



CENTRALBIDDING
FROM CENTRAL AUCTION HOUSE

**50-00139375 One time Purchase of Hydraulic Powered Actuators &
Assoc. Parts**
Jefferson Parish Government

Project documents obtained from www.CentralBidding.com
31-Aug-2022 01:54:24 PM



Bid Number 50-00139375

**One Time Purchase of Hydraulic Powered Actuators
and Associated Parts**

BID DUE: September 15, 2022 AT 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 on the Purchasing Department's eProcurement site, www.jeffparishbids.net, by the bid due date and time. Late bids will not be accepted.

**Jefferson Parish Purchasing Department
200 Derbigny Street
General Government Building, Suite 4400
Gretna, LA 70053
Buyer Name: Ms. Sidney Duffy
Buyer Email: sduffy@jeffparish.net
Buyer Phone: 504-364-2682**

DATE: 8/29/2022
BID NO.: 50-00139375

INVITATION TO BID
THIS IS NOT AN ORDER
JEFFERSON PARISH
PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

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BUYER: SDUFFY@jeffparish.net

BIDS WILL BE RECEIVED ONLINE VIA WWW.JEFFPARISHBIDS.NET UNTIL 2:00 PM, 9/15/2022 AND PUBLICLY OPENED THEREAFTER IN THE WEST BANK PURCHASING DEPT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETNA, LA 70053. At no charge, bidders are to submit via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net to register for this free site. Additional instructions are included in the text box highlighting electronic procurement.

LATE BIDS WILL NOT BE ACCEPTED

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. HOWEVER, ELECTRONIC SIGNATURES AS DEFINED IN LSA -R.S. 9:2620(8) ARE ACCEPTABLE. SIGNATURE MUST BE A SECURED DIGITAL SIGNATURE.

**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 as amended.

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

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from <http://purchasing.jeffparish.net> and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Vendors may experience a delay in payment if your company is not a registered vendor with Jefferson Parish.

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

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

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

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

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

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

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

A corporate resolution or written evidence of the individual signing the bid having such authority must be submitted with the bid. Failure to comply will cause bid to be rejected. For corporate entities, such written evidence may be a printout of the Louisiana Secretary of State's website listing the signatory as an officer. Such printout shall be included with the bid submission. Bids submitted by Owners or Sole 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 submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

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

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

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

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

D. PRICES: Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and local 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).

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INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

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.

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

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

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

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

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

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 as amended. 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, 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(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.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

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 electronic envelope. Failure to comply will cause the bid to be rejected. When submitting the bid electronically, 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. Precaution must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.
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. Failure to comply with this instruction will result in bid rejection.
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. All sureties must be in original format (no copies) When 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.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

15. **NON PUBLIC WORK BIDS** - Completed, Signed and Properly Notarized Affidavits Required in conformity with the provisions contained in LSA - RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.

17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which is 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 owed 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 to 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, and report to Owner the amount of taxes not incurred.

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 JPCO 2-155.10(19). By signing this document, every corporation, partnership, or person contracting with PARISH, whether by cooperative endeavor, intergovernmental agreement, bid, proposal, application or solicitation for a parish contract, and every application for certification of eligibility for a parish contract or program, attests that it understands and will abide by all provisions of JPCO 2-155.10.

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BID NO.: 50-00139375

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 X

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 _____

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

THIS SECTION MUST BE COMPLETED BY BIDDER:

FIRM NAME: Motor-Services Hugo Stamp, Inc.

ADDRESS: 2022 Tamvest Court

CITY, STATE: Mandeville, LA 70448 ZIP: _____

TELEPHONE: (985) 626-8707 FAX: (N/A)

EMAIL ADDRESS: service@mshs.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 by placing the addendum number 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: \$ 59,105

AUTHORIZED SIGNATURE: David A. Santamar

September 15, 2022

TITLE: President/CEO

Printed Name

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.

