

Lab Products & Services US Selection Guide 2019



Sartorius Laboratory Products & Services

US Selection Guide 2019



Sartorius Laboratory Products and Services is a global provider offering integrated solutions for your everyday lab applications. An industry leader for over 140 years, we pride ourselves with our innovative expertise, diverse product portfolio, and excellent customer and product services.

Strongly rooted in the scientific community and closely allied with customers and technology partners, we provide laboratory weighing, filtration, purification, cell culture, microbiology, lab water, liquid handling, electrochemistry, and moisture products. Sartorius is dedicated to its philosophy of "turning science into solutions."

The purpose of this selection guide is to showcase features, benefits and specifications of our Lab products and services in an easy to follow format. Basic tables and simple graphic icons will allow you to find the right product for your application work-flows.



1870

Founding year of Sartorius

The "university mechanician" Florenz Sartorius founded a precision mechanical workshop, "Feinmechanische Werkstatt F. Sartorius."

1888

First short-beam analytical balance built

Florenz Sartorius unveiled a short beam analytical balance that stabilized much faster than the conventional balances available.

1927

A Sartorius membrane filter company was started with Nobel Prize winner Zsigmondy

The company's primary objective was research development and manufacturing novel membranes.

1940

Manufacture of the first filter devices

The first filter devices manufactured by Sartorius facilitated breakthroughs in sterile filtration and microbiological testing of liquid media and gases.

1945

Key player in providing clean drinking water during World War II

During and after World War II, people were exposed to considerable risk of contracting diseases. Sartorius helped alleviate the situation by providing filters for testing drinking water. These were the beginnings of bacteriological analysis, one of Sartorius's core areas of expertise.

1960

Sartorius develops a range of hemofiltration products for people with kidney failure

Sartorius worked closely with leading specialist clinics and hospitals to develop hemofiltration products for patients with renal insufficiency. Its crossflow filter units were used to reliably filter out toxins from the human body.

1962

Guinness Book of World Records

Sartorius manufactured a vacuum ultra-microbalance called "Gastnanogram." For many decades, it was listed in the Guinness Book of World Records as the "most accurate balance in the world."

1969

Sartorius is involved in the Apollo 11 mission

Sartorius caused a worldwide stir by weighing the first moon rocks brought back by Neil Armstrong on the Apollo 11 mission.

1970

First subsidiaries founded worldwide

At the beginning of the 1970s, Sartorius began to establish its own subsidiaries abroad.

1971 – The first subsidiary was founded in Austria, then more companies were established.

1975 – The U.S. subsidiary was incorporated, which started in a hotel room in San Francisco, California.

c. 1980

The first manufacturer of pleated membrane filter cartridges

Sartorius was the first manufacturer to create membrane filter cartridges using pleated material well known in air filter technology. This space-saving design is still the basis for today's innovations in pleated membrane filtration equipment.

2009

The first fully modular-design laboratory balance

Sartorius developed the world's first modular and menu-configurable series of laboratory balances. As a result, they give users customized instruments to make their everyday workflows much easier and more accurate.

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Fax: 631-254-4252

Tech Support

Phone: 800-635-2906 xt. 8215
Fax: 631-254-4252

Service

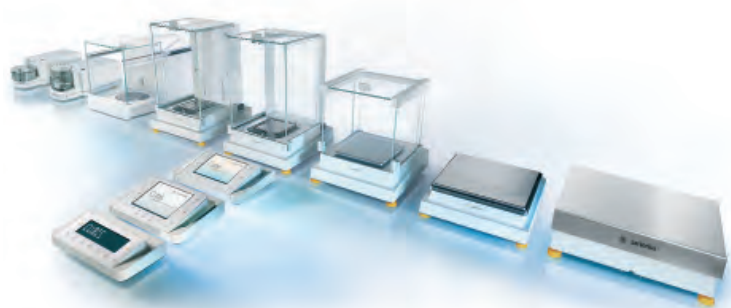
Phone: 800-635-2906 xt. 8733

All prices and specifications listed herein are subject to change without notice. List prices effective January 1, 2019 through December 31, 2019. Version 0119

Cubis® Premium Laboratory Balances

High Performance Weighing

Cubis® Premium Laboratory Balances offer a never before seen freedom of choice, as it's the first and only laboratory balance featuring a modular design to configure display|control units, weighing modules, draft shields and interfaces, as well as be adapted to the changing requirements of different applications. It's for users who expect the best possible performance from a laboratory balance, but who only want to invest in what is necessary.



Benefits

Only pay for what you need... modular balance design allows you to choose from different options to configure your balance to suit your individual needs and obtain the most optimal solution for integration into your weighing process.

Broad portfolio ranging from ultra-micro to high capacity balances with high-precision weighing performance for fast and accurate results.

Safe & easy to use with Q-Guide... specific tasks can be easily defined through the interactive operator guidance to program settings and hide information that isn't relevant.

With Q-Level, weigh with ease knowing your balance will always be level... Cubis® is the only laboratory balance that automatically checks, performs and documents its exact leveling¹.

Cubis® individual... a more effective way to increase process efficiency and promote fail-safe reliability in the weighing process by implementing Q-Apps directly in the Cubis®.

Fast and straight-forward communication with Q-Com... three fixed (USB, RS-232C, Ethernet²) and three optional interfaces make almost all forms of bi-directional communication possible.

Cubis® is well-protected against fluid spillage and has an easily removable, high-grade stainless steel weigh pan & shield plate. In seconds, the balance can be ready again for measurements.

With the integrated Q-Stat ionizer³ and conductive coating on the glass panels, electrostatic charges on vessels and samples are quickly eliminated for stable, more accurate results.

A wide selection of accessories can adapt to various vessel types for ergonomic operation and can also function in harsh workplace conditions for safer, more efficient weighing.

Applications

Types	MSA	MSU	MSE
Applications	Unit conversion, SQmin for monitoring the operating range according to USP Ch. 41, isoCAL automatic calibration adjustment function, individual identifiers, density determination, statistics, calculations, averaging, formulation, weighing in percent, time-controlled functions, totalizing, DKD measurement uncertainty, second tare memory, counting, checkweighing, Alibi memory, audit trail	Unit conversion, SQmin for monitoring the operating range according to USP Ch. 41, isoCAL automatic calibration adjustment function, individual identifiers, density determination, statistics, calculations, averaging, formulation, weighing in percent, time-controlled functions, totalizing, DKD measurement uncertainty, second tare memory, counting, checkweighing, Alibi memory, audit trail	Mass unit conversion, isoCAL automatic calibration adjustment function, density determination (buoyancy method only), calculations, averaging, net total formulation, weighing in percent, counting, totalizing
Personalizable with Q-Apps	– Downloadable Q-Apps – Customer-specific modifications on request	–	–

¹ For models that do not feature automatic motorized leveling (weighing capacity > 6.2 kg or readability ≤ 0.001 mg), leveling is done manually with real-time, interactive operator guidance

² MSA and MSU displays only

³ DI draft shield only



Cubis® MSA



Cubis® MSU



Cubis® MSE

Features

	Cubis® MSA	Cubis® MSU	Cubis® MSE
Tamper Protection Compliance Support			
Hierarchical password protection	•	•	
Integrated alibi memory	•	•	
User management	•	•	
Calibration storage	•	•	
Audit trail	•	•	
Action hierarchies for warning and intervention functions	•	•	
Inspection Equipment Monitoring			
Self-test			
Leveling control	•	•	•
Automatic motorized leveling, Q-Level	•	•	•
Automatic time- and temperature-dependent calibration, isoCAL	•	•	•
Monitoring of the operating range according to USP Ch. 41, SQmin	•	•	
Automatic Repeatability test, reproTest	•	•	
Support Guidance			
Monitoring pre-selectable calibration routines in UserCal (with Q-App)	•		
Determination of measurement uncertainty in accordance with USP Ch. 41 (with USP Q-App)	•		
Displaying measurement uncertainty, SURE	•	•	
Data Handling Data Integration Process Integration			
Applications Workflows			
Downloadable apps (application software)	•		
Integration of individual SOPs (workflows)	•		
Direct LIMS integration	•		
Advanced communication via web services	•		
Interfaces			
Serial	•	•	•
Network-compatible	•	•	
Operational Support Ease of Use Ergonomics			
Integrated electrostatic eliminator, Q-Stat (DI draft shield)	•	•	•
Variable vessel holder, Q-Grip (0.01mg/0.1mg readability only)	•	•	•
Weighing pan for laboratory hood or laminar flow bench, Q-Grid	•	•	•
IR sensor, foot switch, barcode reader (optional accessories)	•	•	•
Programmable automatic draft shield doors	•	•	•

Cubis® individual

Increase Efficiency & Reliability in your Weighing Process

Customize a Cubis® MSA laboratory balance at any time by downloading specific applications, called Q-Apps, directly into the balance. Once installed, Q-Apps guide users step-by-step through a specific weighing workflow, ensuring thorough compliance with written SOP's. Integrating SOPs directly into the Cubis® adapts the balance to a process and not the other way around, and is considered embedded software on which fewer validation requirements are needed, as compared with external software, or middleware. Cubis® individual tremendously increases efficiency and reliability in the weighing process, thus saving valuable time and money in laboratories.



Two Q-App Versions are Available:

- **Standard Q-Apps** can be downloaded directly from our website free of charge to trial for 30 days. After the trial period has elapsed, simply purchase the Q-App for a license to allow it to work permanently
- **Customized Q-Apps** can be individually configured for a more individualized solution to adapt any specific weighing process to the balance and SOP

Features & Benefits

Improve Sample Management

For better organizing and control of weighing samples.

Effective Data Management

Alleviates the need for manual data handling, which can automate the documentation process and also increase the reliability of results.

Efficient Communication

In addition to printers, direct connectivity to LIMS via web services and direct read & write from/to FTP servers are also possible. With Q-App Advanced versions, result evaluation via HTML (browser) is also possible.

No Laptops, PCs or Terminals Required – Cubis® MSA is the Only Interface Needed

An alternative to implementing or validating external middleware.

Visit our Apps Center for a list of standard Q-Apps to download



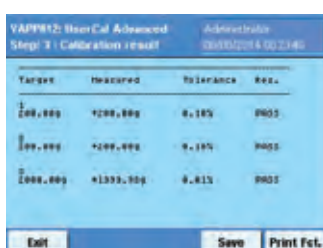
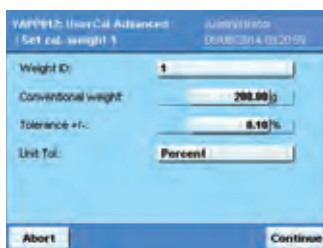
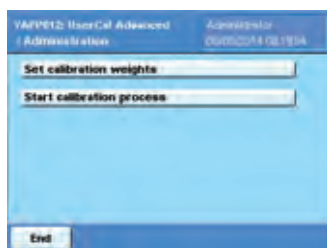
Q-Apps – Specifications & Pricing

Model	Description	Application	US List Price (\$)
YAPP01	UserCal V1	User definable calibration routine with external weights	72
YAPP012	UserCal Advanced	User definable calibration routine with external weights and calibration history via HTML	520
YAPP02	USP V2	Determination of the operating range according to USP Chapter 41	142
YAPP022	USP Advanced	Software for determination of the operating range according to USP Chapter 41 with HTML evaluation	315
YAPP03	Backweigher Light V1	Simple differential weighing with automatic sample numeration (100 samples max.)	350
YAPP032	Backweigher Light V2	Simple differential weighing with lots batches and automatic sample numeration (5 × 100 samples max.)	420
YAPP033	Backweigher Light V3	Simple differential weighing with individual sample numeration	495
YAPP04	Pipette Check Light V1	Check calibrate fixed volume and variable piston pipettes according to ISO 8655 tolerances	350
YAPP042	Pipette Check Advanced	Test routine for easy and accurate testing of pipettes with HTML evaluation for the last check	595
YAPP05	Formulation V1	Simple formulation with integrated recipe memory	495
YAPP06	Tablet Checker V1	Tablet checker according to Pharmacopeia standards	700
YAPP10	Residual Dirt Analysis	Gravimetric determination of residual dirt according to VDA19, with individual Sample ID (alphanumeric)	910
YAPP11	QR and Barcode Label Creator	Requirement for printing labels on the YDP30 printer	205
YAPP12	Easy ID	Simple weighing application with individual alpha-numeric sample ID	70
YAPP14	NTP Synchronizer	Automatic date and time synchronization with an NTP server	580
YAPP16	Dosing	Preparation of stock solutions (standards) with defined concentrations	1,775
YAPP100	Web Services	Activation license for web services	350

Example... Q-App: UserCal Advanced

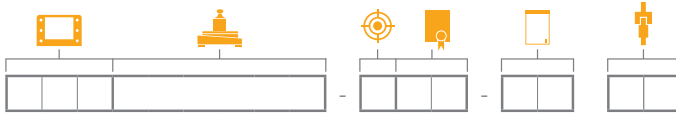
Guided external calibration process with up to 5 definable weights.

The workflow has two levels, an administrator and a user level. Administrators are allowed to define up to 5 different weight values, including the ID, value and permissible tolerances. Users are only allowed to perform the calibration process. The process runs automatically and the user is guided through the calibration process. Data acquisition and evaluation are done automatically. Documentation can be performed on a Sartorius printer and/or via Ethernet on the basis of Q-Web with HTML visualization.



Configuring a Cubis®

Please use the fields to enter the selection made with the icon.



Example



Cubis® Display|Control Unit Model

Select the display and control unit and enter it in the field marked with the icon

Types	MSA	MSU	MSE
Operation	Touch screen, keys for important basic functions	Keys	Keys
Display	High-resolution color TFT, 5.7" graphic display	High-resolution black white, 5.7" graphical display	Liquid crystal display, black white
Adaptation of the display and control unit	Tiltable display, removable display and control unit	Tiltable display, removable display and control unit	Removable display and control unit
Standard data interfaces	– USB port (integrated into weighing module) – RS-232C accessory interface, 25-pin (integrated into weighing module) – Ethernet (integrated into display and control unit) – Choice of data protocols available (also enables connection to software designed for external manufacturers) – Bluetooth® (optional accessory)		– USB port (integrated into weighing module) – RS-232C accessory interface, 25-pin (integrated into weighing module) – Bluetooth® (optional accessory)
SD card reader	Integrated as standard into display and control unit	Integrated as standard into display and control unit	
Operation of motorized draft shield (only applies to DA, DI or DM draft shield)	Activated by side keys or touch-free using IR sensor (optional); learning capability	Activated by side keys or touch-free using IR sensor (optional); learning capability	Activated by key or touch-free using IR sensor (optional); learning capability



Cubis® Weighing Modules

Please enter the weighing module name, starting from the left, in the field identified by the icon.

Balance Type	Readability			# of Decimal Places	Weighing Modules	Automatic Motorized Leveling Compatibility
Ultra-Micro	0.1 µg	0.0001 mg	0.0000001 g	7	2.7S	No
Micro	1 µg	0.001 mg	0.000001 g	6	3.6P, 6.6S, 36S, 36P, 66S, 66P	No
Semi-Micro	10 µg	0.01 mg	0.00001 g	5	125P, 225S, 225P	Yes
Analytical	100 µg	0.1 mg	0.0001 g	4	124S, 224S, 324S, 324P, 524S, 524P	Yes
Precision	1,000 µg	1 mg	0.001 g	3	323S, 623S, 623P, 1203S, 2203S, 2203P, 3203S, 5203S, 5203P	Yes
					1202S, 2202S, 4202S, 5202S, 6202S, 6202P	Yes
					8202S, 10202S, 14202S, 14202P	No
	100 mg	0.1 g	0.1 g	1	5201S	Yes
					8201S, 12201S, 20201S, 36201S, 36201P, 70201S	No
	1,000 mg	1 g	1 g	0	36200S, 70200S	No



Cubis® Leveling

Select the type of leveling and enter identifier "1" or "0" in the field marked by the icon. Use the above table to verify automatic motorized leveling compatibility for each weighing module.

- 1 Fully Automatic Motorized Leveling**
Cubis® balance is automatically leveled at the touch of a button (comes standard on all Cubis® models; not applicable for weighing modules > 6.2 kg, ultra-micro, and micro)
- 0 Manual, Guide-Assisted Leveling**
Cubis® shows the level indicator on the display and provides support for rapid leveling (a standard feature on MSA and MSU display and control units; for MSE units, only symbols are provided as an aid for manual leveling; (mandatory for all Cubis® weighing modules > 6.2 kg, ultra-micro, and micro)



Cubis® Test Certificates

Select a test certificate and enter the identifier in the field marked with the icon.

- 00** Standard certificate of conformity to specifications
- TR** Like 00, but with a detailed test protocol



Cubis® Draft Shields

Select a draft shield and enter the corresponding identifier in the field marked with the icon.

DO

No draft shield

Weighing modules:

- Precision, 0.01 g, 0.1 g, 1 g readability (pan size: 206 × 206 mm and 400 × 300 mm)
- Not applicable for model 5202S



DA

Automatic, glass

Chamber height: 250 mm (9.8")

Learning capability

Weighing modules:

- Semi-Micro, Analytical (pan size: 85 × 85 mm)
- Precision, 1 mg readability and model 5202S



DR

Removable, flat, stainless steel

Weighing modules:

- Precision, 1 mg readability and model 5202S (pan size: 140 × 140 mm)
- For weighing in areas where glass is not permitted or no draft shield is wanted



DI

Automatic, glass

Chamber height: 250 mm (9.8")

Learning capability

Integrated ionizer - to eliminate electrostatic charges

Weighing modules:

- Semi-Micro, Analytical (pan size: 85 × 85 mm)
- Precision, 1 mg readability and model 5202S (pan size: 140 × 140 mm)



DE

Manual, glass

Chamber height: 172 mm (6.8")

Weighing modules:

- Precision, 1 mg readability and model 5202S (pan size: 140 × 140 mm)



DM

Automatic, glass

Chamber height: 67 mm (2.6")

Learning capability

Weighing modules:

- 2.7S (pan size: 20 mm)
- 3.6P & 6.6S (pan size: 30 mm)



DU

Manual, glass

Chamber height: 261 mm (10.3")

Weighing modules:

- Semi-Micro, Analytical (pan size: 85 × 85 mm)
- Precision, 1 mg readability and model 5202S (pan size: 140 × 140 mm)



DF

Manual, stainless steel

Chamber height: 20 mm (0.78")

Designed for weighing filters

Weighing modules:

- 2.7S & 6.6S only
- Standard pan size: 50 mm
- Optional pan sizes: 75 mm and 90 mm



DH

Automatic, glass

Chamber height (66S/P, 36S/P only): 181.5 mm (7.15")

Chamber height (116P only): 240.5 mm (9.47")

Learning capability

Weighing modules:

- 36S & 36P pan size: 30 mm
- 66S & 66P pan size: 30 mm & 50 mm
- 116P pan size: 50 mm



Cubis® Interface Module Options

Select an additional interface module if necessary.

IR 25-pin RS232 interface

IB Bluetooth®, wireless interface

IP 9-pin RS232 with PS2 port interface (for connecting a keyboard or barcode scanner)

Cubis® Ultra-Micro Balances – Specifications & Pricing

2.7S

Capacity: 2.1 g
 Repeatability (±): 0.25 µg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 20|0.8 Ø

Readability: 0.1 µg
 Linearity (±): 0.9 µg
 Calibration Weight: 2 g

Model	US List Price (\$)
MSA2.7S-000-DM	36,430
MSU2.7S-000-DM	35,780
MSE2.7S-000-DM	34,615

2.7S (with DF Filter Draft Shield)

Capacity: 2.1 g
 Repeatability (±): 0.25 µg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 50*|1.97 Ø

Readability: 0.1 µg
 Linearity (±): 0.9 µg
 Calibration Weight: 2 g

Model	US List Price (\$)
MSA2.7S-000-DF	37,380
MSU2.7S-000-DF	36,730
MSE2.7S-000-DF	35,565

Cubis® Micro Balances – Specifications & Pricing

6.6S

Capacity: 6.1 g
 Repeatability (±): 1 µg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 30|1.2 Ø

Readability: 1 µg
 Linearity (±): 4 µg
 Calibration Weight: 5 g

Model	US List Price (\$)
MSA6.6S-000-DM	28,815
MSU6.6S-000-DM	28,165
MSE6.6S-000-DM	27,000

6.6S (with DF Filter Draft Shield)

Capacity: 6.1 g
 Repeatability (±): 1 µg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 50*|1.97 Ø

Readability: 1 µg
 Linearity (±): 4 µg
 Calibration Weight: 5 g

Model	US List Price (\$)
MSA6.6S-000-DF	29,765
MSU6.6S-000-DF	29,115
MSE6.6S-000-DF	27,950

3.6P

Capacity: 1.1 | 2.1 | 3.1 g
 Repeatability (±): 3 | 4 | 5 µg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 30|1.2 Ø

Readability: 1 | 2 | 5 µg
 Linearity (±): 4 µg
 Calibration Weight: 2 + 1 g

Model	US List Price (\$)
MSA3.6P-000-DM	22,400
MSU3.6P-000-DM	21,750
MSE3.6P-000-DM	20,585



MSE6.6S-000-DM

Cubis® Configured Upgrade Options

	add to List Price (\$)
Replace 00 certificate with TR certificate (example: MSE2.7S-0TR-DF)	100

Interface Module Options

IB (Bluetooth)	215
IP (9-pin RS232 PS2)	215
IR (25-pin RS232)	215

* For DF draft shield models, 75 mm and 90 mm filter weigh pan sizes are available as accessories

Cubis® High-Capacity Micro Balances – Specifications & Pricing

116P

Capacity: 12 g | 111 g
 Readability: 2 µg | 10 µg
 Repeatability (5 g | 100 g): (±) 4 µg | 10 µg
 Linearity (±): 20 µg
 Calibration Type: isoCAL
 Calibration Weight: 100 g
 Pan Size Dimensions: 50 mm / 1.97" Ø

Model	US List Price (\$)
MSA116P-000-DH	22,535

66P

Capacity: 12 g | 61 g
 Readability: 1 µg | 10 µg
 Repeatability (2 g | 50 g): 2 µg | 10 µg
 Linearity (±): 20 µg
 Calibration Type: isoCAL
 Calibration Weight: 50 g
 Pan Size Dimensions: 30 mm | 50 mm / 1.18" | 1.97" Ø

Model	US List Price (\$)
MSA66P-000-DH	32,510

36P

Capacity: 6 g | 31 g
 Readability: 1 µg | 10 µg
 Repeatability (1 g | 20 g): (±) 1.5 µg | 8 µg
 Linearity (±): 15 µg
 Calibration Type: isoCAL
 Calibration Weight: 20 g
 Pan Size Dimensions: 30 mm / 1.18" Ø

Model	US List Price (\$)
MSA36P-000-DH	26,565

66S

Capacity: 61 g
 Readability: 1 µg
 Repeatability (2 g | 50 g): (±) 1.5 µg | 4 µg
 Linearity (±): 20 µg
 Calibration Type: isoCAL
 Calibration Weight: 50 g
 Pan Size Dimensions: 30 mm | 50 mm / 1.18" | 1.97" Ø

Model	US List Price (\$)
MSA66S-000-DH	35,465

36S

Capacity: 31 g
 Readability: 1 µg
 Repeatability (1 g | 20 g): (±) 1.5 µg | 2 µg
 Linearity (±): 15 µg
 Calibration Type: isoCAL
 Calibration Weight: 20 g
 Pan Size Dimensions: 30 mm / 1.18" Ø

Model	US List Price (\$)
MSA36S-000-DH	30,730

Cubis® Configured Upgrade Options	add to List Price (\$)
Replace 00 certificate with TR certificate (example: MSA66S-OTR-DH)	100

Interface Module Options	
IB (Bluetooth)	215
IP (9-pin RS232 PS2)	215
IR (25-pin RS232)	215



MSA66S-000-DH

Cubis® Semi-Micro Balances – Specifications & Pricing

225S

Capacity: 220 g Readability: 0.01 mg
 Repeatability (±): 0...60 g: 0.015 mg | 60...220 g: 0.025 mg
 Linearity (±): 0.1 mg
 Calibration Type: isoCAL Calibration Weight: 200 g
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Model ⁺	US List Price (\$)
MSA225S-100-DU	13,985
MSA225S-100-DA	16,300
MSA225S-100-DI	17,460
MSU225S-100-DU	13,335
MSU225S-100-DA	15,650
MSU225S-100-DI	16,810
MSE225S-100-DU	12,170
MSE225S-100-DA	14,485
MSE225S-100-DI	15,645

225P

Capacity: 60 | 120 | 220 g Readability: 0.01 | 0.02 | 0.05 mg
 Repeatability (±): 0...60 g: 0.015 mg | 60...220 g: 0.04 mg
 Linearity (±): 0.15 mg
 Calibration Type: isoCAL Calibration Weight: 200 g
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Model ⁺	US List Price (\$)
MSA225P-100-DU	12,270
MSA225P-100-DA	14,585
MSA225P-100-DI	15,745
MSU225P-100-DU	11,620
MSU225P-100-DA	13,935
MSU225P-100-DI	15,095
MSE225P-100-DU	10,455
MSE225P-100-DA	12,770
MSE225P-100-DI	13,930

125P

Capacity: 60 | 120 g Readability: 0.01 | 0.1 mg
 Repeatability (±): 0...60 g: 0.015 mg | 60...120 g: 0.06 mg
 Linearity (±): 0.15 mg
 Calibration Type: isoCAL Calibration Weight: 100 g
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Model ⁺	US List Price (\$)
MSA125P-100-DU	9,350
MSA125P-100-DA	11,665
MSA125P-100-DI	12,825
MSU125P-100-DU	8,700
MSU125P-100-DA	11,015
MSU125P-100-DI	12,175
MSE125P-100-DU	7,535
MSE125P-100-DA	9,850
MSE125P-100-DI	11,010

⁺If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSE225P-000-DA). The list price is the same.



MSA225S-100-DI

Cubis® Analytical Balances – Specifications & Pricing

524S

Capacity: 520 g Readability: 0.1 mg
 Repeatability (±): 0.1 mg Linearity (±): 0.4 mg
 Calibration Type: isoCAL Calibration Weight: 500 g
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Model ⁺	US List Price (\$)
MSA524S-100-DU	11,090
MSA524S-100-DA	13,405
MSA524S-100-DI	14,565
MSU524S-100-DU	10,440
MSU524S-100-DA	12,755
MSU524S-100-DI	13,915
MSE524S-100-DU	9,275
MSE524S-100-DA	11,590
MSE524S-100-DI	12,750

324S

Capacity: 320 g Readability: 0.1 mg
 Repeatability (±): 0.1 mg Linearity (±): 0.3 mg
 Calibration Type: isoCAL Calibration Weight: 200 + 100 g
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Model ⁺	US List Price (\$)
MSA324S-100-DU	9,475
MSA324S-100-DA	11,790
MSA324S-100-DI	12,950
MSU324S-100-DU	8,825
MSU324S-100-DA	11,140
MSU324S-100-DI	12,300
MSE324S-100-DU	7,660
MSE324S-100-DA	9,975
MSE324S-100-DI	11,135

524P

Capacity: 120 | 240 | 520 g Readability: 0.1 | 0.2 | 0.5 mg
 Repeatability (±): 0.15 | 0.2 | 0.4 mg Linearity (±): 0.5 mg
 Calibration Type: isoCAL Calibration Weight: 500 g
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Model ⁺	US List Price (\$)
MSA524P-100-DU	9,350
MSA524P-100-DA	11,665
MSA524P-100-DI	12,825
MSU524P-100-DU	8,700
MSU524P-100-DA	11,015
MSU524P-100-DI	12,175
MSE524P-100-DU	7,535
MSE524P-100-DA	9,850
MSE524P-100-DI	11,010

324P

Capacity: 80 | 160 | 320 g Readability: 0.1 | 0.2 | 0.5 mg
 Repeatability (±): 0.1 | 0.2 | 0.4 mg Linearity (±): 0.5 mg
 Calibration Type: isoCAL Calibration Weight: 200 + 100 g
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Model ⁺	US List Price (\$)
MSA324P-100-DU	8,590
MSA324P-100-DA	10,905
MSA324P-100-DI	12,065
MSU324P-100-DU	7,940
MSU324P-100-DA	10,255
MSU324P-100-DI	11,415
MSE324P-100-DU	6,775
MSE324P-100-DA	9,090
MSE324P-100-DI	10,250

⁺If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSA324P-000-DA). The list price is the same.

