FX 3000
HydroTester IV
Automatic Hydrostatic Head Tester
FX 3000 HydroTester IV with many benefits

The fourth generation of the Hydrostatic Head Tester impresses by its flexibility, its user-friendliness, and its broad, increased measuring range. The instrument measures in compliance with AATCC 127, ASTM F 1670, BS 2823, DIN 53886, EN 1734, EN 20811, FZ/T 01004, GB/T 4744, GB/T 22897, ISO 811, JIS L 1092A, JIS L 1092 B-a+b, WSP 80.6 and many other national and international test standards.

Benefit thanks to broad measuring range

Constantly rising requirements for water resistance – The FX 3000 HydroTester IV allows measurements up to a pressure of 5 bar (50 m water column). Different models with different pressure maximums meet every customer requirement. Low pressures, e.g. when testing nonwovens, are also controlled very precisely.

Benefit thanks to Automatic Drop Detection

The optional Automatic Drop Detector eliminates the need for an operator to watch the sample and to manually terminate the test. When the termination criterion is reached, normally after the third drop has penetrated the sample, the test is automatically stopped and the result is displayed.
Benefit thanks to evaluation and printing options

Flexible data management for every customer preference. The FX 3000 HydroTester IV is optionally available with an integrated evaluation program, respectively with an integrated strip printer. Both options are used for easy documentation of the individual test results and for statistical evaluation. The instrument can be connected to a network by Ethernet or Wi-Fi interface.

Benefit thanks to Automatic Level Control

The optional Automatic Level Control fills the water tank before the first test and automatically compensates for any water loss in between two measurements – Reliably and totally without help of the operator.

Benefit thanks to high clamping force

A manual clamping mechanism, depending on the model supported by a pneumatic cylinder, provides a constant clamping force and effectively prevents lateral water loss through the specimen.
## Technical specifications FX 3000 HydroTester IV

### Measuring range:
- **FX 3000-4L-PUM**: 0 ... 500 mbar (5 m water column)
- **FX 3000-4M**: 0 ... 2,000 mbar (20 m water column)
- **FX 3000-4H**: 0 ... 5,000 mbar (50 m water column)

### Dynamic Test Method:
- Pressure gradient: 1 ... 1,000 mbar/min

### Static Test Method:
- Test pressure: 1 mbar ... max. test pressure

### Program Test Method:
- Freely programmable time-pressure-sequences

### Measuring accuracy:
- ± 0.5 % of displayed value ± 1 mbar

### Readability:
- 0.1 mbar up to 99.9 mbar
- 1 mbar up to 999 mbar
- 10 mbar over 1,000 mbar
- 0.1 min up to 99.9 min
- 1 min over 100 min

### Units of measure for pressure:
- mbar, kPa, cm w.c., and mm w.c.

### Test area:
- 100 cm² (10 cm², 26 cm², and 28 cm² as options)

### Sample thickness:
- 0 ... 5 mm

### Aperture of test head:
- 40 mm

### Clamping of specimen:
- Manual clamping arm
  - Models 4M und 4H supported by pneumatic cylinder

### Clamping force:
- Model 4L-PUM: approx. 2,000 N
- Model 4M: approx. 8,000 N
- Model 4H: approx. 20,000 N

### Space behind test head:
- 150 mm deep, 80 mm high

### Data ports:
- USB 2/3, Ethernet and Wi-Fi as options

### User interface:
- Touch display

### Power requirements:
- 90 ... 240 V, 50 ... 60 Hz, 200 W

### Compressed air requirements:
- Model 4M: 4 ... 8 bar (clean and dry)
- Model 4H: 6 ... 8 bar (clean and dry)

### Dimensions (w x d x h):
- 40 x 65 x 71 cm

The scope of supply includes a drain hose, a skimmer and an ISO conform calibration certificate.

### Accessories

**FX 3000-IV AUT**
- Automatic Drop Detector

**FX 3000-IV ALC**
- Automatic Level Control

**FX 3000-IV EVA**
- Evaluation software with style management

**FX 3000-IV PRI**
- Integrated strip printer, with evaluation software

**FX 3000-IV WLN**
- Wi-Fi module, with evaluation software

**FX 3000-IV STP**
- Integrated strip printer for a basic test protocol

Technical data subject to change.