



## COMPACT DIGITAL SAFETY VALVE TESTER

The DMSV1 is a digital technology portable Safety Valve Tester incorporating a number of standard features usually found in more expensive products. It is a rugged and splashproof unit suited to demanding commercial and flight line applications.

Easy and intuitive to both novice and expert users. Testing and troubleshooting is performed via an integrated touch screen.

Readings of both commanded and measured test values are displayed at any time.

Unit incorporates an ergonomic user-friendly interface. Intelligent software prevents input values exceeding predefined limit ranges.

Test values and rates are displayed and set in aeronautical (altitude) or engineering (pressure) mode.

## FEATURES

- Accuracy  $\pm 6$  feet at sea level.
- Compact and self-contained. The entire test set including pumps is housed into a single compact case with a stowable handle.
- Easy to read color LCD backlit display with touch screen featuring a modern and ergonomic user interface.
- Simultaneous display of required parameters.
- Optional Remote Control Unit
- Low power consumption
- Lightweight (12.5 kgs/ 28 lbs)

Low power consumption results in low heat generation enabling a higher accuracy and product durability.

The DMSV1 features one temperature and pressure compensated “smart” precision transducer achieving greater accuracy at all altitude values.

## SAFETY

Unit is designed for maximum safety during testing. Key design features protect the test set and instruments under test. The test circuit is safely isolated during a power loss event. Preset factory or user programmed safe limits prevent damage to instruments under test.

## MULTI-PURPOSE

The DMSV1 can be used to carry out several checks:

- the sensor accuracy is suitable for checking the calibration of altimeters and other pressure measurement instruments;
- the software interface allows to run leak tests, and also to program them for unattended operation;
- the powerful internal pump is able to achieve and maintain a constant altitude rate on a large load volume, enabling testing of cabin pressure safety valves.



## STANDARD SPECIFICATIONS

Control capability optimized for 5,000 feet/min at 40,000 feet on 0 to 50 liters (3,051 cu.in.) load.  
Larger volumes possible with reduced RoC

| Parameter               | Range                     |                            | Resolution                 |          | Accuracy                                   |
|-------------------------|---------------------------|----------------------------|----------------------------|----------|--------------------------------------------|
|                         | Measure                   | Control                    | Measure                    | Setpoint |                                            |
| Altitude(ft)            | from -2,000<br>to +50,000 | from ambient<br>to +50,000 | 1                          | 1        | ± 6 @ SL<br>± 16 @ 30,000<br>± 40 @ 50,000 |
| Vertical speed (ft/min) | 0 to 6,000                | 0 to 6,000                 | 5 @ < 1,000<br>25 @ > 1000 | 25       | ± 1%<br>of setting                         |
| Static pressure         | (inHg abs) 3.4 to 32      | 3.4 to ambient             | 0.001                      | 0.001    | ± 0.005                                    |
|                         | (hPa abs) 116 to 1090     | 116 to ambient             | 0.01                       | 0.01     | ± 0.15                                     |

### STANDARD TEST FUNCTIONS:

- internal vacuum generation
- automatic leak check
- controlled venting to ambient
- altitude input
- static pressure input
- altitude rate input
- static pressure rate input
- User test programmed profiles including up to 26 steps
- Various measure units selectable

### DISPLAY

Splashproof and shock protected integrated front panel  
LCD backlit touch screen, 89 mm (3,5") diagonal,  
all test parameters displayed

### CALIBRATION

One year interval performed using software

### DISPLAYED UNITS

Altitude: ft, m, hm

Pressure: inHg, hPa, kPa, Pa, psi, mmHg, inH<sub>2</sub>O

### WARRANTY

2 Years

### ENVIRONMENTAL

Temperature range

Operating: -5°C to +50°C

Storage: -20°C to +70°C.

Splashproof and shockproof

CE compliant

### PHYSICAL SPECIFICATIONS

Weight: 12.5 kgs (28 lbs)

Dimensions: W 558, D 356 H 230 mm  
(22" x 14" x 9")

### POWER SUPPLY

Universal power supply: 90-240 Vac; 50-400 Hz

Note: --- Ongoing research results in specifications being subject to change without notice ---

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