SPRING-LESS VALVE

MICROLITLENTUS™

Bottle Top Dispenser for Hydrofluoric Acid

High-purity Media • Acids & Bases for Trace Analysis

ISO 17025

CE

ISO 9001

UK
ISO 13485

We are World Leaders in Bottle Top Dispensing Technology

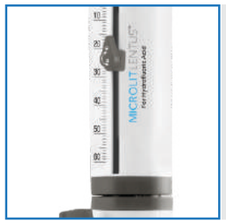
MICROLIT LENTUS™ Bottle Top Dispenser (BTD) is a high precision liquid handling instrument engineered with carefully selected and tested materials for use with Hydrofluoric Acid (HF).

MICROLIT LENTUS™ can precisely dispense high-purity media. When high-purity materials are dispensed with the dispenser after appropriate cleaning, they release virtually no metal ions. This makes the dispenser suitable for trace analysis.

Built by our in-house team of product design engineers, it uses Springless Valve™, an award winning technology, and Recirculation Valve for preventing loss of reagent during purging.
MICROLIT LENTUS™ also features two product innovations, EasyKnob™ and FlexiNozzle™ that enhance its ease of use and flexibility.

Designed with ergonomics and intuitive handling in mind, it exhibits excellent chemical compatibility with HYDROFLUORIC ACID (HF) and other reagents and chemicals to achieve precision and safety with reliability in practical laboratory environments.

Experience the Power of Precision and Safety in HYDROFLUORIC ACID DISPENSING.



Change Volume with EasyKnob™

EasyKnob™ is a specially designed volume adjustment knob that allows 180° rotation for easy and effortless volume setting.

Move Effortlessly with a PTFE Piston

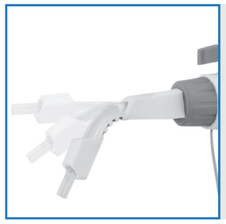
A PTFE Piston with an ETP O-Ring facilitates smooth and effortless movement and ensures high chemical compatibility.

Re-direct Liquids with Recirculation Valve

Recirculation Valve prevents the loss of reagents during purging by re-directing them into the mounted bottle and facilitates bubble free dispensing.

Operate Jam-free with Springless Valve™

MICROLIT LENTUS™ comes with an award-winning technology, Springless Valve™, that facilitates smooth and jam-free functioning.

