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

STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

G-76

OTTAWA February 26, 1971

SPRAGUE METER DIVISION, TYPE 175RM
STANDARD AND TEMPERATURE COMPENSATED
COMBINATION POSITIVE DISPLACEMENT GAS METERS AND PRESSURE REGULATORS

Apparatus

Badged capacity, cu. ft./hr. (air)	175
Differential pressure at badged capacity	0.5" w.g.
Capacity per revolution, cu. ft.	0.111
Maximum working pressure, psig	5
Diaphragm designation	G-4
Temperature compensator activity (T.C. meters)	0.00315"/°F
Base temperature (T.C. meters)	60°F
Tangent to 2 cu. ft. test dial rev. ratio	18:1
Meter connection for high pressure inlet	½" male
Meter connection outlet (delivery pressure)	1" male
Proving inlet connection, special	1" female

Pressure Regulator Specifications

Inlet Pressure Range psig	Inlet Orifice Dia. inches	Delivery Pressure Range inches, w. c.
15 to 125	1/8	5-9
5 to 60	3/16	5-9
3 to 28	¼	5-9
2 to 13	5/16	5-9

Approved adjustment springs for the regulator are colour-coded brown, dark green or light green.

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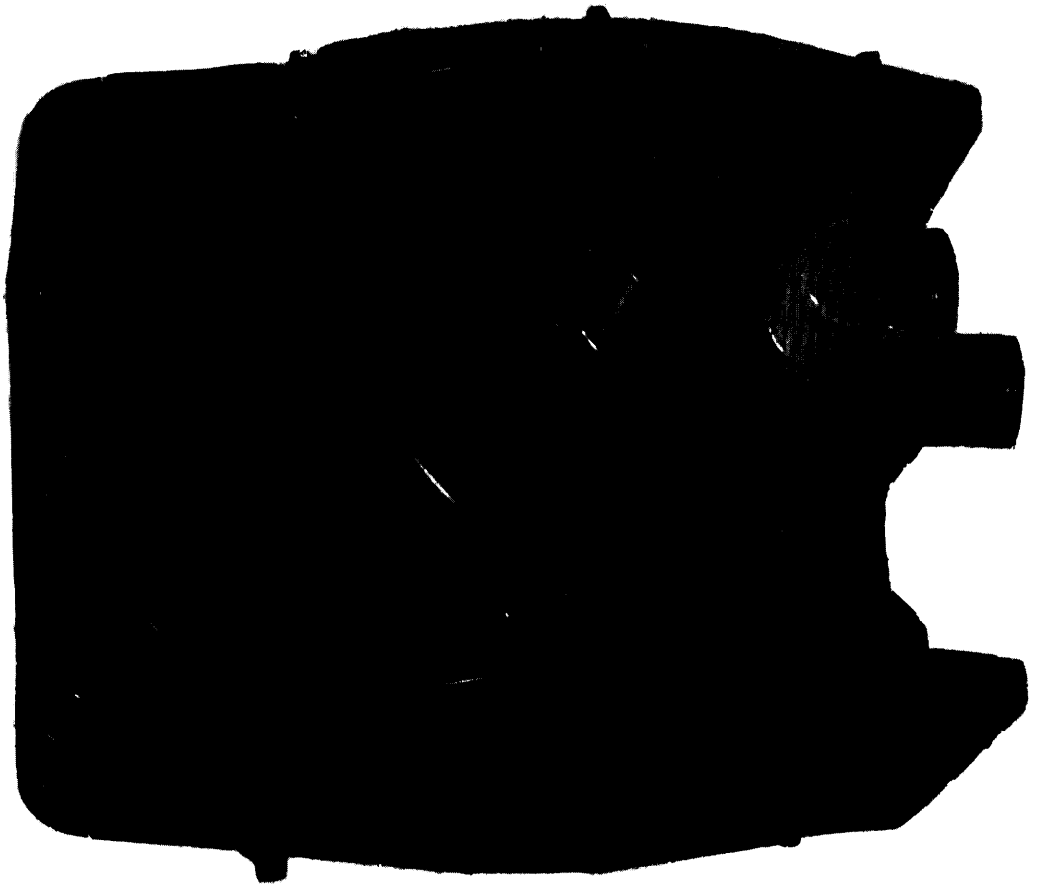

