

SAMPLING
SOLUTIONS

MEGA SYSTEM

CALIBRATION
& METROLOGY

LIFETEK SERIES

Lifetek 100



Lifetek 33



Lifetek 55



- Environmental sampling at constant flow
- Automatic isokinetic sampling
- Automatic flow regulation
- Mains or Battery Powered



LIFETEK SERIES

Lifetek series environmental samplers are designed to perform sampling in compliance with European directives on **health and safety in the workplace**.

They are also used to sample **total dust, thoracic and respirable fractions (PM₁₀ and PM_{2,5})** and **asbestos fibers**.

When connected to any Isocheck series processor, the XP-R versions perform automatic isokinetic sampling in compliance with **EN ISO 16911-1** and **EN 13284-1 standards**.

The samplers are equipped with a **keyboard** and **display** for running the software with visualization and data storage. They also have a flow control device that permits automatic setting and adjustment of the sampling flow rate.

Whenever an alarm situation occurs (failure to maintain constant flow, lack of power, etc.) the anomaly is recorded and reported.

The volumetric meter is **dry type** with $\pm 2\%$ accuracy. An electronic sensor detects the air temperature sampled at the meter input for the subsequent volume normalization calculation.

The reduced dimensions and weight of all models allow easy transport even in hard to access areas. All models in the 33 and 55 series have dual power supply, i.e. they can use a mains power source and / or external standard batteries or make use of a battery box (optional).

The **Lifetek 55 model** is equipped with an atmospheric pressure sensor and an ambient temperature sensor, enabling it to perform daily **fine dust (PM₁₀, PM_{2,5}, PM₁)** sampling in both indoor and outdoor environments, by adjusting the sampling flow according to environmental conditions to ensure accurate measurements.

The **Lifetek 100 model** is also used **for sampling fine dust (PM₁₀, PM₄, PM_{2,5}, PM₁)** in emissions where the impactor complies with **EN ISO 23210**.



LIFETEK SERIES

TECHNICAL FEATURES

- Electronic system for **automatic load loss compensation**
- **Digital vacuum gauge** for measuring sampling line pressure drop
- Digital flow setting and variation via keyboard (even during sampling)
- **Automatic flow regulation** (no requirement for external accessories or flowmeters)
- Possibility to adjust the duration of the sampling or the volume aspirated via software and to set a delayed start

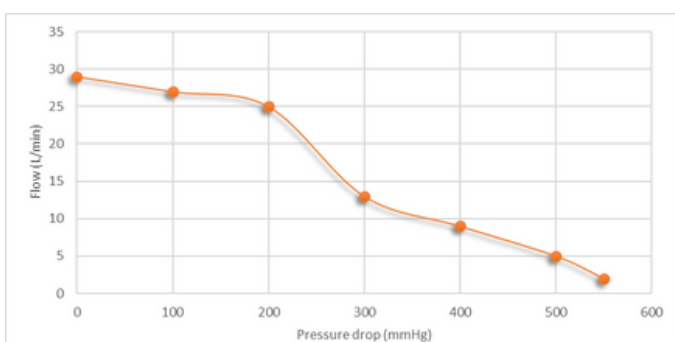


SOFTWARE FEATURES

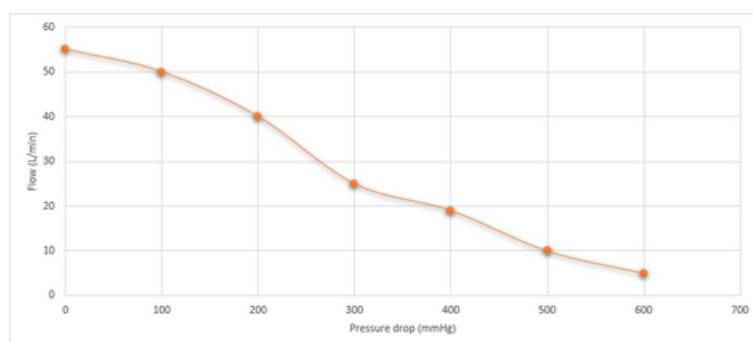
- Constant flow environmental sampling
- Constant flow (PM version) environmental sampling of PM₁₀, PM_{2.5}, PM₁
- Semi-automatic isokinetic samplings with manual parameter input
- Automatic isokinetic samplings with thermodynamic parameter detection by Isocheck series processor

CHARACTERISTIC CURVE OF THE PUMP

Lifetek 33



Lifetek 55

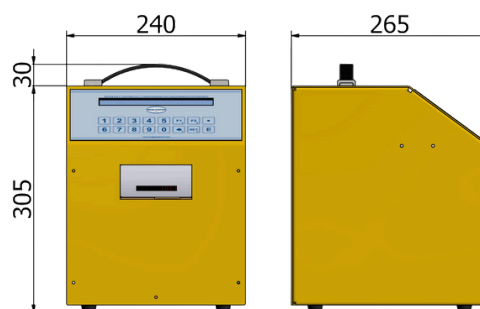


LIFETEK SERIES

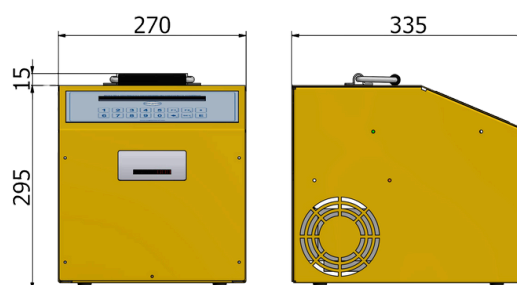
TECHNICAL FEATURES

MODEL	LIFETEK 33	LIFETEK 55	LIFETEK 100
• PERFORMANCE			
Pump type	Membrane mono-head 1,8 m³/h	Membrane dual-head 4 m³/h	Rotary vane 6 m³/h
Operating range	0,3 ÷25 l/min	1÷ 50 l/min	5 ÷ 70 l/min
Maximum vacuum	> 600 mmHg		
Volumetric meter/ Resolution/Accuracy	G 2,5 / 0,2 l / ±2%		G4/ 0,2l /±2%
Flow	Automatic regulation		
• INTERFACE, DATA ARCHIVING			
Display	LED Alphanumeric (40x2)		
RS232 for data download to PC			
RS232 for connections to ISOCHECK series			
• ENVIRONMENTAL CONDITIONS			
Temperature	0 °C ÷ 45 °C - 95% UR		
• ENERGY			
Power	230 ± 50 Hz		
Average consumption	50 W	100 W	250 W
Acoustic power (distance 8 meters)	12 Vcc (not included)	24 Vcc (not included)	-
• FEATURES			
Pump weight	7 kg	11 kg	20 kg
• OPTIONS			
Electrovalve gas inlet	-	✓	✓
Dry gas meter LAT certification			
• SUPPLIED WITH			
Technical manual			
Test report			

LIFETEK 33



LIFETEK 55



LIFETEK 100