Cubis® Analytical Balances – Specifications & Pricing

224S

Capacity: 220 g
 Repeatability (±): 0.07 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Readability: 0.1 mg
 Linearity (±): 0.2 mg
 Calibration Weight: 200 g

Model*	US List Price (\$)
MSA224S-100-DU	8,645
MSA224S-100-DA	10,960
MSA224S-100-DI	12,120
MSU224S-100-DU	7,995
MSU224S-100-DA	10,310
MSU224S-100-DI	11,470
MSE224S-100-DU	6,830
MSE224S-100-DA	9,145
MSE224S-100-DI	10,305

124S

Capacity: 120 g
 Repeatability (±): 0.1 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 85 x 85 | 3.3 x 3.3

Readability: 0.1 mg
 Linearity (±): 0.2 mg
 Calibration Weight: 100 g

Model*	US List Price (\$)
MSA124S-100-DU	7,435
MSA124S-100-DA	9,750
MSA124S-100-DI	10,910
MSU124S-100-DU	6,785
MSU124S-100-DA	9,100
MSU124S-100-DI	10,260
MSE124S-100-DU	5,620
MSE124S-100-DA	7,935
MSE124S-100-DI	9,095

Cubis® Configured Upgrade Options

	add to List Price (\$)
Replace 00 certificate with TR certificate (example: MSU224S-1TR-DU)	100

Interface Module Options

IB (Bluetooth)	215
IP (9-pin RS232 PS2)	215
IR (25-pin RS232)	215



MSA124S-100-DI with YFH01MS Q-Grip Accessory

*If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSE224S-000-DA). The list price is the same.

Cubis® Precision (3-place) Balances - Specifications & Pricing

5203S

Capacity: 5,200 g
 Repeatability (±): 1 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 mg
 Linearity (±): 5 mg
 Calibration Weight: 5 kg

Model ⁺	US List Price (\$)
MSA5203S-100-DR	11,420
MSA5203S-100-DE	11,420
MSA5203S-100-DU	11,885
MSA5203S-100-DA	14,200
MSA5203S-100-DI	15,360
MSU5203S-100-DR	10,770
MSU5203S-100-DE	10,770
MSU5203S-100-DU	11,235
MSU5203S-100-DA	13,550
MSU5203S-100-DI	14,710
MSE5203S-100-DR	9,605
MSE5203S-100-DE	9,605
MSE5203S-100-DU	10,070
MSE5203S-100-DA	12,385
MSE5203S-100-DI	13,545

3203S

Capacity: 3,200 g
 Repeatability (±): 1 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 mg
 Linearity (±): 5 mg
 Calibration Weight: 2 kg

Model ⁺	US List Price (\$)
MSA3203S-100-DR	10,120
MSA3203S-100-DE	10,120
MSA3203S-100-DU	10,585
MSA3203S-100-DA	12,900
MSA3203S-100-DI	14,060
MSU3203S-100-DR	9,470
MSU3203S-100-DE	9,470
MSU3203S-100-DU	9,935
MSU3203S-100-DA	12,250
MSU3203S-100-DI	13,410
MSE3203S-100-DR	8,305
MSE3203S-100-DE	8,305
MSE3203S-100-DU	8,770
MSE3203S-100-DA	11,085
MSE3203S-100-DI	12,245

5203P

Capacity: 1,200 | 2,400 | 5,200 g
 Repeatability (±): 1 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 | 2 | 5 mg
 Linearity (±): 5 mg
 Calibration Weight: 5 kg

Model ⁺	US List Price (\$)
MSA5203P-100-DR	10,960
MSA5203P-100-DE	10,960
MSA5203P-100-DU	11,425
MSA5203P-100-DA	13,740
MSA5203P-100-DI	14,900
MSU5203P-100-DR	10,310
MSU5203P-100-DE	10,310
MSU5203P-100-DU	10,775
MSU5203P-100-DA	13,090
MSU5203P-100-DI	14,250
MSE5203P-100-DR	9,145
MSE5203P-100-DE	9,145
MSE5203P-100-DU	9,610
MSE5203P-100-DA	11,925
MSE5203P-100-DI	13,085



MSU5203S-100-DR

Cubis® Configured Upgrade Options	add to List Price (\$)
Replace 00 certificate with TR certificate (example: MSU5203S-1TR-DR)	100
Interface Module Options	
IB (Bluetooth)	215
IP (9-pin RS232 PS2)	215
IR (25-pin RS232)	215

⁺If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSU5203S-000-DR). The list price is the same.

Cubis® Precision (3-place) Balances – Specifications & Pricing

2203S

Capacity: 2,200 g
 Repeatability (±): 1 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 mg
 Linearity (±): 3 mg
 Calibration Weight: 2 kg

Model ⁺	US List Price (\$)
MSA2203S-100-DR	9,835
MSA2203S-100-DE	9,835
MSA2203S-100-DU	10,300
MSA2203S-100-DA	12,615
MSA2203S-100-DI	13,775
MSU2203S-100-DR	9,185
MSU2203S-100-DE	9,185
MSU2203S-100-DU	9,650
MSU2203S-100-DA	11,965
MSU2203S-100-DI	13,125
MSE2203S-100-DR	8,020
MSE2203S-100-DE	8,020
MSE2203S-100-DU	8,485
MSE2203S-100-DA	10,800
MSE2203S-100-DI	11,960

1203S

Capacity: 1,200 g
 Repeatability (±): 0.7 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 mg
 Linearity (±): 2 mg
 Calibration Weight: 1 kg

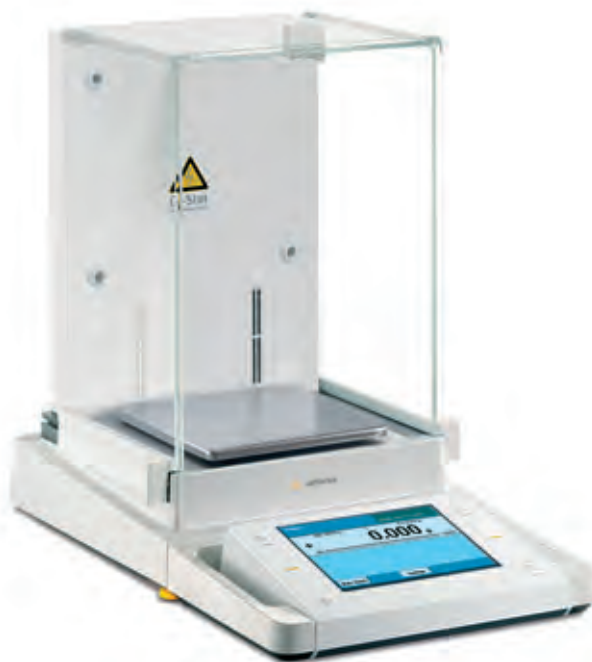
Model ⁺	US List Price (\$)
MSA1203S-100-DR	8,820
MSA1203S-100-DE	8,820
MSA1203S-100-DU	9,285
MSA1203S-100-DA	11,600
MSA1203S-100-DI	12,760
MSU1203S-100-DR	8,170
MSU1203S-100-DE	8,170
MSU1203S-100-DU	8,635
MSU1203S-100-DA	10,950
MSU1203S-100-DI	12,110
MSE1203S-100-DR	7,005
MSE1203S-100-DE	7,005
MSE1203S-100-DU	7,470
MSE1203S-100-DA	9,785
MSE1203S-100-DI	10,945

2203P

Capacity: 1,010 | 2,200 g
 Repeatability (±): 1 | 6 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 | 10 mg
 Linearity (±): 5 mg
 Calibration Weight: 1 kg

Model ⁺	US List Price (\$)
MSA2203P-100-DR	9,560
MSA2203P-100-DE	9,560
MSA2203P-100-DU	10,025
MSA2203P-100-DA	12,340
MSA2203P-100-DI	13,500
MSU2203P-100-DR	8,910
MSU2203P-100-DE	8,910
MSU2203P-100-DU	9,375
MSU2203P-100-DA	11,690
MSU2203P-100-DI	12,850
MSE2203P-100-DR	7,745
MSE2203P-100-DE	7,745
MSE2203P-100-DU	8,210
MSE2203P-100-DA	10,525
MSE2203P-100-DI	11,685



MSA1203S-100-DI

⁺If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSA1203S-000-DI). The list price is the same.

Cubis® Precision (3-place) Balances – Specifications & Pricing

623S

Capacity: 620 g
 Repeatability (±): 0.7 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 mg
 Linearity (±): 2 mg
 Calibration Weight: 500 g

Model ⁺	US List Price (\$)
MSA623S-100-DR	7,250
MSA623S-100-DE	7,250
MSA623S-100-DU	7,715
MSA623S-100-DA	10,030
MSA623S-100-DI	11,190
MSU623S-100-DR	6,600
MSU623S-100-DE	6,660
MSU623S-100-DU	7,065
MSU623S-100-DA	9,380
MSU623S-100-DI	10,540
MSE623S-100-DR	5,435
MSE623S-100-DE	5,435
MSE623S-100-DU	5,900
MSE623S-100-DA	8,215
MSE623S-100-DI	9,375

323S

Capacity: 320 g
 Repeatability (±): 0.7 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 mg
 Linearity (±): 2 mg
 Calibration Weight: 200 g

Model ⁺	US List Price (\$)
MSA323S-100-DR	6,465
MSA323S-100-DE	6,465
MSA323S-100-DU	6,930
MSA323S-100-DA	9,245
MSA323S-100-DI	10,405
MSU323S-100-DR	5,815
MSU323S-100-DE	5,815
MSU323S-100-DU	6,280
MSU323S-100-DA	8,595
MSU323S-100-DI	9,755
MSE323S-100-DR	4,650
MSE323S-100-DE	4,650
MSE323S-100-DU	5,115
MSE323S-100-DA	7,430
MSE323S-100-DI	8,590

Cubis® Configured Upgrade Options

Replace 00 certificate with TR certificate (example: MSE323S-1TR-DE)

add to List Price (\$)

100

Interface Module Options

IB (Bluetooth)

215

IP (9-pin RS232|PS2)

215

IR (25-pin RS232)

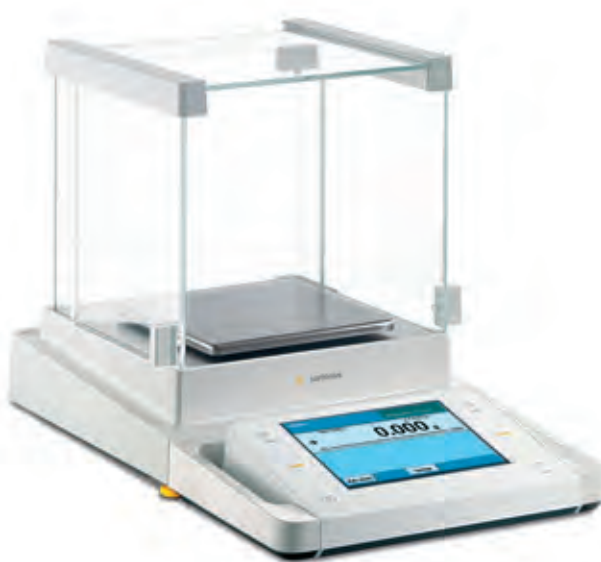
215

623P

Capacity: 150 | 300 | 620 g
 Repeatability (±): 1 | 2 | 4 mg
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Readability: 1 | 2 | 5 mg
 Linearity (±): 5 mg
 Calibration Weight: 500 g

Model ⁺	US List Price (\$)
MSA623P-100-DR	6,570
MSA623P-100-DE	6,570
MSA623P-100-DU	7,035
MSA623P-100-DA	9,350
MSA623P-100-DI	10,510
MSU623P-100-DR	5,920
MSU623P-100-DE	5,920
MSU623P-100-DU	6,385
MSU623P-100-DA	8,700
MSU623P-100-DI	9,860
MSE623P-100-DR	4,755
MSE623P-100-DE	4,755
MSE623P-100-DU	5,220
MSE623P-100-DA	7,535
MSE623P-100-DI	8,695



MSA323S-100-DE

Cubis® Precision (2-place) Balances – Specifications & Pricing

14202S

Capacity: 14,200 g Readability: 0.01 g
 Repeatability (±): 0.01 g Linearity (±): 0.03 g
 Calibration Type: isoCAL Calibration Weight: 10 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model	US List Price (\$)
MSA14202S-000-D0	9,985
MSU14202S-000-D0	9,335
MSE14202S-000-D0	8,170

10202S

Capacity: 10,200 g Readability: 0.01 g
 Repeatability (±): 0.007 g Linearity (±): 0.02 g
 Calibration Type: isoCAL Calibration Weight: 10 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model	US List Price (\$)
MSA10202S-000-D0	8,420
MSU10202S-000-D0	7,770
MSE10202S-000-D0	6,605

6202S

Capacity: 6,200 g Readability: 0.01 g
 Repeatability (±): 0.007 g Linearity (±): 0.02 g
 Calibration Type: isoCAL Calibration Weight: 5 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model*	US List Price (\$)
MSA6202S-100-D0	6,805
MSU6202S-100-D0	6,155
MSE6202S-100-D0	4,990

14202P

Capacity: 3,500 | 7,000 | 14,200 g Readability: 0.01 | 0.02 | 0.05 g
 Repeatability (±): 0.01 | 0.02 | 0.04 g Linearity (±): 0.05 g
 Calibration Type: isoCAL Calibration Weight: 10 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model	US List Price (\$)
MSA14202P-000-D0	8,830
MSU14202P-000-D0	8,180
MSE14202P-000-D0	7,015

8202S

Capacity: 8,200 g Readability: 0.01 g
 Repeatability (±): 0.007 g Linearity (±): 0.02 g
 Calibration Type: isoCAL Calibration Weight: 5 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model	US List Price (\$)
MSA8202S-000-D0	7,485
MSU8202S-000-D0	6,835
MSE8202S-000-D0	5,670

6202P

Capacity: 1,500 | 3,000 | 6,200 g Readability: 0.01 | 0.02 | 0.05 g
 Repeatability (±): 0.007 | 0.02 | 0.04 g Linearity (±): 0.05 g
 Calibration Type: isoCAL Calibration Weight: 5 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model*	US List Price (\$)
MSA6202P-100-D0	6,260
MSU6202P-100-D0	5,610
MSE6202P-100-D0	4,445



MSA10202S-000-D0 with YWP03MS Q-Grid Accessory

*If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSA6202S-000-D0). The list price is the same.

Cubis® Precision (2-place) Balances – Specifications & Pricing

5202S

Capacity: 5,200 g Readability: 0.01 g
 Repeatability (±): 0.006 g Linearity (±): 0.01 g
 Calibration Type: isoCAL Calibration Weight: 5 kg
 Pan Size Dimensions [mm|in.]: 140 x 140 | 5.5 x 5.5

Model*	US List Price (\$)
MSA5202S-100-DR	7,315
MSA5202S-100-DE	7,315
MSA5202S-100-DU	7,780
MSA5202S-100-DA	10,095
MSA5202S-100-DI	11,255
MSU5202S-100-DR	6,665
MSU5202S-100-DE	6,665
MSU5202S-100-DU	7,130
MSU5202S-100-DA	9,445
MSU5202S-100-DI	10,605
MSE5202S-100-DR	5,500
MSE5202S-100-DE	5,500
MSE5202S-100-DU	5,965
MSE5202S-100-DA	8,280
MSE5202S-100-DI	9,440



MSE4202S-100-D0

4202S

Capacity: 4,200 g Readability: 0.01 g
 Repeatability (±): 0.007 g Linearity (±): 0.02 g
 Calibration Type: isoCAL Calibration Weight: 2 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model*	US List Price (\$)
MSA4202S-100-D0	6,105
MSU4202S-100-D0	5,455
MSE4202S-100-D0	4,290

2202S

Capacity: 2,200 g Readability: 0.01 g
 Repeatability (±): 0.007 g Linearity (±): 0.02 g
 Calibration Type: isoCAL Calibration Weight: 2 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model*	US List Price (\$)
MSA2202S-100-D0	5,700
MSU2202S-100-D0	5,050
MSE2202S-100-D0	3,885

1202S

Capacity: 1,200 g Readability: 0.01 g
 Repeatability (±): 0.007 g Linearity (±): 0.02 g
 Calibration Type: isoCAL Calibration Weight: 1 kg
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Model*	US List Price (\$)
MSA1202S-100-D0	5,290
MSU1202S-100-D0	4,640
MSE1202S-100-D0	3,475

*If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSE4202S-000-D0). The list price is the same.

Cubis® Precision (1-place) Balances – Specifications & Pricing

12201S

Capacity: 12,200 g
 Repeatability (±): 0.05 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Readability: 0.1 g
 Linearity (±): 0.1 g
 Calibration Weight: 10 kg

Model	US List Price (\$)
MSA12201S-000-D0	6,205
MSU12201S-000-D0	5,555
MSE12201S-000-D0	4,390

8201S

Capacity: 8,200 g
 Repeatability (±): 0.05 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Readability: 0.1 g
 Linearity (±): 0.1 g
 Calibration Weight: 5 kg

Model	US List Price (\$)
MSA8201S-000-D0	5,760
MSU8201S-000-D0	5,110
MSE8201S-000-D0	3,945

5201S

Capacity: 5,200 g
 Repeatability (±): 0.05 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 206 x 206 | 8.1 x 8.1

Readability: 0.1 g
 Linearity (±): 0.1 g
 Calibration Weight: 5 kg

Model*	US List Price (\$)
MSA5201S-100-D0	4,655
MSU5201S-100-D0	4,005
MSE5201S-100-D0	2,840



MSU8201S-000-D0

Cubis® Configured Upgrade Options

	add to List Price (\$)
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Replace 00 certificate with TR certificate (example: MSE5201S-1TR-D0)	100
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Interface Module Options

IB (Bluetooth)	215
IP (9-pin RS232 PS2)	215
IR (25-pin RS232)	215

*If a guide-assisted leveling model is desired, then change the leveling designation number from a 1 to a 0 (i.e.: MSE5201S-000-D0). The list price is the same.

Cubis® Precision High-Capacity Balances – Specifications & Pricing

70201S

Capacity: 70,200 g
 Repeatability (±): 0.1 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 400 x 300 | 15.7 x 11.8

Readability: 0.1 g
 Linearity (±): 0.5 g
 Calibration Weight: 20 kg

Model	US List Price (\$)
MSA70201S-000-D0	14,205
MSU70201S-000-D0	13,555
MSE70201S-000-D0	12,390

36201S

Capacity: 36,200 g
 Repeatability (±): 0.1 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 400 x 300 | 15.7 x 11.8

Readability: 0.1 g
 Linearity (±): 0.2 g
 Calibration Weight: 10 kg

Model	US List Price (\$)
MSA36201S-000-D0	9,405
MSU36201S-000-D0	8,755
MSE36201S-000-D0	7,590

36201P

Capacity: 10,200 | 36,200 g
 Repeatability (±): 0.1 | 0.5 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 400 x 300 | 15.7 x 11.8

Readability: 0.1 | 1 g
 Linearity (±): 0.2 g
 Calibration Weight: 10 kg

Model	US List Price (\$)
MSA36201P-000-D0	8,075
MSU36201P-000-D0	7,425
MSE36201P-000-D0	6,260

20201S

Capacity: 20,200 g
 Repeatability (±): 0.1 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 400 x 300 | 15.7 x 11.8

Readability: 0.1 g
 Linearity (±): 0.2 g
 Calibration Weight: 10 kg

Model	US List Price (\$)
MSA20201S-000-D0	7,670
MSU20201S-000-D0	7,020
MSE20201S-000-D0	5,855

70200S

Capacity: 70,200 g
 Repeatability (±): 0.5 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 400 x 300 | 15.7 x 11.8

Readability: 1 g
 Linearity (±): 1 g
 Calibration Weight: 20 kg

Model	US List Price (\$)
MSA70200S-000-D0	10,745
MSU70200S-000-D0	10,095
MSE70200S-000-D0	8,930

36200S

Capacity: 36,200 g
 Repeatability (±): 0.5 g
 Calibration Type: isoCAL
 Pan Size Dimensions [mm|in.]: 400 x 300 | 15.7 x 11.8

Readability: 1 g
 Linearity (±): 1 g
 Calibration Weight: 10 kg

Model	US List Price (\$)
MSA36200S-000-D0	6,860
MSU36200S-000-D0	6,210
MSE36200S-000-D0	5,045

Cubis® Configured Upgrade Options**add to List Price (\$)**

Replace 00 certificate with TR certificate (example: MSU36201P-0TR-D0) 100

Interface Module Options

An Interface Module Option (Bluetooth, 9-pin RS232|PS2, or additional RS232) is now available for Cubis Precision High-Capacity models via an external connection box, VF4466, and field upgradeable interface module (option cannot be configured). See accessories section on page 26 for more details.



MSE36201S-000-D0
 with YDH02MS Display Holder

Cubis® Essential Edition Balances

- Cubis® Essential Edition balances consist of select preconfigured MSE Cubis models available with only specific draft shields that are typically in stock for faster delivery (check availability with Customer Service).
- All models come with guide-assisted leveling only and are sold as is where no modifications are permitted.

Model	Capacity	Readability	Repeatability (±)	Linearity (±)	Pan Size [mm in.]	Calibration Type	Wt	Design	US List Price (\$)
Semi-Micro Balance									
MSE225S-ED15	220 g	0.01 mg	0...60 g: 0.015 mg 60...220 g: 0.025 mg	0.1 mg	85×85 3.3×3.3	isoCAL	200 g	A*	11,560
Analytical Balances									
MSE324S-ED15	320 g	0.1 mg	0.1 mg	0.3 mg	85×85 3.3×3.3	isoCAL	200 + 100 g	B	7,275
MSE224S-ED15	220 g	0.1 mg	0.07 mg	0.2 mg	85×85 3.3×3.3	isoCAL	200 g	B	6,490
Precision Balances									
MSE1203S-ED15	1,200 g	1 mg	0.7 mg	2 mg	140 ×140 5.5 ×5.5	isoCAL	1 kg	C	6,655
MSE623S-ED15	620 g	1 mg	0.7 mg	2 mg	140 ×140 5.5 ×5.5	isoCAL	500 g	C	5,165
MSE6202S-ED15	6,200 g	0.01 g	0.007 g	0.02 g	206 ×206 8.1 ×8.1	isoCAL	5 kg	D	4,740
MSE4202S-ED15	4,200 g	0.01 g	0.007 g	0.02 g	206 ×206 8.1 ×8.1	isoCAL	2 kg	D	4,075
MSE12201S-ED15	12,200 g	0.1 g	0.05 g	0.1 g	206 ×206 8.1 ×8.1	isoCAL	10 kg	D	4,170
MSE8201S-ED15	8,200 g	0.1 g	0.05 g	0.1 g	206 ×206 8.1 ×8.1	isoCAL	5 kg	D	3,750
MSE5201S-ED15	5,200 g	0.1 g	0.05 g	0.1 g	206 ×206 8.1 ×8.1	isoCAL	5 kg	D	2,700
MSE36201S-ED15	36,200 g	0.1 g	0.1 g	0.2 g	400 ×300 15.7 ×11.8	isoCAL	10 kg	E	7,210
MSE20201S-ED15	20,200 g	0.1 g	0.1 g	0.2 g	400 ×300 15.7 ×11.8	isoCAL	10 kg	E	5,560
MSE36200S-ED15	36,200 g	1 g	0.5 g	1 g	400 ×300 15.7 ×11.8	isoCAL	10 kg	E	4,795

* Design A comes with a slotted weigh pan and separate electronics box



Design A | B
(DU draft shield)



Design C
(DR draft shield)



Design D
(D0 draft shield)



Design E
(D0 draft shield)

Cubis® MSA Preconfigured Balances

- If you configure a Cubis® that has a corresponding preconfigured model as listed below (no dashes in the model number), then order the preconfigured model for a faster delivery time as we typically have these models in stock (check availability with Customer Service)
- Preconfigured Cubis® models are sold as is per the models below where no modifications are permitted
- If an optional interface module (25-pin RS232, Bluetooth, or 9-pin RS232 with PS2) is required, please order the field upgradeable accessory version
- Cubis® preconfigured models, when applicable, come standard with automatic motorized leveling

Model	Capacity	Readability	Repeatability (±)	Linearity (±)	Pan Size [mm in.]	Calibration Type	Wt	US List Price (\$)
Ultra-Micro w Detailed Certificate of Conformity								
MSA2.7S0TRDM	2.1 g	0.1 µg	0.25 µg	0.9 µg	20 0.8 Ø	isoCAL	2 g	36,530
MSA2.7S0TRDF	2.1 g	0.1 µg	0.25 µg	0.9 µg	50 1.97 Ø	isoCAL	2 g	37,480
Micro w Detailed Certificate of Conformity								
MSA6.6S0TRDM	6.1 g	1 µg	1 µg	4 µg	30 1.2 Ø	isoCAL	5 g	28,915
MSA3.6P0TRDM	1.1 2.1 3.1 g	1 2 5 µg	3 4 5 µg	4 µg	30 1.2 Ø	isoCAL	2 + 1 g	22,500
Semi-Micro (Automatic Motorized Draft Shield w Integrated Ionizer and Auto Leveling)								
MSA225S100DI	220 g	0.01 mg	0...60 g: 0.015 mg 60...120 g: 0.025 mg	0.1 mg	85×85 3.3×3.3	isoCAL	200 g	17,460
MSA225P100DI	60 120 220 g	0.01 0.02 0.05 mg	0...60 g: 0.015 mg 60...120 g: 0.04 mg	0.15 mg	85×85 3.3×3.3	isoCAL	200 g	15,745
Semi-Micro (Manual, Large Draft Shield w Auto Leveling)								
MSA225S100DU	220 g	0.01 mg	0...60 g: 0.015 mg 60...120 g: 0.025 mg	0.1 mg	85×85 3.3×3.3	isoCAL	200 g	13,985
Analytical (Automatic Motorized Draft Shield w Integrated Ionizer and Auto Leveling)								
MSA224S100DI	220 g	0.1 mg	0.07 mg	0.2 mg	85×85 3.3×3.3	isoCAL	200 g	11,765
MSA324S100DI	320 g	0.1 mg	0.1 mg	0.3 mg	85×85 3.3×3.3	isoCAL	200 + 100 g	12,950
MSA524S100DI	520 g	0.1 mg	0.1 mg	0.4 mg	85×85 3.3×3.3	isoCAL	500 g	14,565
Analytical (Manual, Large Draft Shield w Auto Leveling)								
MSA124S100DU	120 g	0.1 mg	0.1 mg	0.2 mg	85×85 3.3×3.3	isoCAL	100 g	7,435
MSA224S100DU	220 g	0.1 mg	0.07 mg	0.2 mg	85×85 3.3×3.3	isoCAL	200 g	8,645
MSA324S100DU	320 g	0.1 mg	0.1 mg	0.3 mg	85×85 3.3×3.3	isoCAL	200 + 100 g	9,475

