



TRADE AND COMMERCE  
CANADA

SD-GA.41

## STANDARDS DIVISION

OTTAWA.....September 14, 1953.

TYPE APPROVALFOXBORO PRESSURE ELEMENT - "HYDRON" LOW-PRESSURE TYPE

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: "Hydron" low-pressure type of Pressure Element, manufactured by the Foxboro Company, Foxboro, Mass., and Ville LaSalle, P.Q., and distributed in Canada by Peacock Brothers Limited, Montreal, P.Q.

Application: For determination of static pressure, in the lower ranges of pressure, wherever static pressure is a factor in the measurement of gas.

Rating of Apparatus:  
Pressure Range ..... 0 - 15#; 0 - 18#.

Description: The "hydron" pressure element is used in the measurement of low static pressures. It is considered by the manufacturer to be a modification of the diaphragm-type construction although the design differs rather radically from that of the diaphragm type. The hydron unit is essentially a seamless metal bellows contained inside a metallic housing. Pressure is applied inside the housing but outside the bellows. (This is in contrast to the usual diaphragm-type instrument where the pressure is applied internally.) The resistance to pressure is provided by an internal compression spring and by the bellows itself. The motion of the hydron is transmitted to the recording mechanism through a rack and pinion.

The usual adjustment for zero is provided as well as two adjustments for correcting the indication throughout the scale.

Approval covers the use of this element in conjunction with other approved elements or as an individual static pressure gauge. Pressure elements of this type are presently identified by the abbreviation 'HYDN' as part of the type designation; for example, Type BR.HYDN. (meaning bronze hydron).

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