

5000128426- PURCHASE OF AMMONIA DETECTOR AND CHECK VALVE FOR THE EASTBANK WATER PLANT

Jefferson Parish Government

Project documents obtained from www.CentralBidding.com 10-Oct-2019 02:19:21 AM



Bid Number 50-128426

Purchase of ammonia detector and check valve for the Eastbank Water Plant

October 16, 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: Rae Lynn Scott Buyer Email: rscott@jeffparish.net

Buyer Phone: 504-364-2688

INVITATION TO BID THIS IS NOT AN ORDER

DATE: 10/08/2019 BID NO.: 50-00128426

JEFFERSON PARISH

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

VENDOR: 27118 BLANK BID COPY VENDOR BUYER: RSCOTT@jeffparish.net

Bids will be received until 11:00 AM, 10/16/2019 via online at www.jeffparishbids.net or by hand delivery, USPS mail or other

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

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 guaranty, 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 Al 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.

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BID NO.: 50-00128426 Page: 2

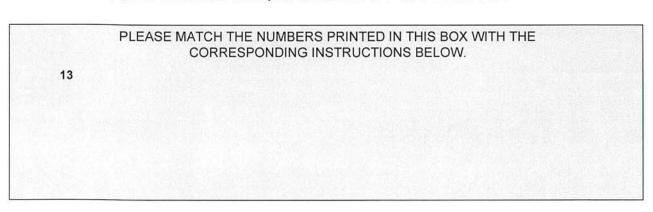
INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

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 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



- 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.

DATE: 10/08/2019

BID NO.: 50-00128426

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.
- 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.

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INVITATION TO BID THIS IS NOT AN ORDER

10/08/2019 DATE:

BID NO.: 50-00128426

JEFFERSON PARISH

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

VENDOR: 27118 BLANK BID COPY VENDOR	BUYER: RSCOTT
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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	See Attached
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:	None
	NUMBER:	
	NUMBER:	<u> </u>
	NUMBER:	

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

*** ALL BIDDERS MUST COMPLETE SECTION BELOW ***						
FIRM NAME:						
Technology International, Inc.						
SIGNATURE: Right Hold	TITLE:					
(Must be signed here) Report That I	Business Development Exec.					
PRINT OR TYPE NAME:						
Rifat Habib						
ADDRESS:						
1349 South International Pkwy, Suite 241	1,					
CITY, STATE:	ZIP:					
Lake Mary, Florida	32746					
TELEPHONE:	FAX:					
(407) 359-2373	(407) 359-2372					
EMAIL ADDRESS:						
tii@tii-usa.com						

TOTAL PRICE OF ALL BID ITEMS: \$ 23,004.00

Page:

DATE: 10/08/2019

INVITATION TO BID FROM JEFFERSON PARISH - continued

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BID NO.: 50-00128426

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			PURCHASE OF AMMONIA DETECTOR AND CHECK VALVE FOR THE EASTBANK WATER PLANT		
1	1.00	EA	0010 DE NORA MODEL 1610B SINGLE POINT AMMONIA DETECTOR (OR EQUAL)	\$2,852.00	\$2,852.00
			WATER DEPTEB WATER PLANT-MERVIN GRAVES		
			JOB NAME: GAS DETECTOR AMMONIA DATED 10/04/2019		
			(THIS IS TO REPLACE AMMONIA GAS DETECTOR THAT IS CURRENTLY OUT OF SERVICE AT THE EB WATER PLANT)		
2	1.00	EA	0020 24 IN FIGURE SB200-D RUBBER FLAPPER CHECK VALVE (OR EQUAL)	\$20,152.00	\$20,152.00
		1	JOB NAME: GA VALVE DATED 10/07/2019		
			(THIS SHALL BE TO REPLACE AN EXISTING VALVE ON THE EB WATER PLANT TRANSFER PUMP NUMBER 2)		
			LOCATION:		
			JEFFERSON PARISH EB WATER PLANT 3600 JEFFERSON HWY., BLDG. D JEFFERSON, LA 70121		
			a con leading		
	***Plea	ase see	our Equipment Proposal TII/LA/1019/12538 at	tached.	

