

## ■ mLINE® Mechanical Pipettes

### Effortless Accuracy

Sartorius' most advanced mechanical pipette in the Biohit *family* – the mLINE – offers excellent ergonomics, performance and safety in manual pipetting. It is particularly designed for repetitive and long-lasting pipetting in order to prevent work related hand, arm and shoulder disorders or Repetitive Strain Injury (RSI). mLINE is recommended by health and safety officers around the globe. It covers the full volume range of 0.1 µl to 10 ml and is available in single- and multichannel models.

- Excellent ergonomics to protect from injuries, with the exceptionally light pipetting and tip ejection forces
- High accuracy and precision, also in repetitive, long-lasting pipetting
- Minimised risk of contamination with Safe-Cone Filters and full autoclavability
- Increased safety with volume lock which prevents accidental volume changes while pipetting
- Thermal insulation of internal components to improve accuracy



Extremely light pipetting forces & ergonomic design  
 – Prevents repetitive strain injury (RSI)  
 – Better pipetting results in long pipetting series

Ergonomic finger support  
 – No need to squeeze the pipette during pipetting, reduces the risk of RSI



### □ Features and Benefits

Smooth and light volume setting  
 – Prevents hand injuries, can be adjusted by finger tips

Thermal insulation of internal components to improve accuracy

Volume colour-coding  
 – Eases correct Sartorius tip selection, through matching colour code

Unique thumb-activated light filter-ejection mechanism

Materials have high chemical and UV-resistance  
 – Highly durable and long lasting pipette

Large numbers used on volume display  
 – Quick and easy-to-read volume minimises risk of volume-setting errors

Volume lock  
 – Prevents accidental volume changes while pipetting

Easy to use "do-it-yourself" calibration  
 – Quick re-calibration possible e.g. for different liquids

Only three parts to disassemble  
 – The easiest pipette to clean and maintain, improves purity

Fully autoclavable without disassembly (excl. 1200 µl multi-channel pipettes)  
 – Easy to steam sterilise, improves purity



Optiload for perfect tip sealing  
 – Allows tip loading with an equal constant force onto every channel  
 – Enables perfect tip sealing onto every individual tip cone  
 – Makes tip ejection light and easy



Safe-Cone Filters available for models > 10 µl  
 – Contamination-free pipetting





### Superior Ergonomics

mLINE pipettes have a patented spring mechanism (plunger technology) resulting in exceptionally light pipetting forces. The tension spring mechanism makes the pipetting force almost 4 times lighter than conventional compression spring operated pipettes. Light pipetting force improves pipetting precision in long pipetting series. Thanks to the device's unique spring mechanism, the starting force is always constant, regardless of the set volume, which improves pipetting results especially for small volumes.



### Perfect Tip Sealing with Optiload Tip Loading Mechanism

All mLINE pipettes are equipped with spring loaded tip cones – the Optiload mechanism secures even tip sealing and simultaneously allows tips to be loaded and ejected with minimum force. This is a particular advantage with multichannel models, where tip loading and ejecting generally requires more force. Using less force reduces the risk of hand injuries.



### Prevent Contamination with Safe-Cone Filters

Replaceable Safe-Cone Filters act as a barrier, preventing aerosols or fluids from reaching the internal components of the pipette. Safe-Cone Filters are available for all mLINE models greater than 10 µl. These filters must be replaced regularly, and in every case of over-aspiration.

### Unique Safe-Cone Filter Ejection Mechanism

Safe-Cone filters can easily and safely be ejected by removing the colour cap and pressing all the way down on the operating button.

