


 TRADE AND COMMERCE
 CANADA

SD-GA.25

STANDARDS DIVISION

OTTAWA, December 9, 1952.

TYPE APPROVALFOXBORO TYPES "9" AND "29" FLOW METERS

The apparatus specified and illustrated herein has been duly approved by the Standards Division under the provisions of the Gas Inspection Act, Chap.82, R.S.1927, as amended, and may be admitted to verification in Canada.

Apparatus Approved: Types "9" and "29" Flow Meters, manufactured by The Foxboro Company, Foxboro, Mass. and Ville LaSalle, P.Q., and distributed in Canada by Peacock Brothers Limited, Montreal, P.Q.

Application: Measurement of fluids in conjunction with standard orifice plates and approved pressure gauges where the differential pressure is low.

Rating of Apparatus: Differential Ranges 1, 2.5, 5, 10
 (inches of water)
 Working Pressure up to 150 p.s.i.
 Bell Diameter 6.5 inches
 Mercury 6.5 pounds (an organic liquid is used for the 1" differential range)

Description: The types "9" and "29" bell meters have a single pressure chamber, divided into separate compartments by a bell and a liquid seal. For ranges $2\frac{1}{2}$ " and above, a small quantity of mercury at the bottom of the chamber acts as a seal between the compartment inside the bell and the one outside. An organic liquid is used as a seal for the 1" range. The downstream or low pressure side of the orifice is connected to the inner bell compartment, and the upstream or high pressure side is connected to the compartment surrounding the bell. The differential pressure between the two compartments moves the bell. This motion is opposed by a calibrated spring and is converted into inches of water differential on the chart through the segmented lever, the Foxboro "pressure-tite" bearing and the pen arm. Ranges may be changed by substituting a new pre-calibrated spring and zeroing the meter. The type "29" is a newer form of the type "9". The meters are essentially the same except that the type "29" incorporates a "Teflon" bearing. These meters may be used in conjunction with any approved type of static pressure element for the measurement of flow.

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