Ammonia Gas Detector

2.03 GAS DETECTOR

- A. The ammonia gas detector shall consist of a wall mounted receiver and remote sensor. The gas detector shall have a range of 0-50 parts per million (ppm). New gas detectors to match existing detectors in the plant. Sensors need to be interchangeable between existing detectors. The gas detector shall be DeNora Model 1610B or equal.
- B. The receiver shall provide a LED bar graph display. The LED bar graph display shall be color-coded to indicate sensor status, gas concentration and alarm set point. Additional LEDs shall provide for indication of set point alarm, sensor malfunction, power ON and sensor ready. The receiver shall be housed in a NEMA 4X enclosure.
- C. The sensor shall be an electrochemical type requiring no chemical addition with a response time of 30 seconds maximum for 80% of full range at 20 degrees C. The sensor shall be wall mounted and housed in a NEMA 4X enclosure.
- D. The alarm and malfunction contacts shall be SPDT rated at 10 amps at 240 Vac or 28 Vdc maximum resistive or inductive load. The alarm and malfunction contacts shall be field configurable for manual reset (latching) or automatic reset (non-latching).
- E. Communications between the sensor and receiver shall be 3-wire, shielded, 22 gauge cable. The maximum distance between the receiver and sensor shall be 1000 feet/305 meters.
- F. The gas detector shall operate from a 120 Vac, 60 Hz, 1 phase power supply. The receiver and sensor electronics shall have provisions for protection against radio frequency/electromagnetic interference.

Rubber Flapper Check Valve

1.0 GENERAL

- A. Provide two (1) Golden Anderson 24" Figure SB200-D or equivalent rubber flapper check valve. This shall be to replace tow existing valves on the East Bank Water Treatment Plant transfer pumps. Face to face shall measure 48 inches.
- B. Winning bidder shall have valve delivered to the East bank Water Treatment Plant within 6 weeks from the date that bid is awarded..

1.1 QUALITY ASSURANCE

A. Supplier shall at the request of purchasing, provide detailed product data and descriptive literature including dimensions, weight, headloss, pressure rating, materials of construction and cross sectional drawings clearly illustrating the individual components.

2.0 PRODUCT

Rubber Flapper Check Valve

- A. The valve shall be rated for 250 PSI, have integral ANSI Class 125/150 flanged connections and employ only one (1) moving parts the flexible disc. The body shall have a "full waterway" with a flow area not less than the nominal pipe area through the valve. To minimize closure time, the valve shall seat on a 45 degree angle.
- B. The cover shall be removable and allow removal of the flexible disc without removing the valve from the line. The cover shall be of a "domed" shape to facilitate self-cleaning. There shall be a threaded port with pipe plug to permit installation of a visual or electrical position indicator. A mechanical position indicator shall also be provided for a visual indication of the disc position.
- C. The flexible disc shall be one piece and precision molded with alloy steel and nylon reinforcement and an integral O-ring style seat for drop tight seating at low pressure.
- D. The spring assist shall be one-piece construction formed with a large radius to allow smooth movement and provide rapid valve closure. The spring assist shall be secured to the cover using Type 316 screws and field replaceable without removing the valve from the line and or the need for special tools.

2.1 MATERIALS

- A. Valve body and cover shall be made from ductile iron per ASTM A536 Grade 65-45-12.
- B. The flexible disc shall be made from Buna-N (NBR) rubber.
- C. The spring assist shall be made from type 316 stainless steel.
- D. The valve body and cover shall be factory coated internally and externally with 12-16 mill of fusion bonded epoxy and be NSF-61 certified for contact with drinking water.