Model	Capacity	Readability	Repeatability (±)	Linearity (±)	Pan Size [mm in.]	Calibration Type	Wt	US List Price (\$)
Precision (Manual, Small Draft Shield w Auto Leveling)								
MSA623S100DE	620 g	1 mg	0.7 mg	2 mg	140×140 5.5×5.5	isoCAL	500 g	7,250
MSA1203S100DE	1,200 g	1 mg	0.7 mg	2 mg	140×140 5.5×5.5	isoCAL	1 kg	8,820
MSA3203S100DE	3,200 g	1 mg	1 mg	5 mg	140×140 5.5×5.5	isoCAL	2 kg	10,120
Precision (No Draft Shield w Auto Leveling)								
MSA2202S100D0	2,200 g	0.01 g	0.007 g	0.02 g	206×206 8.1×8.1	isoCAL	2 kg	5,700
MSA4202S100D0	4,200 g	0.01 g	0.007 g	0.02 g	206×206 8.1×8.1	isoCAL	2 kg	6,105
MSA6202S100D0	6,200 g	0.01 g	0.007 g	0.02 g	206×206 8.1×8.1	isoCAL	5 kg	6,805
Precision (No Draft Shield)								
MSA8202S000D0	8,200 g	0.01 g	0.007 g	0.02 g	206×206 8.1×8.1	isoCAL	5 kg	7,485
MSA8201S000D0	8,200 g	0.1 g	0.05 g	0.1 g	206×206 8.1×8.1	isoCAL	5 kg	5,760



MSA224S100DU

Cubis® Balance Accessories

Item	Description	US List Price (\$)	Ultra Micro, 2.7S	Micro, 6.6S	Micro, 3.6P	High Cap Micro	5-place Semi-Micro	4-place Analytical	3-place Precision	2- & 1-place Precision	2-place Precision, 5202S	High Cap Precision
Printers, Cables and Data Communication												
YDP30	Premium GLP lab printer (paper not included)	1,440	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
69Y03285	Standard paper & ink ribbon set for YDP30 (fade-resistant)	103	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
69Y03286	Self-adhesive paper & ink ribbon set for YDP30 (fade-resistant)	112	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
69Y03094	Self-adhesive labels, 58 x 100 mm (350 pcs)^	91	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
69Y03093	Self-adhesive labels, 58 x 76 mm (500 pcs)^	75	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
69Y03092	Self-adhesive labels, 58 x 30 mm (1,000 pcs)^	68	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YDP10-OCE	Cubis Data printer, includes cable	1,035	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YDP10BT-OCE	Cubis Bluetooth Data printer, wireless*	1,035	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ ⁺
YDP20-OCE	Data Printer, with statistics and time date functions, includes cable	1,155	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6906918	Ink Ribbon, fits YDP10 and YDP20	56	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6906937	Paper (pkg of 5 rolls), fits YDP10 and YDP20	51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC05-001M2	Cable, 25-pin to 9-pin RS232, 5 ft.	103	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC05-001M5	Cable, 25-pin to 9-pin RS232, 16 ft.	113	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC05-001M10	Cable, 25-pin to 9-pin RS232, 33 ft.	137	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC05-001M15	Cable, 25-pin to 9-pin RS232, 49 ft.	152	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC01-USBM2	Cable, 25-pin RS232 to USB, 6.5 ft.	150	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC01-MSD3	Extended Cubis display cable for MSA MSU, 3 m	245	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC01-MSED3	Extended Cubis display cable for MSE, 3 m	245	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YCC01-MSM3	Extended cable from Cubis weighing to electronics modules, 3 m	355	✓	✓	✓	✓	✓					
YSW02	Sartorius Wedge for Windows (no cable included)	510	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YD001MS-B	Field Upgradeable Interface Module for Cubis, Bluetooth (wireless connection; same as IB option)	220	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ ⁺
YD001MS-P	Field Upgradeable Interface Module for Cubis, 9-pin RS232 PS2 (connection to PC & keyboard or barcode scanner; same as IP option)	220	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ ⁺
YD001MS-R	Field Upgradeable Interface Module for Cubis, 25-pin RS232 (same as IR option)	220	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ ⁺
VF4466	Optional External Interface Box for Cubis Prec HiCap; requires Field Upgradeable Interface Module	on request										✓

^ for YDP30 & Q-App YAPP11 only

+ Requires VF4466

* requires Bluetooth® interface module (Cubis® only)



YDP30 Thermal Transfer Printer

Item	Description	US List Price (\$)	Ultra Micro, 2.7S	Micro, 6.6S	Micro, 3.6P	High Cap Micro	5-place Semi-Micro	4-place Analytical	3-place Precision	2- & 1-place Precision	2-place Precision, 5202S	High Cap Precision
Power Supply and Line Cords												
6971987	Power Supply for Cubis, 100-240 V	183	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6900901	Line cord for Cubis, 120 volt (USA)	43	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6900900	Line cord for Cubis, 220 volt (Euro)	43	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Displays and Input/Output Devices												
YAC01MSA	MSA Display and Control Unit, color touchscreen	3,340	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YAC01MSU	MSU Display and Control Unit, B&W graphic display w/ tactile keys	1,920	✓	✓	✓		✓	✓	✓	✓	✓	✓
YAC01MSE	MSE Display and Control Unit, with backlit LCD and tactile keys	1,005	✓	✓	✓		✓	✓	✓	✓	✓	✓
YBR04PS2	QR and Barcode Reader, with PS2 connecting cable^	1,400	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓#
YHS01MS	Infrared sensor for touch-free activation of functions	295	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YHS02	Hand Switch w/T-Connector, for remote control of print, tare, cal, F, CF or toggle key	475	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YFS01	Foot Switch w/T-Connector, for remote control of print, tare, cal, F, CF or toggle key	425	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YPE01RC	Foot Switch w/T-Connector, for open/close door, tare & print	750	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YRD03Z	Additional Remote Display (LCD), backlit (fits RS232), 3 ft.	525	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

^ Requires PS2 interface module (Cubis® only)

Requires VF4466

Extended Warranty, Installation and IQ/OQ (for more info, see page 198)

84WAL04	12-month micro balance extended warranty	630	✓	✓	✓	✓						
84WAL03	12-month semi-micro balance extended warranty	310					✓					
84WAL02	12-month analytical balance extended warranty	310						✓				
84WAL01	12-month precision balance extended warranty	310							✓	✓	✓	✓
84ICL04	Micro balance installation ≤ 0.000001g	550	✓	✓	✓	✓						
84ICL03	Semi-micro balance installation 0.00001g	265					✓					
84ICL02	Analytical balance installation 0.0001g	265						✓				
84ICL01	Precision balance installation ≥ 0.001g	265							✓	✓	✓	✓
84QAL04	Micro balance IQ/OQ	1,110	✓	✓	✓	✓						
84QAL03	Semi-Micro balance IQ/OQ	1,110					✓					
84QAL02	Analytical balance IQ/OQ	1,110						✓				
84QAL01	Precision balance IQ/OQ	1,110							✓	✓	✓	✓
84CGNA	USP Chapter 41 Certificate	95	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
84CENC	ISO 17025 Measurement Uncertainty Certificate	125	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Installation and IQ/OQ pricing are only valid for the continental United States. Travel and expenses are not included in the prices listed above.

Item	Description	US List Price (\$)	Ultra Micro, 2.7S	Micro, 6.6S	Micro, 3.6P	High Cap Micro	5-place Semi-Micro	4-place Analytical	3-place Precision	2- & 1-place Precision	2-place Precision, 5202S	High Cap Precision
Pipette Calibration Kits												
YCP04MS	Pipette Calibration Kit (Hardware), for Cubis 0.01 0.1 mg	1,160					✓	✓				
VF988	Pipette Calibration Kit (Hardware), for Cubis 1 µg	on request		✓								
Filter Weighing and Anti-Static Accessories												
VF2562	Filter Weighing Pan for DF Draft Shield, Ø 75 mm	on request	✓	✓								
VF2880	Filter Weighing Pan for DF Draft Shield, Ø 90 mm	on request	✓	✓								
YWP01MS	Anti-static weighing pan, Ø 5.1"	295					✓	✓				
YWP10	Slotted Titanium weighing pan, 90 mm (116P only)	1,060				✓						
YIB02-115V	Ionizer with U-shaped electrode (incl. power supply 115V)	2,820	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YIB01-OUR	Ionizing Blower (neutralizes static charges)	1,785	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YSTP01	Stat Pen (neutralizes static charges)	1,885	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
U1-69US0094	Static Master	114	✓	✓	✓	✓	✓	✓	✓		✓	
Special Application Accessories												
YDK01MS	Density Determination Kit for liquids and solids, Cubis models with a readability of 0.01 mg and 0.1 mg	1,140					✓	✓				
YDK02MS	Density Determination Kit for liquids and solids, Cubis models with a weigh pan size of 140 x 140 mm	1,140							✓		✓	
YFH01MS	Q-Grip, Flexible holder for weigh flasks, vials, filters up to 120 mm (replaces original weigh pan)	405					✓	✓				
YWP03MS	Q-Grid pan, for Cubis models with 10 mg & 100 mg readability (replaces original weigh pan)	2,220								✓		
69EA0040	Below balance weighing hook	52										✓
YTF02-115NA	Automatic Tablet Feeder (includes: tablet feeder, line cord, 25-25 pin cable, sample collection bowl & manual)	7,535					✓	✓	✓			
YTFDL01	Stainless Steel Draft Shield Door, left side, for Tablet Feeder (for DU draft shield only)	320					✓	✓	✓			
Safety Powder Hoods												
SPH32	32" Safety Powder Hood, includes dark-blue base, light, power cord access port, filters (2 HEPA, 1 pre-filter), 110 V	7,570	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SPH32B	32" Safety Powder Hood, includes dark-blue base, waste chute/bio-bag port on right side, light, power cord access port, filters (2 HEPA, 1 pre-filter), 110 V	8,005	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SPH48	48" Safety Powder Hood, includes dark-blue base, light, power cord access port, filters (2 HEPA, 1 pre-filter), 110 V	9,195	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SPH48B	48" Safety Powder Hood, includes dark-blue base, waste chute/bio-bag port on right side, light, power cord access port, filters (2 HEPA, 1 pre-filter), 110 V	9,625	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6009.1	Pre-filter, pack of 12 for SPH32 & SPH32B	345	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6010.1	Pre-filter, pack of 12 for SPH48 & SPH48B	485	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6011.1	HEPA Filter for SPH32 & SPH32B	485	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6012.1	HEPA Filter for SPH48 & SPH48B	835	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6015.1	32" wide Stand with leveling feet for SPH32 & SPH32B	800	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6016.1	48" wide Stand with leveling feet for SPH48 & SPH48B	950	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* Not an after-market option. Must be ordered with the hood.

Item	Item Description	US List Price (\$)	Ultra Micro, 2.7S	Micro, 6.6S	Micro, 3.6P	High Cap Micro	5-place Semi-Micro	4-place Analytical	3-place Precision	2- & 1-place Precision	2-place Precision, 5202S	High Cap Precision
Anti-Vibration Solutions												
U1-21201315	Granite Platform (13" × 15"), with vibration isolators *	695	✓	✓	✓		✓	✓	✓	✓	✓	
U1-24201621	Granite Platform (16" × 21"), with vibration isolators **	1,305				✓	✓	✓	✓	✓	✓	✓
YWT03	Balance table, made from granite with vibration dampeners	2,130	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YWT09	Weighing table, made of wood, with decoupled centered granite plate	2,005	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Weighing Accessories												
YDH01MS	Display holder for Cubis Precision models; for raising the MSE, MSU & MSA displays	520								✓		
YDH02MS	Display holder for Cubis Precision High-Capacity models for raising MSE, MSU & MSA displays	555										✓
U1-6565-250	Weighing Boats, aluminum (4.5 mg) 0.5" × 0.2" × 0.1" / qty; 250	137	✓	✓	✓	✓						
YBW01S	Small Weigh Boat, anti-static polystyrene with pour spout (1.375" x 1.875" x 0.5"), 50/pkg	21					✓	✓	✓	✓	✓	✓
YBW01M	Medium Weigh Boat, anti-static polystyrene with pour spout (2.875" x 4.75" x 1.25"), 50/pkg	24							✓	✓	✓	✓
YBW01L	Large Weigh Boat, anti-static polystyrene with pour spout (3.875" x 6.625" x 1.125"), 50/pkg	27								✓		✓
YBW01K	Weigh Boat Kit, anti-static polystyrene with pour spout, 30/pkg (10x each of S, M, L)	55					✓	✓	✓	✓	✓	✓
U1-LD2	Locking Device, anti-theft	84	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Display/Dust Covers												
6960MS01	Cubis Display Protection Cover, for MSA MSU	130	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6960MS05	Cubis Display Protection Cover, for MSE	94	✓	✓	✓		✓	✓	✓	✓	✓	✓
6960MS02	In-Use Dust Cover for Cubis Precision (pan size: 206 × 206 mm only)	130								✓		
6960MS03	Overnight Dust Cover, for Cubis (DU DA DI draft shield only)	68					✓	✓	✓		✓	
6960MS04	Overnight Dust Cover, for Cubis (DE draft shield only)	89							✓		✓	

* Applicable for all all Cubis® ultra-micro|micro models

** Applicable for all MSA|MSU Cubis® models (except ultra-micro|micro)

Cubis® MSA Dosing System

Makes the Preparation of Standards Easy and Reliable

The Cubis® MSA Dosing System and YAPP16 Q-App software simplifies workflows in the preparation of analytical standards. The system guides the user step-by-step throughout the entire process and automatically performs all calculations in the background to determine the exact concentration to prevent errors. Prepare standards with confidence in accuracy, consistency and traceability.



Features

Automated Preparation of Standards

YAPP16 Dosing Q-App software connects your Cubis® MSA balance directly to your dispenser and will then accurately calculate the required solvent volume based on the quantity of solid weighed.

Documentation of Test Procedures

The YAPP16 Q-App will guide you step-by-step throughout your workflow and digitally document the entire process in a traceable, easy-to-understand record.

Reliable Planning of Simple Workflows

Forget delays caused by the need to take corrective steps. Now you won't have to be prepared for the unexpected – thanks to automated and fast preparation of 100% consistent standards, including reliable documentation.

Modularity

The balance can be configured according to your specific requirements.

Intelligent isoCAL calibration system

100% certainty that your balance is always correctly calibrated and adjusted.

Automation Interface for Chromeleon™ 7.2 CDS Software

The YAPP16 Dosing Q-App has an interface port for Thermo Scientific™ Chromeleon 7.2 Chromatography Data System software, which enables data management of chromatographic systems, simplified run creation/ data analysis, and direct transfer of the verified concentration of calibration standards.

Benefits

Perfectly Integrated System

Highly accurate weighing with the Cubis® MSA balance and dispensing of solvents using automatic dispensers, electronic or manual pipettes.

Versatile, Automatic Preparation of Standards

Preparation of individual standards and mixed standards with automatic adjustment of the solvent volume to the actual weight of a compound for maximum efficiency and time savings without compromising accuracy or precision.

Proven Valid Results

Automatic calculation of the verified volume and concentration(s).

Integrated Software Application

Controls system components by the YAPP16 Dosing Q-App. No separate computer is necessary.

Flexible and Reliable

Create an individual library of solvents and compounds along with specifications on purity, lot, molecular weight, density and supplier.

Cost- and Time-Efficient

Automated processes eliminate unnecessary waste of solvents or compounds and no need for high-maintenance glassware.

Standardized Process with Controlled Workflows

Consistency in the preparation of standards, independent of the particular lab analyst, 100% compliance with your SOPs.

Audit Trail

Systematic monitoring and documentation of process steps for traceability in compliance with GLP and accredited procedures.

Direct Data Transfer

Reliable documentation, error-free printing, no manual transcription errors.

Configurable Printouts

Choice between GLP-compliant and standard printouts, as well as label printouts.

The Cubis® MSA Dosing System is custom-configurable from a choice of components. Configuration options are as follows:

- **Cubis® MSA:** Modular, configurable high-resolution balances for accurate determination of the mass of liquid, paste-like, powdered or solid materials. Cubis® MSA balances already installed can be easily retrofitted to readily convert them into dosing systems. Recommended MSA models: 116P, 66S, 66P, 36S, 36P, 6.6S, 225S, 225P, 125P, 224S or 124S.
- **YAPP16:** Dosing application software for Cubis® MSA balances to prepare standards of a defined concentration
- **Dispenser:** The solvent can be dosed manually using a pipette or automatically with either the Hamilton Microlab dispenser or the Hirschmann opus® titration unit
- **Density meter:** The Anton Paar DMA 35 density meter can be implemented to measure the density of solvents
- **Printer:** Connect the YDP30 thermal transfer printer to document the results on your choice of standard or self-adhesive fade-resistant paper
- **Sample holder:** Various sample holders are available to accommodate the containers you use
- **NOTE:** If using an automatic dispenser and YDP30 printer, two serial ports are needed. Please either configure balance with IR or select YD001MS-R

Specifications & Pricing

Model	Description	US List Price (\$)
YDU-10	Hamilton MICROLAB 630 Complete Package Includes: Hamilton MICROLAB 630 Dispenser with 25mL syringe, tip hand probe, tubing and 1L solvent bottle (4) with safety cap	13,030
YDU-11	Hamilton MICROLAB 630 Complete Package w/ Density Meter Includes: Hamilton MICROLAB 630 Dispenser with 25mL syringe, tip hand probe, tubing, 1L solvent bottle (4) with safety cap and Anton Paar DMA 35 Density Meter with calibration certification	15,990
69Y03295	RS-232 cable (required for Dispenser)	88
Options		
YDU-5	Hamilton 10 ml Syringe	315
YDU-6	Hamilton 50 ml Syringe	655
For Hirschmann opus® Titrators		
YDU-12	Hirschmann opus® titrator, 10 mL (Accessories Set I or II required)	2,370
YDU-13	Hirschmann opus® titrator, 20 mL (Accessories Set I or II required)	2,370
YDU-14	Hirschmann opus® titrator, 50 mL (Accessories Set I or II required)	2,370
YDU-15	Hirschmann opus® Accessories Set I Includes: Base set for adapter with filler neck and bottle adapter, opus® system platform, opus® RS232 connection cable, Suction hose (2 m), return hose (2 m), Bottle adapter (GL45) with 2 ports for suction and return hose	765
YDU-16	Hirschmann opus® Accessories Set II Includes: opus® System platform, opus® RS232 connecting cable	325
69Y03295	RS-232 cable (required for opus® titrator unit)	88
Additional Accessories		
YDU-20	SD-Card, 8GB (required for Q-App)	12
YD001MS-R	Field Upgradeable Interface Module for Cubis®, 25-pin RS232	220
YFH01MS	Q-Grip, flask holder for Cubis® analytical and semi-micro balance	405
YAPP16	Cubis® Dosing Q-App software (standard on MSA116P model)	1,775
YDP30	Premium GLP thermal transfer lab printer (paper not included)	1,440
69Y03285	Standard paper & ink ribbon set for YDP30 (fade-resistant)	103
69Y03286	Self-adhesive paper & ink ribbon set for YDP30 (fade-resistant)	112
YDU-9	DMA 35 Density Meter	4,120



opus® Titrator



Cubis® with Hamilton Dispenser



DMA 35 Density Meter

Cubis® MPS– Manual Pipette Calibration System

The Right Balance and Software Combination for Accuracy, Precision, Speed and Convenience

The perfectly balanced system designed to reconcile all your needs for accuracy, precision, speed and convenience in pipette calibration. Accuracy and precision to comply with international regulations (DIN EN ISO 8655); speed to meet requirements for cost and time-efficient performance; and convenience for working in a comfortable posture.

Features & Benefits

- Motion Control. Quick opening of the draft shield: convenient and efficient pipetting
- Integrated humidity sensor. Monitors humidity inside the weighing chamber
- White LED light. Illumination of the full weighing area
- Red LED light. Instant alert if climate parameters are out of tolerance
- Automated draft shield door. Prevents evaporation for error-free measurements
- Evaporation trap. Stable humidity conditions inside the weighing chamber
- Accessories for MPS. Improve accuracy and efficiency with the Climate Module, Liquid Reservoir and Suction Pump



Speedcal Mobile

Speedcal Mobile is suitable for calibrating multi-channel pipettes. Its innovative design and sophisticated technology simplify the entire calibration process. Parallel connection of up to 12 balances, which simultaneously determine the dispensed volumes from a multi-channel pipette, make Speedcal Mobile the fastest and most effective system on the market for this task.

Features & Benefits

- Ideal for testing multi-channel pipettes with a nominal volume of more than 10 µL
- The entire test of twelve channels in compliance with DIN EN ISO 8655 10.3 (= 360 individual measurements) takes only around 10 minutes or less to complete, which saves time and money
- Unique system, available with either 4, 8, or 12 channels, with the option of subsequently adding up to 12 channels at any time that simultaneously measure the weight of the test liquid volumes dispensed by a multi-channel pipette
- The Web Service interface enables Speedcal Mobile to be used with any pipette calibration software
- Clever, dual-use design: for both continuous use in the lab and for use in the field
- The Sartorius Climate Tower and Water Reservoir can be readily connected to Speedcal Mobile for measuring climate data real time for better accuracy



Specifications & Pricing

Model	Description	US List Price (\$)
MPS6.6S	Cubis®MPS Pipette Calibration Balance, 6.1 g x 1 µg	24,890
MPS105S	Cubis® MPS Pipette Calibration Balance, 101 g x 0.01 mg	16,345
Speedcal-M4	Speedcal Mobile 4-Channel Pipette Calibration Balance	on request
Speedcal-M8	Speedcal Mobile 8-Channel Pipette Calibration Balance	on request
Speedcal-M12	Speedcal Mobile 12-Channel Pipette Calibration Balance	on request
YCP05-LR01	Liquid Reservoir with DAkkS calibrated temperature sensor for MPS & Speedcal Mobile units	1,310
YCP05-SP01	Suction Pump to aspirate container for MPS & Speedcal Mobile units	1,970
YCM20MC	Climate Module, uncalibrated for MPS & Speedcal Mobile units (requires YCM20MC-Tower)	610
YCM20MC-DAKKS	Climate Module, with DAkkS Calibration for MPS & Speedcal Mobile units (requires YCM20MC-Tower)	2,135
YCM20MC-Tower	Tower for mounting Climate Module for MPS & Speedcal Mobile units	940

Pipetto- Pipette Calibration Software

Professional pipette calibration software to manage your pipette data

Pipetto Calibration Software is a professional pipette management solution available in three different versions: Basic, Standard, and Pro. All three software solutions are exceptionally easy to use. Pipettes can be selected and calibrated with just a few clicks. The Standard and Pro versions both have network capability and user management features including individual task assignment options.



Features & Benefits

- Complete ease of operation. Select and calibrate pipettes quickly and easily
- Calibration software for single and multi-channel pipettes, dispensers, burettes, etc.
- Seamless integration with your Cubis® MPS and Speedcal Mobile system
- Compatible with all standard balances
- Up-to-date pipette database
- PCOM Box (Peak Climate Online Monitor) is an optional hardware unit for recording environmental climate conditions directly into the software to convert the gravimetric data during calibration for more accurate results

Basic version. Simple and specially designed for small in-house calibration laboratories that comply with ISO 8655.

Standard version. Ideal for calibration laboratories with multiple workstations that comply with ISO 17025.

Pro version. The optimum solution for accredited calibration laboratories that comply with ISO 17025 and FDA 21 CFR Part 11.

Specifications & Pricing

Model	Description	US List Price (\$)
PI20301-S	Pipetto version 1.1 Basic with 1 dongle	1,495
PI20201-S	Pipetto version 1.1 Standard with 1 dongle	2,820
PI20202-S	Pipetto version 1.1 Standard with 1 PCOM box and 1 dongle	3,580
PI20203-S	Pipetto version 1.1 Standard with 1 DAkkS PCOM box and 1 dongle	4,255
PI20101-S	Pipetto version 1.1 Pro with 1 dongle	5,320
PI20102-S	Pipetto version 1.1 Pro with 1 PCOM box and 1 dongle	5,540
PI20103-S	Pipetto version 1.1 Pro with 1 DAkkS PCOM box and 1 dongle	6,335
PI20404-S	Pipetto expansion module – MPS (for Standard or Pro version only)	FOC
PI20402-S	Pipetto expansion module – Speedcal (for Standard or Pro version only)	910
PI20403-S	Pipetto expansion module – expanded measurement uncertainty (for Pro version only)	820

Manual Mass Comparators

Your Full-range Mass Standards Laboratory

The new manual Cubis® MCM Mass Comparators are the first devices on the market that unite metrological weighing competence with an integrated control of workflows in line with the recommendations of OIML and ASTM. The workflow is ergonomically optimized giving the user a more relaxed working atmosphere, which minimizes the error rate during operation.



Features & Benefits

Incorporated Workflow Control. Provides user-guided workflows with step-by-step instructions to perform mass calculation, which reduces operator error and increases the accuracy of the results.

Climate Sensor. Integrated into the draft shield logs temperature, humidity and air pressure for calculating air buoyancy correction at the site of measurement.

Fast Methodology. Delivers fast-run method cycles (ABA, ABBA or AB1...BnA) for determining the conventional value of mass (also referred to as conventional mass and its combined standard uncertainty).

Color Touchscreen. Features a Cubis® MSA display and control unit with color touchscreen for fast and simple configuration of parameters and workflows.

Automatic Uncertainty Calculation. The measurement uncertainty is determined in full accordance with OIML and ASTM recommendations. No external software or a climate measuring station is required.

Off-Center Load Compensation. Significantly reduces measurement errors when the load is off-center. Therefore, no automatic centering is usually necessary and the loading is much easier.

Leveling Status is Constantly Monitored. Automatically detects when the balance is skewed and provide graphic support during leveling. On the models MCM2004, MCM5004 and MCM5003, automatic motorized leveling is also possible.

Diverse Communication Possibilities. Data interfaces, like USB, RS232 and Ethernet enable nearly all forms of bidirectional communication. Parameter and data can be stored on an SD card then transferred to a PC or other MCM.





Specifications & Pricing

Model	Capacity	Readability	Repeatability*	Linearity	Electronic Weighing Taring Range	Substitution Weight	Pan Size (mm/in.)	US List Price (\$)
MCM6.7	6.1 g	0.1 µg	0.15 µg	1 µg	6.1 g	-	16/0.6 Ø	on request
MCM36	31 g	1 µg	1 µg	6 µg	31 g	-	30/1.2 Ø	on request
MCM66	61 g	1 µg	1 µg	8 µg	61 g	-	30/1.2 Ø	on request
MCM106	111 g	1 µg	1 µg	8 µg	61 g	50 g	50/1.97 Ø	on request
MCM605	610 g	0.01 mg	10 µg	100 µg	610 g	-	90/3.5 Ø	on request
MCM1005	1,110 g	0.01 mg	15 µg	100 µg 600 g	610 g	500 g	90/3.5 Ø	on request
MCM1004	1,110 g	0.1 mg	0.05 mg	0.1 mg 600 g	610 g	500 g	90/3.5 Ø	on request
MCM2004	2,500 g	0.1 mg	0.05 mg	1 mg	2,500 g	-	136 x 136/5.4 x 5.4	on request
MCM5004	5,100 g	0.1 mg	0.3 mg	2 mg	5,100 g	-	136 x 136/5.4 x 5.4	on request
MCM5003	5,100 g	1 mg	0.5 mg	3 mg	5,100 g	-	136 x 136/5.4 x 5.4	on request
MCM10K3	11 kg	1 mg	0.8 mg	6 mg	11 kg	-	200 x 200/7.9 x 7.9	on request
MCM40K3	41 kg	1 mg	2 mg	20 mg	41 kg	-	400 x 300/15.7 x 11.8	on request
MCM60K3	64 kg	2 mg	4 mg	40 mg	64 kg	-	400 x 300/15.7 x 11.8	on request
MCM60K2	64 kg	10 mg	6 mg	50 mg	64 kg	-	400 x 300/15.7 x 11.8	on request

*Repeatability is the standard deviation "s"; it is calculated from 5 ABA cycles, after eliminating drift; based on optimal conditions: automatic measurement without operator influence measured in a laboratory under E1 conditions, on a decoupled weighing stone, no drafts from above.