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INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00139375

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			One time purchase of Hydraulic Powered Actuators and Associated Parts		
1	6.00	EA	0010 2301E Engine, LSSC, 24VDC Input Ordinary Item# W008273-1011	\$ 2,523	\$ 15,138
2	6.00	EA	0020 UG Act EMD Missing SERR CW Part# W008251-724A	\$ 5,652	\$ 33,912
3	6.00	EA	0030 MPU 5/8 x 18 x 4.5 Part# W001680-631	\$ 208	\$ 1,248
4	6.00	EA	0040 Cable assy, 48" shielded, 90 degree Part# MIS5958-0012	\$ 288	\$ 1,728
5	6.00	EA	0050 UG actuator harness, 10', 3-pin wire Part# BOME2845-0150	\$ 120	\$ 720
6	1.00	EA	0060 Assistance, 3 days including travel, T&M. *Installation and commissioning **SPECIFICATIONS ATTACHED** DELIVER TO: AMES PUMP STATION 5100 ROCHESTER DR. MARRERO, LA 70072 ATTN: BEN LEPINE	\$ 6,359	\$ 6,359
			FOB - Ames pump station warehouse	750	750

ONE TIME PURCHASE OF A HYDRAULIC POWERED ACTUATORS AND ASSOCIATED PARTS

The intent of this specification is to define the minimum requirements of the Parish of Jefferson for the purchase and delivery of the following hydraulic powered actuators and associated parts. A bid is a guarantee by the vendor of all specifications being met.

Submittals:

Any exception to this specification requires the vendor submit a letter attached to the documents listing in detail how it differs from the specifications. Mere attachment of brochures covering standard manufactured equipment when such differs from these specifications shall not be adequate to satisfy the letter of exceptions requirement. Such items may include

- A complete specification and submittal of all major components for the proposed items
- One copy of all pump "Bill of Materials" of the unit's construction, cutaway drawings, and dimensions as offered to confirm compliance with the specifications.
- Insurance certificate is required with bid

Any bidder not able to supply information shall be considered non-responsive and shall not be accepted.

Delivery:

Freight shall be included in base bid. The valve shall be delivered to the Ames pump station warehouse at 5100 Rochester Drive, Marrero, LA 70072. All deliveries shall be made during operating hours between 7:00 AM and 3:00 PM Monday through Friday. Deliveries will not be accepted during Jefferson parish holidays.

Specifications:

Item 0010: ITEM # WOO8273-1011 Woodward 2301E product specification 03404 - Engine Digital Load Sharing and Speed Control

Has four operating modes

Speed Control: Has multiple dynamics flexibility. Will work on pumps or compressors. Has capability for remote 4-20 mA speed reference through a configurable analog input.

Isochronous Load Sharing: Is compatible with most existing analog load sharing speed control systems. Now with soft load and unload capability.

Droop Base Load: Adjustable load control using discrete raise and lower contacts.

Isochronous Base Load: Provides constant load level operation against a utility bus. The load setting may be fixed, changed using discrete raise and lower inputs, or a remote 4-20 mA input

Operates from a 24 Vdc supply or equivalent

Includes:

- 1 Load Sensor Circuit
- 1 Actuator Driver, 4-20 mA, 0-20 mA, 0-200 mA, or PWM
- 1 MPU Speed Sensor
- 1 Configurable Analog Output

Bid Specifications #50-00139375

- 2 Configurable Analog Inputs
- 8 Discrete (Switch) Inputs
- 4 Discrete (Relay Driver) Outputs

Operates within a range of -40 to +70 °C (-40 to +158 °F).

Adjustable load control using discrete raise and lower contacts

The control is housed in a sheet-metal chassis for ordinary and hazardous locations, and consists of a single printed circuit board.

The 2301E is configured using a computer with Control Assistant software or a Woodward ToolKit service tool. The configuration software may be downloaded from the Woodward website (www.woodward.com). The computer connects to the 2301E through a 9-pin connector (RS-232 port). Modbus control can be operated through the second serial port (RS-422) or equal.

Item 0020: ITEM # WOO8251-724A Woodward product specification 37511C - UG-Actuator Hydraulic Powered Electric Actuator for Engine or Turbine Control

Must include self-contained oil sump with a capacity of <1.4L or equivalent

Produces at least 15ft-lb of work or equivalent

Maximum Work Capacity (based on the full 42 degree travel of the output shaft)

- Standard UG-ACTUATOR: 19.4 J (14.3 ft-lb) in the increase direction;
- 23.3 J (17.2 ft-lb) in the decrease direction or equal
- 20 ft-lb UG-ACTUATOR: 27.2 J (20 ft-lb) in both directions or equal
- Remote UG-ACTUATOR: 27.2 J (20 ft-lb) when supplied with 2760 kPa (400 psi); pressurized oil must be supplied to the actuator or equal
- Rated Work Capacity: 2/3 of maximum work capacity or equal

