

**BIOHIT**

Innovating for Health

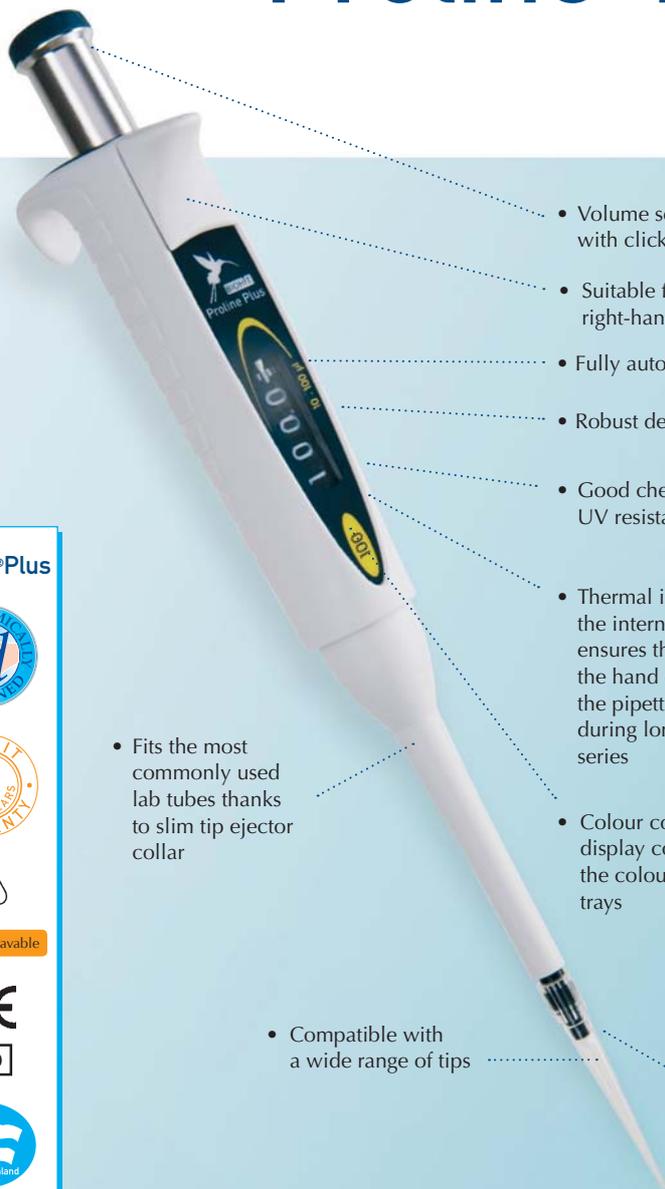
Designed  
to keep on  
going

**Proline® Plus**

Mechanical Single and  
Multichannel Pipettors



# Proline® Plus



- Volume setting with click stops
- Suitable for both left and right-handed users
- Fully autoclavable
- Robust design
- Good chemical & UV resistance
- Thermal insulation of the internal components ensures that the warmth of the hand does not affect the pipetting results during long pipetting series
- Colour coding on display corresponds to the colour coding of tip trays

- Fits the most commonly used lab tubes thanks to slim tip ejector collar

- Compatible with a wide range of tips

- Optiload tip loading for easy tip loading and ejection, as well as excellent tip sealing in multichannel models
- Safe-Cone Filters to prevent contamination



## Proline® Plus



Fully autoclavable



### 1. Quality matters in all pipetting

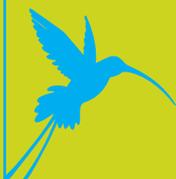
- Finnish high quality design
- Made in Finland by Biohit, the original Proline manufacturer in accordance with ISO 13485 / 9001 / 14001 quality and environmental standards
- Supplied with individual quality certificate (QC)
- Provides high accuracy and precision according to ISO 8655
- 3-year warranty
- CE/IVD marked

