

## ■ Proline® Plus Mechanical Pipettes

### Dependable Durability

113.1; 113.3; 113.5 pirkimo  
dalys



Proline® Plus has a comfortable handle and an ergonomic finger support for effortless pipetting.



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



Proline® Plus pipettes have only three parts that need cleaning and maintenance.

Sartorius' mechanical pipette Proline® Plus is designed to offer comfort and quality to manual pipetting. While it shares many of the excellent features of mLINE®, it has a personal design and a robust feel for heavier use. In addition, it has the widest pipette range, including fixed volume pipettes, for when volumes need to be ready-set to avoid errors. Proline® Plus pipettes are an excellent choice for both experienced laboratory professionals and students.

#### Ergonomic Design

Proline® Plus has low pipetting forces, a comfortable handle and an ergonomic finger support for effortless pipetting. Good fit in hand minimizes the grip force needed to hold the pipette, thereby reducing the risk of strain injury.

#### Loading Tips on Multi-channel Pipettes with Minimum Force

Loading and ejecting tips with multi-channel pipettes requires relatively high forces. Proline® Plus multi-channel pipettes have spring loaded tip cones – the Optiload mechanism.

Optiload allows tips to be loaded and ejected with minimum force, which reduces the risk of hand injuries. Moreover, it secures even tip sealing onto every individual tip cone.

#### Protect the Pipette with Safe-Cone Filters

The replaceable Safe-Cone Filter located inside the tip-cone prevents aerosols and fluids from penetrating the pipette, also in case of over-aspiration. The use of Safe-Cone Filters lengthens the maintenance interval of the pipette. Safe-Cone Filters are available for all Proline® Plus models greater than 10 µl. They must be replaced regularly, and always in case of over-aspiration.

#### Easy Maintenance and Calibration

No opening tools are needed for cleaning and maintaining Proline® Plus pipettes, and only three parts need to be cleaned. These pipettes are also easy to calibrate using the calibration tool that is provided with the pipette.



Fully autoclavable

## □ Features and Benefits

- Low pipetting forces that prevent RSI and improve results in long pipetting series
- Ergonomic finger support minimizes the grip force needed to hold the pipette
- Optiload mechanism in multi-channel models for easy and light tip loading with perfect tip sealing
- Wide variety of adjustable single and multi-channel models as well as fixed single-channel models
- Volume range from 3 µl (5 µl for fixed) to 10 ml
- Easy volume setting with click stop mechanism
- Easy-to-read volume display
- Colour-coding of different volumes to ease the selection of matching pipette tips
- Safe-Cone Filters available for models > 10 µl
- Fully autoclavable without disassembly
- Simple to clean and maintain with only three parts to disassemble
- Easy user calibration e.g. for different liquids
- Materials have high chemical and UV-resistance to secure long lifetime of the pipette



## Ordering Information

### Proline® Plus

Order Code	Channels	Volume Range (µl)	Colour-Coding	Increment (µl)	Test Volume (µl)	Systematic Error* (%)	Random Error* (%)	Safe-Cone Filters	
								Standard	Plus
728010	1	0,1 – 3	●	0,002	3	1,30	0,80	-	-
					1,5	2,40	1,60		
					0,3	10,00	6,00		
113.1 728020	1	0,5 – 10	●	0,01	10	1,00	0,60	-	-
					5	1,50	1,00		
					1	2,50	1,50		
728030	1	2 – 20	●	0,02	20	0,90	0,40	721014	-
					10	1,20	1,00		
					2	3,00	2,00		
728040	1	5 – 50	●	0,10	50	1,00	0,30	721008	721018
					25	1,40	0,50		
					5	3,00	1,50		
113.3 728050	1	10 – 100	●	0,10	100	0,80	0,15	721008	721018
					50	1,00	0,40		
					10	2,00	1,00		
728060	1	20 – 200	●	0,20	200	0,60	0,15	721007	721017
					100	0,80	0,30		
					20	2,30	0,90		
113.5 728070	1	100 – 1000	●	1,00	1000	0,70	0,20	721006	721016
					500	0,70	0,20		
					100	2,00	0,50		
728080	1	500 – 5000	●	10,0	5000	0,50	0,20	721005	721015
					2500	0,60	0,30		
					500	2,00	0,60		
728090	1	1 – 10 ml	●	20,0	10000	0,60	0,20	721005	721015
					5000	1,20	0,30		
					1000	3,00	0,60		
728120	8	0,5 – 10	●	0,01	10	1,50	1,00	-	-
					5	2,50	2,50		
					1	4,00	4,00		
728130	8	10 – 100	●	0,10	100	0,70	0,25	721008	721018
					50	1,00	0,70		
					10	3,00	1,50		
728140	8	30 – 300	●	0,20	300	0,60	0,25	721007	721017
					150	1,00	0,50		
					30	2,00	1,00		
728220	12	0,5 – 10	●	0,01	10	1,50	1,00	-	-
					5	2,50	2,50		
					1	4,00	4,00		
728230	12	10 – 100	●	0,10	100	0,70	0,25	721008	721018
					50	1,00	0,70		
					10	3,00	1,50		
728240	12	30 – 300	●	0,20	300	0,60	0,25	721007	721017
					150	1,00	0,50		
					30	2,00	1,00		

\*The listed systematic and random error values are valid for pipetting mode only and are achieved under strictly controlled conditions during type tests per ISO 8655.

Due to the continuous product development by Sartorius, the systematic and random error values may change without prior notice.