Standard Laboratory Balances

Secura® and Quintix®

Reliable Weighing for Faster and Better Results

Based on Intuitive Operation:

The Start Assistant function and SmartTouch user interface will enable you to operate the balance immediately and feel right at ease using all the functions available. Both the convenient operating design with its easy-to-understand menu structure and the ergonomic balance design have already won several awards. These features will significantly help accelerate your workflows right from the start for error-free results.

Using Integrated Applications:

Built-in standard applications let you instantly extend the options for using the balance, turning special, often complicated, lab tasks into efficient routines. These applications are set up for intuitive use, guiding you in simple steps throughout each of your workflows. This will save you valuable time and increase the reliability of your results.

Made to Deliver the Best Results:

Quickly and easily transfer, evaluate, further process or save and document weighing results in perfect compliance with legal requirements – just by using Plug & Play technology, without needing any extra software or complicated settings. In this way, you can unlock the full potential of your lab data and reliably save it. As a result, you will have more time for new, intriguing analytical procedures, while being on the safe side.

Secura®



Micro model

Semi-micro models
(includes 324)

Analytical models
(excludes 324)

Milligram models

Precision models

Quintix®



Semi-micro models

Analytical models

Milligram models

Precision models



Applications



Weighing



Density



Percentage



Checkweighing



Peak Hold



Counting



Conversion



Unstable
Conditions



Components



Mixing



Statistics

Features

Secura® Quintix®

Reliability and Data Security

isoCAL: internal calibration and adjustment function

• •

CAL audit trail function

• •

Menu protection

• •

Password protection

•

SQmin: monitoring the minimum sample weight for compliance with the USP* operating range

•

Individual security levels

•

Data Transfer and Documentation

Plug & Play functionality via mini USB port

• •

PC-Direct feature for data transfer to a computer

• •

Sample and batch identification

•

Monitored data transfer

•

Leveling

Leveling guided by the level indicator

•

Continuous real-time level monitoring

•

Models

Semi-micro balances

• •

Micro balance

•

Higher weighing capacity | readability levels**

•

* USP- United States Pharmacopeia

** See Technical Specifications

Specifications & Pricing

Model	Capacity (g)	Readability (g)	Repeatability (± g)	Pan Size Ø (mm in.)	Calibration Type	Wt. (g)	US List Price (\$)
Micro Balance							
SECURA26-1S	21	0.002 mg	0.004 mg	50 1.97	isoCAL	20	20,555
Semi-Micro Balances							
SECURA125-1S	60 120	0.01 0.01 mg	0.03 0.04 mg	80 3.1	isoCAL	100	6,445
SECURA225D-1S	60 120 220	0.01 0.01 0.1 mg	0.03 0.04 0.07 mg	80 3.1	isoCAL	100	6,770
QUINTIX35-1S	30	0.01 mg	0.03 mg	80 3.1	isoCAL	20	5,280
QUINTIX65-1S	40 60	0.01 0.01 mg	0.03 0.04 mg	80 3.1	isoCAL	50	5,510
QUINTIX125D-1S	40 60 120	0.01 0.01 0.1 mg	0.03 0.04 0.07 mg	80 3.1	isoCAL	50	5,740
Analytical Balances							
SECURA124-1S	120	0.0001	0.0001	90 3.5	isoCAL	100	3,935
SECURA224-1S	220	0.0001	0.0001	90 3.5	isoCAL	200	4,365
SECURA324-1S	320	0.0001	0.0001	90 3.5	isoCAL	200	5,135
QUINTIX64-1S	60	0.0001	0.0001	90 3.5	isoCAL	50	3,130
QUINTIX124-1S	120	0.0001	0.0001	90 3.5	isoCAL	100	3,480
QUINTIX224-1S	220	0.0001	0.0001	90 3.5	isoCAL	200	3,940
Milligram Balances							
SECURA213-1S	210	0.001	0.001	120 4.75	isoCAL	200	2,405
SECURA313-1S	310	0.001	0.001	120 4.75	isoCAL	200	2,620
SECURA513-1S	510	0.001	0.001	120 4.75	isoCAL	500	3,280
SECURA613-1S	610	0.001	0.001	120 4.75	isoCAL	500	3,495
SECURA1103-1S	1,100	0.001	0.001	120 4.75	isoCAL	1,000	5,090
QUINTIX213-1S	210	0.001	0.001	120 4.75	isoCAL	200	2,060
QUINTIX313-1S	310	0.001	0.001	120 4.75	isoCAL	200	2,200
QUINTIX513-1S	510	0.001	0.001	120 4.75	isoCAL	500	2,980
QUINTIX613-1S	610	0.001	0.001	120 4.75	isoCAL	500	3,130
Precision Balances							
SECURA612-1S	610	0.01	0.01	180 7	isoCAL	500	2,070
SECURA1102-1S	1,100	0.01	0.01	180 7	isoCAL	1,000	2,295
SECURA2102-1S	2,100	0.01	0.01	180 7	isoCAL	2,000	2,730
SECURA3102-1S	3,100	0.01	0.01	180 7	isoCAL	2,000	2,950
SECURA5102-1S	5,100	0.01	0.01	180 7	isoCAL	5,000	3,390
SECURA6102-1S	6,100	0.01	0.01	180 7	isoCAL	5,000	3,605
SECURA3101-1S	3,100	0.1	0.05	180 7	isoCAL	2,000	2,200
SECURA6101-1S	6,100	0.1	0.05	180 7	isoCAL	5,000	2,520
QUINTIX412-1S	410	0.01	0.01	180 7	isoCAL	200	1,510
QUINTIX612-1S	610	0.01	0.01	180 7	isoCAL	500	1,740
QUINTIX1102-1S	1,100	0.01	0.01	180 7	isoCAL	1,000	1,970
QUINTIX2102-1S	2,100	0.01	0.01	180 7	isoCAL	2,000	2,200
QUINTIX3102-1S	3,100	0.01	0.01	180 7	isoCAL	2,000	2,435
QUINTIX5102-1S	5,100	0.01	0.01	180 7	isoCAL	5,000	3,020
QUINTIX6102-1S	6,100	0.01	0.01	180 7	isoCAL	5,000	3,535
QUINTIX2101-1S	2,100	0.1	0.1	180 7	isoCAL	2,000	1,510
QUINTIX5101-1S	5,100	0.1	0.1	180 7	isoCAL	5,000	1,740
QUINTIX6101-1S	6,100	0.1	0.1	180 7	isoCAL	5,000	2,085
QUINTIX5100-1S	5,100	1.0	0.5	180 7	isoCAL	5,000	1,390
QUINTIX6100-1S	6,100	1.0	0.5	180 7	isoCAL	5,000	1,510

Scope of delivery for all Secura® & Quintix® balances include: Universal power adapter (100-240 V~), in-use cover, Application guide, Draft shield & Dust cover for micro, semi-micro, analytical and milligram balances.

Secura® & Quintix® Accessories

Item	Description	US List Price (\$)
YDP30	Premium GLP lab printer (paper not included)	1,440
69Y03285	Printer paper for YDP30 (ink ribbon set for GLP)	103
69Y03286	Self-adhesive printer paper for YDP30 (ink ribbon set for GLP)	112
YDP40	Standard Thermal Lab Printer	920
69Y03287	Standard thermal paper for YDP30 YDP40, 5 rolls	60
69Y03288	Self-adhesive thermal paper for YDP30 YDP40, 5 rolls	95
YRB11Z	Battery pack for standard lab balances	590
YCC04-D09	Data cable mini USB USB A	55
YCC03-D09	Data cable mini USB RS232 9-pin female	55
YCC03-D25	Data cable mini USB RS232 25-pin female	55
VF4601	Density kit for balances with a readability of 0.01 mg and Model 324-1S	on request
YDK03	Density kit for balances with a readability of 0.1 mg 1 mg	875
YDK04	Density kit for balances with a readability of 0.01 g	765
YFW01SQP	Filter weighing pan, 130 mm, for 0.01 mg balances	490
YWP01SQP	Weighing pan 90 mm for 0.01 mg balances	365
YSP01SQP	Weighing pan, 80 mm slotted, for 0.01 mg balances	730
YDB-SECURA-5	Carrying case for 0.01 mg balances	950
YDB-SECURA	Carrying case for 0.1 mg 1 mg balances	765
YDB-SECURA-P	Carrying case for 10 mg balances	510
YDS01SQP	Draft shield for balances with a readability of 0.01 g 0.1 g 1 g	410
YDS02SQP	Draft shield for balances with a readability of 1 mg	280
YHK01SQP	Interior glass draft shield for balances with a readability of 0.002 mg	765
6960SE05	In-use covers for balances with a readability of 0.01 mg or 0.002 mg	44
6960SE01	In-use covers for balances with a readability of 0.1 mg or 1 mg	63
6960SE02	In-use covers for balances with a readability of 0.01 g 0.1 g 1 g	63
6960SE04	Dust cover for balances with a readability of 0.01 mg or 0.002 mg	55
6960SE03	Dust cover for balances with a readability of 0.1 mg or 1 mg	56
YIB01-OUR	Ionizing blower for electrostatically charge of samples	1,785
YSTP01	Stat pen, for neutralize static electricity on samples	1,885
YWT09	Weighing table, made of wood, with decoupled centered granite plate	2,065
YWT03	Balance table, made of granite, with vibration dampeners	2,195
U1-21201315	Granite Platform (13" × 15"), with vibration isolators	695
YCP06SQ	Pipette calibration kit (hardware) for balances with a readability of 0.01 mg	930
641214	Weighing scoop made of chrome nickel steel, 90 mm × 32 mm × 8 mm	96
U1-6565-250	Aluminum weighing scoops, 4.5 mg (pkg. of 250) for micro balances	137
YSW02	Sartorius Wedge for Windows (no cable included)	510
Extended Warranty and Installation (for more info & service options, see page xxx)		
84WAL04	12-month micro balance extended warranty	630
84WAL03	12-month semi-micro balance extended warranty	310
84WAL02	12-month analytical balance extended warranty	310
84WAL01	12-month precision/milligram balance extended warranty	310
84ICL04	Micro balance installation	550
84ICL03	Semi-micro balance installation	265
84ICL02	Analytical balance installation	265
84ICL01	Precision/milligram balance installation	265
84CGNA	USP Chapter 41 Certificate	95
84CENC	ISO 17025 Measurement Uncertainty Certificate	125



YDP30 Thermal Transfer Printer



YDS02SQP Round Glass Draft Shield



YDK03 Density Kit

^ Please contact a Sartorius rep for pricing

Installation pricing is only valid for the continental United States. Travel and expenses are not included in the prices listed.

Basic Laboratory Balances

Entris® and Practum®

These two families of balances are designed to help you start off right in professional weighing. All models feature high-quality weigh cells that ensure fast and repeatable weighing results.

Entris®: It's the classic lab balance!

Entris® has been specially designed to let you accomplish a large number of simple routine weighing tasks effectively and reliably. The balance's clearly structured user interface, logical key assignment and easy-to-read display are ideal features for error-free, confident operation.

Practum®: Meet the clever lab balance!

Its advanced, ergonomic design and intuitive touch-screen user interface will give you the perfect support you need in your daily routine tasks. Get the best value for your money, without any compromises in precision or reliability.



Features

Usability

Colored Touchscreen technology		•
High-contrast backlit LCD display	•	
Integrated application programs	•	•

Reliability

External calibration function	•	•
Internal calibration and adjustment function	•	
Overload protection feature	•	•

Data Transfer

Plug & Play functionality via mini USB port		•
PC-Direct feature for data transfer to a computer		•
Easy data transfer to a computer via RS232	•	

Leveling

Leveling guided by the level indicator	•	•
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Entris®

Practum®

Entris® Applications

- Basic Weighing
- Weighing in %
- Counting
- Animal Weighing | Averaging
- Density
- Mass Unit Conversion

Practum® Applications

- Basic Weighing
- Weighing in %
- Counting
- Animal Weighing | Averaging
- Density
- Mass Unit Conversion
- Checkweighing
- Peak Hold



Analytical models



Milligram models



Precision models with square weighing pan



Precision models with round weighing pan

Entris® Specifications & Pricing

Model	Capacity (g)	Readability (g)	Repeatability (± g)	Pan Size Ø (mm/in.)	Calibration Type	Wt. (g)	US List Price (\$)
Analytical Balances							
ENTRIS64i-1SUS	60	0.0001	0.0001	90 3.5	Internal	50	2,460
ENTRIS124i-1SUS	120	0.0001	0.0001	90 3.5	Internal	100	2,885
ENTRIS224i-1SUS	220	0.0001	0.0001	90 3.5	Internal	200	3,210
ENTRIS64-1SUS	60	0.0001	0.0001	90 3.5	External	50	1,805
ENTRIS124-1SUS	120	0.0001	0.0001	90 3.5	External	100	2,160
ENTRIS224-1SUS	220	0.0001	0.0001	90 3.5	External	200	2,400
Milligram Balances							
ENTRIS153i-1SUS	150	0.001	0.001	115 4.5	Internal	100	1,715
ENTRIS323i-1SUS	320	0.001	0.001	115 4.5	Internal	200	1,875
ENTRIS423i-1SUS	420	0.001	0.001	115 4.5	Internal	200	2,255
ENTRIS623i-1SUS	620	0.001	0.001	115 4.5	Internal	500	2,670
ENTRIS153-1SUS	150	0.001	0.001	115 4.5	External	100	1,080
ENTRIS323-1SUS	320	0.001	0.001	115 4.5	External	200	1,265
ENTRIS423-1SUS	420	0.001	0.001	115 4.5	External	200	1,505
ENTRIS623-1SUS	620	0.001	0.001	115 4.5	External	500	1,750
Precision Balances							
ENTRIS822i-1SUS	820	0.01	0.01	150 5.9	Internal	500	1,600
ENTRIS2202i-1SUS	2,200	0.01	0.01	180 7.1*	Internal	2,000	1,815
ENTRIS3202i-1SUS	3,200	0.01	0.01	180 7.1*	Internal	2,000	2,030
ENTRIS4202i-1SUS	4,200	0.01	0.01	180 7.1*	Internal	2,000	2,305
ENTRIS6202i-1SUS	6,200	0.01	0.01	180 7.1*	Internal	5,000	2,735
ENTRIS2201i-1SUS	2,200	0.1	0.1	180 7.1*	Internal	2,000	1,420
ENTRIS5201i-1SUS	5,200	0.1	0.1	180 7.1*	Internal	5,000	1,660
ENTRIS8201i-1SUS	8,200	0.1	0.1	180 7.1*	Internal	5,000	1,900
ENTRIS822-1SUS	820	0.01	0.01	150 5.9	External	500	965
ENTRIS2202-1SUS	2,200	0.01	0.01	180 7.1*	External	2,000	1,140
ENTRIS3202-1SUS	3,200	0.01	0.01	180 7.1*	External	2,000	1,385
ENTRIS4202-1SUS	4,200	0.01	0.01	180 7.1*	External	2,000	1,565
ENTRIS6202-1SUS	6,200	0.01	0.01	180 7.1*	External	5,000	1,805
ENTRIS2201-1SUS	2,200	0.1	0.1	180 7.1*	External	2,000	1,030
ENTRIS5201-1SUS	5,200	0.1	0.1	180 7.1*	External	5,000	1,210
ENTRIS8201-1SUS	8,200	0.1	0.1	180 7.1*	External	5,000	1,320

Scope of delivery for all Entris® balances include: Universal power adapter (100-240V~), Draft shield for analytical balances, Round draft shield for milligram balances, Installation & operating instructions.

* square pan

Practum® Specifications & Pricing

Model	Capacity (g)	Readability (g)	Repeatability (± g)	Pan Size Ø (mm in.)	Calibration Type	Wt. (g)	US List Price (\$)
Analytical Balances							
PRACTUM64-1S	60	0.0001	0.0001	90 3.5	External	50	2,095
PRACTUM124-1S	120	0.0001	0.0001	90 3.5	External	100	2,455
PRACTUM224-1S	220	0.0001	0.0001	90 3.5	External	200	2,700
Milligram Balances							
PRACTUM213-1S	210	0.001	0.001	120 4.75	External	200	1,400
PRACTUM313-1S	310	0.001	0.001	120 4.75	External	200	1,510
PRACTUM513-1S	510	0.001	0.001	120 4.75	External	500	1,920
Precision Balances							
PRACTUM412-1S	410	0.01	0.01	180 7	External	200	990
PRACTUM612-1S	610	0.01	0.01	180 7	External	500	1,095
PRACTUM1102-1S	1,100	0.01	0.01	180 7	External	1,000	1,215
PRACTUM2102-1S	2,100	0.01	0.01	180 7	External	2,000	1,270
PRACTUM3102-1S	3,100	0.01	0.01	180 7	External	2,000	1,510
PRACTUM2101-1S	2,100	0.1	0.1	180 7	External	2,000	1,135
PRACTUM5101-1S	5,100	0.1	0.1	180 7	External	5,000	1,295
PRACTUM6101-1S	6,100	0.1	0.1	180 7	External	5,000	1,355
PRACTUM5100-1S	5,100	1.0	1.0	180 7	External	5,000	1,000
PRACTUM6100-1S	6,100	1.0	1.0	180 7	External	5,000	1,055

Scope of delivery for all Practum® balances include: Universal power adapter (100-240 V~), In-use cover, Application guide, Draft shield & Dust cover for analytical and milligram balances.



Analytical models



Milligram models



Precision models



Entris® & Practum® Accessories

Item	Description	Entris®	Practum®	US List Price (\$)
YDP40	Standard thermal lab printer		•	920
69Y03287	Standard thermal paper for YDP30 YDP40, 5 rolls		•	60
69Y03288	Self-adhesive thermal paper for YDP40, 5 rolls		•	95
YDP20-OCE	Data Printer, with statistics and time date function	•	*	1,155
6906937	Paper Rolls for YDP20-OCE, 5 rolls	•	*	51
6906918	Ink Ribbon for YDP20-OCE	•	*	56
YRB11Z	Battery pack for standard lab balances	•	•	590
YRD03Z	Remote display, backlit LCD, character height: 15 mm	•	*	525
YCC04-D09	Data cable mini USB USB A		•	55
YCC03-D09	Data cable mini USB RS232 9-pin		•	55
YCC01-USBM2	Data Cable RS232 USB	•		150
YCC05-001M2	Data Cable 25-pin RS232 9-pin RS232, 5'	•		13
YDK03	Density kit for balances with a readability of 0.1 mg 1 mg	(0.1 mg only)	•	875
YDK04	Density kit for balances with a readability of 0.01 g		•	765
YDS01SQP	Draft shield for balances with a readability of 0.01 g 0.1 g 1 g		•	410
YDS02SQP	Draft shield for balances with a readability of 1 mg		•	290
6960SE01	In-use covers for balances with a readability of 0.1 mg or 1 mg		•	63
6960SE02	In-use covers for balances with a readability of 0.01 g 0.1 g 1 g		•	63
6960SE03	Dust cover for balances with a readability of 0.1 mg or 1 mg		•	56
6960ED01	In-use cover for models with a square weighing pan	•		87
6960ED02	In-use cover for models with a round weighing pan	•		95
6960BP08	Overnight dustcover for 0.1mg models	•		63
YIB01-OUR	Ionizing blower for electrostatically charge of samples	•	•	1,785
YSTP01	Stat pen, for neutralize static electricity on samples	•	•	1,885
U1-21201315	Granite Platform (13" × 15"), with vibration isolators	•	•	695
YWT09	Weighing table, made of wood, with decoupled centered granite plate	•	•	2,065
YWT03	Balance table, made of granite, with vibration dampeners	•	•	2,195
YSW02	Sartorius Wedge for Windows (no cable included)	•	•	510
Extended Warranty and Installation (for more info & service options, see page 198)				
84WAL02	12-month analytical balance extended warranty	•	•	310
84WAL01	12-month precision/milligram balance extended warranty	•	•	310
84ICL02	Analytical balance installation	•	•	265
84ICL01	Precision/milligram balance installation	•	•	265
84CGNA	USP Chapter 41 Certificate	•	•	95
84CENC	ISO 17025 Measurement Uncertainty Certificate	•	•	125

* Additional components required for use with Practum®, contact Sartorius rep for more information



YDP40 Standard Thermal Lab Printer



YRB11Z External Battery Pack



YDP20-OCE Data Printer

PMA.Evolution

The new PMA Standard. Economic. Efficient. Effective.

Increase your Hazardous Area efficiency while reducing your total cost of ownership: Benefit from the precise, reliable and fast results of the new PMA.Evolution. Its superior readability - both from an angle and from a distance - make it a practical and time-saving tool to work with. With a variety of accessories you can enhance the functionality and usability of this high-quality Made-in-Germany product.



Features

Internal Mixing Module

- Integrated mixing module for PC independent formulation processing

New High-Contrast Glass Sensor Touch Display

- Viewable from any angle, even at a distance

Tempered Edge-Glass Display Face for Easy clean up

Built-In Overpour Recalculation and Factor Weighing

Dual-Range functionality

- More precise results

Display Lock

- Prevent unauthorized use

Easy Installation

- Power and Data over one USB cable

Microsoft Certified® drivers

Internationally Compliant

ATEX / FM / IECEx Approved

Integrated Zener Barrier

Multi-Language Support

Applications

- Straight Weighing
- Overpour Recalculation
- Factor Weighing
- Unit Toggling (grams or parts per pound only)
- Dual-Range
- Display Lock

Specifications & Pricing

Model	Capacity (g)	Readability (g)	Pan Size	Calibration	US List Price (\$)
EVO1X2N1-C	7500 1000	0.1 0.05	9 in. Ø	1 2 5 External	4,180
Approvals					
IECEx		Ex ib IIB T4 Gb			
ATEX		II 2G Ex ib IIB T4 Gb			
FM (USA)		IS CL I, DIV 1, GP C,D T4; CL I, Zone 1, AEx ib IIB T4			
FM (CAN)		Ex ia CL I, DIV 1, GP C,D T4, Zone 1, Ex ib IIB T4			

Benefits

Glass-sensor touch technology with visual key hit feedback allows for a faster and more accurate user interaction and with the solvent resistant full-face edge glass, cleanup is fast and easy.

Accidentally added too much of a component? No problem, the patented Overpour Recalculation feature allows you to "fix your mix" without sacrificing accuracy of recipe.

Lock features prevent unauthorized use of the scale. By entering a user-defined password, you can further enhance the security of the system.

Integrated zener barrier and USB power allows for a fast installation, with data and power over one single cable-no more tangled mess of cables.

Microsoft Certified® drivers-If an internet connection to the PC is present, the scale will locate the proper USB drivers and automatically install them.

Factory Mutual Systems Approved for use in Class I, Division 1 Hazardous Areas provides the user with the peace of mind of knowing that the unit is safe to use even in the most extreme conditions.

In-Use Protective Covers are available as accessories to keep your product looking and working like new.

PMA.HD

High-Resolution. When Every Drop Counts

The PMA.HD is the ideal solution where higher accuracy for smaller amounts is needed. With a high 10 mg resolution, the Ex Zone 1 | Class I, Div. 1 approval and the ability to connect via USB to a PC or AC power, the PMA.HD provides the ideal specifications for fast and effective results in your lab. The ergonomic design uses a smaller footprint, saving space, and the superior display and versatile power options make the PMA.HD the ideal solution for your weighing needs at higher resolution.

Features

Internal Mixing Module

- Integrated mixing module for PC independent formulation processing

New High-Contrast Glass Sensor Touch Display

- Viewable from any angle, even at a distance

Tempered Edge-Glass Display Face for Easy clean up

Built-In Overpour Recalculation and Factor Weighing

Display Lock

- Prevent unauthorized use

Easy Installation

- Power and Data over one USB cable

Microsoft Certified® drivers

Internationally Compliant

ATEX / FM / IECEx Approved

Integrated Zener Barrier

Multi-Language Support

Applications

- Straight Weighing
- Overpour Recalculation
- Factor Weighing
- Unit Toggling (grams or parts per pound only)
- Dual-Range
- Display Lock

Specifications & Pricing

Model	Capacity (g)	Readability (g)	Pan Size	Calibration	US List Price (\$)
LAB1X2N1	2200	0.01	7 in. Ø	0.5 1 2 External	5,215
Approvals					
IECEx	Ex ib IIB T4 Gb				
ATEX	II 2G Ex ib IIB T4 Gb				
FM (USA)	IS CL I, DIV 1, GP C,D T4; CL I, Zone 1, AEx ib IIB T4				
FM (CAN)	Ex ia CL I, DIV 1, GP C,D T4, Zone 1, Ex ib IIB T4				



Benefits

Glass-sensor touch technology with visual key hit feedback allows for a faster and more accurate user interaction and with the solvent resistant full-face edge glass, cleanup is fast and easy.

Accidentally added too much of a component? No problem, the patented Overpour Recalculation feature allows you to "fix your mix" without sacrificing accuracy of recipe.

Lock features prevent unauthorized use of the scale. By entering a user-defined password, you can further enhance the security of the system.

Integrated zener barrier and USB power allows for a fast installation, with data and power over one single cable-no more tangled mess of cables.

Microsoft Certified® drivers-If an internet connection to the PC is present, the scale will locate the proper USB drivers and automatically install them.

Factory Mutual Systems Approved for use in Class I, Division 1 Hazardous Areas provides the user with the peace of mind of knowing that the unit is safe to use even in the most extreme conditions.

In-Use Protective Covers are available as accessories to keep your product looking and working like new.

PMA.Power Ex

Hazardous Area Weighing at High Capacity. Awesome Accuracy up to 35 kg

The new PMA.Power is the ideal solution for Zone 1 explosive areas. If you don't want to make any compromises when weighing to higher capacities. Designed primarily as a 5-gallon paint mixing scale, Its monolithic weigh cell featuring a resolution of 0.1 g and a weighing capacity extending up to 35 kg enables you to add components quickly and accurately into relatively large paint cans or other vessels. Thanks to its high resolution, you will also find it easy to pour in small amounts with total accuracy on the PMA.Power scale. This lets you save money by not having to buy a second scale for the smaller jobs. Its enhanced, large 14-segment display enables the operator to clearly read both weights and color components as well as other important information.

In addition, the PMA.Power display is equipped with a bracket that can be installed on a wall or set up on a bench. This gives you optimal flexibility in customizing your work area to suit your needs. And it ensures that you will have all important information available at a glance! The special display lock function enables you to secure your PMA.Power against unauthorized use.



Features

- Built-In Overpour Recalculation and Factor Weighing
- Display Lock-Prevent unauthorized use
- FM Approved Class I, Division 1
- Package complete with a Safe-Area Power Supply
- Solvent-Resistant Housing Components
- RS232 Interface
- Multi-Language Support

Applications

- Straight Weighing
- Overpour Recalculation
- Factor Weighing
- Unit Toggling (grams or parts per pound only)
- Display Lock

Benefits

High-Capacity force-compensation weighing system to 35kg and 0.1g readability through the entire weighing range gives you the most accurate results.

Accidentally added too much of a component? No problem, the patented Overpour Recalculation feature allows you to "fix your mix" without sacrificing accuracy of recipe.

Lock features prevent unauthorized use of the scale. By entering a user-defined password, you can further enhance the security of the system.

