

**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 \_\_\_\_\_

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 - 3 WKS

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

**THIS SECTION MUST BE COMPLETED BY BIDDER:**

FIRM NAME: CIMS CO

ADDRESS: 1840 L+A Road

CITY, STATE: METairie, LA ZIP: 70001

TELEPHONE: (504) 835-7319 FAX: (504) 832-0820

EMAIL ADDRESS: Jeff@CimSCO.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: \_\_\_\_\_  
NUMBER: \_\_\_\_\_  
NUMBER: \_\_\_\_\_  
NUMBER: \_\_\_\_\_

TOTAL PRICE OF ALL BID ITEMS: \$ 542,111.00

AUTHORIZED SIGNATURE: [Signature]

Jeff Devillier  
Printed Name

TITLE: SALES

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.: 50-00120679

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			ONE (1) YEAR CONTRACT FOR A SUPPLY OF GATE AND BUTTERFLY VALVES FOR THE JEFFERSON PARISH DEPT. OF PUBLIC WORKS, ALL WATER DISTRICTS AND ALL JEFFERSON PARISH AGENCIES AND MUNICIPALITIES		
1	1.00	EA	0020 - 3 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62201A)	330 <sup>-</sup>	330 <sup>-</sup>
2	15.00	EA	0050 - 4 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62402A)	350 <sup>-</sup>	5250 <sup>-</sup>
3	60.00	EA	0090 - 6 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62405A)	460 <sup>-</sup>	27600 <sup>-</sup>
4	80.00	EA	0120 - 8 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62408A)	740 <sup>-</sup>	59200 <sup>-</sup>
5	3.00	EA	0150 - 10 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62411A)	950 <sup>-</sup>	2850 <sup>-</sup>
6	5.00	EA	0180 - 12 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62414A)	1500 <sup>-</sup>	7500 <sup>-</sup>
7	1.00	EA	0210 - 14 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT (62416)	1900 <sup>-</sup>	1900 <sup>-</sup>
8	1.00	EA	0240 - 3 INCH RESILIENT SEAT GATE VALVE, FLANGE (62201)	330 <sup>-</sup>	330 <sup>-</sup>
9	1.00	EA	0270 - 4 INCH RESILIENT SEAT GATE VALVE, FLANGE (62400A)	350 <sup>-</sup>	350 <sup>-</sup>
10	50.00	EA	0300 - 6 INCH RESILIENT SEAT GATE VALVE, FLANGE (62403A)	460 <sup>-</sup>	23000 <sup>-</sup>
11	10.00	EA	0330 - 8 INCH RESILIENT SEAT GATE VALVE, FLANGE (62406A)	680 <sup>-</sup>	6800 <sup>-</sup>
12	1.00	EA	0360 - 10 INCH RESILIENT SEAT GATE VALVE, FLANGE (62409)	950 <sup>-</sup>	950 <sup>-</sup>

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
13	1.00	EA	0390 - 12 INCH RESILIENT SEAT GATE VALVE, FLANGE (62412)	1200 <sup>-</sup>	1200 <sup>-</sup>
14	1.00	EA	0420 - 14 INCH RESILIENT SEAT GATE VALVE, FLANGE	1900 <sup>-</sup>	1900 <sup>-</sup>
15	1.00	EA	0450 - 3 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE	330 <sup>-</sup>	330 <sup>-</sup>
16	5.00	EA	0480 - 4 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62636A)	350 <sup>-</sup>	1750 <sup>-</sup>
17	100.00	EA	0510 - 6 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62637A)	460 <sup>-</sup>	46000 <sup>-</sup>
18	20.00	EA	0540 - 8 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62638A)	700 <sup>-</sup>	14000 <sup>-</sup>
19	1.00	EA	0570 - 10 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62639)	950 <sup>-</sup>	950 <sup>-</sup>
20	1.00	EA	0600 - 12 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE (62640)	1180 <sup>-</sup>	1180 <sup>-</sup>
21	1.00	EA	0630 - 14 INCH RESILIENT SEAT GATE VALVE, MECHANICAL JOINT X FLANGE	1900 <sup>-</sup>	1900 <sup>-</sup>
22	1.00	EA	0640 - 6 INCH BUTTERFLY VALVE, MECHANICAL JOINT	660 <sup>-</sup>	660 <sup>-</sup>
23	1.00	EA	0650 - 8 INCH BUTTERFLY VALVE, MECHANICAL JOINT	880 <sup>-</sup>	880 <sup>-</sup>
24	1.00	EA	0660 - 10 INCH BUTTERFLY VALVE, MECHANICAL JOINT	990 <sup>-</sup>	990 <sup>-</sup>
25	10.00	EA	0670 - 12 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62360)	1300 <sup>-</sup>	13000 <sup>-</sup>

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
26	2.00	EA	0680 - 14 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62361)	1600 <sup>-</sup>	3200 <sup>-</sup>
27	1.00	EA	0690 - 16 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62365)	3500 <sup>-</sup>	3500 <sup>-</sup>
28	10.00	EA	0700 - 18 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62367)	3300 <sup>-</sup>	33000 <sup>-</sup>
29	1.00	EA	0710 - 20 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62372)	3700 <sup>-</sup>	3700 <sup>-</sup>
30	1.00	EA	0720 - 24 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62349)	5300 <sup>-</sup>	5300 <sup>-</sup>
31	1.00	EA	0730 - 30 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62374)	10200 <sup>-</sup>	10200 <sup>-</sup>
32	1.00	EA	0740 - 36 INCH BUTTERFLY VALVE, MECHANICAL JOINT (62375)	12500 <sup>-</sup>	12500 <sup>-</sup>
33	1.00	EA	0750 - 42 INCH BUTTERFLY VALVE, MECHANICAL JOINT	18000 <sup>-</sup>	18000 <sup>-</sup>
34	1.00	EA	0755 - 48 INCH BUTTERFLY VALVE, MECHANICAL JOINT	22000 <sup>-</sup>	22000 <sup>-</sup>
35	1.00	EA	0760 - 6 INCH BUTTERFLY VALVE, FLANGE (62356)	660 <sup>-</sup>	660 <sup>-</sup>
36	1.00	EA	0770 - 8 INCH BUTTERFLY VALVE, FLANGE (62357)	880 <sup>-</sup>	880 <sup>-</sup>
37	1.00	EA	0780 - 10 INCH BUTTERFLY VALVE, FLANGE (62358)	990 <sup>-</sup>	990 <sup>-</sup>
38	1.00	EA	0790 - 12 INCH BUTTERFLY VALVE, FLANGE (62359)	1400 <sup>-</sup>	1400 <sup>-</sup>

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00120679

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
39	1.00	EA	0800 - 14 INCH BUTTERFLY VALVE, FLANGE (62362)	1600 <sup>-</sup>	1600 <sup>-</sup>
40	1.00	EA	0810 - 16 INCH BUTTERFLY VALVE, FLANGE (62366)	3500 <sup>-</sup>	3500 <sup>-</sup>
41	1.00	EA	0820 - 18 INCH BUTTERFLY VALVE, FLANGE (62370)	4000 <sup>-</sup>	4000 <sup>-</sup>
42	1.00	EA	0830 - 20 INCH BUTTERFLY VALVE, FLANGE (62371)	4100 <sup>-</sup>	4100 <sup>-</sup>
43	1.00	EA	0840 - 24 INCH BUTTERFLY VALVE, FLANGE (62348)	5900 <sup>-</sup>	5900 <sup>-</sup>
44	1.00	EA	0850 - 30 INCH BUTTERFLY VALVE, FLANGE (62347)	14000 <sup>-</sup>	14000 <sup>-</sup>
45	1.00	EA	0860 - 36 INCH BUTTERFLY VALVE, FLANGE (62346)	15000 <sup>-</sup>	15000 <sup>-</sup>
46	1.00	EA	0870 - 42 INCH BUTTERFLY VALVE, FLANGE (62345)	25000 <sup>-</sup>	25000 <sup>-</sup>
47	1.00	EA	0875 - 48 INCH BUTTERFLY VALVE, FLANGE (62344)	24000 <sup>-</sup>	24000 <sup>-</sup>
48	6.00	EA	0880 - 3 INCH DOUBLE DISC GATE VALVE, FLANGE (62629)	918 <sup>-</sup>	5508 <sup>-</sup>
49	6.00	EA	0890 - 4 INCH DOUBLE DISC GATE VALVE, FLANGE (62632)	1027 <sup>-</sup>	6162 <sup>-</sup>
50	16.00	EA	0900 - 6 INCH DOUBLE DISC GATE VALVE, FLANGE (62242)	1373 <sup>-</sup>	21968 <sup>-</sup>
51	12.00	EA	0910 - 8 INCH DOUBLE DISC GATE VALVE, FLANGE (62244)	2144 <sup>-</sup>	25728 <sup>-</sup>

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00120679

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
52	6.00	EA	0920 - 10 INCH DOUBLE DISC GATE VALVE, FLANGE (62246)	3408 <sup>-</sup>	20448 <sup>-</sup>
53	1.00	EA	0930 - 12 INCH DOUBLE DISC GATE VALVE, FLANGE (62350)	4114 <sup>-</sup>	4114 <sup>-</sup>
54	1.00	EA	0940 - 14 INCH DOUBLE DISC GATE VALVE, FLANGE (62355)	10681 <sup>-</sup>	10681 <sup>-</sup>
55	1.00	EA	0950 - 16 INCH DOUBLE DISC GATE VALVE, FLANGE (62247)	14272 <sup>-</sup>	14272 <sup>-</sup>

## Request for Taxpayer Identification Number and Certification

Give Form to the  
requester. Do not  
send to the IRS.

Print or type  
See Specific Instructions on page 2.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.  
**CIMSCO, INC.**

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check only one of the following seven boxes:  
 Individual/sole proprietor or single-member LLC  
 C Corporation  
 S Corporation  
 Partnership  
 Trust/estate  
 Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ \_\_\_\_\_  
 Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.  
 Other (see instructions) ▶ \_\_\_\_\_

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):  
 Exempt payee code (if any) \_\_\_\_\_  
 Exemption from FATCA reporting code (if any) \_\_\_\_\_  
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)  
**1840 L&A ROAD**

6 City, state, and ZIP code  
**METAIRIE, LOUISIANA 70001**

7 List account number(s) here (optional)

Requester's name and address (optional)

### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number									
or									
Employer identification number									
7	2	-	0	5	0	9	5	0	6

### Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here      Signature of U.S. person ▶ **CHRISTEN C RIVIERE**      Date ▶ **3/20/17**

Digitally signed by CHRISTEN C RIVIERE  
DN: cn=CHRISTEN C RIVIERE, o=CDOLBY, ou=CDOLBY, email=CHRISTENR@CDOLBY.COM, c=US  
Date: 2017.03.20 14:25:05 -0500

### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at [www.irs.gov/fw9](http://www.irs.gov/fw9).

**Purpose of Form**  
An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)  
Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued).
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

**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 November 1, 2016  
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT  
WAS:

RESOLVED THAT Jeffrey De Villier, 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 Riviere  
SECRETARY-TREASURER

9/27/17  
DATE

Non-Public Works Bid

AFFIDAVIT

STATE OF LA

PARISH/COUNTY OF JEFFERSON

BEFORE ME, the undersigned authority, personally came and appeared: JEFF  
DEVINER, (Affiant) who after being by me duly sworn, deposed and said that  
he/she is the fully authorized AGENT of CISCO (Entity),  
the party who submitted a bid in response to Bid Number 50-120679, 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.

*Jeff DeVicker*  
Signature of Affiant

Jeff DeVicker  
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME  
ON THE 27 DAY OF September, 2017.

*Brandy McReynolds*  
Notary Public

Brandy McReynolds  
Printed Name of Notary

37504  
Notary/Bar Roll Number

My commission expires upon death.



**Brandy-Leigh McReynolds**  
**Notary Public**  
**State of Louisiana**  
**LSBA# 37504**  
**My Commission Is For Life**

Print

## Notary Search - Detail

**Name:** BRANDY-LEIGH MCREYNOLDS  
**Address:** 2341 METAIRIE RD.  
METAIRIE, LA 70001

**Phone:** (504) 837-4950

**Notary ID Number:** 150747  
**Parish:** ORLEANS with STATEWIDE JURISDICTION  
**Agency:** N/A  
**Notary Type:** Attorney  
**Bar Roll #:** 37504

**Status:** Active

**Commission Date:** 06/01/2017  
**Oath Date:** 05/24/2017  
**Surety Expiration Date:** Not Required  
**Annual Report Current:** Not Applicable

[Back to Search Results](#)[New Search](#)



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
9/5/2017

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 E B Ducasse Insurance Agency, Inc 3200 Ridgelake Dr, Suite 401 Metairie LA 70002		CONTACT NAME: Darly Oser	
		PHONE (A/C, No, Ext): (504) 840-9883	FAX (A/C, No): (504) 840-9889
		E-MAIL ADDRESS: doser@ebducasse.com	
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A: United Fire and Indemnity Co	19496
		INSURER B: AmTrust North America Inc	
		INSURER C:	
		INSURER D:	
		INSURER E:	
		INSURER F:	

## COVERAGES CERTIFICATE NUMBER: 17-18 REVISION NUMBER:

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	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (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	9/1/2017	9/1/2018	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 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			60418952	9/1/2017	9/1/2018	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			60418952	9/1/2017	9/1/2018	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	TWC3658676	9/1/2017	9/1/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER 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. Bid No: 50-120679

CERTIFICATE HOLDER  The Parish of Jefferson, its Districts, Department & Agencies under the direction the Parish President & the Parish Council Department of Engineering 1221 Elmwood Park Blvd Ste 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./WAYNE <i>Edward B. Ducasse Sr.</i>

**STANDARD INSURANCE REQUIREMENTS – PUBLICLY ADVERTISED BIDS**

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 advertised 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.

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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.

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**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**

No insurance required shall include a deductible not greater than \$10,000.00. The cost of the deductible shall be borne by the contractor.

NOTE: If the vendor requires a change in deductibles, the request must be submitted in writing to the Purchasing Department prior to the due date of the bid. Such request shall be reviewed by the Parish Attorney's Office with the concurrence of the Director of Risk Management.

**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.

100% Domestic As per JP Spec

**RESILIENT  
WEDGE VALVES**  
**CLOW VALVE COMPANY**

**CLOW AWWA Resilient Wedge Gate Valves  
Meet or Exceed the Requirements of  
AWWA Standard C515**

Size Range	Water Working Pressure psi	Bubble Tight Test psi	Hydrostatic Shell Test psi
AWWA 4"-48"	250	250	500
ULFM 4"-16"	200	200	400

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

**Available End Connections & Size Range**

	Size Range	Figure No.
FLG End (NRS)	4"-48"	F-6102
M.J.	4"-48"(except 2 1/2")	F-6100
FLG & M.J.	4"-48"	F-6106
Push-on for PVC (SDR)	4"-12"	F-6110
FLG End (OS & Y)	4"-24"	F-6136
M.J. for Tapping	4"-24"	F-6114
Tyton for D.I. & C900 PVC	4"-12" & 16"	F-6112
M.J. Cutting-in	4"-12"	F-6111
Tyton for D.I. X FLG	4"-12"	F-6113

**Accessories (Illustrated in the Gate Valve Section)**

- Indicator Posts
- Enclosed Gearing (14"-24")
- "T" Handles
- Stem Guides
- Electric Motor Actuators
- 2" Sq. Operating Nuts
- Handwheels
- Extension Stems
- Floor Boxes
- Chain Wheels
- Floorstands (non-rising stem)

**NOTE:**  
It is recommended that valves be installed with stems vertical when used in raw sewage or sludge applications or in water with excessive sediment.

MODEL 2638 AWWA C515 REDUCED WALL DUCTILE IRON

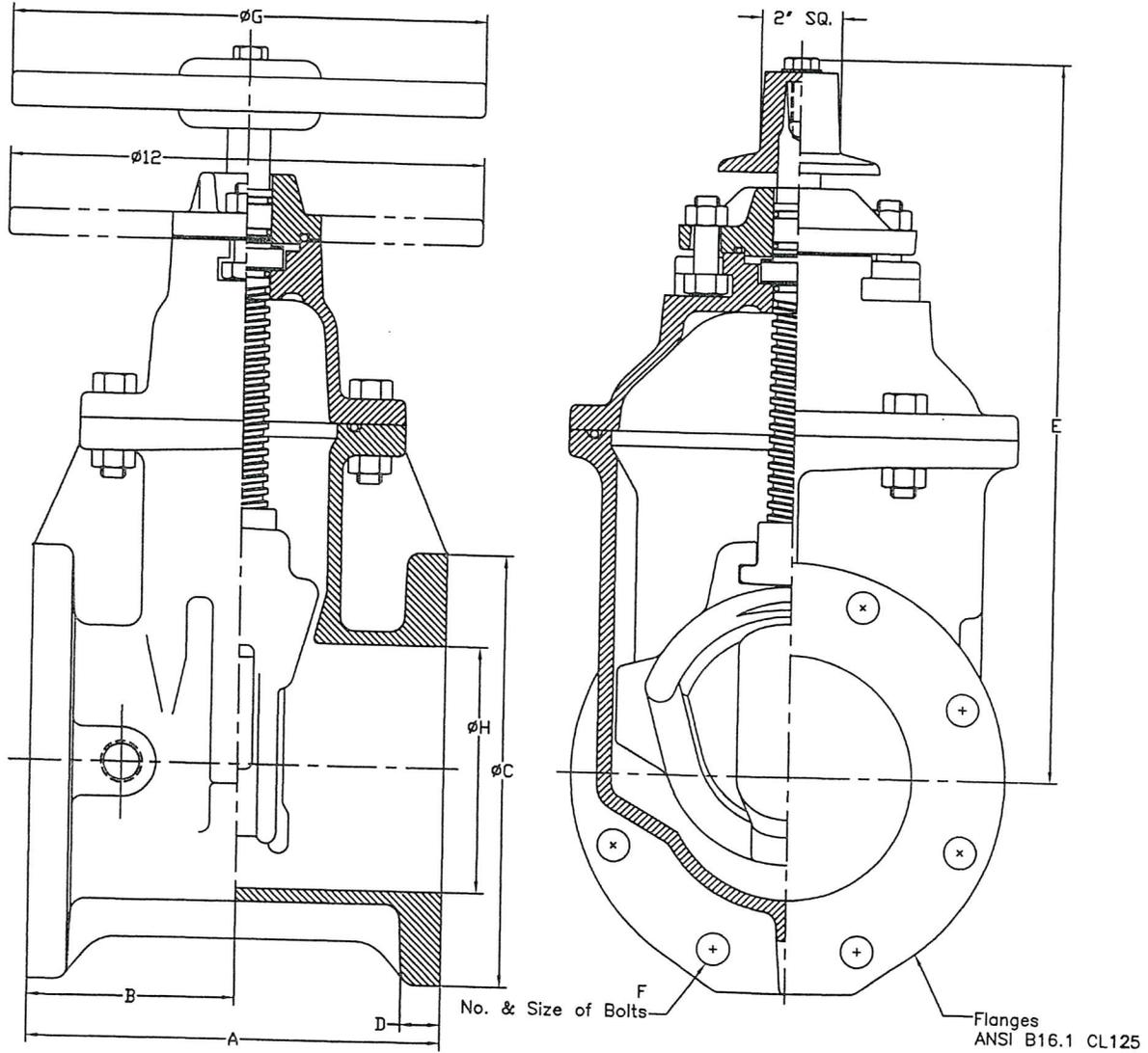
Complies with applicable requirements of AWWA C515