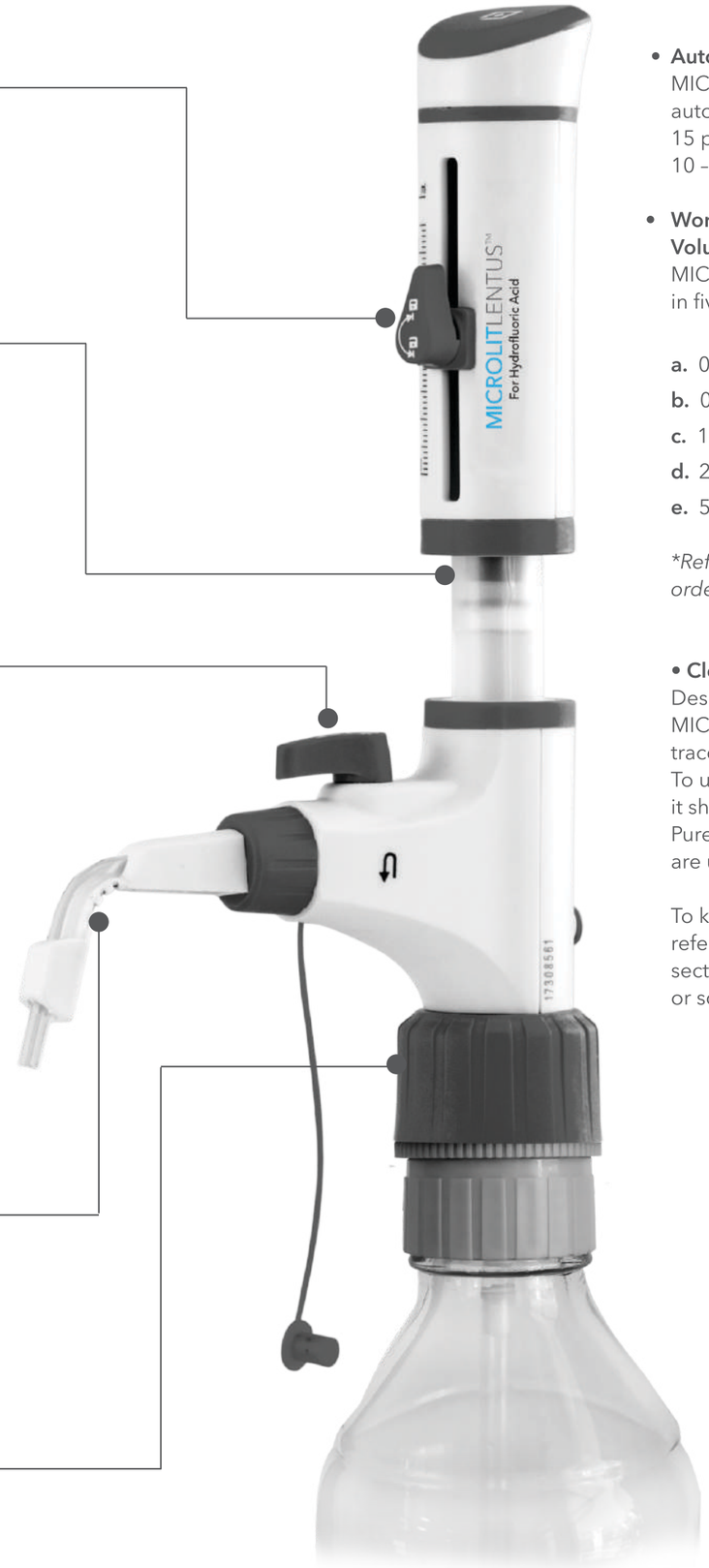


Dispense Easily with FlexiNozzle™

FlexiNozzle™ is an adjustable delivery nozzle. It offers a high degree of flexibility, facilitating easy dispensing in demanding laboratory conditions.

Work Flexibly with a 360° Adapter

A specially designed Adapter allows 360° rotation, facilitating complete work flexibility.



- **Autoclaving Parameters**
  MICROLIT LENTUS™ is fully autoclavable at 121 °C and 15 psi for a duration of 10 – 15 minutes.

- **Work with a Comprehensive Volume Range**
  MICROLIT LENTUS™ is available in five unique volume ranges:

  a. 0.25-2.5 ml
  b. 0.5-5 ml
  c. 1-10 ml
  d. 2.5-30 ml
  e. 5-60 ml

  **Refer to the specifications and ordering information.*

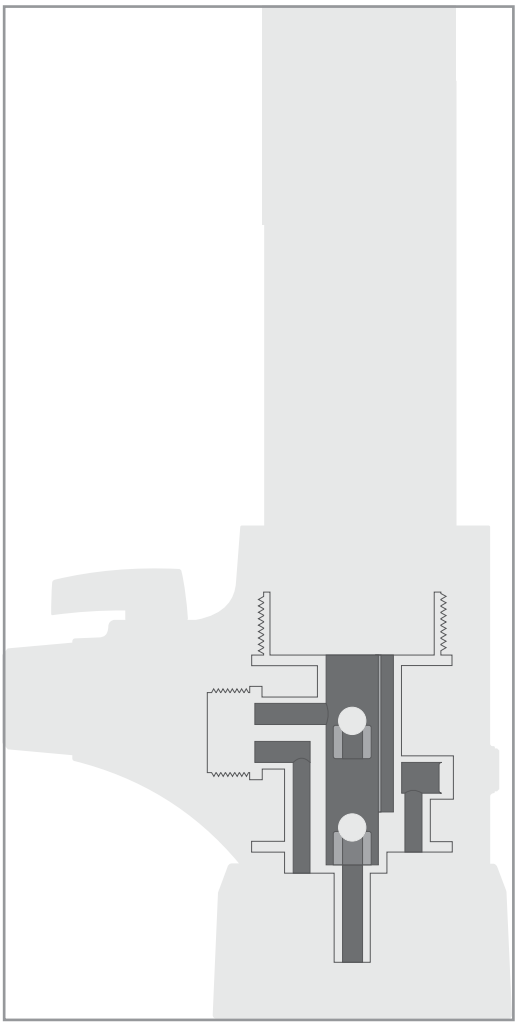
- **Cleaning for Trace Analysis**
  Designed to dispense Hydrofluoric Acid, MICROLIT LENTUS™ can also be used for trace analysis.
  To use the dispenser for trace analysis, it should be thoroughly cleaned.
  Pure chemicals used for analytical purposes are used for this cleaning procedure.