The scale is offered in a package, and comes complete with a YPS02-ZKR safe-area power supply-no more selecting and purchasing the high-cost power supply separately.

Factory Mutual Systems Approved for use in Class I, Division 1 Hazardous Areas provides the user with the peace of mind of knowing that the unit is safe to use even in the most extreme conditions.

In-Use Protective Display Covers are available as accessories to keep your product looking and working like new.



Specifications & Pricing

Model	Capacity (g)	Readability (g)	Pan Size	Calibration	US List Price (\$)
PMP01P-XKR013	3500	0.1	14" x 10"	10 kg External	9,180
Approvals					
ATEX	II 2G Ex ib IIB T4 Gb				
FM (USA)	IS CL I, DIV 1, GP C,D T4; CL I, Zone 1, AEx ib IIB T4				
FM (CAN)	Ex ia CL I, DIV 1, GP C,D T4; Zone 1, Ex ib IIB T4				

Weight Kits

Traceable Calibration Weights

Rice Lake Weighing Systems manufactures a wide selection of quality calibration weights. Calibration weights can be certified at Rice Lake's mass laboratories, which include traceability to NIST and can be accredited to ISO/IEC 17025:2005.



Essential Weights™ Weight Sets

Essential Weights are customized sets of three or four stainless steel test weights in a small, durable carrying case, specifically tailored to your precision weighing equipment.

- ASTM Class 0 and Class 1 weights
- Polished stainless steel
- Density is approximately 7.95 g/cm³
- Special PVC weight case
- Precision tweezers included
- Configurations available ideal for calibration, shift tests and sensitivity tests
- Other configurations available by special order
- Meets USP-41 requirements for intermediate checks
- Includes NVLAP Accredited Certificate of Calibration



Essential Weights™ Pricing and Specifications

Model	Kit Contents	US List Price (\$)
ASTM Class 0		
WCP250AC0C	2 g, 200 mg, 1 mg	335
WCP251AC0C	5 g, 500 mg, 1 mg	360
ASTM Class 1		
WCP270AC1C	20 g, 2 g, 20 mg	310
WCP254AC1C	100 g, 10 g, 20 mg	375
WCP255AC1C	100 g, 10 g, 200 mg	375
WCP281AC1C	200 g, 20 g, 20 mg	390
WCP257AC1C	200 g, 20 g, 200 mg	390
WCP258AC1C	200 g, 20 g, 2 g	410
WCP260AC1C	500 g, 50 g, 200 mg	525
WCP261AC1C	500 g, 50 g, 2 g	540
WCP262AC1C	1 kg, 100 g, 2 g	695
WCP263AC1C	1 kg, 100 g, 20 g	715
WCP264AC1C	2 kg, 200 g, 2 g	1,015
WCP265AC1C	2 kg, 200 g, 20g	1,035
WCP226AC1C	5 kg, 500 g, 2 g	1,235
WCP267AC1C	5 kg, 500 g, 20 g	1,305

Rice Lake Precision Laboratory Calibration Weights - with NVLAP Certification

Weight kits include the calibration weight, case or vial, and handling equipment.

Pricing and Specifications

Model	Description	US List Price (\$)	Model	Description	US List Price (\$)
Precision Weights ASTM - with NVLAP Certification			Cylinder EB Weights - with NVLAP Certification		
WI001MAC0C	1 mg Prec WT ASTM - Class 0	255	WE010GAC1C	10 g Cyl. EB Weight- Class 1	136
WI001MAC1C	1 mg Prec WT ASTM - Class 1	115	WE100GAC1C	100 g Cyl. EB Weight- Class 1	146
WI002MAC0C	2 mg Prec WT ASTM - Class 0	255	WE200GAC1C	200 g Cyl. EB Weight- Class 1	240
WI002MAC1C	2 mg Prec WT ASTM - Class 1	115	WE200GAC2C	200 g Cyl. EB Weight- Class 2	240
WI010MAC0C	10 mg Prec WT ASTM -Class 0	260	WE200GAC3C	200 g Cyl. EB Weight - Class 3	235
WI010MAC1C	10 mg Prec WT ASTM- Class 1	115	WE500GAC1C	500 g Cyl. EB Weight- Class 1	260
WI010MAC4C	10 mg Prec WT ASTM - Class 4	68	WE01KGAC1C	1 kg Cyl. EB Weight- Class 1	290
WI020MAC1C	20 mg Prec WT ASTM - Class 4	115	WI002KAC1C	2 kg Prec WT ASTM - Class 1	860
WI050MAC1C	50 mg Prec WT ASTM - Class 1	115	WE02KGAC1C	2 kg Cyl. EB Weight- Class 1	345
WI100MAC1C	100 mg Prec WT ASTM - Class 1	115	WE02KGAC3C	2 kg Cyl. EB Weight- Class 3	325
WI500MAC4C	500 mg Prec WT ASTM - Class 4	68	WI002KOE2C	2 kg Prec WT OIML - Class E2	805
WI001GAC1C	1 g Prec WT ASTM - Class 1	127	WI002KOF1C	2 kg Prec WT OIML - Class F1	725
WI001GAC2C	1 g Prec WT ASTM - Class 2	126	WE05KGAC1C	5 kg Cyl. EB Weight- Class 1	790
WI002GAC1C	2 g Prec WT ASTM - Class 1	137	WE05KGAC3C	5 kg Cyl. EB Weight- Class 3	635
WI005GAC1C	5 g Prec WT ASTM - Class 1	147			
WI010GAC1C	10 g Prec WT ASTM - Class 1	147			
WI020GAC1C	20 g Prec WT ASTM- Class 1	147			
WI020GAC4C	20 g Prec WT ASTM - Class 4	110			
WI030GAC1C	30 g Prec WT ASTM - Class 1	151			
WI050GAC1C	50 g Prec WT ASTM - Class 1	158			
WI100GAC1C	100 g Prec WT ASTM - Class 1	163			
WI200GAC1C	200 g Prec WT ASTM - Class 1	280			
WI500GAC0C	500 g Prec WT ASTM - Class 0	565			
WI500GAC2C	500 g Prec WT ASTM - Class 2	335			
WI500MAC1C	500 g Prec WT ASTM - Class 1	115			
WI001KAC1C	1 kg Prec WT ASTM - Class 1	625			
Precision Weights OIML - with NVLAP Certification					
WI020MOE2C	20 mg Prec WT OIML - Class 2	tbd			
WI001GOE2C	1 g Prec WT OIML - Class E2	129			
WI010GOE2C	10 g Prec WT OIML - Class E2	147			
WI050GOE2C	50 g Prec WT OIML - Class E2	158			
WI100GOE2C	100 g Prec WT OIML - Class E2	163			
WI200GOF1C	200 g Prec WT OIML - Class F1	310			
WI200GOE2C	200 g Prec WT OIML -Class E2	330			
WI500GOE2C	500 g Prec WT OIML - Class E2	415			
WI500GOF1C	500 g Prec WT OIML -Class F1	360			
WI001KOE2C	1 kg Prec WT OIML - Class E2	595			

Rice Lake Precision Laboratory Calibration Weights- with Traceability Certificate

Weight kits include the calibration weight, case or vial, and handling equipment.

Pricing and Specifications

Model	Description	US List Price (\$)	Model	Description	US List Price (\$)
Precision Weights ASTM - with Traceability Certificate			Cylinder EB Weights - with Traceability Certificate		
WI001MAC1T	1 mg Prec WT ASTM - Class 1	105	WE020GAC1T	20 g Cyl. EB Weight- Class 1	136
WI002MAC1T	2 mg Prec WT ASTM - Class 1	105	WE030GAC1T	30 g Cyl. EB Weight- Class 1	126
WI005MAC1T	5 mg Prec WT ASTM - Class 1	105	WE050GAC1T	50 g Cyl. EB Weight- Class 1	126
WI010MAC1T	10 mg Prec WT ASTM - Class 1	105	WE050GAC2T	50 g Cyl. EB Weight- Class 2	126
WI010MAC2T	10 mg Prec WT ASTM - Class 2	82	WE100GAC1T	100 g Cyl. EB Weight- Class 1	136
WI020MAC1T	20 mg Prec WT ASTM - Class 1	105	WE100GAC4T	100 g Cyl. EB Weight- Class 4	79
WI050MAC1T	50 mg Prec WT ASTM - Class 1	105	WE200GAC1T	200 g Cyl. EB Weight- Class 1	172
WI100MAC1T	100 mg Prec WT ASTM - Class 1	105	WE200GAC2T	200 g Cyl. EB Weight- Class 1	172
WI200MAC1T	200 mg Prec WT ASTM - Class 1	105	WE400GAC2T	400 g Cyl. EB Weight- Class 2	187
WI300MAC2T	300 mg Prec WT ASTM - Class 2	83	WE500GAC1T	500 g Cyl. EB Weight- Class 1	194
WI500MAC1T	500 mg Prec WT ASTM - Class 1	105	WE500GAC2T	500 g Cyl. EB Weight- Class 2	194
WI500MAC2T	500 mg Prec WT ASTM - Class 2	83	WE500GAC3T	500 g Cyl. EB Weight- Class 3	182
WI001GAC1T	1 g Prec WT ASTM - Class 1	116	WE05KGAC1T	5 kg Cyl. EB Weight- Class 1	720
WI001GAC2T	1 g Prec WT ASTM - Class 2	115	WE05KGAC2T	5 kg Cyl. EB Weight- Class 2	590
WI002GAC1T	2 g Prec WT ASTM - Class 1	127	WE05KGAC3C	5 kg Cyl. EB Weight- Class 3	635
WI005GAC1T	5 g Prec WT ASTM - Class 1	137	WE02KGAC1T	2 kg Cyl. EB Weight- Class 1	280
WI005GAC2T	5 g Prec WT ASTM - Class 2	115	WE01KGAC1T	1 kg Cyl. EB Weight- Class 1	220
WI005GAC3T	5 g Prec WT ASTM - Class 3	126	WE02KGAC2T	2 kg Cyl. EB Weight- Class 2	260
WI010GAC1T	10 g Prec WT ASTM - Class 1	137	WE02KGAC3T	2 kg Cyl. EB Weight- Class 3	260
WI010GAC2T	10 g Prec WT ASTM - Class 2	126	WE02KGAC4T	2 kg Cyl. EB Weight- Class 4	240
WI020GAC1T	20 g Prec WT ASTM - Class 1	137			
WI020GAC2T	20 g Prec WT ASTM - Class 2	126			
WI030GAC2T	30 g Prec WT ASTM - Class 2	131			
WI050GAC1T	50 g Prec WT ASTM - Class 1	147			
WI050GAC2T	50 g Prec WT ASTM - Class 2	141			
WI050GAC3T	50 g Prec WT ASTM - Class 3	136			
WI050GAC4T	50 g Prec WT ASTM - Class 4	121			
WI100GAC0T	100 g Prec WT ASTM- Class 0	425			
WI100GAC1T	100 g Prec WT ASTM - Class 1	152			
WI100GAC2T	100 g Prec WT ASTM - Class 2	151			
WI100GAC3T	100 g Prec WT ASTM - Class 3	146			
WI200GAC1T	200 g Prec WT ASTM - Class 1	210			
WI200GAC2T	200 g Prec WT ASTM - Class 2	205			
WI200GAC4T	200 g Prec WT ASTM - Class 4	172			
WI300GAC2T	300 g Prec WT ASTM - Class 2	210			
WI005KAC1T	5 kg Prec WT ASTM - Class 1	1,185			



Rice Lake Precision Laboratory Calibration Weights- without Certificate

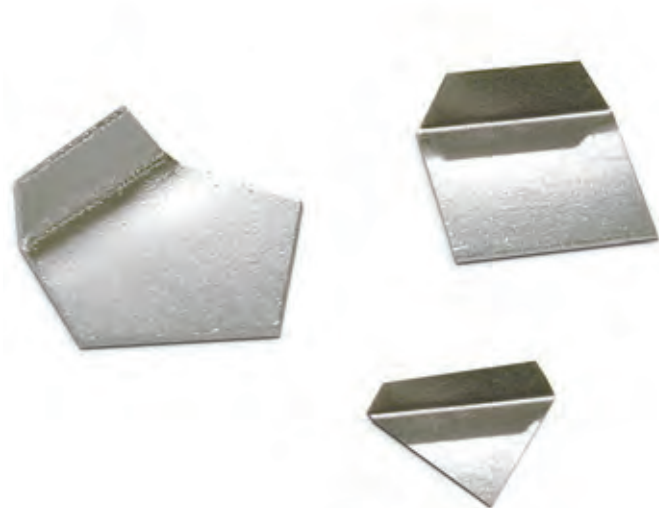
Weight kits include the calibration weight, case or vial, and handling equipment.

Pricing and Specifications

Model	Description	US List Price (\$)
Precision Weights ASTM - without Certificate		
WI001MAC2N	1 mg Prec WT ASTM- Class 2	42
WI003MAC1N	3 mg Prec WT ASTM - Class 1	63
WI010MAC2N	10 mg Prec WT ASTM - Class 2	41
WI050MAC2N	50 mg Prec WT ASTM - Class 2	42
WI001GAC0N	1 g Prec WT ASTM - Class 0	320
WI001GAC2N	1 g Prec WT ASTM - Class 2	74
WI005GAC2N	5 g Prec WT ASTM - Class 2	74
WI010GAC2N	10 g Prec WT ASTM - Class 2	136
WI020GAC2N	20 g Prec WT ASTM - Class 2	84
WI200GAC2N	200 g Prec WT ASTM - Class 2	149
WI300GAC1N	300 g Prec WT ASTM - Class 1	165

Cylinder EB Weights - without Certificate		
WE050GAC1N	50 g Cyl. EB Weight- Class 1	84
WE100GAC1N	100 g Cyl. EB Weight- Class 1	95
WE100GAC2N	100 g Cyl. EB Weight- Class 2	90
WE200GAC1N	200 g Cyl. EB Weight- Class 1	115
WE200GAC2N	200 g Cyl. EB Weight- Class 2	115
WE400GAC2N	400 g Cyl. EB Weight- Class 2	131
WE500GAC1N	500 g Cyl. EB Weight- Class 1	137
WE01KGAC4N	1 kg Cyl. EB Weight- Class 4	149
WE02KGAC2N	2 kg Cyl. EB Weight- Class 2	180
WE02KGAC4N	2 kg Cyl. EB Weight- Class 4	170
WE05KGAC2N	5 kg Cyl. EB Weight- Class 2	515

Precision Weights OIML - without Certificate		
WI100MOE2N	100 mg Prec WT OIML - Class E2	126
WI010GOE1N	10 g Prec WT OIML - Class E1	515
WG25KGICFN	25 kg Iron Grip Handle CL7	160
WG05KGICFN	5 kg Iron Grip Handle CL7	77



LMA200PM Microwave Moisture Analyzer

Speed meets analytical precision

Designed for samples with higher moisture content ranging from 8% to 100%. Microwave technology is the fastest and most effective thermogravimetric method (loss on drying principle) for moisture analysis. Results between typically 40-120 seconds on average. With cylindrical design, a focused emission of microwave energy is channeled vertically through dual apertures at the bottom of the chamber. The carousel rotates the sample permitting an even distribution of microwave energy, preventing hot and cold spots from occurring, a common problem with conventional microwave analyzers.

Features

- Controlled microwave energy
- Rotating carousel
- Built-in printer
- Patented microwave chamber
- Dual endpoint monitoring
- Multiple endpoint configurations
- Large touchscreen
- Password protected
- Applications development and support

Applications

- Dairy products
- Meat products
- Vegetables and pastes, fruit processing
- Canned and fresh vegetables
- Frozen foods
- Wet pet food
- Baby food
- Condiments
- Detergents (liquid) and shampoo
- Soy based liquids
- Latex, Paints (water based)
- Wastewater and effluent, ethanol

Specifications & Pricing

Model	Capacity (g)	Readability (mg)	Reproducibility (1 g)	Calibration Type	Calibration Weight	Shipping Weight (lbs)	US List Price (\$)
LMA 200PM	70	0.0001	± 0.05%	External	50 g	64	15,045



Benefits

Superior control of sample drying. Previous solids analyzers set at levels <100% did not actually deliver X% power. Instead they deliver 100% power at X% time on a duty cycle. In the LMA200, 70% power actually means the beam power is attenuated to 70% of maximum 100% power level.

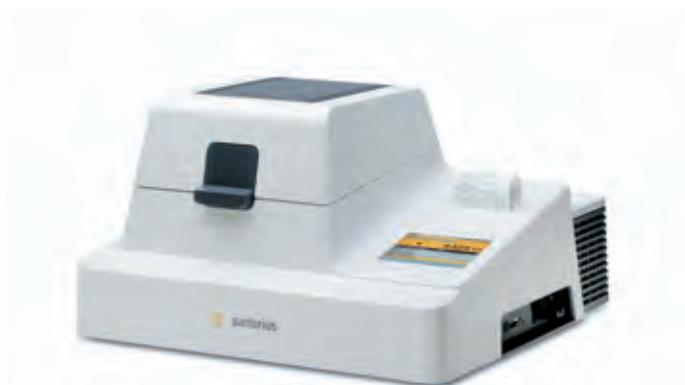
Microwave energy is focused on the plane of the sample pads and the carousel spins the sample to evenly distribute the microwave energy, preventing hot and cold spots.

Built-in printer. No need to connect to a printer for hard copies of your results

Dual endpoint monitoring ensures correct results, using weight differential and monitoring the chamber moisture level.

Multiple end point configurations include; Fully automatic by means of mass and moisture, user defined as loss of weight/time, and timer mode

Applications development and support – when you purchase a LMA 200 Microwave, Sartorius will test your sample and develop a program that correlates to a Standard Reference Method. This service is offered at no charge. Currently we have tested and designed programs for over 10,000 materials.



Mark 3 High Performance and Mark 3 LTE

Simply the Best for all your moisture needs

The Mark 3 Moisture analyzer has been stringently designed to reduce the uncertainties commonly associated with loss-on-drying analyzers. Integrating the most advanced temperature resistant electronic balance with a heating chamber designed for near zero heat induced pan lift and balance drift, the Mark 3 will increase the accuracy and precision for analytical results of your most demanding samples. These features make the Mark 3 a genuine alternative to Karl-Fischer titration. The Mark 3 is available in a High Performance and LTE version (standard).

Features

- Four parallel infrared quartz cylinders for heating
- Up to 4 heater modules per control unit
- Large sample capacity
- Superior inter unit correlation
- In-House testing
- Built-in internal printer
- Superior drift specifications
- Monolithic weighing cell
- Multiple modes of operation
- Dual temperature set point capability
- Moisture content from 0.001% to 99.999%

Applications

- Plastics
- Pharmaceuticals
- Foods
- Chemicals
- Cosmetics
- Sugar
- Paints and coatings
- Pulp and Paper
- Waste treatment
- Dairy
- Ethanol

Specifications & Pricing

Model	Capacity (g)	Readability (g)	Reproducibility (±)	Temp. Range (°C)	Calibration Type	Shipping Weight (lbs)	US List Price (\$)
LMA110-SET-P	40	0.001	1 mg	30-210	External	35	6,315
LMA100-SET-P	100	0.0001	0.1 mg	30-210	Internal or External	35	10,295



Mark 3 LTE



Lab Weighing | Mark 3 HP & Mark 3 LTE

Benefits

Four parallel infrared quartz cylinders give exact temperature control to +/- 1 degree C, fast ramp-up to proper temperature without overheating eliminating burning of your sample as well as fast cooling enabling shorter times between tests.

Up to 4 heaters per control unit, adding 1 to 3 additional heater modules allows you to increase your throughput in testing.

All heater modules correlate to each other, ensuring your results are consistent among several units. No need to settle for "close enough" results.

Superior drift specifications – monolithic weigh cell and chamber design minimizes the drift, providing for more accurate results.

Standard modes of operation include % Moisture, % solids and syringe mode for testing volatiles, TGA mode for FREE and BOUND moisture, and Extrapolation mode which allows us to shorten test times while giving fast accurate answers.

Applications Development and Support – when you purchase a Mark 3 series unit, Sartorius will test your sample and develop a program that correlates to a Standard Reference Method. This service is offered at no charge. Currently we have tested and designed programs for over 10,000 materials.



Mark 3 HP w/ multiple heater modules



MA35

Fully Automatic Infrared Moisture Analyzer

The MA35 moisture meter has a rugged design and is user-friendly. The concise display shows the user all important information at a single glance. Easy-to-understand icons guide you in three steps from taring the sample pan to starting the measurement. To make the moisture meter MA35 even more user-friendly, we have removed unnecessary programming options without compromising flexibility or measurement accuracy.



Lab Weighing | MA35 Moisture Analyzer

Features

- Maximum weighing capacity of 35 g with 1-mg resolution
- Heating of a sample by two powerful metal tubular-shaped heating elements (also called dark radiators) Uniform distribution of the heat rays using an integrated reflector
- Choice of two modes for end-point determination of a measurement: fully automatic and timer modes
- Special version for compliance with FDA/HACCP regulations (no glass components)
- Time-saving and convenient alternative to a drying oven
- Utmost measurement accuracy and durability "made in Germany"
- Ideally suited for robust production applications
- Simple operator guidance using self-explanatory pictograms

Applications

- Loss on Drying
- Loss on Evaporation
- Thermo-gravimetric
- ASTM Oven drying methods

Benefits

- Rapid heating technology** yields results within minutes.
- Easy setup** and user navigation allows for increased productivity.
- Compact footprint** saves valuable bench-top areas and workspaces.
- Straightforward functionality.** Perfect for multi-user environments.
- Consistent heating** gives reproducible and reliable results.
- Rugged and sturdy construction** give users peace of mind that MA35 will hold up to tough industrial environments.

Specifications & Pricing

Model	Capacity (g)	Readability (mg)	Reproducibility (1 g 5 g)	Temp Range	Voltage	Shipping Weight (lbs)	US List Price (\$)
MA35M-115US	35	1 / 0.01%	± 0.2 % ± 0.05%	40 - 160 °C	115 V	17	2,520



MA37 Moisture Analyzer

Fast. Compact. Accurate.

MA37 is the next generation moisture analyzer and continues the legacy of the highly successful MA35. With its user intuitive color touchscreen the MA37 delivers fast, accurate results and is easy to operate. This compact device has a "Better-Clean" design which offers effortless cleaning. The integrated and easy to see status light makes it convenient and efficient to track the status of the measurement. Therefore, the MA37 is ideal for users who require a fast, reliable moisture analyzer which is simple to use and easy to clean.

Features

- All units show results % Moisture, grams / dry matter in % Solids and grams / ATRO in % M/S
- Touchscreen display
- Active display of Moisture curve during process
- LED-illuminated sample chamber, inspection window with grid above the hood
- Shutoff parameters – Fully automatic, semi-automatic, manual and with timer settings
- 1 program saved in non-volatile memory (freely selectable method parameters)
- Removable hood with wide opening angle, "Soft-Close" mechanism
- Mini USB, automatic printer detection
- Direct data transfer to pc- programs
- Infrared heating using metal tube heater

Applications

For quick and reliable determination of the moisture content of liquid, pasty and solid substances using the thermogravimetric method (Loss on Drying). Typical applications of the MA37 include the analysis of foods, beverages, pharmaceuticals, chemicals, paper materials and environmental protection products. For daily recurring moisture analysis tasks, such as in production or incoming goods inspection, the MA37 is the perfect solution!

Specifications & Pricing

Model	Capacity (g)	Readability (1 mg)	Reproducibility (1 g)	Temp. Range (°C)	Calibration Type	Calibration Weight	Shipping Weight (lbs)	US List Price (\$)
MA37-1US	70	0.01%	± 0.02%	40-160	External	50 g	18	3,530



Benefits

New user intuitive touchscreen display guides operator through all processes and set up.

Actual moisture curve is displayed during drying process taking the guess work out of the progress.

Easy-to-see drying sample during the measurement with the LED lighted chamber.

Fully automatic endpoint determination eliminates the cumbersome capture of termination criteria.

"Better-Clean" design makes it easy to disassemble and clean USB communications to a printer and direct data transfer to pc- programs without third party software or secondary programing needs.

New higher temperature heating coil with better and tighter specifications.

MA160 Moisture Analyzer

Managing your sophisticated tasks fast, precise and easy

The MA160 is a next generation moisture analyzer and continues the success of the MA150. With its user intuitive color touchscreen the MA160 delivers fast, accurate and reliable results. With all the features of the MA37 included, the MA160 adds the additional features Method development, 99 program storage, Instrument performance testing, and SD card method sharing.



Lab Weighing | MA160 Moisture Analyzer

Features

- All features of the MA37
- 99 programs saved in non-volatile memory (freely selectable method parameters)
- AURI - Infrared heating using metal tube heater 600W
- Internal Software assistant for Method Development
- Verification of Repeatability with our ReproEasy test pads
- SD card memory method sharing with multiple units

Applications

With its optimized heating elements, the MA 160 produces high speed measurements. The MA160 is ideal for the moisture analysis of a varying range of samples under different conditions. It can generate new methods which allow you to create and effectively manage proprietary measurement procedures for various samples. This fully supports your work in the QC lab or in process control. Typical areas of applications for the MA 160 include the moisture analysis of foods, beverages, pharmaceuticals, chemicals paper materials and environmental protection.

Benefits

All the features of the MA37 including, Multiple result formats, User intuitive Touch Screen, Active display of Moisture curve, LED-illuminated sample chamber, Direct data transfer to Microsoft programs

Store 99 different programs in non-volatile memory with easy recall

AURI metal tube heater is 600 watts providing fastest reliable heating of your samples

Internal software assistant guides you through developing different methods saving you time and hassle in 3 easy steps

Verify the repeatability of your instrument using ReproEasy disposable test pads. This test can be done anytime at 3 different temperatures providing a simple Pass / Fail evaluation

Store methods/programs and results on the SD card. Transfer methods to other MA160 units or transfer to your PC for storage.

Specifications & Pricing

Model	Capacity (g)	Readability (1 mg)	Reproducibility (1 g)	Temp. Range (°C)	Calibration Type	Calibration Weight	Shipping Weight (lbs)	US List Price (\$)
MA160-1US	200	1	± 0.02%	40-160	External	100 g	18	4,410



Moisture Analyzer Accessories & Consumables

Item	Description	US List Price (\$)	MA-35	MA-37	MA-160	Mark 3 HP	Mark 3 LTE	LMA200PM
Printers, Cables and Data Communication								
69TC0479	Disposable Pans 200 pcs	88	✓	✓	✓	✓	✓	
6965542	High Performance Disposable Pans 80 pcs	88	✓	✓	✓			
69MA0349	Lg volume sample pans 10 pcs	59				✓	✓	
69MA0325	Filter Pads	38	✓	✓	✓	✓	✓	✓
69MA0327	High Grade Filter Pads	52	✓	✓	✓	✓	✓	✓
YHP01MA	ReproEasy Test pads qty of 10	80		✓	✓			
YHP02MA	ReproEasy Test pads qty of 20	148		✓	✓			
69TC0480	Printer paper 10 rolls per box	68				✓	✓	✓
YDP20-OCE	Alphanumeric Dot Matrix printer	1,155	✓	✓	✓			
YDP40	Standard Data Printer	920	✓	✓	✓			
YDP30	Premium GLP laboratory printer	1,440	✓	✓	✓			
69Y03306	Power supply for YDP40 printer	285	✓	✓	✓			
YCC03-D09	Adapter cable for connecting YDP-20 printer	55	✓	✓	✓			
YTM15MA	Temperature calibration disk for MA series	1,070	✓	✓	✓			
84WAL10	MA and Premium Series One year Extended Warranty	630	✓	✓	✓	✓	✓	
84WAL13	LMA 200, One year Extended Warranty	1,940						✓
84QAL10	IQOQ documentation, MA Series	1,110	✓	✓	✓			
84QAL11	IQOQ documentation, Premium Series	1,110				✓	✓	
YDB09MA	Carrying case with wheels	625				✓	✓	
YCC01-MK3	Mark 3 to PC (USB) cable	26				✓	✓	
YCC01-MK1	Mark 3 to PC (serial) cable	58				✓	✓	
YCC01-MK2	Mark 3 to PC ethernet cable	26				✓	✓	

Moisture Analysis individual

The Convenient and Reliable Way to Obtain Correct Results

Based on your samples, the Sartorius Applications Laboratory will determine the individual methods best for your specific needs first, then program these parameters into your moisture analyzer. This means you can start using your analyzer right out of the box to run custom-tailored moisture analysis – without the hassle of performing time-consuming test series on your own to find the ideal parameters and having to first program the device.

