

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



STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

G - 72

OTTAWA January 25, 1971

ROCKWELL, CLOCK AND COUNTER TYPE REGISTERS

This approval consolidates previously approved metal, clock-type and metal-plastic counter-type registers that are now commonly supplied with approved gas meters, manufactured by the Rockwell Manufacturing Company of Canada Ltd.

It also extends coverage to the new, all-plastic registers recently introduced by the manufacturer.

Description

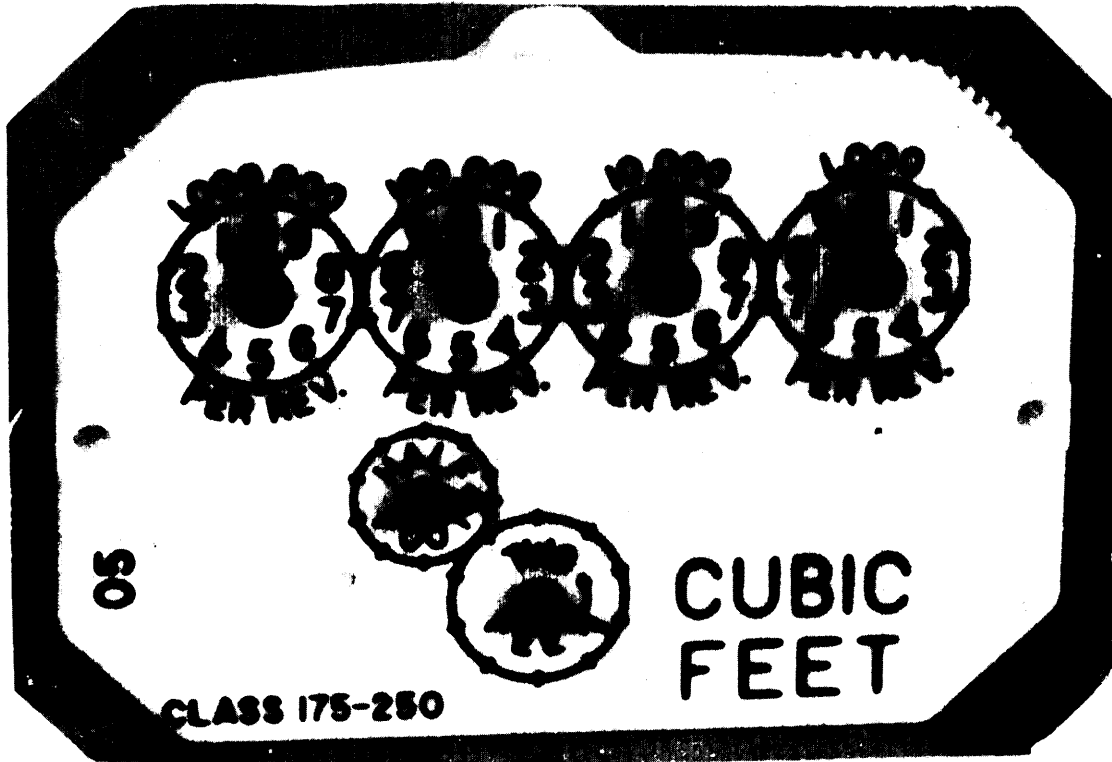
Approval Circulars for various gas meters include illustrations which show registers attached to the meters. Table I, attached to this circular, lists various registers and their intended use, and this information may serve as a reference in identifying approved registers.

Some domestic size gas meters approved in the past may show registers which have clockwise rotation of the test hands and bear manufacturer's designation Nos. 20, 44 or 54. These registers are to be phased out and new meters submitted for verification with these registers are not to be accepted after December 31, 1971.

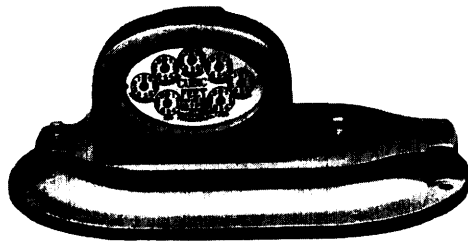
Registers intended for temperature compensated meters, and designated by Nos. 54T.C. and 55T.C. are no longer required. Except for the temperature compensation marking, these registers are identical to those designated by Nos. 44 and 45.

Registers are not in general directly interchangeable between various sizes of domestic meters and care must be taken to ensure that proper gear ratio is selected between the stuffing box gear and the register drive gear. Table II lists the correct number of teeth on these gears for various types of meters and registers.

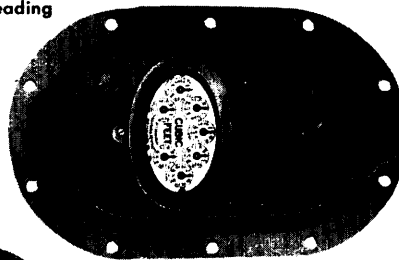
ROCKWELL, CLOCK AND COUNTER TYPE REGISTERS



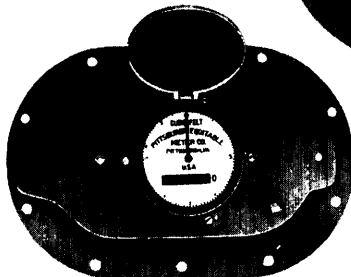
Plastic Registers for Domestic Meters



Vertical, Circular Reading



Horizontal, Circular Reading



Horizontal, Direct Reading

Registers for Larger Capacity Meters

TABLE I.

