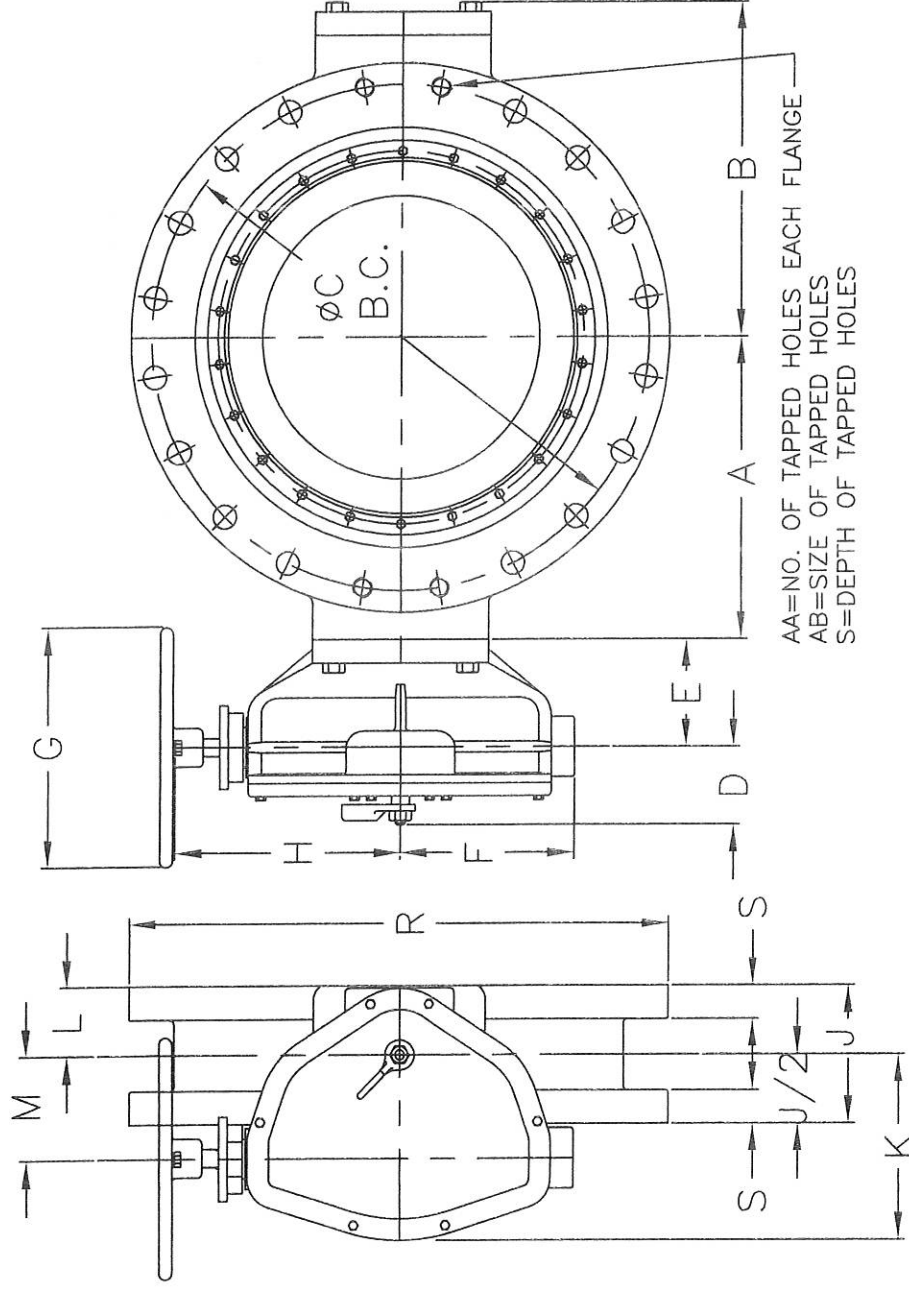
NOTE AA: "A" VARIES TO ENGINEER SPECIFICATIONS

*NOTE AB: APPROXIMATE WEIGHT PER EACH FOOT OF EXTENDED BONNET 150lbs (30"-42")



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL
DATE: 5/22/17
DWG. NO.
CAT914C10023-01
30" THRU 42" STYLE 1450
CLASS 150 BUTTERFLY VALVE
WITH EXTENDED BONNET
BURIED OPERATOR
FLANGED ENDS



VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	L	M	N
30"	20.625	21.50	36	12	28	1.250	38.750	2.125	4	1.250-7	3 7/8	6	72
36"	24.250	25.06	42.750	12	32	1.500	46	2.375	4	1.500-6	4 3/16	7 1/2	90
42"	28.250	28.88	49.500	12	36	1.500	53	2.625	4	1.500-6	4 3/16	7 1/2	90

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	L	M	N	WEIGHT
30"	20.625	21.50	36	12	28	1.250	38.750	2.125	4	1.250-7	3 7/8	6	72	1790
36"	24.250	25.06	42.750	12	32	1.500	46	2.375	4	1.500-6	4 3/16	7 1/2	90	2515
42"	28.250	28.88	49.500	12	36	1.500	53	2.625	4	1.500-6	4 3/16	7 1/2	90	4405

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

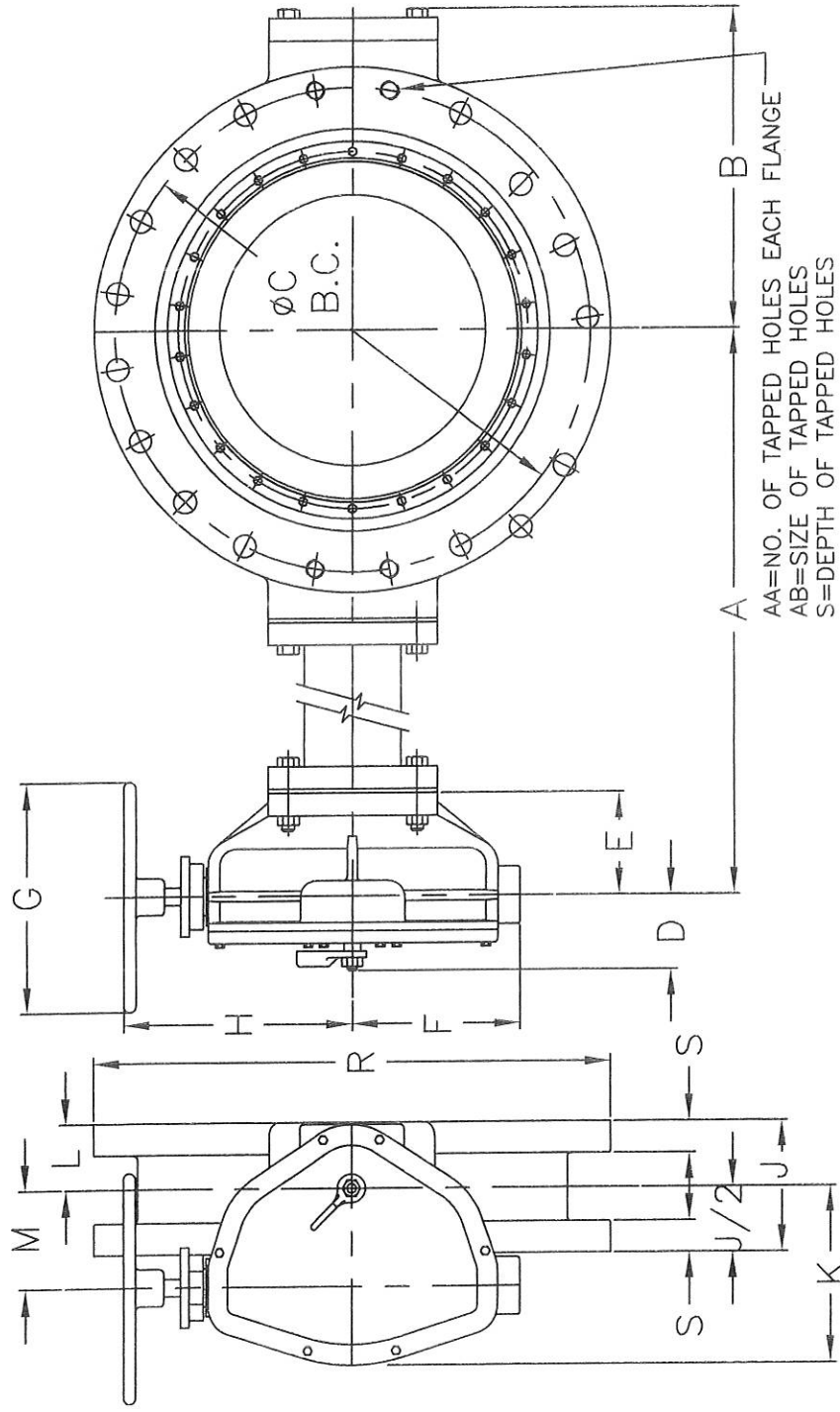
NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL 30" THRU 42" STYLE 1450
DATE: 5/22/17 CLASS 150 BUTTERFLY VALVE
DWG. NO. POSITION INDICATOR
CAT914C10024-01 HANDWHEEL OPERATOR
FLANGED ENDS



AA=NO. OF TAPPED HOLES EACH FLANGE
AB=SIZE OF TAPPED HOLES
S=DEPTH OF TAPPED HOLES

	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
30" & 36"	2200	4 3/16	6 1/4	10 3/8	18	14 5/16	10 3/4	3 7/8	6	72
42"	4350	5 5/8	6 1/16	14 5/16	27	18	13 5/16	4 3/16	7 1/2	90

VALVE SIZE	A	B	C	D	E	F	G	H	K	L	M	N
30"	NOTE AA	21.50	36	12	28	10 3/8	18	14 5/16	10 3/4	3 7/8	6	72
36"	NOTE AA	25.06	42.750	12	32	14 5/16	27	18	13 5/16	4 3/16	7 1/2	90
42"	NOTE AA	28.88	49.500	12	36	15 1/8	30	20	14 1/2	5 1/8	8 1/4	108

NOTE 1: FLOW MAY BE IN EITHER DIRECTION
NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: MAXIMUM LENGTH OF TORQUE TUBE (15 FEET)--BONNET SUPPORTS SHOULD BE USED ON ALL BONNETS EXCEEDING 6 FEET CENTERLINE OF VALVE TO CENTERLINE OF OPERATOR. ALL BONNET SUPPORTS SHALL BE SUPPLIED BY CUSTOMER

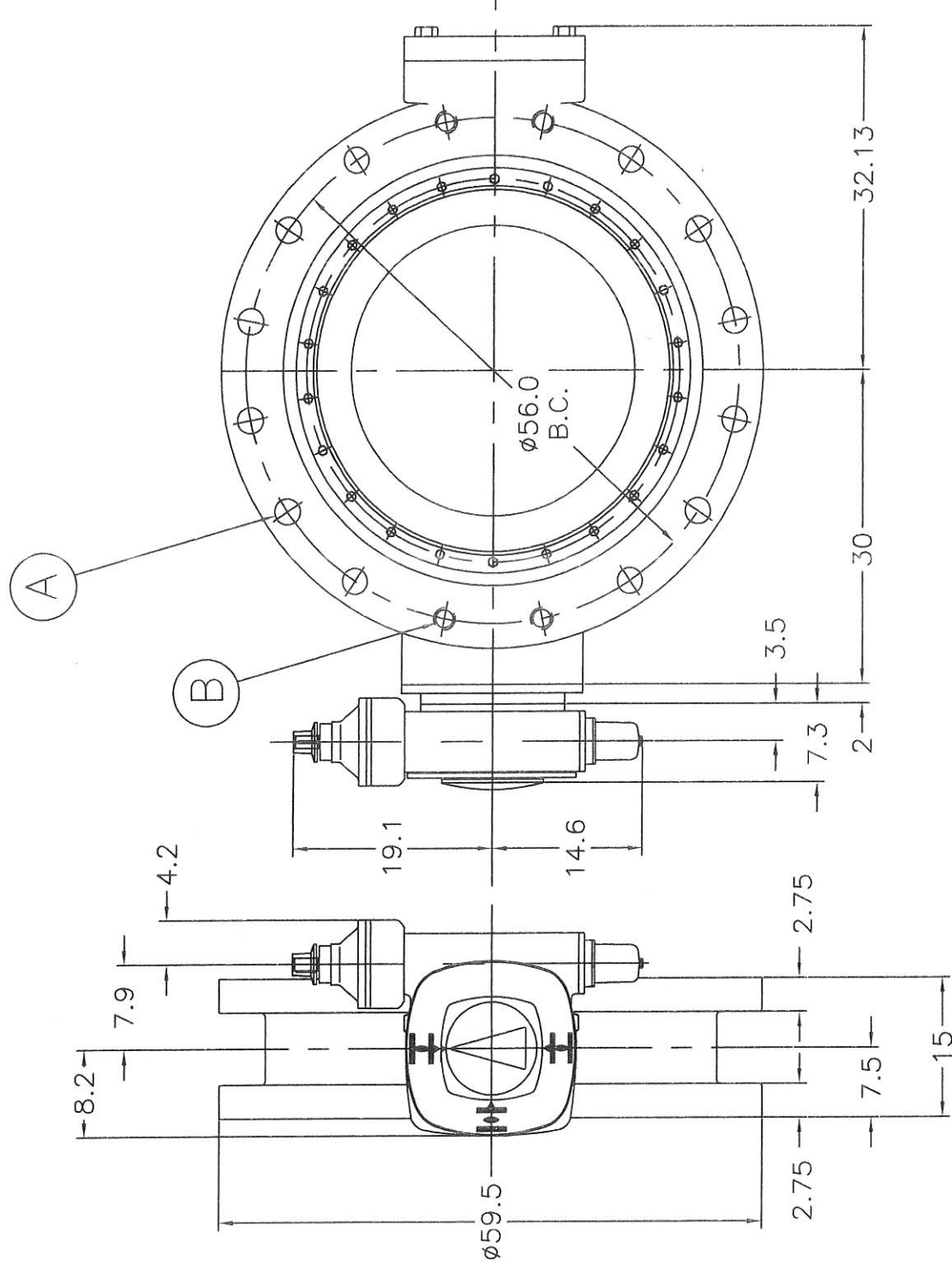
NOTE AA: "A" VARIES TO ENGINEER SPECIFICATIONS

*NOTE AB: APPROXIMATE WEIGHT PER EACH FOOT OF EXTENDED BONNET 150LBS(30"-42")



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL
DATE: 5/22/17
DWG. NO. CAT914C10025-01
30" THRU 42" STYLE 1450
CLASS 150 BUTTERFLY VALVE
WITH EXTENDED BONNET, POSTION
INDICATOR & HANDWHEEL OPERATOR
FLANGED ENDS



NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504-B & DRILLING (A.N.S.I. 125)

NOTE 4: NUMBER OF TURNS TO CLOSE = 108

NOTE 5: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 6: A = (44) ϕ 1.50" BOLTS PER FLANGE

NOTE 7: B = (8) 1.50-6 UNC x 2.25 DEEP TAPPED HOLES EACH FLANGE

NOTE 8: APPROXIMATE WEIGHT = 6300lbs.



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET FLMIRA, NEW YORK 14001

DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10026-01

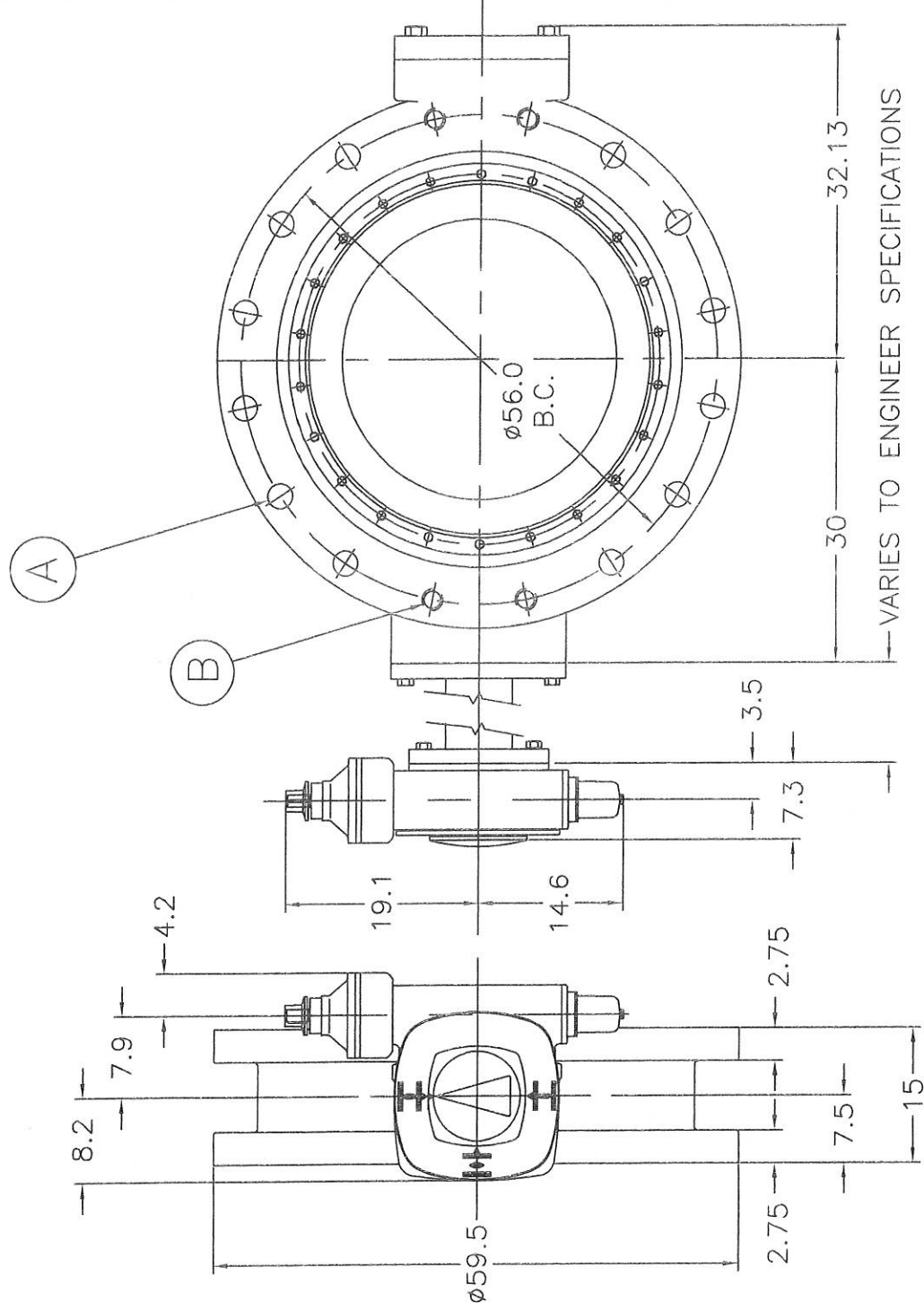
48" STYLE 1450

CLASS 150 BUTTERFLY VALVE

(AUMA GS200.3/GZ200.3:8 GEAR BOX)

BURIED OPERATOR

FE X FE ENDS



NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504-B & DRILLING (A.N.S.I. 125)

NOTE 4: NUMBER OF TURNS TO CLOSE = 108

NOTE 5: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 6: A = (44) $\phi 1.50$ " BOLTS PER FLANGE

NOTE 7: B = (8) 1.50-6 UNC x 2.25 DEEP TAPPED HOLES EACH FLANGE

NOTE 8: APPROXIMATE WEIGHT = 6300lbs.



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET HLMIRA, NEW YORK 14001

DWN: D SKAKAL

DATE: 5/22/17

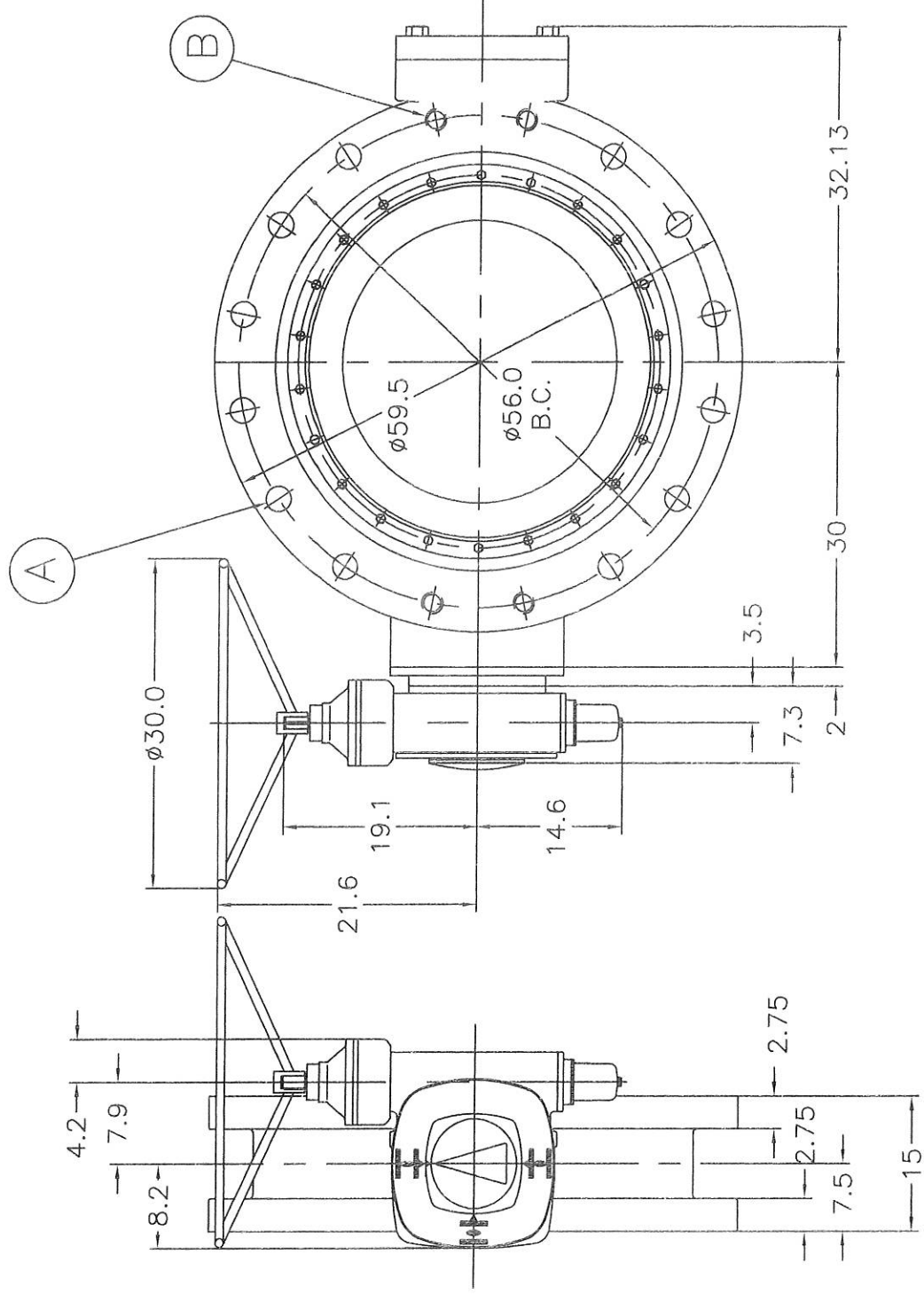
DWG. NO.

CAT914C10027-01

48" STYLE 1450

CLASS 150 BUTTERFLY VALVE

(AUMA GS200.3/GZ200.3:8 GEAR BOX)
BURIED OPERATOR & EXTENDED BONNET
FE X FE ENDS



NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504-B & DRILLING (A.N.S.I. 125)

NOTE 4: NUMBER OF TURNS TO CLOSE = 108

NOTE 5: MANUAL POSITION INDICATOR

NOTE 6: A = (44) ϕ 1.50" BOLTS PER FLANGE

NOTE 7: B = (8) 1.50-6 UNC x 2.25 DEEP TAPPED HOLES EACH FLANGE

NOTE 8: APPROXIMATE WEIGHT = 6300lbs.