Drive/Hydraulic Specifications

- Drive Speed and Rotation: High Speed Pump: 600–1500 rpm
 - Low Speed Pump: 375–1100 rpm
 - Drive operates in one direction only.
- Drive Power Requirement: 375 W (0.5 hp) max or
- Hydraulic Supply: Self-contained sump, 1.4 L (1.5 qt) capacity

Control Qualities

- Hysteresis: Within 3% of max. travel when measured over full 42 degrees of travel;
- Within 0.5% of max. travel when measured over 4% of full travel at 1 Hz
- Temperature Drift: Nominally ±1 degree per 38 °C (100 °F)
- Time Constant: 70–90 ms for ±50 mA step with 1172 kPa (170 psi) actuator oil pressure
- Linearity: Within 2.5% of full 42-degree output travel or equal

Electrical Specifications

- Electrical Connector: 3 pin: US MIL-STD 3102E-14S-7P
 - 10 pin: US MIL-STD 3102E-18-1P (LVDT model)
- Coil Resistance: 23–26 (at 20 °C (68 °F))

Bid Specifications #50-00139375

- Calibration: 1–2 degrees at 20 mA
 - 37 ±2 degrees from 20–160 mA
 - Reaches maximum fuel at <200 mA

Construction

- Pump: Gerotor 3161 pump; relief valve set at 1172 kPa (170 psi) or equal
- Weight: 16 kg (36 lbs)
- Output Shaft: Standard: (2) 0.500-36 inch serrated
- Available: 0.625-36 serrated, or smooth shaft with a flat
- Drive Shaft: Standard: 0.625-36 serrated
- Available: 0.625 keyed drive shaft with 0.625-18 threads
- 1.125-48 shaft with adapter that fits PG base mounting hole pattern

Temperature Ranges

- Ambient Operating Temperature: –29 to +93 °C (–20 to +200 °F)
- Storage Temperature: –29 to +93 °C (–20 to +200 °F)

Compliance

- CSA: Class I, Division 2, Groups A, B, C, D (models available)
- Vibration Resistance: Tested to US MIL-STD 810C, Curve D

Item 0030: ITEM # WOO1680-631 Magnetic Pickups 5/8 x 18 x 4.5

Item 0040: ITEM # MIS5958-0012 Cable Assembly 48" Shielded 90 Degree

Item 0050: ITEM # MIS5958-0012 UG Actuator Harness 10' 3 Pin Wire

Item 0060: Quality Assurance

The vendor shall furnish a qualified field representative for three working days to provide guidance during and after installation and to train Owner's personnel in routine maintenance and troubleshooting procedures. This shall be coordinated with Jefferson Parish and scheduled during the week excluding Parish holidays. This will be held at any one of the major pump stations located in Jefferson Parish. All traveling and expenses shall be included in the base bid.

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF

INCORPORATED.

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

RESOLVED THAT _____, 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.

SECRETARY-TREASURER

DATE

STANDARD INSURANCE REQUIREMENTS FOR BIDDING PURPOSES

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

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

JEFFERSON PARISH REQUIRED STANDARD INSURANCE

☒ WORKER'S COMPENSATION INSURANCE

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

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

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

☒ **COMMERCIAL GENERAL LIABILITY**

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

☒ **COMPREHENSIVE AUTOMOBILE LIABILITY**

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

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

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

UMBRELLA LIABILITY COVERAGE

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

FOR CONSTRUCTION AND RENOVATION PROJECTS:

The following are required if selected below. Such insurance is due upon contract execution.

☐ **OWNER'S PROTECTIVE LIABILITY**

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

☐ **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.

Non-Public Works Bid Affidavit Instructions

- Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.
- Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.
- Affidavit must be notarized or the affidavit will not be accepted.
- Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.
- Affiant **MUST** select either A or B when required or the affidavit will not be accepted.
- Affiants who select choice A must include an attachment or the affidavit will not be accepted.
- If both choice A and B are selected, the affidavit will not be accepted.
- Affidavit marked N/A will not be accepted.
- It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.

Instruction sheet may be omitted when submitting the affidavit

Non-Public Works Bid

AFFIDAVIT

STATE OF Florida

PARISH/COUNTY OF Broward County

BEFORE ME, the undersigned authority, personally came and appeared: David
Santamaria, (Affiant) who after being by me duly sworn, deposed and said that
he/she is the fully authorized CEO and President of Motor-Servies
Hugo Stamp, Inc (Entity),
the party who submitted a bid in response to Bid Number _____, 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 X 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 X There are NO debts which would require disclosure under Choice A of this section.