To ensure that our custom-configured analyzer will exactly fit your needs in enhancing the efficiency of your process, go ahead and try it before you buy it. We offer free trials with no strings attached.

You can rely on our expertise: we have a proven track record in successfully testing over 15,000 different samples for our customers by correlating them to existing reference methods.

Easy

Take care of the rest. Once your moisture analyzer has been preconfigured, all you will need to do is plug it in, conveniently select a program from the list and start the analysis. It will take you less than five minutes to be ready to run your tests.

Fast

Save yourself the inconvenience of having to perform time-consuming reference measurements using a drying oven or Karl-Fischer titration. Plus, you will benefit from optimized, faster analysis time that will make your process more efficient.

Reliable

Whether your samples need to comply with ASTM Standards, specific, national pharmacopeia requirements or German Industrial Standards DIN, you can totally rely on our methods. We will correlate the results of your moisture analyzer with those of the standard reference method you require and thus guarantee reliable, accurate results and traceability.



Lab Weighing | Moisture Analysis individual

Description of the Individual Services Provided

Detailed definition and review of specific requirements and consultation provided by a Sartorius product specialist

Analysis of your samples at the Sartorius Applications Laboratory

Determination of reference values according to the specific standard you use (DIN, S64 LFBG, ASTM, pharmacopeia, etc.) or according to your individual SOP using the following methods:

- Oven-drying method
- Karl-Fischer titration, volumetric
- Karl-Fischer titration, coulometric
- Karl-Fischer titration, coulometric, with oven drying

Method development using your samples to correlate moisture analyzer results with those of reference methods

- Optimization of sample preparation and treatment
- Optimization of the initial sample weight for moisture analysis
- Determination of optimal parameters depending on need for accuracy or speed

Evaluation of measurement results according to your specific requirements

Preparation of a detailed test report

No-obligation two-week free trial of an individually preconfigured moisture analyzer delivered to your premises on the date you request



pHCore

Performing pH analysis has never been easier

Achieve rapid results with ease. pHCore offers fast and reliable pH measurements thanks to advanced algorithm technology. Features like stability control, automatic buffer recognition, automatic temperature compensation, AutoCal ensures accurate measurements in a quick amount of time.



Features

- Easy Key Operation: Mode, Cal, Stability control, OK, Scroll Navigation
- Large Easy-To-Read LCD Display
- Clear Status Icons and Indicators
- Simultaneous pH and Temperature Display, °C or °F
- Quick Review and Display of Electrode Calibration
- Meter Recognizes 2 sets of Standard Buffers or a standard value can be input manually

Applications

- Academia Research and Teaching Labs
- Chemical Labs
- Environmental Labs
- Government Labs

Benefits

Ease your way through your daily pH routines

German quality - saves you time and puts you at ease knowing you will have reliably accurate results every time.

Seamless 2-point calibration routine

Set Autocal for easy recognition of daily buffer set and get to reading your pH sample faster.

Straight forward functions

You don't have to interpret the display anymore - Large display with easy to understand icons tell you instantaneously what your samples and systems are doing.

Specifications & Pricing

Model	pH	mV	Description	US List Price (\$)
pHCoreA	✓	✓	pHCore Meter and Power Supply	525
pHCore-Kit	✓	✓	pHCore pH Kit Meter, Power Supply, and PY-P20-2S Electrode: Plastic Body, Gel Electrolyte, Ceramic Junction, Bulb Style	560

Common Specifications

Range /± Accuracy		
pH	-2.0 ... 20.0 ±0.1 pH	-2.00 ... 20.00 ±0.01 pH
mV	± 1200.0 ±0.3 mV	± 2000 ±1 mV
Temperature -5.0 ... +105.0 ± 0.1°C , manually adjustable to 130°C		

All models include BNC connector, power supply, 4 AA batteries. Kits include electrode, 50 ml bottles of pH 4 and 7 buffers and 50 ml of 3M KCl filling and storage solution.

pHBasic Meters

Superior Results with Classic Functionality

Exceptional quality and reliable pH results are now within your reach. The pHBasic is a perfect benchtop meter for your basic everyday pH routines. Not only is it simple-to-use with classic interface design and intuitive icons, but it is faster due to optimized algorithms with harmonized measuring system of sensor with meter. The pHBasic is extremely reliable with real time indicators like ElectCheck, and Stability Control making this the classic go-to meter for any basic lab.



Features

- Classic no-fuss menus and intuitive operation
- Large LCD displays with simultaneous pH/mV & temperature
- Understandable status icons and indicators like Stability Control
- Automatic temperature compensation
- Automatic buffer recognition- 2 sets of standard buffers or a standard value can be input manually
- Easy 1-2-3 point calibration
- Quick access to electrode calibration data
- At a glance know your sensor efficiency & calibration integrity are intact/expired with ElectCheck

Applications

- Academia Research
- Industrial Labs
- Environmental Labs
- Government Labs

Benefits

Get superior results that are not complex

German quality that saves you time, provides faster reliable results but still maintains its user friendly and classic functionality for your basic everyday pH requirements.

Simple is better

Easy 1-2-3-point calibration routine, large LCD display, intuitive menu navigation, easy to understand indicators make for seamless pH routines.

Improve your pH workflows

With features such as ElectCheck and Stability Control, you do not have to worry about the condition of your sensor, the integrity of your calibration or second guess when to take your reading. Know all of these at a simple glance.



ElectCheck is a sensor evaluation and calibration reminder. The sensor evaluation shows the electrode quality in increments. The integrity criteria are slope, zero point and reaction time. When the time interval has elapsed, an optical and an acoustical signal is activated.

Specifications & Pricing

Model	pH	mV	Description	US List Price (\$)
pHBasicA	✓	✓	pHBasic Meter only with Power Supply	595
pHBasic	✓	✓	pHBasic Meter, Power Supply, Arm, no Electrode	670
pHBasic-Kit	✓	✓	pHBasic pH Kit. Meter, Power Supply, 2 Buffers, Arm, Electrode: PY-P10-2S General purpose - pH/ATC, Plastic Body, Liquid 3M KCl refillable, ceramic junction, Bulb style	860
pHBasic-Bio-Kit	✓	✓	pHBasic Bio Kit. Meter, Power Supply, 2 Buffers, Arm, Electrode: PY-P11-2S High Performance - pH/ATC, Glass Body, Liquid 3M KCl refillable, air flush platinum junction, TRIS compatible, break resistant conical shaped tip, ideal for biological applications	1,000
pHBasic-Food-Kit	✓	✓	pHBasic Food Kit. Meter, Power Supply, 2 Buffers, Arm, Electrode: PY-P27-2S Spearhead, pH, Glass Body, hole junction, polymer reference electrolyte, Spear style	1,055

Common Specifications

Range /± Accuracy			
pH	-2.0 ... 20.0 ±0.1 pH	-2.00 ... 20.00 ±0.01 pH	-2.000 ... 19.999 ±0.005 pH
mV	± 1200.0 ±0.3 mV	± 2000 ±1 mV	
Temperature	-5.0 ... +105.0 ± 0.1°C, manually adjustable to 130°C		

All models include BNC connector, power supply, 4 AA batteries. Kits include: 50 ml bottles of pH 4 and 7 buffers, 50 ml of 3M KCl filling and storage solution, arm and specified electrode.

pHBasic+ Meters

Experience Complete Functionality

Enjoy quick results due to innovative algorithms, superior accuracy with 5 point calibration features, and operate with full functionality with advanced communication & documentation feature. Direct data transmission through convenient USB PC interface allows data memory of up to 500 points to provide a convenient and easy way to manipulate pH results for analysis. The same great classic interface design, intuitive graphic icons, and indicators like ElectCheck and Stability Control round out this robust meter.



Features

- Full functionality with USB data transmission
- Recall and output of 500 data set memory
- Superior Accuracy with up to 5-point calibration
- Easy-to-use menus and intuitive operation sets
- Sensor efficiency & calibration integrity with ElectCheck
- Clear status icons and indicators like Stability Control
- Large LCD display
- Automatic temperature compensation
- Automatic buffer recognition (25 buffer sets)
- Programmable data collection

Reliable and fast communication interface. Transfer up to 500 data points using USB to computer interface with no adaptors needed. Capture GLP time & date stamps and calibration record or printout quickly via USB (slave).

Benefits

Complete functionality at your fingertips

Fast and accurate results, easy operation, and capacity to have direct data recall and transfer. A complete pack for your entire pH requirements.

Make your pH routines more efficient

Large LCD display, intuitive menu navigation and easy to understand indicators make for a seamless pH routine. ElectCheck and Stability Control know the conditions of your sensor, the integrity of your calibration at a simple glance.

Superior accuracy

Up to 5-point calibration gives a broader range in slope accuracy.



ElectCheck is a sensor evaluation and calibration reminder. The sensor evaluation shows the electrode quality in increments. The integrity criteria are slope, zero point and reaction time. When the time interval has elapsed, an optical and an acoustical signal is activated.

Specifications & Pricing

Model	Description	US List Price (\$)
pHBasic+A	pHBasic+. Meter only with Power Supply	755
pHBasic+	pHBasic+ Kit. Meter, Power Supply, Arm	810
pHBasic+Kit	pHBasic+ pH Kit. Meter, Power Supply, Arm, 2 Buffers, Electrode: PY-P10-2S General purpose - pH/ATC, Plastic Body, Liquid 3M KCl refillable, ceramic junction, Bulb Style	890

Common Specifications

pH	-2.0 ... 20.0 ±0.1 pH -2.00 ... 20.00 ±0.01 pH -2.000 ... 19.999 ±0.005 pH
mV	±(1200.0 ±0.3) mV ±(2000 ±1) mV
Temperature	-5.0 ... +105.0 ± 0.1°C , manually adjustable to 130°C

All models include BNC connector, power supply, 4 AA batteries. Kits include: 50 ml bottles of pH 4 and 7 buffers, 50 ml of 3M KCl filling and storage solution, arm and specified electrode

Pro Meters

Professional Performance with Complete Compliance

Pro is the most advanced meter to excel at your professional pH, conductivity, ISE and DO analyses. Be reassured, measurements have never been so accurate with German technology, wider ranges, auto cal and 5-point calibrations. Feel confident with data transfer, data storage and ElectCheck features that meet all your GLP regulatory requirements. Pro offers multi-parameter analysis options and is the whole package: quality, multi-functionality, documentation, & convenience – a true professional at work for you.



Features

- Exact measurements with wider measuring ranges and better accuracy specifications
- Advance GLP Documentation with time and date stamps
- Direct data transmission with RS232 (PR-15 & PR-50) and USB interfaces
- Automated calibration with up to 5 points
- Automatic buffer recognition out of 22 buffer sets

Benefits

Multi-functionality in One

Need advanced pH measurements, select Pro15. For conductivity, select Pro20. For an all-in-one meter, select Pro 50 and have it all: pH, ISE, DO, Conductivity and up to two parameters displayed simultaneously.

Complete Documentation

Feel confident and rely on wireless sensor recognition & user identification. User name can be assigned to each measured value. pHPro also complies with GLP requirements with administrator rights or user identification via an electronic ID card.

User Convenience

Large LCD display, Intuitive menu navigation, ElectCheck and Stability Control to know the conditions of your sensor, the integrity of your calibration and stability of your reading at a single glance.

	pH	mV	ISE	Cond.	DO	Temp.	Sensor/User ID
Pro15	✓	✓	✓			✓	✓
Pro20				✓		✓	
Pro50	✓	✓	✓	✓	✓	✓	✓

Specifications & Pricing

Model	Description	US List Price (\$)
PR-15A	Pro 15 pH Meter Only with Power supply	1,335
PR-15-pH-Kit	Pro 15 pH Kit. Meter B&W backlit display, Power Supply, Arm, 2 Buffers, Manual, Electrode: PY-P11-2S High Performance - pH/ATC, Glass Body, Liquid 3M KCl refillable, air flush, 2X Junction, Platinum TRIS compatible, break resistant conical tip	1,635
PR-20A	Pro20 Conductivity. Meter Only with Power supply	910
PR-20-Con-Kit	Pro 20 Conductivity Kit. Meter, Power Supply, Arm, Conductivity Sensor: PY-C12 ATC-2S, Multi-range, Target Configuration 1-200,000 $\mu\text{S}/\text{cm}$	1,365
PR-50A	Pro50 Multi-parameter. Meter with ID sensor Card. B&W Display. Menu Structured Handling. Recorder Function. Cond pH, mV, Temp, ISE, DO RS232- USB slave 1BNC . Incl. Power supply	2,625

Common Specifications

	Pro15 & 50	Pro15 & 50	Pro20	Pro15 & 50	Pro50	Pro15, 20 & 50
Mode	pH	mV	Conductivity	ISE	Dissolve Oxygen	Temperature
Range	-2 ... 19.999	0...1200.0/2000	0 $\mu\text{S}/\text{cm}$...1000 mS/cm	0.000...999,999 mg/l	0...20.00mg/L	-10 ... 120.0
Resolution	$\pm 0.1/0.01/0.001$	$\pm 0.1/1.0$	± 1 digit	± 0.001	$\pm .1/0.01$	± 0.1
Accuracy	$\pm 0.1/0.01/0.001$	$\pm 0.3/1$	$\pm 0.50\%$	0.0...500,000 mg/l	0.01/1 %	$\pm 0.1^\circ\text{C}$

All models include power supply, 4 AA batteries. Kits include: 50 ml bottles of pH 4 and 7 buffers, 50 ml of 3M KCl filling and storage solution, arm and specified electrode.

Electrodes & Accessories for Meters

Superior Sensors – Precise Results

Electrochemical analysis is one of the most frequent and demanding tasks in daily lab routines. Sartorius understands that measurements will differ based on compositions, temperatures, conductivities and viscosities of samples and it is these different conditions that set our electrodes apart from the rest. Whether for ultrapure water, jam, wine, TRIS Buffers, or drinking water, Sartorius has the right superior and dependable electrode for your sample types and application workflows.

Applications

- Cosmetics
- Agriculture
- Dairy
- Food & beverage
- Surface – skin and textiles
- Drinking water
- Detergents agents
- Pharmaceutical/Biotech/Clinical/Pharmacy
- Biology/Microbiology & Chemistry Lab
- Extreme and difficult samples

Benefits

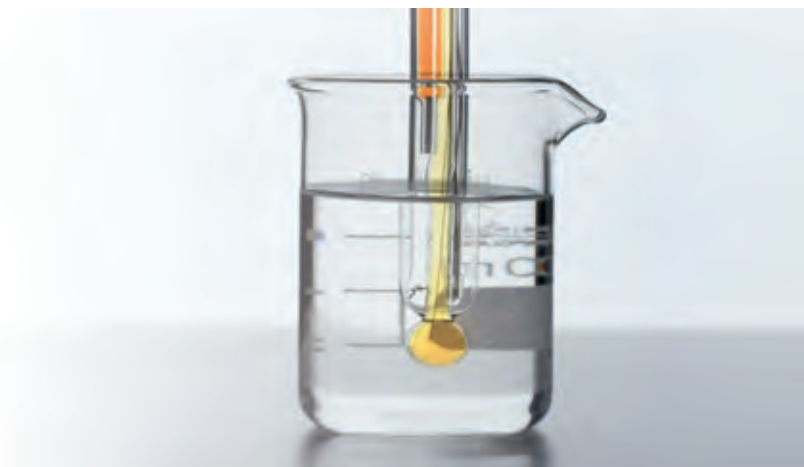
Meet any and all of your unique samples types and application requirements.

The highest quality materials result in better precision and accuracy. The low resistance type A glass membranes are a perfect example of where quality materials interact with samples with less interference, yielding both speed and accuracy.

Liquid electrolyte electrodes with unique platinum junction and refill port slider for easier refilling and less evaporation of the electrolyte. Air flush cap system prevents clogs from forming.

Individual serial number on each electrode for clear identification.

Flexibility and convenience. Electrodes are available with integrated temperature sensors (ATC) or we have a separate temperature probe.



PlatinumLINE Electrodes

Fast and accurate results with high quality materials, low resistance A type glass membrane or unique platinum junctions with patented Ag/AgCl reference system.

Model	Description	Body Type		Fill Solution			US List Price (\$)
		Glass	Plastic	Liquid	Gel	ATC	
PY-P10-2S	General purpose - pH/ATC, Liquid 3M KCl refillable, ceramic junction, Bulb style	—	✓	✓	—	✓	225
PY-P11-2S	High Performance - pH/ATC, Liquid 3M KCl refillable, air flush platinum junction, TRIS compatible, break resistant conical shaped tip, ideal for biological applications, easy to clean	✓	—	✓	—	✓	330
PY-P21-2S	High Performance - pH, Liquid 3M KCl refillable, air-flush platinum junction, TRIS compatible, break resistant conical shaped tip, ideal for biological applications, easy to clean	✓	—	✓	—		190
PY-P12-2S	Low Maintenance - pH/ATC, ceramic junction	—	✓		✓	✓	192
PY-P20-2S	Low Maintenance - pH, ceramic junction	—	✓	—	✓		166
PY-P22-2S	Micro - 5mm diameter - pH, Liquid 3M KCl refillable, air flush platinum junction, TRIS compatible ideal for low volume samples	✓	—	✓	—	—	260
PY-P23-2S	Flat-Surface - pH, Gel Filled, circular junction, ideal for meats, cheeses, agar, skin	✓		—	✓	—	265
PY-P24-2S	Sleeve - pH, Liquid 3M KCl refillable, Sleeve junction, ideal for low ionic samples	✓	—	✓		—	345
PY-P25-2S	Econo - pH, fiber junction, Bulb style	—	✓	—	✓	—	126
PY-P26-2S	Econo - pH/ATC, fiber junction, Bulb style	—	✓	—	✓	✓	192
PY-P27-2S	Speartip - pH, hole junction, Poylmer Filled	—	✓	—	✓		345
PY-T01-2S	Temperature - ATC, 2.5mm, Stainless Steel Body	—	—	—	—	✓	205
PY-R01-2S	ORP Combination for REDOX oxidation/reduction potentials	✓	—	✓	—	—	300
PY-D01-2S	Galvanic Dissolved Oxygen Probe	—	✓	✓	—	✓	375

Notes: pH is BNC connection ATC is 2.5 mm connection Cable length is 1.5 mm

Conductivity Cells (compatible with PR-20 & PR-50 only)

Model	Description	Conductivity Range	pH	ATC	US List Price (\$)
PY-CL1-2S	1.0 cm-1 Conductivity Cell - 2 band	10 to 20,000 $\mu\text{S}/\text{cm}$	—	✓	185
PY-C01-2S	0.5 cm-1 Conductivity Cell - 4 band	0.5 to 2,000 $\mu\text{S}/\text{cm}$	—	✓	480
PY-C02-2S	1.0 cm-1 Conductivity Cell - 4 band	10 to 5,000 $\mu\text{S}/\text{cm}$	—	✓	480
PY-C03-2S	10 cm-1 Conductivity Cell - 4 band	1,000 to 200,000 $\mu\text{S}/\text{cm}$	—	✓	480
PY-C12-2S	Multi Range, Target Configuration Conductivity/ATC	1 $\mu\text{S}/\text{cm}$ to 2 S/cm	—	✓	540
PY-C21-2S	0.1 cm-1 Conductivity Cell Flow-through	0.001 - 200 $\mu\text{S}/\text{cm}$	—	✓	660
PY-C22-2S	0.01 cm-1 Conductivity Cell Flow-through	0.0001 - 30 $\mu\text{S}/\text{cm}$	—	✓	1,100
PY-PC1-2S	Multi-sense 1.0 cm Conductivity/pH/ATC	10 to 5,000 $\mu\text{S}/\text{cm}$	✓	✓	645

Note: Conductivity cells have 8-pin female connectors. Older meters have a 8-DIN male connector that can be made to order without -2 suffix.

Accessories

Model	Description	US List Price (\$)
PY-B250-2S	250 mL Buffer Bottle Set 4,7,10	82
PY-B1L-2S	1000 mL Buffer Bottle Set 4,7,10	121
YCC-PR0-2S	1.5M RS-232 Cable	73
PY-A02-2S	Basic Meter Arm	102
PY-A03-2S	Pro Meter Arm	161
PY-A04-2S	DO Probe Maintenance kit	230
PY-E50-2S	Electrode Refilling and storage solution 3M KCL 50ml bottle	60
YCC04-D09	Data cable mini B USB USB A	55



Buffer Bottle Sets

Picus® NxT Electronic Pipettes

For Highly Regulated Laboratories

Picus® NxT offers distinct advantages for compliance in strictly regulated laboratories with its added certification, safety features and technology. Its superior design, adopted from the proven Picus®, provides maximum operating convenience, considerably easing your workload.

Features

Conform to Lab Regulations

- Certificate of accredited 3-point calibration
- (ISO 17025 and ISO 8655) conforms to the strictest regulations
- Maintenance and calibration reminders alert you when service is required
- Advanced password protection for settings and pipetting protocol memory
- Pipette locking increases lab safety by disabling the pipette from use



Benefits

Enjoy Pipetting

- Uniquely lightweight (only 100 grams!) and streamlined design for effortless pipetting experience
- Conveniently located soft-touch operating button and electronic tip ejection help minimize muscle strain
- The comfortable design of the handle and the finger hook enable Picus® NxT to rest lightly in your hand, with minimum effort

Achieve Reliable Results

- Unique plate tracker increases reliability in microwell plate dispensing
- Electronic piston control and brake guarantee accurate and precise pipetting results, independent of the user
- Repeated blow-out function helps dispense the very last liquid droplets, ensuring complete recovery
- Safe-Cone Filters prevent the risk of contamination, cost-effectively















Speed Up Your Work

- The unique adjustment wheel offers extremely fast volume setting and menu navigation
- The extensive range of pipetting modes, from diluting and titrating to serial dispensing, helps to perform the pipetting tasks quickly and easily

P = Pipetting Mode D = Multi-dispensing mode.

The listed systematic and random error values are of 10 measurements at 10% of the nominal volume.

Picus® NxT– Specifications & Pricing

			Volume	Increment	Test	System.	System.	Random	Random	Safe-Cone Filters		Optifit	SafetySpace	US List	
Model	Channel		Range (μl)	(μl)	Volume (μl)	Mode	Error (%)	Error (μl)	Error (%)	Error (μl)	Standard	Plus	Tips (μl)	Filter Tips (μl)	Price (\$)
LH-745021	1		0.2–10	0.01	10	P	1.0	0.100	0.4	0.040	-	-	10	10	1,010
					5	P	1.2	0.060	0.7	0.035					
					1	P	3.0	0.030	2.0	0.020					
					0.2	P	17.5	0.035	10	0.020					
					1	D	6.0	0.060	7.0	0.070					
LH-745041	1		5–120	0.10	120	P	0.5	0.60	0.15	0.18	721008	721018	200 350	120 200	1,010
					60	P	0.7	0.42	0.2	0.12					
					12	P	2.0	0.24	1.0	0.12					
					5	P	5.5	0.275	2.5	0.125					
					12	D	4.0	0.48	4.0	0.48					
LH-745061	1		10–300	0.20	300	P	0.5	1.50	0.15	0.45	721007	721017	350	300	1,010
					150	P	0.6	0.90	0.2	0.30					
					30	P	1.5	0.45	0.8	0.24					
					10	P	5.0	0.50	2.4	0.24					
					30	D	3.0	0.90	3.0	0.90					
LH-745081	1		50–1000	1.00	1000	P	0.45	4.5	0.15	1.5	721006	721016	1000	1000	1,010
					500	P	0.6	3.0	0.2	1.0					
					100	P	2.0	2.0	0.5	0.5					
					50	P	4.0	2.0	1.0	0.5					
					100	D	2.5	2.5	2.0	2.0					
LH-745101	1		100–5000	5.00	5000	P	0.5	25	0.15	7.5	721005	721015	5000	-	1,010
					2500	P	1.7	17.5	0.2	5					
					500	P	1.6	8	0.4	2					
					100	P	8.0	8	2.0	2					
					500	D	2.4	12	2.4	12					
LH-745111	1		500–10000	10.00	10000	P	0.6	60	0.2	20	721005	721015	10000	-	1,010
					5000	P	0.9	45	0.3	15					
					1000	P	3.0	30	0.6	6					
					500	P	7.0	35	1.2	6					
					1000	D	4.0	40	2.4	24					
LH-745321	8		0.2–10	0.01	10	P	1.2	0.120	0.5	0.050	-	-	10	10	1,680
					5	P	1.5	0.075	0.8	0.040					
					1	P	4.0	0.040	3.0	0.030					
					0.2	P	25.0	0.050	15.0	0.030					
					1	D	12.0	0.120	15.0	0.150					
LH-745341	8		5–120	0.10	120	P	0.6	0.72	0.3	0.36	721008	721018	200 350	120	1,680
					60	P	0.8	0.48	0.4	0.24					
					12	P	2.5	0.30	1.67	0.20					
					5	P	6.0	0.30	4.0	0.20					
					12	D	4.5	0.54	8.0	0.96					
LH-745361	8		10–300	0.20	300	P	0.6	1.80	0.2	0.60	721007	721017	350	300	1,680
					150	P	0.8	1.20	0.3	0.45					
					30	P	2.33	0.70	1.0	0.30					
					10	P	8.0	0.80	3.0	0.30					
					30	D	3.33	1.00	6.0	1.80					
LH-745391	8		50–1200	1.00	1200	P	0.6	7.2	0.2	2.4	721006	721016	1200	1200	1,680
					600	P	1.0	6.0	0.3	1.8					
					120	P	2.5	3.0	1.0	1.2					
					50	P	8.0	4.0	2.4	1.2					
						D	3.33	4.0	3.33	4.0					
LH-745421	12		0.2–10	0.01	120	P	1.2	0.120	0.5	0.05	-	-	10	10	2,070
					5	P	1.5	0.075	0.8	0.04					
					1	P	4.0	0.040	3.0	0.03					
					0.2	P	25.0	0.050	15.0	0.03					
					1	D	12.0	0.120	15.0	0.15					
LH-745441	12		5–120	0.10	120	P	0.6	0.72	0.3	0.36	721008	721018	200 350	120	2,070
					60	P	0.8	0.48	0.4	0.24					
					12	P	2.5	0.30	1.67	0.20					
					5	P	6.0	0.30	4.0	0.20					
					12	D	4.5	0.54	8.0	0.96					
LH-745461	12		10–300	0.20	300	P	0.6	1.80	0.2	0.60	721007	721017	350	300	2,070
					150	P	0.8	1.20	0.3	0.45					
					30	P	2.33	0.70	1.0	0.30					
					10	P	8.0	0.80	3.0	0.30					
					30	D	3.33	1.00	6.0	1.80					
LH-745491	12		50–1200	1.00	1200	P	0.6	7.2	0.2	2.4	721006	721016	1200	1200	2,070
					600	P	1.0	6.0	0.3	1.8					
					120	P	2.5	3.0	1.0	1.2					
					50	P	8.0	4.0	2.4	1.2					
					120	D	3.33	4.0	3.33	4.0					

See page 89 for Charging Stands and Accessories

Picus® Electronic Pipettes

The Most Sophisticated and Ergonomic Pipette Ever!