1349 South International Pkwy, Suite 2411

Lake Mary, FL 32746 Tel: (407) 359-2373 Fax: (407) 359-2372

E-mail: <u>tii@tii-usa.com</u>
Website: <u>www.tii-usa.com</u>

Equipment Proposal

Description: Purchase of Ammonia Detector and Check Valve for the Eastbank Water Plant

Solicitation #: 5000128426

Agency: Jefferson Parish Government

Our Ref: TII/LA/1019/12538

Date: 10/15/2019

In response to your quote request for Purchase of Ammonia Detector and Check Valve for the Eastbank Water Plant, Technology International, Inc. is pleased to submit the following for consideration:

ITEM NO.	QTY	DESCRIPTION/ MODEL NO.	UNIT PRICE	EXTD. PRICE
1	1	DeNora Ammonia Detector	\$2,852.00	\$2,852.00
2	1	Crispin Model # RF241-ASR BD00A14RF241-ASR 24" Rubber Flapper Check Valve w/Adjustment Spring Return, Ductile Iron Body & Cover, Steel & Nylon Reinforced Rubber Flapper, Steel Bolts, ANSI Class 150# Flanged Ends, Lined & Coated with 8 +/-4 Mills DFT of Tnemec 141 Epoxy. 250 PSIG Max. Operating Pressure	\$20,152.00	\$20,152.00

See attached data sheets

Total price for all above.....\$23,004.00

Warranty: Manufacturer's Standard warranty applies.

Delivery:

• Estimated delivery is **17 WEEKS** after receipt of order and approved submittal

- All delivery dates quoted are subject to manufacturer's confirmation at time of order.
- Submittal data will be provided for approval after receipt of order (if applicable).
- Customer to provide equipment and personnel to unload.
- TII will deliver good title (MSO) to the Agency upon payment confirmation. The Agency is responsible for its own title work and registration (if applicable).

Freight: Freight Included to Jefferson, LA 70121.

Validity: Quote is valid for 30 days.

Payment Terms: NET 30

Prompt Payment discount: 1/4 % 10 days

*** Notes:

Quoted price is not available on a line item basis. This is an offer for a lump sum contract.

Technology International, Inc. Corporate data:

We are a small business and our Tax Payer Identification Number (TIN): 650342335. The above price quoted does not include any sales, excise or similar taxes. If applicable agency must accrue and remit it directly."

We trust that this proposal will meet your requirements and we look forward to hearing from you.

If you have any questions or need more information, please contact us by phone at 407-359-2373, fax at 407-359-2372 or email us at tii@tii-usa.com

Respectfully submitted,

Rifat Habib

Business Development Exec.

Technology International, Inc.

The RF Series Rubber Flapper Check Valve

Sizes 2" to 48" • Available in #150 and #300 ratings

Ductile Iron Body





Rubber Flapper Check Valve



Rubber Flapper Check Valve

rispin-Multiplex Manufacturing Co. is proud to announce the introduction of its RF Series Rubber Flapper CheckValve.

It is the perfect combination of simplicity, function and design. Developed as a versatile and cost-effective solution to flow reversal, the RF is based on a low-maintenance concept. Its standard ductile iron body and steel-reinforced Buna-N rubber flapper are produced under the same rigid quality requirements that have

made Crispin synonymous with quality for over 105 years.

The 45 degree seat angle also provides a smaller stroke than conventional swing check valves, reducing slamming.

- In the static position, the "flex" and tension of the flapper provide a firm, tight seal.
- During flow, the flapper flexes out of the media, while not traveling nearly as far as a standard swing check disc.

 On flow stoppage, the flapper flexes back to the body seat, and gives a soft, yet strong and quick seal.

All of this is accomplished in a virtually maintenance-free atmosphere. The steel disc inside the rubber flapper is "over-engineered" for strength, and may never need to be replaced. In addition, the smooth body interior of the valve does not give solids the opportunity to collect anywhere on the inside of the body.

