DATA SHEET

FORTEST

T9740

RFO HIGH-PERFORMANCE FLOW TESTER

RFO flow measurement

"RFO" technology is the latest evolution in continuous capacity measurement instrumentation, specifically for applications with high variability of flow values and the need for very high adjustment of the pressure, to compensate those different load losses.
Typical applications include leak testing of boiler gas-tight chambers, car, tractor or lorry cabs, chimney flues, etc...where the test pressures requested are very low (0.5...10 mbar) and therefore pressure adjustment must be extremely stable and precise.

Solid-state sensor

Multiple operating modes

Intelligent pressure adjustment

Limitless connectivity.

T9740 includes ports for the USB slave, RS232, RS485, Can bus and TTY. The instrument may also include an optional Ethernet port and a 26-pole connector with 4 inputs and 8 outputs, which are completely programmable, for interfacing with the external valves, safety barriers, switches, etc...
The front panel has a master USB port for connection to a USB key to save the tests, backup/restore parameters and upgrade firmware.
The connection to thermal printers, barcode/data-matrix readers and markers takes place automatically using an internal menu.

Usb key

High power outputs

RS232, RS485, Can, TTY

Ethernet and auxiliary connector

Top category technology.

We decided not to make compromises when equipping the T9740, assembling the best components currently on the market, such as the piezoelectric electronic regulator which guarantees stable and repetitive adjustment, or the solid-state sensor with a vast reading range, or the specific valves for this model, with a life estimated in tens of millions of cycles. All these advantages give never before seen precision performance, stability and accuracy.

Automatic pressure regulator

Measurement up to 300,000 cc/min

Resolution starting from 0.1 cc/min

Made to measure pneumatic section.

To avoid overheating due to long activation times of the filling circuit, we have designed particular, high capacity pneumatic valves, which not only work in hot temperatures, but also quickly fill the piece being tested, making the T9740 also suitable for testing on parts with significant volumes.
All of the above, while maintaining ForTest's historic reliability.

Heat-proof pneumatic valves

High filling speed

No periodic maintenance

Innovative design.

What appears to be a simple design exercise, in fact hides an in-depth study to make use and understanding of the equipment as simple as possible.
The front panel is made of a single sheet of tempered glass and aluminium, which makes it extremely easy to clean, making the T9740 suitable for use in the laboratory and on the production line.
The extensive internal menus are easy to understand and the graphic interface was designed to only display important information.
Everything is exactly where it should be.

User-friendly interface

Easy to clean

Use in sectors at 360°

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Application Sectors

Aerospace	Valves	Packaging
Automotive	Alternative Energy	Gas
Household Appliances	Mechanical	Hydraulics
Electronics	Medical	Pneumatics

Measurement Caracteristics

Type		Range from 0,005 bar to 0,1 bar
Δp(Leak) up to 300 l/min	Accuracy	1% RDG+0,1%FS to 1% RDG+1%FS
	Resolution	From 0,1 l/h to 5 l/h
Direct Pressure	Accuracy	0.25% to 0.5% FS

Optional

- Electronic regulator
- AUX I/O 24VDC with 8 output programmable, 4 input programmable, 4BCD
- Communication interfaces
- Pneumatic fast filling
- Pre-filling

Features

- Resolution from 0.01 cc/min
- HMI touchscreen controller
- Colour display
- USB pen drive for store results and test parameters
- Bluetooth Low Energy and WiFi interfaces 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 pen
- Password protection
- 24V I/O (Start,Stop,Filling,Test,Good,Reject,4BCD)
- Unit measure available: mbar, bar, psi, mmHg, mmH20, Pa, HPa, cc/min, cc/min, cc/h pressure/s
- Frontal connector for Staubli calibrated leak

Technical Specifications

- Dimensions 300×160×350 mm
- Weight 10 Kg
- Electrical Supply 24VDC, 110 VAC, 230 VAC
- Air tube size: 4×2.7, 6×4, 8×6, 10×8

Test Modes

- Leak Flow test

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