

TESTING INSTRUMENTS FOR QUALITY CONTROL 



## FX 3300 LabAir IV

Air Permeability Tester



**TEXTTEST**  
**INSTRUMENTS**

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# FX 3300 LabAir IV with many benefits

The fourth generation of the FX 3300 unites 50 years of experience, know-how and R&D expertise in an instrument for determination of air permeability and pressure drop. The LabAir IV is distinguished by its user-friendliness, flexibility and wide measuring range. The instrument complies to ASTM D 737, ASTM D 3574, DIN 53887, EN ISO 7231, EN ISO 9237, GB/T 5453, GB/T 24218.15, JIS L 1096-A, TAPPI T-251, WSP 70.1 and many other national and international test standards.



## Benefit thanks to sophisticated design

Due to the robust design and the very sturdy clamping arm, the instrument is well-suited, not only for measurements in the laboratory, but also for the rugged conditions of a production environment.

## Benefit thanks to flexibility

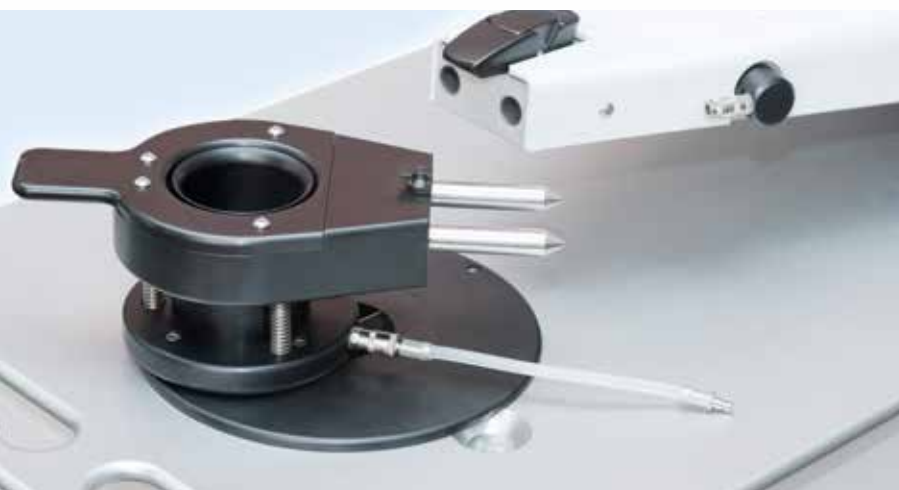
Many custom-built test heads and adapters are available for special applications. Talk to us, if your products are out-of-the-ordinary.

## Benefit thanks to «more than air permeability»

Besides air permeability in many different units of measure, the FX 3300-IV can also determine pressure drop and specific air flow resistance.

## Benefit thanks to Sequence Module

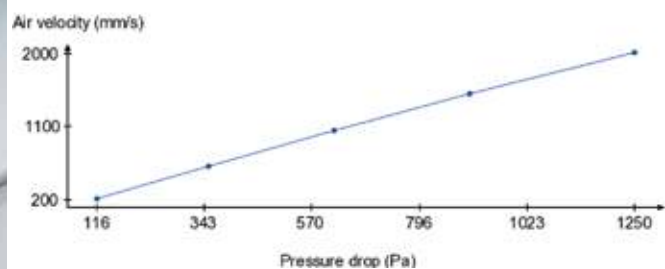
This optional software module allows the programming of automatic pressure or velocity sequences for R&D work in the acoustic filter sector. As a result, the respective air permeabilities or pressure drops, and, if desired, the rayl values and non-linearity factors, are provided.



Robust design

Sequence	Air Velocity	Pressure Drop	Rayl	NLF 1	NLF 2
1	200 mm/s	116 Pa	580 mks rayl	-	-
2	600 mm/s	350 Pa	581 mks rayl	1.00	-
3	1050 mm/s	816 Pa	588 mks rayl	1.01	1.07
4	1500 mm/s	904 Pa	602 mks rayl	1.02	-
5	2000 mm/s	1250 Pa	623 mks rayl	1.04	-

## Graphic



Test report generated with FX 3300-IV SEQ

## BENEFITS AT A GLANCE

- Sophisticated design
- Flexibility
- «More than air permeability»
- Sequence Module
- Automatic cleaning function
- Automatic measuring range selection
- Evaluation and printing options



Touch display for operation of the instrument

### Benefit thanks to automatic cleaning function

Manual cleaning is rendered unnecessary. The automatic cleaning function prevents fibers and dust from accumulating on the orifice disk or at its seals, which can affect the test results.

### Benefit thanks to automatic measuring range selection

The operator has no influence whatsoever on the test result. The automatic measuring range selection has eliminated the last source of error.

### Benefit thanks to evaluation and printing options

The instrument can be connected to a network by ethernet cable or Wi-Fi. With the optional evaluation module, test reports in PDF or XML formats can be downloaded from the instrument's web server. Alternatively, an integrated strip printer is available.