KENNEDY VALVE

Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10028-01

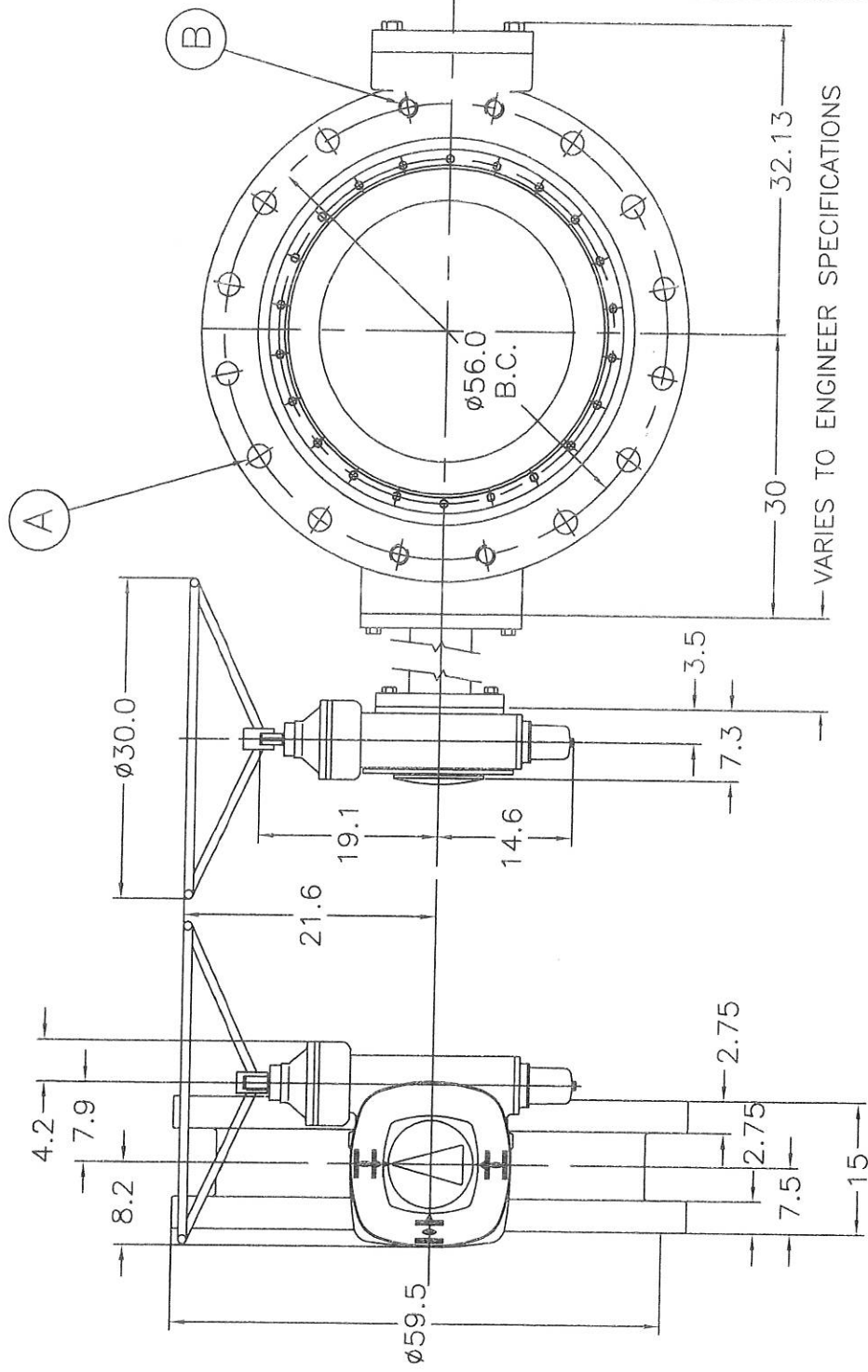
48" STYLE 1450

CLASS 150 BUTTERFLY VALVE

(AUMA GS200.3/GZ200.3:8 GEAR BOX)

HANDWHEEL OPERATOR

FE X FE ENDS



VARIES TO ENGINEER SPECIFICATIONS

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504-B & DRILLING (A.N.S.I. 125)

NOTE 4: NUMBER OF TURNS TO CLOSE = 108

NOTE 5: OPERATED BY HANDWHEEL

NOTE 6: A = (44) $\phi 1.50$ " BOLTS PER FLANGE

NOTE 7: B = (8) 1.50-6 UNC x 2.25 DEEP TAPPED HOLES EACH FLANGE

NOTE 8: APPROXIMATE WEIGHT = 6300lbs.



KENNEDY VALVE

Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL

48" STYLE 1450

DATE: 5/22/17

CLASS 150 BUTTERFLY VALVE

DWG. NO.

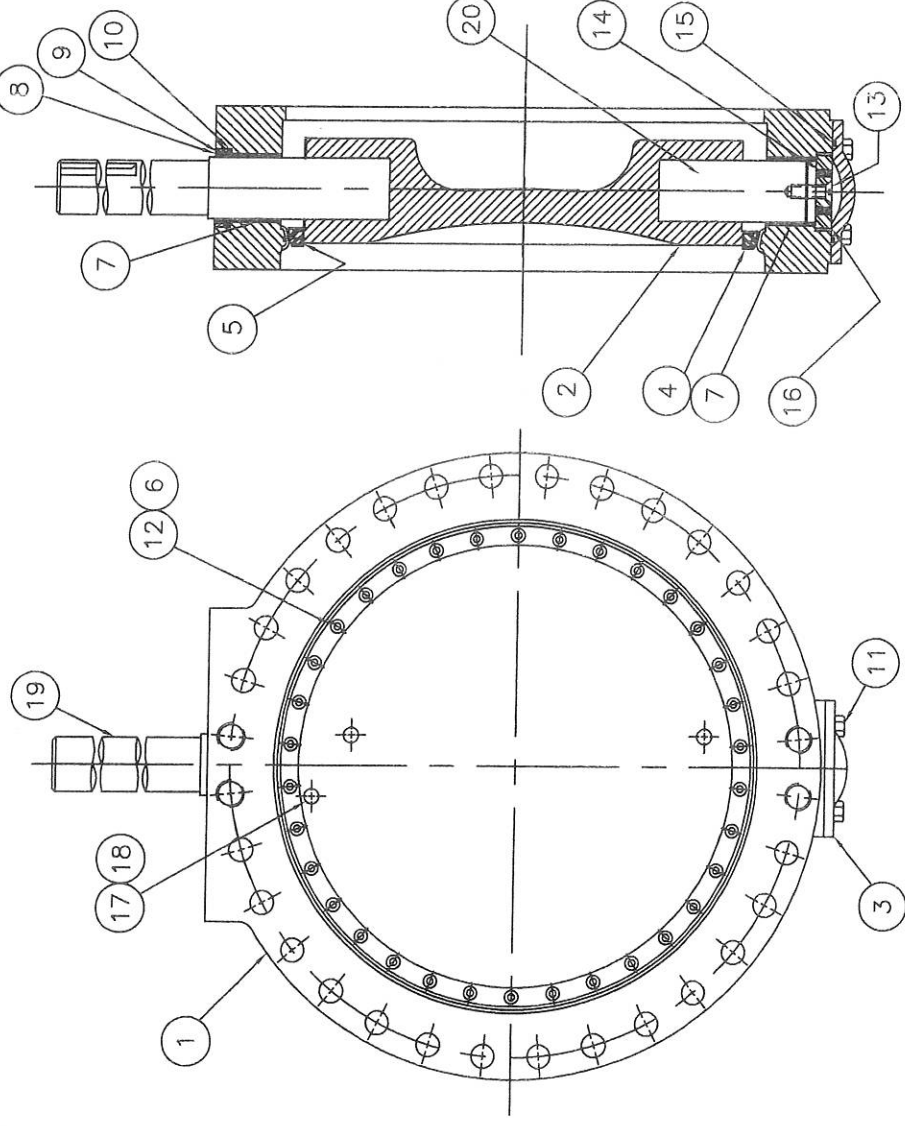
(AUMA GS200.3/GZ200.3:8 GEAR BOX)
HANDWHEEL OPERATOR &

CAT914C10029-01 EXTENDED BONNET - FE X FE ENDS

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CL 150 FEG BFW Catalog

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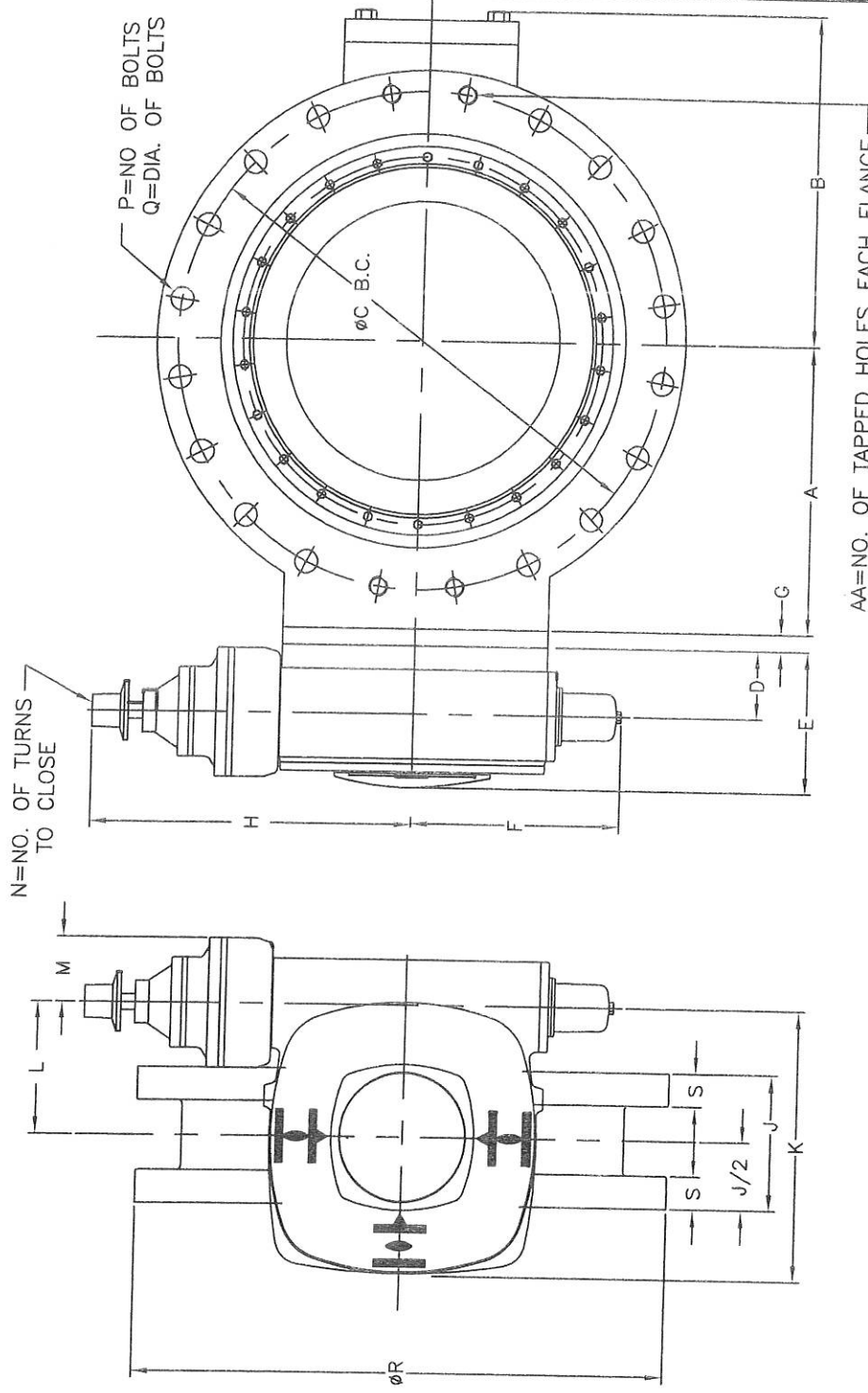


ITEM NO.	DESCRIPTION	MATERIAL
1	BODY, VALVE	DUCTILE IRON, ASTM A-536, GR. 70-50-05 W/316 STN. STL. SEAT
2	VANE	DUCTILE IRON, ASTM A-536, GR. 70-50-05
3	END COVER	FABRICATED A-36 STEEL
4	SEAT RING, VANE	EPDM
5	CLAMP RING, SEAT	304 STAINLESS STEEL
6	SEALING WASHER	NYLON
7	BUSHING, BODY	FIBERGLIDE
8	CARTRIDGE, SHAFT	BRONZE
9	SEAL, SHAFT	BUNA-N
10	SEAL, CARTRIDGE	BUNA-N
11	BOLT, END COVER	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
12	SOCKET SCREW ~ FLAT HEAD	18-8 STAINLESS STEEL W/NYLOK INSERT
13	SOCKET SCREW ~ FLAT HEAD	18-8 STAINLESS STEEL W/NYLOK INSERT
14	SET SCREW ~ FLAT POINT	18-8 STAINLESS STEEL W/NYLOK INSERT
15	END COVER SEAL	BUNA-N
16	THRUST BEARING PLATE	BRONZE
17	TAPER PIN	416 STAINLESS STEEL
18	TAPER PIN BOLT	18-8 STAINLESS STEEL
19	SHAFT (OPERATOR)	304 STAINLESS STEEL
20	SHAFT (THRUST)	304 STAINLESS STEEL



KENNEDY VALVE
 Division of McWane, Inc.
 1021 EAST WATER STREET EL MIRA, NEW YORK 14001

DWN: D SKAKAL 54" - 60" STYLE 1450
 DATE: 5/22/17 CLASS 150 BUTTERFLY VALVE
 DWG. NO. SUB-ASSEMBLY / MATERIAL LIST
 CAT914C10030-01 (NON-ADJUSTABLE PACKING)
 FLANGED ENDS



AA=NO. OF TAPPED HOLES EACH FLANGE
AB=SIZE OF TAPPED HOLES
AC=DEPTH OF TAPPED HOLES

VALVE SIZE	A	B	C	G	J
54"	33.125	34.8	62.75	2.00	15.00

VALVE SIZE	P	Q	R	S	AA	AB	AC
54"	44	1.75	66.25	3	12	1 3/4-5	2.25

OPERATOR MODEL	D	E	F	H	K	L	M	N
54" GS 250.3/GZ250.3:8	5.1	9.2	15.8	22.0	19.8	9.8	4.8	104

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

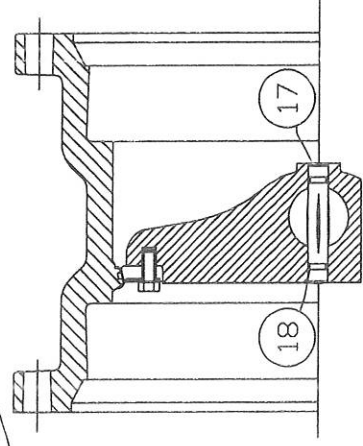
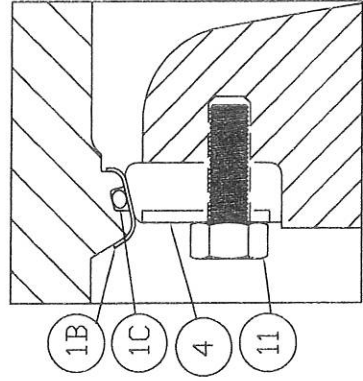
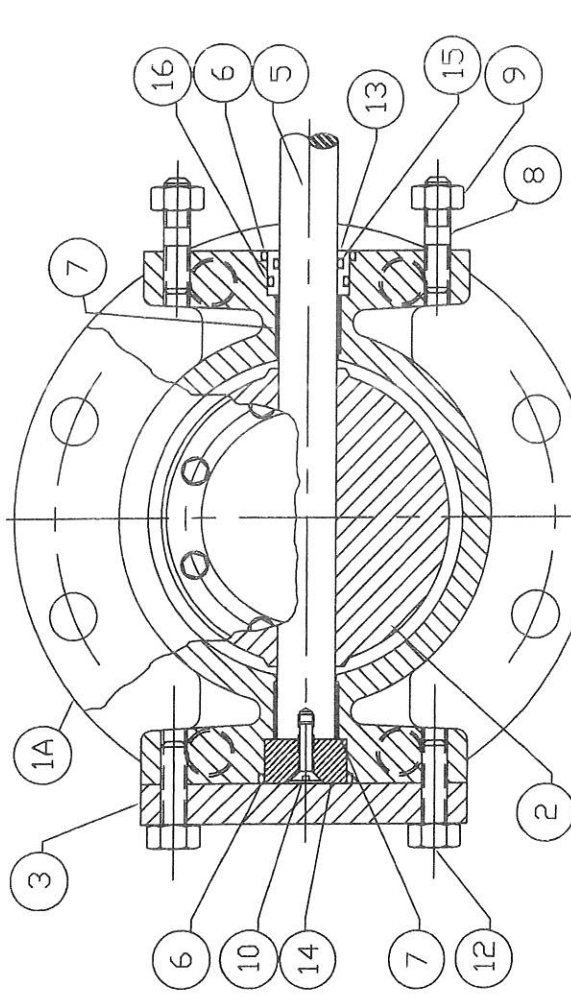
DWN: D SKAKAL 54" - 60" STYLE 1450
DATE: 5/22/17 CLASS 150 BUTTERFLY VALVE
DWG. NO. BURIED OPERATOR
CAT914C10031-01 (AUMA GS250.3/GZ250.3:8 or 16)
FLANGED ENDS

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CL150 FCBV Catalog

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Last Updated 11/16/2017



ITEM #	DESCRIPTION	MATERIAL
1A	VALVE BODY	CAST IRON, A-126, CLASS B
1B	BODY SEAT RING (Permanently Secured)	316 STAINLESS STEEL
1C	BODY O-RING (Permanently Secured)	BUNA-N
2	VANE	CAST IRON, A-126, CLASS B
3	END COVER PLATE	CAST IRON, A-126, CLASS B
4	RUBBER VANE SEAT RING	EPDM VULCANIZED TO 304 STAINLESS STEEL INSERT
5	SHAFT (One Piece Design)	304 STAINLESS STEEL, ASTM A-276
6	OPERATOR & THRUST HUB O-RING	BUNA-N
7	SHAFT BEARING / BUSHING (2)	ACETEL
8	OPERATOR MOUNTING STUDS (2)	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
9	HEX NUT (For Operator Mounting Studs) (2)	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
10	FLAT HEAD HEX SOCKET SCREW	18-8 STAINLESS STEEL
11	HEX CAPSCREW (For Rubber Vane Seat Ring)	18-8 STAINLESS STEEL (With Nylock Patch)
12	END COVER PLATE HEX BOLTS	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
13	O-RING CARTRIDGE SEAL	ACETEL
14	THRUST BEARING DISK	ACETEL
15	INSIDE O-RING (For Cartridge Seal)	BUNA-N
16	OUTSIDE O-RING (For Cartridge Seal)	BUNA-N
17	GROOVED PIN	303 STAINLESS STEEL
18	GROOVED PIN O-RING	BUNA-N



KENNEDY VALVE
 Division of McWane, Inc.
 1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL

DATE: 6/9/17

DWG. NO.

CAT914C10001-01

4" THRU 12"

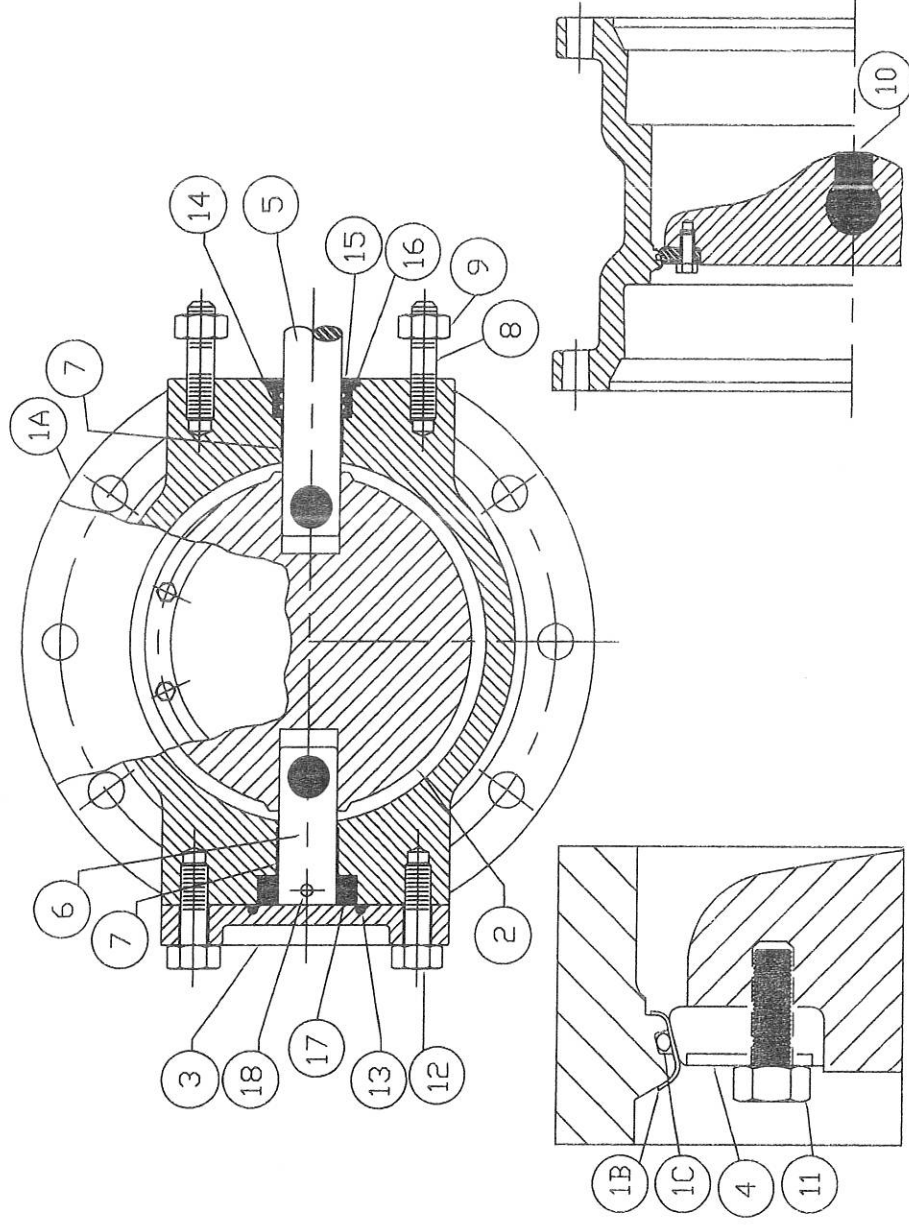
AWWA C504-STYLE 4500

CLASS 150 BUTTERFLY VALVE

SUB-ASSEMBLY / MATERIAL LIST

MJ X MJ

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ITEM #	DESCRIPTION	MATERIAL
*1A	VALVE BODY	CAST IRON, A-126, CLASS B
1B	BODY RING (Permanently Secured)	316 STAINLESS STEEL
1C	BODY O-RING (Permanently Secured)	BUNA-N
*2	VANE	CAST IRON, A-126, CLASS B
3	END COVER PLATE	CAST IRON, A-126, CLASS B
4	RUBBER VANE SEAT RING	EPDM VULCANIZED TO A 304 STAINLESS STEEL INSERT
5	SHAFT (Operator Side)	304 STAINLESS STEEL, ASTM A-276
6	SHAFT (Thrust Side)	304 STAINLESS STEEL, ASTM A-276
7	SHAFT BEARING (Operator & Thrust Side)	REINFORCED TEFLON
8	OPERATOR MOUNTING STUDS (2)	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
9	HEX NUT (For Operator Mounting Stud) (2)	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
10	VANE / SHAFT TORQUE PLUG	304 STAINLESS STEEL, ASTM A-276 (With Nylock Patch)
11	HEX CAPSCREW (For Rubber Vane Seat Ring)	18-8 STAINLESS STEEL (With Loctite)
12	END COVER PLATE HEX BOLTS	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
13	END COVER PLATE O-RING	304 STAINLESS STEEL, ASTM A-276 (With Nylock Patch)
14	TRIPLE LOBED O-RING SEAL	18-8 STAINLESS STEEL (With Loctite)
15	SEAL RING (Operator Side)	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
16	SEAL RING O-RING	BUNA-N
17	THRUST BEARING COLLAR	BUNA-S
18	ROLL PIN	STEEL, C-1018
*18" THRU 24" DUCTILE IRON		BUNA-N
		STEEL, C-1018
		BUNA-N
		BRONZE ALLOY UNS C93200
		STAINLESS STEEL, A.I.S.I. 420



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET FLMIRA, NEW YORK 14901

DWN: D SKAKAL

14" THRU 24"

DATE: 6/9/17

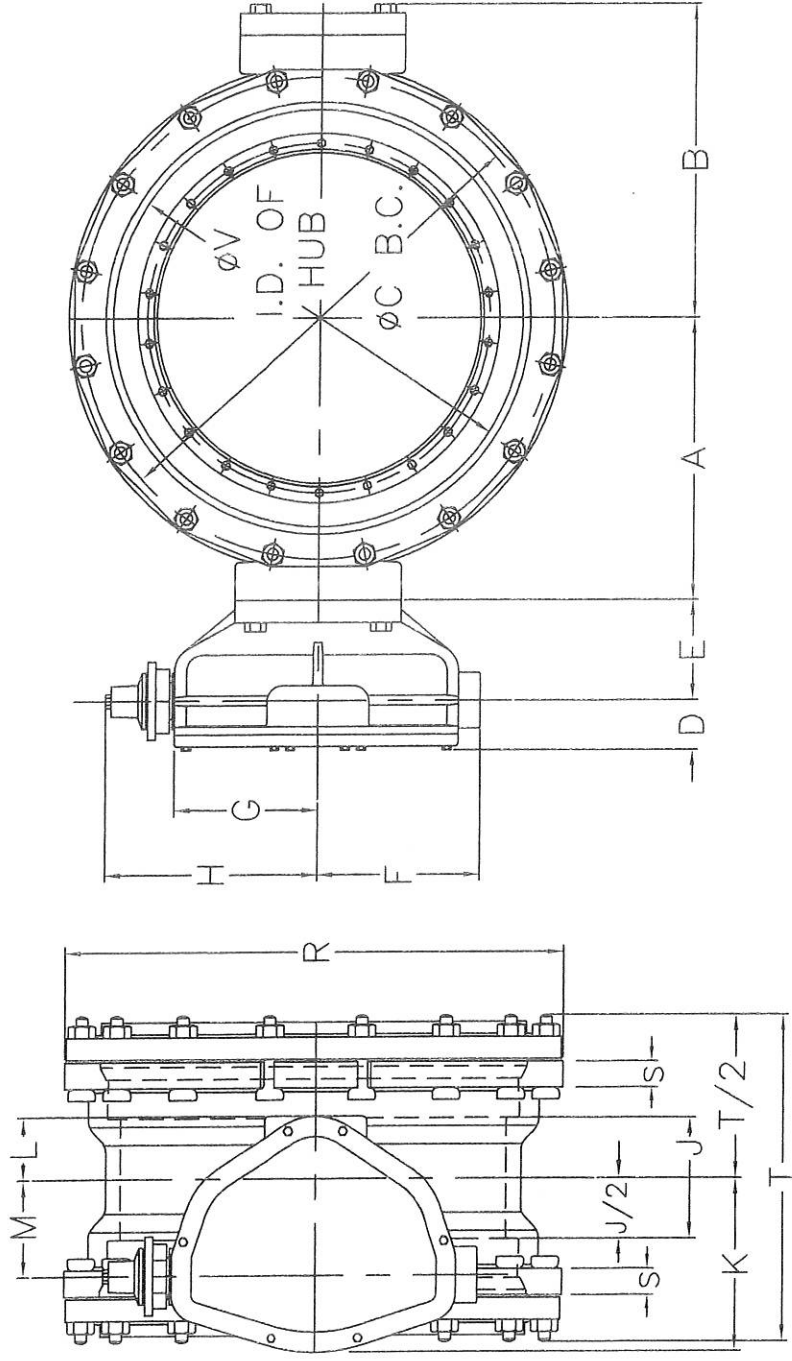
AWWA C504--STYLE 4500
CLASS 150 BUTTERFLY VALVE

DWG. NO.