4"-12" R/W VALVE NRS FLANGED ENDS  
GENERAL DIMENSIONS

**CLOW VALVE COMPANY**

MODEL 2638

F-6102



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

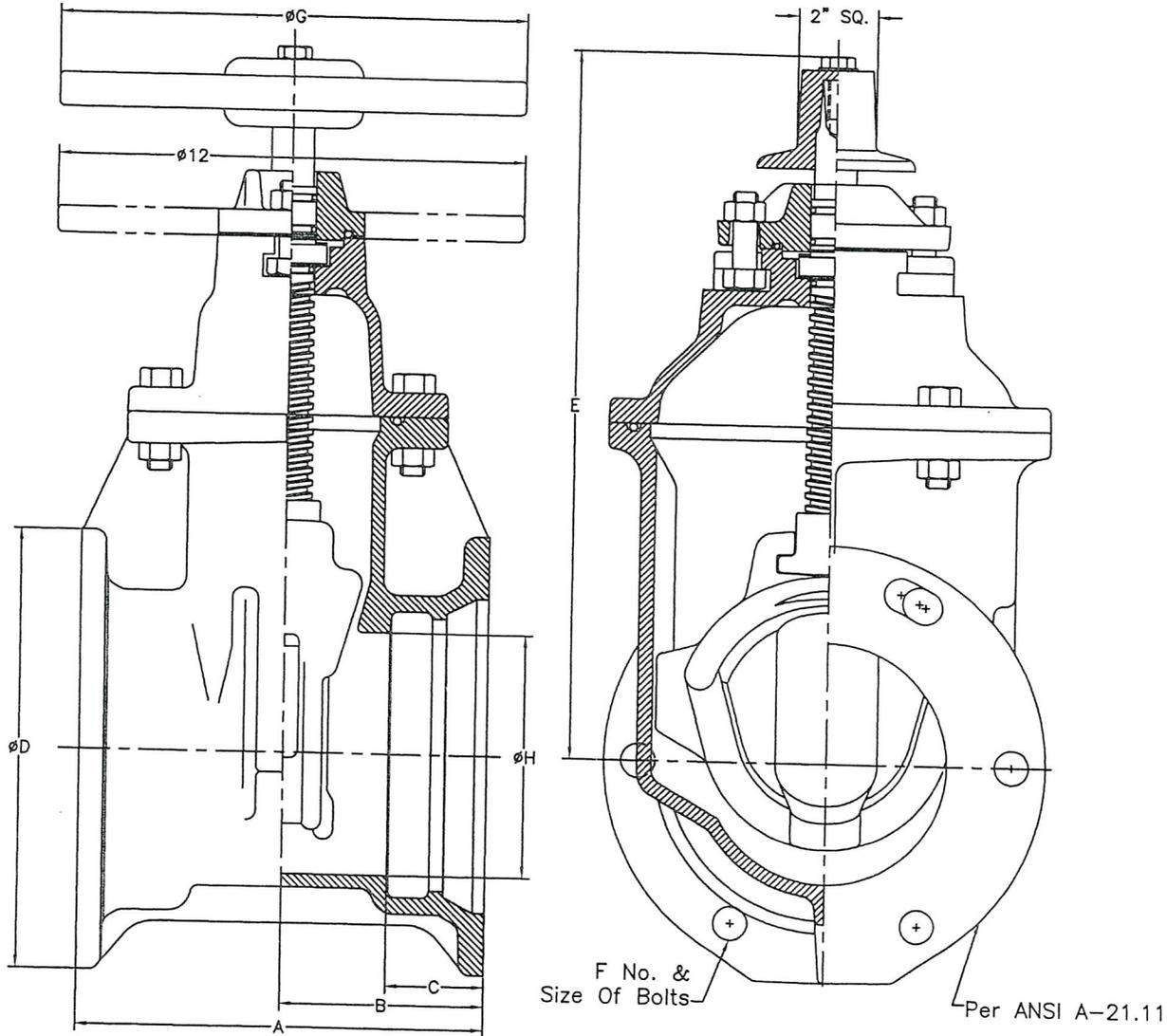
Complies with applicable requirements of AWWA C515

4"-12" R/W VALVE MECHANICAL JOINT ENDS  
GENERAL DIMENSIONS

**CLOW VALVE COMPANY**

MODEL 2638

F-6100



VALVE SIZE	A	B	C	D	E	F	G	H
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

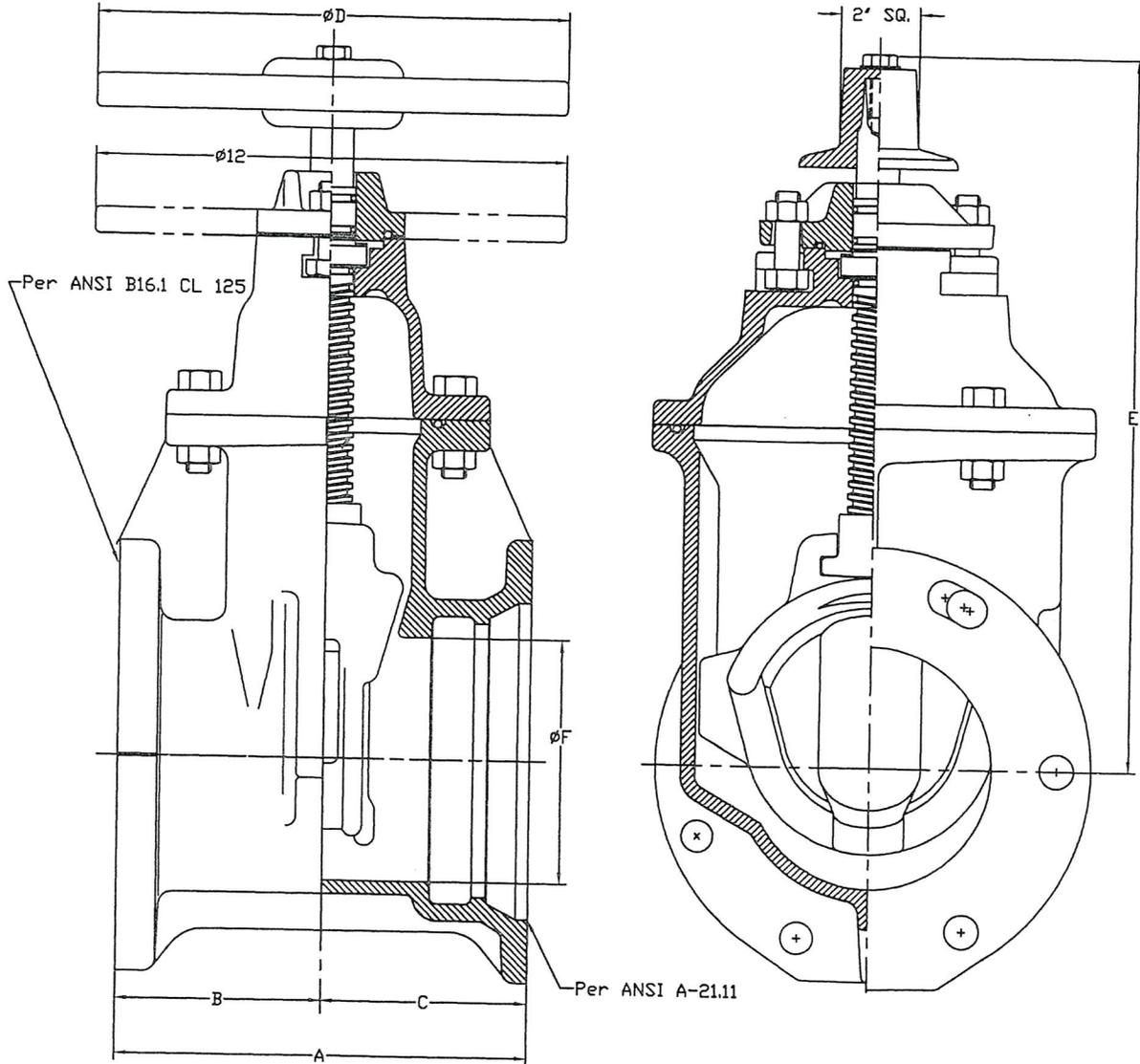
Complies with applicable requirements of AWWA C515

4" -12" R/W VALVE NRS FLANGED x MECHANICAL JOINT ENDS GENERAL DIMENSIONS

**CLOW VALVE COMPANY**

MODEL 2638

F-6106



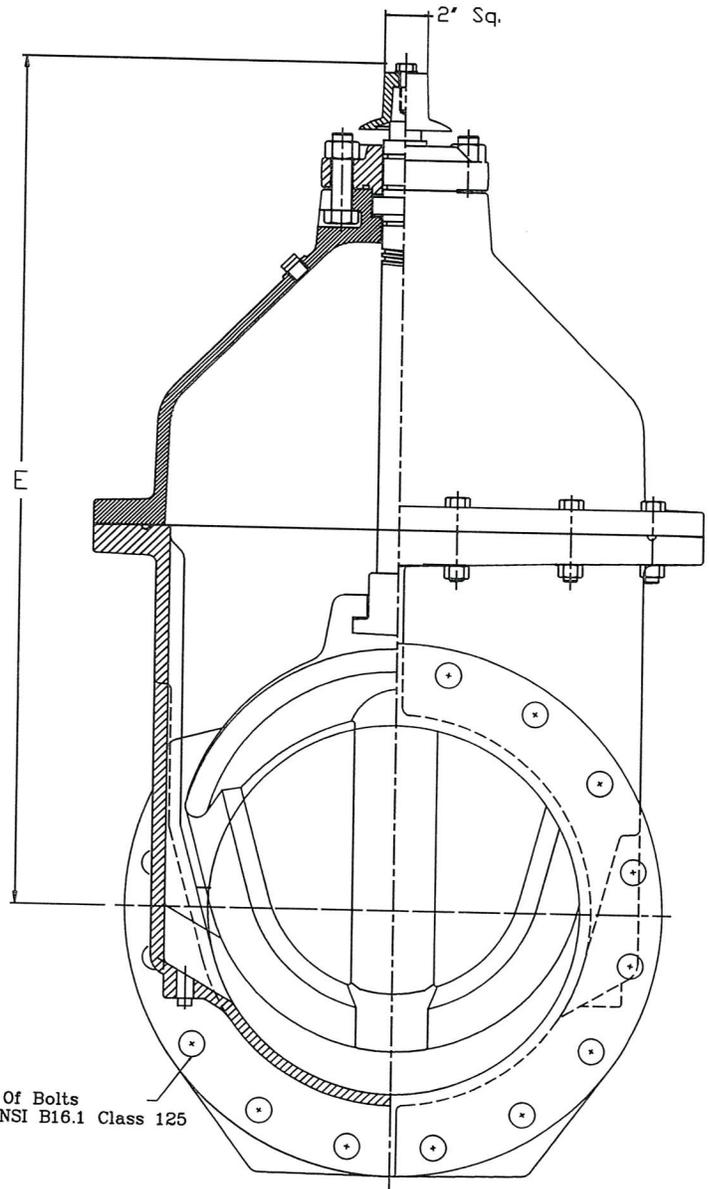
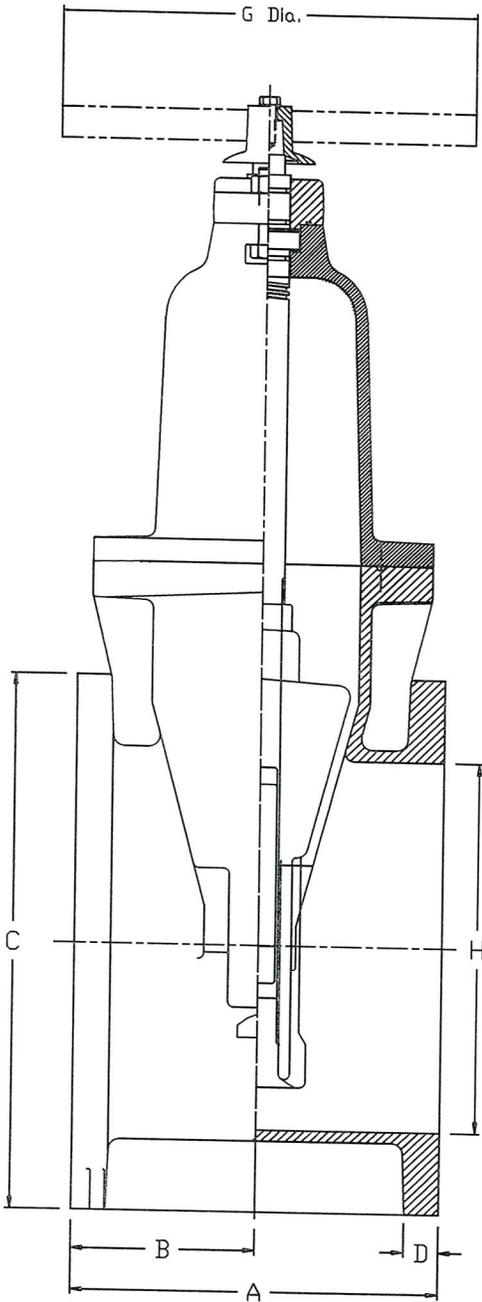
VALVE SIZE	A	B	C	D	E	F
4	9 1/4	4 1/2	4 3/4	10	14 3/4	4 1/4
6	10 1/2	5 1/4	5 1/4	12	19	6 1/4
8	12 5/16	5 3/4	6 9/16	14	22 1/2	8 1/4
10	14 1/4	6 1/2	7 3/4	18	26 1/2	10 1/4
12	15	7	8	18	30	12 1/4

Complies with applicable requirements of AWWA C515

14" - 16" R/W VALVE FLANGED ENDS  
GENERAL DIMENSION

**CLOW VALVE COMPANY**

MODEL 2638



F No. & Size Of Bolts  
Drilling per ANSI B16.1 Class 125

SIZE	A	B	C	D	E	F	G	H
14	15	7.5	21	1.38	37.75	12-1	28	14.25
16	16	8	23.5	1	37.75	18-1	28	16.25

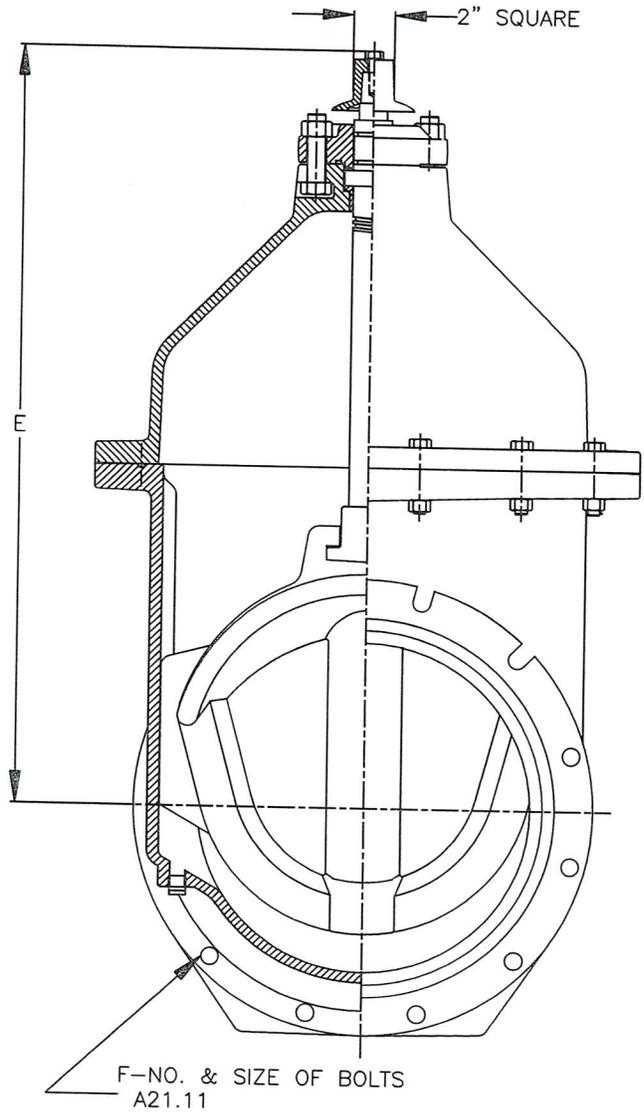
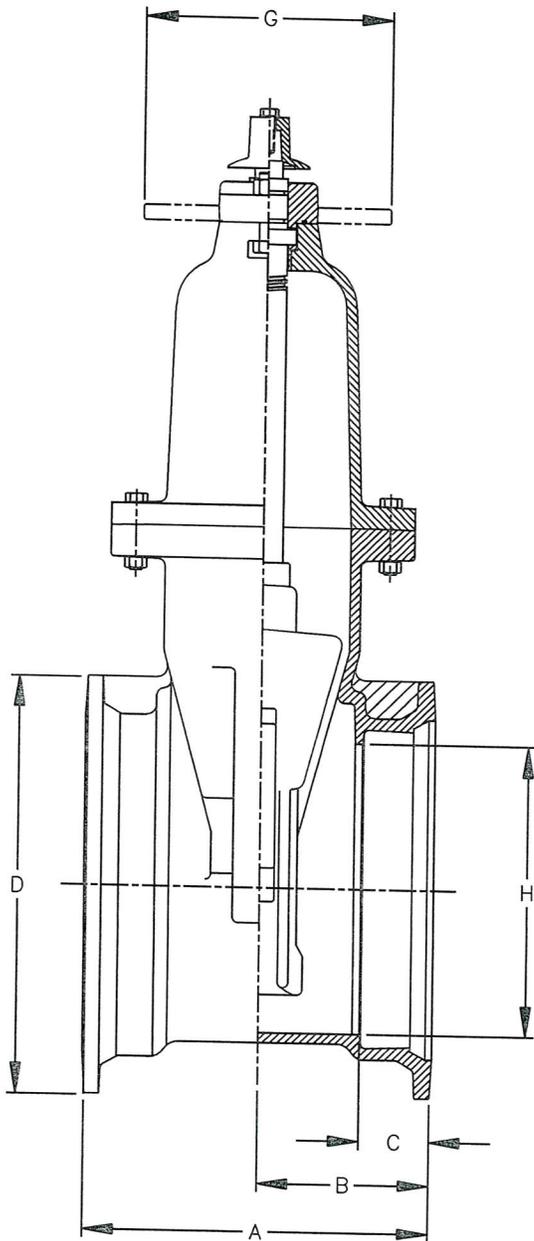
Complies with applicable requirements of AWWA C515

14"-16" R/W VALVE MJ ENDS  
GENERAL DIMENSIONS

**CLOW VALVE COMPANY**

MODEL 2638

**F-6100**



VALVE SIZE	A	B	C	D	E	F	G	H	Weight
14"	17	8.5	3.5	20.25	37.75	10-3/4	18	14 1/4	625
16"	17	8.5	3.5	22.5	37.75	12-3/4	18	16 1/4	675

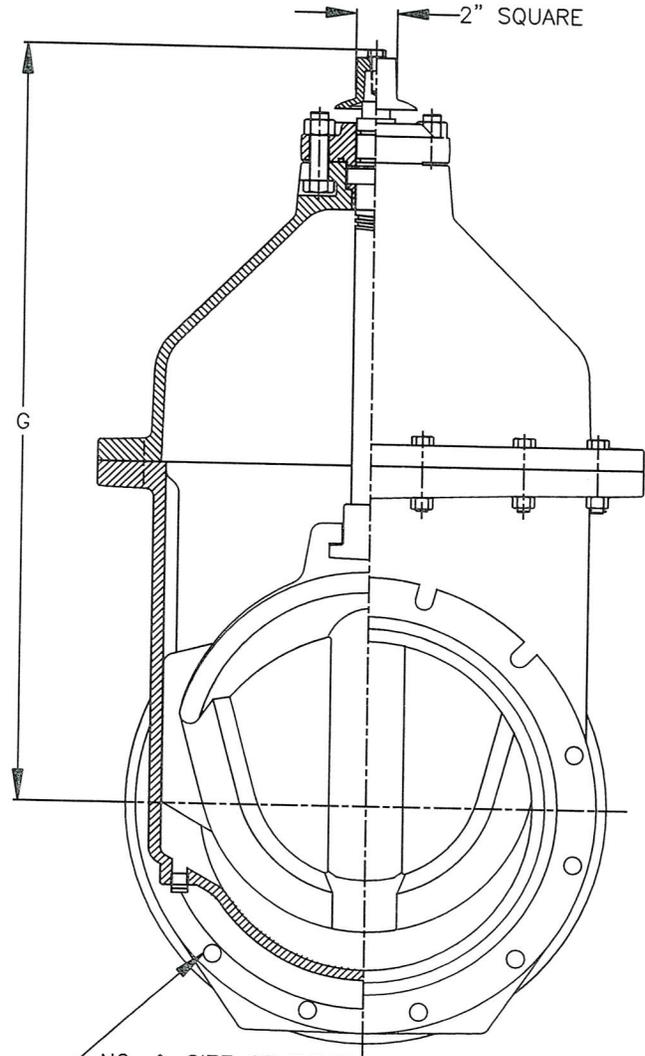
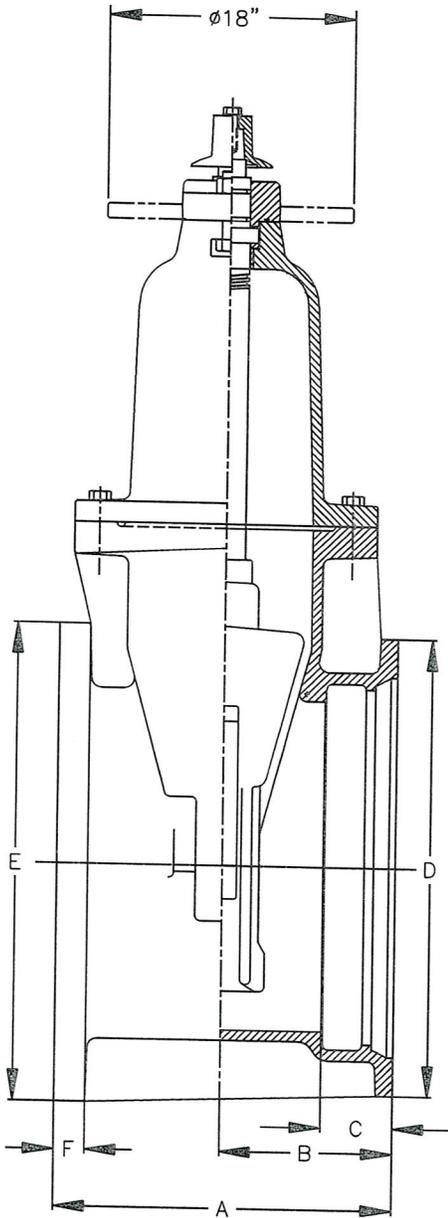
Complies with applicable requirements of AWWA C515