Affiant further said:

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

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

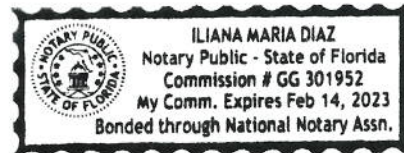
That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection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

Signature of Affiant

Printed Name of Affiant

James Gardner
James Gardner

SWORN AND SUBSCRIBED TO BEFORE ME
ON THE 15th DAY OF Sept., 2022



Iliana Maria Diaz
Notary Public

Iliana Maria Diaz
Printed Name of Notary

GG 301952
Notary/Bar Roll Number

My commission expires 02/14/2023

Customer Quote

9/15/2022 12:51:11 AM



Invoice To: C001974
JEFFERSON PARISH FINANCE DEPARTMENT
PO Box 9
Gretna LA 70054-0019
USA

Quotation: E000200089
Quote Date: 9/15/2022
Expiration Date: 10/30/2022
Taken By: Tamara Nunez
Customer ID#: C001974
Sales Manager:
Customer PO:

Ship To: AMES PUMP STATION
5100 ROCHESTER DR
MARRERO LA 70072
USA

Payment Terms: NET 30 DAYS
Delivery/Inco Terms: FOB, Loading Port, MSHS Warehouse

No.	Item	Item Description	Qty	Unit Price	Net Amount	
1	WOO8273-1011 LEAD TIME 22-24 WEEKS ARO	2301E - ENGINE LSSC 24VDC INPUT ORDINARY	6.000	2,523.00000	15,138.00	USD
2	WOO8251-724A LEAD TIME 22-24 WEEKS ARO	UG ACT EMD MISSING SERR CW	6.000	5,652.00000	33,912.00	USD
3	WOO1680-631 LEAD TIME 10-12 WEEKS ARO	MPU 5/8x18x4.5	6.000	208.00000	1,248.00	USD
4	MIS5958-0012 LEAD TIME 10-12 WEEKS ARO	CABLE ASSY 48" SHIELDED 90 DEGREE	6.000	288.00000	1,728.00	USD
5	BOME2845-0150 LEAD TIME 10-12 WEEKS ARO	UG ACTUATOR HARNESS 10' 3 PIN WIRE	6.000	120.00000	720.00	USD
6		Assistance 3 days includes travel, T&M	1.000	6,359.00000	6,359.00	USD
*installation and commissioning						
PRICING IS FOR THE INSTALLATION AND COMMISSIONING OF ONLY ONE ENGINE						
7	10/30/2022	ESTIMATED FREIGHT (400 LBS)	1.000	275.00000	275.00	USD

HMN009724

Remit To: Motor-Services Hugo Stamp, Inc.
3190 SW 4th Ave
Fort Lauderdale FL 33315
USA

Sale Amount: 59,380.00
Order Disc(0.0000%): 0.00
Surcharge: N/A
Sales Tax: 0.00

Misc: 0.00
Total: 59,380.00

Wire To: City National Bank of Florida
Bank Transit Number: 06600436

Customer Quote

9/15/2022 12:51:11 AM



No.	Item	Due Date	Item Description	Qty	Unit Price	Net Amount
Account Number:		2003276792				
Payment Terms:		NET 30 DAYS				
Special Instructions:						

2301E

Digital Load Sharing and Speed Control

Applications

The Woodward 2301E provides load sharing and speed control of generators being driven by diesel or gaseous engines.

With the flexible configuration software incorporated in the 2301E hardware, application variations can now be selected using an external computer (PC). Changing the application to accommodate engine speed range, gear teeth, and selection of forward or reverse acting is a matter of software setup.

The 2301E is capable of communicating using a Modbus® * RTU protocol, functioning as a Modbus slave device, via RS-422 drivers.

The 2301E has four operating modes:

Speed Control

Has multiple dynamics flexibility. Will work on pumps or compressors. Has capability for remote 4–20 mA speed reference through a configurable analog input.

Isochronous Load Sharing

Is compatible with most existing analog load sharing speed control systems. Now with soft load and unload capability.

Droop Base Load

Adjustable load control using discrete raise and lower contacts.

Isochronous Base Load

Provides constant load level operation against a utility bus. The load setting may be fixed, changed using discrete raise and lower inputs, or a remote 4–20 mA input.