Crispin Rubber Flapper Check Valve Function

Design

The "RF" concept is simple: full pipe flow, low head loss, maintenance-free construction. With a standard ASTM A536, grade 65-45-12 Ductile Iron Body, the "RF" valve already meets tomorrow's material requirements. The Buna-N-Flapper, with "O-Ring" face, is nylon and steel reinforced, providing superior long-term operability and Drip Tight Seating, even with abrasive media. The flow area is equal to or greater than the nominal pipe diameter, making the "RF" ideal for sewage or any other solids-containing application.

Function

Operating on the same principles as most in-line check valves, the "RF" is primarily used for Basic Flow Reversal situations. Because the seat area is angled 45Þ, the valve can be mounted horizontally or vertically.

Materials

The "RF" comes standard with a 65-45-12 Ductile Iron Body, primer coatings and Buna-N/Steel Flapper. A variety of materials and coatings are available to suit most municipal and industrial applications. The flapper is available in most common

Rubber materials, including Buna-N, Viton and EPDM.

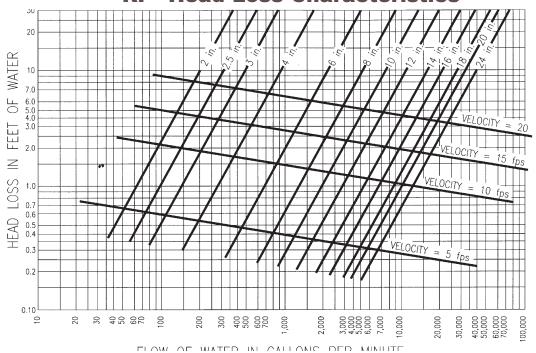
Options

- Backflow Device—used for draining or pump priming, this option is a safe and effective way to manually activate the valve.
- Visual Indicator or Limit Switch available.
- **Rubber Lining**—is available for abrasive and particularly harsh applications.
- **Special Coatings**—a variety are available. Please contact the factory.

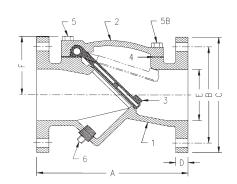
Rubber Flapper Check Valve



"RF" Head Loss Characteristics







RF Series Materials Description

			-
ITEM	DESCRIPTION	MATERIAL	ASTM
1	Body	Ductile Iron	A536 GR. 65–45–12
2	Cover	Ductile Iron	A536 GR. 65–45–12
3	Disc	Buna-N-Rubber,	D2000
		Steel & Nylon	
4	Gasket	Armstrong N-8092	N/A
5	Bolt	Steel	SAE GR. 5 ALLOY STEEL
5B	Bolt	Steel	SAE GR. 5 ALLOY STEEL
6	Plug	Cast Steel	A105

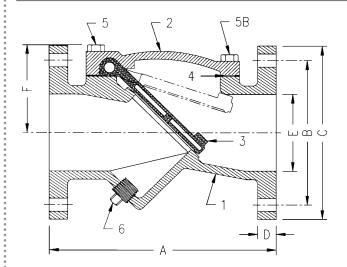
Submittal Sheet for Crispin RF Series



2"-24" Rubber Flapper Check Valve

Manufactured in compliance with ANSI/AWWA C508

Date: 2016



Rubber Flapper Parts List

	ITEM	DESCRIPTION	MATERIAL	ASTM
	1	BODY	DUCTILE IRON	A536 GR. 65-45-12
	2	COVER	DUCTILE IRON	A536 GR. 65-45-12
	3	DISC	BUNA-N RUBBER,	
			STEEL & NYLON	D2000, A240
	4	GASKET	ARMSTRONG N-8092	N/A
	5	BOLT	STEEL	SAE GR. 5 ALLOY STEEL
	5B	BOLT	STEEL	SAE GR. 5 ALLOY STEEL
•	6	PLUG	CAST STEEL	A05

Specifications

The Rubber Flapper Check Valve(s) shall be installed for use in basic flow reversal situations, and may be mounted either horizontally or vertically.