14"-16" R/W VALVE FLANGE X MJ ENDS  
GENERAL DIMENSIONS

**CLOW VALVE COMPANY**

MODEL 2638

F-6106



NO. & SIZE OF BOLTS  
H - FLANGE ENDS PER ANSI B16.1  
J - MJ END PER A21.1

VALVE SIZE	A	B	C	D	E	F	G	H	J
14	17	8.5	3.5	20.25	21	1.38	37.75	12-1	10-3/4
16	16.5	8.5	3.5	22.5	23.5	1.50	37.75	16-1	12-3/4

CR (CORROSION RESISTANCE) COATING

CLOW VALVE COMPANY

CHEMICAL	EPOXY RATING		CHEMICAL	EPOXY RATING	
	70°F	180°F		70°F	180°F
<b>ACIDS:</b>			<b>ALKALIES:</b>		
Acetic, 10%	F	N	Ammonium Hydroxide	E	G
Benzene Sulfonic, 10%	E	E	Calcium Hydroxide	E	E
Benzoic	E	E	Potassium Hydroxide	E	E
Boric	E	E	Sodium Hydroxide	E	E
Chloracetic, 10%	E	E	<b>ACID SALTS:</b>		
Chromic, 5%	F	N	Aluminum Sulfate	E	E
Citric, 10%	E	N	Ammonium Chloride*	E	E
Fatty Acids	E	E	Copper Chloride*	E	E
Formic, 90%	E	F	Iron Chloride*	E	E
Hydrobromic, 20%	G	G	Nickel Chloride*	E	E
Hydrochloric, 20%	E	G	Zinc Chloride*	E	E
Hydrocyanic	E	E	<b>ALKALINE SALTS:</b>		
Hydrofluoric, 20%	G	G	Barium Sulfide	E	E
Hypochlorous, 5%	F	N	Sodium Bicarbonate	E	E
Lactic, 5%	F	N	Sodium Carbonate	E	E
Maleic, 25%	E	E	Sodium Sulfide	E	E
Nitric, 5%	E	G	Trisodium Phosphate	E	E
Nitric, 30%	G	P	<b>NEUTRAL SALTS:</b>		
Oleic	E	E	Calcium Chloride*	E	E
Oxalic	E	E	Magnesium Chloride*	E	E
Phosphoric	G	F	Potassium Chloride*	E	E
Picric	G	F	Sodium Chloride*	E	E
Steraric	E	E	<b>SOLVENTS:</b>		
Sulfuric, 50%	G	F	Alcohols	E	E
Tannic	E	E	Aliphatic Hydrocarbons	E	E
			Aromatic Hydrocarbons	E	E
Ketones	F	F	Benzene	E	E
Ethers	F	F	Formaldehyde, 37%	E	G
Esters	F	F	Phenol, 5%	G	F
Gasoline	E	E	Mineral Oils	E	E
Carbon Tetrachloride	E	E	Vegetable Oils	E	E
Organics:			Chlorobenzene		
Aniline	G	P			

KEY: E - no attack  
 G - appreciably no attack  
 F - some attack, but useable in some instances  
 P - attacked, not recommended for use  
 N - rapidly attacked  
 \* - and nitrate and sulfate

RW Gate Valve  
EPDM Wedge Compatibility Chart

**CLOW VALVE COMPANY**

Chemical	Rating
Acetic (10%)	1
Alcohols	2
Aliphatic Hydrocarbons	4
Aluminum Sulfate	1
Ammonium Chloride	1
Ammonium Hydroxide	1
Aniline	2
Aromatic Hydrocarbons	4
Barium Sulfide	1
Benzene	4
Benzene Sulfonic (10%)	4
Benzoic	4
Boric	1
Calcium Chloride	1
Calcium Hydroxide	1
Carbon Tetrachloride	4
Chloracetic (10%)	2
Chlorobenzene	4
Chromic (5%)	2
Citric (10%)	1
Copper Chloride	1
Esters	3
Ethers	3
Fatty Acids	3
Formaldehyde (37%)	2
Formic (90%)	1
Gasoline	4
Hydrobromic (20%)	1
Hydrochloric (20%)	3
Hydrocyanic	1

Chemical	Rating
Hydrofluoric (20%)	X
Hypochlorous (5%)	2
Iron Chloride	1
Ketones	1
Lactic (5%)	1
Magnesium Chloride	1
Maleic (25%)	2
Mineral Oils	3
Nickel Chloride	1
Nitric (30%)	3
Nitric (5%)	2
Oleic	4
Oxalic	1
Phenol (5%)	4
Phosphoric	1
Picric	1
Potassium Chloride	1
Potassium Hydroxide	1
Sodium Bicarbonate	1
Sodium Carbonate	1
Sodium Chloride	1
Sodium Hydroxide	1
Sodium Sulfide	1
Stearic	2
Sulfuric (50%)	4
Tannic	1
Trisodium Phosphate	1
Vegatable Oils	3
Zinc Chloride	1

- 1 = Satisfactory
- 2 = Fair (usually acceptable for static seal)
- 3 = Doubtful (sometimes acceptable for static seal)
- 4 = Unsatisfactory
- X = Insufficient Data

*Ratings are based on solutions at room temperature. Specific conditions of each application, such as flow and temperature, can significantly affect results. Always test under actual service conditions.*

Resilient Wedge (RW) Gate Valve  
Product Analysis

**CLOW VALVE COMPANY**

Model 2638

Valve meets or exceeds the requirements of AWWA C515

Valve is certified by UL/FM (where applicable)

Features	Benefits
Bubble Tight Closure at full rated pressure	<ul style="list-style-type: none"><li>• No leakage across the wedge</li></ul>
Smooth, Unobstructed Waterway	<ul style="list-style-type: none"><li>• Minimal flow loss</li><li>• Sediment buildup is minimized</li><li>• Will not impede the travel of line cleaning tools</li></ul>
Only Three Internal Parts	<ul style="list-style-type: none"><li>• Virtually maintenance free</li></ul>
No Seat Rings	<ul style="list-style-type: none"><li>• Nothing to be damaged by scoring</li></ul>
Anti-Friction Thrust Bearing	<ul style="list-style-type: none"><li>• Operating torque is minimized</li></ul>
Copper Alloy Stem Nut and High Strength Copper Alloy Stem	<ul style="list-style-type: none"><li>• No corrosion</li><li>• Trouble free service</li></ul>
Stem Nut is Self-Centering	<ul style="list-style-type: none"><li>• Reduces lateral stress on stem and wedge</li></ul>
Two O-ring seals above stem thrust collar	<ul style="list-style-type: none"><li>• O-Rings can be replaced with the valve in service</li></ul>
Fully Encapsulated Iron Wedge	<ul style="list-style-type: none"><li>• Trouble free service with minimal maintenance</li></ul>
Wedge design incorporates two seating surfaces	<ul style="list-style-type: none"><li>• Seals in either direction</li></ul>

**Note:**

It is recommended that valves be installed with stems vertical when used in water with excessive sediment.

Valve meets or exceeds the requirements of AWWA C515

Valve is rated at 250 psi working pressure

Per AWWA C515, every valve:

- has been operated through a full cycle to ensure the proper functioning of parts
- has been hydrostatically shell tested a twice rated pressure (500 psi)
- has been hydrostatically seat tested on both sides at full rated pressure (250 psi) to confirm there is no leakage across the seat.

Per AWWA C515, a representative valve:

- has been hydrostatically tested at 2 times rated pressure on each side of the gate
- has been hydrostatically shell tested at 2.5 times rated pressure
- has been over torqued in both the fully closed and fully open positions according to the values published in the standard
- has been cycle tested for a minimum of 500 cycles without loss of bubble-tight seal

Rubber to iron bond on wedge is inspected for strength per ASTM D429 specification

**Note:**

It is recommended that valves be installed with stems vertical when used in water with excessive sediment.

2"-16" RW Gate Valves for UL/FM Service  
Performance Information

**CLOW VALVE COMPANY**

Model 2638

Valve complies with Underwriters Laboratory standard UL 262 and the FM standard for "Fire Service Water Control Valves"

Valve is rated at 200 psi working pressure

Per the UL and FM Standards, each valve:

- Has been hydrostatically shell tested at twice rated pressure (400 psi)
- Has been hydrostatically seat tested at full rated pressure (200 psi) for a bubble tight seal without exceeding the torque limits listed in the FM Standard
- Has been hydrostatically seat tested at 1.5X rated pressure (300 psi) for a bubble tight seal on both sides

Per the UL and FM Standards, a representative valve:

- Has been hydrostatically shell tested at four times rated pressure (800 psi)
- Has been hydrostatically seat tested at full rated pressure (200 psi) for a bubble tight seal without exceeding the torque limits listed in the FM Standard
- Has been hydrostatically seat tested at 1.5X rated pressure (300 psi) for a bubble tight seal without exceeding the torque limits listed in the UL Standard
- Has been over torqued in both the open and close directions according to the values in the UL and FM standards without loss of functionality
- Has been hydrostatically tested for the strength of the gate at twice rated pressure (400 psi) in both directions
- Has been cycle tested for a minimum of 1000 cycles without loss of bubble tight seal

Rubber to iron bond on wedge is inspected for strength as per ASTM D429 specification.

For complete data on the tests  
Underwriters Laboratories  
performed reference UL file  
EX2697 Project 87NK7353

**NOTE:**

It is recommended that valves be installed with stems vertical when used in water with excessive sediment.

**C515 Resilient Wedge Gate Valves  
Recommended Specifications****CLOW VALVE COMPANY**

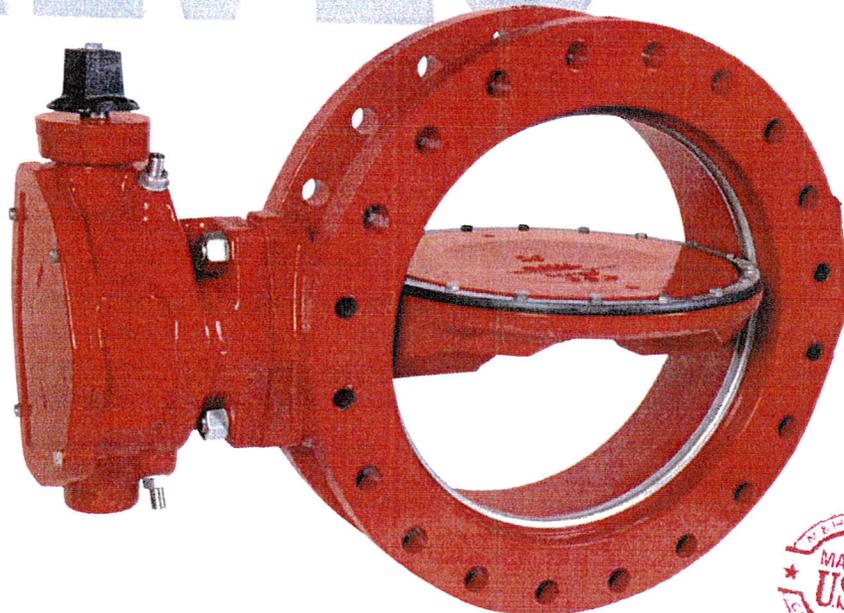
1. Valves shall conform to the latest revision of AWWA Standard C515 covering resilient-seated (RS) gate valves for water supply service.
2. AWWA C515 valves shall have a ductile iron body, bonnet and O-ring plate. The wedge shall be fully encapsulated with rubber.
3. The sealing rubber shall be permanently bonded to the wedge casting per ASTM D429.
4. Valves shall be supplied with O-ring seals at all pressure retaining joints. No flat gaskets shall be allowed.
5. The valve shall be non-rising stem (NRS) or rising stem (OS&Y), opened by turning left or right, and provided with a 2" square operating nut or a handwheel. The operating nut and the handwheel shall be marked indicating the direction to open with the word "Open" and an arrow.
6. Stems shall be made with copper alloy or stainless steel, with an integral collar, and in full compliance with AWWA C515. All stems shall operate with copper alloy stem nuts independent of the wedge.
7. All NRS stems shall have two O-rings located above the thrust collar and at least one below. The upper o-rings or packing shall be replaceable with the valve fully opened and subjected to full pressure. The stems on 4"-12" NRS valves shall have a low torque thrust bearing located both above and below the stem collar to reduce friction during operation.
8. Waterway shall be smooth, unobstructed, and free of all pockets, cavities and depressions in the seat area. Valves made with a tapping flange shall accept a full-size tapping cutter.
9. The body, bonnet, and O-ring plate shall be coated, both on the interior and the exterior, with fusion-bonded epoxy. Epoxy shall be applied in accordance with AWWA C550 and be certified NSF 61.
10. Each valve shall have the manufacturer's name, the pressure rating, and the year in which it was manufactured cast into the body. Prior to shipment from the factory, each valve shall be hydrostatically pressure tested according to the requirements of AWWA C515 (and UL/FM where applicable).
11. Valves shall have all component parts cast and assembled in the United States and shall be manufactured by the Clow Valve Company.

An industry leader in underground and in-plant applications.

# BUTTERFLY VALVES

STYLE 4500 3" – 24"  
STYLE 1450 30" – 54"

Consult factory for  
sizes 60" – 120"



C504 • Class 150B & 250B



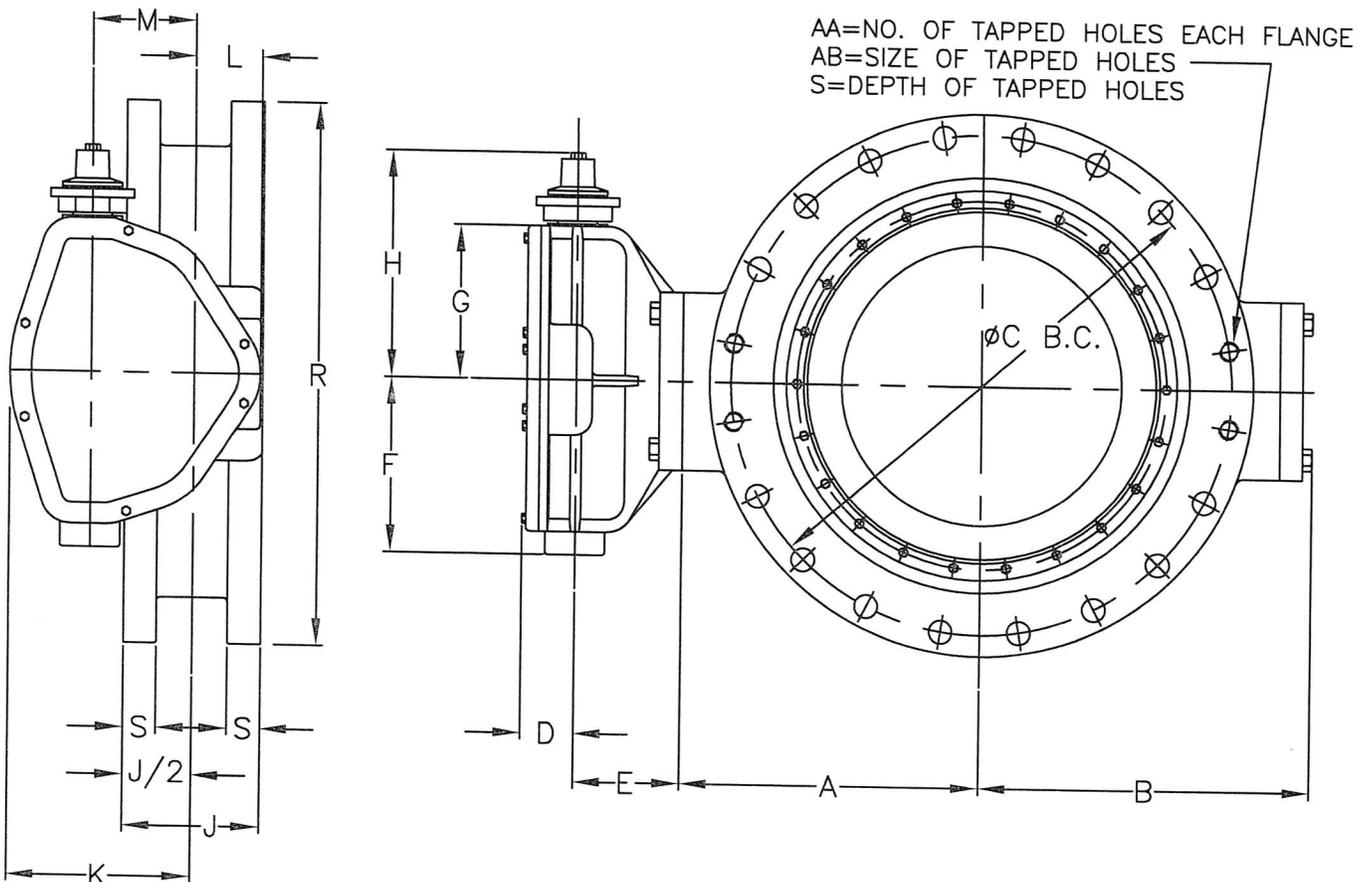
**M&H VALVE COMPANY**

*M&H Valve is a division of McWane, Inc.*

[www.mh-valve.com](http://www.mh-valve.com)



**For Generations**



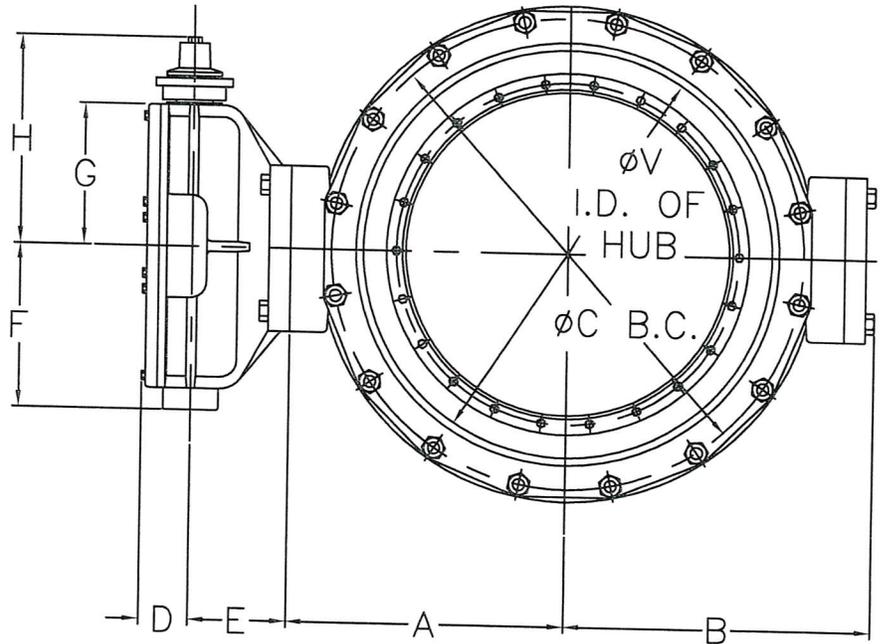
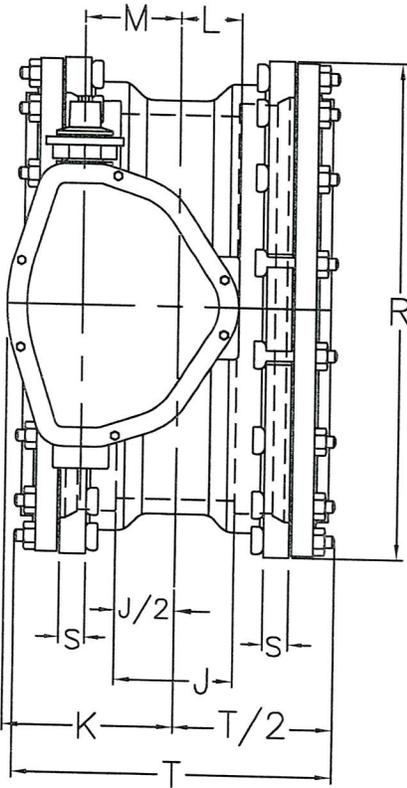
AA=NO. OF TAPPED HOLES EACH FLANGE  
 AB=SIZE OF TAPPED HOLES  
 S=DEPTH OF TAPPED HOLES

VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2	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.

<p>M&amp;H VALVE COMPANY          ANNISTON, ALABAMA          A DIVISION OF MCWANE INC.</p>	DWN: TRIJ	<p>3" THRU 24" STYEL 4500          CLASS 150 BUTTERFLY VALVE          BURIED OPERATOR          FLANGED ENDS</p>
	DATE: 8/11/11	
	DWG. NO. BFE-15-45C	



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

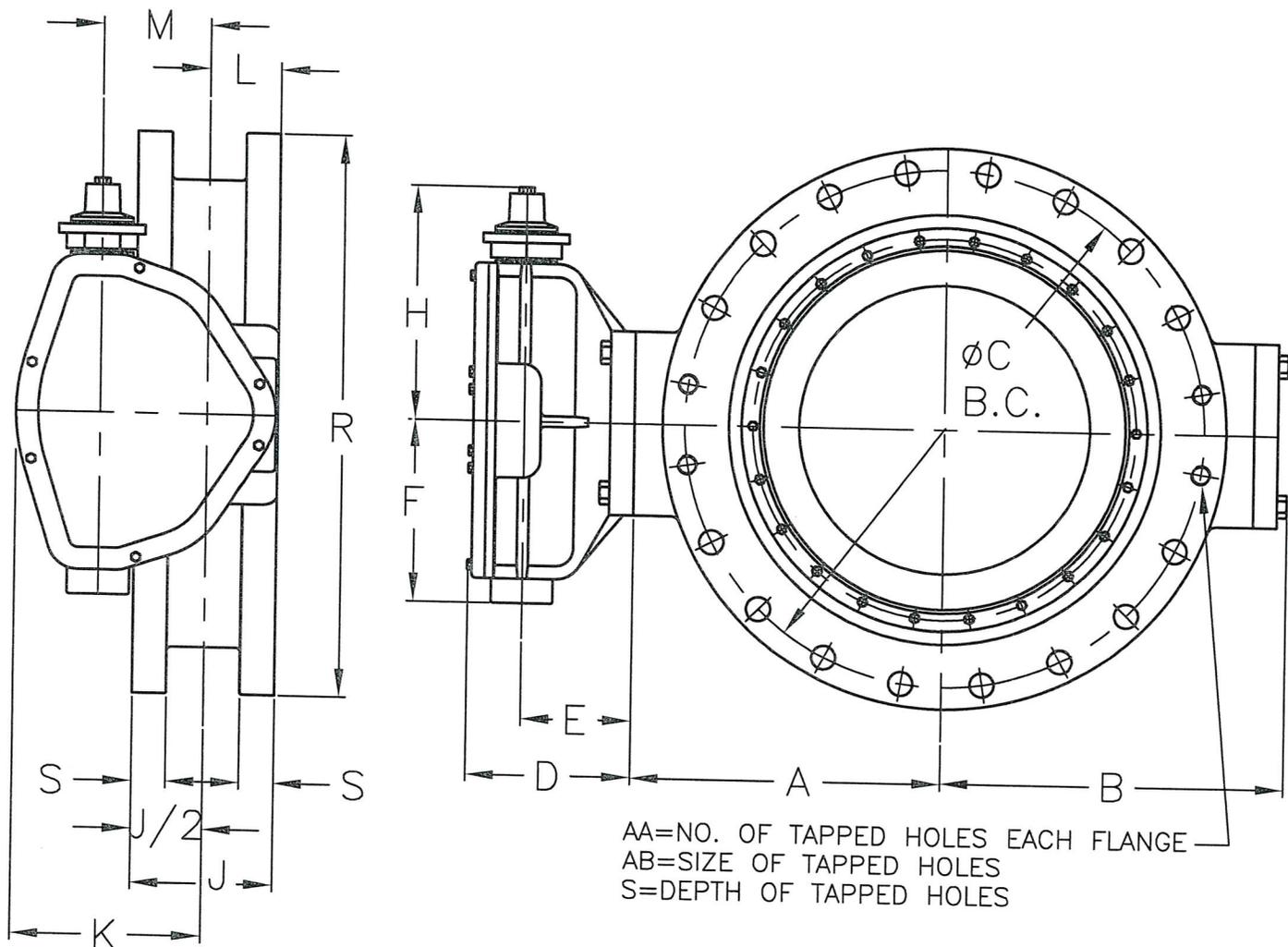
VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
4"	4	5 1/8	7 1/2	2 1/2	4	3/4x3 1/2	9 1/8	1	12 3/4	4.90 <sup>±.05</sup>	80
6"	5	6 1/8	9 1/2	2 7/8	6	3/4x3 1/2	11 1/8	1 1/16	13	7.00 <sup>±.05</sup>	100
8"	6	7 3/8	11 3/4	3	6	3/4x4	13 3/8	1 1/8	14	9.15 <sup>±.05</sup>	150
10"	7 3/4	9 1/2	14	4 1/4	8	3/4x4	15 11/16	1 3/16	15 1/8	11.20 <sup>±.05</sup>	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 <sup>±.05</sup>	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 <sup>±.05</sup>	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 <sup>±.05</sup>	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 <sup>±.05</sup>	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 <sup>±.05</sup>	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 <sup>±.05</sup>	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: RATED AND TESTED FOR 250 PSI WORKING PRESSURE  
 NOTE 9: GASKET, GLANDS, BOLTS, FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER

M&H VALVE COMPANY  
 ANNISTON, ALABAMA  
 A DIVISION OF MCWANE INC.

DWN: TRIJ  
 DATE: 8/10/11  
 DWG. NO.  
 BMJ-25-45C

4"-24" STYLE 4500  
 CLASS 250 BUTTERFLY VALVE  
 BURIED OPERATOR  
 MJ x MJ



	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

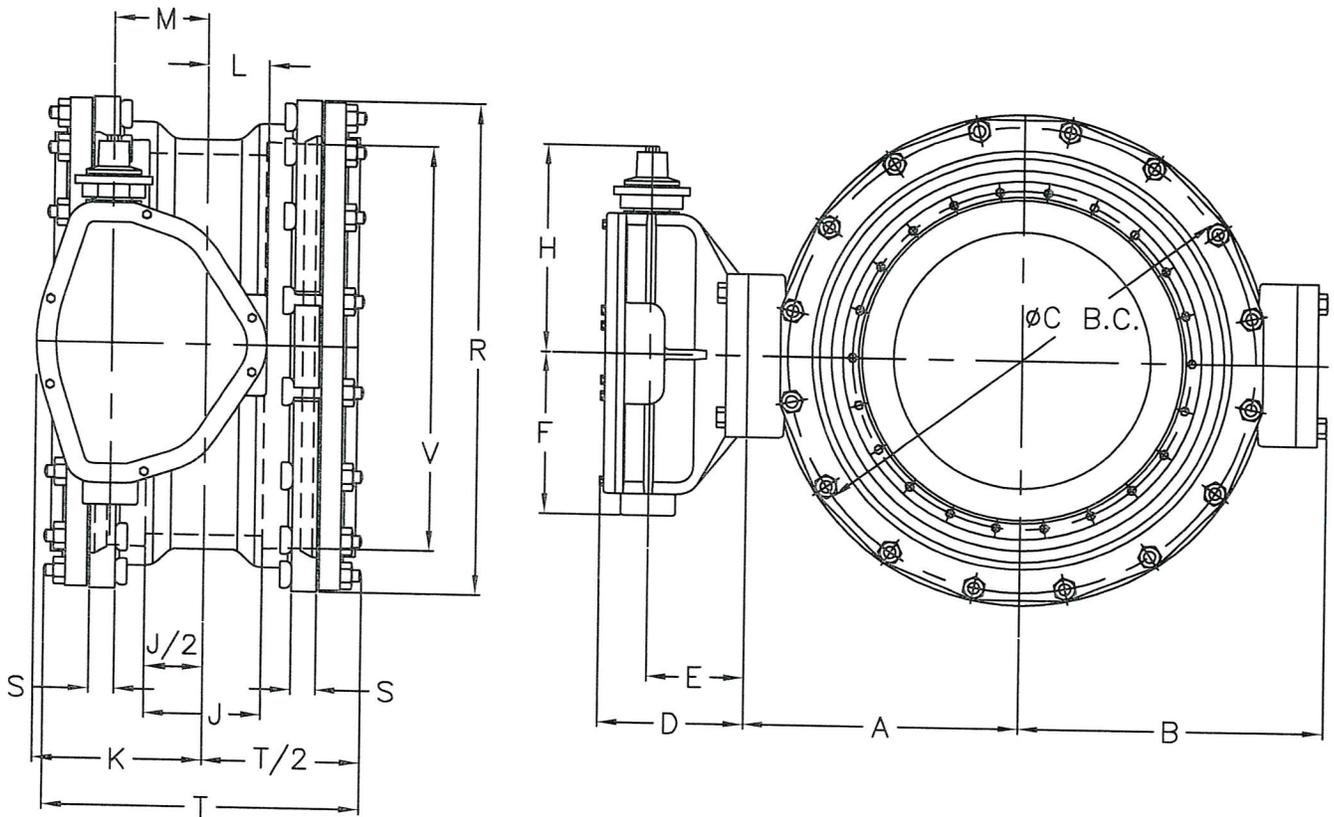
VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
30"	20.625	21.50	36	12	28	1.250	38.750	2.125	4	1.250-7	1790
36"	24.250	25.06	42.750	12	32	1.500	46	2.375	4	1.500-6	2515
42"	28.250	28.88	49.500	12	36	1.500	53	2.625	4	1.500-6	4405

- 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

M&H VALVE COMPANY  
 ANNISTON, ALABAMA  
 A DIVISION OF MCWANE INC.

DWN: TRIJ  
 DATE: 1/1/11  
 DWG. NO.  
 BFE-15-14B

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



	OPERATOR MODEL	D	E	F	H	K	L	M	N
30"	2200	9 7/16	6 1/4	10 3/8	14 5/16	10 3/4	3 7/8	6	72
36" & 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	T	V	WEIGHT
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: RATED AND TESTED FOR 250 PSI WORKING PRESSURE

M&H VALVE COMPANY  
 ANNISTON, ALABAMA  
 A DIVISION OF MCWANE INC.

DWN: TRIJ  
 DATE: 8/10/11  
 DWG. NO.  
 BMJ-25-14B

30" THRU 42" STYLE 1450  
 CLASS 250 BUTTERFLY VALVE  
 BURIED OPERATOR  
 MJ X MJ

# K-FLO

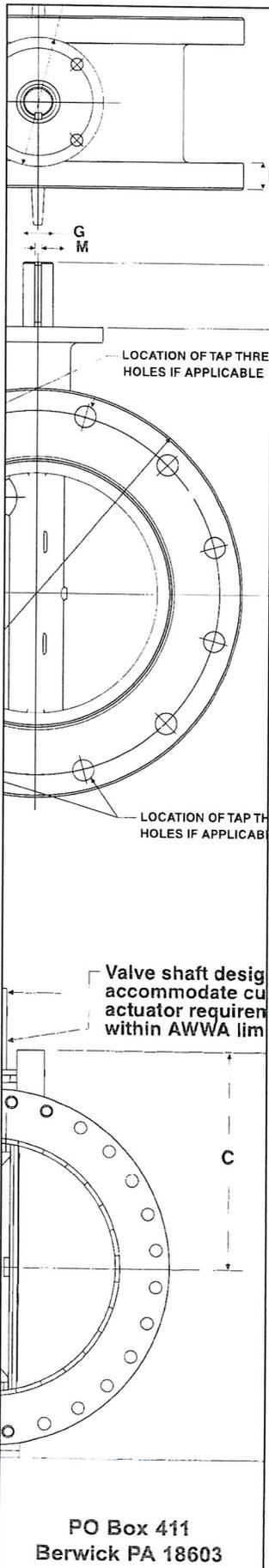
## BUTTERFLY VALVES

VALVES FROM 3" THRU 168"

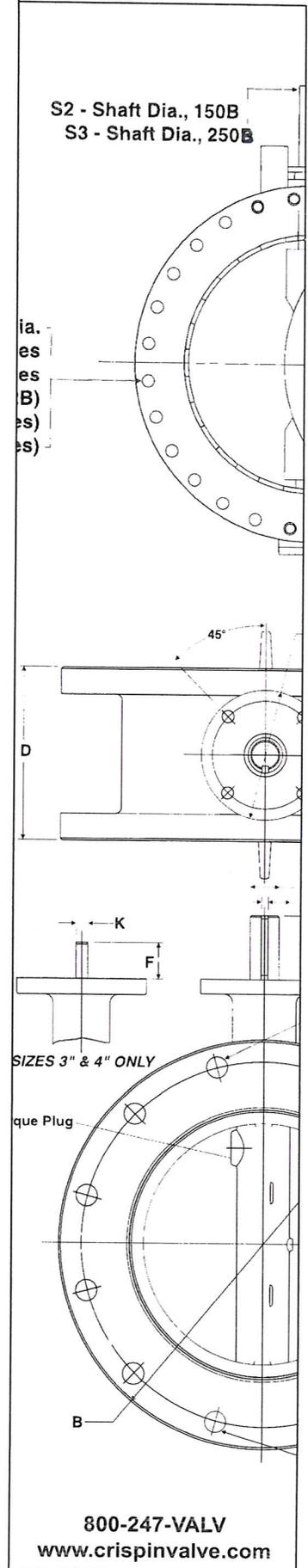


MEETS AND EXCEEDS  
THE LATEST AWWA C504 EDITION

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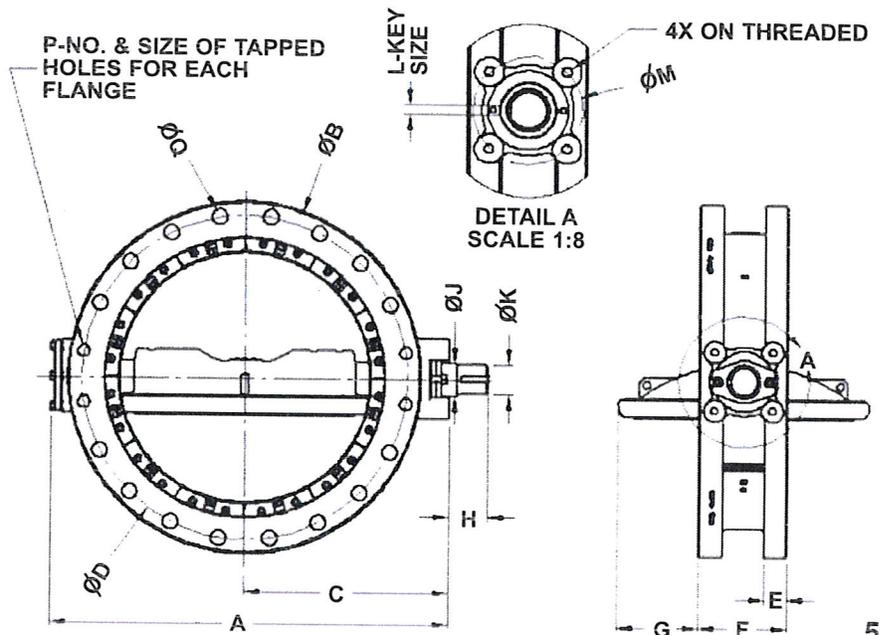
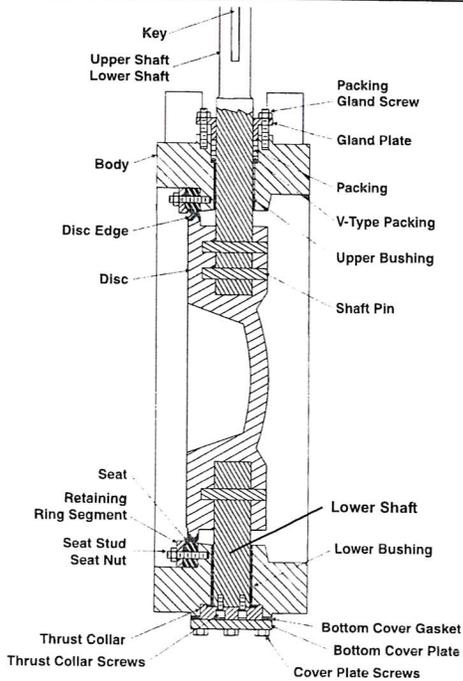
# 47 SERIES: Dimensional Data

## K-FLO Model 47 (Flanged x Flanged, AWWA Class 150B)

Size in.	K-FLO Model 47 (Flanged x Flanged, AWWA Class 150B)															Bare Shaft	
	A in.	B in.	C in.	D in.	E	F	G	H	J in.	K in.	L in.	M in.	N in.	P in.	Q in.	Weight in lbs.	
24	36	32	18 <sup>1</sup> / <sub>2</sub>	29 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>8</sub>	8	7 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	3	2 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>16</sub> X <sup>5</sup> / <sub>8</sub> X2 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	3 <sup>4</sup> / <sub>4</sub> -10 <sub>NC</sub> X1 <sup>1</sup> / <sub>4</sub> DP	(4)1- <sup>1</sup> / <sub>4</sub> -7 <sub>NC</sub>	(16)1 <sup>3</sup> / <sub>8</sub>	740	
30	46 <sup>7</sup> / <sub>8</sub>	38 <sup>3</sup> / <sub>4</sub>	25 <sup>3</sup> / <sub>8</sub>	36	2 <sup>1</sup> / <sub>8</sub>	12	8 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	3 <sup>5</sup> / <sub>8</sub>	3	1 <sup>2</sup> / <sub>2</sub> X <sup>3</sup> / <sub>4</sub> X3 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>4</sub>	1-8 <sub>NC</sub> X1 <sup>1</sup> / <sub>2</sub> ZDP	(6)1- <sup>1</sup> / <sub>4</sub> -7 <sub>NC</sub>	(22)1 <sup>3</sup> / <sub>8</sub>	1650	
36	54	46	28 <sup>3</sup> / <sub>4</sub>	42 <sup>3</sup> / <sub>4</sub>	2 <sup>7</sup> / <sub>16</sub>	12	11 <sup>3</sup> / <sub>8</sub>	4 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>2</sub> X <sup>3</sup> / <sub>4</sub> X3 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>4</sub>	1-8 <sub>NC</sub> X1 <sup>1</sup> / <sub>2</sub> ZDP	(6)1- <sup>1</sup> / <sub>2</sub> -6 <sub>NC</sub>	(26)1 <sup>5</sup> / <sub>8</sub>	2380	
42	58 <sup>7</sup> / <sub>8</sub>	53	30 <sup>15</sup> / <sub>16</sub>	49 <sup>1</sup> / <sub>2</sub>	2 <sup>11</sup> / <sub>16</sub>	12	13 <sup>13</sup> / <sub>16</sub>	6 <sup>5</sup> / <sub>16</sub>	5	4	3 <sup>4</sup> / <sub>4</sub> X1X5	11 <sup>3</sup> / <sub>4</sub>	1-8 <sub>NC</sub> X1 <sup>1</sup> / <sub>2</sub> ZDP	(6)1- <sup>1</sup> / <sub>2</sub> -6 <sub>NC</sub>	(30)1 <sup>5</sup> / <sub>8</sub>	3260	
48	65 <sup>15</sup> / <sub>16</sub>	59 <sup>1</sup> / <sub>2</sub>	34 <sup>3</sup> / <sub>4</sub>	56	2 <sup>3</sup> / <sub>4</sub>	15	15 <sup>7</sup> / <sub>16</sub>	6 <sup>5</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>8</sub>	4	3 <sup>4</sup> / <sub>4</sub> X1X5	16	1 <sup>1</sup> / <sub>8</sub> -7 <sub>NC</sub> X2DP	(8)1- <sup>1</sup> / <sub>2</sub> -6 <sub>NC</sub>	(36)1 <sup>5</sup> / <sub>8</sub>	4490	
54	75 <sup>11</sup> / <sub>16</sub>	66 <sup>1</sup> / <sub>4</sub>	40 <sup>3</sup> / <sub>16</sub>	62 <sup>3</sup> / <sub>4</sub>	3	15	18 <sup>3</sup> / <sub>8</sub>	6 <sup>15</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>8</sub> X1 <sup>1</sup> / <sub>4</sub> X5 <sup>3</sup> / <sub>4</sub>	16	1 <sup>1</sup> / <sub>8</sub> -7 <sub>NC</sub> X2DP	(8)1- <sup>3</sup> / <sub>4</sub> -5 <sub>NC</sub>	(36)2	5970	
60	82 <sup>3</sup> / <sub>4</sub>	73	43 <sup>3</sup> / <sub>16</sub>	69 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>16</sub>	15	21 <sup>1</sup> / <sub>16</sub>	6 <sup>15</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>8</sub> X1 <sup>1</sup> / <sub>4</sub> X5 <sup>3</sup> / <sub>4</sub>	16	1 <sup>1</sup> / <sub>8</sub> -7 <sub>NC</sub> X2DP	(8)1- <sup>3</sup> / <sub>4</sub> -5 <sub>NC</sub>	(44)2	7550	
66	89 <sup>7</sup> / <sub>8</sub>	80	47	76	3 <sup>3</sup> / <sub>8</sub>	18	23 <sup>3</sup> / <sub>16</sub>	8	7 <sup>3</sup> / <sub>4</sub>	6	1X1 <sup>1</sup> / <sub>2</sub> X7	18 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub> -7 <sub>NC</sub> X2 <sup>1</sup> / <sub>4</sub> DP	(8)1- <sup>3</sup> / <sub>4</sub> -5 <sub>NC</sub>	(44)2	9920	
72	97 <sup>1</sup> / <sub>16</sub>	86 <sup>1</sup> / <sub>2</sub>	51 <sup>1</sup> / <sub>16</sub>	82 <sup>1</sup> / <sub>2</sub>	3 <sup>9</sup> / <sub>16</sub>	18	25 <sup>13</sup> / <sub>16</sub>	8 <sup>3</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>2</sub>	6	1X1 <sup>1</sup> / <sub>2</sub> X6	18 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub> -7 <sub>NC</sub> X2 <sup>1</sup> / <sub>4</sub> DP	(10)1- <sup>3</sup> / <sub>4</sub> -5 <sub>NC</sub>	(50)2	12,050	
78	101 <sup>1</sup> / <sub>16</sub>	93	52 <sup>13</sup> / <sub>16</sub>	89	3 <sup>3</sup> / <sub>4</sub>	18	29	10 <sup>7</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub> X1 <sup>3</sup> / <sub>4</sub> X9	18 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub> -7 <sub>NC</sub> X2 <sup>1</sup> / <sub>4</sub> DP	(10)2-4- <sup>1</sup> / <sub>2</sub> <sub>NC</sub>	(54)2 <sup>1</sup> / <sub>4</sub>	12,200	
84	108 <sup>3</sup> / <sub>8</sub>	99 <sup>3</sup> / <sub>4</sub>	56 <sup>7</sup> / <sub>16</sub>	95 <sup>1</sup> / <sub>2</sub>	3 <sup>15</sup> / <sub>16</sub>	18	32	9 <sup>7</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub> X1 <sup>3</sup> / <sub>4</sub> X8	18 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub> -7 <sub>NC</sub> X2 <sup>1</sup> / <sub>4</sub> DP	(8)2-4- <sup>1</sup> / <sub>2</sub> <sub>NC</sub>	(56)2 <sup>1</sup> / <sub>4</sub>	16,700	
90	116 <sup>3</sup> / <sub>16</sub>	106 <sup>1</sup> / <sub>2</sub>	60 <sup>7</sup> / <sub>16</sub>	102	4 <sup>3</sup> / <sub>16</sub>	21	33 <sup>15</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub> X1 <sup>3</sup> / <sub>4</sub> X9	23	1 <sup>1</sup> / <sub>2</sub> -6 <sub>NC</sub> X2 <sup>1</sup> / <sub>2</sub> ZDP	(20)2- <sup>1</sup> / <sub>4</sub> -4- <sup>1</sup> / <sub>2</sub> <sub>NC</sub>	(48)2 <sup>1</sup> / <sub>2</sub>	22,250	
96	122 <sup>5</sup> / <sub>8</sub>	113 <sup>1</sup> / <sub>4</sub>	63 <sup>5</sup> / <sub>8</sub>	108 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>	21	36 <sup>3</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>4</sub>	9	9	1 <sup>1</sup> / <sub>2</sub> X2X10	23	1 <sup>1</sup> / <sub>2</sub> -6 <sub>NC</sub> X2 <sup>1</sup> / <sub>2</sub> ZDP	(24)2- <sup>1</sup> / <sub>4</sub> -4- <sup>1</sup> / <sub>2</sub> <sub>NC</sub>	(44)2 <sup>1</sup> / <sub>2</sub>	26,000	

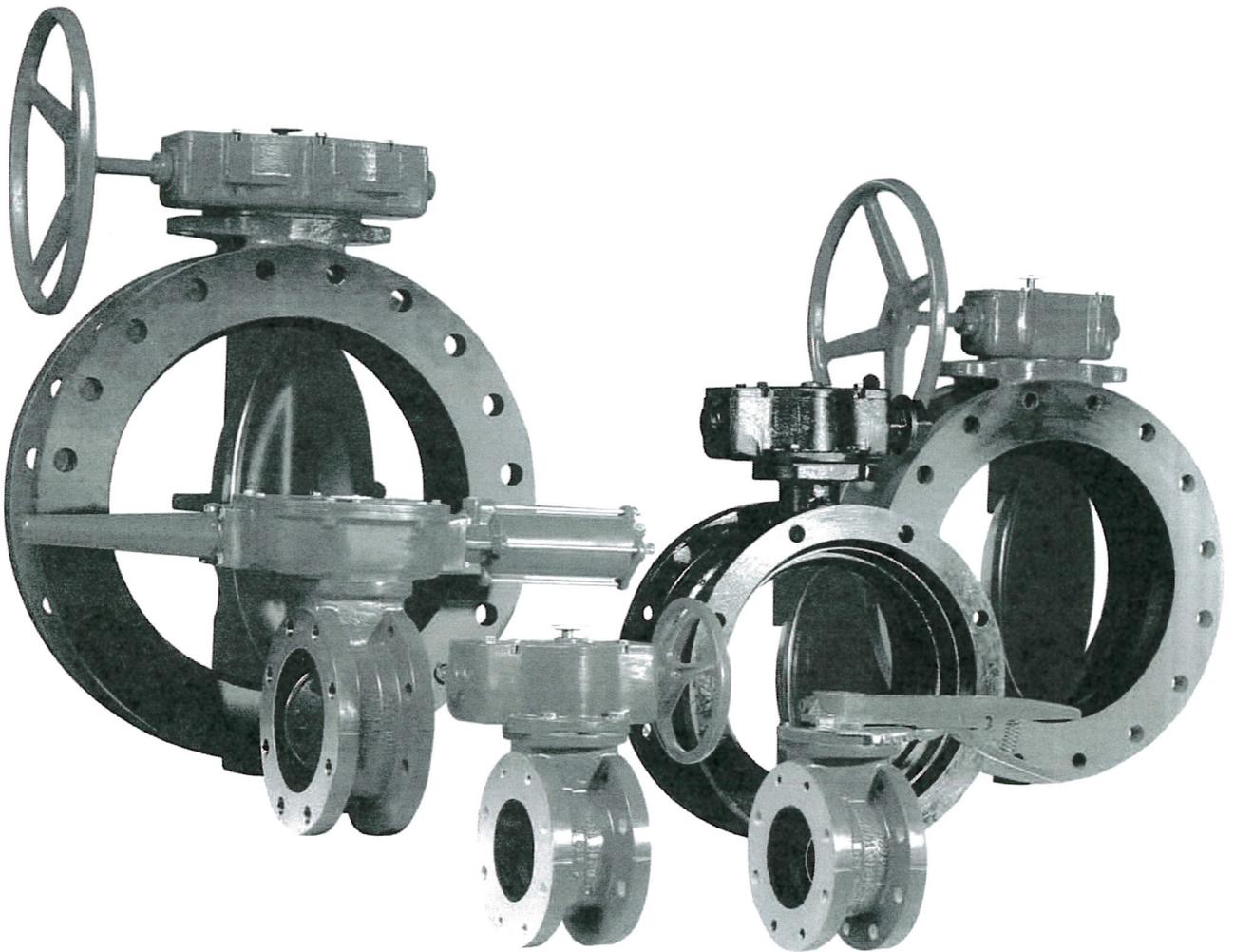
## K-FLO Model 47 (Flanged x Flanged, AWWA Class 250B)

Size in.	K-FLO Model 47 (Flanged x Flanged, AWWA Class 250B)															Bare Shaft	
	A in.	B in.	C in.	D in.	E in.	F in.	G in.	H in.	J in.	K in.	L in.	M in.	N in.	P in.	Q in.	WT. lbs.	
24	39 <sup>1</sup> / <sub>2</sub>	36	20 <sup>1</sup> / <sub>8</sub>	32	2 <sup>3</sup> / <sub>4</sub>	12	5 <sup>7</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>2</sub>	3	2 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>16</sub> X <sup>5</sup> / <sub>8</sub> X2 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	3 <sup>4</sup> / <sub>4</sub> -10 <sub>NC</sub> X1 <sup>1</sup> / <sub>4</sub> DP	(4)1- <sup>1</sup> / <sub>2</sub> -6 <sub>NC</sub>	(20)1 <sup>5</sup> / <sub>8</sub>	990	
30	50 <sup>7</sup> / <sub>8</sub>	43	27 <sup>1</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>8</sub>	12	8 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	3 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>2</sub> X <sup>3</sup> / <sub>4</sub> X3 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>4</sub>	1-8 <sub>NC</sub> X1 <sup>1</sup> / <sub>2</sub> DP	(6)1- <sup>3</sup> / <sub>4</sub> -5 <sub>NC</sub>	(22)2	1950	
36	57 <sup>15</sup> / <sub>16</sub>	50	30 <sup>5</sup> / <sub>8</sub>	46	3 <sup>3</sup> / <sub>8</sub>	15	9 <sup>7</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>	4	1 <sup>2</sup> / <sub>2</sub> X <sup>3</sup> / <sub>4</sub> X3 <sup>1</sup> / <sub>2</sub>	16	1 <sup>1</sup> / <sub>8</sub> -7 <sub>NC</sub> X2DP	(6)2-4- <sup>1</sup> / <sub>2</sub> <sub>NC</sub>	(26)2 <sup>1</sup> / <sub>4</sub>	3000	
42	62 <sup>11</sup> / <sub>16</sub>	57	32 <sup>3</sup> / <sub>4</sub>	52 <sup>3</sup> / <sub>4</sub>	3 <sup>11</sup> / <sub>16</sub>	15	12 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>2</sub>	5	5	3 <sup>4</sup> / <sub>4</sub> X1 <sup>1</sup> / <sub>4</sub> X5	16	1 <sup>1</sup> / <sub>8</sub> -7 <sub>NC</sub> X2DP	(8)2-4- <sup>1</sup> / <sub>2</sub> <sub>NC</sub>	(28)2 <sup>1</sup> / <sub>4</sub>	4175	
48	70 <sup>3</sup> / <sub>4</sub>	65	36 <sup>3</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>16</sub>	15	15 <sup>7</sup> / <sub>16</sub>	8	5 <sup>5</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>8</sub> X1 <sup>1</sup> / <sub>4</sub> X6	16	1 <sup>1</sup> / <sub>8</sub> -7 <sub>NC</sub> X2DP	(8)2-4- <sup>1</sup> / <sub>2</sub> <sub>NC</sub>	(32)2 <sup>1</sup> / <sub>4</sub>	5475	



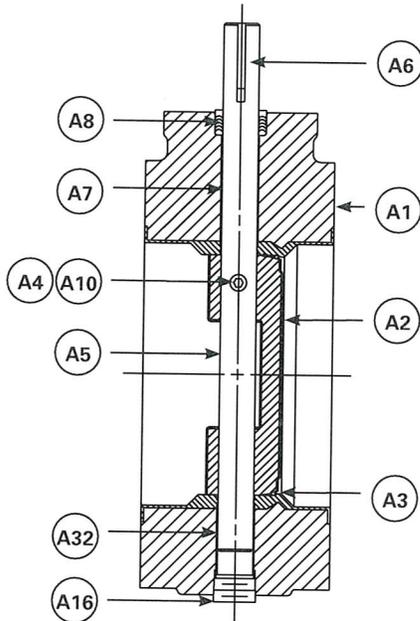


## **DeZURIK AWWA BUTTERFLY VALVES TECHNICAL SPECIFICATIONS**

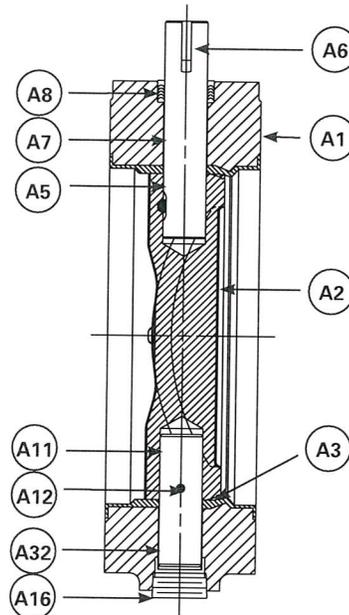


# Materials of Construction

3-16" (80-400mm)



18 & 20" (450 & 500mm)



## 3-20" (80-500mm) Valve Sizes

Item	Description	Material
A1	Body NBR or EPDM seat is permanently bonded to the body	Cast Iron ASTM A126 Class B Ductile Iron ASTM A536 Grade 65-45-12
A2	Disc	Cast Iron ASTM A48 Class 40C Ductile Iron ASTM A536 Grade 65-45-12 316 Stainless Steel, ASTM A743, Type CF8M
A3	Disc Seating Edge	316 Stainless Steel, ASTM A276, Type 316
A4	Tangential Pin 14-20" (350-500mm)	316 Stainless Steel, ASTM A276, Type 316 (250B) 17-4 PH Stainless Steel, H1100
A5	Shaft 3-16" (80-400mm) Upper Shaft 18-20" (450-600mm)	304 Stainless Steel, ASTM A276, Type 304 316 Stainless Steel, ASTM A276, Type 316 17-4 PH Stainless Steel, ASTM A564, Type 630 Condition 1150
A6	Key	Steel AISI 1018
A7	Upper Journal Bearing	Nylon and Molybdenum Disulphite Composition (NBR Seat) PTFE (EPDM Seat) (250B) Teflon/Dacron Fabric Liner, Fiberglass back-up shell
A8	Packing	Acrylonitrile Butadiene (NBR Seat) Ethylene Propylene Diene Terpolymer (EPDM Seat)
A10	Torque Screw 3-12" (80-300mm)	316 Stainless Steel, ASTM A276, Type 316 (250B) 17-4 PH Stainless Steel, Condition 1100
A10	Set Screw 14-20" (350-500mm)	18-8 Stainless Steel
A11	Lower Shaft 18-20" (450-600mm)	304 Stainless Steel, ASTM A276, Type 304 316 Stainless Steel, ASTM A276, Type 316 17-4 PH Stainless Steel, ASTM A564, Type 630 Condition 1150
A12	Set Screw 18-20" (450-500mm)	18-8 Stainless Steel
A16	Plug 3-20" (80-500mm)	3-8" (80-200mm) Carbon Steel, SAE J403, Grade 1008/1010 10-20" (250-500mm) Malleable Iron, ASTM A47-52 Grade 35018 (250B, 3-6" (80-150mm)) Carbon Steel, SAE J403, Grade 1008/1010 (250B, 8-20" (200-500mm)) Malleable Iron, ASTM A47-52 Grade 35018
A32	Lower Journal Bearing	Nylon and Molybdenum Disulphite Composition (NBR Seat) PTFE (EPDM Seat) (250B) Teflon/Dacron Fabric Liner, Fiberglass back-up shell

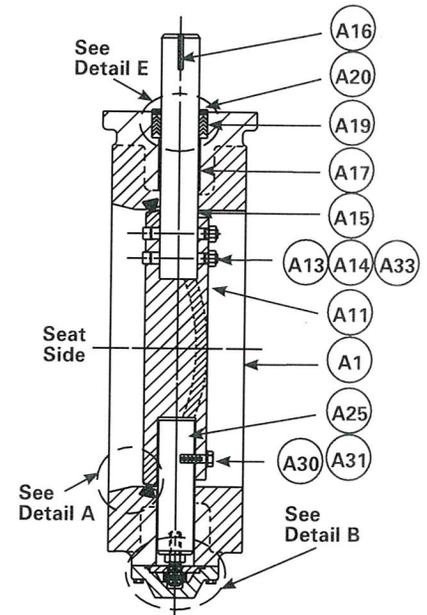
# Materials of Construction

## 24-72" (600-1800mm) Valve Sizes

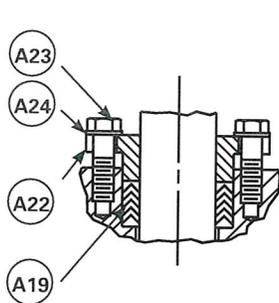
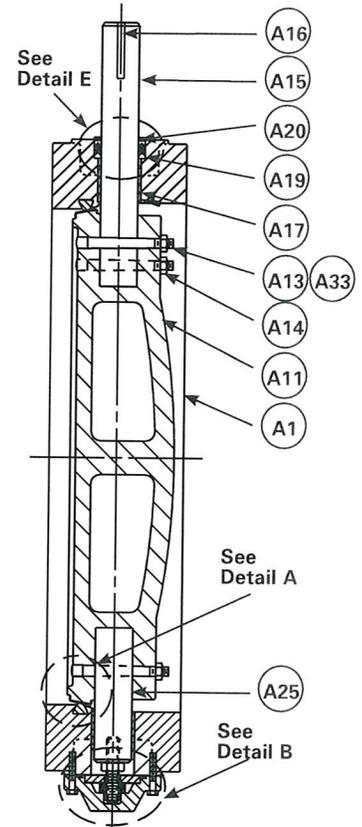
Item	Description	Material
A1	Body	Cast Iron, ASTM A126 Class B Ductile Iron, ASTM A536 Grade 65-45-12
A2	Seat	Acrylonitrile-Butadiene (NBR) Terpolymer of Ethylene Propylene and a Diene (EPDM)
A6	Thrust Bearing Cover	Cast Iron, ASTM A126 Class B Ductile Iron, A536 Grade 65-45-12
A7	Screw	18-8 Stainless Steel
A8	O-Ring	Acrylonitrile-Butadiene (NBR) Terpolymer of Ethylene Propylene and a Diene (EPDM)
A9	Thrust Collar	Steel, ASTM 108
A10	Set Screw	18-8 Stainless Steel
A11	Disc	Cast Iron ASTM A48 Class 40C Ductile Iron ATM A536 Grade 65-45-12
A12	Disc Edge	316 Stainless Steel, ASTM A240, Type 316
A13	Disc Pin	24-48" (600-1200mm) 304 Stainless Steel, ASTM A276, Type 304 54-72" (1400-1800mm) 303 Stainless Steel, ASTM 582, Type 303
A14	Nut	18-8 Stainless Steel
A15	Upper Shaft	304 Stainless Steel, ASTM A276, Type 304 316 Stainless Steel, ASTM A276, Type 316 17-4 PH Stainless Steel, ASTM, Type 630 Condition 1150
A16	Key	Steel AISI 1018
A17	Bearing	Teflon/Dacron Fabric Liner, Fiberglass back-up shell
A19	Packing	NBR Acrylonitrile-Butadiene (NBR Seat) EPDM Ethylene Propylene and a Diene (EPDM Seat)
A20	Spacer 30-48" (750-1200mm)	316 Stainless Steel, ASTM A276, Type 316
A22	Gland 60-72" (1500-1800mm)	Bronze ASTM B-62
A23	Screw (Used with A22)	18-8 Stainless Steel
A24	Washer (Used with A22)	18-8 Stainless Steel
A25	Lower Shaft	304 Stainless Steel, ASTM A276, Type 304 316 Stainless Steel, ASTM A276, Type 316 17-4 PH Stainless Steel, ASTM, Type 630 Condition 1150
A26	Adjusting Screw	303 Stainless Steel, ASTM A582, Type 303
A27	Jam Nut	18-8 Stainless Steel
A29	Thrust Plate	Carbon Steel AISI A108
A30	Screw 24-48" (600-1200mm)	18-8 Stainless Steel
A31	Lockwasher 24-48" (600-1200mm)	18-8 Stainless Steel
A32	Epoxy	Epoxy
A33	O-Ring	Acrylonitrile-Butadiene (NBR) Terpolymer of Ethylene Propylene and a Diene (EPDM)

Contact DeZURIK for materials of construction on valve sizes 78-120" (2000-3000mm).

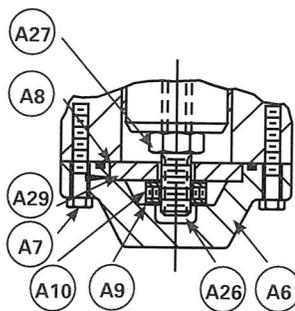
## 24-42" (600-1100mm)



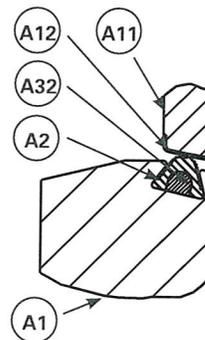
## 48-72" (1200-1800mm)



**Detail E**  
Adjustable Packing  
Optional on 24-48" (600-1200mm)  
Standard on 54-72" (1400-1800mm)



**Detail B**



**Detail A**

# 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

## % 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	98
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 78-120" (2000-3000mm) valves and for Class 250B.

