

**AUTOMATIC**  
**VAPOR**  
**PRESSURE**  
**TESTER**  
(Reid Method, Demi Size)  
**Model**

**AVP-30D**



AVP-30D-4bombs & Mercury Manometer

**AVP-30D** series carries out the Reid Vapor Pressure test prescribed in ASTM D323 and IP69, AVP-30D has been developed after its well received predecessor, AVP-21D/22D series, with further enhancement in the electronics. The new features include easy switch between display in kPa and kgf/cm<sup>2</sup> units, water level monitor for safety, and communication capability with external computers.

**EASY HANDLING:** Compact size bombs allow easier handling, yet yielding the same test results compared to the heavy full size bombs. (The V/L ratio of 4 is maintained, and therefore equivalent test result is obtained).

Note- The suffix "D" followed by "AVP-30" stands for "Demi size."

**COMPACT SIZE:** Width is merely 400mm, and the footage on the lab bench is at minimal.

**PRECISE RESULTS:** Semiconductor type vapor pressure sensor and reliable/efficient see-saw shaking mechanism are employed. The semiconductor sensor is extremely stable, yielding consistent test results.

**TRACEABLE:** The pressure sensor can be calibrated easily using a Mercury Manometer (Optional).

### SPECIFICATIONS:

#### RELATED STANDARDS:

ISO 3077, ASTM D323, IP69 etc.

#### TYPE:

Bench-top with 2,3, or 4 Demi-size bombs

**Pls. Indicate number of bomb when ordering**

Automated continuous shaking of test bomb by "see-saw" motion.

#### MEASURING RANGE:

0 to 196kPa (2kgf/cm<sup>2</sup>)

#### TEST BOMBS:

Small size stainless steel bombs with 66% in length and 31% in volume compared to the regular full size bombs.

The V/L ratio of 4 is the same as full size bomb.

A "Quick Coupler" is equipped at the center of the vapor chamber for connecting to external pressure sensor located inside of the tester

#### PRESSURE SENSOR:

Semiconductor type pressure sensor.

Range: 0 to 196kPa (2kgf/cm<sup>2</sup>)

Linearity: <0.3% of the range

Hysteresis: <0.3% of the range

#### DISPLAY:

LCD with back light

Pressure display range: 0 to 200kPa or 0 to 2kgf/cm<sup>2</sup>

#### SHAKING:

By "see-saw" movement with angular movement of +/-15 degrees and interval of 6 sec

#### BATH:

Temp control: Digital controller/display with PT-100 sensor

Precision: +/-0.1°C

Stirring: By propeller driven by motor

Heater: Stainless sheathed heater 1.15kW

#### CALIBRATION:

By connecting a mercury manometer (optional) to the pressure sensor

#### SAFETY MECHANISM:

Water level monitoring device for preventing overheating due to low water level

#### DATA OUTPUT:

RS-232C 1 channel (for PC or Optional Printer)

### DIMENSION & WEIGHT:

400W x 600D x 720H (mm),

50kg when dry, 85kg when filled with water

### INSTALLATION SITE:

Ambient temperature: 0 to 40 °C

RH: Less than 90%(no condensation)

### POWER SUPPLY:

AC100/120V or 220/240V 50/60Hz

(set at the factory) 1.5kW(max.)

### ORDERING INFORMATION:

#### STANDARD ACCESSORIES:

	2-bomb	3-bomb	4bomb
1. Test Bombs	2 sets	3 sets	4 sets
2. Thermometer ASTM-18C	1 pc	1 pc	1 pc
3. Spare Packing for Bombs	4 pc	6 pc	8 pc
4. Spare Fuse	1 pc	1 pc	1 pc
5. Water Hose, 2m	1 pc	1 pc	1 pc
6. Water Hose Band	1 pc	1 pc	1 pc
7. Silicone Plug No.3	1 pc	1 pc	1 pc
8. Connecting Pipe with Teflon Fittings	2 sets	3 sets	4 sets
9. Air Pipe	1 pc	1 pc	1 pc
10. Pressure Releasing Jig	1 pc	1 pc	1 pc
11. Instruction Manual	1 copy	1 copy	1 copy
12. Quick Coupler 1S	1 pc*	1 pc*	1 pc*
13. High Pressure Hose, 3m	1 pc*	1 pc*	1 pc*

\*: These items are not includes when ordering together with mercury manometer

#### OPTIONAL ACCESSORIES:

Mercury Manometer, Single Glass Tube Type

0 to 100kPa or 0 to 147kPa with 0.2kPa division

Air Compressor for Mercury Manometer, 0.2P-5S

Printer, CBM-510

#### SUGGESTED SPARES FOR 2 YEARS:

1. Thermometer ASTM-18C	1pc
2. Spare Packing for Bomb	5pcs/bomb
3. Fuse MHS-10A(100/120V) or MHS20A(220/240V)	1pc
4. Connecting Pipe with Teflon Fittings	1set/bomb

Specifications subject to change without prior notice.

### TANAKA SCIENTIFIC LIMITED

7-10-3, Ayase, Adachi-ku, Tokyo 120-0005 Japan

Tel: +81-3-3620-1711 Fax: +81-3-3620-1713

URL: <http://www.tanaka-sci.com>

e-mail: [sales@tanaka-sci.com](mailto:sales@tanaka-sci.com) Printed in Japan 0006(E)