### Ordering Information

#### mLINE®

Cat. No.	Channels	Volume Range (µl)	Increment (µl)	Test Volume (µl)	Inacc. (%)	Impr. (%)	Safe-Cone Filters		Optifit Tips (µl)	SafetySpace™ Filter Tips (µl)
							Standard	Plus		
725010	1	0.1-3	0.002	3 1.5 0.3	1.30 2.40 10.00	0.80 1.60 6.00	-	-	10	10
725020	1	0.5-10	0.01	10 5 1	1.00 1.50 2.50	0.60 1.00 1.50	-	-	10	10
725030	1	2-20	0.02	20 10 2	0.90 1.20 3.00	0.40 1.00 2.00	721014	-	200	20
725050	1	10-100	0.10	100 50 10	0.80 1.00 2.00	0.15 0.40 1.00	721008	721018	200 350	120
725060	1	20-200	0.20	200 100 20	0.60 0.80 2.00	0.15 0.30 0.80	721007	721017	200 350	200 300
725070	1	100-1000	1.00	1000 500 100	0.60 0.60 1.00	0.20 0.20 0.40	721006	721016	1000	1000
725080	1	500-5000	10.0	5000 2500 500	0.50 0.60 2.00	0.20 0.30 0.60	721005	721015	5000	-
725090	1	1-10 ml	20.0	10000 5000 1000	0.60 1.20 3.00	0.20 0.30 0.60	721005	721015	10 000	-
725120	8	0.5-10	0.01	10 5 1	1.50 2.50 4.00	1.00 2.50 4.00	-	-	10	10
725130	8	5-100	0.10	100 50 10	0.70 1.00 3.00	0.25 0.70 1.50	721008	721018	200 350	120
725140	8	30-300	0.20	300 150 30	0.60 1.00 2.00	0.25 0.50 1.00	721007	721017	350	300
725220	12	0.5-10	0.01	10 5 1	1.50 2.50 4.00	1.00 2.50 4.00	-	-	10	10
725230	12	5-100	0.10	100 50 10	0.70 1.00 3.00	0.25 0.70 1.50	721008	721018	200 350	120
725240	12	30-300	0.20	300 150 30	0.60 1.00 2.00	0.25 0.50 1.00	721007	721017	350	300

### Ordering Information

#### Pipette Stands and Accessories

Cat. No.	Item
725600	Carousel Stand for 6 pipettes
725610	Pipette Holder for one pipette
725620	Linear Stand
726203	Calibration tool   Tube opener
726001	Colour coding caps, 5 pcs



Carousel Stand



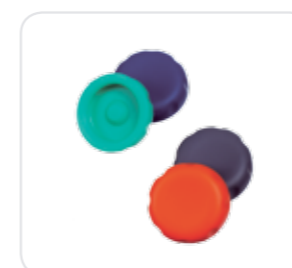
Pipette Holder



Linear Stand



Calibration tool



### Ordering Information

mLINE Starter Kit offers an opportunity to test and get started with mLINE pipettes. You can choose between two Starter Kits with three single-channel pipettes of different volumes. Both kits also include colour coded tip racks for every pipette and many useful accessories such as a pipette holder,

colour coding caps and a calibration tool, which also acts as a tube opener. mLINE PCR Starter Kit includes all you need to make your PCR work fast and reliable. A cooling rack keeps valuable samples stable while working, thereby increasing reliability.

### Ordering Information

Cat. No.	Item
725651	<b>mLINE® Starter Kit 1</b> mLINE 0.5 – 10 µl mLINE 10 – 100 µl mLINE 100 – 1000 µl Optifit Tip 0.1 – 10 µl, Single Tray Optifit Tip 0.5 – 200 µl, Single Tray Optifit Tip 10 – 1000 µl, Single Tray Pipette Holder × 3 Colour Coding Caps Calibration Tool   Tube Opener × 3 Pen Literature
725652	<b>mLINE® Starter Kit 2</b> mLINE 2 – 20 µl mLINE 20 – 200 µl mLINE 100 – 1000 µl Optifit Tip 0.5 – 200 µl, Single Tray Optifit Tip 10 – 1000 µl, Single Tray Pipette Holder × 3 Colour Coding Caps Calibration Tool   Tube Opener × 3 Pen Literature
725660	<b>mLINE® PCR Starter Kit 3</b> mLINE 0.5 – 10 µl mLINE 10 – 100 µl mLINE 100 – 1000 µl SafetySpace Filter Tip 0.1 – 10 µl, Single Tray, sterile SafetySpace Filter Tip 2 – 120 µl, Single Tray, sterile SafetySpace Filter Tip 50 – 1000 µl, Single Tray, sterile Pipette Holder × 3 Colour Coding Caps Calibration Tool   Tube Opener × 3 Cryo Pen Cooling Rack for Micro Tubes