

■ mLINE® Mechanical Pipettes

Effortless Accuracy



mLINE® low pipetting forces protect laboratory workers from injury.



OptiLoad secures even tip sealing onto every individual tip cone, and allows tips to be loaded and ejected with minimum force.



Safe-Cone Filters protect the pipette from contamination, and should be changed regularly.

Sartorius' mechanical pipette family – the mLINE® – offers excellent ergonomics, performance and safety in manual pipetting. It is designed to maintain high accuracy and precision in repetitive and long-lasting manual pipetting. Its excellent ergonomics minimize the risk of work related hand, arm and shoulder disorders and Work Related Upper Limb Disorder (WRULD).

It covers the full volume range of 0.1 µl to 10 ml and is available in single- and multi-channel models.

Excellent Ergonomics with Low Pipetting Forces

Excellent ergonomics and low pipetting forces protect laboratory workers from injury. mLINE® has exceptionally light pipetting and tip ejection forces due to its patented spring mechanism. The light pipetting force improves pipetting precision in long pipetting series.

The starting forces in mLINE® pipettes are always constant, regardless of the set volume. This improves pipetting results especially for small volumes.

OptiLoad – Loading Tips with Minimum Force

mLINE® pipettes have spring-loaded tip cones – the OptiLoad mechanism – on both single and multi-channel models. OptiLoad secures even tip sealing onto every individual tip cone, and allows tips to be loaded and ejected with minimum force. This is an advantage especially when working with multi-channel models that otherwise would require more force for tip loading and ejection than a single-channel model.

Safe-Cone Filters Protect the Pipette

The replaceable Safe-Cone Filter located inside the tip-cone prevents aerosols and fluids from penetrating the pipette, also in cases of over-aspiration. The use of Safe-Cone Filters lengthens the maintenance interval of the pipette.

Safe-Cone Filters are available for all mLINE® models greater than 10 µl. They must be replaced regularly, and always in cases of over-aspiration. Safe-Cone Filters can easily and safely be ejected by removing the colour cap and pressing down the operating button.

□ Features and Benefits

- Low pipetting forces that prevent WRULD and improve results in long pipetting series
- Ergonomic finger support minimizes the grip force needed to hold the pipette
- OptiLoad mechanism in both single- and multi-channel models for easy and light tip loading with perfect tip sealing
- Single and multi-channel models
- Volume adjustment locking for preventing accidental volume changes
- Big volume display
- Colour-coding of volumes to ease the selection of corresponding pipette tips
- Safe-Cone Filters available for models > 10 µl with convenient filter ejection mechanism
- Fully autoclavable without disassembly
- Simple to clean and maintain with only three parts to disassemble
- Materials have high chemical and UV-resistance to ensure a long life span for the pipette



Ordering Information

| mLINE® Order Code | Channels | Volume Range (µl) | Increment (µl) | Test Volume (µl) | Systematic Error ^N Limit ± (%) (µl) | Random Error ^N Limit (%) (µl) | | | |
|----------------------|----------|-------------------------|-------------------|---------------------|--|--|------|-------|--|
| 725010 | 1 | 0.1 – 3 | 0.002 | 3 | 1.4 | 0.042 | 0.8 | 0.024 | |
| | | | | 1.5 | 2.6 | 0.039 | 1.6 | 0.024 | |
| | | | | 0.3 | 10.0 | 0.030 | 6.0 | 0.018 | |
| 725020 | 1 | 0.5 – 10 | 0.01 | 10 | 1.0 | 0.100 | 0.6 | 0.060 | |
| | | | | 5 | 1.5 | 0.075 | 1.0 | 0.050 | |
| | | | | 1 | 3.0 | 0.030 | 2.0 | 0.020 | |
| 725030 | 1 | 2 – 20 | 0.02 | 20 | 1.0 | 0.200 | 0.5 | 0.100 | |
| | | | | 10 | 1.4 | 0.140 | 0.9 | 0.090 | |
| | | | | 2 | 4.0 | 0.080 | 3.0 | 0.060 | |
| 725050 | 1 | 10 – 100 | 0.10 | 100 | 0.8 | 0.80 | 0.2 | 0.20 | |
| | | | | 50 | 1.0 | 0.50 | 0.4 | 0.20 | |
| | | | | 10 | 3.0 | 0.30 | 1.0 | 0.10 | |
| 725060 | 1 | 20 – 200 | 0.20 | 200 | 0.6 | 1.20 | 0.2 | 0.40 | |
| | | | | 100 | 0.8 | 0.80 | 0.3 | 0.30 | |
| | | | | 20 | 2.3 | 0.46 | 0.9 | 0.18 | |
| 725070 | 1 | 100 – 1,000 | 1.00 | 1,000 | 0.7 | 7.0 | 0.2 | 2.0 | |
| | | | | 500 | 0.8 | 4.0 | 0.2 | 1.0 | |
| | | | | 100 | 2.5 | 2.5 | 0.6 | 0.6 | |
| 725080 | 1 | 500 – 5,000 | 10.0 | 5,000 | 0.6 | 30 | 0.2 | 10 | |
| | | | | 2,500 | 0.7 | 17.5 | 0.3 | 7.5 | |
| | | | | 500 | 2.4 | 12 | 0.6 | 3 | |
| 725090 | 1 | 1,000 – 10,000 | 20.0 | 10,000 | 0.6 | 60 | 0.2 | 20 | |
| | | | | 5,000 | 1.2 | 60 | 0.3 | 15 | |
| | | | | 1,000 | 3.0 | 30 | 0.6 | 6 | |
| 725120 | 8 | 0.5 – 10 | 0.01 | 10 | 1.5 | 0.150 | 1.0 | 0.100 | |
| 725220 | 12 | | | 5 | 2.5 | 0.125 | 2.0 | 0.100 | |
| | | | | 1 | 5.5 | 0.055 | 4.0 | 0.040 | |
| 725130 | 8 | 5 – 100 | 0.10 | 100 | 0.9 | 0.90 | 0.4 | 0.40 | |
| 725230 | 12 | | | 50 | 1.2 | 0.60 | 0.7 | 0.35 | |
| | | | | 10 | 4.0 | 0.40 | 2.0 | 0.20 | |
| 725140 | 8 | 30 – 300 | 0.20 | 300 | 0.6 | 1.80 | 0.25 | 0.75 | |
| 725240 | 12 | | | 150 | 1.0 | 1.50 | 0.5 | 0.75 | |
| | | | | 30 | 2.5 | 0.75 | 1.0 | 0.30 | |