SUB-ASSEMBLY / MATERIAL LIST
MJ X MJ

CAT914C10002-01

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VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
6"	150	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
8"	250	2 1/8	3 11/16	4 1/4	3 7/8	8 3/4	4 1/2	2 3/8	2	24
10" & 12"	510	2 3/8	4 1/2	5 9/16	5 3/16	10 1/2	6 1/8	2 3/4	3 1/8	36
14", 16", 18" & 20"	1250	3 3/16	5 3/4	8 3/8	7	12 5/16	7 7/8	3 1/4	4	48
24"	2200	3 3/16	6 1/4	10 3/8	9	14 5/16	10 3/4	3 7/8	6	72

VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
4"	4	5 1/8	7 1/2	2 1/2	4	3/4x3 1/2	9 1/8	1	12 3/4	4.90 ^{±.25}	80
6"	5	6 1/8	9 1/2	2 7/8	6	3/4x3 1/2	11 1/8	1 1/16	13	7.00 ^{±.25}	100
8"	6	7 3/8	11 3/4	3	6	3/4x4	13 3/8	1 1/8	14	9.15 ^{±.25}	150
10"	7 3/4	9 1/2	14	4 1/4	8	3/4x4	15 11/16	1 3/16	15 1/8	11.20 ^{±.25}	242
12"	9 1/2	10 7/8	16 1/4	4 1/4	8	3/4x4	17 15/16	1 1/4	16	13.30 ^{±.25}	310
14"	10 7/16	12 3/16	18 3/4	5 3/8	10	3/4x4	20 5/16	1 5/16	17 5/8	15.44 ^{±.25}	510
16"	12 3/16	13 15/16	21	5 1/4	12	3/4x4 1/2	22 9/16	1 3/8	18 1/2	17.54 ^{±.25}	595
18"	13 5/16	15 1/16	23 1/4	6 1/8	12	3/4x4 1/2	24 13/16	1 7/16	19 1/4	19.64 ^{±.25}	760
20"	14 7/8	16 5/8	25 1/2	6 1/8	14	3/4x4 1/2	27 1/16	1 1/2	19 1/8	21.74 ^{±.25}	885
24"	17 19/32	19 5/16	30	7 1/2	16	3/4x5	31 9/16	1 5/8	21 1/4	25.94 ^{±.25}	1190

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-111 (A.N.S.I. A21-11)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: GASKET, GLANDS, BOLTS, FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER



KENNEDY VALVE

Division of McWane, Inc.

1021 EAST WATER STREET EL MIRA, NEW YORK 14001

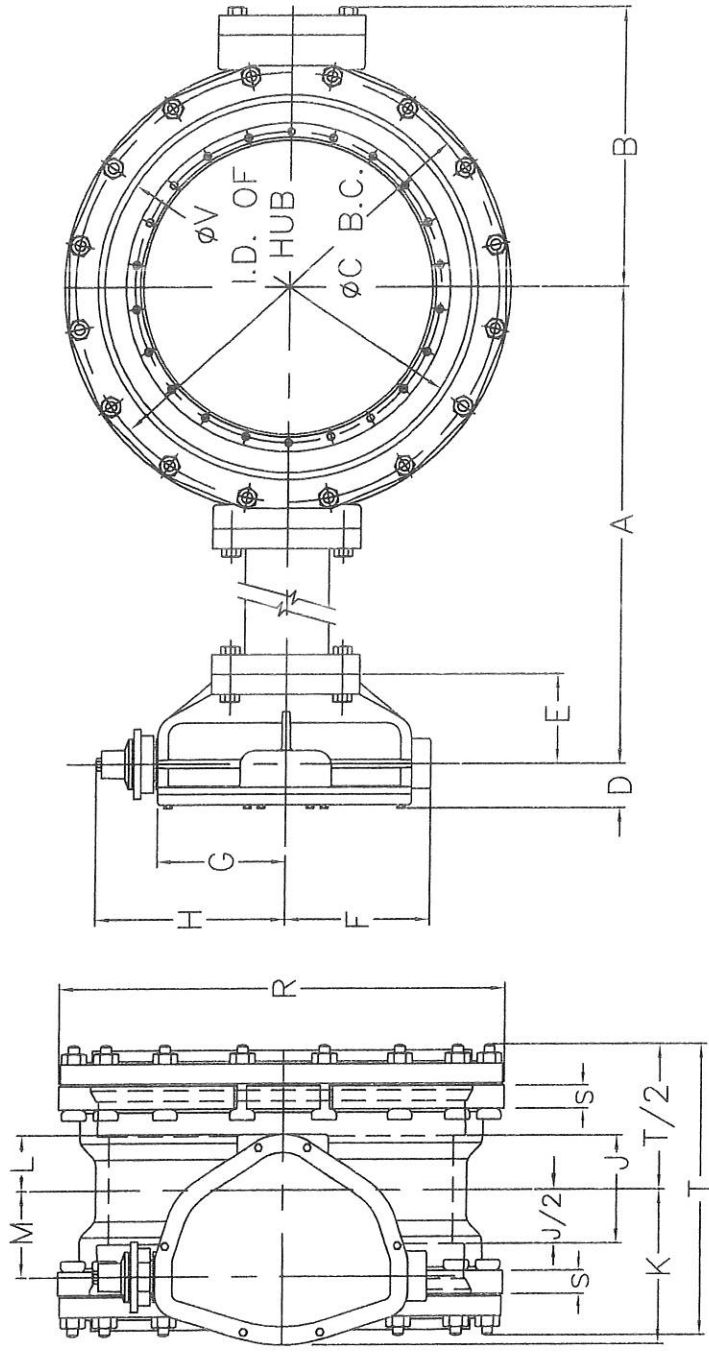
DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10003-01

4"-24" STYLE 4500
CLASS 150 BUTTERFLY VALVE
BURIED OPERATOR
MJ x MJ



VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
6"	150	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
8"	250	2 1/8	3 11/16	4 1/4	3 7/8	8 3/4	4 1/2	2 3/8	2	24
10"	510	2 3/8	4 1/2	5 9/16	5 3/16	10 1/2	6 1/8	2 3/4	3 1/8	36
14", 16", 18" & 20"	1250	3 3/16	5 3/4	8 3/8	7	12 5/16	7 7/8	3 1/4	4	48
24"	2200	3 3/16	6 1/4	10 3/8	9	14 5/16	10 3/4	3 7/8	6	72

VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
4"	NOTE AA	5 1/8	7 1/2	2 1/2	4	3/4	9 1/8	1	12 3/4	4.90 ^{±.05}	80
6"	NOTE AA	6 1/8	9 1/2	2 7/8	6	3/4	11 1/8	1 1/16	13	7.00 ^{±.05}	100
8"	NOTE AA	7 3/8	11 3/4	3	6	3/4	13 3/8	1 1/8	14	9.15 ^{±.05}	150
10"	NOTE AA	9 1/2	14	4 1/4	8	3/4	15 11/16	1 3/16	15 1/8	11.20 ^{±.05}	242
12"	NOTE AA	10 7/8	16 1/4	4 1/4	8	3/4	17 15/16	1 1/4	16	13.30 ^{±.05}	310
14"	NOTE AA	12 3/16	18 3/4	5 3/8	10	3/4	20 5/16	1 5/16	17 5/8	15.44 ^{±.05}	510
16"	NOTE AA	13 15/16	21	5 1/4	12	3/4	22 9/16	1 3/8	18 1/2	17.54 ^{±.05}	595
18"	NOTE AA	15 1/16	23 1/4	6 1/8	12	3/4	24 13/16	1 7/16	19 1/4	19.64 ^{±.05}	760
20"	NOTE AA	16 5/8	25 1/2	6 1/8	14	3/4	27 1/16	1 1/2	19 1/8	21.74 ^{±.05}	885
24"	NOTE AA	19 5/16	30	7 1/2	16	3/4	31 9/16	1 5/8	21 1/4	25.94 ^{±.05}	1190

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-111 (A.N.S.I. A21-11)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: GASKET, GLANDS, BOLTS, FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER

NOTE 9: MAXIMUM LENGTH OF TORQUE TUBE (15 FEET)--BONNET SUPPORTS SHOULD BE USED ON ALL BONNETS EXCEEDING

6 FEET CENTERLINE OF VALVE TO CENTERLINE OF OPERATOR. ALL BONNET SUPPORTS SHALL BE SUPPLIED BY CUSTOMER

NOTE AA: "A" VARIES TO ENGINEER SPECIFICATIONS

*NOTE AB: APPROXIMATE WEIGHT PER EACH FOOT OF EXTENDED BONNET 25LBS(4"-12"), 50LBS(14"-20"), 80LBS(24")



KENNEDY VALVE

Division of McWane, Inc.
1021 EAST WATER STREET FLEMING, NEW YORK 14901

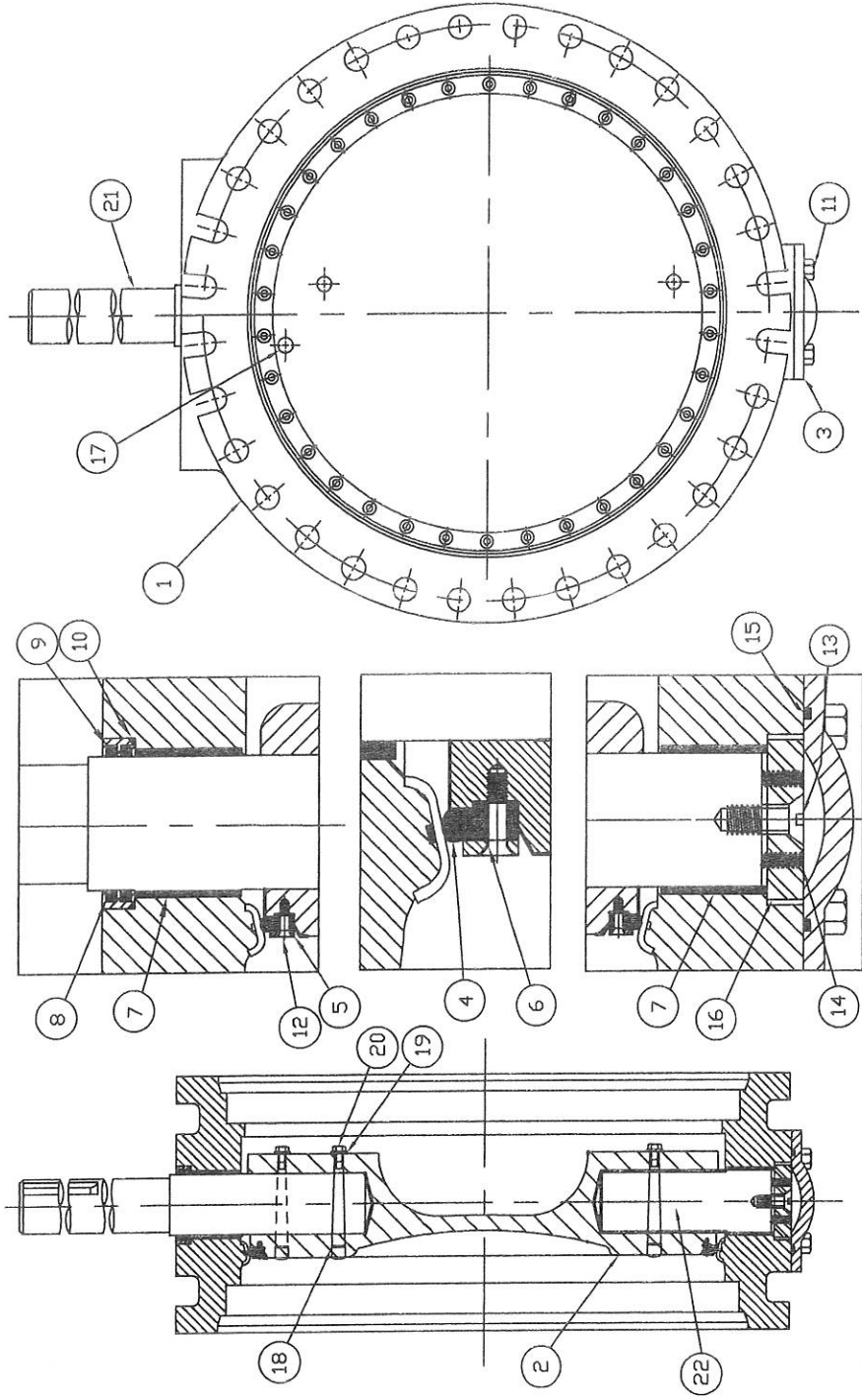
DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10004-01

4" THRU 24" STYLE 4500
CLASS 150 BUTTERFLY VALVE
WITH EXTENDED BONNET
BURIED OPERATOR
MJ X MJ



ITEM #	DESCRIPTION	MATERIAL
1A	VALVE BODY	DUCTILE IRON, ASTM A-536, Grade 70-50-05
1B	BODY RING (Permanently Attached)	316 STAINLESS STEEL
1C	BODY O-RING (Permanently Attached)	BUNA-N
2	VANE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
3	END COVER PLATE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
4	RUBBER VANE SEAT RING	EPDM
5	SEGMENTED CLAMP RING (4)	304 STAINLESS STEEL, ASTM A-276
6	SEALING WASHER	NYLON
7	SHAFT SLEEVE BEARING	FIBERGLIDE BACKED WITH STAINLESS STEEL
8	SHAFT O-RING CARTRIDGE	BRONZE
9	O-RING SHAFT SEALS (2)	BUNA-N
10	OUTSIDE O-RING CARTRIDGE SEAL	BUNA-N
11	END COVER PLATE HEX BOLTS	A307 STEEL (STANDARD)/304 SS/316 SS
12	FLAT HEAD SOCKET SCREW (For Rubber Vane Seat Ring)	18-8 STAINLESS STEEL (WITH LOCITITE)
13	FLAT HEAD SOCKET SCREW (For Thrust Bearing)	18-8 STAINLESS STEEL (WITH NYLOK INSERT)
14	ALLEN HEAD SET SCREW (For Thrust Bearing)	18-8 STAINLESS STEEL (WITH NYLOK INSERT)
15	END COVER PLATE O-RING	BUNA-N
16	THRUST BEARING	BRONZE
17	TAPER PIN (3)	416 STAINLESS STEEL
18	TAPER PIN O-RING (3)	BUNA-N
19	TAPER PIN WASHER (3)	416 STAINLESS STEEL
20	TAPER PIN BOLT (3)	304 STAINLESS STEEL
21	SHAFT (OPERATOR)	304 STAINLESS STEEL
22	SHAFT (THRUST SIDE)	304 STAINLESS STEEL



KENNEDY VALVE

Division of McWane, Inc.

1021 EAST WATER STREET FLEMING, NEW YORK 14901

DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10005-01

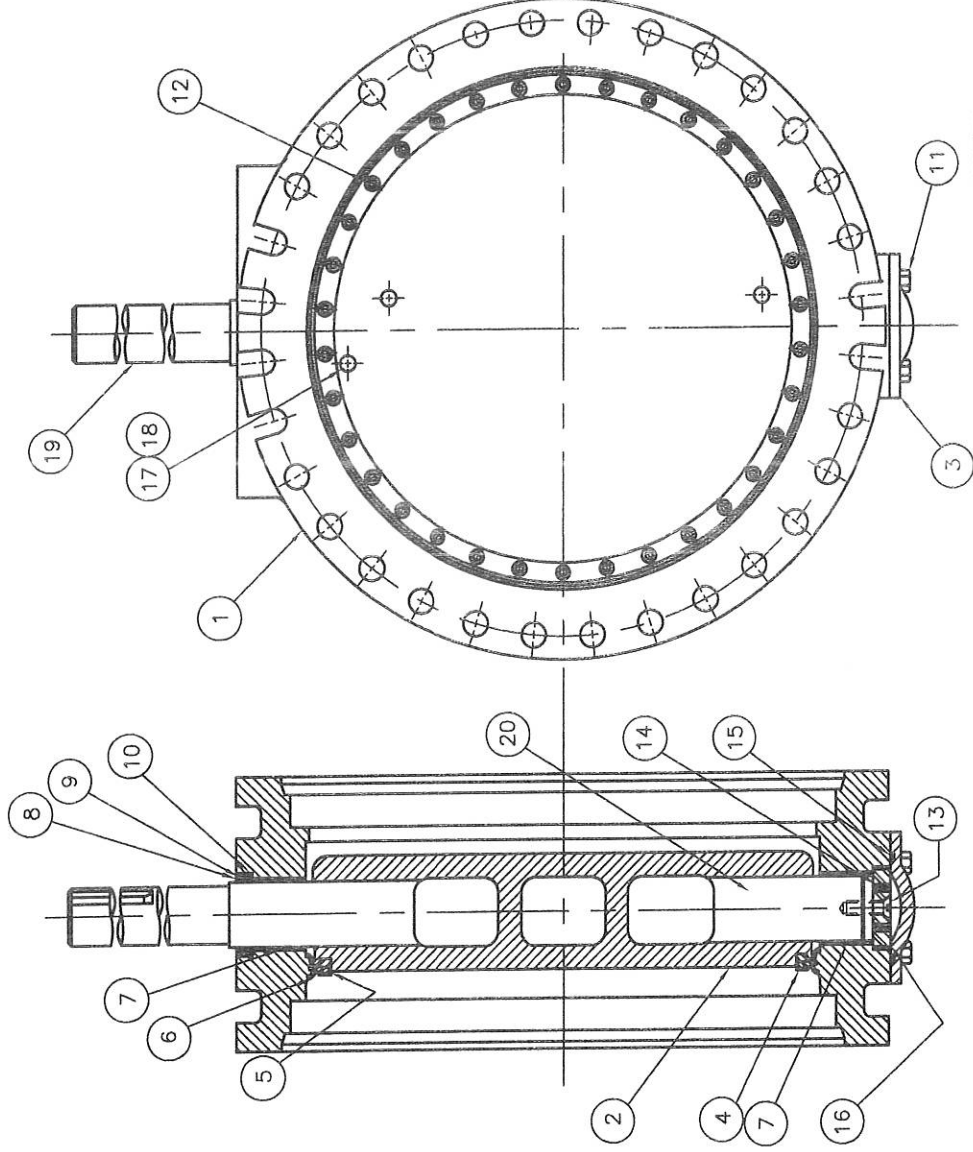
30" & 36"

AWWA C504-STYLE 1450

CLASS 150 BUTTERFLY VALVE

SUB-ASSEMBLY / MATERIAL LIST

MJ X MJ

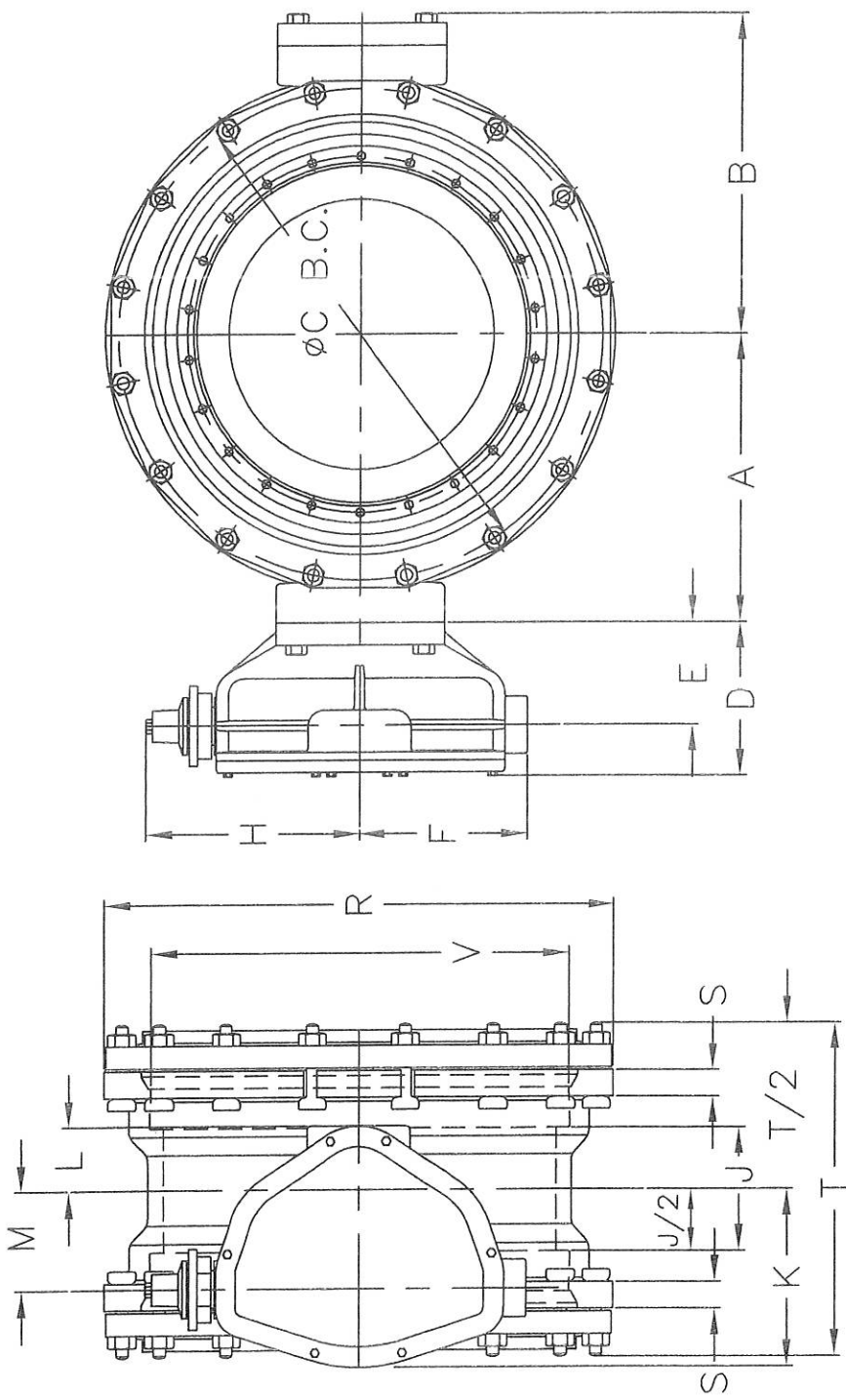


ITEM NO.	DESCRIPTION	MATERIAL
1	BODY, VALVE	DUCTILE IRON, ASTM A-536, GR. 70-50-05 W/316 STN. STL. SEAT
2	VANE	DUCTILE IRON, ASTM A-536 GR. 70-50-05
3	END COVER	DUCTILE IRON, ASTM A-536 GR. 70-50-05
4	SEAT RING, VANE	EPDM
5	CLAMP RING, SEAT	304 STAINLESS STEEL
6	SEALING WASHER	NYLON
7	BUSHING, BODY	FIBERGLIDE
8	CARTRIDGE, SHAFT	BRONZE
9	SEAL, SHAFT	BUNA-N
10	SEAL, CARTRIDGE	BUNA-N
11	BOLT, END COVER	A307 STEEL (STANDARD)/304 SS (OPTIONAL)/316 SS (OPTIONAL)
12	SOCKET SCREW ~ FLAT HEAD	18-8 STAINLESS STEEL W/NYLOK INSERT
13	SOCKET SCREW ~ FLAT HEAD	18-8 STAINLESS STEEL W/NYLOK INSERT
14	SET SCREW ~ FLAT POINT	18-8 STAINLESS STEEL W/NYLOK INSERT
15	END COVER SEAL	BUNA-N
16	THRUST BEARING	BRONZE
17	TAPER PIN	STAINLESS STEEL
18	TAPER PIN BOLT	18-8 STAINLESS STEEL
19	SHAFT (OPERATOR)	304 STAINLESS STEEL
20	SHAFT (THRUST)	304 STAINLESS STEEL



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET, ELMIRA, NEW YORK 14901

DWN: D SKAKAL 42" & 48" STYLE 1450
DATE: 5/22/17 CLASS 150 BUTTERFLY VALVE
DWG. NO. SUB-ASSEMBLY / MATERIAL LIST
CAT914C10006-01 (NON-ADJUSTABLE PACKING) MJ X MJ



VALVE SIZE	A	B	C	D	E	F	H	K	L	M	N
30" & 36"	20 5/8	21 1/2	36 7/8	12	20	1	39 1/8	1 13/16	28 3/8	32.22	2300
36"	24 1/8	25 1/16	43 3/4	12	24	1	46	2	28 3/8	38.47	2840
42"	28	28 7/8	50 5/8	12	28	1 1/4	53 1/8	2	28 3/8	44.67	4405

VALVE SIZE	A	B	C	D	E	F	H	K	L	M	N
30"	20 5/8	21 1/2	36 7/8	12	20	1	39 1/8	1 13/16	28 3/8	32.22	2300
36"	24 1/8	25 1/16	43 3/4	12	24	1	46	2	28 3/8	38.47	2840
42"	28	28 7/8	50 5/8	12	28	1 1/4	53 1/8	2	28 3/8	44.67	4405

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-111 (A.N.S.I. A21-11)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: GASKET, GLANDS, BOLTS, FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER

NOTE 9: 2200 OPERATOR ON 30" & 36" --4350 OPERATOR ON 42"



KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIIRA, NEW YORK 14901

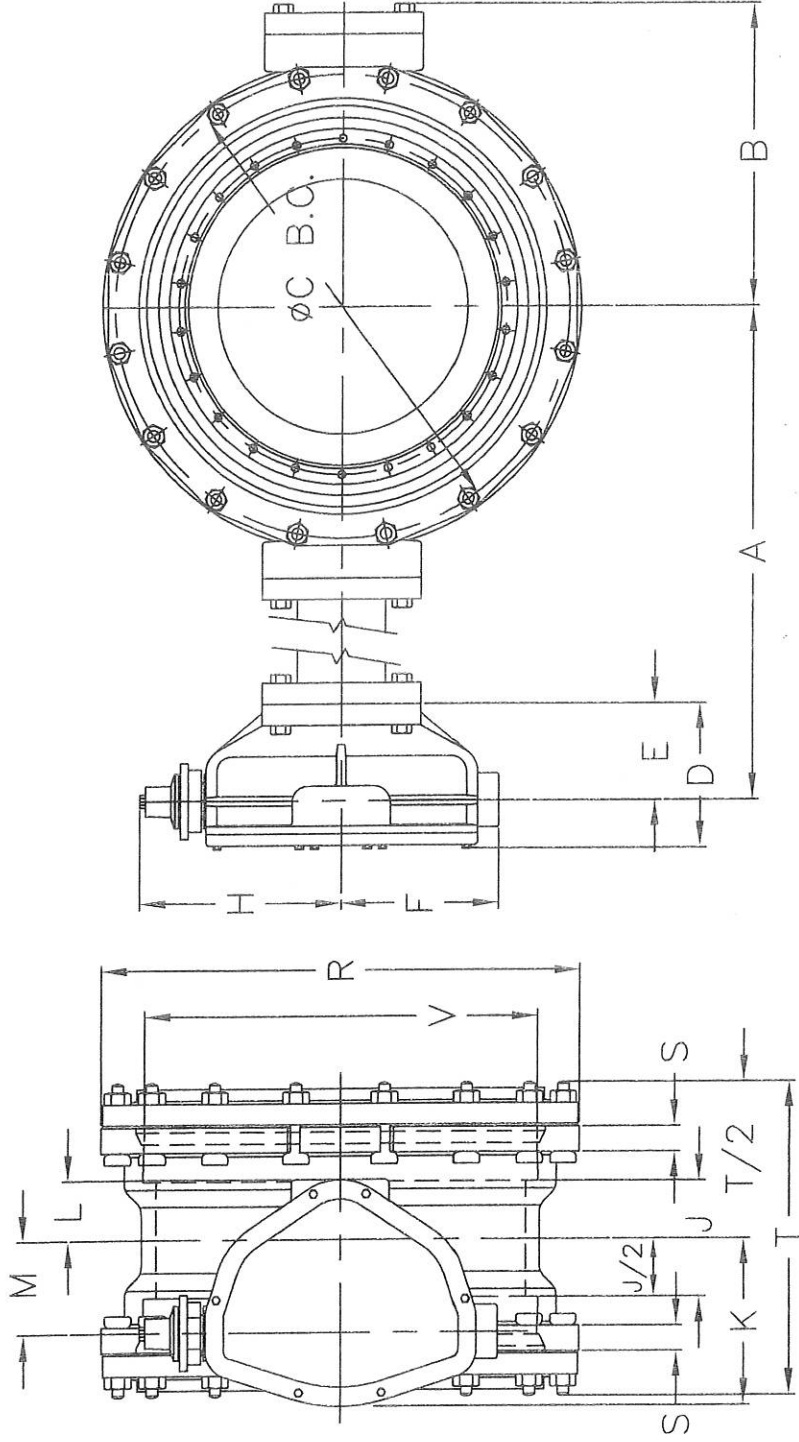
DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10007-01

30" THRU 42" STYLE 1450
CLASS 150 BUTTERFLY VALVE
BURIED OPERATOR
MJ X MJ



	OPERATOR MODEL		D	E	F	H	K	L	M	N
30" & 36"	2200	4350	9 7/16	6 1/4	10 3/8	14 5/16	10 3/4	3 7/8	6	72
42"			10 3/16	6 1/16	14 5/16	18	13 5/16	4 3/16	7 1/2	90

VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
30"	NOTE AA	21 1/2	36 7/8	12	20	1	39 1/8	1 13/16	28 3/8	32.22	2300
36"	NOTE AA	25 1/16	43 3/4	12	24	1	46	2	28 3/8	38.47	2840
42"	NOTE AA	28 7/8	50 5/8	12	28	1 1/4	53 1/8	2	28 3/8	44.67	4405

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-111 (A.N.S.I. A21-11)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: GASKET, GLANDS, BOLTS, FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER

NOTE 9: 2200 OPERATOR ON 30" & 36"---4350 OPERATOR ON 42"

NOTE 10: MAXIMUM LENGTH OF TORQUE TUBE (15 FEET)---BONNET SUPPORTS SHOULD BE USED ON ALL BONNETS EXCEEDING 6 FEET CENTERLINE OF VALVE TO CENTERLINE OF OPERATOR. ALL BONNET SUPPORTS SHALL BE SUPPLIED BY CUSTOMER

NOTE AA: "A" VARIES TO ENGINEER SPECIFICATIONS

*NOTE AB: APPROXIMATE WEIGHT PER EACH FOOT OF EXTENDED BONNET 150lbs (30"-42")



KENNEDY VALVE

Division of McWane, Inc.

1021 EAST WATER STREET FLEMING, NEW YORK 14001

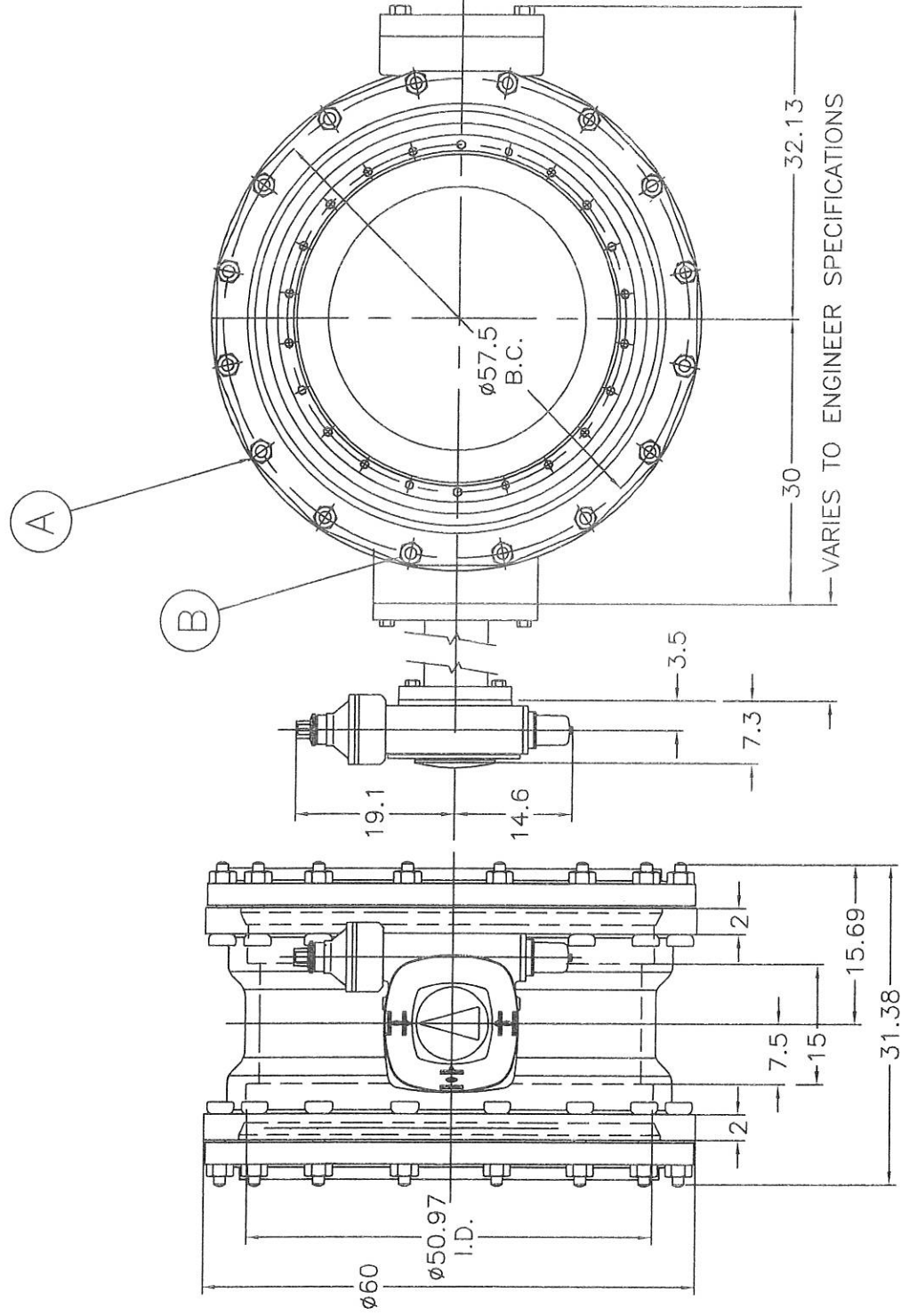
DWN: D SKAKAL

DATE: 5/22/17

DWG. NO.

CAT914C10008-01

30" THRU 42" STYLE 1450
CLASS 150 BUTTERFLY VALVE
WITH EXTENDED BONNET
BURIED OPERATOR
MJ X MJ



- NOTE 1: FLOW MAY BE IN EITHER DIRECTION
 NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.
 NOTE 3: REFERENCE AWWA C-504-B
 NOTE 4: NUMBER OF TURNS TO CLOSE = 108
 NOTE 5: OPERATED BY 2" AWWA OPERATING / WRENCH NUT
 NOTE 6: A = (32) $\phi 1.25$ " BOLTS PER FLANGE
 NOTE 7: B = (8) 1.38 SLOTTED HOLES EACH FLANGE
 NOTE 8: RATED AND TESTED TO 150 PSI WORKING PRESSURE
 NOTE 9: APPROXIMATE WEIGHT = 6300lbs.



KENNEDY VALVE
 Division of McWane, Inc.
 1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: D SKAKAL 48" STYLE 1450
 DATE: 5/22/17
 DWG. NO. CAT914C10010-01
 CLASS 150 BUTTERFLY VALVE
 (AUMA GS200.3/GZ200.3:8 GEAR BOX)
 BURIED OPERATOR & EXTENDED BONNET
 MJ X MJ ENDS

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

Size Range	2"-48"	
	Water working Pressure psi	Hydrostatic Test psi
2"-12"	200	400
14"-48"	150	300

Available in either, NRS, or OS&Y.

Available End Connections & Size Range Figure No.

Fig.-NRS	2"-48"	F-5070
Fig.-OS&Y	14"-36"	F-5072
M.J.	2"-36"	F-5065
M J Cutting End	4"-12"	F-5067
Fig. & M.J.	4"-36"	F-5066
Push-on Ends for PVC	2"-10"	F-5085

Accessories

Floorstands (NRS & R.S.)	By-Pass Valves
Needle & Slot (Navy) Indicators	Enclosed Gearing(Grease Case)
Electric Motors	Position Indicators
2" Sq. Operating Nuts	Tracks, Rollers, & Scrapers for
Chainwheels	Valves 14" or larger
"T" Handles	Horizontal Position in Horizontal Line
Stem Guides	Handwheels
Indicator Posts	Extension Stems

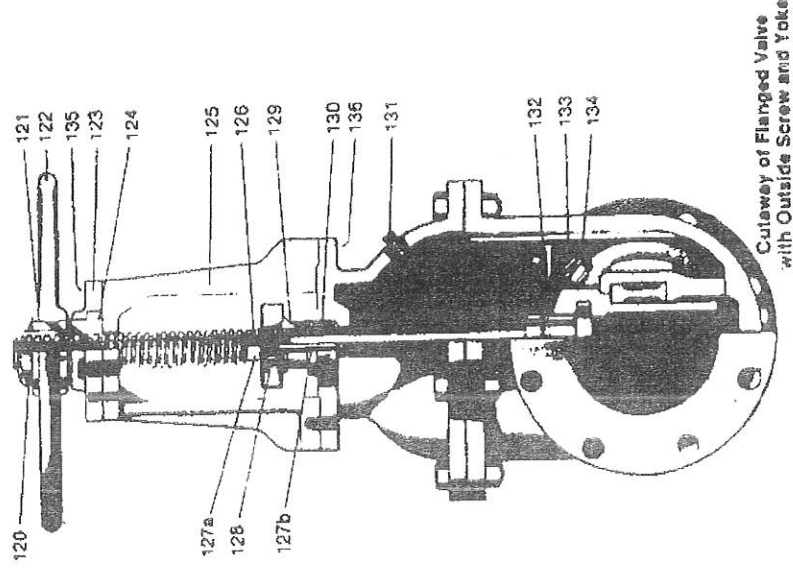
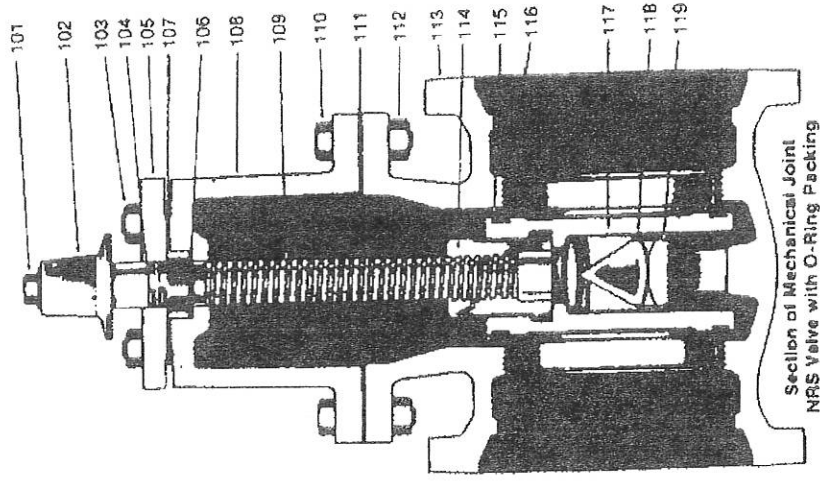
Floor Boxes

*Note: Call Factory For Special Applications

AWWA DOUBLE DISC GATE VALVES PARTS LIST

KENNEDY VALVE

*Recommended Spare Parts



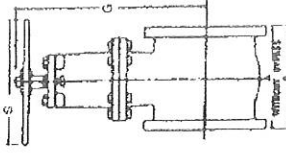
DET.	QTY.	DESCRIPTION	MATERIAL
101	1	Cap Screw	Steel
102	1	Operating Nut	Cast Iron
*103		O-Ring Plate Bolts & Nuts	Steel
*104	2	O-Rings	Rubber
105	1	O-Ring Plate	Cast Iron
106	1	Low Torque Bearing	
*107	1	Stuffing Box Gasket	
108	1	Cover	Cast Iron
*109	1	Non-Rising Stem	Bronze
*110		Neck Flange Bolts	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
136		OS&Y Yoke Bolts & Nuts	Steel – Rust-Proofed

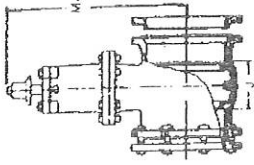
KENNEDY AWWA GATE VALVES UNDERGROUND AND PLANT PIPING SYSTEMS

KENNEDY VALVE

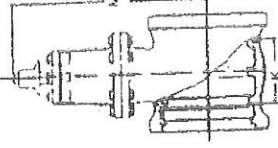
VALVE SIZE	A	B	G	J	K	M ₁	P	Q	R	S	U	Y	Z	AA	BB	DD	GG	HH	LL	Open	Stem
2	7	—	10 1/4	3 1/4	—	10 1/4	3	14	11 1/2	7 1/4	—	—	—	—	—	—	—	—	5 1/8	5	7/8
2 1/4	7 1/2	—	10 1/4	3 1/4	—	10 1/4	—	—	—	7 1/4	—	—	—	—	—	—	—	—	—	5	7/8
2 1/2	7 1/2	—	11 3/8	—	—	11 3/8	3/8	20 1/4	12 1/2	7 1/4	—	—	—	—	—	—	—	—	—	6	7/8
3	8	—	12 1/4	4 3/4	5 1/4	12 1/2	4 1/2	24	19 3/4	10	—	—	—	—	—	—	—	—	6 7/8	15	7 1/8
4	9	—	14	—	—	15 1/2	—	27 1/4	23 1/4	10	—	—	—	—	—	—	—	—	—	18	7 1/8
5	10	—	15 1/2	—	6 1/2	22	6 1/4	40 1/2	31 1/2	12	—	—	—	—	—	—	—	—	8	21	7 1/4
6	10 1/2	—	18	5 1/4	6 1/2	22	6 1/4	40 1/2	31 1/2	14	—	—	—	—	—	—	—	—	9	27	7 1/4
8	11 1/2	—	22	6 1/2	7 1/4	25 5/8	6 1/2	47 1/4	36 1/4	18	—	—	—	—	—	—	—	—	—	33	1 1/2
10	13	—	25 5/8	6 1/4	7 1/4	29 1/8	—	58 3/8	45 3/8	18	—	—	—	—	—	—	—	—	—	39	7 1/2
12	14	—	29 1/8	7	7 3/4	39 3/4	—	68	53	22	19 1/4	8	3 7/8	18	45	12	42 3/4	35 7/8	11 1/2	45	7 1/8
14	15 1/4	23	36 1/2	7 1/4	—	—	—	68	75 1/4	22	20 1/2	8	33 3/8	18	49	12	46 1/4	39 3/4	15 3/8	52	7 1/8
16	17	23	40 3/4	9 1/4	—	43 1/2	—	82 1/2	63 1/2	26	22 1/2	8	36 3/8	18	50	12	47 1/4	42 7/8	16 1/2	58	2 1/8
18	19	24	43 1/4	9 1/4	—	46	—	90 1/4	69 1/4	26	24	8	40 1/2	18	55 1/4	12	46 1/2	46 1/2	18 3/8	64	2 1/8
20	20	24	47 1/4	10	—	50	—	107	82	30	28	8	46	18	62 1/8	12	60	52 7/8	22	76	2 1/2
24	23	28 1/2	55	16	—	56 3/4	—	107	82	30	31 1/2	10	54 1/2	18	76 3/4	15 1/2	72 1/8	72 1/8	—	63	2 3/4
30	25	32 1/2	64 3/4	12 1/2	—	66 1/2	—	128 1/4	97	30	30	10	54 1/2	22	88 3/8	21 1/2	81 1/8	72 3/8	—	75	3
36	27	36	75 3/8	23 1/4	—	77 3/8	—	147 1/2	110	30	30	10	77 1/2	30	106 3/8	27	105 1/2	97	—	88	3 1/2
42	34	34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
48	45 1/2	45 1/2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



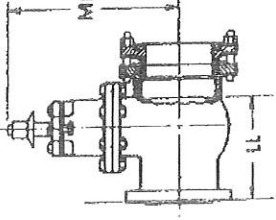
C561/F-5070
Flanged Ends



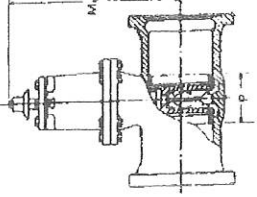
C571/F-5065
Mechanical Joint
C572/F-5066



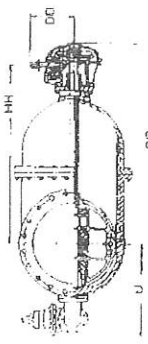
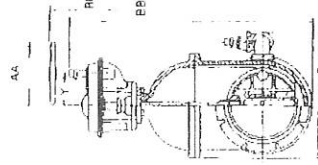
Push-On Ends
For Cast Iron Pipe
C950/F-5093



Mechanical Joint
Tapping Valve
C597/F-5085



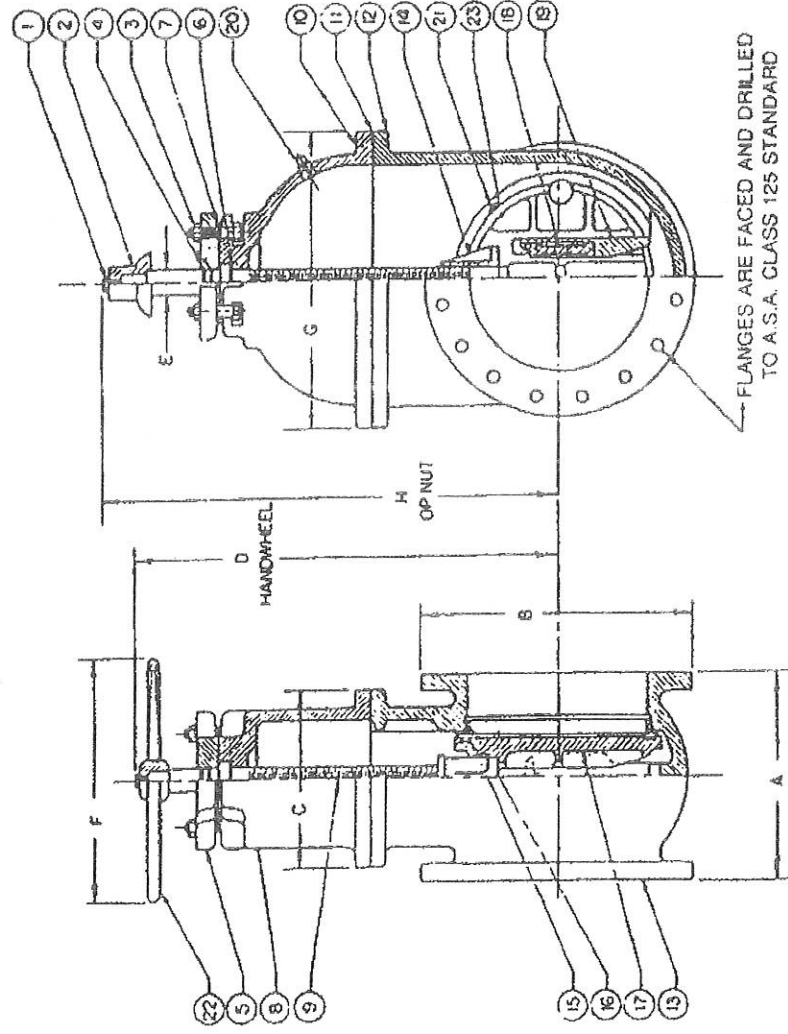
Push-On Ends
For PVC Pipe
C566/F-5072



URNS TO OPEN ARE FOR VALVES WITHOUT GEARING
DIMENSIONS-INCHES
FLANGES ARE FACED AND DRILLED TO ANSI 125 POUND
TEMPLATE, UNLESS OTHERWISE SPECIFIED

2"-12" FLANGED END C561/F-5070 GATE VALVE

KENNEDY VALVE

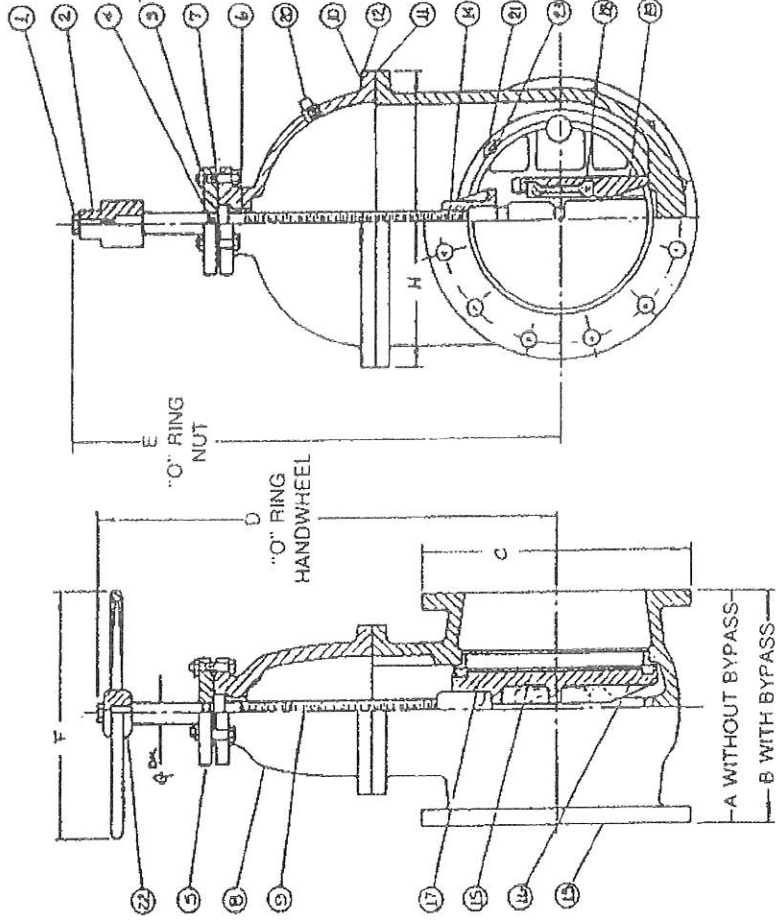


SEQ.	QTY.	DESCRIPTION	MATERIAL
1	1	Capscrew	Steel
2	1	Operating Nut	Cast Iron
3		Bolts & Nuts	Stainless Steel
4	2	O-Rings	Rubber
5	1	O-Ring Plate	Cast Iron
6	1	Low Torque Bearing	Delrin 1
7	1	Stuffing Box Gasket	Composition
8	1	Cover	Cast Iron
9	1	Non-Rising Stem	Bronze
10		Neck-Flange Bolts	Stainless 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	A	B	C	D	E	F	G	H	Weight	Turns to Open
2	7	6	5	11 ³ / ₄	1 ¹ / ₈	7 ¹ / ₄	5 ¹ / ₈	11 ³ / ₄	30	5
2 ¹ / ₂	7 ¹ / ₂	7	5 ¹ / ₈	13	7 ¹ / ₈	7 ¹ / ₄	6 ³ / ₈	13	30	6
3	8	7 ¹ / ₂	5 ¹ / ₂	14	7 ¹ / ₈	7 ¹ / ₄	7 ¹ / ₈	14	50	7
4	9	9	7	15 ¹ / ₄	1 ¹ / ₈	10	9	15 ¹ / ₄	90	15
5	10	10	7 ³ / ₄	16 ³ / ₄	1 ¹ / ₈	10	10 ⁷ / ₈	16 ³ / ₄	120	18
6	10 ¹ / ₂	11	9	18 ¹ / ₂	1 ¹ / ₄	12	12 ⁵ / ₈	18 ¹ / ₂	166	21
8	11 ¹ / ₂	13 ¹ / ₂	10	21 ⁵ / ₈	1 ³ / ₈	14	15 ¹ / ₄	21 ⁵ / ₈	288	27
10	13	16	10 ⁵ / ₈	28 ¹ / ₄	1 ¹ / ₂	18	18 ¹ / ₄	28 ¹ / ₄	405	33
12	14	19	11 ¹ / ₄	30 ³ / ₄	1 ¹ / ₂	18	20 ¹ / ₄	30 ³ / ₄	565	39

