

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



STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL-AVIS D'APPROBATION

No.

G-26-5

DATE

January 9, 1973.

DRESSER MEASUREMENT DIVISION "ROOTSMETER", MAGNETICALLY COUPLED ROTARY TYPE POSITIVE DISPLACEMENT GAS METER STANDARD, TEMPERATURE COMPENSATED AND INSTRUMENT DRIVE VERSIONS

This approval is supplementary to that of Circular G-26-3 and G-57-1.

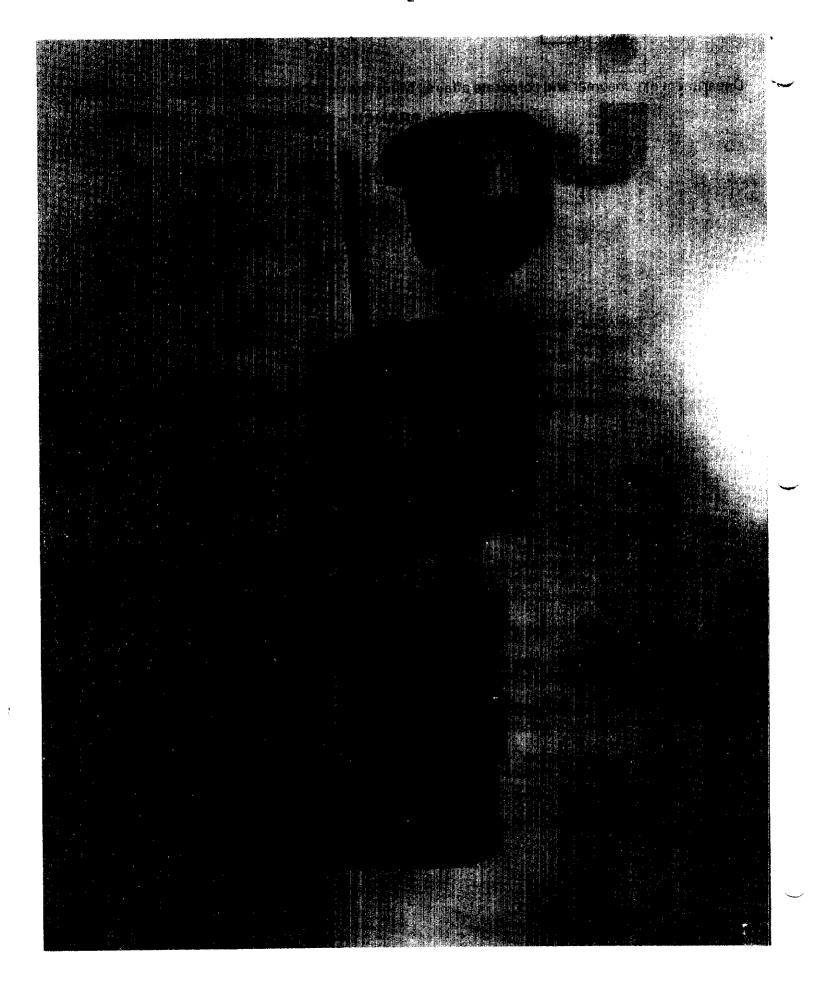
Apparatus

Model Pressure, static, psi. Maximum flowrate, cfh. Maximum R.P.M. Gear reduction ratio Displacement/revolution Instrument shaft out-	2 M	3 M	5 M	7 M	11 M
	125	125	125	125	125
	2000	3000	5000	7000	11000
	3000	2250	2250	1870	1835
	904.50/1	452.25/1	271.25/1	160.80/1	100.50/1
	.01106	.02211	.03687	.06219	.09950
Instrument shaft out- nut/revolution cu. ft.	10	10	10	10	10

Ambient temperature range: -40°F. to 140°F.

These meters are approved for low pressure only, approximately seven ounces or less per square inch, except

- (i) the instrument drive version which can be used at working pressures up to 125 PSIG
- (ii) where a meter is specifically approved for use in a Pressure Factor Installation.



Description

Meters, listed above, are a modified version of the "Rootsmeter" rotary type positive displacement gas meter, described in Circular G-26-3. They incorporate all the features of model 1.5Ml25, described in the above circular. Model 2Ml25 is actually a 1.5Ml25 meter with an extended flow range.

The new version introduces the modular design, i.e., the meter body and three types of readout modules - standard counter, temperature compensated counter and instrument drive. Any of the three readout modules can be attached to the meter body thus facilitating the manufacturing process.

The most important modifications are shown in the following listing:

- 1. Magnetically coupled drive.
- 2. Spur gear reduction positioned outside the pressure vessel.
- 3. Standard, temperature compensated and instrument drive versions interchangeability.
- 4. Identical meter bodies for each version of the same model.
- 5. Shearing device on Instrument Drive unit for instrument protection.
- 6. Permanent installation of a temperature well in the meter body.

All meters are identified by a serial number, the first two digits of which indicate the year of manufacture. The following table shows those models and versions fitted with magnetic coupled drive:

Meter model	Version *	Magnetic coupling
1.5 M 2 M 3 M 3 M 5 M 5 M 7 M 7 M 11 M	S.C./I.D./T.C. S.C./I.D./T.C. S.C./I.D. T.C. S.C./I.D. T.C. S.C./I.D. T.C. S.C./I.D.	All years All years 1973 and later All years

- * S.C. denotes Standard Counter
 - I.D. denotes Instrument Drive
 - T.C. denotes Temperature Compensated



All meters shall be effectively sealed to ensure that no access can be gained to the meters' registration or to the temperature compensating mechanism. Each meter shall have a nameplate which shall include the following information:

- Manufacturer's name or trademark.
 Model designation.
- 3. Rated capacity of the meter.
- 4. Maximum pressure rating.
- 5. Serial number of the meter.

For field test procedure and other data refer to "Technical Gas Circular No. G-71/1."

Approval granted to:

J.S.T. Swanson, P. Eng., Chief, Standards Laboratory, Standards Branch.

Dresser Measurement Division, Dresser Industrial Products Ltd.. 3140 Universal Dr., Mississauga, Ont.

W.J.S. Fraser,

Chief, Electricity and Gas Division, Standards Branch.

Ref: SL-100-855 T & U 1147-57/D2-855