

## FLOW METER & DEWAR

Sr#	Description	Qty
1	<p><b><u>Flow Meter</u></b></p> <ul style="list-style-type: none"> <li>• Fluids: Liquid Oxygen/Liquid Nitrogen</li> <li>• Working Pressure: 6 MPa</li> <li>• Flow rate 1-10 liters/sec</li> <li>• Size: DN-50</li> <li>• Power Supply: 15-30 Volt DC</li> <li>• Output: 4-20 mA</li> <li>• Display at 100 meters away</li> <li>• Seals and wetted parts compatible with LOX/LN2</li> <li>• Fluid temperature: -200 - +100 deg. Centigrade</li> <li>• Response time: 100-500 ms</li> <li>• Accuracy: +/-0.5%</li> <li>• Resistant to Vibration</li> <li>• End Connections: Flanged</li> <li>• Preference: Turbine or Venturi type flow meter</li> </ul>	2
2	<p><b><u>Cryo Liquid Oxygen Tank</u></b></p> <ul style="list-style-type: none"> <li>• Type: Dewar</li> <li>• Orientation: Horizontal /Vertical</li> <li>• Mounting: Moveable frame with brakes in wheels</li> <li>• Capacity: Approx. 500 Liters</li> <li>• Working pressure: 40 bar</li> <li>• Dry Vacuum Level: 0.02 mbar</li> <li>• Evaporation Rate: 0.2 - 0.4%/day</li> <li>• Liquid Inlet and Outlet Line Size: Nominal diameter (DN) 50 mm</li> <li>• Accessories: <ul style="list-style-type: none"> <li>○ Liquid Inlet and Outlet Valve (Size DN 50 mm)</li> <li>○ Working Pressure 40 bar</li> <li>○ Pressure building system with Booster valve and Combined Pressure regulating valve</li> <li>○ Content gauge</li> <li>○ Pressure gauge</li> <li>○ Vacuum measuring gauge</li> <li>○ bursting disc</li> <li>○ Safety valve</li> <li>○ Vent valve</li> </ul> </li> </ul>	2

**Notes:**

a. For Item Sr#1, The Flow Meter:

- i. Please specify the type of flow meter offered in the quotation.
- ii. Pre-shipment inspection and training will be required at supplier's premises.
- iii. Technical literature of the offered flow meter must be submitted with the quotation.
- iv. Calibration certificate(s) are required in case of an order.
- v. Installation, Operation & Maintenance Manual in English must be provided in case of an order.
- vi. Circuit diagram in English must be provided in case of an order.

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- vii. If Venturi flow meters are offered, two sets of sensors/pressure transducers are required with each flow meter.
- b. For Item Sr#2, The Cryo Liquid Oxygen Tank:
  - i. Please provide qualification certificate with the quotation.
  - ii. Please quote for spare parts and accessories for four replacements of each tank.
  - iii. Technical literature must be provided with the quotation.
  - iv. Installation, Operation & Maintenance Manual in English must be provided in case of an order.
  - v. Pre-shipment inspection at supplier's premises will be required in case of an order.