



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

STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

G - 73

OTTAWA January 25, 1971

ROCKWELL IMPULSE CONTACTOR INDEX

Apparatus

Index Box Assembly:

- (1) Clock-type Register
Seven dial capacity, registering either 10 to 10,000,000 or 100 to 100,000,000 cu. ft. per rev.
- (11) Impulse Contactor
Republic No.4602-275, magnetically actuated, mercury wetted reed switch.
Spring position 'A' - impulse every 1,000 cu. ft.
Spring position 'B' - impulse every 10,000 cu. ft.

Remote, Electrical Counters

- (1) ITT General Controls, Cat. No.CE600BK602
- (11) Veeder-Root, Form No.C.B.120506
Both six-digit capacity, 115 volts, 60Hz

Permissible loop impedance - 130 ohm $\pm 10\%$
Power supply - 115 volts, 60Hz

Description

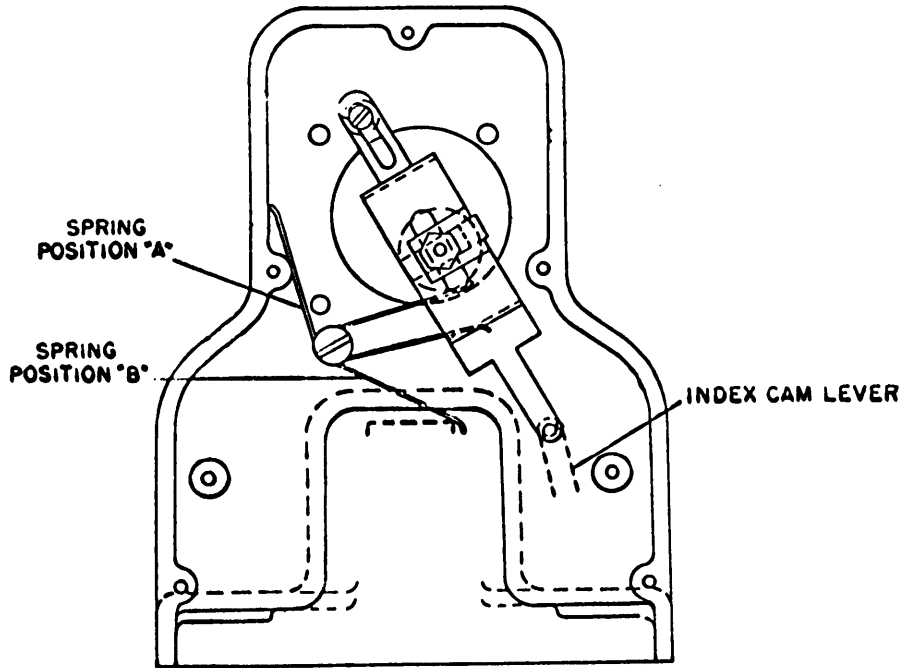
This industrial meter registering system consists of two basic elements:

- (a) The index box assembly which contains the register and the magnetic impulse switch, and
- (b) The remote, electrical counter, equipped with a reset key and a locking device. *Provision*

ROCKWELL IMPULSE CONTACTOR INDEX



INDUSTRIAL METERS - IMPULSE CONTACTOR INDEX BOX ASSEMBLY



FRONT VIEW WITH COVER PLATE
AND INDEX REMOVED

The two components are interconnected by a switable, two-wire line and connected to 115 volt supply.

The register in the index box assembly is equipped with two cams located on the shafts of 1,000 and 10,000 cu. ft. per revolution dials. Through an index cam lever, a sliding motion is imparted to a permanent magnet, suitably located on a movable bracket. The bracket is spring loaded to maintain continuous contact with the cam. Two spring positions permit changing the cam lever from 1,000 to 10,000 cu. ft. capacity dial.

In operation the register is driven by the meter and the cam, mounted on the index gear shaft moves the magnet into the position over the reed switch causing it to operate. As the cam rotates further, the magnet follows and the switch completes an open-close cycle sending a signal to the remote counter. The latter records the impulse in the form of a digit advance which represents either 1,000 or 10,000 cubic feet volume passed through the meter.