The valve(s) sh	$_{ m all}$ be $_{ m -}$			ansi Ci	ass
(150, 300) with	n a stanc	dard AST	M A53	6 65-45	-12
ductile iron bo	dy and	a steel-	reinforc	ed Bun	a-N
Rubber Flappe	r with '	"0-Ring"	face, a	and prii	mer
coating inside	and o	out. It	shall	operate	at
	PSIG. v	with a m	aximum	1 250 PS	SIG

The valve(s) shall be Crispin Model ______ Rubber Flapper Valve(s) as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, PA.

Option: A Visual Indicator or Limit Switch can be provided on the exterior for positive confirmation of flapper open/ closed positioning.

Option: A Rubber Lining is available for abrasive and particularly harsh applications.

Option: A variety of special coatings are available. Please contact the factory for more information.

Option: If needed, the rubber flapper can be made from (Viton, EPDM) instead of Buna-N.

*For Class 300 Specifications, please call the factory.

Class 150 Specifications*

MODEL	Α	В	С	D	Е	F	# OF	WT.
#							BOLTS	lbs.
RF21	8	4.75	6	0.63	2	3.38	4	24
RF251	8.5	5.5	7	0.69	2.5	3.38	4	26
RF31	9.5	6	7.5	0.75	3	3.88	4	37
RF41	11.5	7.5	9	0.94	4	4.63	8	67
RF61	15	9.5	11	1	6	5.88	8	120
RF81	19.5	11.75	13.5	1.13	8	7.63	8	219
RF101	24.5	14.25	16	1.19	10	9.88	12	360
RF121	27.5	17	19	1.25	12	11.38	12	503
RF141	31	18.75	21	1.38	14	13.38	12	680
RF161	32	21.25	23.5	1.44	16	15.38	16	975
RF181	36	22.75	25	1.57	18	17.13	16	1325
RF201	40	25	27.5	1.69	20	19.13	20	1650
RF241	48	29.5	32	1.88	24	22.75	20	2125

Submittal Sheet for Crispin RF Series

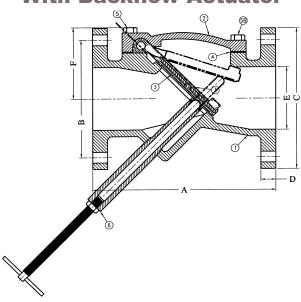
2"–24" Rubber Flapper Check Valve

Manufactured in compliance with ANSI/AWWA C508





With Backflow Actuator



Specifications

The Rubber Flapper Check Valve(s) shall be installed for use in basic flow reversal situations, and may be mounted either horizontally or vertically.

The valve(s) shall be _______" ANSI Class (150, 300) with a standard ASTM A536 65-45-12 ductile iron body and a steel-reinforced Buna-N Rubber Flapper with "O-Ring" face, and primer coating inside and out. It shall operate at ______ PSIG, with a maximum 250 PSIG. A backflow device will also be used for draining or pump priming.

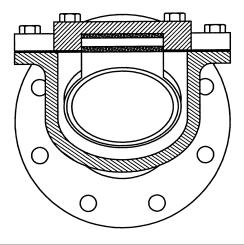
The valve(s) shall be Crispin Model _____ Rubber Flapper Valve(s) as manufactured by Multiplex Manufacturing Co., Berwick, PA.

Option: A Visual Indicator or Limit Switch can be provided on the exterior for positive confirmation of flapper open/closed positioning.

Option: A Rubber Lining is available for abrasive and particularly harsh applications.

Option: A variety of special coatings are available. Please contact the factory for more information.

Option: If needed, the rubber flapper can be made with (Viton, EPDM) instead of Buna-N.