Picus® is Sartorius' most ergonomic pipette in the Biohitfamily. Designed to revolutionize pipetting, it is the smallest and lightest electronic pipette on the market. This enables it to ease the user's workload and provides protection from repetitive strain injury (RSI). Its new generation technology, electronic brake and piston control system guarantee accurate and precise pipetting results.

Features

Excellent Ergonomics

- Extremely small and light electronic pipette (only 100 g)
- Comfortable handle design and finger hook
- Light, electronic tip ejection

New Generation Technology

- Enhanced DC-motor concept provides outstanding accuracy and repeatability of the results

Intuitive User-Interface

- Available with five language options: English, Chinese, French, German and Russian

Handy Adjustment Wheel

- Offers extremely fast volume setting and easy menu navigation
- Enables ergonomic one-handed operation
- Controls accurately manual pipetting and titrating speed with just a light touch of the thumb

Microwell Plate Tracker

- Unique built-in tracker for 96 and 384 well plates guides the user to pipette into the correct wells
- Improves work efficiency and reliability of results

Optoload for Perfect Tip Sealing

- Allows tip loading with an equal constant force onto every channel
- Enables perfect tip sealing onto every individual tip cone
- Optoload is available only in multichannel models

Safe-Cone Filters

- Prevent contamination
- In all models > 10 µl

Autoclavable Lower Parts (excl. 1200 µl models)

- For easy cleaning

All pipettes include universal AC-adaptor (EU, UK, US | JPN, AUS and CHN plugs)
NOTE: For additional product specifications (including Pipetting & Multi-Dispensing modes) contact your sales rep. for a datasheet. The listed systematic and random error values can be achieved only under strictly controlled conditions during type tests per ISO 8655. Pipettes are tested at factory default speed settings. Due to the continuous product development by Sartorius, the systematic and random error values are subject to change without notice.



Benefits

Enjoy Pipetting

- Our lightest and smallest electronic pipette protects you from RSI (repetitive strain injury) and eases your workload in long pipetting series
- New ergonomic design ensures an optimal working posture and comfortable pipetting
- Effortless, electronic tip ejection

Achieve Reliable Results

- New generation technology – the electronic brake and piston control system guarantee accurate and precise pipetting results
- A unique plate tracker increases reliability in microwell plate work, by guiding pipetting steps
- Fully electronic operation guarantees user-independent results

Learn to Use It in a Minute

- Intuitive user interface with five language options helps learning the main functions easily without a manual
- Fastest volume setting and easy menu navigation with unique adjustment wheel
- Hot key provides fast access to your favorite programs, easing routine work

















1-channel models

8-channel models

12-channel models

Picus® – Specifications & Pricing

			Volume	Increment	Test	System.	System.	Random	Random	Safe-Cone Filters		Optifit	SafetySpace	US List	
Model	Channel		Range (μl)	(μl)	Volume (μl)	Mode	Error (%)	Error (μl)	Error (%)	Error (μl)	Standard	Plus	Tips (μl)	Filter Tips (μl)	Price (\$)
735021	1		0.2–10	0.01	10	P	1.0	0.100	0.4	0.040	-	-	10	10	895
					5	P	1.2	0.060	0.7	0.035					
					1	P	3.0	0.030	2.0	0.020					
					0.2	P	17.5	0.035	10	0.020					
					1	D	6.0	0.060	7.0	0.070					
735041	1		5–120	0.10	120	P	0.5	0.60	0.15	0.18	721008	721017	200 350	120 200	895
					60	P	0.7	0.42	0.2	0.12					
					12	P	2.0	0.24	1.0	0.12					
					5	P	5.5	0.275	2.5	0.125					
					12	D	4.0	0.48	4.0	0.48					
735061	1		10–300	0.20	300	P	0.5	1.50	0.15	0.45	721007	721017	350	300	895
					150	P	0.6	0.90	0.2	0.30					
					30	P	1.5	0.45	0.8	0.24					
					10	P	5.0	0.50	2.4	0.24					
					30	D	3.0	0.90	3.0	0.90					
735081	1		50–1000	1.00	1000	P	0.45	4.5	0.15	1.5	721006	721016	1000	1000	895
					500	P	0.6	3.0	0.2	1.0					
					100	P	2.0	2.0	0.5	0.5					
					50	P	4.0	2.0	1.0	0.5					
					100	D	2.5	2.5	2.0	2.0					
735101	1		100–5000	5.00	5000	P	0.5	25	0.15	7.5	721005	721015	5000	–	895
					2500	P	1.7	17.5	0.2	5					
					500	P	1.6	8	0.4	2					
					100	P	8.0	8	2.0	2					
					500	D	2.4	12	2.4	12					
735111	1		500–10000	10.00	10000	P	0.6	60	0.2	20	721005	721015	10000	–	895
					5000	P	0.9	45	0.3	15					
					1000	P	3.0	30	0.6	6					
					500	P	7.0	35	1.2	6					
					1000	D	4.0	40	2.4	24					
735321	8		0.2–10	0.01	10	P	1.2	0.120	0.5	0.050	–	–	10	10	1,480
					5	P	1.5	0.075	0.8	0.040					
					1	P	4.0	0.040	3.0	0.030					
					0.2	P	25.0	0.050	15.0	0.030					
					1	D	12.0	0.120	15.0	0.150					
735341	8		5–120	0.10	120	P	0.6	0.72	0.3	0.36	721008	721018	200 350	120	1,480
					60	P	0.8	0.48	0.4	0.24					
					12	P	2.5	0.30	1.67	0.20					
					5	P	6.0	0.30	4.0	0.20					
					12	D	4.5	0.54	8.0	0.96					
735361	8		10–300	0.20	300	P	0.6	1.80	0.2	0.60	721007	721017	350	300	1,480
					150	P	0.8	1.20	0.3	0.45					
					30	P	2.33	0.70	1.0	0.30					
					10	P	8.0	0.80	3.0	0.30					
					30	D	3.33	1.00	6.0	1.80					
735391	8		50–1200	1.00	1200	P	0.6	7.2	0.2	2.4	721006	721016	1200	1200	1,480
					600	P	1.0	6.0	0.3	1.8					
					120	P	2.5	3.0	1.0	1.2					
					50	P	8.0	4.0	2.4	1.2					
						D	3.33	4.0	3.33	4.0					
735421	12		0.2–10	0.01	120	P	1.2	0.120	0.5	0.05	–	–	10	10	1,875
					5	P	1.5	0.075	0.8	0.04					
					1	P	4.0	0.040	3.0	0.03					
					0.2	P	25.0	0.050	15.0	0.03					
					1	D	12.0	0.120	15.0	0.15					
735441	12		5–120	0.10	120	P	0.6	0.72	0.3	0.36	721008	721018	200 350	120	1,875
					60	P	0.8	0.48	0.4	0.24					
					12	P	2.5	0.30	1.67	0.20					
					5	P	6.0	0.30	4.0	0.20					
					12	D	4.5	0.54	8.0	0.96					
735461	12		10–300	0.20	300	P	0.6	1.80	0.2	0.60	721007	721017	350	300	1,875
					150	P	0.8	1.20	0.3	0.45					
					30	P	2.33	0.70	1.0	0.30					
					10	P	8.0	0.80	3.0	0.30					
					30	D	3.33	1.00	6.0	1.80					
735491	12		50–1200	1.00	1200	P	0.6	7.2	0.2	2.4	721006	721016	1200	1200	1,875
					600	P	1.0	6.0	0.3	1.8					
					120	P	2.5	3.0	1.0	1.2					
					50	P	8.0	4.0	2.4	1.2					
					120	D	3.33	4.0	3.33	4.0					

See page 89 for Charging Stands and Accessories

Tacta Mechanical Pipettes

The New Perfectly Balanced Mechanical Pipette

Tacta is the new premium mechanical pipette with superb comfort and reliability. We listened to our customers and combined their views with our extensive experience and state-of-the-art R&D to create the exceptionally balanced design. It feels great in your hand and is easy and comfortable to use. All of the materials used for Tacta have been carefully selected and each component is designed to meet the highest standards. Tacta makes pipetting effortless and safe, while producing accurate and reliable results time after time.

Features

- Single-channel models cover a volume range of 0.1 µl– 10,000 µl and multichannel models a range of 0.5 µl – 10,000 µl
- Fully autoclavable
- Optilock, dual locking system
- Optiject, levered tip ejection system
- Optiload, spring-loaded tip cones
- Weight: 76 g (1-ch, 1000 µl). 138 g (8-ch, 300 µl)
- Length: L215mm (1-ch, 1000 µl). 240mm (8-ch, 300 µl)
- Air displacement pipetting principle



Benefits

Feel the Comfort

- Comfortable to hold due to the ergonomically designed handle
- Low pipetting and tip ejection forces that reduce the risk of Work Related Upper Limb Disorder (WRULD)
- Controlled and smooth tip ejection with the new Sartorius Optiject technology
- The unique Sartorius Optilock system provides flexibility for volume adjustment and locking

Achieve Reliable Results

- Reliable results, even over lengthy pipetting periods
- Calibration adjustment to provide accurate results for various liquid types
- Large, easy-to-read four-digit volume display helps to set exact volumes

Prevent Contamination

- Safe-Cone Filters are a cost effective method to prevent sample aerosols and fluids from contaminating the internal components of the pipette
- Safe-Cone Filters are used in pipette tip cones in all models > 10µl
- The unique Safe-Cone Filter ejector enables the removal of used filters without human contact with contaminated filters

Easy Cleaning

- Tacta® is the quickest and easiest pipette on the market to clean, with only three parts to be disassembled for cleaning and no tools are needed for disassembly
- Tacta® can also be steam-sterilized or autoclaved as-is, without disassembly
- High UV and chemical resistance



Tacta – Specifications & Pricing

			Volume	Increment	Test	System.	System.	Random	Random	Safe-Cone Filters		Optifit	SafetySpace	US List
Model	Channel		Range (µl)	(µl)	Volume (µl)	Error (%)	Error (µl)	Error (%)	Error (µl)	Standard	Plus	Tips (µl)	Filter Tips (µl)	Price (\$)
LH-729010	1	●	0.1-3	0.002	3	1.40	0.042	0.80	0.024	-	-	10	10	410
					1.5	2.60	0.039	1.60	0.024					
					0.3	10.00	0.030	6.00	0.018					
LH-729020	1	●	0.5-10	0.01	10	1.00	0.100	0.60	0.060	-	-	10	10	410
					5	1.50	0.075	1.00	0.050					
					1	3.00	0.030	2.00	0.020					
LH-729030	1	●	2-20	0.02	20	1.00	0.200	0.50	0.100	721014	-	200	20	410
					10	1.40	0.140	0.90	0.090					
					2	4.00	0.080	3.00	0.060					
LH-729050	1	●	10-100	0.10	100	0.80	0.80	0.20	0.20	721008	721018	200	120	410
					50	1.00	0.50	0.40	0.20			350		
					10	3.00	0.30	1.00	0.10					
LH-729060	1	●	20-200	0.20	200	0.60	1.20	0.20	0.40	721007	721017	200	200	410
					100	0.80	0.80	0.30	0.30			350	300	
					20	2.30	0.46	0.90	0.18					
LH-729070	1	●	100-1000	1.00	1,000	0.70	7.0	0.20	2.0	721006	721016	1000	1000	410
					500	0.80	4.0	0.20	1.0					
					100	2.50	2.5	0.60	0.6					
LH-729080	1	●	500-5000	10.0	5,000	0.60	30	0.20	10	721005	721015	5000	-	410
					2,500	0.70	17.5	0.30	7.5					
					500	2.40	12	0.60	3					
LH-729090	1	●	1-10 ml	20.0	10,000	0.60	60	0.20	20	721005	721015	10 000	-	410
					5,000	1.20	60	0.30	15					
					1,000	3.00	30	0.60	6					
LH-729120	8	●	0.5-10	0.01	10	1.50	0.150	1.00	0.100	-	-	10	10	1,035
					5	2.50	0.125	2.00	0.100					
					1	5.50	0.055	4.00	0.040					
LH-729130	8	●	5-100	0.10	100	0.90	0.90	0.40	0.40	721008	721008	200	120	1,035
					50	1.20	0.60	0.70	0.35			350		
					10	4.00	0.40	2.00	0.20					
LH-729140	8	●	30-300	0.20	300	0.60	1.80	0.25	0.475	721007	721017	350	300	1,035
					150	1.00	1.50	0.50	0.75					
					30	2.50	0.75	1.00	0.30					
LH-729220	12	●	0.5-10	0.01	10	1.50	0.150	1.00	0.100	-	-	10	10	1,220
					5	2.50	0.125	2.00	0.100					
					1	5.50	0.055	4.00	0.040					
LH-729230	12	●	5-100	0.10	100	0.90	0.90	0.40	0.40	721008	721018	200	120	1,220
					50	1.20	0.60	0.70	0.35			350		
					10	4.00	0.40	2.00	0.20					
LH-729240	12	●	30-300	0.20	300	0.60	1.80	0.25	0.75	721007	721017	350	300	1,220
					150	1.00	1.50	0.50	0.75					
					30	2.50	0.75	1.00	0.30					

The listed systematic and random error values can be achieved only under strictly controlled conditions during type tests per ISO 8655. Pipettes are tested at factory default speed settings. Due to the continuous product development by Sartorius, the systematic and random error values are subject to change without notice.

Accessories

Item	Description	US List Price (\$)
LH-725630	Carousel Stand for 6 pipettes	132
LH-727640	Pipette Holder for one pipette	10
725620	Linear Stand	132
Pre-Delivery Calibration Certificates (for more info, see page xxx)		
84JOP01	Single Channel 5.3 Calibration Mechanical Pipette	62
84JOP02	(8) Channel 5.3 Calibration Mechanical Pipette	96
84JOP10	(12) Channel 5.3 Calibration Mechanical Pipette	120
Extended Warranty (for more info, see page xxx)		
84WAP01	12 months Mechanical Single Channel Pipette	113
84WAP02	12 months Mechanical (8) Channel Pipette	205
84WAP10	12 months Mechanical (12) Channel Pipette	235



Linear Stand

mLINE® Mechanical Pipettes

Effortless Accuracy

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



Features & Benefits

Extremely Light Pipetting Forces & Ergonomic Design

- Prevents repetitive strain injury (RSI)
- Better pipetting results in long-lasting pipetting

Secured Volume Setting

- Volume lock prevents accidental volume changes while pipetting
- Large, easy-to-read volume display minimizes the risk of volume-setting errors

Thermal Insulation of Internal Components to Improve Accuracy

- Improves accuracy in long pipetting series

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
- Available in single and multichannel models

Safe-Cone Filters

- Prevent contamination
- In all models > 10 µl
- Unique filter ejection mechanism for easy removal

Materials Have High Chemical and UV-Resistance

- Highly durable and long-lasting pipette

Fully Autoclavable without Disassembly

- Easy to steam-sterilize, improves purity

Only Three Parts to Disassemble

- Very easy to clean and maintain
- Improves purity and secures functionality



mLINE® – Specifications & Pricing

Model	Channel	Volume Range (µl)	Increment (µl)	Test	System.	System.	Random	Random	Safe-Cone Filters		Optifit	SafetySpace	US List Price (\$)
				Volume (µl)	Error (%)	Error (µl)	Error (%)	Error (µl)	Standard	Plus	Tips (µl)	Filter Tips (µl)	
725010	1	●	0.1-3	3	0.042	1.40	0.024	0.80	-	-	10	10	395
				1.5	0.039	2.60	0.024	1.60					
				0.3	0.030	10.00	0.018	6.00					
725020	1	●	0.5-10	10	0.100	1.00	0.060	0.60	-	-	10	10	395
				5	0.075	1.50	0.050	1.00					
				1	0.030	3.00	0.020	2.00					
725030	1	●	2-20	20	0.200	1.00	0.100	0.50	721014	-	200	20	395
				10	0.140	1.40	0.090	0.90					
				2	0.080	4.00	0.060	3.00					
725050	1	●	10-100	100	0.80	0.80	0.20	0.20	721008	721018	200	120	395
				50	0.50	1.00	0.20	0.40			350		
				10	0.30	3.00	0.10	1.00					
725060	1	●	20-200	200	1.20	0.60	0.40	0.20	721007	721017	200	200	395
				100	0.80	0.80	0.30	0.30			350	300	
				20	0.46	2.30	0.18	0.90					
725070	1	●	100-1000	1000	7.0	0.70	2.0	0.20	721006	721016	1000	1000	395
				500	4.0	0.80	1.0	0.20					
				100	2.5	2.50	0.6	0.60					
725080	1	●	500-5000	5000	30	0.60	10	0.20	721005	721015	5000	-	395
				2500	17.5	0.70	7.5	0.30					
				500	12	2.40	3	0.60					
725090	1	●	1-10 ml	10000	60	0.60	20	0.20	721005	721015	10 000	-	395
				5000	60	1.20	15	0.30					
				1000	30	3.00	6	0.60					
725120	8	●	0.5-10	10	0.150	1.50	0.100	1.00	-	-	10	10	935
				5	0.125	2.50	0.100	2.00					
				1	0.055	5.50	0.040	4.00					
725130	8	●	5-100	100	0.90	0.90	0.40	0.40	721008	721018	200	120	935
				50	0.60	1.20	0.35	0.70			350		
				10	0.40	4.00	0.20	2.00					
725140	8	●	30-300	300	1.80	0.60	0.75	0.25	721007	721017	350	300	935
				150	1.50	1.00	0.75	0.50					
				30	0.75	2.50	0.30	1.00					
725220	12	●	0.5-10	10	1.5	0.150	0.100	1.00	-	-	10	10	1,120
				5	2.5	0.125	0.100	2.00					
				1	5.5	0.055	0.040	4.00					
725230	12	●	5-100	100	0.90	0.90	0.40	0.40	721008	721018	200	120	1,120
				50	0.60	1.20	0.35	0.70			350		
				10	0.40	4.00	0.20	2.00					
725240	12	●	30-300	300	1.80	0.60	0.75	0.25	721007	721017	350	300	1,120
				150	1.50	1.00	0.75	0.50					
				30	0.75	2.50	0.30	1.00					

The listed systematic and random error values can be achieved only under strictly controlled conditions during type tests per ISO 8655. Pipettes are tested at factory default speed settings. Due to the continuous product development by Sartorius, the systematic and random error values are subject to change without notice.

Accessories

Item	Description	US List Price (\$)
LH-725630	Carousel Stand for 6 pipettes	132
725610	Pipette Holder for one pipette	8.40
725620	Linear Stand	132
726203	Calibration tool Tube opener	46
726001	Color coding caps, 5 pcs	33
Pre-Delivery Calibration Certificates (for more info, see page xxx)		
84JOP01	Single Channel 5.3 Calibration Mechanical Pipette	62
84JOP02	(8) Channel 5.3 Calibration Mechanical Pipette	96
84JOP10	(12) Channel 5.3 Calibration Mechanical Pipette	120
Extended Warranty (for more info, see page xxx)		
84WAP01	12 months Mechanical Single Channel Pipette	113
84WAP02	12 months Mechanical (8) Channel Pipette	205
84WAP10	12 months Mechanical (12) Channel Pipette	235



Carousel Stand

mLINE® Pipette Multipacks

With the mLINE® Multipacks you can affordably replace your used mechanical pipettes with new ones or set up new workstations for every researcher. A set of three to five mLINE® mechanical pipettes, a Linear Stand and racks of matching tips are included in each pack.



Specifications & Pricing

Item	Description	US List Price (\$)
LH-725661	mLINE® Pipette 3-pack 10 – mLINE® pipettes 0.5-10 µl, 10-100 µl, 100-1000 µl – Sartorius Optifit Tip tray box 0.2-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand	740
LH-725662	mLINE® Pipette 3-pack 20 – mLINE® pipettes 2-20 µl, 20-200 µl, 100-1000 µl – Sartorius Optifit Tip tray box 0.5-200 µl, 10-1000 µl – Linear Stand	740
LH-725663	mLINE® Pipette 4-pack – mLINE® pipettes 0.5-10 µl, 10-100 µl, 20-200 µl, 100-1000 µl – Sartorius Optifit Tip tray box 0.2-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand	920
LH-725664	mLINE® Pipette 5-pack – mLINE® pipettes 2-20 µl, 10-100 µl, 20-200 µl, 100-1000 µl, 500-5000 µl – Sartorius Optifit Tip tray box 0.5-200 µl, 10-1000 µl, 5000 µl – Linear Stand	1,085
LH-725665	mLINE® Pipette 3+1-pack – mLINE® pipettes 0.5-10 µl, 20-200 µl, 100-1000 µl and 8-channel 30-300 µl – Sartorius Optifit Tip tray box 0.2-10 µl, 0.5-200 µl, 5-350 µl, 10-1000 µl – Linear Stand	1,265

Tacta Pipette Multipacks

Tacta® Multipacks offer complete sets of pipettes and accessories with eight options that include:

- Mechanical Tacta® pipettes
- Linear Stand
- Matching Optifit Tips
- Pipette Holders



Specifications & Pricing

Item	Description	US List Price (\$)
LH-729670	Tacta® Pipette 3-pack 10 – Tacta® pipettes 0.5-10 µl, 10-100 µl, 100-1000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.2-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x3	810
LH-729671	Tacta® Pipette 3-pack 20 – Tacta® pipettes 2-20 µl, 20-200 µl, 100-1000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x3	810
LH-729672	Tacta® Pipette 4-pack 20 – Tacta® pipettes 0.5-10 µl, 2-20 µl, 20-200 µl, 100-1000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.1-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x4	1,020
LH-729673	Tacta® Pipette 4-pack 100 – Tacta® pipettes 0.5-10 µl, 10-100 µl, 20-200 µl, 100-1000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.1-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x4	1,020
LH-729674	Tacta® Pipette 5-pack 10 – Tacta® pipettes 0.5-10 µl, 10-100 µl, 20-200 µl, 100-1000 µl, 500-5000 µl (1 channel) – Sartorius Optifit Tip Rack (96 tips) 0.1-10 µl, 0.5-200 µl, 10-1000 µl, Tip Rack (50 tips) 5000 µl – Linear Stand & Pipette Holder x5	1,190
LH-729675	Tacta® Pipette 5-pack 20 – Tacta® pipettes 2-20 µl, 10-100 µl, 20-200 µl, 100-1000 µl, 500-5000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.5-200 µl, 10-1000 µl, Tip Rack (50 tips) 5000 µl – Linear Stand & Pipette Holder x5	1,190
LH-729676	Tacta® Pipette 3 + 1 pack – Tacta® pipettes 0.5-10 µl, 20-200 µl, 100-1000 µl (1 channel), 30-300 µl (8 channel) – Sartorius Optifit Tip rack (96 tips) 0.1-10 µl, 0.5-200 µl, 5-350 µl, 10-1000 µl – Linear Stand & Pipette Holder x4	1,385
LH-729677	Tacta® Pipette 3-pack max – Tacta® pipettes 100-1000 µl, 500-5000 µl, 1-10 ml – Sartorius Optifit Tip rack - 10-1000 µl (96 tips), 0.1-5 ml (50 tips), 1-10 ml (35 tips) – Linear Stand & Pipette Holder x3	810

Proline® Plus Mechanical Pipettes

Dependable Durability

Proline® Plus is designed to offer comfort and quality in every day manual pipetting. While it shares many of the excellent features of mLINE®, it has a personal design and a durable 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.



Features & Benefits

Wide variety of adjustable, single and multichannel models

- Fixed volume pipettes for specific applications to avoid volume setting errors

Low Pipetting Forces & Ergonomic Finger Support

- Reduces the risk of repetitive strain injury (RSI)

Easy-to-read Volume Display

- Large, easy-to-read volume display minimizes the risk of volume-setting errors

Thermal Insulation of Internal Components

- Improves accuracy in long pipetting series

Optiload for Perfect Tip Sealing on Multi-Channel Models

- 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

- Prevent contamination
- In all models > 10 µl

Materials have High Chemical and UV-Resistance

- Highly durable and long lasting pipette

Fully Autoclavable without Disassembly
















- Easy to steam-sterilize, improves purity

Only Three Parts to Disassemble

- Very easy to clean and maintain
- Improves purity and secures functionality



Proline® Plus – Specifications & Pricing

			Volume	Increment	Test	System.	System.	Random	Random	Safe-Cone Filters		Optifit	SafetySpace	US List
Model	Channel		Range (µl)	(µl)	Volume (µl)	Error (%)	Error (µl)	Error (%)	Error (µl)	Standard	Plus	Tips (µl)	Filter Tips (µl)	Price (\$)
728010	1		0.1 – 3	0.002	3	1.40	0.042	0.80	0.024	–	–	10	10	255
					1.50	2.60	0.039	1.60	0.024					
					3	10.00	0.030	6.00	0.018					
728020	1		0.5 – 10	0.01	10	1.00	0.100	0.60	0.060	–	–	10	10	255
					5	1.50	0.075	1.00	0.050					
					1	3.00	0.030	2.00	0.020					
728030	1		2 – 20	0.02	20	1.00	0.200	0.50	0.100	721014	–	200	20	255
					10	1.40	0.140	0.90	0.090					
					2	4.00	0.080	3.00	0.020					
728040	1		5 – 50	0.10	50	1.00	0.500	0.30	0.150	721008	721018	200	120	255
					25	1.40	0.350	0.50	0.125					
					5	3.00	0.150	1.50	0.075					
728050	1		10 – 100	0.10	100	0.80	0.80	0.20	0.20	721008	721018	200	120	255
					50	1.00	0.50	0.40	0.20					
					10	3.00	0.30	1.00	0.10					
728060	1		20 – 200	0.20	200	0.60	1.20	0.20	0.40	721007	721017	200	200	255
					100	0.80	0.80	0.30	0.30					
					20	2.30	0.46	0.90	0.18					
728070	1		100 – 1000	1.00	1000	0.70	7.0	0.20	2.0	721006	721016	1000	1000	255
					500	0.80	4.0	0.20	1.0					
					100	2.50	2.5	0.60	0.6					
728080	1		500 – 5000	10.0	5000	0.60	30	0.20	10	721005	721015	5000	–	255
					2500	0.70	17.5	0.30	7.5					
					500	2.40	12	0.60	3					
728090	1		1 – 10 ml	20.0	10000	0.60	60	0.20	20	721005	721015	10 000	–	255
					5000	1.20	60	0.30	15					
					1000	3.00	30	0.60	6					
728120	8		0.5 – 10	0.01	10	1.50	0.150	1.00	0.100	–	–	10	10	695
					5	2.50	0.125	2.00	0.100					
					1	5.50	0.055	4.00	0.040					
728130	8		10 – 100	0.10	100	0.90	0.90	0.40	0.40	721008	721018	200	120	695
					50	1.20	0.60	0.70	0.35					
					10	4.00	0.40	2.00	0.20					
728140	8		30 – 300	0.20	300	0.60	1.80	0.25	0.75	721007	721017	350	300	695
					150	1.00	1.50	0.50	0.75					
					30	2.50	0.75	1.00	0.30					
728220	12		0.5 – 10	0.01	10	1.50	0.150	1.00	0.100	–	–	10	10	850
					5	2.50	0.125	2.00	0.100					
					1	5.50	0.055	4.00	0.040					
728230	12		10 – 100	0.10	100	0.90	0.90	0.40	0.40	721008	721018	200	120	850
					50	1.20	0.60	0.70	0.35					
					10	4.0	0.40	2.00	0.20					
728240	12		30 – 300	0.20	300	0.60	1.80	0.25	0.75	721007	721017	350	300	850
					150	1.00	1.50	0.50	0.75					
					30	2.50	0.75	1.00	0.30					