  To know the detailed cleaning procedure, refer to the 'Cleaning for Trace Analysis' section of the product operation manual or scan the QR Code below:

Excellent compatibility with Hydrofluoric Acid

Hydrofluoric Acid (HF) is a highly corrosive liquid and standard organic & inorganic reagent dispensers are not designed to be used with it. MICROLIT LENTUS™ is engineered with carefully selected and tested materials for use with Hydrofluoric Acid.

Enhance your Productivity with Springless Valve™ Technology



Traditional Bottle Top Dispensers contain two valves with glass balls:

Inlet Valve - This valve is vertical. It operates under gravity and does not require a spring to hold the glass ball in its position, in order to keep the valve closed.

Outlet Valve - This valve is horizontal. It requires a spring to keep the glass ball in its position, in order to keep the valve closed while aspirating reagents in the barrel. It opens only when a reagent is being dispensed. **The spring housed in the Outlet Valve, poses a lot of problems** including metal reactivity and availability of a surface for deposition of chemicals. This results in a piston jam, thereby compelling the user to repeatedly clean the valve, or replace it altogether.

Our product design engineers have expertly addressed these problems by designing a system where both Inlet and Outlet Valves are vertical and hence do not require any spring. This Springless Valve™ Technology ensures that LENTUS™ offers smooth, jam-free piston movement and also service-free operation.
The valve system of MICROLIT LENTUS™ consists of high purity ceramic components to ensure maximum resistance to Hydrofluoric Acid (HF).

Work with a Sophisticated Accessory Range that Enhances Flexibility

Adapters

The instrument comes with five adapters that comfortably fit most laboratory reagent bottles. The available sizes are –
28 mm, 32 mm, 38 mm, 40 mm and 45 mm.

Extendable Tube

A Telescoping Tube, that can be adjusted according to a variety of bottle sizes, is provided as an inside-the-box accessory.

*ISO 8655 is the globally accepted industry standard for piston-operated volumetric apparatus. The evaluation was performed by trained and certified personnel at an ISO17025 accredited lab.

The precision and accuracy of our liquid handling instruments is twice better than industry standards.*

Assured Quality with ISO 8655 Conformed Calibration

MICROLIT LENTUS™ is calibrated in an ISO 17025 accredited laboratory according to ISO 8655 standards.

A calibration certificate is included inside the product package.

A calibration tool is also included for quick in-lab recalibration.

Product Excellence

MICROLIT LENTUS™ reflects the design philosophy of our organization, combining the best performance parameters with the best user experience for dispensing Hydrofluoric acid, high - purity media and acids and bases for trace analysis.

MICROLIT LENTUS™ is manufactured as per ISO 9001, ISO 13485 and ISO 17025 standards. The product is CEcertified.

Additionally, Microlit was honoured by CII Industrial Innovation Awards and adjudged a place in the top 25 Most Innovative Companies of 2016.

CII INDUSTRIAL INNOVATION AWARDS 2016 Top 25 Most Innovative Companies

We are also accredited by a number of global organizations and have earned worldwide credibility.

SPECIFICATIONS AND ORDERING INFORMATION

Model No.	Vol. Range	Increment	Accuracy		CV	
			±%	±ml	±%	±ml
LNT-HF-2.5	0.25-2.5 ml	0.05 ml	0.6	0.015	0.2	0.005
LNT-HF-5	0.5-5 ml	0.1 ml	0.6	0.030	0.2	0.010
LNT-HF-10	1-10 ml	0.2 ml	0.6	0.060	0.2	0.020
LNT-HF-30	2.5-30 ml	0.5 ml	0.6	0.180	0.2	0.060
LNT-HF-60	5-60 ml	1.0 ml	0.6	0.360	0.2	0.120

The error limits (Accuracy and Coefficient of Variation) mentioned above are in accordance with the nominal capacity (or maximum volume) indicated on the instrument. These are obtained by using the instrument with distilled water at equilibrium, the ambient temperature of 20 °C while operating it smoothly and steadily. The error limits are in accordance with DIN EN ISO 8655-5.

EXPERIENCE PRECISION

MICROLIT

OUR REACH

YOUR SATISFACTION IS OUR PRIORITY

Microlit products follow GMP norms and are manufactured under comprehensive QA (Quality Assurance) and QC (Quality Control). However, if you are dissatisfied with the operation of any of our products, get in touch with us or call your nearest Microlit dealer for free replacement.

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