T9731 - EN 14683

CONTINUOUS MEASUREMENT HIGH PERFORMANCE FLOW TESTER EN 14683 VERSION

The T9731 - EN 14683 is specifically designed for measure the adequate air flow rate in complete adherence to the standard EN 14683 .
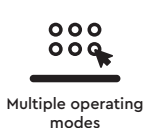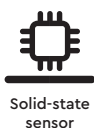
As shown in diagram C.1 on page 12 of the standard, the instrument is equipped with two air flow meters of type Mass-flow with scales 0.0...10.0 nLitres/minute (2.12 of diagram - point C.2.1) servo driven valve controlled from the software (10 of the diagram - point C.2.4), and a double gauge / differential pressure measurement (M1 and M2) as expressly indicated in point C.2.2 .

In order to comply with both the ISO accreditation standards and the expectations of the reference standard, the pressure measurements in "Differential" mode (or pressure drop) occurs in Pa or Pa/cm2 in case the sample area is set in the menu TST with area different from 1.00 cm2.

Complete the features all the options already present in the T9000 range as ISO, LAN traceability, Wifi, BLE , communication ports, signals of interfacing etc... as more in detail indicated in the user manual.

Usb key Traceability	RS232, RS485, Can, TTY	Ethernet and auxiliary connector

The T9731- EN 14683 is able to perform in the following way fully automatic all procedures that requires regulation:
- "Breathability" tests, setting the test in mode " PRESSURE DROP" as per Procedure C.4;
- "Tool validation" tests (C.2.5.5) Part 1 of Mass-Flow Relevance
- "Equipment validation" tests (C.2.5.5) part 2 of Mass-Flow Zero Flow Seal

Automatic pressure regulator	Measurement up to 20,000 cc/min	Resolution starting from 0.1 cc/min

The connecting "short form" attached to the manuals provides connection to an external vacuum pump (C.2.3), not provided. A special "flow sensor deviation" parameter allows a continuous comparison of the two sensors of flow measurement(can be excluded by setting the threshold to 0%) in order to comply in Run-Time mode with the validation of C.2.5.5.

In addition to what is required in the legislation, the instrumentation shall is able to measure both differential pressures (loss of pressure (mouthpiece head) and relative pressure (mouthpiece head) both for perform tests indiscriminately at a controlled flow rate that at constant pressure.

Advanced interface.
We thought the T9000 series as the ultimate expression of technology in measuring systems, with an advanced interface that is useful for analysis and studies in the prototyping or pre-series phase, as well as for the production line testing.

The large 7" colour display, embedded in a panel in capacitive glass, allows total interaction in the internal and main-screen menus, and the evidence archive "smart" contains daily, monthly and specific for each test program, so as to maintain controlled the level of quality of your products.

Solid-state sensor	Multiple operating modes	Intelligent pressure adjustment

User-friendly interface	Easy to clean	Use in sectors at 360°

DATA SHEET

T9731 - EN 14683

CONTINUOUS MEASUREMENT
HIGH PERFORMANCE
FLOW TESTER
EN 14683 VERSION

Application Sectors

Medical

Measurement Caracteristics

Type		Scale: 100 mbar - 10.000 cc/min
Flow	Accuracy	1% RDG + 0,1% FS
	Resolution	1 cc/min
Direct Pressure	Accuracy	0,5% RDG + 3 DGT
	Resolution	0,001 mbar (0,1 Pa)

Features

- Dual mass flow type flow sensor
- Fully automatic test flow adjustment management (8,000 Lt/min)
- Automatic mass flow diagnostic check
- Resolution 1 cc/min
- HMI touchscreen controller
- Colour display
- USB pen drive for store results and test parameters
- Bluetooth Low Energy interface on-board
- Real Time Graph of pressure and decay
- 300 Test Programs
- USB Type-B female connector for PC
- 6 Languages (English, Italian, French, German, Spanish, Portuguese)
- Mechanical Start/Stop button
- Firmware upgrade via USB key
- Password protection
- 24V I/O (Start, Stop, Filling, Test, Good, Reject, 4BCD)
- Unit measure available: Pa/cm2, mbar, bar, psi, mmHg, mmH20, Pa, HPa, cc/min, cc/min, cc/h pressure/s

Technical Specifications

- Dimensions 300x160x350 mm
- Weight 10 Kg
- Electrical Supply 24VDC, 110 VAC, 230 VAC
- Air tube size: 6x4, 10x8

Test Modes

- Flow test
- Loss of charge
- Leak test holder

Communication Interfaces

Interface Name	Standard	Protocol
RS232/RS485	Yes	ForTest, Modbus RTU, Trace EOT
USB-Serial	Yes	ForTest, Modbus RTU, Trace EOT
Ethernet TCP/IP	Optional	ForTest, Modbus RTU, Trace EOT
Profinet	Optional	Profinet
EtherCAT	Optional	EtherCAT

Accessories

- Barcode reader
- Label printer
- Leak Test Manager PC software
- Air filter
- External Start/Stop push button