Description

The Woodward 2301E microprocessor-based control functions like the 2301A load sharing and speed control and 2301D load sharing and speed control.

The control is housed in a sheet-metal chassis for ordinary and hazardous locations, and consists of a single printed circuit board.

The 2301E is configured using a computer with Control Assistant software or a Woodward ToolKit service tool. The configuration software may be downloaded from the Woodward website (www.woodward.com). The computer connects to the 2301E through a 9-pin connector (RS-232 port). Modbus control can be operated through the second serial port (RS-422).

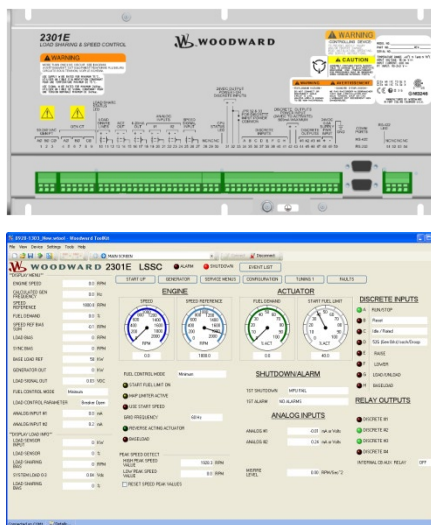
The control operates from a 24 Vdc supply.

The 2301E includes:

- 1 Load Sensor Circuit
- 1 Actuator Driver, 4–20 mA, 0–20 mA, 0–200 mA, or PWM
- 1 MPU Speed Sensor
- 1 Configurable Analog Output
- 2 Configurable Analog Inputs
- 8 Discrete (Switch) Inputs
- 4 Discrete (Relay Driver) Outputs

The 2301E operates within a range of –40 to +70 °C (–40 to +158 °F).

*—Modbus is a trademark of Schneider Automation Inc.



- Engine / generator or pump applications
- Multiple dynamics
- Manifold Air Pressure (MAP) limiter
- Torque limiter
- Low-speed-sensing functionality
- Remote speed & load reference
- Soft load transfer
- Automatic idle-to-rated switching
- Load rejection / load pulse option
- Idle droop function
- Optional Modbus® serial communications
- Adaptive speed-sensing algorithm
- Two serial ports
- Data-logging capability
- 2301E ToolKit service tool or Control Assistant programmable
- Ordinary or Hazardous Location chassis

Regulatory Compliance

European Compliance for CE Mark:

EMC Directive Declared to 2014/30/EU

Low Voltage Directive Declared to 2014/35/EU

ATEX – Potentially Explosive Atmospheres Directive Declared to 2014/34/EU

Zone 2, Category 3, Group II G, Ex nA IIC T3 Gc X

Zone 2, Category 3, Group II G, Ex nA IIC T4 Gc X

Marine Compliance Certificates:

