

Enquiry for a magnetic linear actuator

Enquiry Number: IITK/ME/ML/2017-18/MICA

Original Enquiry date: 27-04-2017

Original Closing date: 15-05-2017

Sealed quotations (in two separate envelopes marked separately as "Technical Bid" and as 'Financial bid' are invited as per the specifications and terms and conditions listed below.

Quantity required: 1 actuator + 1 set of electronics (amplifier/power supply etc.)

Specifications for the actuator, and scope of supply:

- Peak force: 500 N ($\pm 10\%$)
- Continuous force: 300 N ($\pm 10\%$)
- Stroke: 4 mm ($\pm 10\%$)
- Maximum allowable coil winding temperature: 155 °C
- Max. weight of assembly: 4 kg
- Weight of moving part: < 0.6 kg
- Tuned resonant frequency: < 45 Hz
- Inductance: 11 mH ($\pm 20\%$)
- Force sensitivity: 27.3 N/A ($\pm 20\%$)
- Max. dimensions of the actuator: 185 mm x 125 mm x 125 mm
- Appropriate high power switching amplifier/power amplifier should be supplied with the actuator
- Continuous current output of the amplifier: 20 A ($\pm 20\%$)
- Switching frequency of the power amplifier: 50 kHz ($\pm 20\%$)
- Amplifier should have option of being integrated with a wide bandwidth controller to perform position and/or velocity control at high sampling frequencies
- Actuator should be capable of being driven in a shaker mode
- Amplifier should be supplied with convertors for suitable BNC connectors, such that it can be driven by signals from an external signal generator
- Gain setting of the amplifier should be adjustable (ideally with a knob)
- All support power cables etc. should be supplied along with the actuator
- Actuator cables should be at least 3 m long
- Optional features should include: Flexure bearing and specific interface
- Device when supplied must come with its operational manual(s)

Terms and Conditions:

- Maximum education discount, if any should be offered
- Validity of quotation should be at least for 60 days
- The price quoted should be for delivery at Kanpur, India.
- Terms and conditions for the payment, including the banker's name of the principal and the account number
- Proprietary certificate, if relevant, should be provided.
- Delivery must be within 12 weeks from issuance of purchase order/indent
- The Indenter/Institute reserves the right of accepting and rejecting any quotation without assigning any reason.
- The Technical Bid should contain detailed technical specification of the product being offered and should not mention any price.
- The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges.

Kindly submit the Technical and Financial bids in two separate sealed envelopes addressed to:

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