Department of consumer and corporate affairs / Ministère de la consommation et des corporations

STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL G-37-1

OTTAWA August 19, 1969

ROCKWELL, TYPE RC 175
STANDARD AND TEMPERATURE COMPENSATED
POSITIVE DISPLACEMENT GAS METERS

Apparatus

Badged capacity	140 cu. ft./hr. (air)
Differential Pressure at badged capacity	0.5" w.g.
Capacity per revolution	0.0625 cu. ft.
Maximum working pressure	5 p.s.i.g.
Diaphragm designation	E-65
Compensating Tangent Activity (T.C. Meter)	0.00162"/°F
Base Temperature (T.C. Meter)	60°F
Tangent to test dial rev. ratio	32:1 for clock type register, or 16:1 for counter type register
Meter connections (male)	1"

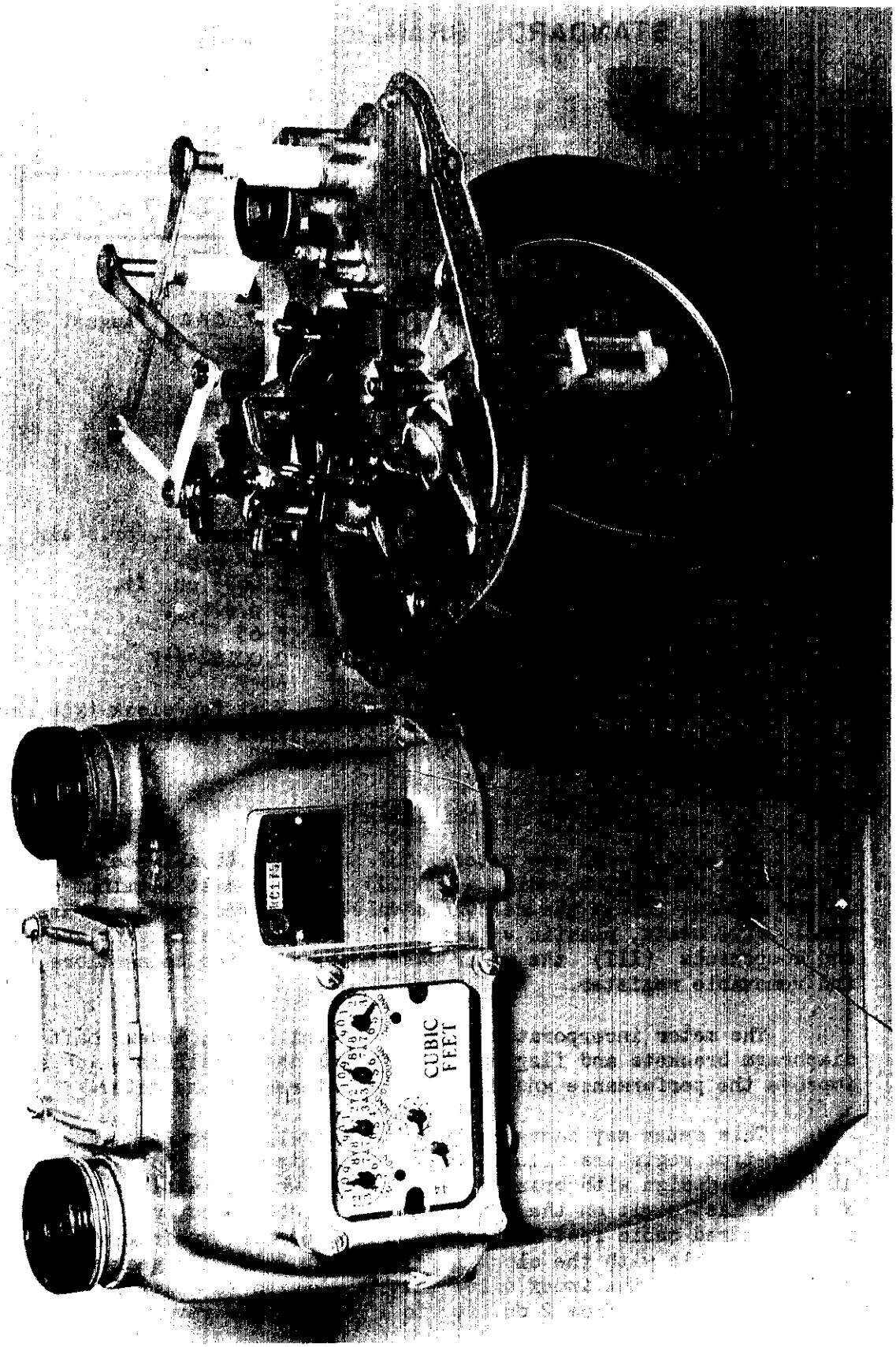
Description

The type RC-175 gas meter is of the conventional design. It consists of three major assemblies, which are: (I) the die-cast aluminum case, partitioned in the middle: (II) the removable valve table and diaphragm assembly with white metal valve seats, plastic valves, double adjustable tangent and associated linkages and components (III) the meter case cover with top connections, hand hole plate and removable register.