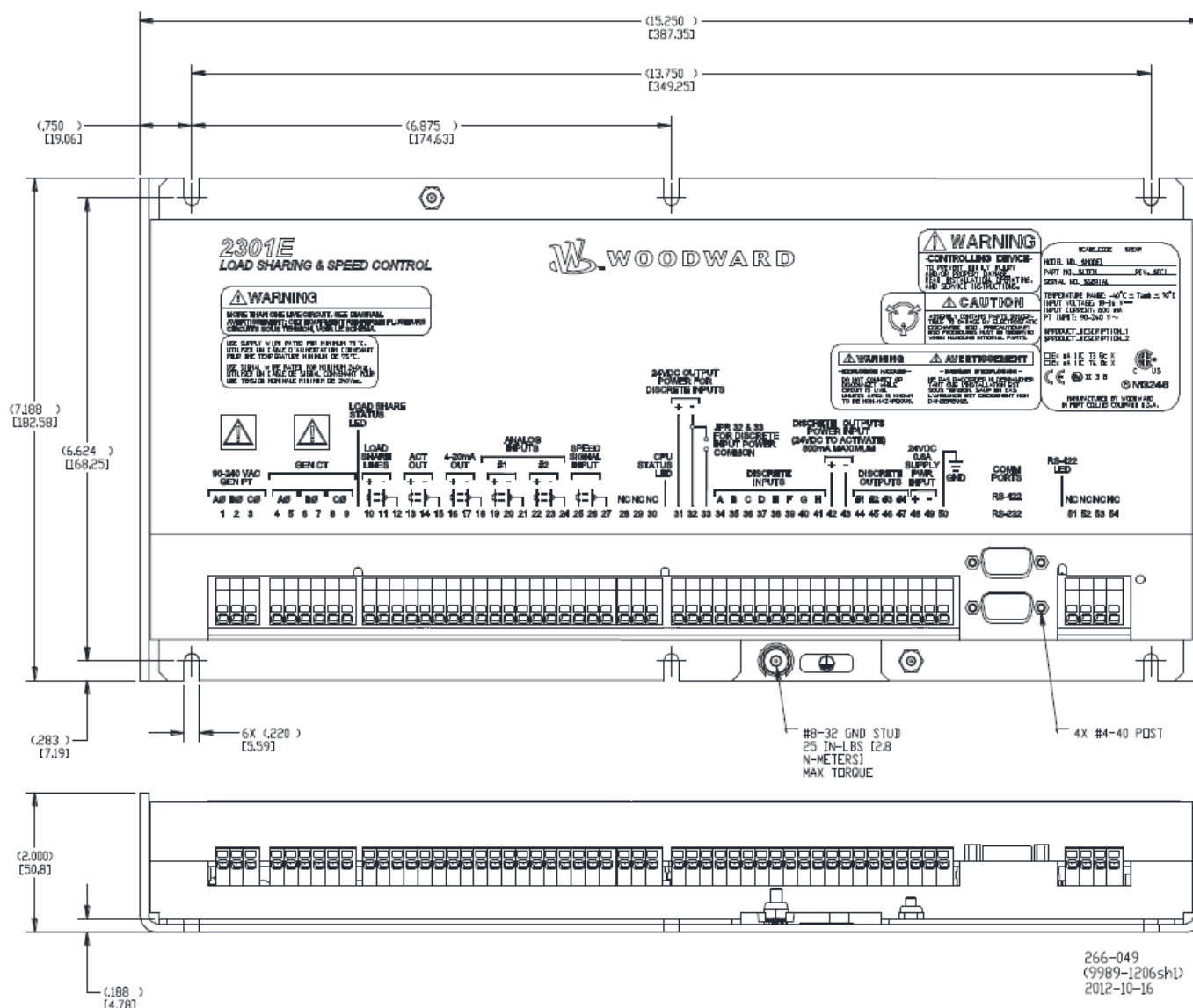
American Bureau of Shipping, Bureau Veritas, China Classification Society, DNV GL, Lloyd's Register of Shipping, Nippon Kaiji Kyokai, Royal Institution of Naval Architects

North American Compliance:

CSA (CSA Certified for Class I, Division 2, Groups A, B, C, D, T3 or T4 Hazardous Locations and ordinary locations at 70 °C ambient; for use in Canada and the United States; NOTE—Wiring must be in accordance with applicable electric codes with the authority having jurisdiction. These listings are limited to those units bearing the UL or CSA agency identification.)

NOTE—Some certifications apply to specific models only. See complete information in technical manual embedded in the control software service tool.

Outline Drawing



2301E Digital Control (ordinary locations version shown) (Do not use for construction)

(Weight = 1.75 kg / 3.86 lb)

266-049
(9989-1206sh1)
2012-10-16



PO Box 1519, Fort Collins CO, USA 80522-1519
1041 Woodward Way, Fort Collins CO 80524 USA
Tel.: +1 (970) 482-5811

www.woodward.com

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For more information contact:



UG-ACTUATOR

Hydraulic Powered Electric Actuator for Engine or Turbine Control

APPLICATIONS

The UG-ACTUATOR offers the advantages of electronic control and load sharing systems while using the convenient, existing UG-8 type drives and linkages. The actuator provides the muscle for Woodward analog controls such as the 2301A, as well as Woodward digital controls such as the 500-series and 700-series. The UG-ACTUATOR can be used with diesel, gasoline, or natural gas engines, and with steam and industrial gas turbines. The UG-ACTUATOR has a self-contained oil sump, so a separate oil supply is not required.

The actuator operates with a low speed pump for drive speeds from 375 to 1100 rpm, and with a high speed pump for 600 to 1500 rpm. An optional cooler is available for applications with a higher drive speed or high ambient temperature.

The UG-ACTUATOR is ideal for installations involving unattended starts.

