

GENERAL INSTRUMENTATION**Description**

IE Prover Electronics is a Microprocessor based instrument, which is designed to be used in Terminal Automation projects to do the periodical proving of the meters used. This is based on high speed micro controller. The Prover Electronics consists of a front panel LCD back lit graphical display and a keyboard on the front panel. This is interfaced with prover tank of 2000 litres capacity and to a digital control valve. This can be hooked up to any of the meter for which the proving is required.

Design Features

- iiA iiB Explosion Proof enclosures
- Liquid crystal display with back lighting graphical
- Watchdog timer function
- Digital valve control for flow rate control & Volumeter Batch control
- Proving Tank certified by Weight & Measures Dept
- RS 232/RS 485 Interface

Principle Of Operation

The outlet of the meter is connected to the prover pipe line and the flow rate is set through front panel in the Prover Electronics, the fluid will be collected in a prover tank on pressing start button of prover electronics. On tank full the sensor will send a signal to the prover electronics and the digital valve at the prover tank will be closed. The Prover Electronics will be fed with pulses from meter under proving during the prover tank filling. On completion of the prover cycle the Prover Electronics will calculate the K-Factor for the particular flow rate i.e. set. In the same fashion the number of cycles are repeated at different flow rates and the K-Factors are calculated. T

Specifications

WARNING: Do not operate this instrument in excess of the specifications listed below. Failure to heed warning may result in serious personal injury or damage to the equipment.

Inputs

- Pulse input from meter under proving
- Sensor signal from prover tank

Outputs

- Front panel display LCD back lit graphical
- RS / RS 485 terminal for data communication with P.C
- Digital valve control signal to control the flow rate set for the prover run