RF/Backflow Parts List

ITE	M	DESCRIPTION	MATERIAL	ASTM
1		BODY	DUCTILE IRON	A536 GR. 65-45-12
2		COVER	DUCTILE IRON	A536 GR. 65-45-12
3		DISC	BUNA-N RUBBER, STEEL & NYLON	D2000, A240
4		GASKET	ARMSTRONG N-8092	N/A
5		BOLT	STEEL	SAE GR. 5 ALLOY STEEL
5E	3	BOLT	STEEL	SAE GR. 5 ALLOY STEEL
*6	3	BACKFLOW	STAINLESS STEEL/ ACTUATOR	A582, B505 BRASS

^{*} Backflow actuator is optional

Class 150 Specifications*

MODEL	Α	В	С	D	Е	F	# OF	WT.
#							BOLTS	lbs.
RF21	8	4.75	6	0.63	2	3.38	4	n/a
RF251	8.5	5.5	7	0.69	2.5	3.38	4	n/a
RF31	9.5	6	7.5	0.75	3	3.88	4	39
RF41	11.5	7.5	9	0.94	4	4.63	8	71
RF61	15	9.5	11	1	6	5.88	8	126
RF81	19.5	11.75	13.5	1.13	8	7.63	8	230
RF101	24.5	14.25	16	1.19	10	9.88	12	378
RF121	27.5	17	19	1.25	12	11.38	12	528
RF141	31	18.75	21	1.38	14	13.38	12	714
RF161	32	21.25	23.5	1.44	16	15.38	16	1024
RF181	36	22.75	25	1.57	18	17.13	16	1392
RF201	40	25	27.5	1.69	20	19.13	20	1733
RF241	48	29.5	32	1.88	24	22.75	20	2232

[†]For Class 300 Specifications, please call the factory.



Adjustable Spring Return

Adjustable Spring Return for RF

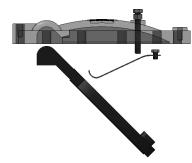
or those situations when the closing speed of the standard "RF" is not quite fast enough, the new "ASR" Adjustable Spring Return attachment is the perfect solution. Extremely cost effective and simple in design, the "ASR" attachment substantially increases the closing speed of the standard "RF" check valve, thus reducing water hammer. Available in both non-adjustable and adjustable configurations, the "ASR" is covered under the comprehensive "RF" warranty.

The "ASR" is a simple flat spring made of stainless steel that is placed inside the "RF" body. The "ASR" is in constant contact with the back of the "RF" disc, creating an accelerated closing speed. During the entire valve stroke, the "ASR" spring remains neatly tucked behind the disc and out of the way of the flow.

The adjustable configuration employs the same simple flat spring, but also includes an Externally Adjustable Tension Screw for setting spring preload. The "ASR" can give you true adjustability without having to remove the top cover and place additional springs against the disc.



The Adjustable Spring
Return's simple and costeffective spring is made of
stainless steel. It is
placed directly inside the
body of the Rubber
Flapper Valve.



Neatly tucked behind the disc, it accelerates closing speed, reduces water hammer and never interferes with flow.



Available with or without optional externally adjustable tension screws that set spring preload.

RF-ASR Parts List

RUBBER FLAPPER CHECK VALVE PARTS		
ITEM	DESCRIPTION	MATERIAL
1	BODY	A536 GR. 65-45-12
		DUCTILE IRON
2	COVER	A536 GR. 65-45-12
		DUCTILE IRON
3	FLAPPER	BUNA-N STEEL & NYLON
4	GASKET	ARMSTRONG N-8092
5	HEX BOLT	SAE GRADE 5
		ALLOY STEAL
5A	HEX BOLT	SAE GRADE 5
		ALLOY STEAL
6	PIPE PLUG	CAST STEEL

SPRING ASSIST PARTS LIST

ITEM	DESCRIPTION	MATERIAL
1S	SPRING	A313 GR.302
		STAINLESS STEEL
2S	BOLT	A193 STAINLESS STEEL
3S 4S	STOP	A193 STAINLESS STEEL
4S	STOP NUT	D2000 RUBBER & A193 S/S

Ordering the ASR is as simple as using it.

Just add "-ASR" to the end of the RF
model number. All dimensions remain the
same as those listed in the RF brochure.

