



T8090

DUAL ABSOLUTE STANDARD LEVEL LEAK TESTER



The Dual Absolute.

The new Dual Absolute technology makes it possible to eliminate the disadvantages of a classic differential system, improve its advantages and renew an industry that has been standing still for decades. Thanks to the new Dual Absolute technology, ForTest has combined the simplicity of a classic absolute decay system with the precision and sensitivity of a differential system, bringing leak testing instruments to a level never seen before. The new algorithms and measurement hardware eliminate typical defects in a differential system, such as differences in stabilization between the test part and the reference sample. The new range of instruments is able to work in 3 different ways: Differential, Dual Absolute® and Dual Zero Center®. The new Dual Absolute technology is so powerful and reliable that ForTest has decided to stop developing the classic differential system.

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|  Sampling at programmable lapse |  Sensitive as a differential tester |  Dual Safe® |  Solid state measure |
|  Double productivity |  No periodic maintenance |  High pressure test |  Measurement width |

A touch of innovation.

The video controller "ForTest MMI" brought a superior level of human-machine interaction, thanks to an innovative capacitive panel in tempered glass, around a splendid 6.2" colour display. Parameter programming is much faster thanks to the new numerical keyboard integrated in the menus, and the big display makes viewing even clearer of the test cycle. The main screen also enables interaction with shortcut functions, such as test program change, "smart" test archive menu and locking/unlocking using a password.

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|  6.2" colour display |  Test graphic |  Full area touch screen |  Extended programming keyboard |
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Limitless connectivity.

T8090 includes ports for the USB slave, RS232, RS485, Can bus, TTY, Profinet and EtherCAT. Assembly 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 conducted, backup/restore parameters and upgrade equipment firmware. The connection to thermal printers, barcode/data-matrix readers and markers takes place automatically using an internal menu.

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|  Usb key |  High power outputs |  RS232, RS485, Can, TTY, Profinet, EtherCAT |  Ethernet and auxiliary connector |
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Always better measurements.

The test cycle was further accelerated thanks to processor and coprocessor interaction, maintaining the reliability that has always made ForTest unique. We can say with certainty that T8090 avails of the most advanced measurement section in the world, thanks to the centring technology in windows and the double Faraday optical-isolated cage, which reduces the settling times under 18 ms. This gives a real measurement resolution of 0.1 Pa at 1 bar (0.5 Pa at 6 bar), stable and noise-free.

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|  Built-in processor and coprocessor |  Centring technology in windows |  Resolution from 0.1 Pa |
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Application Sectors

| | | |
|----------------------|---------------|------------|
| Aerospace | Valves | Packaging |
| Automotive | Brakes | Gas |
| Household Appliances | Refrigeration | Heating |
| Electronics | Mechanical | Hydraulics |
| Foundry | Medical | Energy |
| Pneumatics | Oleodynamic | Cylinders |

Measurement Characteristics

| Type | | Range from -1 to 200 bar |
|-----------------|------------|-----------------------------|
| Δp(Leak) | Accuracy | 0.5% RDG+3DGT |
| | Resolution | From 0.001 mbar to 0.1 mbar |
| Direct Pressure | Accuracy | 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
- Volume measurement

Features

- Resolution from 0.1 Pa
- 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, mmH2O, Pa, HPa, cc/min, cc/h, pressure/s
- Frontal connector for Staubli calibrated leak

Technical Specifications

- Dimensions 270 × 160 × 300 mm
- Weight 8 Kg
- Electrical Supply 24VDC, 110 VAC, 230 VAC
- Air tube size: 4×2.7, 6×4, 8×6, 10×8

Test Modes

- Leak Test Absolute Decay
- Leak Test Dual Absolute
- Leak Test Zero Center
- Leak Test Obstruction
- Leak Test Differential

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
- Electrovalve group "cylinder's" type with filter
- External Start/Stop push button