



## SMARTLEAK-M

### STRUMENTO LEAK TEST DEVICE

PRESSURE DECAY MEASUREMENT (D1, EN1779)




“SMARTLEAK” is a measuring instrument designed to perform leak tests with pressure decay measurement.


The user panel with 5"resistive touchscreen graphic display (480x272 Pixels) allows real-time viewing of the test progress and makes programming and use of the device simple and immediate.

The high measurement resolution allows you to test different types of parts in various sectors in a quick, objective and always traceable manner. Furthermore, the possibility of interfacing external automations via digital I/O, ASCII and fieldbus protocols (Modbus-RTU as standard, Profinet with optional external gateway), the serial port for barcode readers connection, the saving function of the test results on PC via USB cable and special software makes “SMARTLEAK” a complete, reliable and integrable device in any production system.


### SECTORS OF APPLICATION



**Automotive**  
Engine, brake system, cooling, transmission, lighting




**Hydraulics / Pneumatics**  
Fittings, hydraulic and pneumatic cylinders, valves, guns, filters




**Household Appliances**  
Cleaning systems, fabrics and dishes, refrigeration systems



**Aerospace**  
Drives, generators, alternators, injectors, valves



**Mechanical components**  
Gearmotors, axles, gearboxes, covers, casings, heat exchangers



**Medical / Pharmaceutical**  
Plastic bags for liquids, syringes, inhalers, catheters, filters, valves



**LEAK TEST DEVICE**  
**PRESSURE DECAY MEASUREMENT (D1, EN1779)**

- Pressure range -1000 mbar (\*) - 10000 mbar
- Mechanical pressure regulator (\*\*) with digital reading
- 32-bit CPU, 24-bit A/D converter
- Measurement resolution 1 ppm of full-scale value
- Measuring accuracy 0,5% of full-scale value
- Graphic view of the measurement process and results
- 128 testing programs
- Storage of approximately 10.000 results
- Connection for calibrated leak
- Wi-Fi (TCP/IP) Connectivity
- Serial ASCII and MODBUS-RTU protocols
- Optional Windows based software for data storage and management
- Testing results available in Excel and CSV format

**Measuring range:**

	SMARTLEAK -MV	SMARTLEAK -M2	SMARTLEAK -M10
Full scale of measurement	Up to -1000 mbar (*)	2000 mbar	10000 mbar
Accuracy	1,5% of the full scale – Accuracy = linearity + repeatability + hysteresis		
Resolution	1 Pa	1 Pa	10 Pa

(\*) according to the characteristics of the connected vacuum generator

(\*\*) in the vacuum version (-V) the pressure regulator is supplied for external assembly, the vacuum pump is not included

**Interfaces:**

- **USB to Host:** connection to PC, using of software for data storage and printing of the test reports
- **Serial port RS-232:** bar code readers connection or remote control through ASCII protocol
- **Fieldbus:** Modbus RTU @ RS-232 as standard, Profinet with optional external gateway
- **Digital I/O 24 VDC:** interfacing to automation systems

**Technical Specifications:**

Dimensions (WxHxD)	270 x 211 x 370 mm
Weight	4 Kg.
Power supply	24 VDC
Rated output	50 VA
Test fluid	Dried Air, filtered 5 µm max. oil 30 mg/m3 dew point -20°C according to ISO 8573-1 Cl. 3
Programs	128
Digital Inputs	Start, Stop, Zero + 4 AUX
Digital Outputs	Ready, OK + 4 AUX
Connectivity	1 USB to Host, 1 RS-232, Wi-Fi
Calibrated leak connection	Stäubli RBE 03
Storage temperature	-20°C / 60°C
Working temperature	10° / 45°C

LEAK TEST (Pressure Decay Measurement)