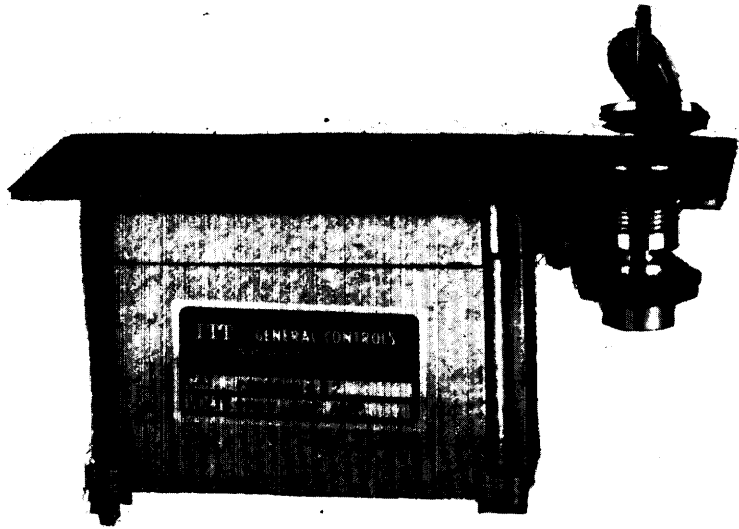
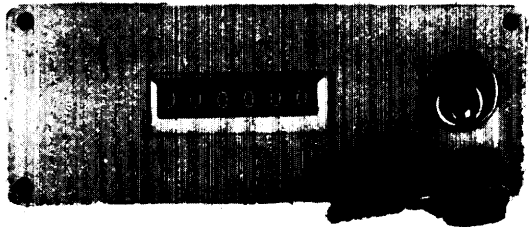
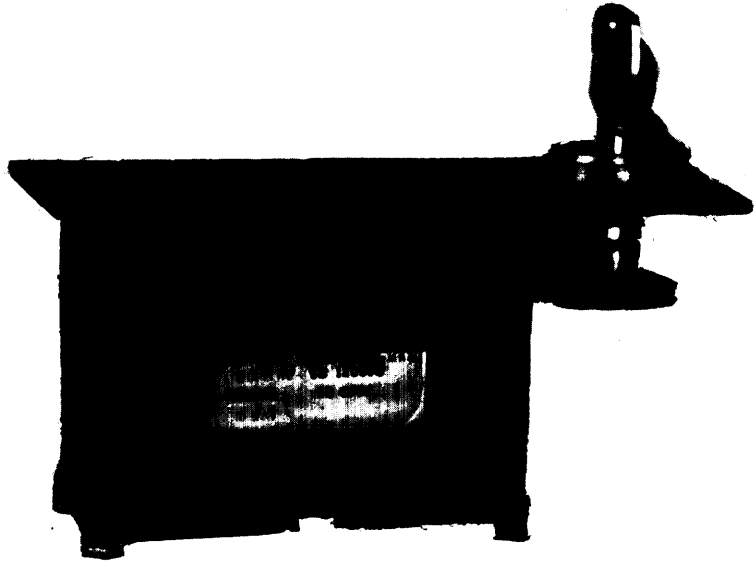
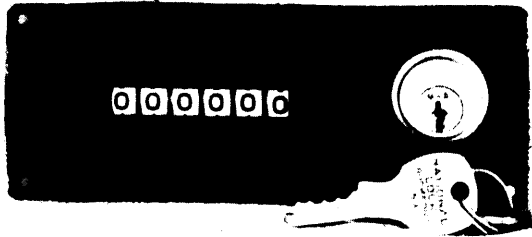
The manufacturer indicates that the Impulse Contactor Index is intended for large capacity industrial meters. It must be emphasized however, that larger capacity meters usually operate on pressures greater than the domestic distribution pressure and would therefore require appropriate volume correcting devices. The Index described herein is not approved for use on meters which operate on pressures greater than about seven ounces per square inch unless on approved auxiliary attachment is fitted to the meter.

When used for billing (on low pressures only) the following requirements shall apply:

- (1) The index box shall be properly sealed to prevent access to the register or tampering with the impulse contactor reed switch, located at the back.
- (11) The Index shall be sealed to the meter.
- (111) The front cover plate of the index box shall be clearly and permanently marked to indicate the capacity of each pulse, i.e. 1,000 or 10,000 cu. ft. per pulse.
- (1V) The remote counter shall have the units of measurement, i.e. "cubic feet" marked above or below the numerals and an appropriate number of zeros shall follow the lowest reading numeral.

Subject to the conditions listed above the Impulse Contactor Index may be used on any suitable approved gas meter whose capacity per revolution of the output shaft is either 10 or 100 cubic feet.

ROCKWELL IMPULSE CONTACTOR INDEX

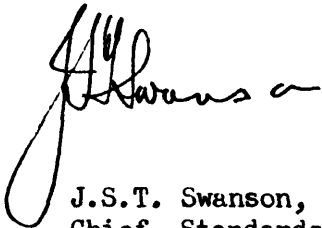


During verification of a gas meter carrying the Impulse Contactor Index the correct transfer of meter registration to the remote counter shall be established.

It shall be the responsibility of the utility to ensure that the meter registration is properly transferred to the remote counter at all times and to prevent unauthorized persons access to the locking key of the remote counter.

Approval granted to:

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



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