



Consumer and  
Corporate Affairs

Consommation et  
corporations

Standards

Normes

**NOTICE OF APPROVAL  
AVIS D'APPROBATION**

G-125

Ottawa, January 9, 1979

CANADIAN METER COMPANY TYPE AL 225 (IMPERIAL UNITS) AND TYPE  
AL M 225 (METRIC UNITS) ALUMINUM CASE, STANDARD AND TEMPERATURE  
COMPENSATED POSITIVE DISPLACEMENT GAS METERS

Apparatus

	<u>IMPERIAL</u>	<u>METRIC</u>
Model designation:	AL 225	AL M 225
Rated air capacity at 0.5 in W.C. or 0.125 kPa:	180 cu ft/h	5.1 m <sup>3</sup> /h
Capacity per tangent revolution:	0.111 cu ft	3.13 dm <sup>3</sup>
Tangent to test dial rev. ratio	18:1 (2 cu ft dial) 9:1 (1 cu ft dial)	16:1 (0.05m <sup>3</sup> dial)
Max. working pressure:	5 psig	35 kPa (gauge)
Compensating tangent activity (T.C. meter):	0.00125"/°F	0.05715 mm/°C
Base temperature (Temp. comp. meters):	60°F	15°C
Diaphragm material:	Duramic D7	Duramic D7
Meter connections:	1" male	1" male

Approved Indexes:

(A) AL 225 meters

<u>Index Type</u>		<u>Test Dials, cu ft/rev</u>	<u>Approved in Notice of Approval</u>
Clock	28538G100	1 & ½	G-74
Clock	04972G072	2 & ½	G-74-2
Counter	54887G001 & 54887G002 (T.C.)	1 & ½	G-74-1
Counter	54885G001 & 54885G002 (T.C.)	2 & ½	G-74-1

(B) AL M 225 meters:

<u>Index Type</u>	<u>Part No.</u>	<u>Test Dials,</u> <u>m<sup>3</sup>/rev.</u>	<u>No. of Visible</u> <u>Digits</u>	<u>Total</u> <u>Capacity m<sup>3</sup></u>
Counter	52142G005	0.05 & 0.01	5	99 999

Registers will have the appropriate units of measurement, CUBIC FEET or CUBIC METRES, clearly marked on their faceplates. In addition, each register will be marked with its part number on the backplate.

Description

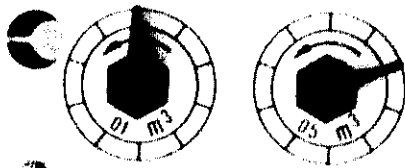
The AL 225 and AL M 225 type positive displacement gas meters have a conventional Glover-type mechanism enclosed in a die cast aluminum housing. The mechanism includes a double adjustable tangent, D-type slide valves and a single throw crank.

In the temperature compensated version, the conventional tangent is replaced by a temperature compensating tangent that changes the stroke length of the diaphragm with changes in flowing gas temperature, so that the registered volume is expressed at a base temp. of either 60°F or 15°C.

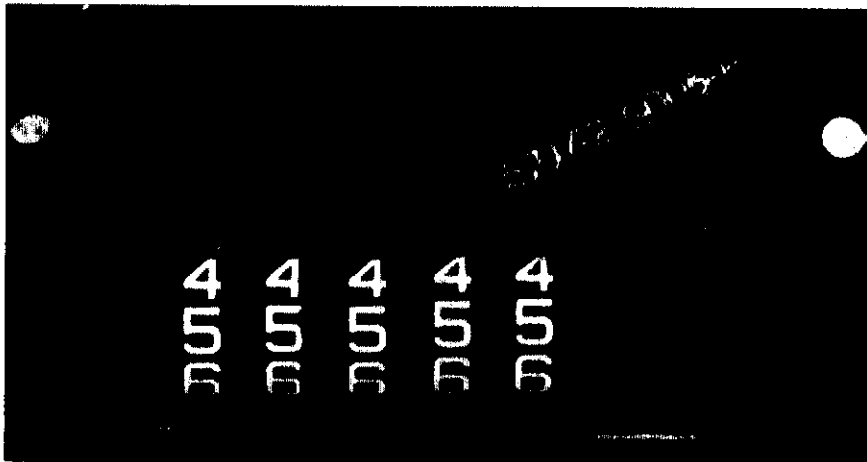
The following is a summary of the major components and their respective materials used in the current series of meters:

1. The meter body, side covers and top are die cast aluminum. Top is provided with plated steel threaded-in connectors.
2. The flag arm sleeve, crank arm bushing, lower crank frame bushing and crank frame axle bushing are porous bronze.
3. Valves and valve seats are phenolic resin and the valve guide posts are plastic.
4. The axle and wheel, short flag arm, lower flag rod bearing, tangent bushing and flag rod box are acetal.
5. Crank arms, crank frame and tangent wrist are made from a zinc alloy.
6. The flag rod brackets, tangent pin, tangent arm, and crank are brass. The crank worm is either brass or acetal.
7. Flag rods are made from plated steel wire.
8. The diaphragm disc grommet, axle box seal and flag rod seal are nitrile rubber.
9. All gaskets are of cork-rubber material.

"METRIC REGISTER PART NO. 52142G005"



**CUBIC  
METRES**





Each meter shall have a nameplate containing the following information:

- (1) Manufacturer's name
- (2) Model designation
- (3) Manufacturer's serial number
- (4) Rated capacity, cu ft/h at 0.5 in w.c. or  
m<sup>3</sup>/h at 0.125 kPa, differential.
- (5) Maximum working pressure, 5 psi or 35 kPa.
- (6) Temperature compensated type meters shall have a red background badge with the following applicable additional information: "Temp. Comp. cu ft at 60°F" or "Temp. Comp. m<sup>3</sup> at 15°C."

Each meter is to be sealed by passing a sealing wire, or an approved equivalent, through one screw on the index, on the top, and on the hand-hole cover, in succession.

Approval granted to:

Canadian Meter Company Limited  
Milton (Ontario)  
Edmonton (Alberta)



D. L. Smith, P.Eng.,  
Chief,  
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