

## **FEATURES**

HOUSING: Compact, stainless steel construction

INTERNAL CONTRUCTION: Soldered Stainless Steal drum and internal parts.

EASY READING INDEX: Large resetable sweep hand and four resetable totalizing

hands - all friction mounted available in liters or cubic feet.

HIGH VISIBILITY GAGE GLASS: Permits accurate liquid level adjustment.

CONNECTIONS: Inlet and outlet adaptable to hose.

**GASKETS**: Buna-N

EASE OF LEVELING: Bulls eye level and leveling screws provide means for correct

operational position of the meter.

EASE OF MAINTENANCE: A removable back is provided to facilitate cleaning.



## INTRODUCTION

American Wet Test Meters are precision, positive dis-placement meters, individually calibrated under controlled conditions. The drums are of the low-differential Hinman type providing high accuracy. These meters will maintain the original calibration for long periods because of the extensive use of corrosion resistant material. The grommet-type seal is designed for minimum friction to give maximum meter sensitivity.

## PRINCIPLE OF OPERATION

The liquid sealed rotating drum meter is constructed of a sealed hollow case in which a hollow drum of several compartments is free to rotate. The passage of gas through the meter causes the drum to rotate. The drum is designed so that when the case is filled with liquid to a pre-determined level, each compartment will be filled and emptied successively as the drum rotates. The volume of each compartment is know, therefore the record of rotation of the rotation of the drum is a measure of the quantity of gas passed. An index, driven by the drum shaft, totalizes the quantity of gas passed in convenient units.



**High Visibility Gage Glass** 

## **APPLICATIONS**

- Laboratories and Research Institutions -Accurate measurement of small volumes and low flow rates where required.
- Calibrating small orifices
- Determining proper fuel air ratios for gas appliances
- Practical laboratory tool in Refinery Pilot plant development and research
- Measuring of manufactured, natural and technical gases
- Educational Institutions for laboratory experiments

- Determining gas volumes in, or resulting from chemical reactions
- Testing gas consumption in domestic science cooking experiments
- Calibrating meter for atmospheric emission sample meters
- Gas Appliance Testing
- Calibrating Reference for Diaphragm Type Gas Meters

|  |               |             |     | Large Dial |       | Approx. Dimensions, Inches ■ |        |        |                    |                         |     |
|--|---------------|-------------|-----|------------|-------|------------------------------|--------|--------|--------------------|-------------------------|-----|
|  |               |             |     |            |       |                              |        |        |                    |                         |     |
|  |               |             |     |            |       |                              |        |        |                    |                         |     |
|  |               |             |     |            |       |                              |        |        |                    |                         |     |
| WITH CUB   | inches<br>w.c | exes<br>chf | chf | cf         | cf    | cf                           | inches | inches | inches             |                         | Ibs |
| AL - 17  | 14" w.c.      | 8           | 10  | 0.05       | .0005 | 1,000                        | 101⁄4  | 12     | 613/16             | note 1                  | 16  |
| AL - 18  | 14" w.c.      | 16          | 20  | 0.10       | .001  | 1,000                        | 131⁄4  | 141⁄4  | 81⁄4               | note 2                  | 25  |
| AL - 19  | 14" w.c.      | 64          | 80  | 1.0        | .01   | 10,000                       | 16½    | 16     | 1111/16            | 1⁄2″ MPT♦               | 65  |
| AL - 20  | 14" w.c.      | 120         | 150 | 1.0        | .01   | 10,000                       | 19     | 18½    | 14 <sup>1/8</sup>  | 3⁄4" MPT♦               | 85  |
| AL - 21  | 12" w.c.      | 240         | 300 | 1.0        | .01   | 10,000                       | 19     | 23¾    | 25 <sup>1/8</sup>  | 1″ MPT♦                 | 165 |
| AL - 22  | 12" w.c.      | 480         | 600 | 10.0       | .10   | 100,000                      | 221/2  | 27     | 32 <sup>5/16</sup> | 1 <sup>1/4</sup> " MPT♦ | 210 |
| WITH LITER INDEXES   inches   L/m   L/m   liters   liters   inches   inches   inches |               |             |     |            |       |                              |        |        |                    |                         | lbs |
|  | W.C           |             |     |            |       |                              |        |        | 40/4/              |                         |     |
| AL 17 - 1  | 14" w.c.      | 4           | 5   | 1          | 0.01  | 10,000                       | 101/4  | 12     | 6 <sup>13/16</sup> | note 1                  | 16  |
| AL 18 - 3  | 14" w.c.      | 8           | 10  | 3          | 0.01  | 10,000                       | 131⁄4  | 143/4  | 8¾                 | note 2                  | 25  |
| AL 19 - 3  | 14" w.c.      | 32          | 40  | 10         | 0.10  | 100,000                      | 16½    | 16     | 1111116            | 1⁄2″ MPT♦               | 65  |
| AL 20 - 1  | 14" w.c.      | 60          | 75  | 100        | 1.0   | 1,000,000                    | 19     | 181/2  | 14 <sup>1/8</sup>  | 3⁄4" MPT♦               | 85  |

150 ■ Overall dimensions without pressure gage, thermometers and nozzles or swivels.

• One straight swivel, one elbow swivel and two caps supplied.

120

233/4 note 1 - Hose nozzles and caps supplies

note 2 - Hose nozzles and caps or 3/8-inch threaded swivels and caps supplies as specified

 $25^{1/8}$ 

1" MPT◆



12" w.c.

1.0

100

10,000,000