### 2. Good ergonomics – it fits any hand!

- Handle design is suitable for both left and right-handed users
- Finger support provides a relaxed grip and good balance
- Volume display is easy to read also during pipetting
- Tip loading and ejection are light and easy, with excellent tip sealing – also in multichannel models
- Pipetting forces are low

### 3. Prevent contamination – easily and cost-effectively

- Fully autoclavable without disassembling (121°C, 20 min)
- Proline Plus features unique Safe-Cone Filters that
  - prevent fluids and liquid vapours from reaching the internal components of the pipettor
  - help you prevent contamination of your pipettor and sample in your everyday work
  - prolong the pipettor life-time
  - are replaceable
  - can be removed by using a convenient forceps
  - are available for all models > 10 µl





PLUS IS MORE!

## Proline Plus – the classic Biohit Proline reborn

By the 1970s, Professor Osmo Suovaniemi – who later was to establish Biohit – together with his team at Labsystems developed and commercialised the adjustable single and multichannel air displacement pipettors, also known as the red-and-black Finnpiettes. These included the original 9-channel and the first 8- and 12-channel adjustable pipettors that were designed to aid the liquid handling work in the vertical photometry based analysers developed by Professor Suovaniemi (and his company Labsystems), such as the very first 96-well microplate reader (the Titertek Multiskan).

**European standards. Finnish design and production make the quality products of Biohit**

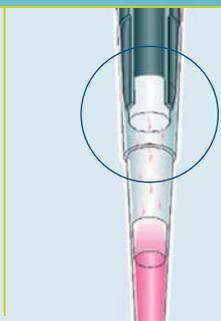
Biohit was established in 1988 and in 1990 the company launched its first electronic pipette, the Proline electronic, followed by the mechanical Proline in 1992. Over the years, Proline has taken its place in laboratories worldwide as an ergonomic, safe and reliable pipette suitable for all types of pipetting.

**Now the classical Proline has taken a new shape – Proline Plus**

In the new Proline Plus, the experienced R&D personnel of Biohit have combined the innovative ideas from the early years with new, modern pipette design and technology. Particular emphasis has been put on safety, ergonomics, and efficiency in pipetting, as well as on the high quality of the device.



- Fully autoclavable
- Improved UV-light resistance
- More ergonomic design
- Reduced pipetting and tip ejection force



#### 4. Basic calibration and maintenance couldn't be easier – do it yourself!

- No opening tools are needed
- Only 3 parts need to be cleaned – piston, tip cone and tip ejector collar
- Calibration is easy with the tool included in the package
- Should you want to leave it to a professional, Biohit offers complete maintenance, repair and calibration services

#### 5. The package includes:

- Proline Plus pipettor
- Calibration tool
- Autoclavable grease
- Tip
- Safe-Cone Filters (>10 µl) and forceps
- Manual
- QC-certificate

#### 6. Try it out with the convenient Starter Kit!

- Pipettors and tips
  - Kit 1: 0.1-3 µl, 0.5-10 µl, 2 single-tray tip boxes
  - Kit 2: 0.5-10 µl, 10-100 µl, 100-1000 µl, 3 single-tray tip boxes
  - Kit 3: 2-20 µl, 20-200 µl, 100-1000 µl, 3 single-tray tip boxes
  - Kit 4: 500-5000 µl, 1-10 ml, 2 bulk tip boxes
- Pipettor holder for each pipettor
- Calibration tool for each pipettor
- Literature