The optional self-contained MPU simplifies the conversion of a UG-8 controlled engine or turbine to an electronically controlled engine. A gear which has been specifically designed to operate the MPU means that the electronic control will receive sharp, clean speed signals. Low speed applications may require override of the control's fail-safe during start-up.

DESCRIPTION

The UG-ACTUATOR takes a given electrical input signal and converts it to a proportional hydraulic output-shaft position to control engine fuel flow. The standard UG-ACTUATOR produces approximately 20 J (15 ft-lb) of work over 42 degrees of rotary output.

A UG-8 drive in good condition makes an excellent MPU signal source.

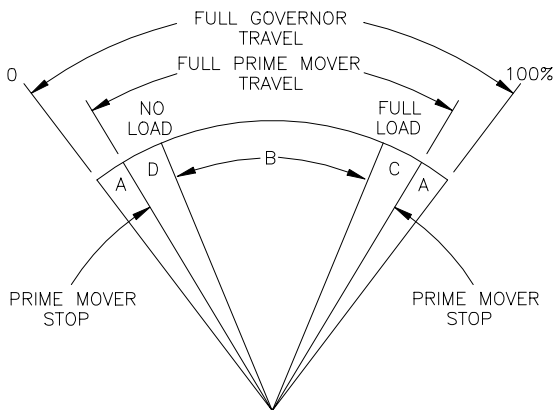
Alternatively, the UG-ACTUATOR is available with an LVDT for position feedback.

The UG-ACTUATOR uses the same cast-iron case as the UG-8 governor. The oil pump is the proven high-output Gerotor, designed to provide long life with minimal maintenance. The actuator uses standard UG-8 output shafts, power levers, power pistons, and piston links. The base is designed to precisely fit any drive designed for a UG-8 governor, and maintenance procedures are similar to those of the UG-8 governor.

The actuator's electric-to-hydraulic transducer uses a Woodward-built torque motor which converts the 20–160 mA control signal to a given output position.

- Proportional electrohydraulic actuator simplifies transfer from mechanical governing
- Economical installation using UG-8 case and drive
- Works with all Woodward 20–160 mA output electronic control systems
- Self-contained oil supply
- Integral magnetic pickup available

SPECIFICATIONS



- A – Overtravel to insure prime mover stops are reached
- B – No load to full load travel – normally 2/3 of full governor travel is recommended
- C – Travel required to accelerate the prime mover
- D – Travel required to decelerate or shut down prime mover

375-090
97-04-24

Maximum Work Capacity (based on the full 42 degree travel of the output shaft)

Standard UG-ACTUATOR	19.4 J (14.3 ft-lb) in the increase direction; 23.3 J (17.2 ft-lb) in the decrease direction
20 ft-lb UG-ACTUATOR	27.2 J (20 ft-lb) in both directions
Remote UG-ACTUATOR	27.2 J (20 ft-lb) when supplied with 2760 kPa (400 psi); pressurized oil must be supplied to the actuator
Rated Work Capacity	2/3 of maximum work capacity

Drive/Hydraulic Specifications

Drive Speed and Rotation	High Speed Pump: 600–1500 rpm Low Speed Pump: 375–1100 rpm Drive operates in one direction only.
Drive Power Requirement	375 W (0.5 hp) max.
Hydraulic Supply	Self-contained sump, 1.4 L (1.5 qt) capacity See Woodward Manual 25071, <i>Oils for Hydraulic Controls</i> , for specific recommendations. In most cases, the same type and weight of oils used in the engine can be used in the actuator.

Control Qualities

Hysteresis	Within 3% of max. travel when measured over full 42 degrees of travel; Within 0.5% of max. travel when measured over 4% of full travel at 1 Hz
Temperature Drift	Nominally ± 1 degree per 38 °C (100 °F)
Time Constant	70–90 ms for ± 50 mA step with 1172 kPa (170 psi) actuator oil pressure
Linearity	Within 2.5% of full 42 degree output travel

Electrical Specifications

Electrical Connector	3 pin: US MIL-STD 3102E-14S-7P 10 pin: US MIL-STD 3102E-18-1P (LVDT model)
Coil Resistance	23–26 Ω at 20 °C (68 °F)
Calibration	1–2 degrees at 20 mA 37 ± 2 degrees from 20–160 mA Reaches maximum fuel at <200 mA