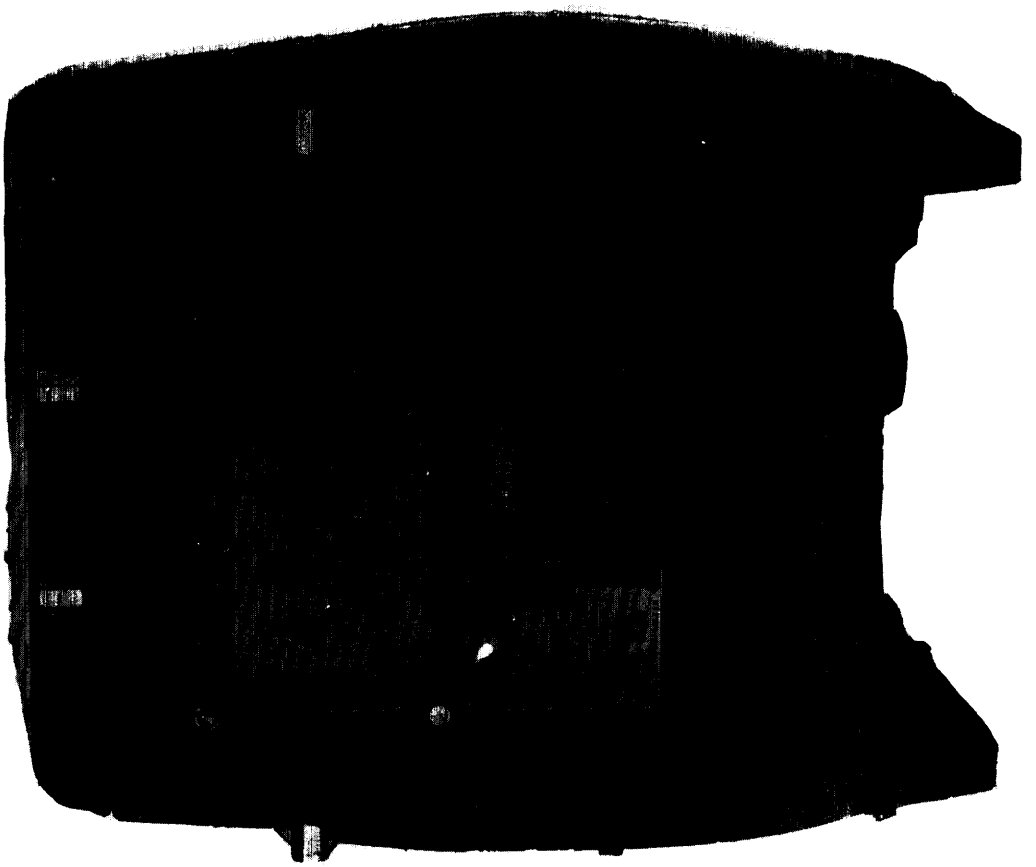

Description

The combination meter approved herein is essentially the same as the Type 240 approved under Circular G-46, with the following exceptions:

1) A regulator is incorporated into the back of the meter's body.

2) There is a separate inlet for proving the meter which by-passes the regulator. This eliminates the necessity of removing the regulator components when proving the meter.

3) A high pressure inlet is located at the bottom of the meter.

4) The adjustment for changing the delivery pressure to the meter is not capped, however, the protruding stem is drilled for sealing.

5) Meters are supplied with special mounting brackets for installation.

The meter connects directly to the line, which must carry gas at pressures given in the above specifications for various inlet orifice sizes. The delivery pressure is set by the tension of the adjusting spring and is a function of the inlet pressure and the size of the orifice at the inlet to the regulator.

The regulator is designed to provide over-pressure protection by incorporating a mechanical relief valve which begins to open at approximately 7 inches water gauge above the spring set pressure. This relief valve prevents the pressure in the houseline from exceeding 2 psig. A controlled breather valve serves to vent the overpressure gas to atmosphere in the event of regulator failure.

These combination meters may be tested in the field using bell prover as a standard of comparison by removing the plug in back of the meter's body and inserting a special adapter available from the manufacturer.

The manufacturer provides a special bulletin which describes and illustrates the methods of connecting this meter to manual and automatic bell provers.

It will be the responsibility of the utility submitting meters for verification to supply the field inspection service with appropriate adapters for proving these meters with bell provers.

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Each meter shall have a nameplate which includes the name of the manufacturer, meter's type designation, the capacity in cubic feet per revolution and cubic feet per hour air at ½" w.g. differential, meter's working pressure in psi and the serial number of the meter. Temperature compensated meters shall have an inscription "Temp. Comp. 60°F Base".

Each meter shall be sealed according to contained photograph.

It will be the responsibility of the utility to verify that the regulator is equipped with the correct adjusting spring and suitable orifice size for the applicable pressure range.

With regard to the adjustment for pressure and sealing of the regulator spring the utility will treat this regulator in the same manner as separately mounted regulators in the line preceeding conventional domestic gas meters.

These combination meters are approved for use <u>in outdoor locations only.</u>

Approval granted to:

Sprague Meter Division of
Textron Canada Ltd.,
Hamilton, Ontario.

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Ref: SL-100-597M

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