ROCKWELL REGISTERS – INFORMATION DATA

TYPE OF REGISTER	READING DIAL POSITION	SHAPE OF DIAL FACE	MATERIAL	No. OF DIALS	TEST DIALS CU. FT.	MAXIMUM CAPACITY CU. FT.	COMPANY REFERENCE No.	SUITABLE FOR USE WITH FOLLOWING METERS
CLOCK	VERTICAL	RECTANGUL.	PLASTIC	4	2, 1/2	1,000,000	05	LPG, RC 175, RC 225, 250, 310, 415
"	"	"	METAL	4	2	"	20 *	"
"	"	"	"	4	2, 1/2	"	54 **	"
"	"	"	"	4	"	"	55 **	"
"	"	"	"	4	"	"	44 *	"
"	"	"	"	4	"	"	45	"
COUNTER	"	"	"	4 DIG.	1	"	60	"
"	"	"	"	5 DIG.	1	"	78	"
CLOCK	"	OVAL	"	5	5	10,000,000	011-14-537-00	* 750, 1600
"	"	"	"	6	10	"	005-68-537-00	* 2 1/2, 3, 4, 4 1/2, 3000, 5000
"	HORIZONT.	"	"	6	"	"	002-65-537-00	"
COUNTER	"	CIRCULAR	"	6 DIG.	"	"	022-67-575-00	* 750, 1600, 2 1/2, 3, 4, 4 1/2, R3, R5
"	"	"	"	6 DIG.	100	100,000,000	055-69-575-00	* 5, 10,000, R8, R11, 6" TURBO
"	"	"	"	6 DIG.	1,000	1,000,000,000	066-26-575-00	* 8 and 10" TURBO
CLOCK	VERTICAL	OVAL	"	6	100	100,000,000	055-69-537-00	* 5, 10,000 and 6" TURBO
"	"	"	"	6	1,000	1,000,000,000	006-26-537-00	* 8 and 10" TURBO
"	"	"	"	7	10	10,000,000	005-68-537-00	* 2 1/2, 3, 4, 4 1/2, 750, 1600, 3000, 5000, R3, R5
"	"	"	"	6	10, 100	100,000,000	005-68-537-03	"
"	"	"	"	5	10	10,000,000	005-68-537-15	"
"	"	"	"	7	100	100,000,000	005-69-537-00	* 5, * 10,000, 6" TURBO, R8, R11
"	"	"	"	6	"	"	005-69-537-08	"

NOTE : ONLY DOMESTIC SIZE GAS METERS ARE MARKED (IN FRONT) WITH REFERENCE NUMBER.

* These registers are not to be used after December 31, 1971.

** These registers were used on T.C. meters and are no longer required.

TABLE II.
ROCKWELL REGISTERS FOR DOMESTIC GAS METERS

TYPE OF METERS →

				LPG, RC 175		RC 225, 250, 310		415	
REGISTER DESIGNATION	Nos. OF DIALS OR DIGITS	TEST DIAL ROTATION	TEST DIAL CAPACITY IN CU.FT.	INDEX GEAR	STUFF. BOX GEAR	INDEX GEAR	STUFF. BOX GEAR	INDEX GEAR	STUFF. BOX GEAR
<u>CLOCK-TYPE</u> 44	4	C. W.	2 and 1/2	24	12	11	11	18	18
45	4	C. C. W.	2 and 1/2	24	12	11	11	18	18
54 T.C.	4	C. W.	2 and 1/2	24	12	11	11	18	18
55 T.C.	4	C. C. W.	2 and 1/2	24	12	11	11	18	18
05	4	C. C. W.	2 and 1/2	24	12	11	11	18	18
20	4	C. W.	2	24	12	11	11	18	18
<u>COUNTER-TYPE</u> 60	4 DIGITS	C. W.	1	18	18	12	24	12	24
78	5 DIGITS	C. W.	1	18	18	12	24	12	24

Plastic registers, illustrated herein, are made completely of moulded plastic material with front and back plates made of DuPont Acrylic No. 140-WT-55 Lucite and pinions and gears from DuPont Delrin material.

The counter-type registers Nos. 60 and 78 are described and illustrated in the approval circular No. G-37-1 which covers Type RC-175 gas meter. Present approval permits the use of these registers on other domestic meters, as listed in Table I.

Larger capacity meters may be equipped with either vertically or horizontally positioned registers, as shown on the illustrations.

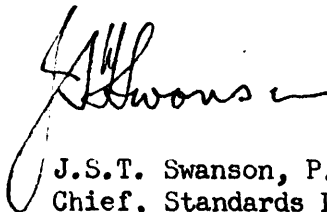
It must be emphasized however, that larger capacity meters are usually operating on pressures greater than about seven ounces per square inch and would therefore require appropriate volume correcting devices. Standard registers listed herein are not presently approved for use on meters when operating pressure exceeds about seven ounces per square inch unless an approved auxiliary device is fitted to the meter.

Each register shall have the units of measurement, CUBIC FEET, clearly marked on its dial face. On clock-type registers, the magnitude of a complete revolution of each dial shall be marked above or below the dial. On counter-type registers, no figures shall be marked above or below the dials, but an appropriate number of zeros shall follow the lowest reading dial.

This approval does not cover registers used in volume correcting devices. Pertinent approval circulars describe approved registers for such instruments.

Approval granted to:

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



J.S.T. Swanson, P. Eng.,
Chief, Standards Laboratory,
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Chief, Electricity and Gas Division,
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Ref: SL-100-129 and 129B

