

Coriolis Flow Meter for Oil

The flow meter is expected to measure flow rate of hot oil at a temperature of 150° C . The unit shall be capable of measuring up to 1 kg/s of maximum flow of oil. The unit shall be able to interface with the controlling device to be able to precisely control flow. The unit shall be able withstand the maximum operating temperature of 150° C. The unit shall comply with ASME standards of high pressure piping requirements.

Detailed technical specifications for the requirements are listed below.

Operational Specifications

| <u>S.No.</u> | <u>Description</u> | |
|---------------------|------------------------------|--|
| 1. | Nominal Mass flow | 0.05 – 1 kg/s or 0 to 3600 kg/h |
| 2. | Maximum Pressure in the Line | 70 bar |
| 3. | Maximum Temp (C) | 150° C |
| 4. | Communication | RS232/RS485 |
| 5. | Mode of Operation | Continuous |
| 6. | Type of Fluid | Oil |
| 7. | Data Transmission | Milliamp / digital outputs |
| 8. | Mass Flow Accuracy | Shall not exceed ± 0.1 % of max flow |
| 9. | Temperature Accuracy | $\pm 1^{\circ}$ C |

Mechanical Specifications

| <u>S.No.</u> | <u>Description</u> | |
|---------------------|---------------------------|----------------------|
| 1. | Nominal Inlet Diameter | BSP 1" inch |
| 2. | Nominal Outlet Diameter | BSP 1" inch |
| 3. | Material Make | 316L stainless steel |

Electrical Specifications

| <u>S.No.</u> | <u>Description</u> | |
|---------------------|---------------------------|----------------------|
| 1. | Voltage | 3 Phase – 220- 240 V |
| 2. | Current | 10 - 15 A |
| 3. | Frequency | 50 – 60 Hz |

Additional Specifications

| <u>S.No.</u> | <u>Description</u> | |
|---------------------|---------------------------|-----------------------|
| 1. | Display | Input digital display |
| 2. | Current | 10 - 15 A |
| 3. | Frequency | 50 – 60 Hz |

General conditions:

1. Quote for 1 year standard warranty and also 1 year optional additional warranty.
2. Must provide commissioning support at IIT Madras.

