



NOTICE OF APPROVAL  
AVIS D'APPROBATION

G-113

Ottawa, August 21, 1975

NATIONAL METER PARTS, TYPE 415N STANDARD  
AND TEMPERATURE COMPENSATED POSITIVE DISPLACEMENT GAS METERS

Apparatus

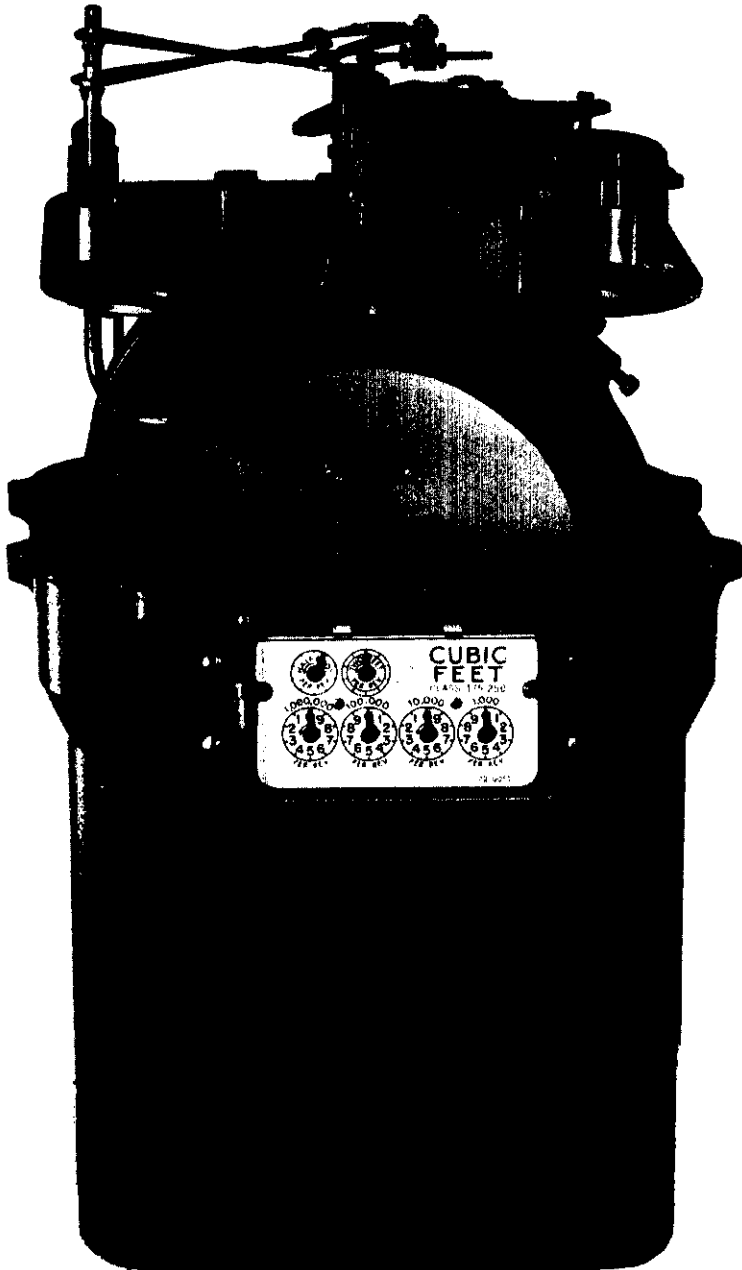
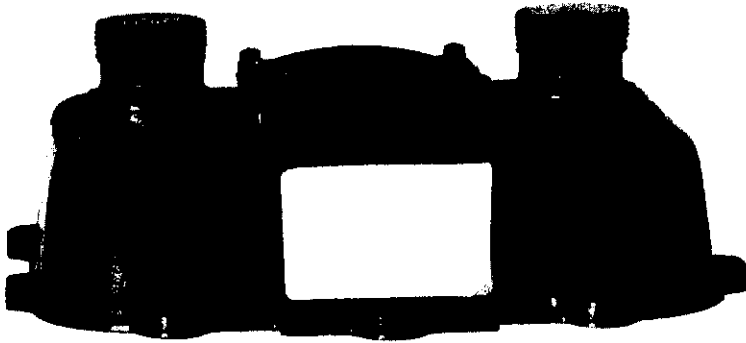
Badged capacity	280 cu. ft./hr. (air)
Differential Pressure at badged capacity	0.5" w.c.
Capacity per tangent revolution	0.143 cu. ft.
Connections, male	1 1/4" N.P.T.
Base temperature (T.C. meter)	60°F
Compensating tangent activity	0.001625"/°F
Maximum working pressure	5 psig

Description

The type 415N gas meter is of conventional design. It consists of three major assemblies:

- (i) The main body, die-cast aluminum case, partitioned in the middle carries delrin flag rod bearings in the bottom.
- (ii) The removable valve table and diaphragm assembly carries white metal valve seats, bakelite valves, double adjustable tangent and associated linkages and components; one piece Delrin with Buna rubber seals each flag rod.
- (iii) The case cover, with meter connections 6.0 inches center to center has a handhole plate and a removable register with clear plastic cover.

Synthetic rubber diaphragm material is used in these meters.



19	TYPE 415N	7
NATIONAL METER		
BY		
PARKINSON COWAN		
.143 CU. FT. PER REV.		
280 CU. FT. AIR PER HR.		
PC#		

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.143 CU. FT. PER REV.		
280 CU. FT. PER HR. AIR		
PC#		
TEMP. COMP. 60°F BASE		

NAMEPLATE INFORMATION

In temperature compensated meters the conventional double adjustable tangent is replaced by a bimetallic, temperature compensating device and an inscription in red letters on a silver background is added on the nameplate, stating: "Temp. Comp. 60°F Base".

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

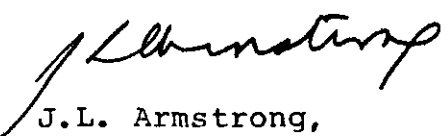
Type 415N meters are similar to the previously approved Superior type 415 except for the rated capacity and the top connections.

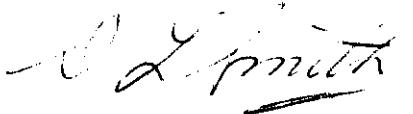
Each meter shall carry a nameplate, or plates, including the following information:

- 1) Manufacturer's name.
- 2) Type designation.
- 3) Rated capacity in cu. ft. per hour (air).
- 4) Capacity per revolution in cu. ft.
- 5) Serial number of the meter.
- 6) Inscription in red: "Temp. Comp. 60°F Base" on temperature compensated meters.

Approval granted to:

Parkinson Cowan (Canada) Ltd.,  
Chatham, Ontario.

  
J.L. Armstrong,  
Chief, Standards Laboratory,

  
D.L. Smith,  
Chief, Electricity & Gas Division,  
Metrology and Laboratory Services.

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