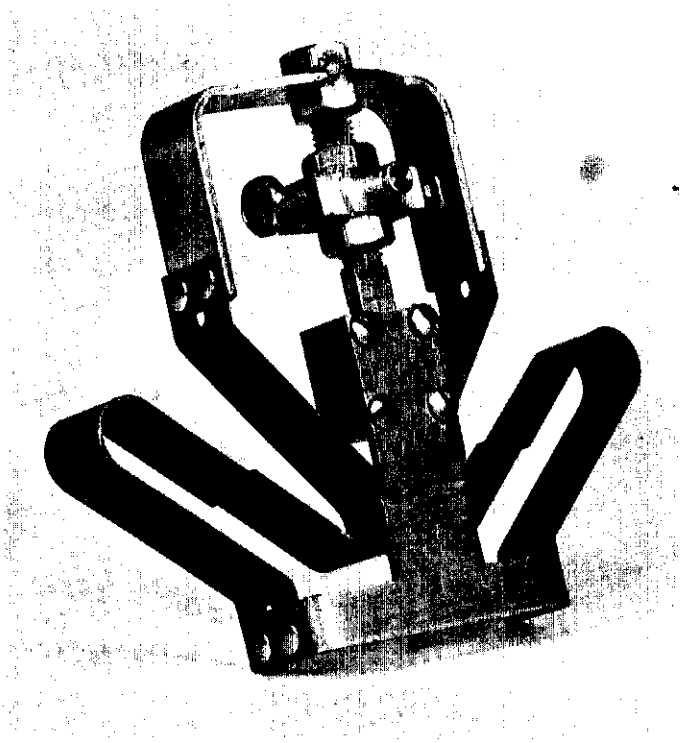
The meter incorporates plastic tangent links, index shaft worm wheel, diaphragm brackets and flag rod glands with their collars which are claimed to improve the performance and durability features of the meter.

This meter may carry either the clock-type register, or one of the two counter-type registers illustrated in this circular. Both counter registers are similar in design with brass gear-train and white plastic cyclometer wheels. When the last digit on the counter register #60 is covered the volume registration is in hundred cubic feet increments. The counter type registers are not directly interchangeable with the clock type register #44. The gear ratio between the stuffing box and the index drive must be changed to allow for the change of the test dial capacity from 2 cu. ft. to 1 cu. ft. per revolution.

ROCKWELL, TYPE 175 STANDARD AND TEMPERATURE COMPENSATED POSITIVE DISPLACEMENT GAS METER



ROCKWELL, TYPE 175 STANDARD AND TEMPERATURE COMPENSATED POSITIVE DISPLACEMENT GAS METER



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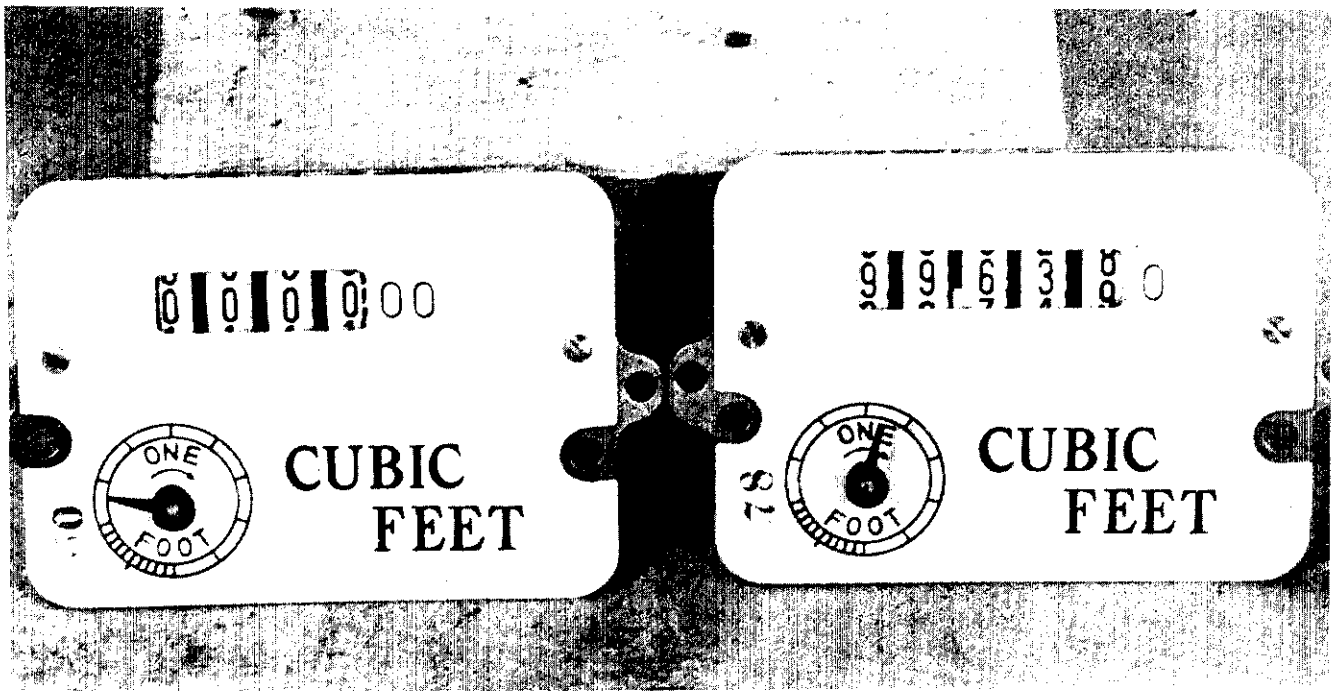