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

KENNEDY VALVE



ITEM	QTY.	DESCRIPTION	MATERIAL
1	1	Capscrew	Steel
2	1	Operating Nut	Cast Iron
3		Bolts & Nuts	Stainless Steel
4	2	O-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

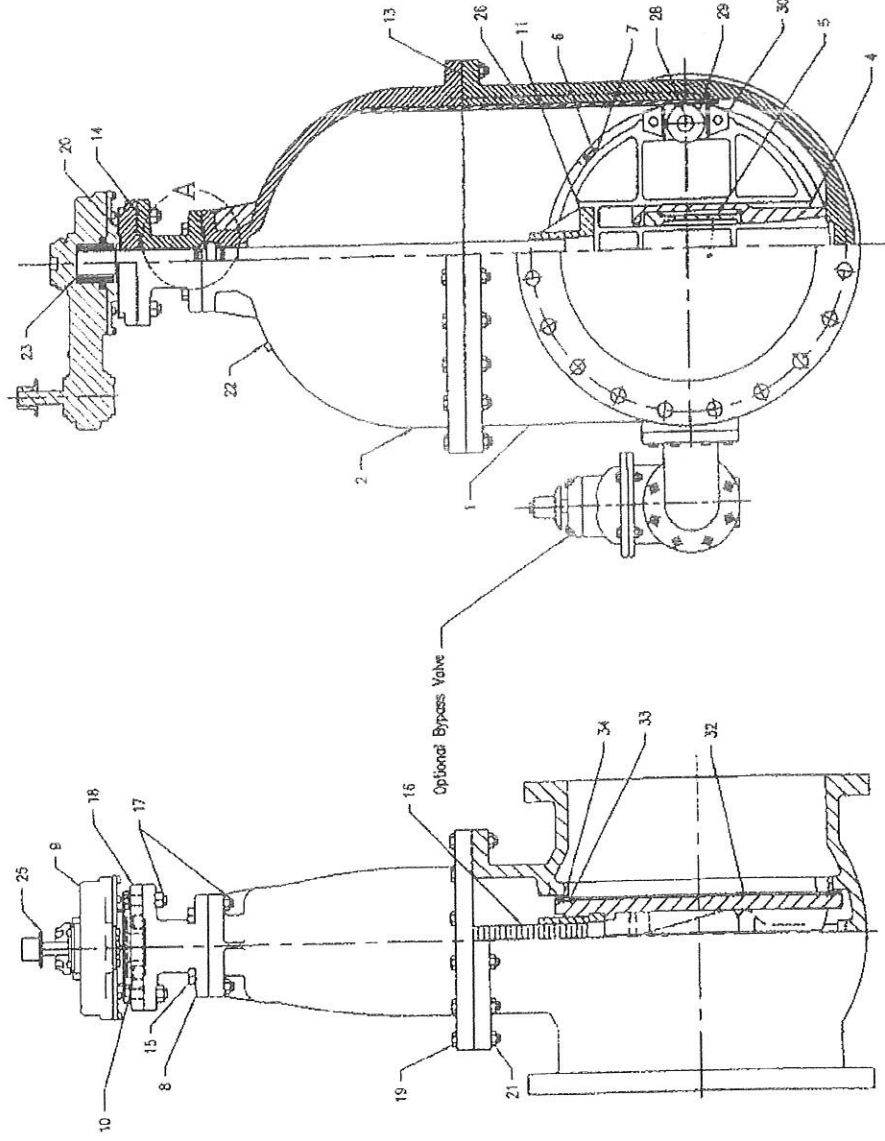
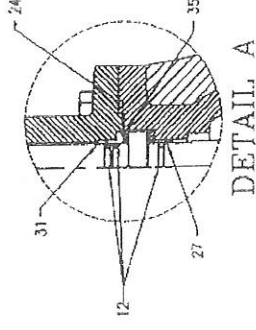
VALVE SIZE	A	B	C	D	E	F	G	H	Weight	Turns to Open
14	15 ³ / ₄	23	21	36 ¹ / ₂	38 ³ / ₄	22	1 ¹ / ₈	23 ³ / ₈	876	45
16	17	23	23 ¹ / ₂	40 ³ / ₄	43 ¹ / ₂	22	1 ¹ / ₈	25 ³ / ₄	1155	52
18	18	24	25	43 ¹ / ₄	46	26	2 ¹ / ₈	27 ³ / ₄	1460	58
20	20	24	27 ¹ / ₂	47 ¹ / ₄	50	26	2 ¹ / ₈	32 ¹ / ₈	1980	64
24	23	28 ¹ / ₂	32	55	56 ³ / ₄	30	2 ¹ / ₂	35 ³ / ₄	2730	76
30	25	32 ¹ / ₂	38 ³ / ₄	64 ³ / ₄	66 ¹ / ₂	30	2 ³ / ₄	45 ³ / ₄	4784	63
36	27	36	46	75 ³ / ₈	77 ³ / ₈	36	3	56 ¹ / ₄	5301	75

DET	QTY	Description	MATERIAL
1	1	Body	Gray Iron, ASTM A126 Class B
2	1	Cover	Gray Iron, ASTM A126 Class B
3	1	Cap
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	14"-16" Only
		Actuator 3:1	18"-24" Only
10	4	Socket Head Bolt	Alloy Steel
11	1	Stem Nut	Bronze, ASTM B584 C83600
12	3	O-ring-Stem	NBR
13	2	O-ring-Cover	NBR
14	1	O-ring-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	O-ring-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

C561/F5070

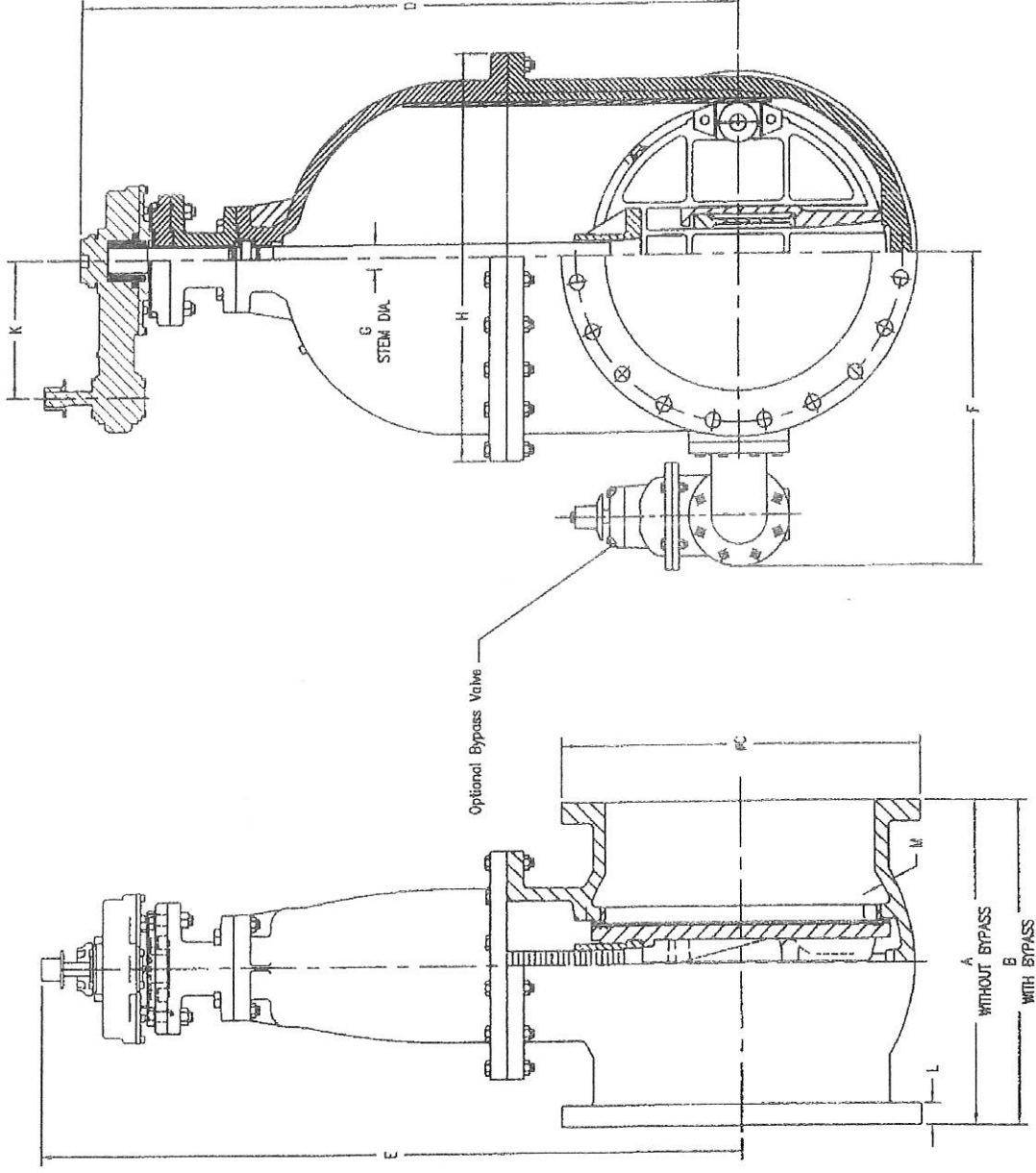


14" - 24" DOUBLE DISC SPUR GEAR FLANGE END DIMENSIONAL LIST

KENNEDY VALVE

C561/F5070

VALVE SIZE	14	16	18	20	24
A	15-3/4	17	19	20	23
B	23	23	24	24	28-1/2
C	21	23-1/2	25	27-1/2	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
H	23-5/8	25-3/4	27-3/4	32-7/8	35-3/4
K	8	8	12	12	12
L	1-3/8	1-7/16	1-9/16	1-11/16	1-7/8
M	7/8	7/8	15/16	1	1-1/8
Turns to Open	90	104	174	192	228

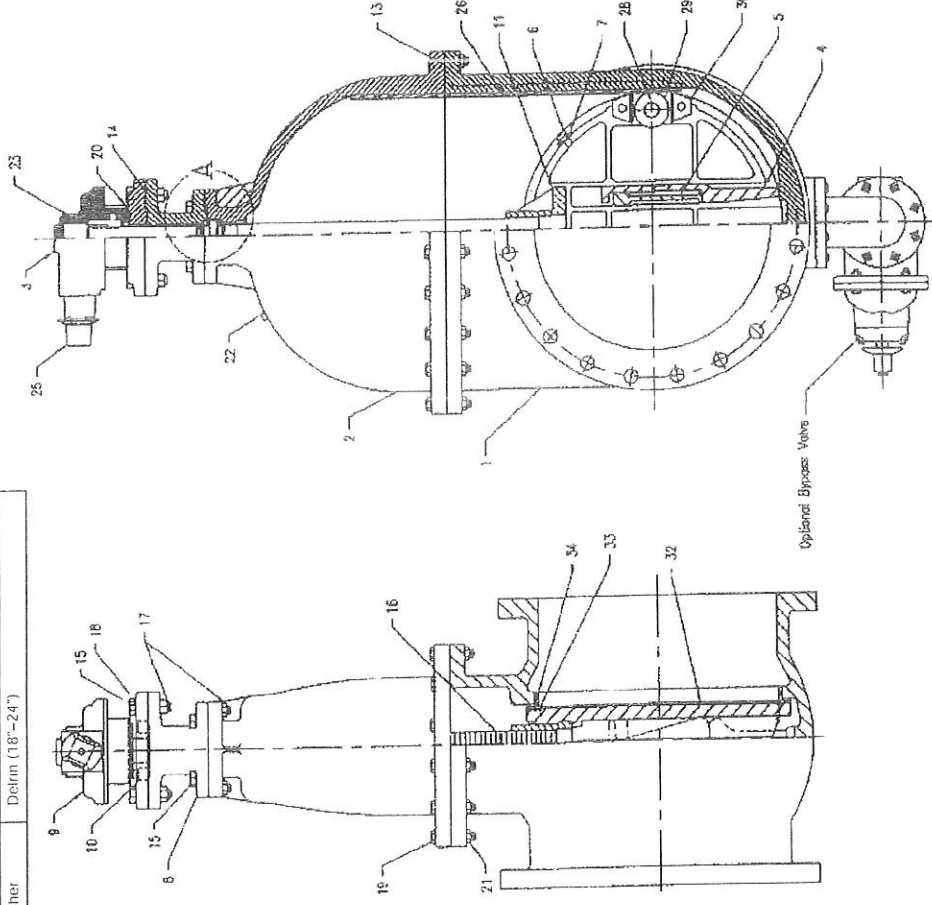
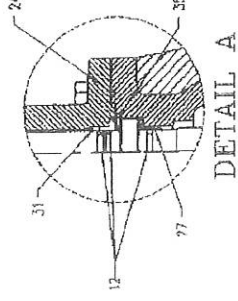


14" - 24" DOUBLE DISC BEVEL GEAR MATERIAL LIST

KENNEDY VALVE

C561/F5070

DET	QTY	Description	MATERIAL
1	1	Body	Gray Iron, ASTM A126 Class B
2	1	Cover	Gray Iron, ASTM A126 Class B
3	1	Cap	-----
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")

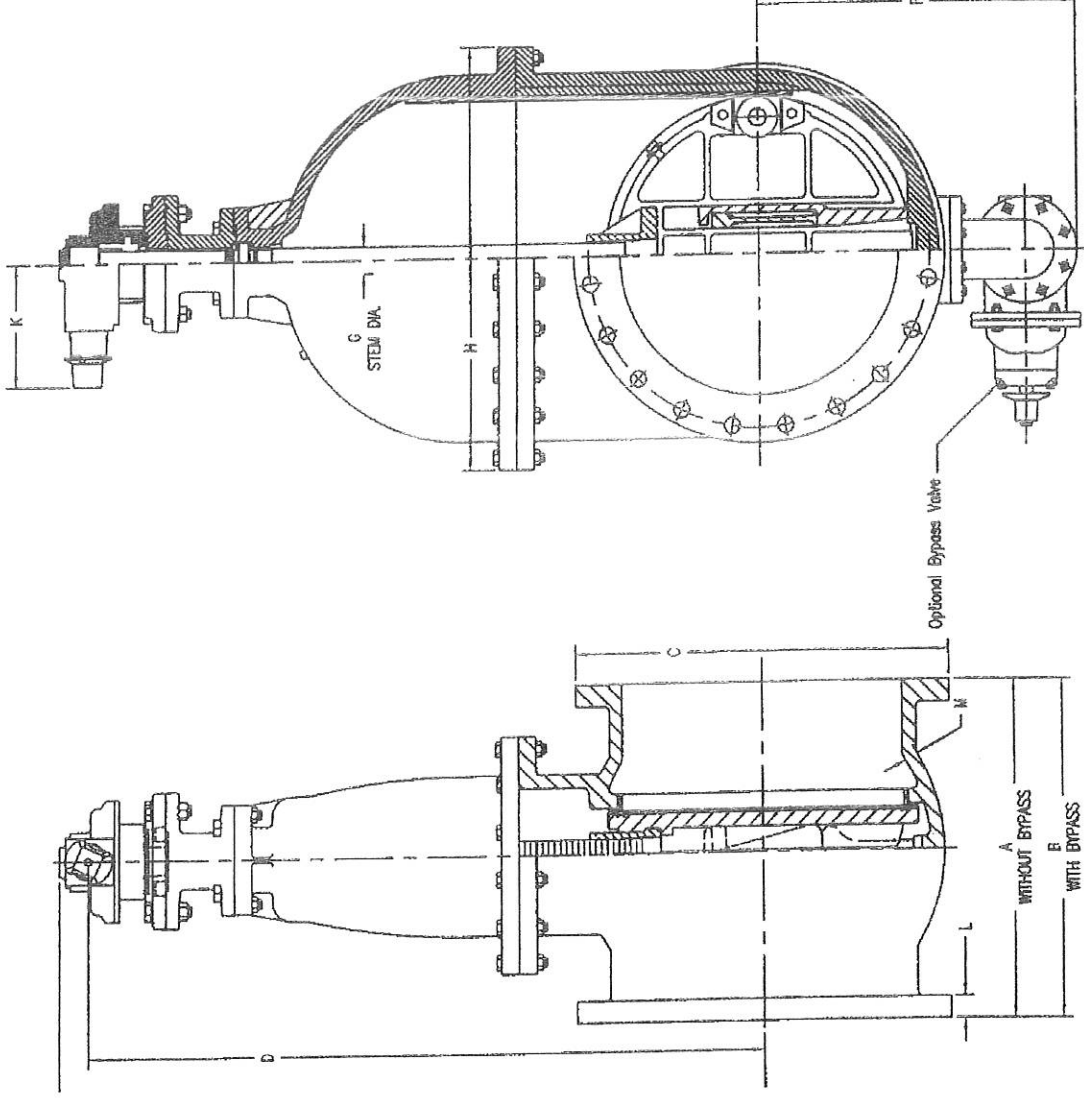


14" - 24" DOUBLE DISC BEVEL GEAR FLANGE END DIMENSIONAL LIST

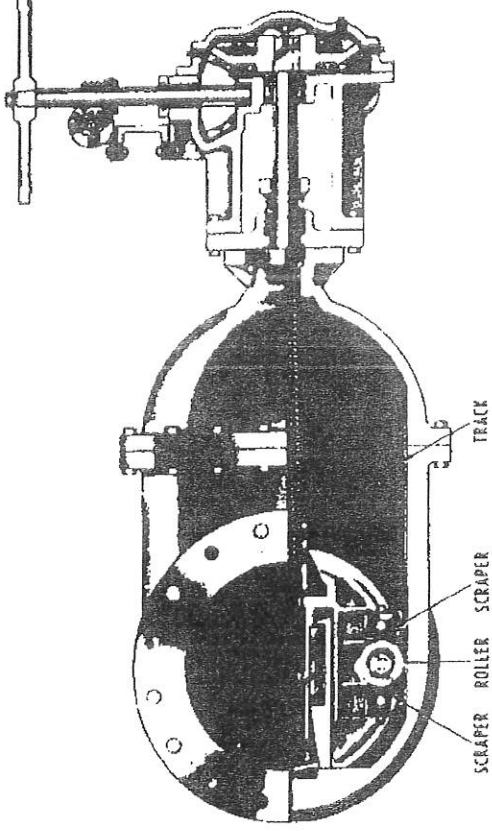
KENNEDY VALVE

C561/F5070

VALVE SIZE	14	16	18	20	24
A	15-3/4	17	19	20	23
B	23	23	24	24	28-1/2
C	21	23-1/2	25	27-1/2	32
D	37	41	47-7/8	51-1/2	58
E	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
H	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
M	7/8	7/8	15/16	1	1-1/8
Turns to Open	90	104	174	192	228



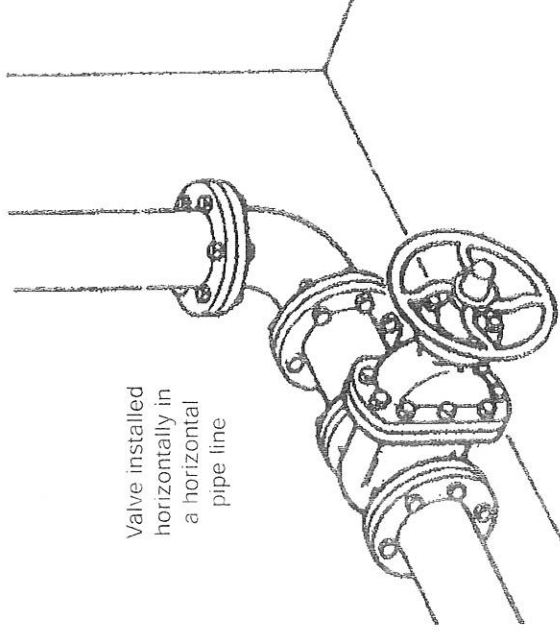
For 14-inch and Larger Diameter Gate Valves Installed Horizontally



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.



Valve installed horizontally in a horizontal pipe line

**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 Pressure psi	Hydrostatic Test psi
4"-20"	250	500
24"-30"	225	450

Available in either, NRS or OS&Y.

Available End Connections & Size Range

Fig. (NRS) 4" - 48"

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

Figure No.

F-5300

F-5305

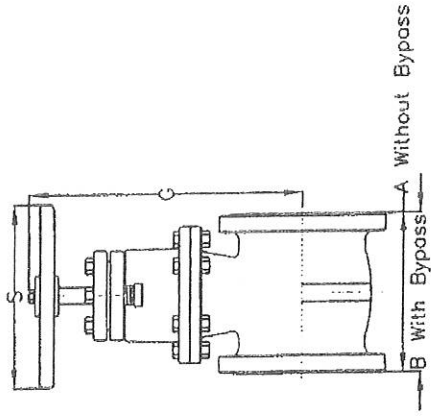
Accessories

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

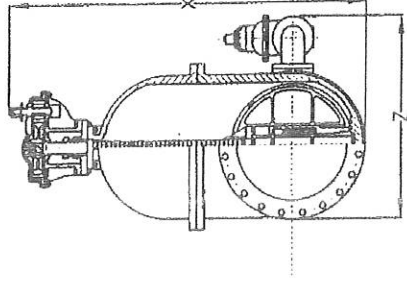
Flanges are faced and drilled to ANSI Class 250 Standard

LIST 16 EXTRA HEAVY DOUBLE DISC GATE VALVES GENERAL DIMENSIONS

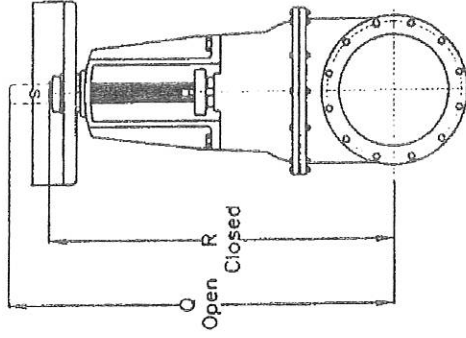
KENNEDY VALVE



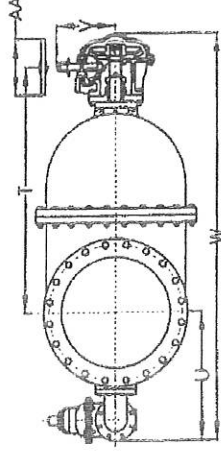
Flanged Ends, NRS



Flanged ends
NRS Spur
Gear
By-Pass



Flanged Ends, OS&Y



Flanged ends, NRS,
with Bevel Gears,
By-Pass

VALVE SIZE	A	B	G	Q	R	S	T	U	V	W	X	Y	Z	AA	Turns to Open	Diam. of Stem
4	9 ⁵ / ₁₆	—	14	24	19 ³ / ₄	10	—	—	—	—	—	—	—	—	15	1 ¹ / ₁₆
6	11 ¹ / ₂	—	18	32 ¹ / ₂	25 ¹ / ₂	12	—	—	—	—	—	—	—	—	21	1 ¹ / ₄
8	12 ¹ / ₂	—	22	40 ¹ / ₂	31 ¹ / ₂	14	—	—	—	—	—	—	—	—	27	1 ³ / ₁₆
10	14 ¹ / ₂	—	25 ⁵ / ₁₆	47 ¹ / ₄	36 ¹ / ₄	18	—	—	—	—	—	—	—	—	33	1 ¹ / ₂
12	17	—	29 ¹ / ₁₆	58 ¹ / ₄	45 ³ / ₄	18	27 ¹ / ₁₆	—	13	—	36 ¹ / ₁₆	8	—	18	39	1 ¹ / ₂
14	17 ¹ / ₂	26 ¹ / ₄	36 ¹ / ₄	67 ³ / ₄	52 ³ / ₄	22	33	21	13	58 ¹ / ₄	41	8	33	18	45	1 ⁷ / ₁₆
16	19	27 ¹ / ₂	40 ¹ / ₄	74 ³ / ₄	57 ³ / ₄	26	36 ¹ / ₁₆	22	13	64	45	8	35 ¹ / ₄	18	52	2
18	21	27 ¹ / ₂	43 ³ / ₁₆	82 ¹ / ₂	63 ¹ / ₂	26	39 ¹ / ₁₆	24	13	69 ³ / ₄	48	8	38 ¹ / ₂	18	58	2 ¹ / ₁₆
20	21 ¹ / ₂	28	48	90 ¹ / ₄	69 ¹ / ₄	30	43 ³ / ₄	24 ³ / ₄	13	74	51 ³ / ₄	8	41 ¹ / ₂	18	64	2 ¹ / ₄
24	26	34	54 ³ / ₁₆	105	79 ³ / ₄	30	52 ¹ / ₁₆	29 ¹ / ₂	17 ¹ / ₂	89	60 ¹ / ₁₆	10	47 ¹ / ₄	18	51	2 ¹ / ₄
30	30	34	65 ³ / ₁₆	128 ¹ / ₄	97	36	64 ¹ / ₁₆	33 ¹ / ₂	23 ³ / ₄	105 ¹ / ₂	79 ¹ / ₁₆	13 ³ / ₁₆	57 ¹ / 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 (MJ, 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 tensile 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.



