INDIAN INSTITUTE OF TECHNOLOGY KANPUR
DEPARTMENT OF MECHANICAL ENGINEERING
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Enquiry no.: ME/ERL/2013-14/May/06
Enquiry date: May 20th, 2013
Extended Last Date: June 30th, 2013

Enquiry for Coriolis Force based Fuel Mass Flow Meter for Liquid Fuels (such as Diesel) and Gaseous fuels (Such as Hydrogen) for Internal Combustion Engine Application

Coriolis based fuels mass flow meters are required for liquid fuel (diesel: 1 No) and Gaseous Fuels (hydrogen: 1 No.) fuelled internal combustion engine. Details of the requirements of Fuel flow meters are given below:

For liquid fuel (Diesel)

- Fuel flow meter required should be suitable for TATA Di-core 2.2 liter engine's fuel requirement.
- Fuel flow rate = 0.001 kg/sec (min), 0.015 kg/sec (max)
- Pressure drop at operating flow $\leq$ 0.35 Kg/m^2
- Mass flow accuracy = ± 0.1% of the fuel flow rate
- On Board Display = Required (for Process Variable, meters status & Alarms) with Touch screen control facility. The basic programming of transmitter should be possible
- Digital Communication = RS485 MODBUS
- Computer interface should be possible

For Gaseous Fuels (Hydrogen)

- Fuel flow meter is required for single cylinder engine of 1 liter swept volume
- Fuel flow rate: 0.01 kg/m (min), 0.1 kg/min (max)
- Fuel inlet pressure in flow meter = 20 bars to 200 bars
- Pressure drop at operating flow ≤ 0. 50 Kg/m^2
- Mass flow accuracy = ± 0.35% of the flow rate
- On Board Display = Required (for Process Variable, meters status & Alarms) with Touch screen control facility. The basic programming of transmitter should be possible
- Digital Communication = RS485 MODBUS
- Computer interface should be possible

Terms & Conditions:

(i) Provide "Authorization certificate" from the manufacturer, in case the quotation is submitted by an Indian Agent.

(ii) Prices should be FOB/ CIF upto Delhi (in case of import), otherwise upto IITK.

(iii) Validity of quotation should be at least for 90 days.

(iv) Warranty: Three Years from the date of Installation and Commissioning.

*Kindly send your best offer (Technical and Commercial offers **separately**) so as to reach us on or before June 30th, 2013 to the following address:*

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Kanpur – 208016, India

In case of any queries/ clarifications related to this tender, you may contact Mr. Dhananjay Srivastava (+91 9935355990).