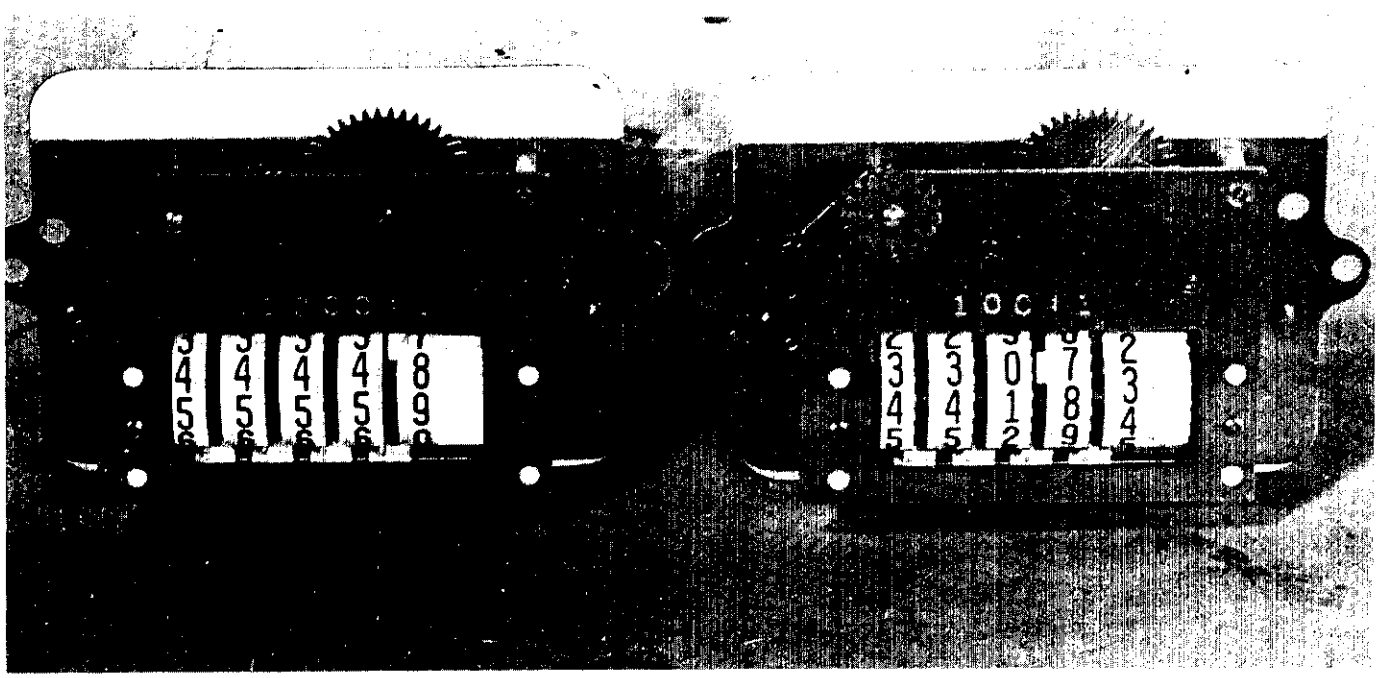

The diaphragms of the meter are stamped with Rockwell identification code, e.g. E-650668. The letter E and first 2 digits identify B.F. Goodrich Co. synthetic material, 0.018 in. thick, while the other 4 digits give the month and year of production. Other numbers may also appear in addition to the code number to indicate the production batches of the fabric.

In temperature compensated meters the conventional double adjustable tangent is replaced by a bimetallic, temperature compensating tangent and an inscription is added on the register face plate, stating: "Temp. Comp. 60°F Base, Cubic Feet".

During operation of the temperature compensated meter the tangent length changes with the temperature change of the flowing gas, thus automatically adjusting the stroke of the diaphragms. The rate of change of the tangent length with temperature is suitably chosen so that irrespective of the temperature of the flowing gas, meter registration indicates the equivalent volume passed at 60°F.

Type RC-175 meter in general design is similar to Type 210 previously approved under Circular S-GA.262 dated June 27, 1963.

This approval supersedes Circular G-37, dated December 30, 1968.

Approval granted to:

Rockwell Manufacturing Company of Canada Ltd.,
Guelph,
Ontario.

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Ref: SL-100-594 I