Tip Selection Guide

| Pipette Colour-Code | Safe-Cone Filters Standard Plus | Optifit Tip ^{LRT} Colour-Code | Volume | SafetySpace Tip ^{LRT} Colour-Code | Volume |
|------------------------|------------------------------------|---|-----------------|---|---------------|
| ● | - - | ● | 0.1 – 10 µl | ● | 0.1 – 10 µl |
| ● | - - | ● | 0.1 – 10 µl | ● | 0.1 – 10 µl |
| ● | 721008 721018 | ● | 0.5 – 200 µl | ● | 0.5 – 20 µl |
| ● | 721008 721018 | ● | 0.5 – 200 µl | ● | 2 – 120 µl |
| | | ● | 5 – 350 µl | | |
| ● | 721007 721017 | ● | 0.5 – 200 µl | ● | 5 – 200 µl |
| | | ● | 5 – 350 µl | ● | 5 – 300 µl |
| ● | 721006 721016 | ● | 10 – 1,000 µl | ● | 50 – 1,000 µl |
| ● | 721005 721015 | ● | 100 – 5,000 µl | - | - |
| ● | 721005 721015 | ● | 500 – 10,000 µl | - | - |
| ● | - - | ● | 0.1 – 10 µl | ● | 0.1 – 10 µl |
| ● | 721008 721018 | ● | 0.5 – 200 µl | ● | 5 – 200 µl |
| | | ● | 5 – 350 µl | | |
| ● | 721007 721017 | ● | 5 – 350 µl | ● | 5 – 300 µl |

^N Note: The listed systematic and random error values can be achieved only under strictly controlled conditions during type tests per ISO 8655. Due to the continuous product development by Sartorius, the systematic and random error values are subject to change without prior notice.

^{LRT} Note: Low Retention Tips are available in volumes up to 1,200 µl. The best compatibility is achieved when combining Sartorius pipettes and Sartorius tips. The systematic error and random error results, in tests, have been achieved using Sartorius Optifit tips.

□ mLINE® Multipacks - Complete Sets of Pipettes and Accessories

mLINE® Multipacks offer are sets of mechanical pipettes in an affordable package, including a Linear Stand and racks of matching tips.

□ Ordering Information

| Multipack Order Code | mLINE® Pipettes | Sartorius Optifit Tips | Accessories |
|---------------------------------------|--|--|--------------|
| mLINE® Pipette 3-pack 10 LH-725661 | 1-channel – 0.5 – 10 µl – 10 – 100 µl – 100 – 1,000 µl | Tip Racks (96 tips) – 0.1 – 10 µl – 0.5 – 200 µl – 10 – 1,000 µl | Linear Stand |
| mLINE® Pipette 3-pack 20 LH-725662 | 1-channel – 2 – 20 µl – 20 – 200 µl – 100 – 1,000 µl | Tip Racks (96 tips) – 0.5 – 200 µl – 10 – 1,000 µl | Linear Stand |
| mLINE® Pipette 4-pack LH-725663 | 1-channel – 0.5 – 10 µl – 10 – 100 µl – 20 – 200 µl – 100 – 1,000 µl | Tip Racks (96 tips) – 0.1 – 10 µl – 0.5 – 200 µl – 10 – 1,000 µl | Linear Stand |
| mLINE® Pipette 5-pack LH-725664 | 1-channel – 2 – 20 µl – 10 – 100 µl – 20 – 200 µl – 100 – 1,000 µl – 500 – 5,000 µl | Tip Racks (96 tips) – 0.5 – 200 µl – 10 – 1,000 µl Tip Rack (50 tips) – 5,000 µl | Linear Stand |
| mLINE® Pipette 3+1-pack LH-725665 | 1-channel – 0.5 – 10 µl – 20 – 200 µl – 100 – 1,000 µl 8-channel – 30 – 300 µl | Tip Racks (96 tips) – 0.1 – 10 µl – 0.5 – 200 µl – 5 – 350 µl – 10 – 1,000 µl | Linear Stand |