## Proline®Plus Single, FIXED and Multichannel Performance Specifications and Ordering Details

Cat. No.	Channels	Volume Range (µl)	Increment (µl)	Test Volume (µl)	Inacc. (%)	Impr. (%)	Safe-Cone Filters		Tip (µl)
							Standard	Plus	
728010	1	0.1-3 µl	0.002	3 1.5 0.3	1.30 % 2.40 % 10.00 %	0.80 % 1.60 % 6.00 %	-	-	10
728020	1	0.5-10 µl	0.01	10 5 1 0.5	1.00 % 1.50 % 2.50 % 5.00 %	0.60 % 1.00 % 1.50 % 4.00 %	-	-	10
728030	1	2-20 µl	0.02	20 10 2	0.90 % 1.20 % 3.00 %	0.40 % 1.00 % 2.00 %	721014	-	300
728050	1	10-100 µl	0.10	100 50 10	0.80 % 1.00 % 2.00 %	0.15 % 0.40 % 1.00 %	721008	721018	300, 350
728060	1	20-200 µl	0.20	200 100 20	0.60 % 0.80 % 2.00 %	0.15 % 0.30 % 0.80 %	721007	721017	300, 350
728070	1	100-1000 µl	1.00	1000 500 100	0.60 % 0.60 % 1.00 %	0.20 % 0.20 % 0.40 %	721006	721016	1000
728080	1	500-5000 µl	10.00	5000 2500 500	0.50 % 0.60 % 2.00 %	0.20 % 0.30 % 0.60 %	721005	721015	5000
728090	1	1-10 ml	20.0	10000 5000 1000	0.60 % 1.20 % 3.00 %	0.20 % 0.30 % 0.60 %	721005	721015	10000
728515	1	5 µl		5	1.30 %	1.20 %	-	-	10
728520	1	10 µl		10	0.80 %	0.80 %	-	-	10
728530	1	20 µl		20	0.60 %	0.50 %	721014	-	300, 350
728535	1	25 µl		25	0.50 %	0.30 %	721008	721018	300, 350
728545	1	50 µl		50	0.50 %	0.30 %	721008	721018	300, 350
728550	1	100 µl		100	0.50 %	0.30 %	721008	721018	300, 350
728560	1	200 µl		200	0.40 %	0.20 %	721007	721017	300, 350
728565	1	250 µl		250	0.40 %	0.20 %	721006	721016	1000
728567	1	500 µl		500	0.30 %	0.20 %	721006	721016	1000
728570	1	1000 µl		1000	0.30 %	0.20 %	721006	721016	1000
728575	1	2000 µl		2000	0.30 %	0.15 %	721005	721015	5000
728580	1	5000 µl		5000	0.30 %	0.15 %	721005	721015	5000
728590	1	10 ml		10000	0.60 %	0.20 %	721005	721015	10000
728120	8	0.5-10 µl	0.01	10 5 1	1.50 % 2.50 % 4.00 %	1.00 % 2.50 % 4.00 %	-	-	10
728130	8	10-100 µl	0.10	100 50 10	0.70 % 1.00 % 3.00 %	0.25 % 0.70 % 1.50 %	721008	721018	300, 350
728140	8	30-300 µl	0.20	300 150 30	0.60 % 1.00 % 2.00 %	0.25 % 0.50 % 1.00 %	721007	721017	350
728220	12	0.5-10 µl	0.01	10 5 1	1.50 % 2.50 % 4.00 %	1.00 % 2.50 % 4.00 %	-	-	10
728230	12	10-100 µl	0.10	100 50 10	0.70 % 1.00 % 3.00 %	0.25 % 0.70 % 1.50 %	721008	721018	300, 350
728240	12	30-300 µl	0.20	300 150 30	0.60 % 1.00 % 2.00 %	0.25 % 0.50 % 1.00 %	721007	721017	350

### Stands & Starter Kits

Cat. No.	Item
725600	Biohit Carousel Stand for 6 pipettors
725610	Biohit Pipettor Holder for one ProlinePlus/mLInE pipettor
725620	Linear Stand for all Biohit pipettors
728650	Starter Kit 1, 3/10 µl Proline Plus
728651	Starter Kit 2, 10/100/1000 µl Proline Plus
728652	Starter Kit 3, 20/200/1000 µl Proline Plus
728653	Starter Kit 4, 5000/10000 µl Proline Plus

The specifications are type test specifications achieved under strictly controlled conditions (ISO 8655). Due to Biohit's continuous R&D, specifications may change without prior notice.

Distributed by: