



**CENTRALBIDDING**  
FROM CENTRAL AUCTION HOUSE

**5000126534 A ONE TIME PURCHASE OF (6) 4 INCH CHECK VALVES FOR  
THE PUBLIC WORKS WAREHOUSE**  
Jefferson Parish Government

Project documents obtained from [www.CentralBidding.com](http://www.CentralBidding.com)

17-May-2019 09:06:45 AM



# JEFFERSON PARISH

Department of Purchasing

Michael S. Yenni  
Parish President

Renny Simno  
Director

April 24, 2019

## CHANGES FOR THE JEFFERSON PARISH PURCHASING DEPARTMENT

- Purchasing will be moving back to the General Government Building the week of May 6, 2019.
- All Public Bid Openings (2 pm response time) after the week of May 6, 2019 will be held in Jefferson Parish Purchasing Department, 200 Derbigny Street, Suite 4400, Gretna, LA, 70053.
- All advertised bid submissions (2 pm) and all non-advertised bid submissions (11 am) are due at the 200 Derbigny Street, Suite 4400 address or via on-line through Central Bidding until the date and time the bid is to open. For convenience, the bid submission can be delivered to our satellite office in the Yenni Bldg, 1221 Elmwood Park Blvd, Suite 404, Jefferson, LA, 70123 until the day before the bid opening date and time.
- Always refer to the Invitation to Bid instructions for pre-bid information (if applicable). 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.
- **Proof of insurance in the form of a current certificate evidencing coverages is required with bid submission from all bidders.** Bidders must read the insurance requirement attachment included in each bid package for specific instructions. Upon contract execution, successful bidder must produce final insurance certificates in accordance with Jefferson Parish insurance requirements.

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

Joseph S. Yenni Building – 1221 Elmwood Park Blvd., Ste. 404, Jefferson, LA 70123  
Office 504.364.2678  
General Government Bldg. – 200 Derbigny St – Suite 4400 - Gretna, LA 70053  
Office 504.364.2678  
Email: [Purchasing@jeffparish.net](mailto:Purchasing@jeffparish.net) Website: [www.jeffparish.net](http://www.jeffparish.net)



**Bid Number 50 - 00126534**

A one time purchase of (6) 4 inch wafer check valves for the Public Works Warehouse

**May 20, 2019 at 11:00 am**

**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: Doris Abraham, Buyer I  
Buyer Email: [dabraham@jeffparish.net](mailto:dabraham@jeffparish.net)  
Buyer Phone: 504-364-2690**

DATE: 5/10/2019

INVITATION TO BID  
THIS IS NOT AN ORDER

Page: 1

BID NO.: 50-00126534

**JEFFERSON PARISH**

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

VENDOR:

BUYER: DABRAHAM@jeffparish.net

Bids will be received until 11:00 AM, 5/20/2019 via online at [www.jeffparishbids.net](http://www.jeffparishbids.net) or by hand delivery, USPS mail or other courier service to Purchasing Department, 200 Derbigny Street (General Government Building), Suite 4400, Gretna, LA 70053. 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 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. A copy of these resolutions 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 [purchasing.jeffparish.net](http://purchasing.jeffparish.net) and clicking on On-line forms.

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.

As per LSA-RS 47:301 et seq., all governmental bodies are excluded from payment of sales taxes to any Louisiana taxing body. Quotations shall be based on F.O.B. Delivered, anywhere within the Parish as designated by the Purchasing Department. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications. 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. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit prices shall prevail.

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

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 as appropriate and a written response will be provided as soon as possible.

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

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 warranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

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.

All formal Addenda require written acknowledgment 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.

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.

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 A1 17.1-1961).

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.

## INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

**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>.

**ADDITIONAL REQUIREMENTS FOR THIS BID**

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

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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(I), 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 state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. NON-PUBLIC WORKS BIDS: A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. NON-PUBLIC WORKS BIDS: A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Prior to contract executions/purchase order issuance, the successful bidder will be required to provide final insurance certificates which shall name Jefferson Parish as an additional insured in accordance with the instructions in the aforementioned "Standard Insurance Requirements" sheet.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. Acceptable forms shall be limited to cashier's check, certified check, or surety bid bond. All sureties must be in original format (no copies). If submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. PUBLIC WORKS BIDS - Completed, Signed and Properly Notarized Affidavits Required; This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
15. NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits Required in conformity with the provisions contained in LSA - RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.

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.

DATE: 5/10/2019

INVITATION TO BID  
THIS IS NOT AN ORDER

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BID NO.: 50-00126534

**JEFFERSON PARISH**

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

VENDOR: Coburn's Supply

BUYER: DABRAHAM

As per LSA-RS 47:301 et seq., all governmental bodies are excluded from payment of sales taxes to any Louisiana taxing body. Quotations shall be based on F.O.B. Agency warehouse or jobsite, anywhere within the Parish as designated by the Purchasing Department.

