



Ottawa, January 19, 1981

NOTICE OF APPROVAL – AVIS D'APPROBATION

**DRESSER INDUSTRIES CANADA, LTD., ROOTS, ROTARY
MAGNETICALLY COUPLED, EXTRUDED ALUMINUM BODY
POSITIVE DISPLACEMENT GAS METERS**

This approval is supplementary to Notices of Approval G-26-6,
G-26-7, G-26-8 and G-57-2.

Apparatus

Model	7M175	11M175	16M175
Maximum working pressure, psig*	175	175	175
Maximum flowrate, cfh.	7,000	11,000	16,000
Maximum R.P.M.	1866	1833	1800
Gear reduction ratio	160:1	100:1	675:1
Maximum register capacity, cu. ft.	10 ⁷	10 ⁷	10 ⁸
Lowest digit counter volume, cu. ft.			
(i) with mask on	100	100	100
(ii) without mask	1	1	10
Lowest graduated increment, cu. ft.	0.2	0.2	2
Instrument drive volume output per revolution			
(i) Non-temp. comp. version, cu.ft.	10	10	100
(ii) T.C. version, cu. ft. at 60°F	100	100	1000

***NOTE:** Meters not equipped with an instrument drive for auxiliary
pressure correcting devices are intended and APPROVED FOR USE
ON LOW PRESSURE ONLY of approximately seven ounces per square
inch or less.

Apparatus - Continued

Temperature Compensation Range: -20°F to +100°F
Base Temperature (Compensated Volume): 60°F
Meter Ambient Temperature Range: -40°F to +140°F

Pulse Contactor:

Models V101 V110 V201 V210

Pulse Transmitter (Solid State)

Model RA-100

This approval covers the meters in the following versions:

1. Standard, with internal direct reading counter.
2. Temperature compensated, with two direct reading counters, the uncompensated counter being covered by a mask.
3. Instrument drive, standard version, with masked counter.
4. Temperature compensated, instrument drive version with two masked counter registers.

Description

This approval extends the coverage of Roots Meters with extruded aluminum bodies to larger capacity meters. Apart from the extruded aluminum body material, increased pressure rating, and the seven digit Durant counters approved in Notice of Approval G-26-8, the design and principle of operation of the metering mechanism remains the same as for those meters approved under Notices of Approval G-26-6, G-26-7 and G-57-2. However, the one exception is the Model 16M which has changed from a planetary gear to magnetically coupled modular design, and from a foot-mounted to a line-mounted version.

Meters not equipped with an instrument drive provision may have a Roots Pulse Contactor or Transmitter attached to the register side of the meter. However, remote registration of volume provided from this pulse contactor or transmitter is not approved for the sale of gas.

The gear reduction ratio incorporated in each meter shall be marked on a plate visible when the meter is fully assembled. This inscribed ratio shall be the same as stipulated in this Notice of Approval.

The volume per revolution of the output shaft and its direction of rotation shall be permanently and clearly displayed on the instrument drive housing.