



DEPARTMENT OF TRADE AND COMMERCE
STANDARDS BRANCH

G-6

OTTAWA May 7 1965

NOTICE OF APPROVAL

FOR

CANADIAN METER COMPANY MODEL VP
VOLUME AND PRESSURE GAUGE

Apparatus

Static Pressure	Ranges, p.s.i.
0 - 5	0 - 100
0 - 10	0 - 200
0 - 15	0 - 300
0 - 30	0 - 500
0 - 45	0 - 1,000
0 - 50	0 - 1,200

Volume Units, Cu. Ft.
1,000, 2,000 or 10,000

Description

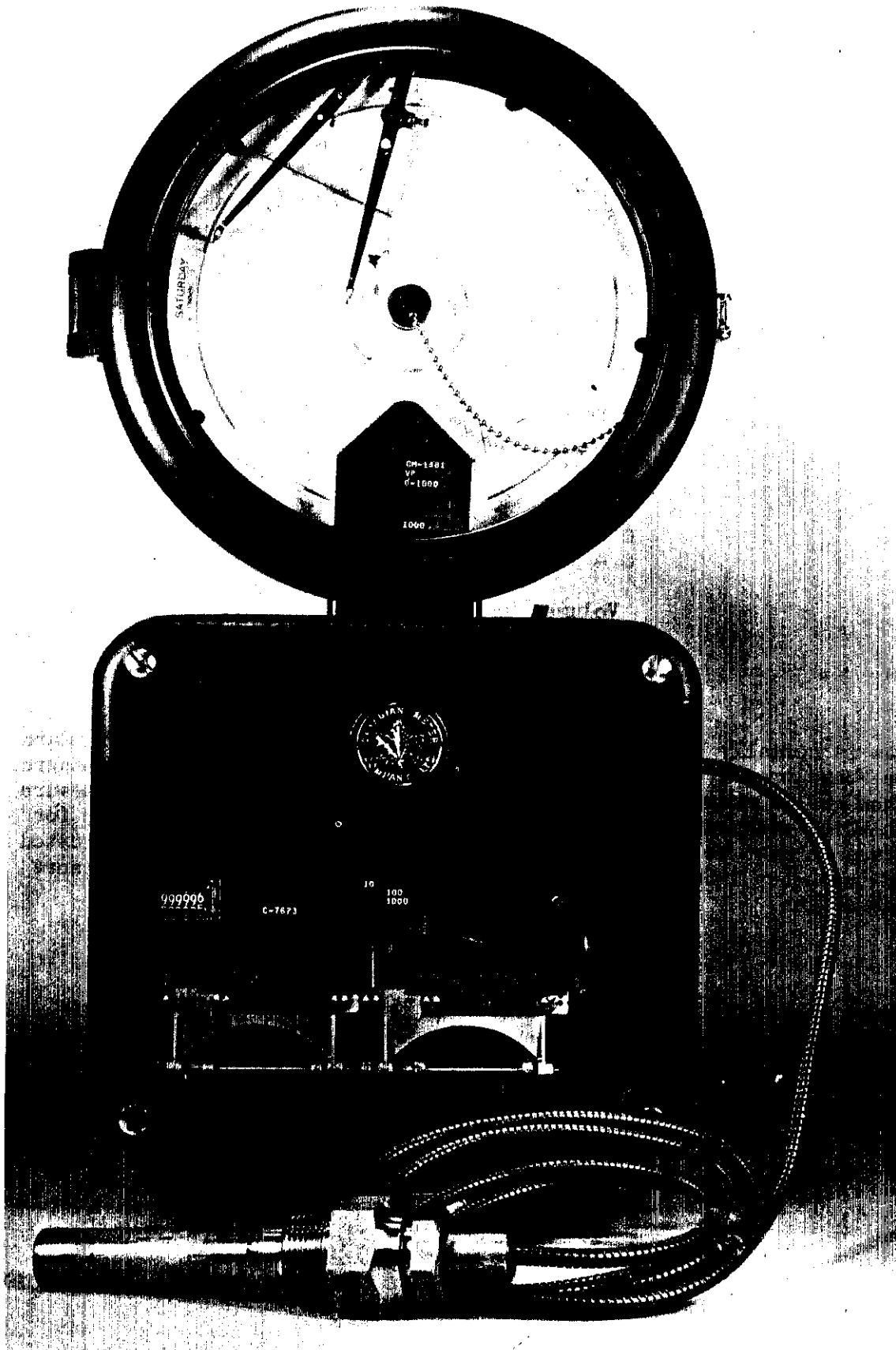
Gas is normally bought or sold in terms of its volume at some standard or "base pressure" which is usually approximately atmospheric pressure. When gas is measured above or below atmospheric pressure, the pressure at which each cubic foot is measured must be known and the factor for pressure must be determined in order to convert the quantity indicated by the meter into the quantity at the "base pressure". This pressure factor is:

$$\frac{\text{Line Pressure} + \text{Atmospheric Pressure}}{\text{Base Pressure}}$$

(Note that the term "base pressure" in this formula is the total or absolute pressure and includes the atmospheric pressure)

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Description (continued)


Where the line pressure varies appreciably, it is necessary to relate the fluctuations in pressure to the amounts of gas flowing. The Volume-Pressure Gauge is a device which records the volume and pressure variations with relation to time so that the pressure factor can be accurately determined for each increment of volume.


The device may be furnished with the conventional index for use directly on a positive displacement diaphragm type meter manufactured by Canadian or American Meter Company, or on rotary type meters distributed by the Canadian Meter Company. It may also be attached to an approved Base Pressure Index or Base Volume Index in order to provide a graphic record of the volume and pressure fluctuations which the Base Pressure Index or the Base Volume Index is integrating and registering on a counter. The volume record in units of displaced volume (1,000, 2,000 or 10,000) is recorded on the margin of an 8-inch diameter chart. The pressure is recorded in the normal way by means of a conventional pressure element. The volume record is obtained through gearing from the positive displacement meter index or from the Base Pressure Index or Base Volume Index.

Any suitable, approved chart drive providing chart rotation of 24 hours or 7 days per revolution may be used with this Volume and Pressure Gauge.

The illustration on the back of this Circular shows a Volume and Pressure Gauge attached to a Base Volume Index.

Approval granted to: Canadian Meter Company Limited, Milton, Ontario.


W. J. S. Fraser,
Chief, Standards Laboratory,
Standards Branch.


K. Cryer,
Chief, Electricity & Gas Division,
Standards Branch.

Ref: A - 319C