JEFFERSON PARISH reserves the right to cancel all or any part of an order 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 at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH is expecting all products to be new and all work to be done in workman-like manner, according to standard practices. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

**DELIVERY: FOB JEFFERSON PARISH**

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

14 days

INDICATE STARTING TIME (IN DAYS) FOR CONSTRUCTION WORK

INDICATE COMPLETION TIME (IN DAYS) FOR CONSTRUCTION WORK

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.

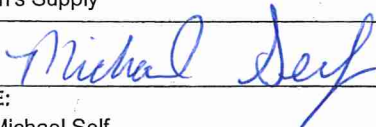
Acknowledge Receipt of Addenda: NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

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

<b>*** ALL BIDDERS MUST COMPLETE SECTION BELOW ***</b>	
FIRM NAME: Coburn's Supply	
SIGNATURE: (Must be signed here) 	TITLE: Municipal OSR
PRINT OR TYPE NAME: Michael Self	
ADDRESS: 1849 Commercial Drive	
CITY, STATE: Harvey, LA	ZIP: 70058
TELEPHONE: ( 225 ) 369-3395	FAX: ( 504 ) 348-1095
EMAIL ADDRESS: mself@coburns.com	

TOTAL PRICE OF ALL BID ITEMS: \$ 3,240.00

DATE: 5/10/2019

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00126534

SEALED BID

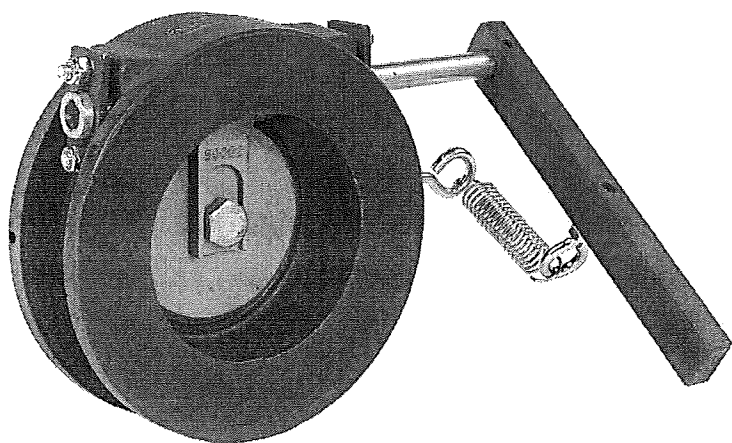
ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	6.00	EA	<p>A one time purchase of (6) 4 inch wafer check valves for the Public Works Warehouse</p> <p>0010 - VALVE, CHECK, WAFER, 4 IN., DUCTILE IRON BODY, EXTERNAL SPRING AND LEVER, STAINLESS STEEL HARDWARE, 2-1/4 IN. FACE TO FACE, ANSI CLASS 150, ANSI B16.1, ENDURO-BOND, KF EAGLE SERIES 18 NO. 7392-126K419191 SK NUMBER 00-0621920</p> <p>DELIVER TO: PUBLIC WORKS WAREHOUSE 1500 RIVER PARK ROAD BRIDGE CITY, LA 70094 ATTN: MARK MCDONALD</p> <p>Quoting Milliken 4" 700 Wafer Check w/ SS Hardware. Specs attached</p>	540.00	3,240.00





2625 Brodhead Road  
Suite #100  
Bethlehem, PA 18020  
Phone: 610-861-8803  
Fax: 610-861-8094  
Website: [www.millikenvalve.com](http://www.millikenvalve.com)

# Milliken Wafer Check Valve Figure 700



- Narrow Face-to-Face
- Heavy Duty Cast Iron Body
- 316 Stainless Steel Internals
- Spring Assisted Closure
- Reversible Spring Arm Assembly
- Elastomer Seat in Body
- Unobstructed Round Port
- Disc Position Indicator
- Manual Override Lever
- Economical Alternative

## Scope of the Line: Wafer Check Valve

### Sizes

3" - 12"

### Body

The compact wafer body is constructed of ASTM A-126 class B cast iron. This short face-to-face dimension means less space is required than with traditional flanged swing check valves.

### Seat

Numerous "O" ring seat materials are available. Positive retention of the seat is accomplished by the dovetail groove machined in the valve body. This groove reduces the possibility of the "O" ring being displaced from the body while allowing removal and replacement during maintenance.

### Packing

Split rings of PTFE packing are employed to prevent leakage through the shaft, and can be adjusted when necessary.

### Shaft / Bushings

The one piece 316 stainless steel shaft is supported by two (2) bronze bushings to insure proper alignment of the disc and seat. The design allows the shaft/arm to be field changed to either left or right hand positions.

### Disc

A corrosion resistant 316 stainless steel disc is used to reduce the chance of disc failure. Precision machining of the mating surface provides uniform contact between the disc and seat.

### Disc Arm

Continuing the concept of 316 stainless steel internals, the disc arm is manufactured of 316 stainless steel. The arm is attached to the disc and shaft by use of stainless steel fasteners.

### Spring / Arm Assembly

The spring arm assembly provides both positive indication of the disc position as well as serving as a manual override for use in back flushing the system. The spring allows the valve to operate properly even if installed in a vertical line. The spring also permits a predetermined line pressure to be reached prior to the valve opening. Optional weight is available.

### Flow

Round unobstructed ports translate to higher flow capabilities than are possible with other types of wafer check valves.

# Wafer Check Valve (Figure 700): Technical Specifications

## General

Check valve shall be of the short face-to-face type with external spring to ensure tight shutoff. The pressure rating shall be 200 psi.

## Valve Bodies

Valve bodies shall be of ASTM A-126 Class B cast iron. Disc and disc arm shall be of ASTM A-743 Grade CF8M stainless steel.

## Valve Shaft

The valve shaft shall be manufactured of ASTM A-276 Grade 316 stainless steel and supported by two (2) SAE 660 bronze bearings. Shaft sealing shall be accomplished by multiple rings of braided PTFE Teflon rings. Packing shall be utilized on each side of the valve.

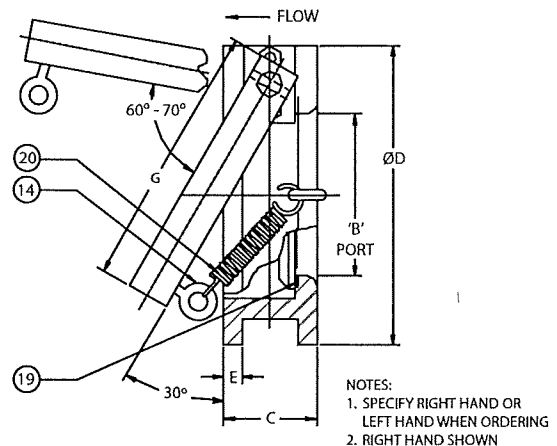
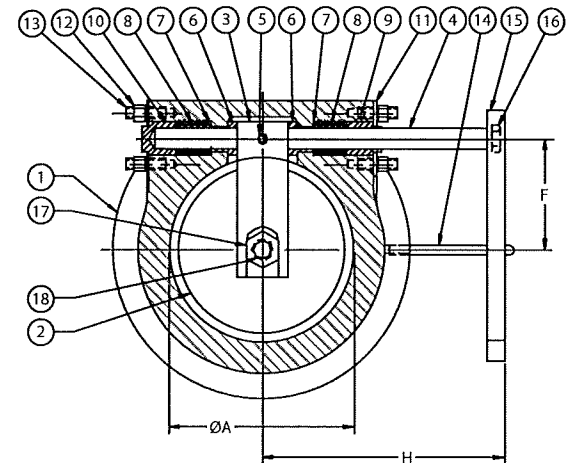
## Arm Assembly

The design of the valve shall be such that spring/arm assembly can be field changed from right to left. The closure spring shall be manufactured of ASTM A-228 spring steel. The spring arm shall be constructed of carbon steel ASTM A-36 and designed to provide disc position indication. The spring arm shall be capable of overriding the spring action for use as an override lever.

## Valve Seat

The valve seat shall be of specified O-ring material and retained in a dovetail groove in the valve body.

20	1	SPRING	STEEL ASTM A228
19	1	O-RING SEAT	AS SPECIFIED
18	1	THREADED ROD	316 S.S.
17	1	NUT	316 S.S.
16	1	SPRING PIN	STEEL
15	1	SPRING ARM	STEEL ASTM A36
14	2	EYEBOLT	STEEL NP
13	4	THREADED NUT	STEEL NP
12	4	NUT	STEEL NP
11	2	PLATE	STEEL ASTM A36
10	1	BLIND GLAND	BRONZE SAE 660
9	1	PACKING GLAND	BRONZE SAE 660
8	AR	PACKING	P.T.F.E.
7	2	WASHER	BRONZE SAE 660
6	2	BUSHING	BRONZE SAE 660
5	1	S.H. CAP SCREW	316 S.S.
4	1	SHAFT	316 S.S.
3	1	DISC ARM	ASTM A-743 CF8M
2	1	DISC	ASTM A-743 CF8M
1	1	BODY	A126 CL.B IRON
ITEM	QTY.	COMPONENT	MATERIAL/SPEC.



SIZE	A	B	C	D	E	F	G	H	WT. LB.
3	2.63	2.06	3.75	5.25	0.50	2.13	3.75	5.00	18
4	3.63	3.03	2.25	6.88	0.44	2.13	7.00	6.00	13
6	5.44	4.75	2.75	8.75	0.56	3.25	7.25	7.13	27
8	7.25	6.44	2.88	11.00	0.63	4.00	8.75	8.06	42
10	8.50	7.63	3.13	13.13	0.88	4.88	11.25	9.50	63
12	10.44	9.50	3.50	16.13	0.88	5.88	13.25	13.88	96