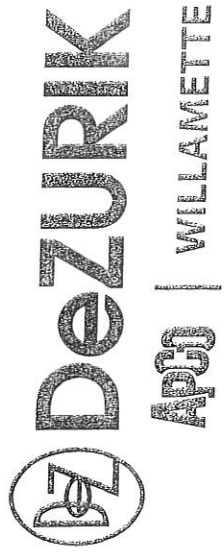
Kennedy Valve

A DIVISION OF MCWANE, INC.

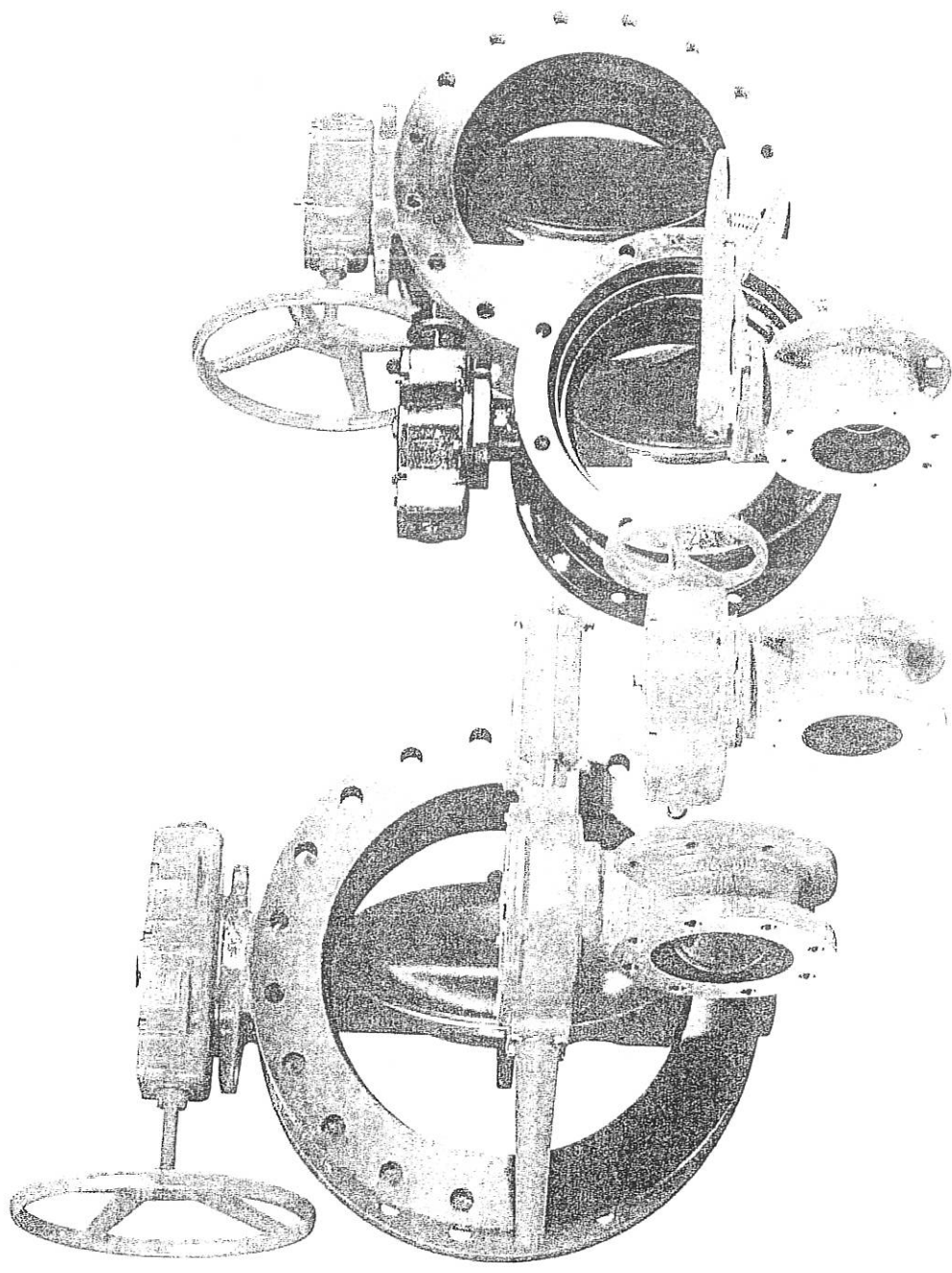
www.kennedyvalve.com

1021 E. Water Street • Elmira, New York 14901
P.O. Box 981

PHONE: (607) 734-2211 • FAX: 1-800-952-4771



DeZURIK AWWA BUTTERFLY VALVES TECHNICAL SPECIFICATIONS



Cv/Kv Values

Class 150B

Valve Size	100% Cv/Kv	
	Flat Cv/Kv	Dome Cv/Kv
3" 80mm	362 313	356 308
4" 100mm	658 569	646 559
6" 150mm	1,380 1,194	1,360 1,176
8" 200mm	2,440 2,111	2,390 2,067
10" 250mm	3,910 3,382	3,840 3,322
12" 300mm	5,730 4,960	5,630 4,870
14" 350mm	7,840 6,782	7,700 6,661
16" 400mm	10,200 8,823	9,980 8,633
18" 450mm	12,600 10,899	12,400 10,726
20" 500mm	15,800 13,667	15,500 13,408
24" 600mm	22,900 19,809	22,500 19,463

Class 25A, 75B, 150B

Valve Size	100% Cv/Kv	
	Flat Cv/Kv	Dome Cv/Kv
30" 750mm	36,500 31,573	35,900 31,054
36" 900mm	53,200 40,018	52,300 45,240
42" 1100mm	73,100 63,232	71,800 62,107
48" 1200mm	109,000 94,285	103,000 89,095
54" 1400mm	140,000 121,100	131,000 113,315
60" 1500mm	173,000 149,645	163,000 140,995
66" 1700mm	210,000 181,650	198,000 171,270
72" 1800mm	250,000 216,250	236,000 204,140

Applicable Standards

DeZURIK AWWA valves are in conformance with the industry standards listed below.

Valves conform to AWWA Standard ANSI/AWWA C-504 for sizes 3" - 72" (80 - 1800mm), Rubber-Seated Butterfly Valves.

Valves conform to AWWA Standard ANSI/AWWA C-516 for sizes 78" and larger (2000mm - larger), Rubber-Seated Butterfly Valves.

Dimensions and drilling of flanged end connections conform to Class 125 sections of ASME/ANSI B16.1, Cast Iron Pipe Flanges and Flanged Fittings.

Mechanical-Joint bell dimensions conform to ANSI/AWWA C111/A21.11, Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings.

Bonding of 3" (80mm) through 20" (600mm) seat conforms to ASTM D429, Standard Test Methods for Rubber Property — Adhesion to Rigid Substrates.

Ozone resistance of seat material conforms to ASTM D1149, Standard Test Method for Rubber Deterioration — Surface Ozone Cracking in a Chamber.

Seat material volume increase is less than 2% after immersion in distilled water for 70 hours, when tested in accordance with ASTM D471, Standard Test Method for Rubber Property — Effect of Liquids.

Materials conform to standards as listed in the Materials of Construction.

% Open vs. % Cv/Kv 3-42" (80-1100mm)

% Open	Flat % Cv/Kv	Dome % Cv/Kv
10	3	3
15	4	4
20	6	5
25	8	7
30	10	9
35	12	11
40	15	14
45	19	18
50	23	22
55	28	27
60	35	34
65	42	41
70	49	49
75	55	58
80	61	66
85	69	75
90	79	87
95	91	96
100	100	100

48-72" (1200-1800mm)

% Open	Flat % Cv/Kv	Dome % Cv/Kv
10	1	2
15	2	2
20	4	3
25	5	4
30	6	6
35	7	8
40	9	10
45	13	14
50	15	18
55	18	22
60	23	27
65	28	33
70	35	41
75	44	48
80	55	59
85	67	71
90	79	84
95	96	96
100	100	100

Contact DeZURIK for Cv/Kv Values on 76-120" (2000-3000mm) valves and for Class 250B.

Ordering Information

Valve Style BAW = AWWA Butterfly Valve

Valve Size			
3"	(80mm)	42"	(1100mm)
4"	(100mm)	48"	(1200mm)
6"	(150mm)	54"	(1400mm)
8"	(200mm)	60"	(1500mm)
10"	(250mm)	66"	(1700mm)
12"	(300mm)	72"	(1800mm)
14"	(350mm)	78"	(2000mm)
16"	(400mm)	84"	(2100mm)
18"	(450mm)	90"	(2300mm)
20"	(500mm)	96"	(2400mm)
24"	(600mm)	102"	(2600mm)
28"	(700mm)	108"	(2700mm)
30"	(750mm)	114"	(2900mm)
36"	(900mm)	120"	(3000mm)
		144"	(3600mm)

Note: All orders for 28" (700mm) and larger must include valve pipeline mounting position and shaft orientation as second line information.

End Connection	
F1	= ANSI 125 Flanged 3-144" (80-3600mm)
F2	= ANSI 250 Flanged 3-48" (80-1200mm)
MJ	= Mechanical Joint 4-48" (100-1200mm)
With Mechanical joint ends, buriable actuators are recommended.	

Body Material	
C1	= Cast Iron - F1 or MJ
CS	= Carbon Steel - F1 (24" & larger, 600mm & larger) (On Application)
DI	= Ductile Iron - F1, F2, or MJ
S2	= 316 Stainless Steel - F1 (24" & larger, 600mm & larger) (On Application)

Packing/Seat Combination Packing Material	
NBRN	= Acrylonitrile-Butadiene Self-Adjusting (3" - 144", 80-3600mm) (-20 to 180°F)(-29 to 82°C)
NBRA	= Acrylonitrile-Butadiene Adjustable (54" - 144", 1400-3600mm) (-20 to 180°F)(-29 to 82°C)
	(3" - 48", 80-1200mm) (-20 to 180°F)(-29 to 82°C)
	Do not use with buried service
EPDN	= EPDM Self-Adjusting (-20 to 290°F)(-29 to 143°C) 3-24" (80-600mm)
EPDA	= EPDM Adjustable (-20 to 290°F)(-29 to 143°C) 3-24" (80-600mm)
	Do not use with buried service.
TCN	= PTFE Self-Adjusting (-20 to 450°F)(-29 to 232°C) 3-144" (80-3600mm)
TCA	= PTFE Adjustable (-20 to 450°F)(-29 to 232°C) 28-144" (700-3600mm)
	Do not use with buried service.
Seat Material	
NBR	= Acrylonitrile-Butadiene (-20 to 180°F)(-29 to 82°C) (Must use NBRN or NBRA packing.)
EPDM	= Terpolymer of Ethylene Propylene & a Diene (-20 to 290°F)(-29 to 143°C) (Must use EPDA or EPDN, TCN or TCA packing.)

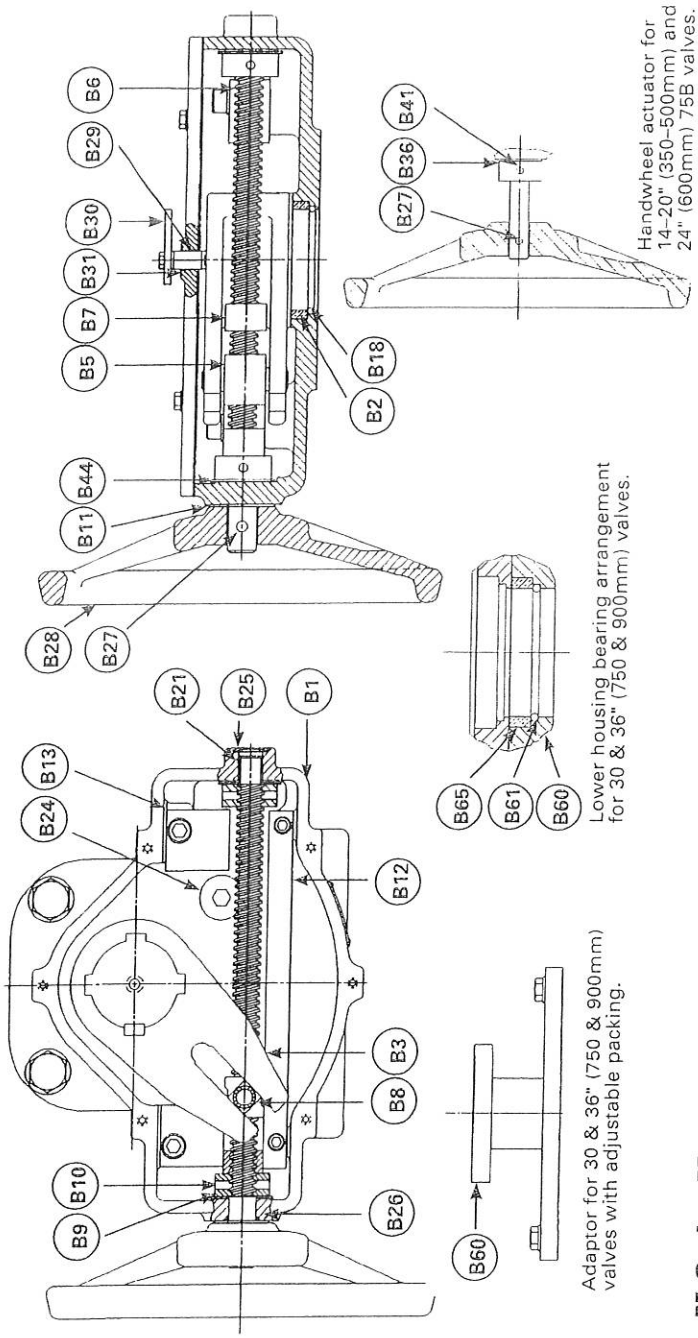
Class AWWA C-504	
25A	= 28-48" (700-1200mm) Flanged
75B	= 28-144" (700-3600mm) Flanged
150B	= 3-144" (80-3600mm) Flanged
	4-48" (100-1200mm) Mechanical Joint
250B	= 3-144" (80-3600mm) Flanged
	4-48" (100-1200mm) Mechanical Joint
Note: Pressure ratings above 150 not available with EPDM Seat on valves 24" & larger (600mm & larger).	

Disc/Shaft Combination Disc Material	
CI	= Cast Iron disc with 316 stainless steel edge
DI	= Ductile Iron disc with 316 stainless steel edge
Special Disc Material	
S2	= 316 Stainless Steel
CS	= Carbon Steel, 24" & larger (600mm & larger) On Application
Shaft & Pin Material	
S1	= 304 Stainless Steel shaft
	Pin - 316 Stainless Steel on 3"-36" (80-900mm)
	304 Stainless Steel on 42"-144" (1100-3600mm)
S5	= 17-4 pH Stainless Steel shaft & pin (must be used with 250B)
S2	= 316 Stainless Steel shaft & pin

Options	
BAA	= Buy American Act
CMC	= Certificate of Material Conformance
ST3	= Pennsylvania Steel Procurement Act
TB	= DeZURIK Standard Certified Hydrostatic shell test and Bi-directional Seat leak test.

Ordering Example:
BAW,24,F1,CI,NBRN-NBR,150B,DI-S1*Actuator

M-Series Manual Actuator Handwheel

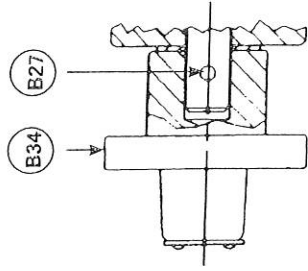


M-Series Manual Actuator Materials of Construction

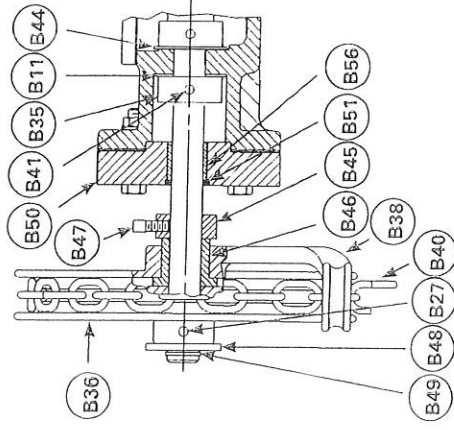
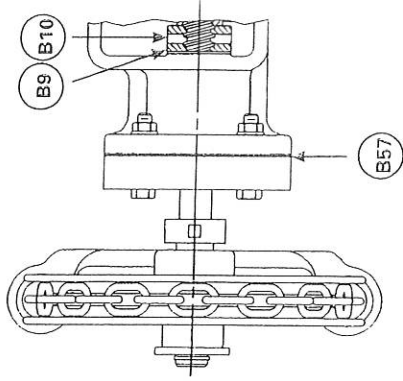
Item	Description	Material
B1	Housing	Cast Iron, ASTM A126 Class B
B2	Bearing (Housing)	Bronze Oil Impregnated
B3	Yoke	Ductile Iron, ASTM A536 80-55-06
B5	Yoke Nut Assembly	Ductile Iron, ASTM A536 80-55-06
B6	Shaft	Steel, ASTM A29 1144
B7	Stop Nut	Steel, AISI 1018
B8	Bearing	Sintered Stainless Steel
B9	Collar	Steel, AISI 1215
B10	Pin	Chrome Steel, Type 420
B11	Thrust Washer	Bronze Oil Impregnated
B12	Yoke Guide	Steel, AISI 1018
B13	Guide Block (450 ft. lb. Actuator only)	Steel, AISI 1018
B18	O-Ring	Nitrile
B21	Bearing	Bronze Oil Impregnated
B24	Screw (M-7 Actuator only)	Zinc Plated Steel
B25	Expansion Plug	Zinc Plated Steel
B26	O-Ring	Nitrile
B27	Pin	Zinc Plated Steel
B28	Handwheel	Cast Iron, ASTM A126 Class B
B29	Driver	Stainless Steel, 316L
B30	Pointer	Steel 14 Gauge
B31	Seal	Steel with Nitrile
B34	Wrenching Square	Cast Iron, ASTM A126 Class B

Item	Description	Material
B35	Collar	Steel, AISI 1215
B36	Chainwheel	Cast Iron, ASTM A126 Class B
B38	Chain Guide	Cast Iron, ASTM A126 Class B
B40	Link Closing	Steel Zinc Plated
B41	Pin	Steel Zinc Plated
B44	Thrust Washer	Fiberglass with Steel Zinc Plated Back (M-7 Actuator)
B45	Collar	Steel, AISI 1215
B46	Bearing	Bronze Oil Impregnated
B47	Set Screw	Steel Zinc Plated
B48	Washer	Steel Zinc Plated
B49	Ring Retainer	Steel
B50	Adaptor A36 12-20" (300-500mm) Valves	Steel Hot Rolled
B51	Seal 12-20" (300-500mm) Valves	Carbon Steel, Nitrile
B55	Bearing (Adaptor Plate)	Bronze Oil Impregnated
B57	Gasket	Fiber Non-Asbestos
B60	Adaptor 30 & 36" (750 & 900mm)	Steel, ASTM A36
B61	O-Ring 30 & 36" (750 & 900mm)	Nitrile (NBR)
B62	Shaft Extension	Steel, ASTM A36
B65	Bearing	Bronze Oil Impregnated 30 & 36" (750 & 900mm)

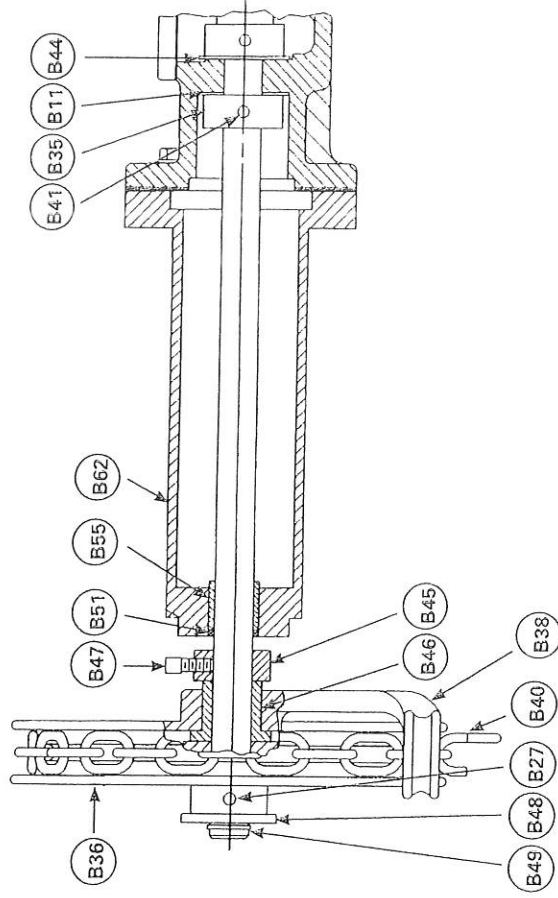
Note: Fasteners are zinc plated steel unless stainless steel bolting is specified.



Chainwheel 3-20" (80-500mm)



Chainwheel 24-36" (600-900mm)



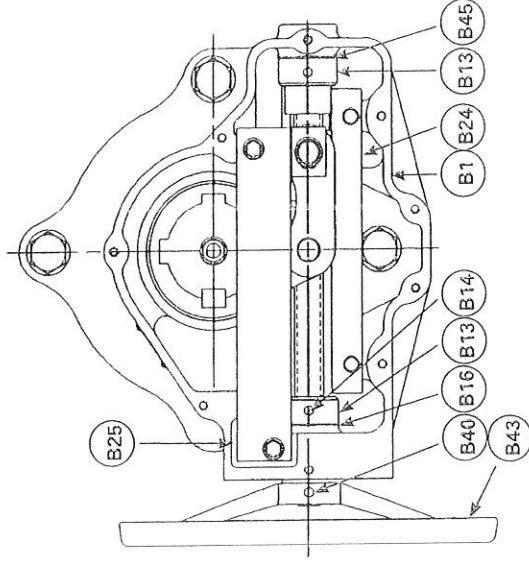
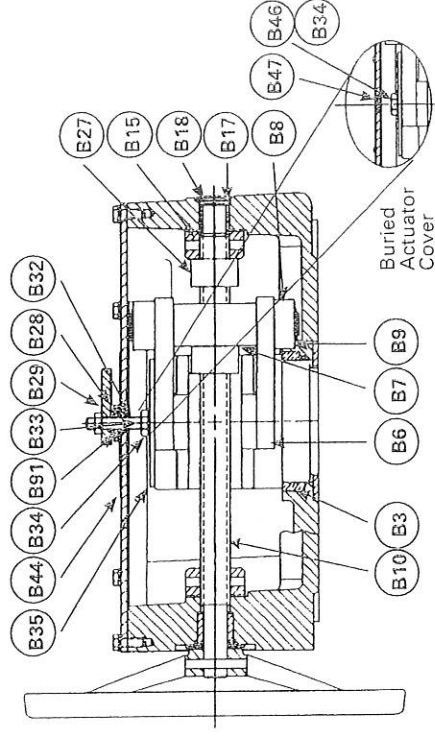
LA-Series Manual Actuator

LA-Series Actuator Materials of Construction

Item	Description	Material
B1	Housing	Cast Iron, ASTM A126 Class B
B2	Bearing	Bronze Oil Impregnated
B3	Yoke	Ductile Iron, ASTM A536 80-55-06
B4	Cover	Steel Plate, A36 HR
B5	Packing Retainer	Steel Plate, A36 HR
B6	Link	Steel
B7	Yoke Nut	Ductile Iron, ASTM A536 80-55-06
B8	Guide Nut (LA-4 & LA-6)	Powder Metal 8020 23B
B9	Retaining Ring	Carbon Steel, SAE 1060-1090
B10	Input Shaft	Steel, AISI 1141
B11	O-Ring	Acrylonitrile-Butadiene
B12	O-Ring	Acrylonitrile-Butadiene
B13	Collar	Steel, AISI 1215
B14	Pin	Steel
B15	Thrust Washer	Teflon/Glass Fabric, Stainless Steel Backing
B16	Thrust Washer	Teflon/Glass Fabric, Stainless Steel Backing
B17	Bearing	Bronze Oil Impregnated
B18	Expansion Plug	Steel Zinc Plated
B23	Retaining Washer	Stainless Steel, Type 18-8
B24	Outer Guide Bar	Steel, AISI 1018
B25	Inner Guide Bar	Steel, AISI 1018
B26	Square Nut	Steel, AISI 1018
B27	Stop Nut	Steel, AISI 1018
B28	Seal	Steel with Nitrile
B29	Pointer	Steel, ASTM A36
B32	Stud	Steel Zinc Plated
B33	Nut	Steel Zinc Plated
B34	Thread Seal	Steel with Nitrile
B35	Yoke Cover	Steel, ASTM A569
B40	Pin	Steel Zinc Plated
B43	Handwheel	Cast Iron, ASTM A126 Class B
B44	Position Plate	Vinyl
B45	Shim	Steel
B47	Expansion Plug	Steel Zinc Plated

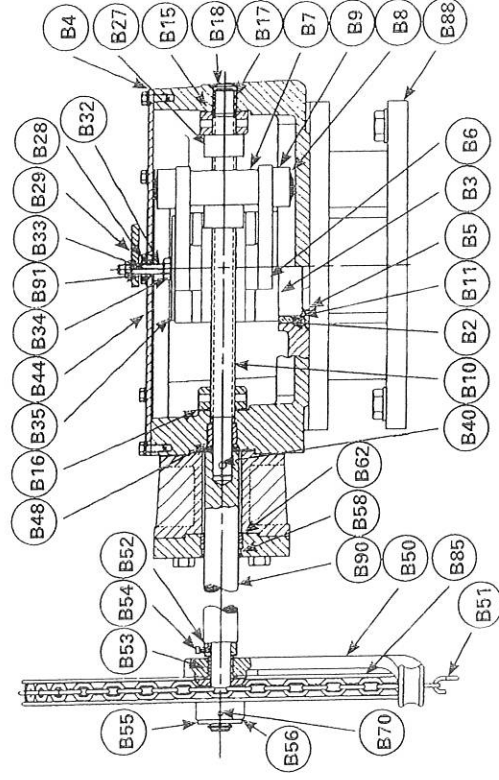
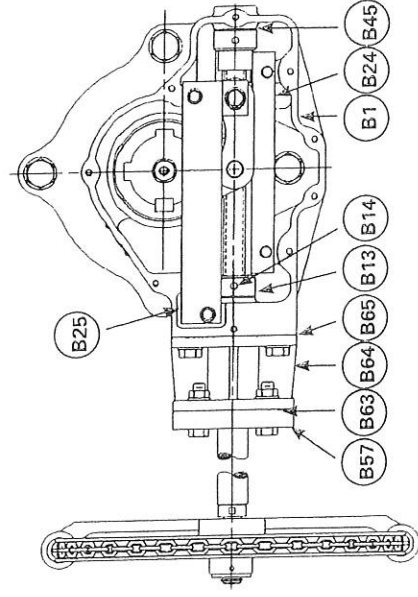
Note: All fasteners are zinc plated steel unless stainless steel bolting is specified.

Handwheel

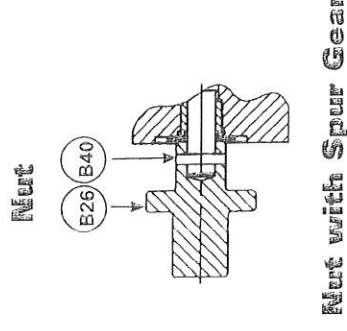
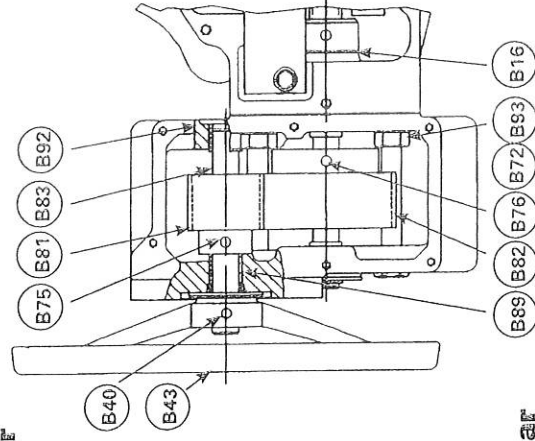
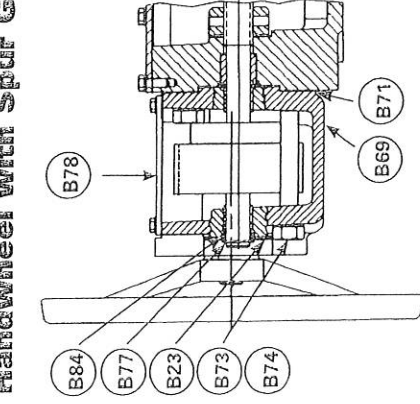


Item	Description	Material
B45	Bushing	Bronze Oil Impregnated
B50	Chain Guide	Cast Iron, ASTM A126
B51	Closing Link	Steel
B52	Collar	Steel, ASTM A36
B53	Bearing	Bronze
B54	Screw	Steel Zinc Plated
B55	Washer	Steel Zinc Plated
B56	Retaining Ring	Carbon Steel
B57	Adaptor Plate	Steel, ASTM A36
B58	Seal	Garlock
B62	Bearing	Bronze
B63	Gasket	Non-Asbestos
B64	Adaptor	Cast Iron, ASTM A126 Class B
B65	Gasket	Non-Asbestos
B69	Housing (Spur Gear)	Cast Iron, ASTM A126
B70	Pin (Chainwheel)	Steel Zinc Plated
B71	Gasket	Fiber Non-Asbestos
B72	Screw	Steel Zinc Plated
B73	Screw	Steel Zinc Plated
B74	Seal	Steel Zinc Plated
B75	Pin	Steel Zinc Plated
B76	Pin	Steel Zinc Plated
B77	Retainer Ring	Steel Zinc Plated
B78	Cover	Steel Plate, ASTM A36
B81	Gear	Carbon Steel
B82	Gear	Carbon Steel
B83	Input Shaft (Spur Gear)	Steel, ASTM A29
B84	O-Ring	Nitrile
B85	Chainwheel	Cast Iron, ASTM A126 Class B
B88	Adaptor (Adj. Packing)	Steel, ASTM A36
B89	Bearing	Bronze
B90	Shaft Extension	Steel, AISI 1215
B91	Washer	Steel Zinc Plated
B92	Expansion Plug	Zinc Plated Steel
B93	Lockwasher	Zinc Plated Steel

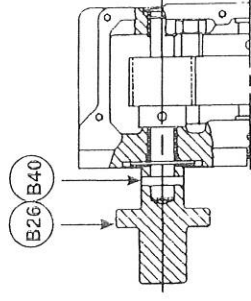
Chainwheel



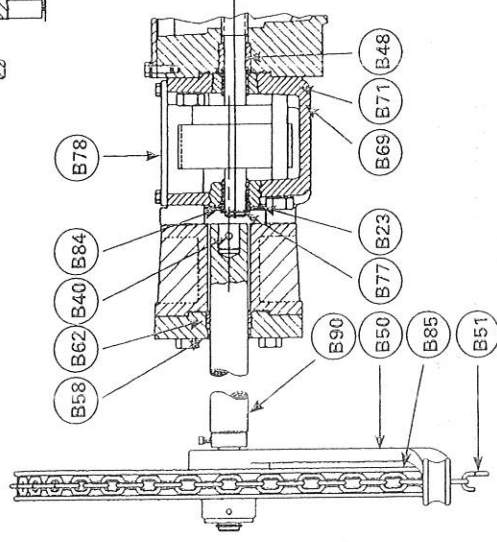
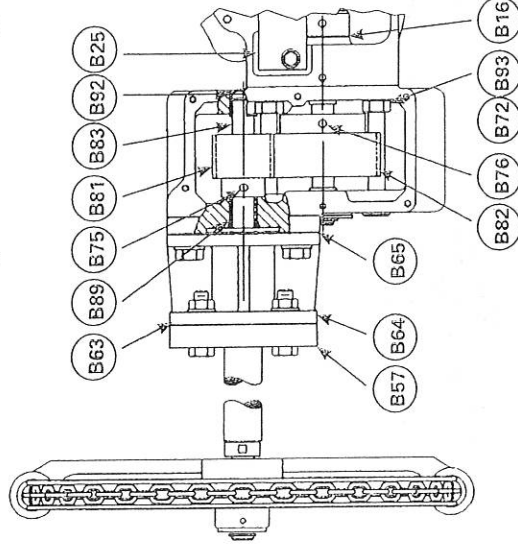
Handwheel with Spur Gear



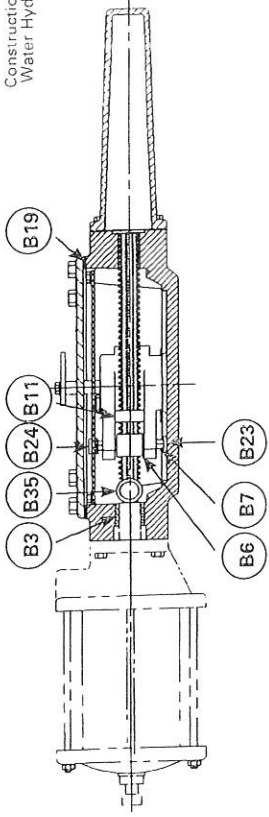
Nut with Spur Gear



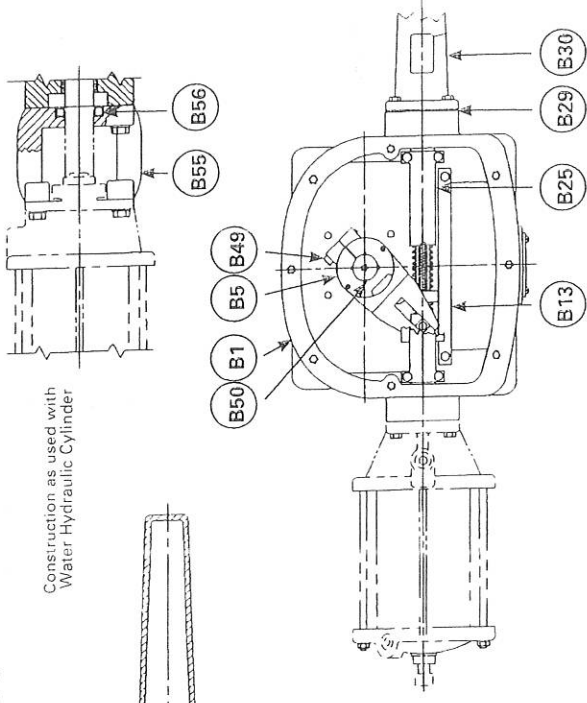
Chainwheel with Spur Gear



T-Series Cylinder Actuator



Construction as used with Water Hydraulic Cylinder

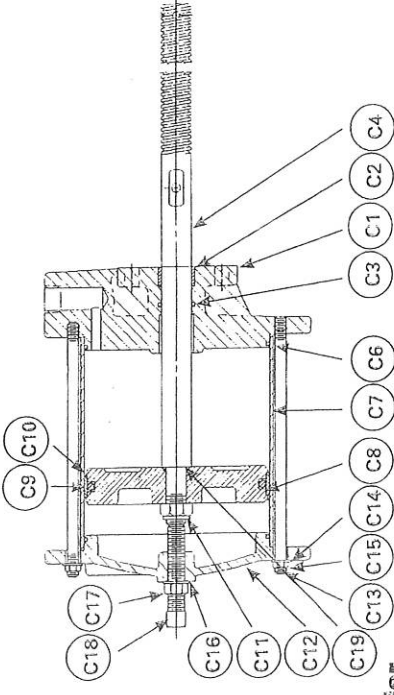


**T-Series Actuator
Materials of Construction**

Item	Description	Material
B1	Housing	Cast Iron, ASTM A126 Class B
B3	Bearing	Bronze
B5	Yoke	Cast Ductile Iron, A536
B6	Yoke Nut	Cold Rolled Steel
B7	Bearing	Sintered Stainless Steel
B11	Stop Nut	Cold Rolled Steel
B13	Guide Rail	Cold Rolled Steel
B19	Gasket	Neoprene
B23	Lower Yoke Guide (TW-7 only)	Steel, AISI 1215
B24	Upper Yoke Guide (TW-7 only)	Steel, ASTM A366
B25	Guide Rail (TW-7 only)	Steel, ASTM A36
B29	Gasket	Neoprene
B30	Cap	Fiberglass
B35	Stay Pin	Steel
B49	Screw	Alloy Steel
B50	Key	Steel, AISI 1018
B55	Adaptor (Hydraulic only)	Cast Iron, ASTM A126 Class B
B56	Wiper (Hydraulic only)	Carbon Steel

Note: All fasteners are zinc plated steel unless stainless steel bolting is specified.

Pneumatic/Low Pressure Oil Hydraulic Standard and C-540



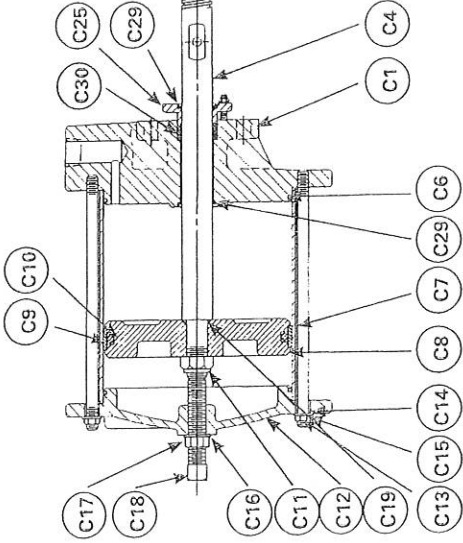
**Pneumatic/Low Pressure Oil Hydraulic Cylinder
Materials of Construction**

Item	Description	Standard Construction	C-540 Construction
C1	Cylinder Head	Cast Iron, ASTM A126 Class B	Ductile Iron, ASTM A536 65-45-12
C2	Bearing	Bronze Oil Impregnated	Bronze Oil Impregnated
C3	Rod Seal	Teflon with NBR	Teflon with NBR
C4	Piston Rod	Steel, AISI 1215 Chrome Plated	Steel, AISI 1215 Chrome Plated
C6	O-Ring	Acrylonitrile-Butadiene	Acrylonitrile-Butadiene
C7	Cylinder Tube	Fiberglass	Fiberglass
C8	Piston	Cast Iron, ASTM A126 Class B	Cast Iron, ASTM A126 Class B
C9	O-Ring	Acrylonitrile-Butadiene	Acrylonitrile-Butadiene
C10	Piston Seal	Virgin Teflon	Virgin Teflon
C11	Nut	Zinc Plated Steel	Zinc Plated Steel
C12	Cylinder Cap	Ductile Iron, ASTM A536 65-45-12	Ductile Iron, ASTM A536 65-45-12
C13	Tie Rod	Zinc Plated Steel	Steel, AISI C1018 Zinc Plated
C14	Washer	Zinc Plated Steel	Zinc Plated Steel
C15	Nut	Zinc Plated Steel	Zinc Plated Steel
C16	Seal Thread	Steel with Nitrile	Steel with Nitrile
C17	Jam Nut	Zinc Plated Steel	Zinc Plated Steel
C18	Set Screw	Zinc Plated Steel	Zinc Plated Steel
C19	O-Ring	Acrylonitrile-Butadiene	Acrylonitrile-Butadiene

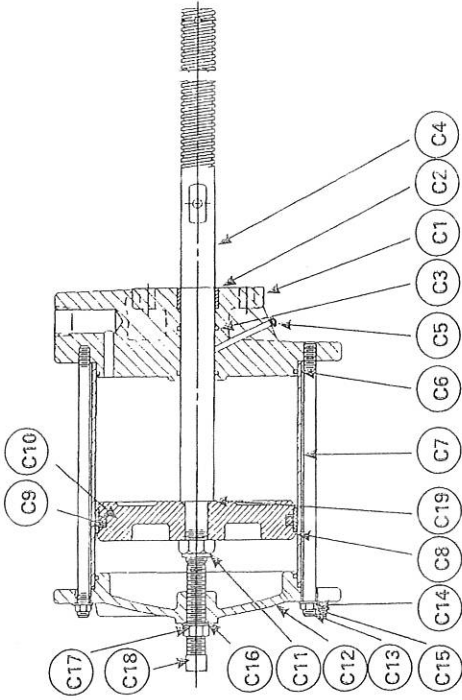
Water Hydraulic Cylinder Materials of Construction

Item	Description	Standard Construction	C-540 Construction
C1	Cylinder Head	Cast Iron, ASTM A126	Ductile Iron, ASTM A536 65-45-12 Nickel Plated
C2	Bearing	-	Bronze Oil Impregnated
C3	Rod Seal	-	Teflon with NBR
C4	Piston Rod	Stainless Steel, ASTM A564, Type 17-4	Stainless Steel, Type 304 Chrome Plated
C5	Vent Plug	-	Alemite 47200
C6	O-Ring	Acrylonitrile-Butadiene	Acrylonitrile-Butadiene
C7	Cylinder Tube	Fiberglass	Fiberglass
C8	Piston	Cast Iron, ASTM A126	Cast Iron, ASTM A126 Class B Nickel Plated
C9	O-Ring	Acrylonitrile-Butadiene	Acrylonitrile-Butadiene
C10	Piston Seal	Virgin Teflon	Virgin Teflon
C11	Nut	Stainless Steel, Type 18-8	Stainless Steel, Type 18-8
C12	Cylinder Cap	Ductile Iron, ASTM A536	Ductile Iron, ASTM A536 65-45-12 Nickel Plated
C13	Tie Rod	Zinc Plated Steel	Steel, AISI C1018 Zinc Plated
C14	Washer	Zinc Plated Steel	Zinc Plated Steel
C15	Nut	Zinc Plated Steel	Zinc Plated Steel
C16	Seal Thread	Steel with Nitrile	Steel with Nitrile
C17	Jam Nut	Zinc Plated Steel	Zinc Plated Steel
C18	Set Screw	Stainless Steel, Type 18-8	Stainless Steel, Type 18-8
C19	O-Ring	Acrylonitrile-Butadiene	Acrylonitrile-Butadiene
C25	Gland	Cast Iron, ASTM A126	-
C29	Scraper	Carbon Steel	-
C30	Packing	Neoprene & Cotton Duck	-

Water Hydraulic — Standard



Water Hydraulic — C-540



Valve Accessories

Mechanical Joint Accessories

Accessories include bolts, nuts, packing and glands for both ends.

Manual Actuators

10-Position Levers

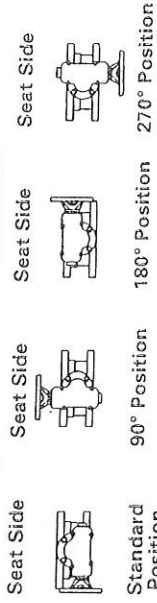
A 10-position dial provides positive latching in open, closed and eight intermediate positions. A pointer indicates position of disc plus a notch in the handle allows use of a padlock to prevent unauthorized valve operation.

Mounting

Lever actuators can be mounted at standard or 180°. Levers are available on 3–8" (80–200mm) valve sizes.



Mounting Nut & Handwheel



Chainwheel



Rotating Manual Actuators

DeZURIK offers a variety of rotary manual actuators which are in complete compliance with AWWA C-504. Manual actuators are available with handwheel, chainwheel or 2" (50mm²) square nut options.

Accessories —

Manual Actuators

450 Ft-Lb (612 Nm) Input Stops

Available on M-Series actuators with handwheel or nut. LA-Series actuators have 450 Ft-Lb (612 Nm) input stops as standard.

Chain — For Chainwheel Actuators

Chain for chainwheel actuators are available in zinc plated, galvanized or 304 stainless steel.

Stainless Steel Bolting

Includes stainless steel fasteners on valve and actuator.

Clockwise Rotation

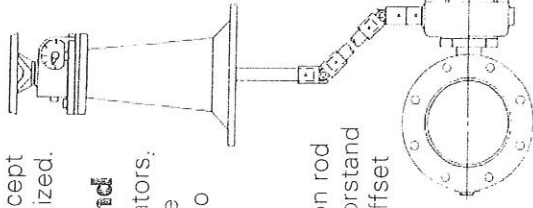
Clockwise rotation to open (open right). Available with M-Series and LA Series Manual Actuators.

Galvanized Chainwheel and Guide

Same as chainwheel actuator except chainwheel and guide are galvanized.

Dial Indicating Floorstand

For valves with handwheel actuators. Actuator is mounted on the valve and the input shaft is extended to the floorstand. Included with the floorstand are the handwheel mounted on the floorstand, dial indicator and couplings. Extension rod must be ordered separately. Floorstand may be directly above valve or offset from valve location. A buried actuator must be specified when ordering an FSDI.

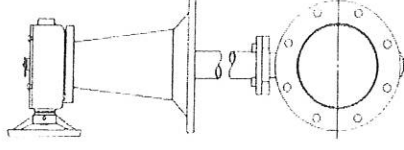


Extension Rod

Extension rod is required for use with FSDI floorstand.

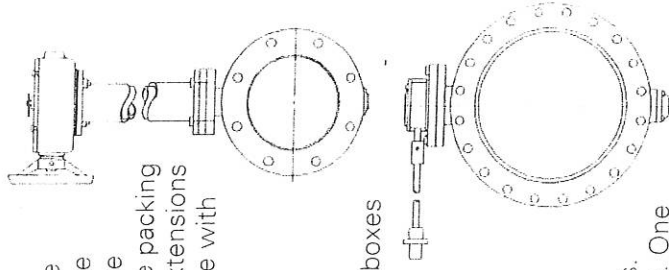
Actuator Mounted on Floorstand

Included with floorstand are the couplings, extension pipe and mounting of actuator on floorstand.



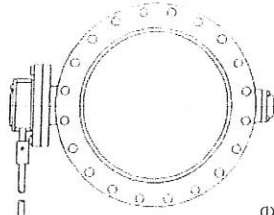
Neck Extensions

Included is an extended valve neck and shaft. Valves for use with neck extensions must be furnished with non-adjustable packing and a non-buried actuator. Extensions are not recommended for use with positioners.



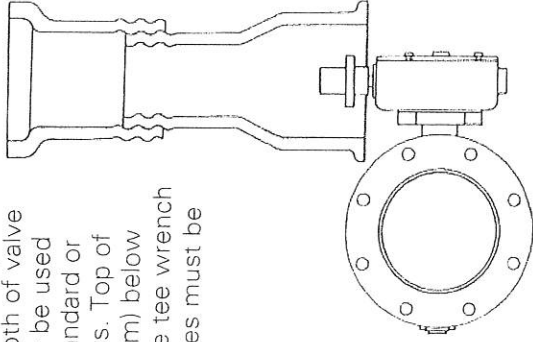
Extended Nut for Manual Actuators

For actuators used with floorboxes and valve boxes. Includes couplings, extension rod and extended 2" (50mm) square nut.



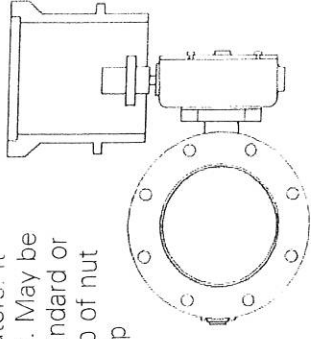
Valve Box and Valve Box Extensions

For use with buried actuators. Includes valve box and cover. One to five extension pieces may be ordered to extend depth of valve box. Valve boxes may be used with valves having standard or extended nut actuators. Top of nut must be 6" (150mm) below grade. Valve boxes are tee wrench actuated. Tee wrenches must be ordered separately.



Floorbox

For use with nut style actuators. It includes floorbox and cover. May be used with valves having standard or extended nut actuators. Top of nut must be 2" (50mm) from top of floorbox. Floorboxes are tee wrench actuated.



Tee wrenches must be ordered separately. Box depth is available in 1" (25mm) increments from 6" (150mm) through 18" (450mm). Standard is 6" (150mm).

Tee Wrench

For use in actuating 2" (50mm) nut actuators. Available in 4, 5, 6, 7 or 8 foot lengths. Other lengths available on special order.

Cylinder Actuators

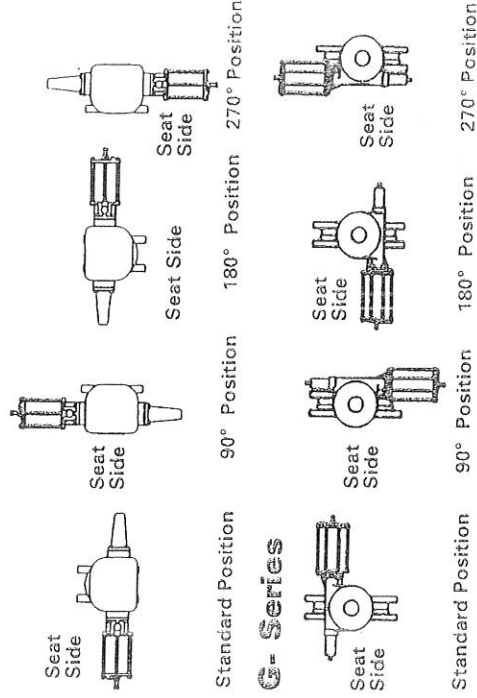
DeZURIK cylinder actuators are available as double-acting pneumatic or water hydraulic cylinders for either on-off or positioning services. Cylinder actuators per AWWA C-540 should be specified.

Mounting

Cylinder actuators can be mounted at 90° increments from standard.

Manual and Throttling Manual Override

Contact Application Engineer for assistance.



Electric Motors

When ordering electric motor actuators, please provide information listed on "Data Input Checklist" at end of bulletin.

Accessories — Cylinder Actuators

Positioners

DeZURIK offers both pneumatic and electronic signal valve positioners for use with cylinder actuators.

Gauges

Pneumatic positioners are available with three gauges mounted and piped; electronic positioners are available with two gauges mounted and piped.

4-Way Solenoid Valves

For cylinder actuators, 4-way direct acting, two position solenoid valves feature metal enclosures, .25" (6mm) NPT connections, Cv of .70 and a maximum pressure differential of 125 psi (8.5 Bar). Solenoid coil voltage is both 110/50/1 and 120/60/1 AC power. Contact Sartell Valves, Inc. for DC voltage. Solenoids are available with or without manual overrides. On large valves, furnish valve/actuator size, service conditions, and required operating speed for recommendations. Solenoid action should be specified.

Air Filter Regulator

For use on all pneumatic actuators. Includes a pressure reducing valve with filter and gauge. Maximum supply is 100 psi (7 Bar).

Speed Control Valves

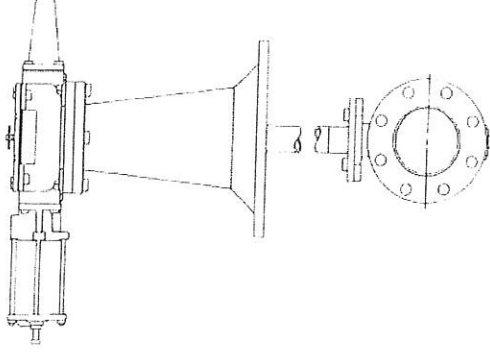
Speed control valves are available for controlling opening and closing speed on cylinder actuators.

Position Indicating Switches

Available in NEMA 4, 4x, 7 or 9 ratings. Switches are available as two SPDT or four SPDT.

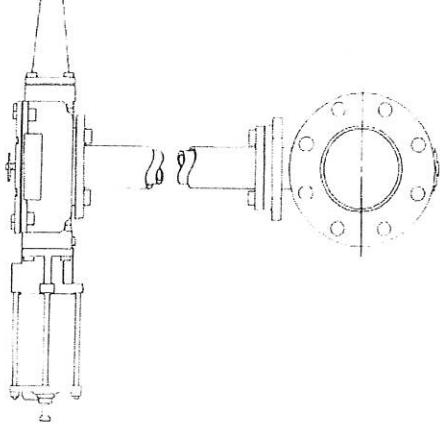
Floorstand

For valves with cylinder actuators mounted on floorstand. Included with the floorstand are couplings, the extension pipe and mounting of the actuator on the floorstand.

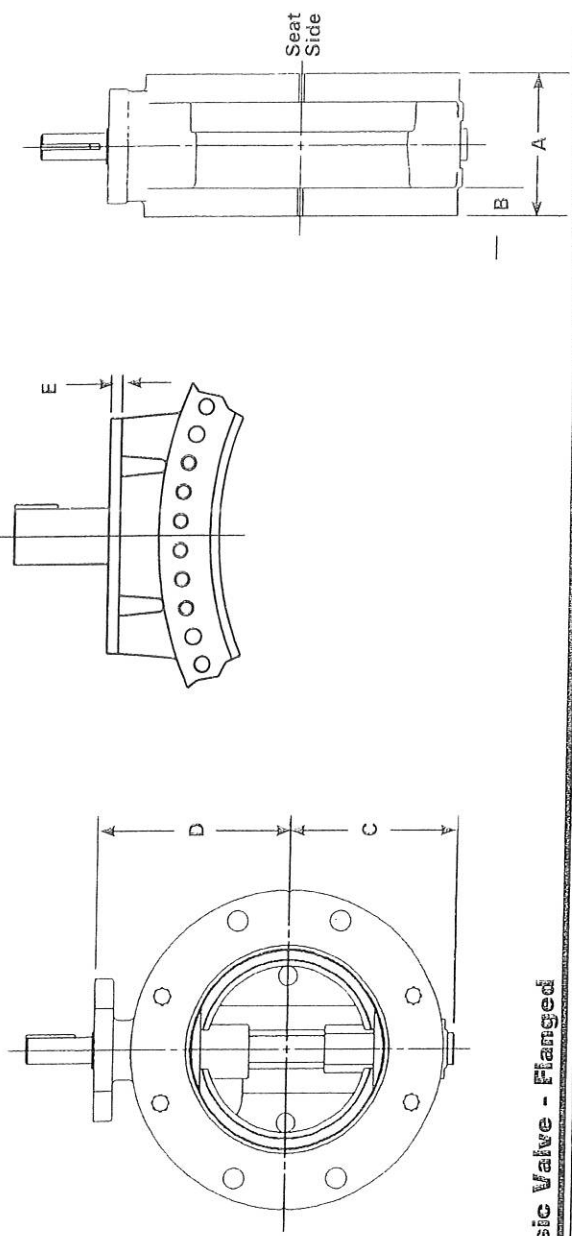


Neck Extension

For 3-20" (80-500mm) valves using T-Series Cylinder actuators. Included is the extended valve neck and shaft with actuator mounted.



Dimensions



Basic Valve - Flanged

Valve Size	A		B		C			D		E
	25A, 75B & 150B*	250B	25A, 75B & 150B*	250B	25A, 75B & 150B*	250B	25A, 75B & 150B*	25A, 75B & 150B*	250B	250B Only
3"	5.00 127	5.00 127	.81 21	1.19 30	4.00 102	4.12** 105	4.81 122	4.81 122	4.81 122	-
4"	5.00 127	5.00 127	1.00 25	1.31 33	4.75 121	5.00** 127	5.56 141	5.56 141	5.56 141	-
6"	5.00 127	5.00 127	1.06 27	1.50 38	6.03 153	6.25** 159	7.00 178	7.00 178	7.00 178	-
8"	6.00 152	6.00 152	1.19 30	1.69 43	7.16 182	7.50** 191	8.31 211	8.31 211	8.31 211	-
10"	8.00 203	8.00 203	1.25 32	1.97 50	8.38 213	8.75** 222	9.50 241	9.50 241	9.50 241	-
12"	8.00 203	8.00 203	1.31 33	2.09 53	9.66 245	10.25** 260	11.00 279	11.00 279	11.00 279	-
14"	8.00 203	8.00 203	1.47 37	2.25 57	10.91 277	11.50** 292	11.50 292	11.50 292	11.50 292	-
16"	8.00 203	8.00 203	1.53 39	2.38 60	12.06 306	12.75** 324	12.75 324	12.75 324	12.75 324	-
18"	8.00 203	8.00 203	1.66 42	2.50 64	14.03 356	14.50 368	13.50 343	13.50 343	14.00 356	-
20"	8.00 203	8.00 203	1.78 45	2.63 67	15.02 382	17.50 445	15.25 387	15.25 387	15.25 387	-
24"	8.00 203	12.00 305	1.97 50	2.91 74	19.00 483	20.19 513	18.41 468	18.41 468	19.50 495	-
30"	12.00 305	12.00 305	2.25 57	3.13 80	23.00 584	23.75 603	22.62 575	22.62 575	21.75 552	1.25 32
36"	12.00 305	15.00 381	2.50 64	3.50 89	27.38 696	27.38 696	25.62 651	25.62 651	25.62 651	1.25 32
42"	12.00 305	15.00 381	2.75 70	3.81 97	30.91 785	30.91 785	30.42 773	30.42 773	30.42 773	1.25 32
48"	15.00 381	15.00 381	2.88 73	4.13 105	35.38 899	35.38 899	33.00 838	33.00 838	33.00 838	1.25 32

Inches
Millimeter

Contact DeZURIK for dimensions on valve sizes 54" (1400mm) and larger.

* Available in AWWA Class 250B when ordered with 17-4 Shaft and 250 psi bearings.

** Flange length exceeds thrust bearing cover in these valve sizes.

Note: All dimensions are subject to change without notice. Request certified drawings for use in preparing piping layouts.

Dimensions

Basic Valve — Mechanical Joint

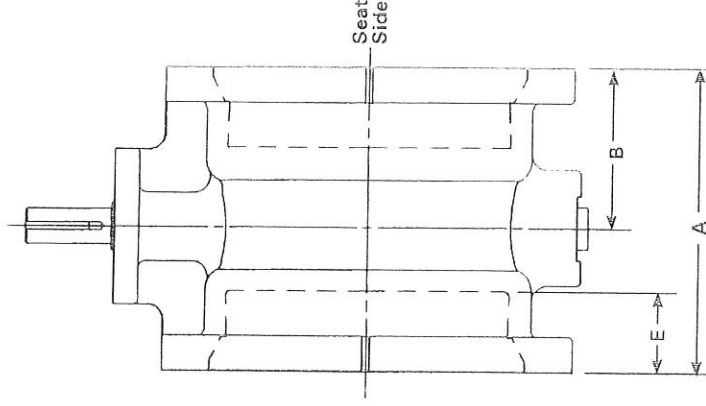
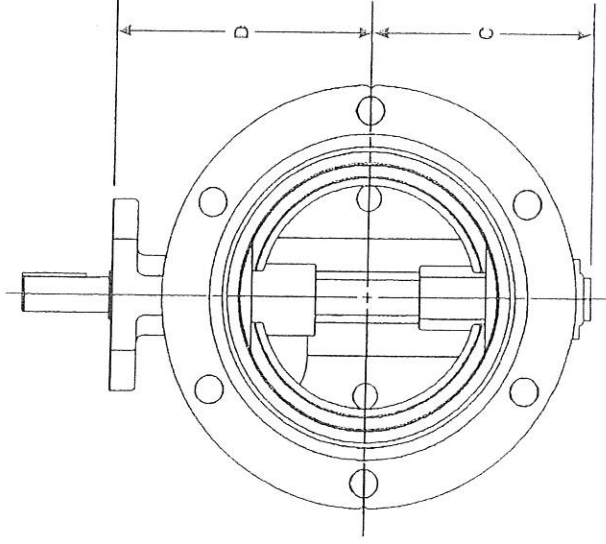
Valve Size	A	B	C	D	E
4"	8.56	4.75	4.75	5.56	2.50
100mm	217	121	121	141	64
6"	8.88	4.75	6.03	7.00	2.50
150mm	226	121	153	178	64
8"	9.50	5.00	7.16	8.31	2.50
200mm	241	127	182	211	64
10"	9.88	5.25	8.38	9.50	2.50
250mm	251	133	213	241	64
12"	10.00	5.38	9.66	11.00	2.50
300mm	254	137	245	279	64
14"	12.38	6.62	10.91	11.50	3.50
350mm	315	168	277	292	89
16"	12.75	6.75	12.06	12.75	3.50
400mm	324	171	306	324	89
18"	13.42	7.00	14.03	13.50	3.50
450mm	341	178	356	343	89
20"	13.38	7.12	15.02	15.25	3.50
500mm	340	181	382	387	89
24"	13.75	7.50	19.00	18.41	3.50
600mm	349	191	463	468	89
30"	17.75	9.62	23.00	22.62	4.00
750mm	451	244	584	575	102
36"	18.00	10.00	27.38	25.62	4.00
900mm	458	254	696	651	102
42"	18.75	10.25	30.91	30.41	4.00
1100mm	476	260	785	772	102
48"	19.62	10.62	35.38	33.00	4.00
1200mm	498	270	896	838	102

Inches

Millimeter

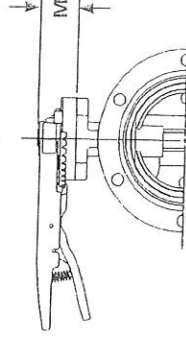
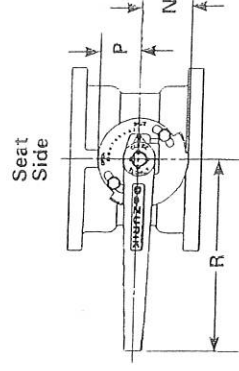
Note: All dimensions are subject to change without notice.

Request certified drawings for use in preparing piping layouts.



Lever Actuator

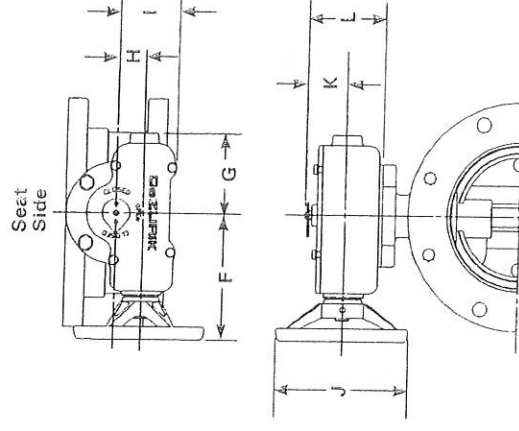
Valve Size	M	N	P	R
3-4" 80-100mm	2.56 65	3.56 90	3.00 76	14.00 356
6-8" 150-200mm	2.88 73	3.56 90	3.00 76	14.00 356



Handwheel Actuator

M-Series 3-24" (80-600mm)

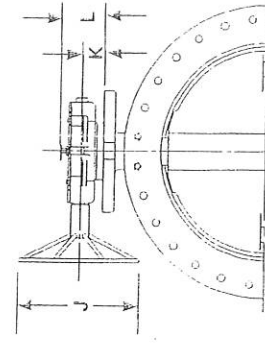
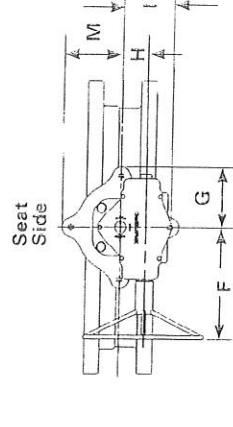
Valve Size (Handwheel Size)	F	G	H	I	J	K	L
3-10" 80-250mm	7.44 189	4.75 121	1.62 41	3.62 92	8.00 203	2.25 57	5.00 127
12-14" 300-350mm	11.69 297	4.75 121	1.62 41	3.62 92	16.00 406	2.25 57	5.00 127
16-18" 400-450mm	9.81 249	7.25 184	3.50 89	7.19 183	8.00 203	2.19 56	5.19 132
20" 500mm	14.06 357	7.25 184	3.50 89	7.19 183	16.00 406	2.18 56	5.19 132
24" 600mm (HD12)	10.06 256	7.25 184	3.50 89	7.19 183	12.00 305	2.19 56	5.19 132
24" 600mm (HD16)	13.06 332	7.25 184	3.50 89	7.19 183	16.00 406	2.19 56	5.19 132
24" 600mm (HD24)	15.69 399	7.25 184	3.50 89	7.19 183	24.00 610	2.19 56	5.19 132



Handwheel Actuator

M-Series 30" (750mm)

Valve Size (Handwheel Size)	F	G	H	I	J	K	L	M
30" 750mm (HD24)	15.69 399	8.25 210	3.50 89	7.19 183	24.00 610	3.18 81	6.18 157	8.25 210
30" 750mm (HD36)	21.00 533	8.25 210	3.50 89	7.19 183	36.00 914	3.18 81	6.18 157	8.25 210

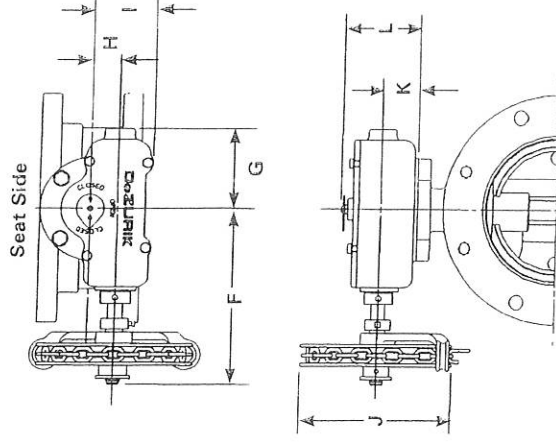


Inches
Millimeter

Dimensions (continued)

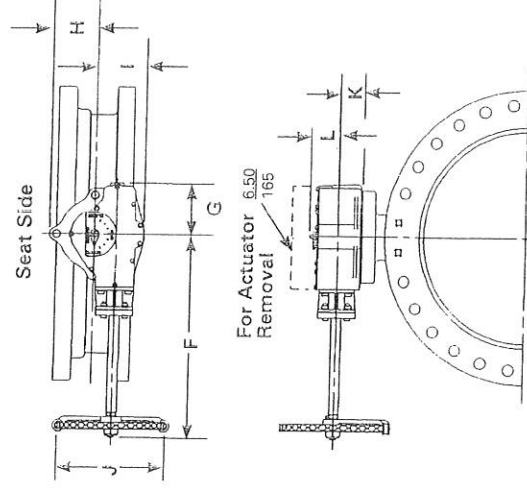
Chainwheel ActuatorM-Series 3-20" (80-500mm)

Valve Size	F	G	H	I	J	K	L
3-10" 80-250mm	10.38 264	4.75 121	1.62 41	3.62 92	9.19 233	2.25 57	5.00 127
12" 300mm	12.78 325	4.75 121	1.62 41	3.62 92	9.19 233	2.25 57	5.00 127
14-16" 350-400mm	14.78 375	4.75 121	1.62 41	3.62 92	20.06 510	2.25 57	5.00 127
18" 450mm	15.19 386	7.25 184	3.50 89	7.19 183	9.19 233	2.19 56	5.19 132
20" 500mm	16.00 406	7.25 184	3.50 89	7.19 183	20.06 510	2.19 56	5.19 132



Chainwheel ActuatorM-Series 24-30" (600-750mm)

Valve Size (Chainwheel Size)	F	G	H	I	J	K	L
24" 600mm (MS-7-CW20)	25.62 651	7.25 184	3.50 89	7.19 183	20.06 510	2.19 56	5.19 132
30" 750mm (MS-7-CW20)	25.62 651	8.25 210	3.50 89	7.19 183	20.06 510	3.19 81	6.19 157



Nut (M-Series)

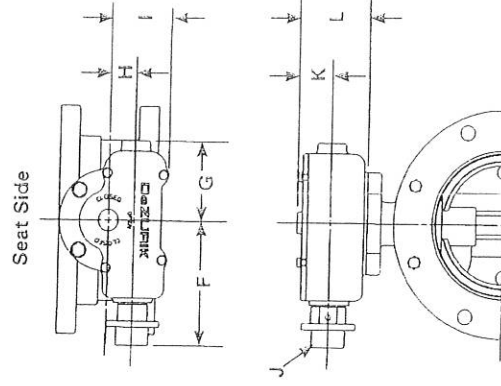
Valve Size	F	G	H	I	J	K	L
3-14" 80-350mm	7.38 188	4.75 121	1.62 41	3.62 92	2.00 51	2.25 57	5.00 127
16-24" 400-600mm	9.75 248	7.25 184	3.50 89	7.19 183	2.00 51	2.19 56	5.19 132
30" 750mm	10.25 260	7.56 192	4.00 102	8.12 206	2.00 51	3.06 78	5.94 151

Inches

Millimeter

Note: All dimensions are subject to change without notice.

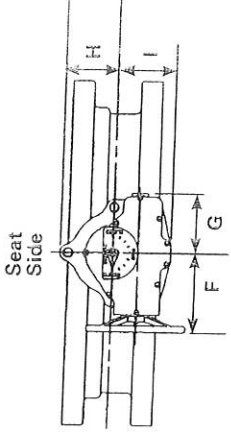
Request certified drawings for use in preparing piping layouts.



Dimensions (continued)

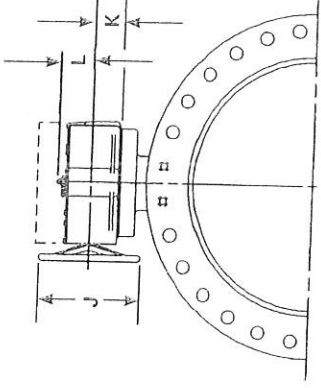
Handwheel LA-Series 30-48" (750-1200mm)

Actuator Size	F	F with Spur Gear	G	H	I	J	K	L
LA-4-HD12	11.62 295	18.25 464	9.38 238	8.25 210	9.44 240	12.00 305	4.41 112	5.25 159
LA-4-HD16	12.25 311	18.88 480	9.38 238	8.25 210	9.44 240	16.00 406	4.41 112	5.25 159
LA-4-HD24	20.25 514	26.88 683	9.38 238	8.25 210	9.44 240	24.00 610	4.41 112	5.25 159
LA-4-HD30	22.88 581	29.50 749	9.38 238	8.25 210	9.44 240	30.00 762	4.41 112	5.25 159
LA-4-HD36	25.50 648	32.12 816	9.38 238	8.25 210	9.44 240	36.00 914	4.41 112	5.25 159



Handwheel LA-Series 36-54" (900-1400mm)

Actuator Size	F	F with Spur Gear	G	H	I	J	K	L
LA-6-HD12	13.62 346	20.25 514	12.12 308	8.25 210	11.12 282	12.00 305	4.41 112	6.25 159
LA-6-HD16	14.25 362	20.88 530	12.12 308	8.25 210	11.12 282	16.00 406	4.41 112	6.25 159
LA-6-HD24	22.25 565	28.88 734	12.12 308	8.25 210	11.12 282	24.00 610	4.41 112	6.25 159
LA-6-HD30	24.88 632	31.50 800	12.12 308	8.25 210	11.12 282	30.00 762	4.41 112	6.25 159
LA-6-HD36	27.50 699	34.12 867	12.12 308	8.25 210	11.12 282	36.00 914	4.41 112	6.25 159



Handwheel LA-Series 42-54" (1100-1400mm)

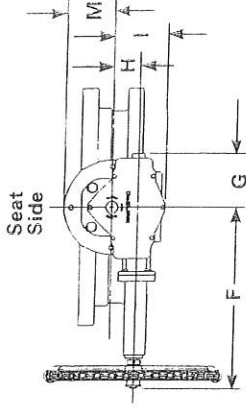
Actuator Size	F	F with Spur Gear	G	H	I	J	K	L
LA-10-HD12	17.62 448	24.25 616	16.81 427	8.25 210	16.12 409	12.00 305	4.81 122	5.84 148
LA-10-HD16	18.25 464	24.88 632	16.81 427	8.25 210	16.12 409	16.00 406	4.81 122	5.84 148
LA-10-HD24	26.25 667	32.88 835	16.81 427	8.25 210	16.12 409	24.00 610	4.81 122	5.84 148
LA-10-HD30	28.88 734	35.50 902	16.81 427	8.25 210	16.12 409	30.00 762	4.81 122	5.84 148
LA-10-HD36	31.50 800	38.12 968	16.81 427	8.25 210	16.12 409	36.00 914	4.81 122	5.84 148

Inches
Millimeter

Note: All dimensions are subject to change without notice.
Request certified drawings for use in preparing piping layouts.

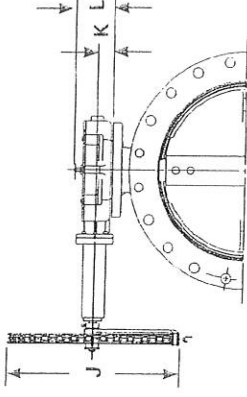
Chainwheel LA-Series 30-48" (750-1200mm)

Actuator Size	F	F with Spur Gear	G	H	I	J	K	L
LA-4-CW12	35.00 889	41.62 1057	9.38 238	8.25 210	9.44 240	12.75 324	4.41 112	6.25 159
LA-4-CW20	35.00 889	41.62 1057	9.38 238	8.25 210	9.44 240	20.06 510	4.41 112	6.25 159
LA-4-CW30	35.00 889	41.62 1057	9.38 238	8.25 210	9.44 240	29.75 756	4.41 112	6.25 159



Chainwheel LA-Series 36-54" (900-1400mm)

Actuator Size	F	F with Spur Gear	G	H	I	J	K	L
LA-6-CW12	37.00 940	43.62 1108	12.12 308	8.25 210	11.12 282	12.75 324	4.41 112	6.25 159
LA-6-CW20	37.00 940	43.62 1108	12.12 308	8.25 210	11.12 282	20.06 510	4.41 112	6.25 159
LA-6-CW30	37.00 940	43.62 1108	12.12 308	8.25 210	11.12 282	29.75 756	4.41 112	6.25 159



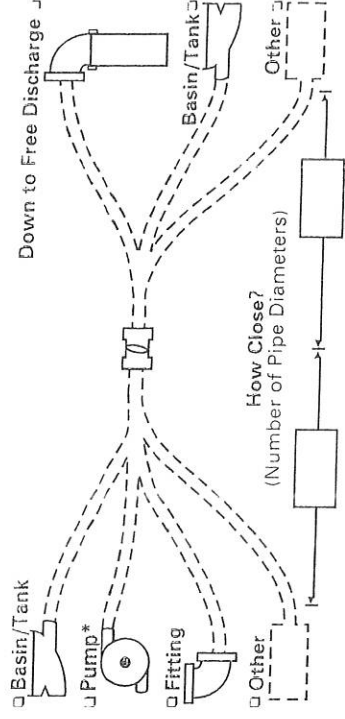
Chainwheel LA-Series 42-54" (1100-1400mm)

Actuator Size	F	F with Spur Gear	G	H	I	J	K	L
LA-10-CW12	41.00 1041	47.62 1210	16.81 427	8.25 210	16.12 409	12.75 324	4.81 122	5.84 148
LA-10-CW20	41.00 1041	47.62 1210	16.81 427	8.25 210	16.12 409	20.06 510	4.81 122	5.84 148
LA-10-CW30	41.00 1041	47.62 1210	16.81 427	8.25 210	16.12 409	29.75 756	4.81 122	5.84 148

Inches
Millimeter

Note: All dimensions are subject to change without notice.
Request certified drawings for use in preparing piping layouts.

DeZURIK Butterfly Valve Applications Data Input Checklist



Part A: Check boxes and complete lines to show upstream/downstream configuration, enter distances in pipe diameters.

Part B: Check off or enter operating conditions.

1. Valve Function? ☐ Open/Shut ☐ Throttling ☐ Modulating Control
2. Where Installed? ☐ Buried ☐ Submerged ☐ Above Ground, In Plant
3. Line Fluid? ☐ Fresh Water ☐ Sewage ☐ Air ☐ Other?
4. Maximum Fluid Temperature? _____ °C _____ °F
5. Line Size? _____ inches _____ (mm) (nominal)
6. Normal Working Pressure? _____ psi _____ kPa
Maximum (Shutoff) Pressure Differential? _____ psi _____ kPa
7. Normal Wide Open Valve Flow? _____ flow rate or _____ flow units
8. Emergency Maximum (Line Break, Etc.) Flow? _____ flow rate _____ flow units
9. (If Throttling or Modulating Control) Flow Range Desired?
Maximum Flow? _____ flow rate _____ flow units
Minimum Flow? _____ flow rate _____ flow units
10. Pipe Connection? _____ Flanged _____ Mechanical Joint _____ Other

Part C: Check off or enter operator requirements.

1. Operator Type?
Manual: ☐ Lever ☐ Lead Screw ☐ Gear ☐ Other?
Power: ☐ Cylinder ☐ Electric ☐ Other?
2. Direction of Rotation To Open: ☐ Clockwise—(OR) ☐ Counter clockwise—(OL)
3. Cylinder Specifications:
a. Supply Type and Pressure? ☐ Water _____ psi _____ kPa ☐ Oil _____ psi _____ kPa
☐ Air _____ psi _____ kPa ☐ Other _____ psi _____ kPa
b. Fail Safe? ☐ Yes ☐ No; If yes which way if valve fails? ☐ Open ☐ Close
c. Operating Times? _____ sec Open to Close; _____ sec Close to Open
d. Accessories?
☐ Speed Control
☐ Solenoid W/Manual Override ☐ Limit Switches (ES) (Qty: _____ O: _____ C: _____ I)
☐ Manual Override (On loss of supply press.) ☐ Positioner
☐ Other? ☐ Solenoid W/O Manual Override
4. Electric Specifications.
a. Supply? _____ Volts _____ Phase _____ Hz
b. Duty Cycle? ☐ Intermittent ☐ Continuous
c. Starter/Control Needs?
d. Operating Times? _____ sec (Note: 60 sec per AWWA unless specified)
e. Accessories?
☐ AUX Switches ☐ Potentiometer ☐ Slidewire Receiver ☐ Reversing Starter
☐ Heaters ☐ Control Station ☐ Control Transformer ☐ Other? _____

Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:
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