# 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.

# 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

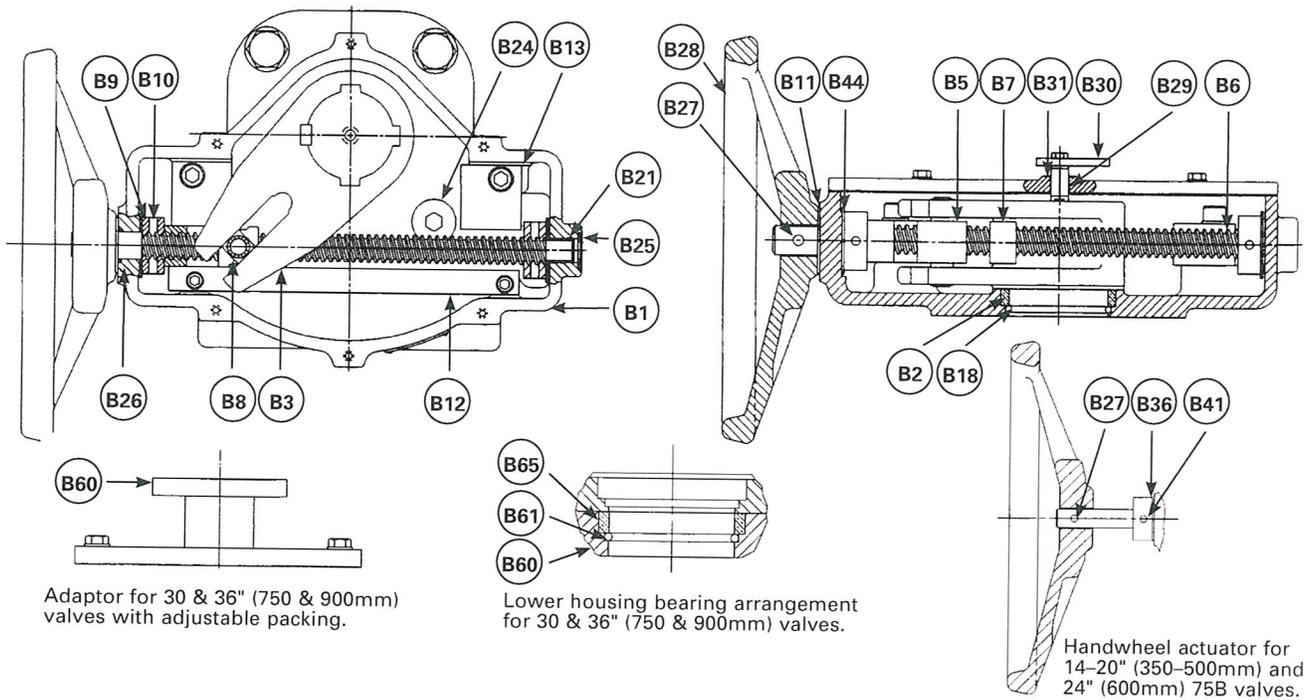
BAA	=	Buy American Act
CMC	=	Certificate of Material Conformance
ST3	=	Pennsylvania Steel Procurement Act
TB	=	DeZURIK Standard Certified Hydrostatic shell test and Bi-directional Seat leak test.

### Ordering Example:

BAW,24,F1,CI,NBRN-NBR,150B,DI-S1\*Actuator

# M-Series Manual Actuator

## Handwheel



Adaptor for 30 & 36" (750 & 900mm) valves with adjustable packing.

Lower housing bearing arrangement for 30 & 36" (750 & 900mm) valves.

Handwheel actuator for 14–20" (350–500mm) and 24" (600mm) 75B valves.

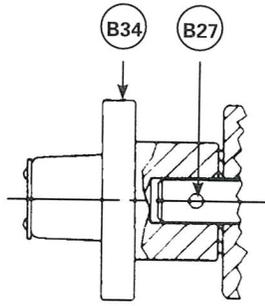
## M-Series Manual Actuator Materials of Construction

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

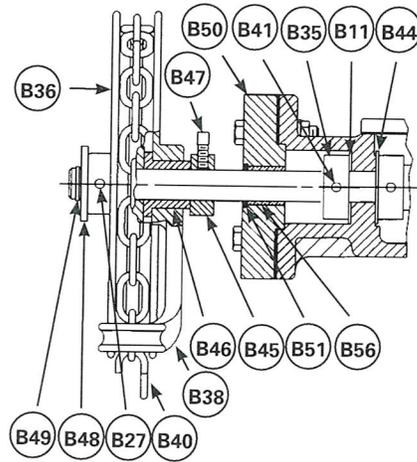
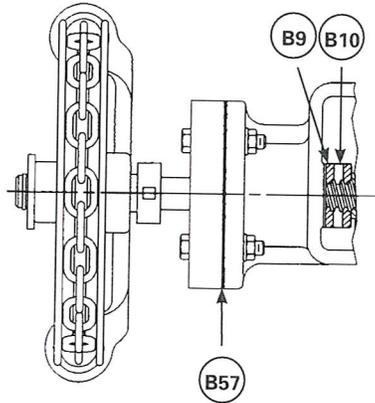
Item	Description	Material
B35	Collar	Steel, AISI 1215
B36	Chainwheel	Cast Iron, ASTM A126 Class B
B38	Chain Guide	Cast Iron, ASTM A126 Class B
B40	Link Closing	Steel Zinc Plated
B41	Pin	Steel Zinc Plated
B44	Thrust Washer	Fiberglass with Steel Zinc Plated Back (M-7 Actuator)
B45	Collar	Steel, AISI 1215
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.

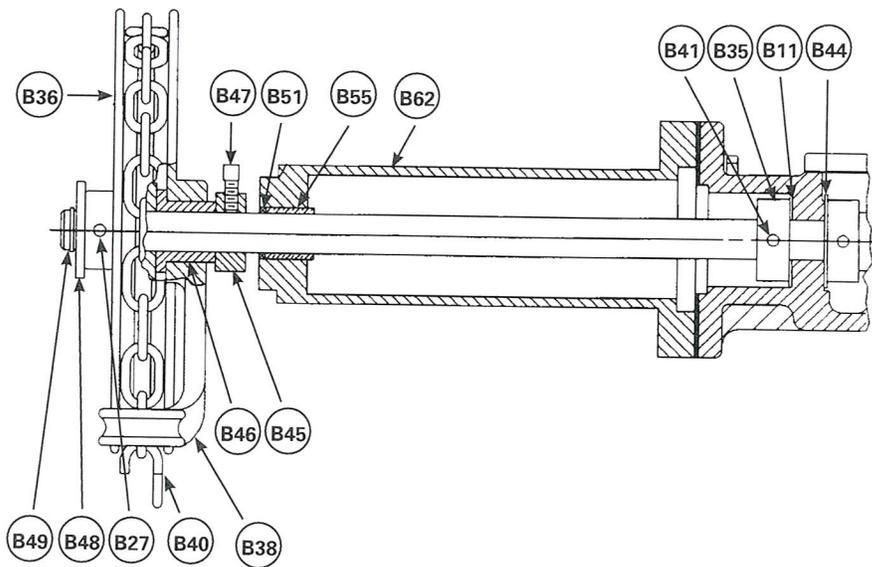
**Nut**



**Chainwheel 3-20" (80-500mm)**



**Chainwheel 24-36" (600-900mm)**



# LA-Series Manual Actuator

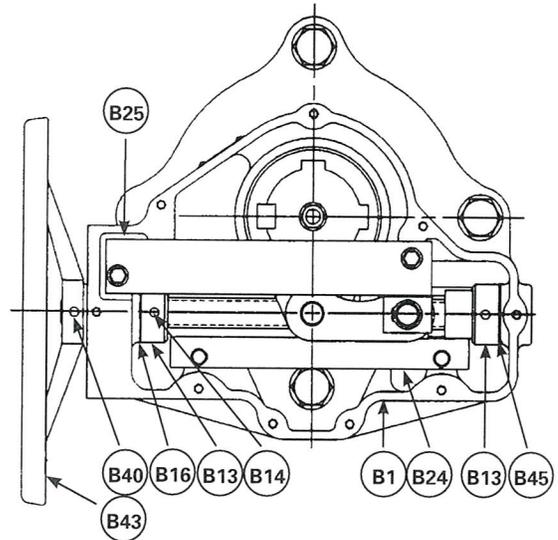
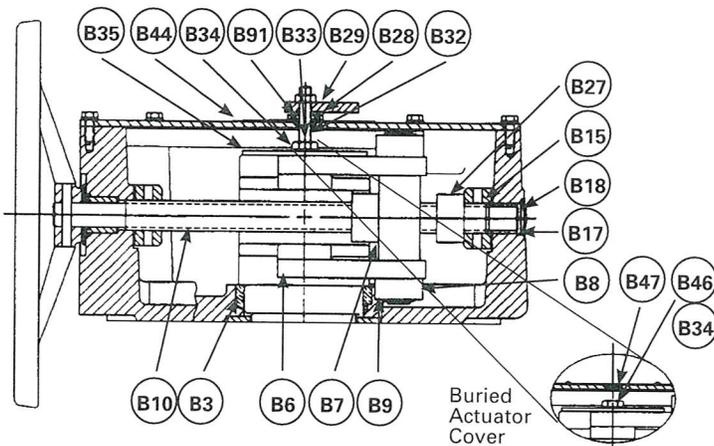
## LA-Series Actuator Materials of Construction

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

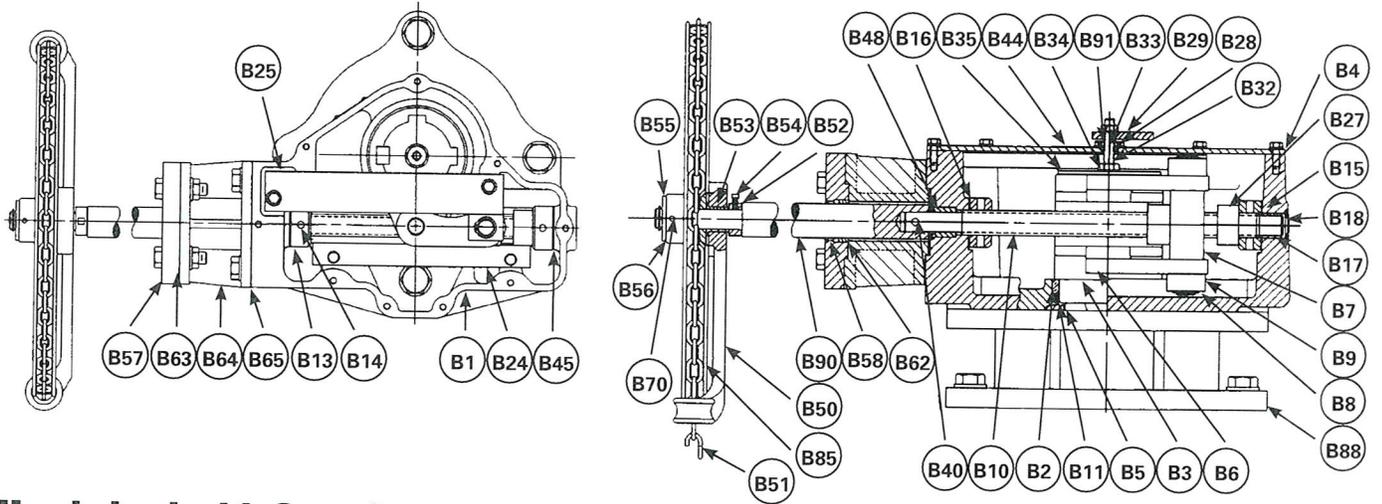
Item	Description	Material
B48	Bushing	Bronze Oil Impregnated
B50	Chain Guide	Cast Iron, ASTM A126
B51	Closing Link	Steel
B52	Collar	Steel, ASTM A36
B53	Bearing	Bronze
B54	Screw	Steel Zinc Plated
B55	Washer	Steel Zinc Plated
B56	Retaining Ring	Carbon Steel
B57	Adaptor Plate	Steel, ASTM A36
B58	Seal	Garlock
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

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

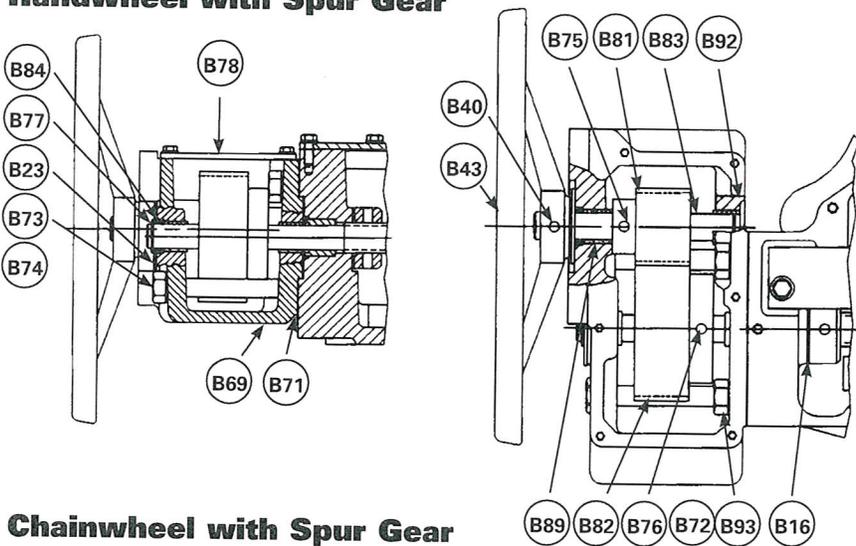
### Handwheel



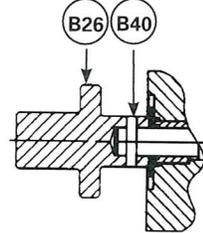
## Chainwheel



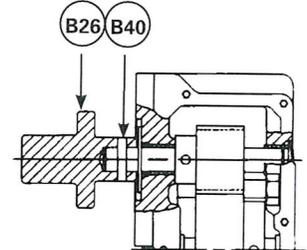
## Handwheel with Spur Gear



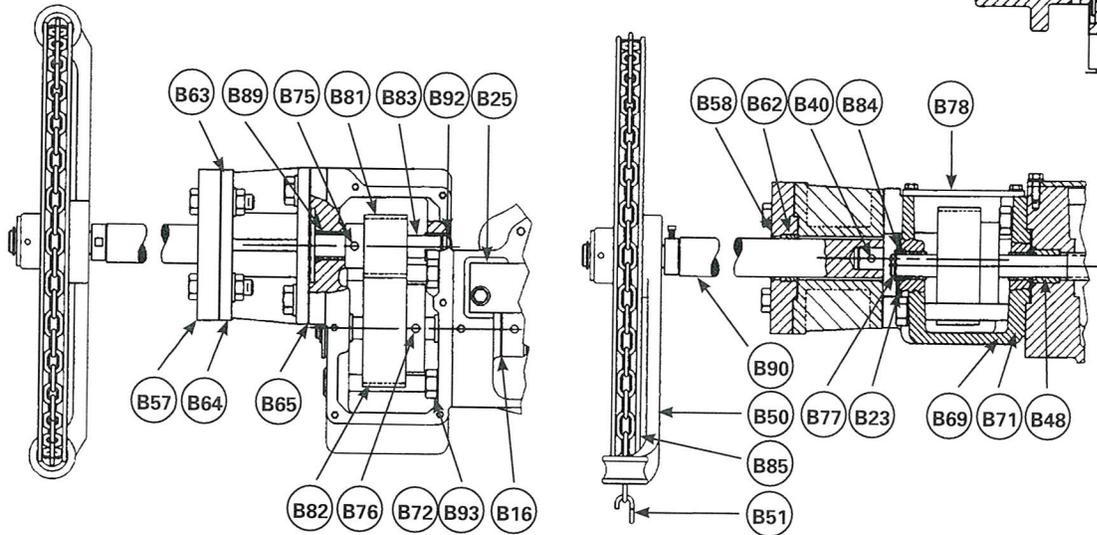
## Nut



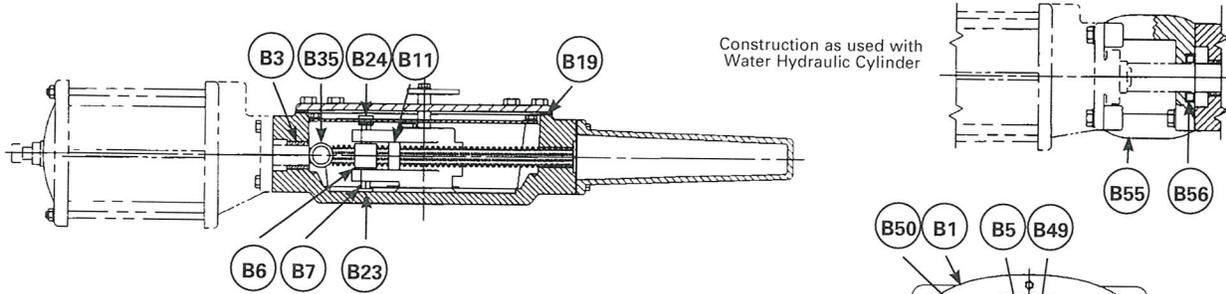
## Nut with Spur Gear



## Chainwheel with Spur Gear



# T-Series Cylinder Actuator

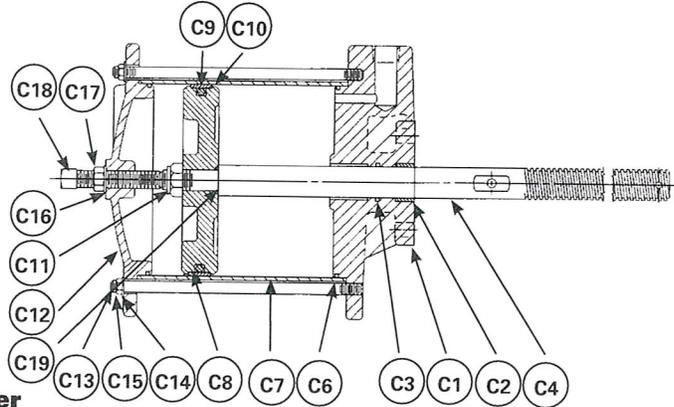


## T-Series Actuator Materials of Construction

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

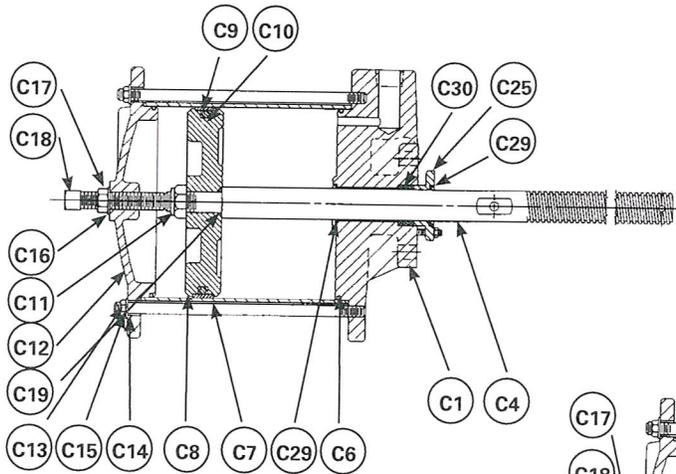
Item	Description	Standard Construction	C-540 Construction
C1	Cylinder Head	Cast Iron, ASTM A126 Class B	Ductile Iron, ASTM A536 65-45-12
C2	Bearing	Bronze Oil Impregnated	Bronze Oil Impregnated
C3	Rod Seal	Teflon with NBR	Teflon with NBR
C4	Piston Rod	Steel, AISI 1215 Chrome Plated	Steel, AISI 1215 Chrome 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

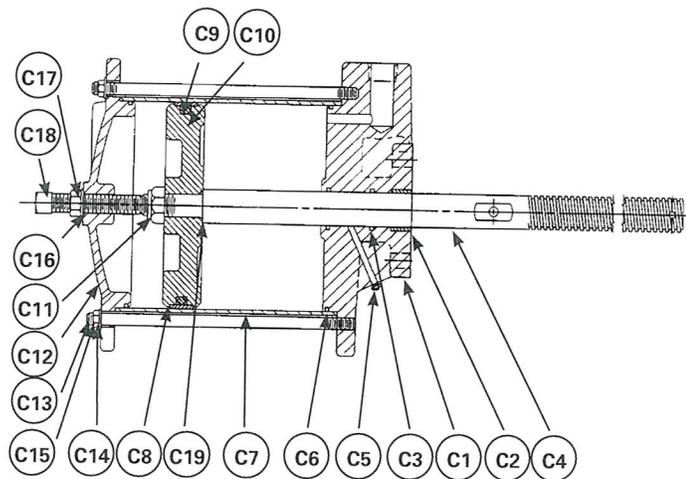
Item	Description	Standard Construction	C-540 Construction
C1	Cylinder Head	Cast Iron, ASTM A126	Ductile Iron, ASTM A536 65-45-12 Nickel Plated
C2	Bearing	-	Bronze Oil Impregnated
C3	Rod Seal	-	Teflon with NBR
C4	Piston Rod	Stainless Steel, ASTM A564, Type 17-4	Stainless Steel, Type 304 Chrome Plated
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

*\* STAINLESS FASTENERS \**



## Water Hydraulic — C-540



# Valve Accessories

## Mechanical Joint Accessories

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

## Manual Actuators

### 10-Position Levers

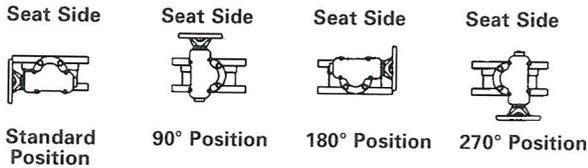
A 10-position dial provides positive latching in open, closed and eight intermediate positions. A pointer indicates position of disc plus a notch in the handle allows use of a padlock to prevent unauthorized valve operation.

