



Meriam Instrument

a Scott Fetzer company

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MODEL 311EG10

PRECISION MERCURY BAROMETER

DESCRIPTION and FUNCTION

The Meriam Model 311EG10 Barometer is a precision instrument combining laboratory accuracy with rugged industrial plant construction. This sealed-tube mercury column barometer includes a 5" scale vernier providing readability to .01 inches or .1mm, depending on whether English or metric scale is required.

Precision .250 I.D. bore tubing is utilized for utmost accuracy and easy reading. The vernier includes a hairline and mirror for parallax-free reading. A thermometer is mounted in the case for correlating reading and applying a temperature correction factor for further precision.

CONSTRUCTION

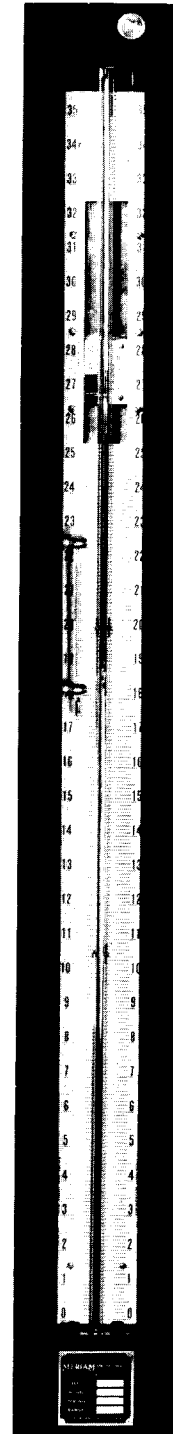
The Model 311EG10 is sturdily constructed for continuous, reliable and accurate service in the instrument laboratory or in industrial process plants. Special design features permit shipping the instrument completely filled with mercury, ready for immediate use without complicated preliminary preparation.

The sturdy instrument body is of heavy gauge steel with welded in end blocks. Large diameter, annealed, precision bore glass tube is fusion sealed at the top. Tube supports eliminate distortion and Viton packing assures leak proof sealing at the stainless steel lower end block where the tube is yoke packed. A submerged restriction between the well and glass indicating tube protects the tube from air entering the indicating tube.

The accuracy of a barometer depends on the condition of evacuation in the void space in the sealed tube. For the ultimate in accuracy, the instrument is evacuated and filled with Meriam Instrument Mercury under controlled conditions assuring complete removal of all entrained air prior to filling with mercury. If the perfect seal of a barometer is lost, the gauge must again be completely evacuated and a new filling of mercury added.

The wide, easily read scale is directly behind the glass indicating tube and is secured to the instrument body at the reference zero. Sharp black graduations on a non-glare satin finish background extend on both sides of the mercury filled indicating tube. Large numbers on major graduations provide at-a-glance readability. The scale is aluminum for easy correlation to available temperature correction factors.

Protection from dirt and dust is provided by the close fitted transparent window framed in the steel cover. The instrument finish is a durable, baked black crackle enamel.



Meriam
 Model 311EG10FF

