



TRADE AND COMMERCE  
CANADA

## STANDARDS DIVISION

SP-CA.46

OTTAWA,.....March 23, 1955.

TYPE APPROVALROCKWELL TYPE 201 ORIFICE METER

The apparatus specified and illustrated herein has been duly approved by the Standards Division under the provisions of the Gas Inspection Act, Chapter 129, R.S.1952, and may be admitted to verification in Canada.

Apparatus Approved: Rockwell Type 201 Orifice Meter, manufactured by the Rockwell Manufacturing Company, Pittsburgh 8, Pa., and sold in Canada by Canada Rockwell Manufacturing Co. of Canada Ltd., Guelph, Ontario except that in the Provinces of Saskatchewan and Alberta the distributors are Barber Engineering and Supply Co. Ltd., Calgary, Alberta.

Application: Measurement of gas in conjunction with standard orifice plates.

## Rating of Apparatus:

Differential Ranges ..... 0-5, 0-10, 0-20, 0-50, 0-100, 0-200, 0-400  
inches water gauge  
Working Pressure ..... 1000 p.s.i. for 0-5" and 0-10" meters  
4000 p.s.i. for higher differential ratings  
Static Pressure Ranges .... 10, 20, 30-0-25, 30-0-35, 50, 100, 30-0-135, 150,  
250, 500, 1000, 2000, 3000, 4000 p.s.i.

Description: The Rockwell type 201 orifice meter includes a differential element and a static pressure element housed in a heavy rectangular case. Where the static pressure is very uniform the static pressure element may be eliminated. For differential ranges from 0-20" to 0-400" the differential element manometer consists of three forgings:- the main housing body, float or low pressure side and high pressure side assembly. Inspection cover plate, float chamber and high pressure chamber are of tongue-and-groove design with gaskets to prevent leakage. The manometer is made of forged steel and designed to withstand 4000 p.s.i. High tensile cap screws are used throughout the assembly and all important internal parts are made of stainless steel. The inner surface of the manometer is finished with baked lacquer to prevent corrosion and assure good movement of the mercury. Differential ranges can be easily changed to 20", 50", 100", 200" and 400" by removing four cap screws in the main housing and loosening the union on the bottom of the float chamber. To convert to the 200" or 400" manometer the mounting bracket must be reversed and the two-inch mounting nipple must be shortened to accommodate additional length of range tube. These changes can be made without dismantling the manifold. The meter is equipped with over and under check valves, dampening valve and drain plug. For the 5" and 10" differential range the meter employs the bell type float principle. These meters have essentially all the features of the higher differential meters. The static pressure elements approved herewith are of the helical tube type only and are made with various materials depending on range and service. The common materials used are trumpet metal, stainless steel and beryllium copper. The chart drives are of the Macnish or Bristol type and are available in two sizes - Standard and Midget. They may be supplied with various clock drives and rotation speeds.

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