### 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" (50mm<sup>2</sup>) 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

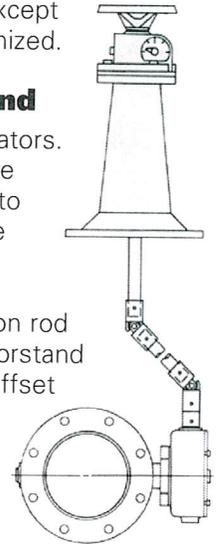
Clockwise rotation to open (open right). Available with M-Series and LA Series Manual Actuators.

### 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.

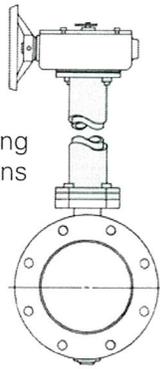
### Actuator Mounted on Floorstand

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



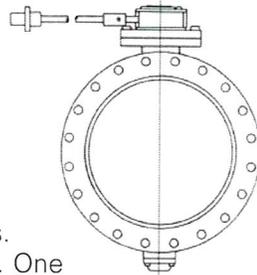
**Neck Extensions**

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.



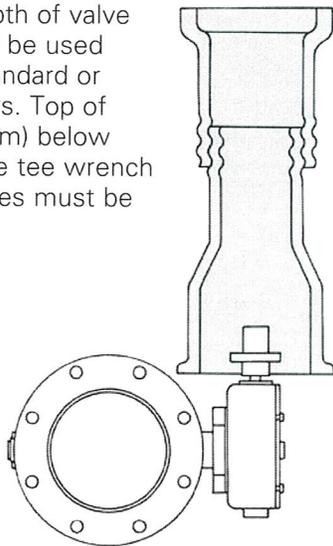
**Extended Nut for Manual Actuators**

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



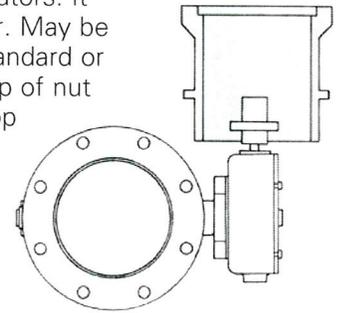
**Valve Box and Valve Box Extensions**

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**

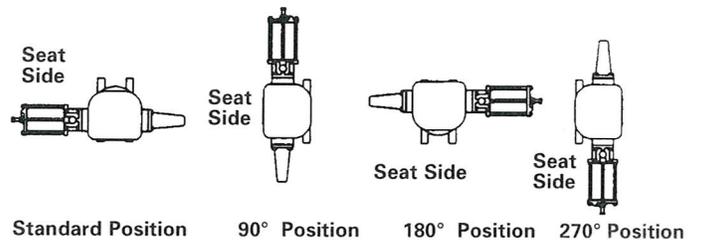
DeZURIK cylinder actuators are available as double-acting pneumatic or water hydraulic cylinders for either on-off or positioning services. Cylinder actuators per AWWA C-540 should be specified.

**Mounting**

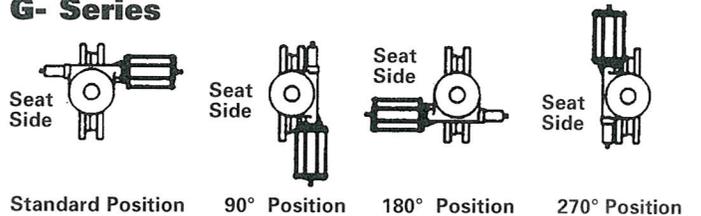
Cylinder actuators can be mounted at 90° increments from standard.

**Manual and Throttling Manual Override**

Contact Application Engineer for assistance.



**G- Series**



**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

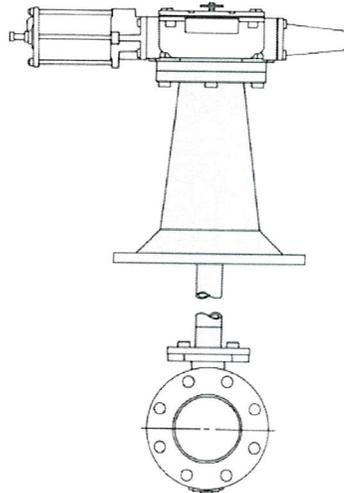
Speed control valves are available for controlling opening and closing speed on cylinder actuators.

## Position Indicating Switches

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

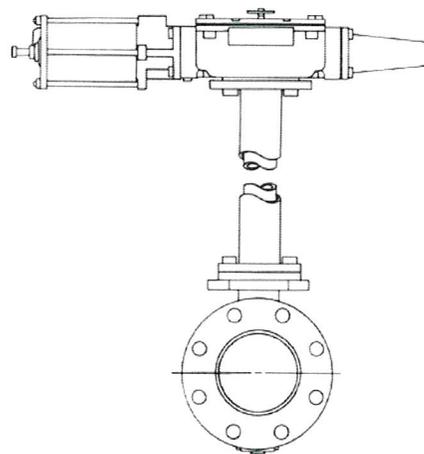
## Floorstand

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.

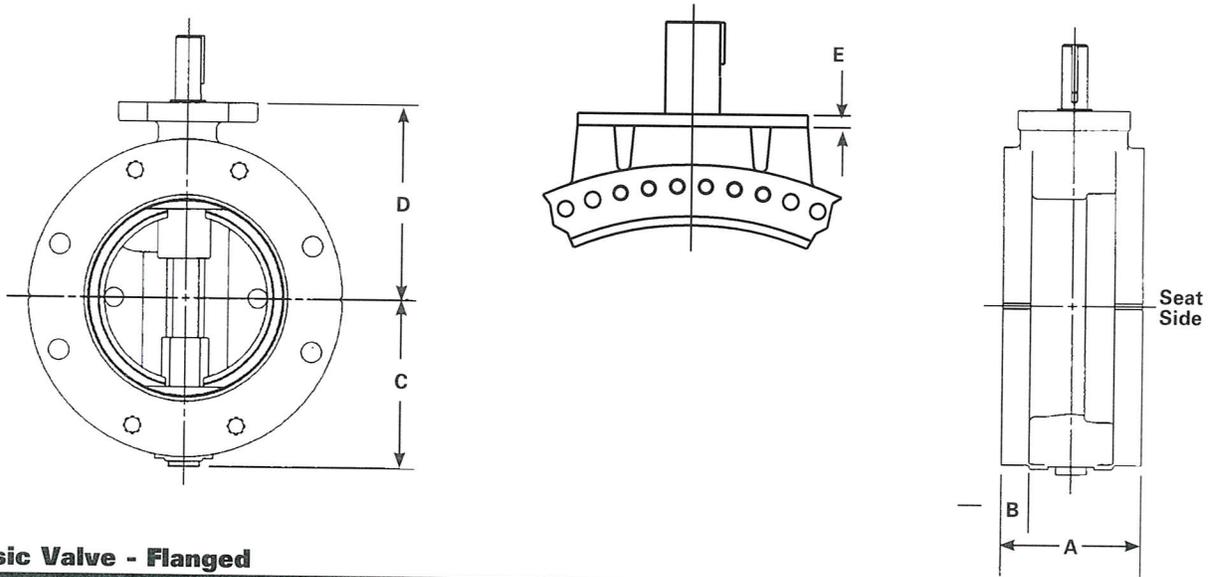


## Neck Extension

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*	250B	250B Only
3" 80mm	5.00 127	5.00 127	.81 21	1.19 30	4.00 102	4.12** 105	4.81 122	4.81 122	-
4" 100mm	5.00 127	5.00 127	1.00 25	1.31 33	4.75 121	5.00** 127	5.56 141	5.56 141	-
6" 150mm	5.00 127	5.00 127	1.06 27	1.50 38	6.03 153	6.25** 159	7.00 178	7.00 178	-
8" 200mm	6.00 152	6.00 152	1.19 30	1.69 43	7.16 182	7.50** 191	8.31 211	8.31 211	-
10" 250mm	8.00 203	8.00 203	1.25 32	1.97 50	8.38 213	8.75** 222	9.50 241	9.50 241	-
12" 300mm	8.00 203	8.00 203	1.31 33	2.09 53	9.66 245	10.25** 260	11.00 279	11.00 279	-
14" 350mm	8.00 203	8.00 203	1.47 37	2.25 57	10.91 277	11.50** 292	11.50 292	11.50 292	-
16" 400mm	8.00 203	8.00 203	1.53 39	2.38 60	12.06 306	12.75** 324	12.75 324	12.75 324	-
18" 450mm	8.00 203	8.00 203	1.66 42	2.50 64	14.03 356	14.50 368	13.50 343	14.00 356	-
20" 500mm	8.00 203	8.00 203	1.78 45	2.63 67	15.02 382	17.50 445	15.25 387	15.25 387	-
24" 600mm	8.00 203	12.00 305	1.97 50	2.91 74	19.00 483	20.19 513	18.41 468	19.50 495	-
30" 750mm	12.00 305	12.00 305	2.25 57	3.13 80	23.00 584	23.75 603	22.62 575	21.75 552	1.25 32
36" 900mm	12.00 305	15.00 381	2.50 64	3.50 89	27.38 696	27.38 695	25.62 651	25.62 651	1.25 32
42" 1100mm	12.00 305	15.00 381	2.75 70	3.81 97	30.91 785	30.91 785	30.42 773	30.42 773	1.25 32
48" 1200mm	15.00 381	15.00 381	2.88 73	4.13 105	35.38 899	35.38 899	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.

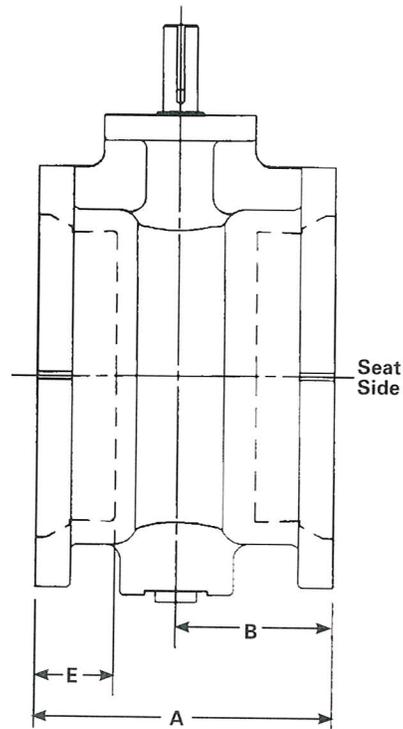
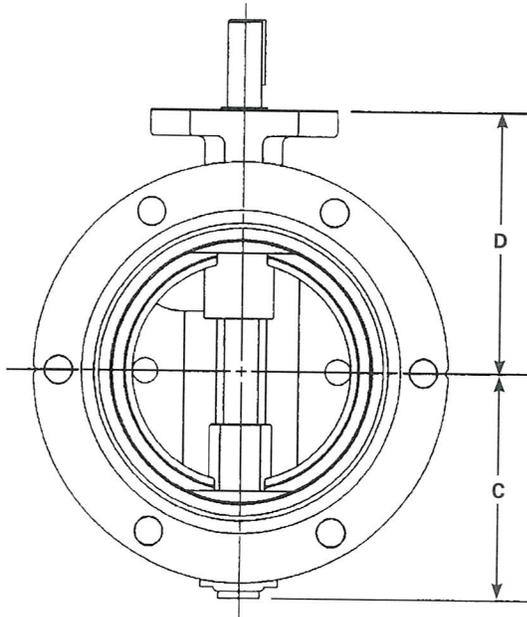
# Dimensions

## Basic Valve — Mechanical Joint

Valve Size	A	B	C	D	E
4" 100mm	8.56 217	4.75 121	4.75 121	5.56 141	2.50 64
6" 150mm	8.88 226	4.75 121	6.03 153	7.00 178	2.50 64
8" 200mm	9.50 241	5.00 127	7.16 182	8.31 211	2.50 64
10" 250mm	9.88 251	5.25 133	8.38 213	9.50 241	2.50 64
12" 300mm	10.00 254	5.38 137	9.66 245	11.00 279	2.50 64
14" 350mm	12.38 315	6.62 168	10.91 277	11.50 292	3.50 89
16" 400mm	12.75 324	6.75 171	12.06 306	12.75 324	3.50 89
18" 450mm	13.42 341	7.00 178	14.03 356	13.50 343	3.50 89
20" 500mm	13.38 340	7.12 181	15.02 382	15.25 387	3.50 89
24" 600mm	13.75 349	7.50 191	19.00 483	18.41 468	3.50 89
30" 750mm	17.75 451	9.62 244	23.00 584	22.62 575	4.00 102
36" 900mm	18.00 458	10.00 254	27.38 696	25.62 651	4.00 102
42" 1100mm	18.75 476	10.25 260	30.91 785	30.41 772	4.00 102
48" 1200mm	19.62 498	10.62 270	35.38 898	33.00 838	4.00 102

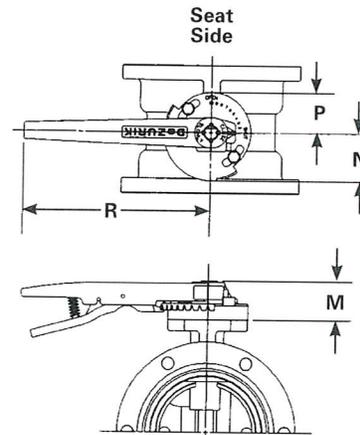
Inches  
Millimeter

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



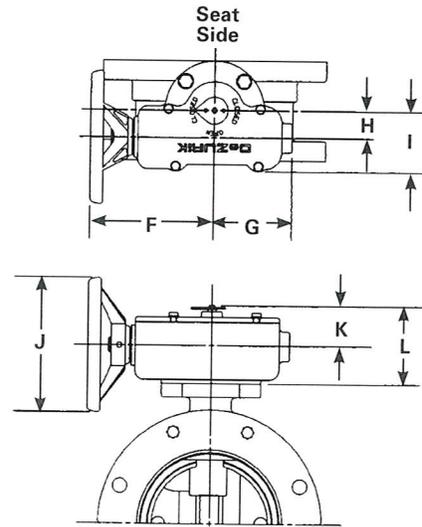
### Lever Actuator

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



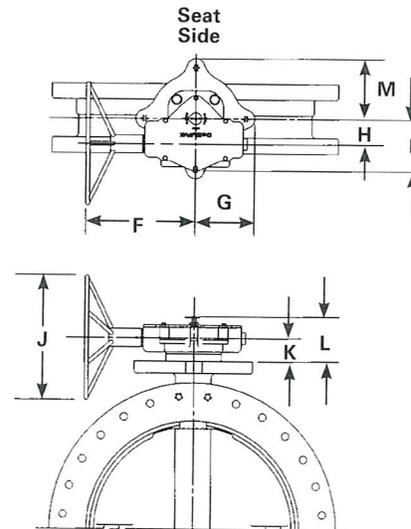
### Handwheel Actuator M-Series 3-24" (80-600mm)

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	2.19 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	3.19 81	6.19 157	8.25 210
30" 750mm (HD36)	21.00 533	8.25 210	3.50 89	7.19 183	36.00 914	3.19 81	6.19 157	8.25 210

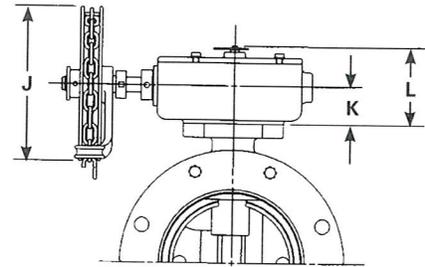
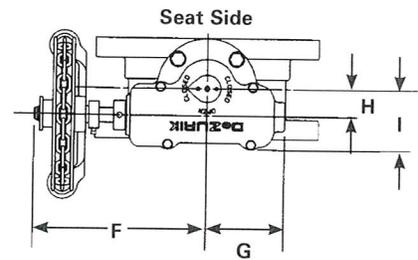


Inches  
Millimeter

# Dimensions (continued)

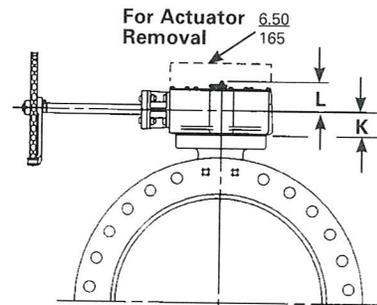
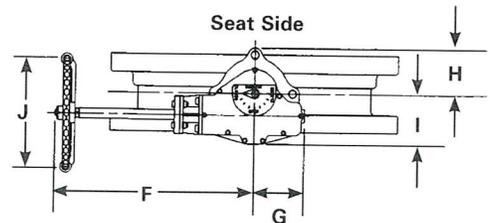
## Chainwheel Actuator M-Series 3-20" (80-500mm)

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



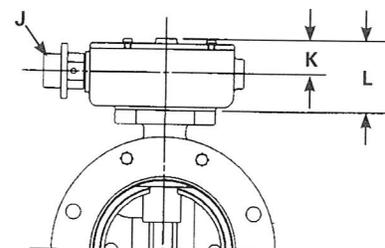
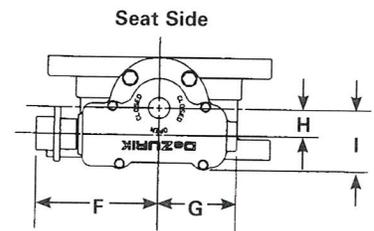
## Chainwheel Actuator M-Series 24-30" (600-750mm)

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

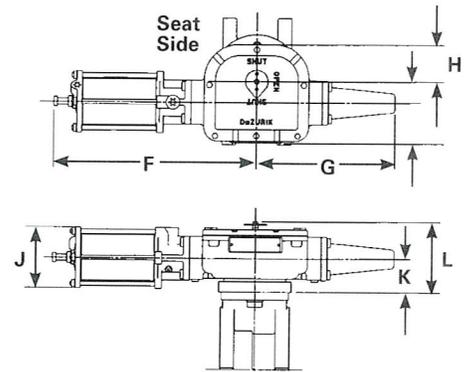


Inches  
Millimeter

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

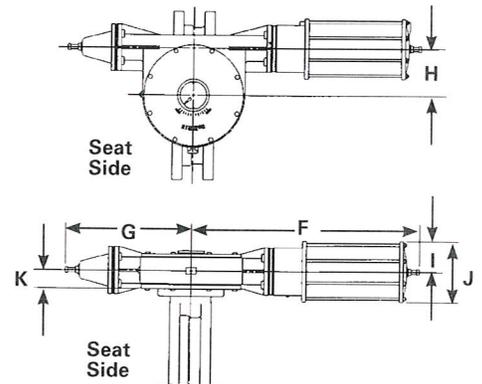
### Cylinder Actuator (T-Series)

Valve Size (Cylinder Size)	F		G	H	I	J	K	L
	Pneumatic	Hydraulic						
3-12" 80-300mm (C4)	18.12 460	21.12 536	16.31 414	3.25 83	5.94 151	5.38 137	1.81 46	4.69 119
12" 300mm (C6)	18.88 480	21.88 556	16.31 414	3.25 83	5.94 151	7.88 200	1.81 46	4.69 119
14-16" 350-400mm (C6)	23.44 595	26.44 672	17.88 454	4.44 113	8.12 206	7.88 200	3.12 79	5.84 148
18-20" 450-500mm (C6)	23.44 595	26.44 672	17.88 454	4.44 113	8.12 206	7.88 200	3.12 79	6.03 153
18-20" 450-500mm (C8)	24.06 611	27.06 687	17.88 454	4.44 113	8.12 206	10.25 260	3.12 79	6.03 153



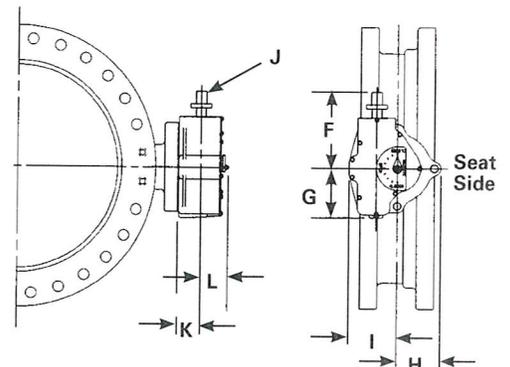
### Cylinder Actuator (G-Series)

Valve Size (Cylinder Size)	F		G	H	I	J	K
	Pneumatic	Hydraulic					
24" 600mm (GS-12-PC8)	31.50 800	32.75 832	17.50 445	6.88 175	4.25 108	8.50 216	3.25 83
24" 600mm (GS-12-PC10)	31.62 803	33.88 861	17.50 445	6.88 175	5.25 133	10.50 267	3.25 83
24" 600mm (GS-16-PC10)	43.88 1115	41.78 1061	24.25 616	9.00 229	5.88 149	11.75 298	3.50 89
30" 750mm (GS-12-PC8)	31.50 800	32.75 832	17.50 445	6.88 175	4.25 108	8.50 216	3.50 89
30-36" 750-900mm (GS-12-PC10)	31.62 803	33.88 861	17.50 445	6.88 175	5.25 133	10.50 267	3.50 89
30-42" 750-1100mm (GS-16-PC10)	43.25 1099	41.78 1061	24.25 616	9.00 229	5.88 149	11.75 298	3.75 95
36-42" 900-1100mm (GS-16-PC12)	44.62 1133	43.50 1105	24.25 616	9.00 229	7.00 178	14.00 356	3.75 95



### Nut (LA-Series)

Valve Size (Actuator Size)	F	F with Spur Gear	G	H	I	J	K	
30-42" 750-1100mm (LA-4)	14.19 360	20.81 529	9.38 238	8.25 210	9.44 240	2.00 51	4.41 112	6.25 159
36-54" 900-1400mm (LA-6)	16.19 411	22.81 579	12.12 308	8.25 210	11.12 282	2.00 51	4.41 112	6.25 159
42-54" 1100-1400mm (LA-10)	20.19 513	26.81 681	16.81 427	8.25 210	16.12 409	2.00 51	4.81 122	5.84 148

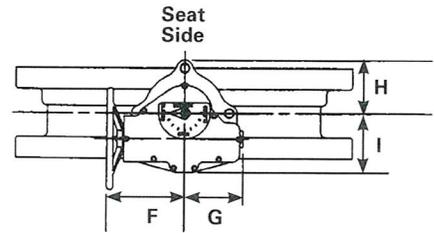


Inches  
Millimeter

# Dimensions (continued)

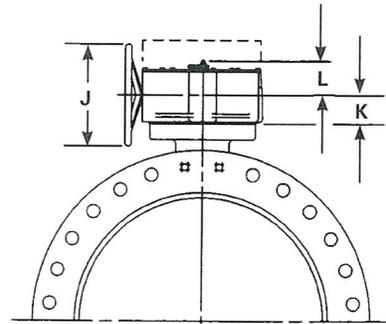
## Handwheel LA-Series 30-48" (750-1200mm)

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	6.25 159
LA-4-HD16	12.25 311	18.88 480	9.38 238	8.25 210	9.44 240	16.00 406	4.41 112	6.25 159
LA-4-HD24	20.25 514	26.88 683	9.38 238	8.25 210	9.44 240	24.00 610	4.41 112	6.25 159
LA-4-HD30	22.88 581	29.50 749	9.38 238	8.25 210	9.44 240	30.00 762	4.41 112	6.25 159
LA-4-HD36	25.50 648	32.12 816	9.38 238	8.25 210	9.44 240	36.00 914	4.41 112	6.25 159



## 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)

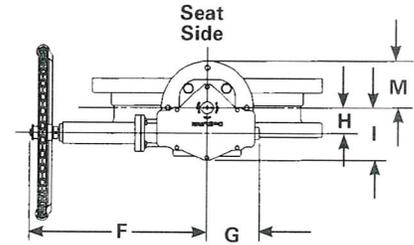
Actuator Size	F	F with Spur Gear	G	H	I	J	K	L
LA-10-HD12	17.62 448	24.25 616	16.81 427	8.25 210	16.12 409	12.00 305	4.81 122	5.84 148
LA-10-HD16	18.25 464	24.88 632	16.81 427	8.25 210	16.12 409	16.00 406	4.81 122	5.84 148
LA-10-HD24	26.25 667	32.88 835	16.81 427	8.25 210	16.12 409	24.00 610	4.81 122	5.84 148
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.

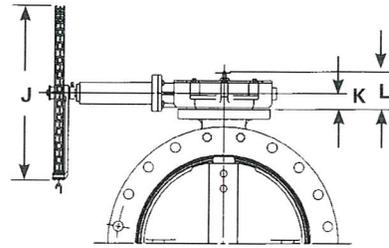
### Chainwheel LA-Series 30-48" (750-1200mm)

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



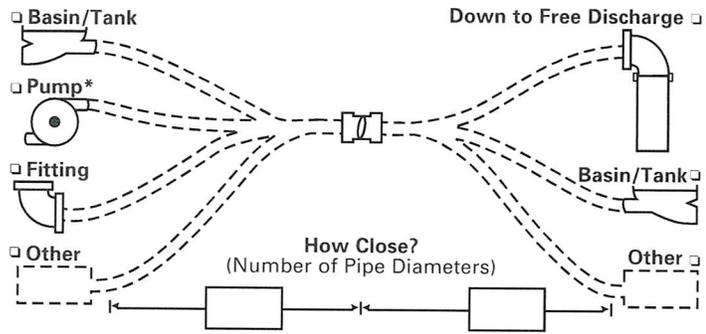
### Chainwheel LA-Series 42-54" (1100-1400mm)

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.

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

## Part C: Check off or enter operator requirements.

- Operator Type? Manual:  Lever  Lead Screw  Gear  Other?  
Power:  Cylinder  Electric  Other?
- Direction of Rotation To Open:  Clockwise—(OR)  Counter clockwise—(OL)
- Cylinder Specifications:
  - Supply Type and Pressure?  Water \_\_\_\_\_ psi \_\_\_\_\_ kPa  Oil \_\_\_\_\_ psi \_\_\_\_\_ kPa  
 Air \_\_\_\_\_ psi \_\_\_\_\_ kPa  Other \_\_\_\_\_ psi \_\_\_\_\_ kPa
  - Fail Safe?  Yes  No; If yes which way if valve fails?  Open  Close
  - Operating Times? \_\_\_\_\_ sec Open to Close; \_\_\_\_\_ sec Close to Open
  - Accessories?
 

<input type="checkbox"/> Speed Control	<input type="checkbox"/> Limit Switches (ES) (Qty: ____ O, ____ C, ____ I)
<input type="checkbox"/> Solenoid W/Manual Override	<input type="checkbox"/> Positioner
<input type="checkbox"/> Manual Override (On loss of supply press.)	<input type="checkbox"/> Solenoid W/O Manual Override
<input type="checkbox"/> Other? _____	
- Electric Specifications:
  - Supply? \_\_\_\_\_ Volts \_\_\_\_\_ Phase \_\_\_\_\_ Hz
  - Duty Cycle?  Intermittent  Continuous
  - Starter/Control Needs? \_\_\_\_\_
  - Operating Times? \_\_\_\_\_ sec (Note: 60 sec per AWWA unless specified)
  - Accessories?
 

<input type="checkbox"/> AUX Switches	<input type="checkbox"/> Potentiometer	<input type="checkbox"/> Slidewire Receiver	<input type="checkbox"/> Reversing Starter
<input type="checkbox"/> Heaters	<input type="checkbox"/> Control Station	<input type="checkbox"/> Control Transformer	<input type="checkbox"/> Other? _____

## **Sales and Service**

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

Web Site: [www.dezurik.com](http://www.dezurik.com) E-Mail: [info@dezurik.com](mailto:info@dezurik.com)



250 Riverside Ave. N. Sartell, Minnesota 56377 • Phone: 320-259-2000 • Fax: 320-259-2227

*DeZURIK, Inc. reserves the right to incorporate our latest design and material changes without notice or obligation. Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing by DeZURIK, Inc. Certified drawings are available upon request.*

100% Domestic as Per JP  
Spec

CLOW AWWA DBL. DISC PARALLEL  
SEAT IBBM GATE VALVES

CLOW VALVE COMPANY

CLOW 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**

Fig. - NRS	2"-48"
Fig. - OS&Y	14"-36"
M.J.	2"-48"
MJ Cutting End	4"-12"
Fig. & M.J.	4"-48"

**Figure No.**

F-5070
F-5072
F-5065
F-5067
F-5066

**Accessories**

Floorstands (NRS & R.S.)  
Electric Motors  
2" Sq. Operating Nuts  
Chainwheels  
"T" Handles  
Stem Guides  
Indicator Posts

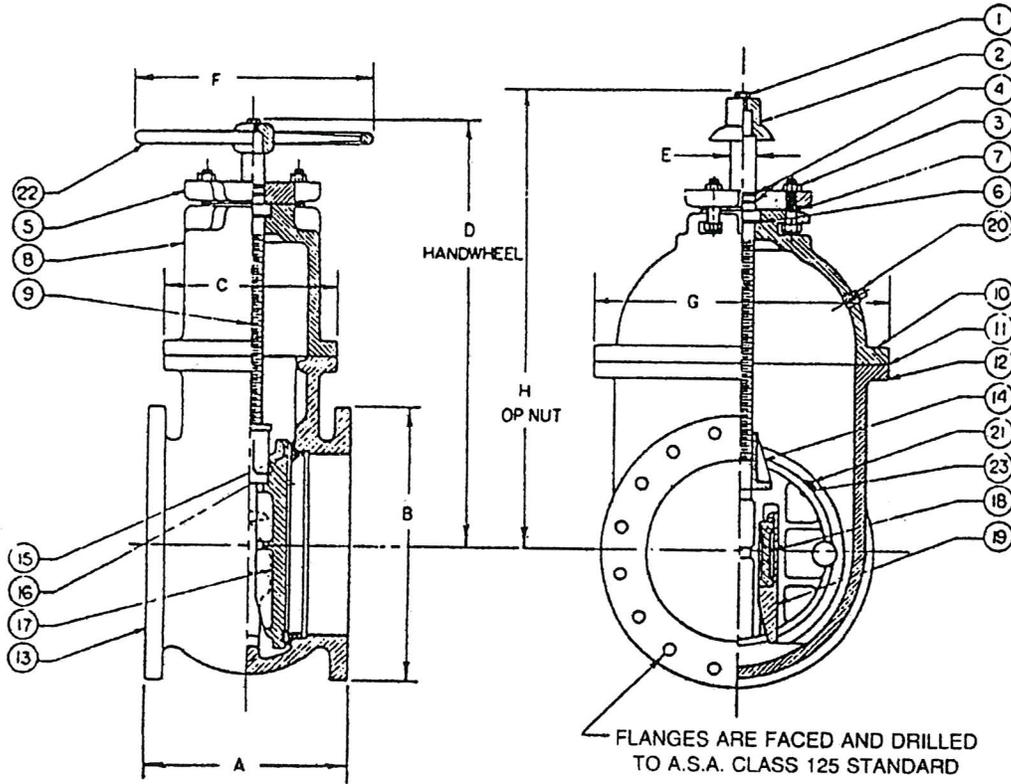
By-pass Valves  
Enclosed Gearing(Grease Case)  
Position Indicators  
Tracks, Rollers, & Scrapers for  
Handwheels  
Extension Stems  
Floor Boxes

\* Note: Call Factory For Special Applications and Accessory Availability.

42" & 48" Drawings Available on Request

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

**CLOW VALVE COMPANY**

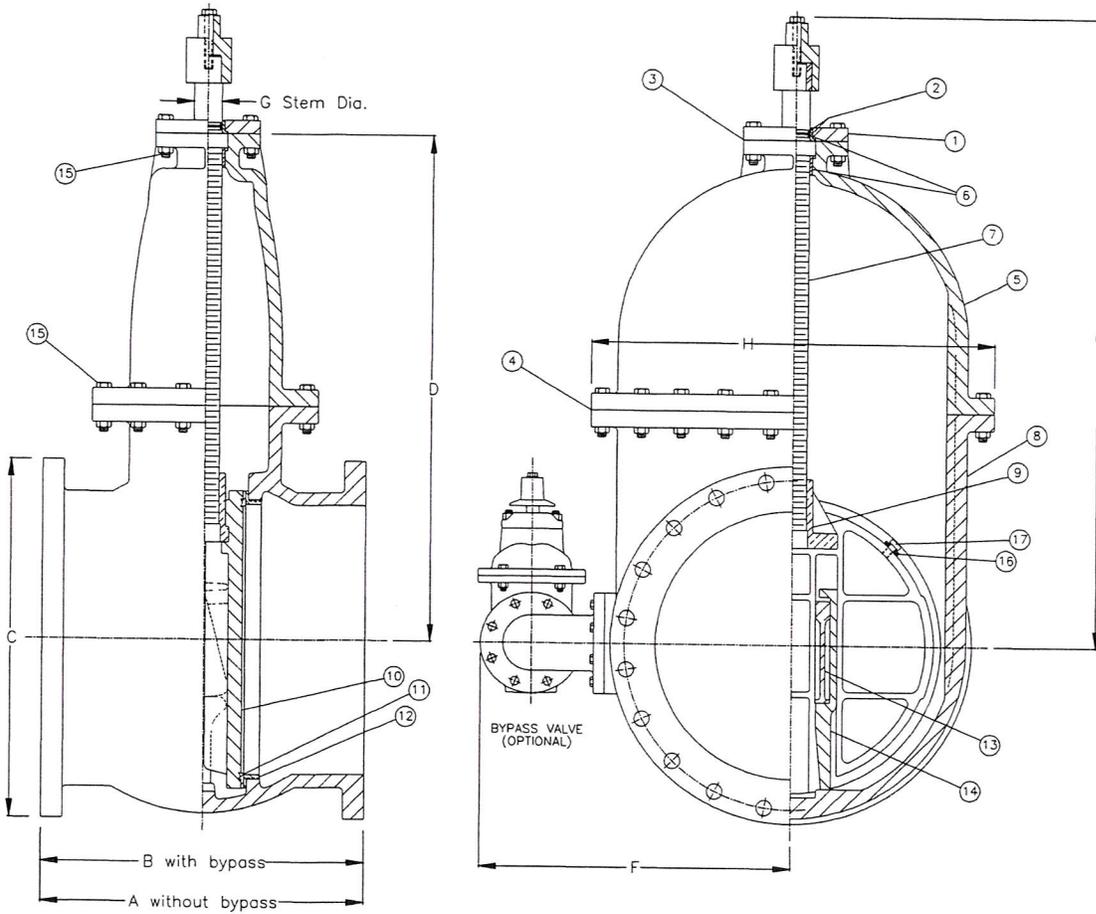


VALVE SIZE	A	B	C	D	E	F	G	H	Turns to Open
2	7	6	5	11¼	¾	7¼	5½	11¼	5
2½	7½	7	5½	13	¾	7¼	6½	13	6
3	8	7½	5½	14	¾	7¼	7½	14	7
4	9	9	7	15¼	1½	10	9	15¼	15
5	10	10	7¾	16¾	1½	10	10½	16¾	18
6	10½	11	9	18½	1¼	12	12¾	18½	21
8	11½	13½	10	21¾	1¾	14	15¼	21¾	27
10	13	16	10¾	28¼	1½	18	18¼	28¼	33
12	14	19	11¾	30¾	1½	18	20¼	30¾	39

SEQ.	QTY.	DESCRIPTION	MATERIAL
1	1	CAPSCREW	STEEL
2	1	OPERATING NUT	CAST IRON
3		BOLTS & NUTS	RUST PROOF 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	COPPER ALLOY
10		NECK-FLANGE BOLTS	RUST PROOF STEEL
11	1	NECK-FLANGE GASKETS	COMPOSITION
12		NECK-FLANGE NUTS	RUST PROOF STEEL
13	1	BODY	CAST IRON
14	1	GATE NUT	COPPER ALLOY
15	2	GATE RING	COPPER ALLOY
16	2	CASE RING	COPPER ALLOY
17	2	GATE	CAST IRON
18	2	WEDGE	COPPER ALLOY
19	2	HOOK	CAST IRON
20	1	PIPE PLUG	CAST IRON
21	4	PEGS—ON 10", 12" & 14" VALVES	COPPER ALLOY
22	1	HANDWHEEL	CAST IRON
23	2	STRAPS—ON 10", 12" & 14" VALVES	STAINLESS STEEL

sd-52  
C 10/25/10

14"-36" FLANGED END  
F-5070 GATE VALVE  
**CLOW VALVE COMPANY**



VALVE SIZE	A	B	C	D	E	F	G	H	Turns to Open
14	15 3/4	23	21	28 1/4	35 1/4	19 1/4	1 7/8	23 5/8	45
16	17	23	23 1/2	32 1/4	39 1/4	20 1/2	1 7/8	25 3/4	52
18	19	24	25	35 3/8	42 3/8	22 1/2	2 1/8	27 3/4	58
20	20	24	27 1/2	39	46	24	2 1/8	32 7/8	64
24	23	28 1/2	32	45 3/8	52 3/8	28	2 1/2	35 3/4	76
30	25	32 1/2	38 3/4	55 3/4	62 3/4	31 1/2	2 3/4	45 3/4	63
36	27	36	46	65 1/4	72 1/4	40	3	56 1/4	75

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	O-ring Plate	Cast Iron, ASTM A126 Cl. B
2	2	O-ring	Buna-N
3	1	Stuffing Box Gasket	Composition
4	1	Neck Flange Gasket	Buna-N
5	1	Cover	Cast Iron, ASTM A126 Cl. B
6	2	Bushing	Bronze, ASTM B584 Alloy 836
7	1	Stem	Bronze, ASTM B584 Alloy 867
8	1	Body	Cast Iron, ASTM A126 Cl. B
9	1	Stem Nut	Bronze, ASTM B584 Alloy 836
10	2	Gate	Cast Iron, ASTM A126 Cl. B
11	2	Gate Ring	Bronze, ASTM B584 Alloy 836
12	2	Case Ring	Bronze, ASTM B584 Alloy 836
13	2	Wedge	Bronze, ASTM B584 Alloy 836
14	2	Hook	Cast Iron, ASTM A126 Cl. B
15		Bolts & Nuts	Rust Proofed Steel
16	2	Strap	Bronze, ASTM B584 Alloy 836
17	4	Peg	Bronze, ASTM B584 Alloy 836



**Bid Number 50 - 00120679**

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

**BID DUE: September 28, 2017, 2:00 PM**

**ATTENTION VENDORS!!!**

**Please review all pages and respond accordingly, complying with all provisions in the technical specifications and Jefferson Parish Instructions for Bidders and General Terms and Conditions. All bids must be received in the Purchasing Department by the bid due date and time.**

**Jefferson Parish Purchasing Department  
200 Derbigny Street  
General Government Building, Suite 4400  
Gretna, LA 70053  
Buyer Name: Melissa Ovalle  
Buyer Email: [movalle@jeffparish.net](mailto:movalle@jeffparish.net)  
Buyer Phone: (504) 364-2687**



# JEFFERSON PARISH

## Department of Purchasing

**Michael S. Yenni**  
Parish President

**Brenda C. Patel**  
Director

### **CHANGES TO JEFFERSON PARISH BIDDING PROCEDURES**

The East bank Office of Purchasing is now open! We are located in the Joseph S. Yenni Building, 1221 Elmwood Park Blvd., Suite 404, Jefferson, LA 70123. Bidders may submit bid responses at this location, pending authorization in each bid package. **Bidders should carefully read and must respond accordingly per the requirements of the bid packages. NOTE: Bidders submitting bids on the day of bid opening, bidders must submit at the West Bank location only.**

#### **Other Changes Continued:**

- For all advertised sealed bids, written evidence of signature authority must be included with bid submission.
- Current W9 Forms 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, a current W-9 form must be supplied upon contract execution, should you be awarded a contract and/or issued a purchase order.
- Upon contract execution, successful bidder must produce final insurance certificates per standard Jefferson Parish insurance requirements. Proof of insurance is required for bidding purposes. Bidders must read the insurance requirements attachment included in each bid package for specific instructions.

**Bidders should reference the “Additional Requirements” section of the bid instructions and/or the “Important Notice to Bidders” included in the bid package for specific requirements to respond accordingly.**

For more information, please call Jefferson Parish Purchasing at 504-364-2678.

## 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)
6. Double Disc Gate Valve (Flange)

### 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 pertinent technical specifications and literature must be included with bid submission. Failure to submit with bid submission will result in a bid rejection.**

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.

### 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**

	<b>Manufacturer</b>	<b>Gate Valves</b>	<b>Butterfly Valves</b>
1	Mueller	A-2360	Lineal III, Lineal XP II, 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, 2FII, 2MII, MKII, HP 250II, HP250

DATE: 9/13/2017  
BID NO.: 50-00120679

INVITATION TO BID  
THIS IS NOT AN ORDER

Page: 1

## JEFFERSON PARISH

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

BUYER: MOVALLE@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, 9/28/2017 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](http://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.

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 and fax them to the Purchasing Department at (504) 364-2693 no later than FIVE (5) working days prior to bid opening. Bid numbers should be mentioned in all requests. Questions may also be emailed to the buyer for this bid at the email address listed above. 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.

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.

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

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

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 Proprietorships 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 submitted a bid in response to this solicitation may submit a protest in writing to the Director of the Purchasing within 48 hours of bid opening. The Purchasing Director will review it in connection with the Parish Attorney's Office which will then respond in writing as soon as possible.

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, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

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](http://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. Unless otherwise stated in the bid specifications, the successful bidder will be required to procure standard insurance policies evidencing Parish-mandated insurance requirements as indicated on the attached "insurance requirements" sheet. All bidders must comply with the instructions in this sheet. Failure to comply will cause bid to be rejected.
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-Collusion 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 are 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.