

DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH



OTTAWA August 12th 1965

NOTICE OF APPROVAL

FOR

AMERICAN MODEL "HI-P" INDICATING DEMAND METER

Apparatus

Demand period	24	hours
Spring wound clock drive data:- Wind period	31 7	days days
Output shaft period of rotation		

Description

The American "H1-P" (High Pressure) indicating demand meter consists of an indicating demand register suitably geared to an approved mechanical clock drive. The instrument is housed in a dust proof case which is attached to a Base Pressure Index.

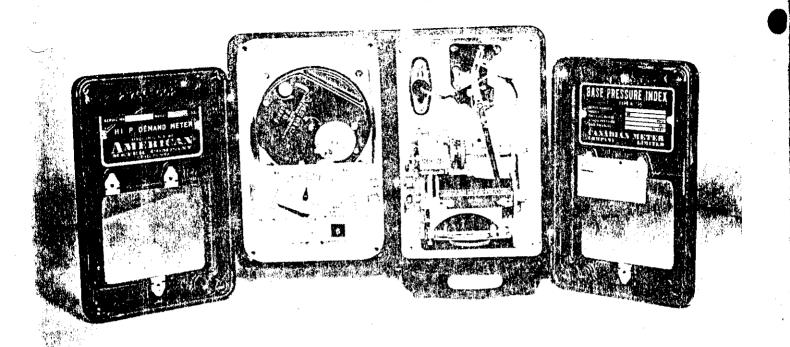
The meter operates in conjunction with a Base Pressure Index and converts a 24 hour registration of the B.P.I's corrected volume to a corresponding demand pointer indication on a scale.

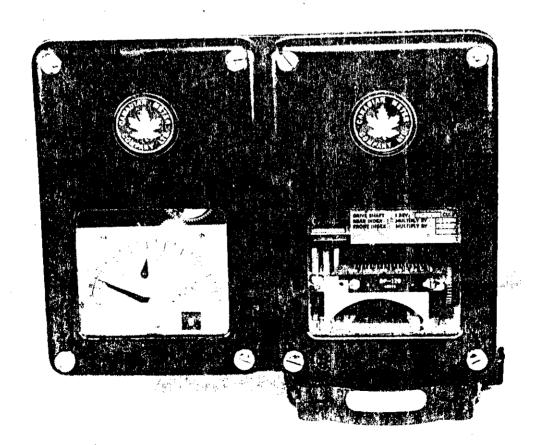
In operation, the volume registered by the corrected index of the B.P.I. is transferred through a geared shaft to a gear train assembly of the demand register, imparting an angular movement to the red driving pointer which pushes a friction-held, black demand pointer up-scale. At a preselected time, once every 24 hours, the clock drive through a suitable gear assembly operates a cam device which momentarily de-clutches the driving shaft assembly returning the spring loaded, red driving pointer to the zero position, but leaving the black demand pointer up-scale.

This operation is repeated daily and, over a billing period of several days, the demand pointer will indicate the maximum demand or maximum volume registered for a 24 hour period by the Base Pressure Index. The standard reset time for the red driving pointer is 8.00 AM; however, other reset times, with corresponding dial faces, are available from the manufacturer.

This meter may be adapted to various ratings of the Base Pressure Indexes through a proper choice of change gears and indicator assemblies. The demand scale multiplier is clearly indicated on the register face and it may vary with the selected range or both instruments.

AMERICAN MODEL "HI-P" INDICATING DEMAND METER





The demand meter shall be sealed by the utility at all times when in use for billing purposes.

This approval covers the use of the Indicating Demand Meter in conjunction with any suitable, approved Base Pressure Index, manufactured by either the Canadian Meter Company Limited, or the American Meter Company.

In field testing the demand meter, the volume registered on the corrected Index is compared with the volume indicated on the scale by the black pointer and the following procedure should be followed:-

- Remove covers from both instruments and carefully remove the micrometer gear stop from the lifter plate. This will tree the gear train movement to the demand register.
- 2. Return the red driving pointer to the zero position, prior to testing, by manually de-clutching the small, spring loaded brass gear, located underneath, at the bottom section of the demand register.
- 3. With the red pointer at zero and coinciding with the black demand pointer, note the reading on the front Index. Rotate the demand register drive gear manually in the direction of increasing index registration until the demand pointer has reached at least 70 per cent of the scale range.
- 4. Note the second reading on the index and using the required multipliers, compare the volume indicated by the demand pointer with the index registered volume. They should agree within 1.0% of full scale of the demand meter.
- 5. Carefully replace gear stop and case covers.

Approval granted to:- Canadian Meter Company Limited, Milton, Ontario.

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- G. Sc. And Me.

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Chief, Electricity & Gas Division,

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kef: SL-100-96