Construction

Pump	Gerotor 3161 pump; relief valve set at 1172 kPa (170 psi)
Weight	16 kg (36 lbs)
Output Shaft	Standard: (2) 0.500-36 inch serrated Available: 0.625-36 serrated, or smooth shaft with a flat
Drive Shaft	Standard: 0.625-36 serrated Available: 0.625 keyed drive shaft with 0.625-18 threads, or 1.125-48 shaft with adapter that fits PG base mounting hole pattern

Temperature Ranges

Ambient Operating Temperature	–29 to +93 °C (–20 to +200 °F)
Storage Temperature	–29 to +93 °C (–20 to +200 °F) (within the limits of the oil being used)

Compliance

CSA	Class I, Division 2, Groups A, B, C, D (models available)
Vibration Resistance	Tested to US MIL-STD 810C, Curve D

PO Box 1519
Fort Collins CO, USA
80522-1519
1000 East Drake Road
Fort Collins CO 80525
Ph: (1)(970) 482-5811
Fax: (1)(970) 498-3058

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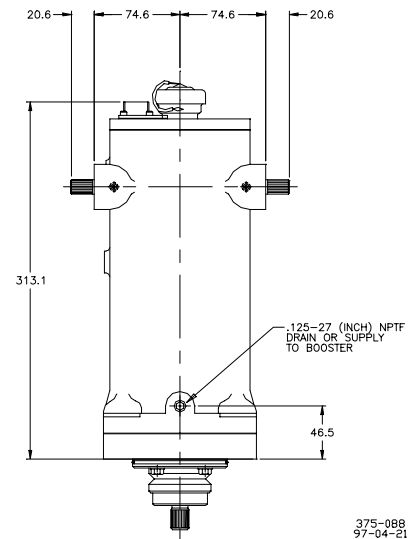
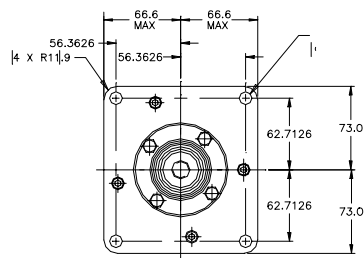
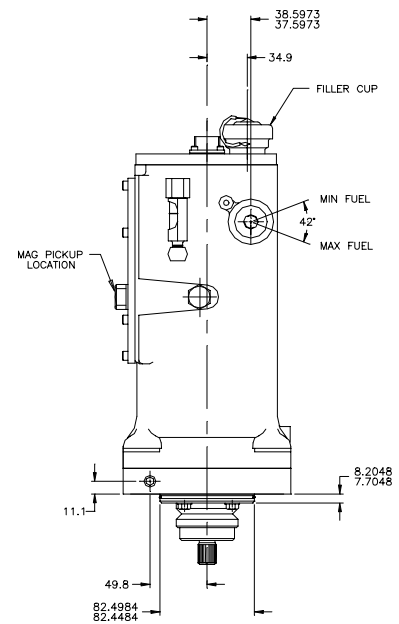
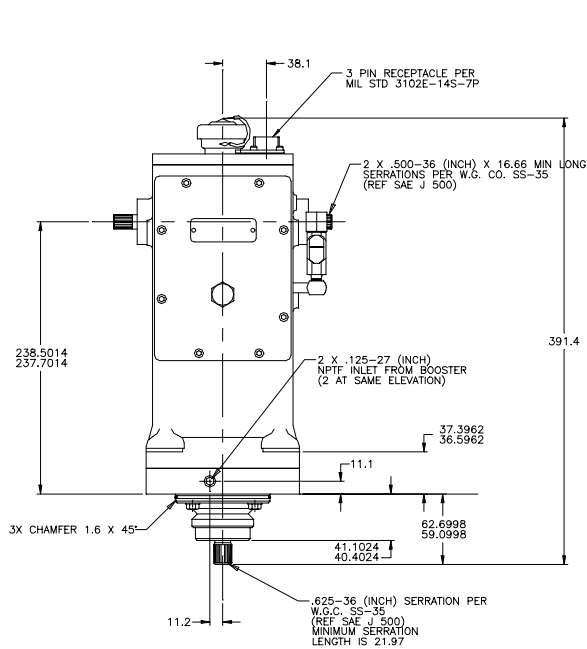
Distributors & Service

Woodward has an international network of distributors and service facilities. For your nearest representative call (1)(800) 835-5182 or see the Worldwide Directory on our web site (<http://www.woodward.com/industrial/address.htm>).

Corporate Headquarters

Rockford IL, USA
Ph: (1)(815) 877-7441

www.woodward.com



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