Static Air Permeability

#### Basic data

Style:	4711
Reference:	A
Date:	28.08.2019
Time:	11:55:23
Instrument:	FX 3300 LabAir IV
Serial Number:	100

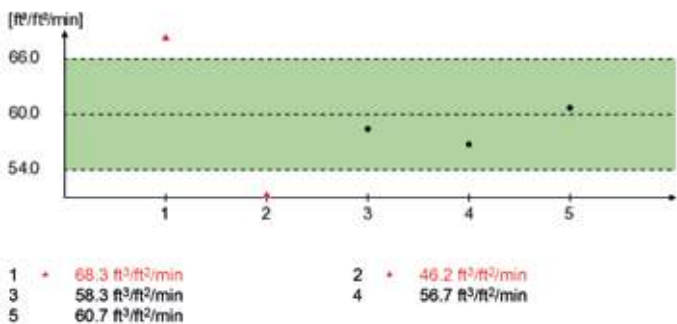
#### Settings

Test pressure:	125 PA
Test area:	38 cm <sup>2</sup>
Nom / Min / Max:	60.0 / 54.0 / 66.0 ft <sup>3</sup> /ft <sup>2</sup> /min

#### Statistical analysis

Average:	58.0 ft <sup>3</sup> /ft <sup>2</sup> /min
Minimum:	46.2 ft <sup>3</sup> /ft <sup>2</sup> /min
Maximum:	68.3 ft <sup>3</sup> /ft <sup>2</sup> /min
CV:	12.3 %
Cpk:	0.189

#### Test results



Test report generated with FX 3300-IV EVA



Integrated Strip Printer FX 3300-IV STP



Test heads for various standards

**Technical Specifications FX 3300 LabAir IV**

Measuring range:	0.4 ... 750 cm <sup>3</sup> /cm <sup>2</sup> /s at 5 cm <sup>2</sup>
	1 ... 10,000 mm/s (l/m <sup>2</sup> /s) at 20 cm <sup>2</sup>
	0.6 ... 6,000 l/dm <sup>2</sup> /min at 20 cm <sup>2</sup>
	0.002 ... 20 dm <sup>3</sup> /s at 25 cm <sup>2</sup>
	0.1 ... 1,300 ft <sup>3</sup> /ft <sup>2</sup> /min at 38 cm <sup>2</sup>
	0.05 ... 700 cm <sup>3</sup> /cm <sup>2</sup> /s at 38 cm <sup>2</sup>
	0.03 ... 400 m <sup>3</sup> /m <sup>2</sup> /min at 38 cm <sup>2</sup>
	2 ... 24,000 m <sup>3</sup> /m <sup>2</sup> /h at 38 cm <sup>2</sup>
	0.1 ... 1,600 l/dm <sup>2</sup> /min at 100 cm <sup>2</sup>
	20 ... 2,500 Pa at 1 ... 10,000 mm/s at 20 cm <sup>2</sup>
Units of measure:	mm/s, l/m <sup>2</sup> /s, l/dm <sup>2</sup> /min, ft <sup>3</sup> /ft <sup>2</sup> /min, cm <sup>3</sup> /cm <sup>2</sup> /s, m <sup>3</sup> /m <sup>2</sup> /min, m <sup>3</sup> /m <sup>2</sup> /h, dm <sup>3</sup> /s, Pa (pressure drop), mks rayl und cgs rayl (air flow resistance)
Measuring accuracy:	Better than ± 3 % of the displayed value
Test pressure:	20 ... 2,500 Pa (expandable to 5,000 Pa)
Test areas:	5, 20, 25, 38 and 100 cm <sup>2</sup> (others on request)
Data ports:	<ul style="list-style-type: none"> <li>■ RS 232 C, asynchronous, bi-directional</li> <li>■ USB 2.0 for USB flash drive</li> <li>■ Ethernet and Wi-Fi as options</li> </ul>
User interface:	Touch display
Power requirements:	<ul style="list-style-type: none"> <li>■ 195 ... 260 VAC, 50/60 Hz, max. 1,100 W</li> <li>■ 85 ... 130 VAC, 50/60 Hz, max. 1,100 W</li> </ul>
Compressed air requirements:	5 ... 8 bar (only required for cleaning function, the instrument can be operated without compressed air)
Projection of clamping arm:	50 cm
Sample thickness:	0 ... 10 mm
Dimensions (w x d x h):	40 x 100 x 98 cm
Weight:	Approx. 55 kg



SWISS CALIBRATION SERVICE

The scope of supply includes a calibration check plate and an ISO-conform calibration certificate.


*Subject to change*

**Accessories:**

FX 3300-IV 5	Test head 5 cm <sup>2</sup> for measurements on very open samples
FX 3300-IV 20	Test head 20 cm <sup>2</sup> for measurements according to DIN 53887, EN ISO 9237, WSP 70.1
FX 3300-IV 25	Test head 25 cm <sup>2</sup> for measurements according to ASTM D 3574, EN ISO 7231
FX 3300-IV 38	Test head 38 cm <sup>2</sup> for measurements according to ASTM D 737, JIS L 1096-A, WSP 70.1
FX 3300-IV 100	Test head 100 cm <sup>2</sup> for measurements on very dense samples
FX 3300-IV EVA	Evaluation module for downloading of test reports
FX 3300-IV STP	Integrated Strip Printer for printing of a basic test protocol
FX 3300-IV PRI	Combination of FX 3300-IV EVA und -STP
FX 3300-IV WLN2	Wi-Fi module for connecting the instrument to the network via Wi-Fi
FX 3300-IV SEQ	Sequence module for automatic pressure or velocity sequences



**TEXTTEST**  
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 **MADE IN SWITZERLAND**



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