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Proline® Plus Pipette Multipacks

Proline® Plus Multipacks offer complete sets of pipettes and accessories with eight options that include:

- Mechanical Proline® Plus pipettes
- Linear Stand
- Matching Optifit Tips
- Pipette Holders



Specifications & Pricing

Item	Description	US List Price (\$)
LH-728670	Proline® Plus Pipette 3-pack 10 – Proline® Plus pipettes 0.5-10 µl, 10-100 µl, 100-1000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.1-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x3	555
LH-728671	Proline® Plus Pipette 3-pack 20 – Proline® Plus pipettes 2-20 µl, 20-200 µl, 100-1000 µl – Sartorius Optifit Tip rack (96 tips) 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x3	555
LH-728672	Proline® Plus Pipette 4-pack 20 – Proline® Plus pipettes 0.5-10 µl, 2-20 µl, 20-200 µl, 100-1000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.1-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x4	700
LH-728673	Proline® Plus Pipette 4-pack 100 – Proline® Plus pipettes 0.5-10 µl, 10-100 µl, 20-200 µl, 100-1000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.1-10 µl, 0.5-200 µl, 10-1000 µl – Linear Stand & Pipette Holder x4	700
LH-728674	Proline® Plus Pipette 5-pack 10 – Proline® Plus pipettes 0.5-10 µl, 10-100 µl, 100-1000 µl, 5000 - 5000 µl , (1 channel), 30-300 µl (8-channel) – Sartorius Optifit Tip Tip Rack (96 tips) 0.1-10 µl, 0.5-200 µl, 10-1000 µl, Tip Rack (50 tips) 5000 µl – Linear Stand & Pipette Holder x5	815
LH-728675	Proline® Plus Pipette 5-pack 20 – Proline® Plus pipettes 2-20 µl, 10-100 µl, 20-200 µl, 100-1000 µl, 500-5000 µl (1 channel) – Sartorius Optifit Tip rack (96 tips) 0.5-200 µl, 10-1000 µl, Tip Rack (50 tips) 5000 µl – Linear Stand & Pipette Holder	815
LH-728676	Proline® Plus Pipette 3 + 1 pack – Proline® Plus pipettes 0.5-10 µl, 20-200 µl, 100-1000 µl (1 channel), 30- 300 µl (8 channel) – Sartorius Optifit Tip rack (96 tips) 0.1-10 µl, 0.5-200 µl, 5-350 µl, 10-1000 µl – Linear Stand & Pipette Holder x4	1,000
LH-728677	Proline® Plus Pipette 3-pack max – Proline® Plus pipettes 100-1000 µl (96 tips), 500-5000 µl, 1-10 ml – Sartorius Optifit Tip rack (96 tips) 10-1000 µl, 0.1-5 ml (50tips), 1-10 ml (35 tips) – Linear Stand & Pipette Holder x3	555

Proline® Plus FIXED Volume, Single-channel – Specifications & Pricing

Model	Channels	Volume (µl)	Increment (µl)	Test Volume (µl)	System. Error (%)	System. Error (µl)	Random Error (%)	Random Error (µl)	Safe-Cone Standard	Filters Plus	Optifit Tips (µl)	SafetySpace™ Filter Tips (µl)	US List Price (\$)
728515	1	5	–	5	1.30	5	1.20	0.060	–	–	10	10	192
728520	1	10	–	10	0.80	10	0.80	0.080	–	–	10	10	192
728530	1	20	–	20	0.60	20	0.50	0.100	721014	–	200	20	192
728535	1	25	–	25	0.50	25	0.30	0.075	721008	721018	200	120	192
728545	1	50	–	50	0.50	50	0.30	0.150	721008	721018	200	120	192
728550	1	100	–	100	0.50	100	0.30	0.30	721008	721018	200 350	120	192
728560	1	200	–	200	0.40	200	0.20	0.40	721007	721017	200 350	200 300	192
728565	1	250	–	250	0.40	250	0.20	0.50	721006	721016	1000	500 1000	192
728567	1	500	–	500	0.30	500	0.20	1.00	721006	721016	1000	500 1000	192
728570	1	1000	–	1000	0.30	1,000	0.20	2.0	721006	721016	1000	1000	192
728575	1	2000	–	2000	0.30	2,000	0.15	3.0	721005	721015	5000	–	192
728580	1	5000	–	5000	0.30	5,000	0.15	7.5	721005	721015	5000	–	192
728590	1	10 ml	–	10000	0.60	10,000	0.20	20	721005	721015	10000	–	192

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Accessories

Item	Description of Upgrade	US List Price (\$)
LH-725630	Carousel Stand for 6 pipettes	132
725610	Pipette Holder for one pipette	8.40
725620	Linear Stand	132
726203	Calibration tool Tube opener	46
Pre-Delivery Calibration Certificates (for more info, see page xxx)		
84JOP01	Single Channel 5.3 Calibration Mechanical Pipette	62
84JOP02	(8) Channel 5.3 Calibration Mechanical Pipette	96
84JOP10	(12) Channel 5.3 Calibration Mechanical Pipette	120
Extended Warranty (for more info, see page xxx)		
84WAP01	12 months Mechanical Single Channel Pipette	113
84WAP02	12 months Mechanical (8) Channel Pipette	205
84WAP10	12 months Mechanical (12) Channel Pipette	235



Pipette Holder



Optifit Tips

Perfect Match to Sartorius Pipettes

In liquid handling, pipetting results are dependent not on the pipette or the tip alone, but a combination of these and the comfort of the user. Optifit Tips are designed and manufactured as a perfect fit for our pipettes, enabling maximal accuracy, precision and ergonomics. Manufacturing the tips in our own production facility allows us to maintain the highest quality and purity standards throughout the manufacturing process.



Features

- Perfect fitting and sealing with Sartorius pipettes
- Compatible also with most other pipette makes (see compatibility with other manufacturers' pipettes at www.sartorius.com)
- Manufactured using diamond polished molds to obtain even surface for enhanced sample recovery
- Packaging and purity options for all needs
- All tip packages, including individual racks, are lot numbered for full traceability
- The highest quality virgin polypropylene (PP) used as a raw material
- Color coding of the tip trays to match compatible Sartorius pipettes

Benefits

Reliable Results

- Perfect fitting and sealing with Sartorius pipettes guarantee the given pipette specifications
- All Sartorius tips are manufactured according to ISO 9001, ISO 14001 and ISO 13485 standards
- High Quality = correct shape, size, material, purity and uniformity
- Color coding of the tip trays allows easy matching with a suitable color coded Sartorius pipette

Sample Safety

- Manufactured in ISO Class 8 certified cleanroom conditions, using highly automated production to avoid contamination
- Every tip lot is tested by an external partner, and certified for being DNase, RNase and endotoxin free
- Autoclavable (20 minutes at 121 °C, 1 bar (15 psi)).
- Pre-sterilized tips are e-beam irradiated

Less Risk for RSI (repetitive strain injury)

- Compatible with Optiload feature in Sartorius Picus® NxT, Picus®, Tacta®, mLINE® and Proline® Plus pipettes enabling ergonomic and light tip attachment and ejection



Optifit Tips, Refill Pack



Optifit Tips, Single Tray



Optifit Tips, Bulk in Box



Optifit Tips, Refill Tower



Optifit Tips, FlexiBulk

Optifit Tips – Specifications & Pricing

Model		Volume Range	Packaging	Pre-sterilized	Qty/Unit	US List Price (\$)
790010	●	0.1 – 10 µl	Single Tray		10 × 96	81
790011			Single Tray	•	10 × 96	107
790012			Refill Tower		10 × 96	55
790013			Refill Pack	•	20 × 96	143
783210	●	0.1 – 10 µl	Single Tray		10 × 96	75
783211		Extended	Single Tray	•	10 × 96	86
790200	●	0.5 – 200 µl	Single Tray		10 × 96	68
790201			Single Tray	•	10 × 96	70
790202			Refill Tower		10 × 96	40
790203			Refill Pack	•	15 × 96	96
790350	●	5 – 350 µl	Single Tray		10 × 96	70
790351			Single Tray	•	10 × 96	96
790352			Refill Tower		10 × 96	47
790353			Refill Pack	•	15 × 96	86
791000	●	10 – 1000 µl	Single Tray		10 × 96	68
791001			Single Tray	•	10 × 96	86
791002			Refill Pack		10 × 96	40
791003			Refill Pack	•	10 × 96	65
791020	●	10 – 1000 µl	Single Tray		10 × 96	70
791021		Wide bore tip	Single Tray	•	10 × 96	92
791200	●	50 – 1200 µl	Single Tray		10 × 96	81
791201			Single Tray	•	10 × 96	101
791202			Refill Pack		10 × 96	55
791203			Refill Pack	•	10 × 96	75
791210*	●	50 – 1200 µl	Single Tray		10 × 96	96
791211*			Single Tray	•	10 × 96	122
791212*			Refill Pack		10 × 96	117
791213*			Refill Pack	•	10 × 96	138
780304+	●	100 – 5000 µl	Single Tray		50	16
780300			Bulk in Box		100	28
780305+			Single Tray	•	50	19
LH-780314	●	1–10 ml	Single Tray		35	26

*Extended length: 90 mm *Minimum order quantity of 10 (10x50). Must order in multiples of 10

NOTE: 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 the listed Sartorius tips and pipettes.

Model	Item	Tip Type (Non-filter tips)	Racks/Unit	US List Price (\$)
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Empty Tip Boxes for Refill System (Tips and Trays are Not Included)

790910	Empty Tip Box for Refill System	10, 200, 350 µl	10	13
790920	Empty Tip Box for Refill System	1000, 1200 µl	10	13

Model	Volume Range (µl)	Length (mm)	Purity Level	Qty.	US List Price (\$)
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Optifit Tips, FlexiBulk

LH-B790204	0.5-200	51	RNase, DNase, endotoxin free	960	36
LH-B790354	5-350	54	RNase, DNase, endotoxin free	960	36
LH-B791004	10-1000	71.5	RNase, DNase, endotoxin free	480	22
LH-B791024 [#]	10-1000 WB	68.5	RNase, DNase, endotoxin free	480	22
LH-B791204	50-1200	71.5	RNase, DNase, endotoxin free	480	22

[#] Tip with wide bore

Optifit Tips, Standard bulk packages

790014	0.1-10	31.5	-	1,000	37
780300	100-5000	150	-	100	28
780308	100-5000	150	-	1,000	153
LH-780316	1-10 ml	155	-	250	117

All Refill Pack and Single Tray packed tips are free of RNase, DNase and endotoxins.

SafetySpace™ Filter Tips

Improved Sample Safety

With their unique safety air gap, SafetySpace™ Filter Tips are designed to prevent crosscontamination with the filter barrier as well as loss of sample. The unique positioning of the filter leaves more space between the sample and the filter than in conventional filter tips. This allows pipetting any type of liquid or using any pipetting technique without the risk of the valuable sample permeating the filter. In effect, the SafetySpace™ Filter Tips minimize the risk of sample contamination, improve sample recovery and, thus, lead to improved sample safety in two ways.



Features

- Perfect fitting and sealing with Sartorius pipettes guarantee the given pipette specifications
- Compatible with most other pipette makes (see compatibility with other manufacturers' pipettes at www.sartorius.com)
- Manufactured using diamond polished molds to obtain even surface
- Tip packages, including individual racks, are lot numbered for full traceability
- All Sartorius tips are manufactured according to ISO 9001, ISO 14001 and ISO 13485 standards
- High Quality = correct shape, size, material, purity and uniformity
- Color coding of the tip trays allows easy matching with a suitable color coded Sartorius pipette

Applications

The Filter Tips are Most Useful in:

- Molecular biology
- Microbiology
- Cell culture
- Radioactive samples

The SafetySpace™ Feature is Particularly Useful in the Following Applications, where Extra Space in the Tip is Needed:

- Pipetting foaming liquids such as buffers and proteins
- Pipetting solvents
- Multiple dispensing with electronic pipettes
- Reverse pipetting

Specifications & Pricing

Model		Volume Range (µl)	Packaging	Pre-sterilized	Qty/Unit	US List Price (\$)
790011F	●	0.1 – 10	Single Tray	●	10 × 96	163
790021F	●	0.5 – 20	Single Tray	●	10 × 96	163
790101F	●	2 – 120	Single Tray	●	10 × 96	163
790201F	●	5 – 200	Single Tray	●	10 × 96	163
790301F	●	5 – 300	Single Tray	●	10 × 96	163
791001F	●	50 – 1000	Single Tray	●	10 × 96	163
791211F	●	50 – 1200	Single Tray	●	10 × 96	195

Filter Tips with Regular Air Gap

783201	●	0.1 – 10 Extended	Single Tray	●	10 × 96	179
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Benefits

Reliable Results

- The safety air gap between the sample and the filter allows accurate results also for foaming liquids or solvents, which otherwise tend to easily penetrate the filter barrier and risk the result accuracy
- Extra space also enables safe use of all pipetting modes (reverse pipetting, multi-dispensing) without the risk of wetting the filter

Sample Safety

- The filter barrier and the extra space in the tip prevent cross-contamination from sample to sample
- The filters (PE) are made without “self-sealing” additives to ensure no particles interfere with the sample and the results
- Manufactured in ISO Class 8 certified cleanroom conditions, using highly automated production to avoid contamination
- Every tip lot is tested by an external partner, and certified for being DNase, RNase and endotoxin free
- E-beam irradiated for sterility

Less Risk for RSI (repetitive strain injury)

- Compatible with Optiload feature in Sartorius Picus® NxT, Picus®, Tacta®, mLINE® and Proline® Plus pipettes enabling ergonomic and light tip attachment and ejection

Extended Tips

Reach the Samples Better!

Pipetting samples from narrow and long tubes without contaminating the pipette can be challenging. New Sartorius Extended tips will guarantee easier reach to wide variety of tubes and vessels. Color-coding of the tip racks ensures easy matching with corresponding Sartorius pipettes.



Specifications & Pricing

Model	Volume Range (µl)	Length (mm)	Packaging	RNase, DNase, endotoxin-free	Presterilized	Qty/Unit	US List Price (\$)
Standard Tips							
LH-X780200	0.5-20	77.5	Single Tray	•		10 x 96	74
LH-X780201	0.5-200	77.5	Single Tray	•	•	10 x 96	76
LH-X781000	10-1,000	102	Single Tray	•		8 x 96	74
LH-X781001	10-1,000	102	Single Tray	•	•	8 x 96	91
Filter Tips							
LH-XF780201	0.5-200	77.5	Single Tray	•	•	10 x 96	166
LH-XF781001	10-1,000	102	Single Tray	•	•	8 x 96	166

Low Retention Tips

Optimum Flow for Optimum Recovery

The Sartorius Low Retention Tips are a perfect companion for pipetting liquids with low surface tension – due to their very even hydrophobic surface, they leave next to no residue in the tip. In addition, the durable tip surface has high chemical resistance securing sample integrity.

Low Retention Tips save your valuable reagents and secure reliable results, for example, with detergent-containing samples in sensitive molecular biology applications. The low retention feature is available with a wide selection of Sartorius Optifit Tips (non-filtered) as well as with SafetySpace™ Filter Tips, with volumes from 10 µl to 1200 µl.

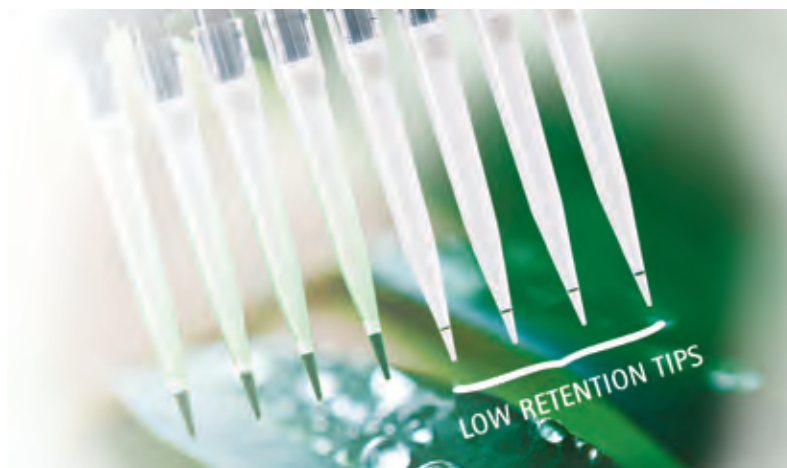
Features

- Manufactured using an advanced proprietary technology to obtain even liquid repellent surface
- Filtered and non-filtered Low Retention Tips available, the filter tips feature extra space between the sample and the filter
- Packaging and purity options for various needs
- Perfect fitting and sealing with Sartorius pipettes, matching color coding of tip trays
- Compatible with most other pipette makes (see compatibility with other manufacturers' pipettes at www.sartorius.com)

Applications

Better sample recovery and reproducibility in pipetting are especially beneficial in sensitive molecular biology applications, where reagents often contain detergents, for example in:

- DNA|RNA techniques, e.g. PCR, real-time PCR, cloning, sequencing, RFLP
- Protein analysis & purification methods, e.g. SDS-PAGE



Benefits

Save Valuable Samples and Reagents

- Maximized sample recovery due to highly hydrophobic tip surface
- Up to 10 times less residue with detergents or other liquids with low surface tension

Reliable Results

- Improved consistency of results and sample recovery due to the highly even liquid-repellent surface
- The safety air gap in filter tips allows accurate results also for foaming liquids or solvents, which otherwise tend to easily penetrate the filter barrier and risk the result accuracy
- All Sartorius tips are manufactured according to ISO 9001, ISO 14001 and ISO 13485 standards
- High Quality = correct shape, size, material, purity and uniformity

Sample Safety

- High chemical resistance secures the sample integrity
- The filter barrier and the extra space in the tip prevent cross-contamination from sample to sample
- The filters (PE) are made without "self-sealing" additives to ensure no particles interfere with the sample and the results
- Manufactured in ISO Class 8 certified cleanroom conditions, using highly automated production to avoid contamination
- Every tip lot is tested by an external partner, and certified for being DNase, RNase and endotoxin free
- Filter tips are e-beam irradiated for sterility
- All tip packages, including individual racks, are lot numbered for full traceability

Less Risk for RSI (Repetitive Strain Injury)

- Compatible with Optiload feature in Sartorius Picus® NxT, Picus®, Tacta®, mLINE® and Proline® Plus pipettes enabling ergonomic and light tip attachment and ejection

Low Retention Optifit Tips – Specifications & Pricing

Model		Volume Range (µl)	Packaging	RNase, DNase, endotoxin-free	Qty/Unit	US List Price (\$)
LH-L790010	●	0.1 – 10	Single Tray	•	10 × 96	86
LH-L790012	●	0.1 – 10	Refill Tower		10 × 96	60
LH-L790200	●	0.5 – 200	Single Tray	•	10 × 96	81
LH-L790202	●	0.5 – 200	Refill Tower		10 × 96	48
LH-L790350	●	5 – 350	Single Tray	•	10 × 96	101
LH-L790352	●	5 – 350	Refill Tower		10 × 96	68
LH-L791000	●	10 – 1000	Single Tray	•	10 × 96	92
LH-L791200	●	50 – 1200	Single Tray	•	10 × 96	96
LH-L791210*	●	50 – 1200	Single Tray	•	10 × 96	96

*Extended length: 90 mm

Low Retention SafetySpace™ Filter Tips – Specifications & Pricing

Model		Volume Range (µl)	Packaging	Pre-sterilized	Qty/Unit	US List Price (\$)
LH-LF790011	●	0.1 – 10	Single Tray	•	10 × 96	181
LH-LF790021	●	0.5 – 20	Single Tray	•	10 × 96	181
LH-LF790101	●	2 – 120	Single Tray	•	10 × 96	181
LH-LF790201	●	5 – 200	Single Tray	•	10 × 96	181
LH-LF790301	●	5 – 300	Single Tray	•	10 × 96	181
LH-LF791001	●	50 – 1000	Single Tray	•	10 × 96	181
LH-LF791211*	●	50 – 1200	Single Tray	•	10 × 96	200

All single tray packed SafetySpace™ Filter Tips are RNase, DNase and endotoxin-free.

*Extended length: 90 mm

NOTE: Low Retention Tips are available in volumes up to 1200 µl.



Low Retention Tips, Single Tray



Low Retention Tips, Refill Tower

Optifit Tips- FlexiBulk

New Tip Packaging Concept for Enhanced Usability of Bulk Tips

The FlexiBulk concept is a completely new approach to packing tips – something that has not been seen on the market before. This pack combines the low cost of bulk tips with saving space, improving usability and securing tip purity. Compared to traditional bulk packages, the stacked tip configuration offers you more advantages.



Features & Benefits

- Reduces up to 40% of pack volume
- Cuts packaging waste by nearly 50%
- Quick to “pick & place” tips into racks or to attach to pipettes right out of the package
- Ensures tip purity with lot-specific certificates

Save space with the compact package

The orderly arrangement of tips allows the FlexiBulk tip to pack to approximately 60% of the volume of conventional bulk tip cartons, in which tips are packed in random order. As a result, FlexiBulk gives you more space on your workbench.

Reduce the amount of waste

FlexiBulk reduces packaging waste by nearly 50% in comparison to a regular bulk carton with a plastic bag inside. How? FlexiBulk is compact and made of durable PET (polyethylene terephthalate) material that can be used and stacked as is – without any outer cardboard box needed. The environmentally friendly PET packs are also 100% suitable to be used as energy waste.

Save time and effort with the clever packaging concept

The well-organized FlexiBulk pack makes tip picking faster and more convenient. You can pick an individual tip for attaching directly to a pipette, or grab a handful for filling a tip rack.

FlexiBulk enables you to save as much as 20% of the time it normally takes you to load tips into racks from randomly packed bulk packages.

Minimize the risk of contamination

FlexiBulk tips are certified to be free of RNase, DNase and endotoxins. The certified purity comes in handy, when you are working with a contamination-critical application. The tips are produced and packaged under cleanroom conditions, and their manufacturing process is fully automated, which effectively eliminates contamination. In addition, the lid provides an airtight seal on the FlexiBulk pack, ensuring 100% cleanliness of the tips during transport and storage. The convenient lid can be easily resealed to protect the tips from dust and dirt.

Specifications & Pricing

Model	Volume Range (µl)	Length (mm)	Purity Level	Qty.	US List Price (\$)
Optifit Tips, FlexiBulk					
LH-B790204	0.5-200	51	RNase, DNase, endotoxin free	960	36
LH-B790354	5-350	54	RNase, DNase, endotoxin free	960	36
LH-B791004	10-1,000	71.5	RNase, DNase, endotoxin free	480	22
LH-B791024*	10-1,000 WB	68.5	RNase, DNase, endotoxin free	480	22
LH-B791204	50-1200	71.5	RNase, DNase, endotoxin free	480	22

* Tip with wide bore

Optifit Tips, Standard bulk packages					
790014	0.1-10	31.5	-	1,000	37
780300	100-5,000	150	-	100	28
780308	100-5,000	150	-	1,000	153
LH-780316	1-10 ml	155	-	250	117

Easybulk Package for Optifit Tips

Make Tip Picking Faster and More Convenient

New Easybulk packs combine the cost effectiveness of bulk tips while guaranteeing high quality and secure attachment to the pipette. The orderly arrangement of tips allows the packs to be approximately 40% smaller than conventional bulk tip cartons. Easybulk is made of durable PET (polyethylene terephthalate). The lid provides an airtight seal ensuring 100% cleanliness of the tips during transportation and storage.



Features & Benefits

- High quality bulk tips
- Perfect fit with Sartorius pipettes
- Space-saving package reduces waste and gives more space on your workbench

Tips in the Easybulk packs are the same high quality as other Sartorius Optifit Tips. Optifit Tips are manufactured under ISO Class 8 cleanroom conditions and provide the following advantages:

- Perfect fit and seal with Sartorius pipettes to ensure the highest possible accuracy and precision
- Ergonomic and light tip attachment and ejection enabled by the Optiload feature in Sartorius Picus® NxT, Picus®, Tacta®, mLINE® and Proline® Plus pipettes
- Compatibility with most other pipette brands
- Compliance with ISO 9001, ISO 14001 and ISO 13485 quality standards

Specifications & Pricing

Model	Volume Range (µl)	Length (mm)	Qty.	US List Price (\$)
LH-EB790204	0.5-200	51	960	17
LH-EB790354	5-350	54	960	20
LH-EB791004	10-1,000	71.5	480	9
LH-EB791204	50-1,200	71.5	480	13

Safe-Cone Filters

Prevent Cross-Contamination

The replaceable Safe-Cone Filters act as a final barrier to prevent any fluids and liquid vapors from reaching the internal components of the pipette.

The filters are available in two types for all pipette volumes greater than 10 µl: self-sealing Plus Filters and Standard Filters. The filters are made of polyethylene (PE).



Tweezers for exchanging filters in pipettes are included with every pipette package excluding mLINE®.

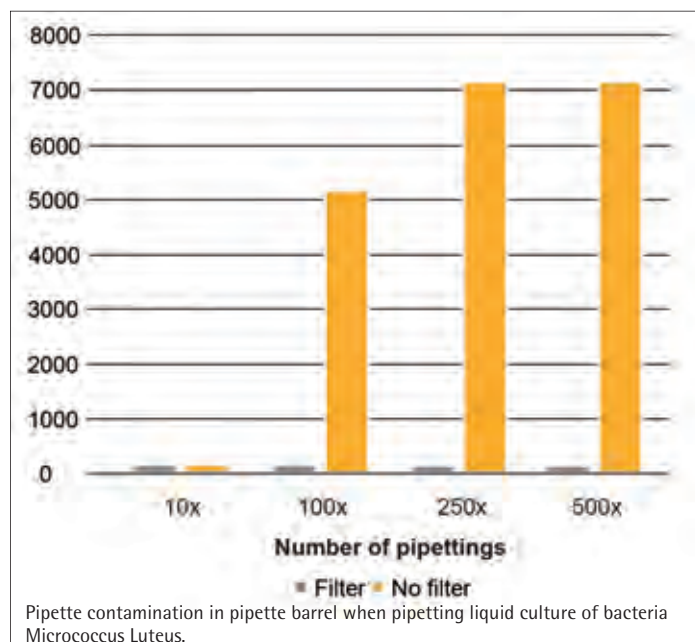
Features

- Protect the pipette and sample from contamination
- Prolong the pipette's lifetime
- Reduce maintenance intervals
- Are cost-effective

Contamination in Pipette Barrel

Number of Pipettings	No Filter	Safe-Cone Filter
10x	–	–
100x	+	–
250x	++	–
500x	+++	–

+: DNA (50 µl plasmid DNA 120 µg/ml) contamination in pipette barrel.



Applications

The Safe-Cone Filters are available in two types to serve various needs and applications:

- Self-sealing Plus Filters are to be used for more demanding applications such as radioactive work, cell culture, bacterial and virological work and molecular biology.
- Standard Filter for general applications. Can also be used for similar applications as the Plus Filter, but then needs to be changed more frequently.

Specifications & Pricing

Model	Description	Qty/Unit	US List Price (\$)
721008	Standard Ø 2.51 mm PE	50	15
721007	Standard Ø 3.15 mm PE	50	15
721006	Standard Ø 5.33 mm PE	50	15
721005	Standard Ø 6.73 mm PE	50	15
721014	Standard Ø 1.83 mm PE	50	15
721018	Plus Ø 2.51 mm PE	50	18
721017	Plus Ø 3.15 mm PE	50	18
721016	Plus Ø 5.33 mm PE	50	18
721015	Plus Ø 6.73 mm PE	50	18

Accessories

Ease Your Pipetting Work

The pipetting accessories are designed to ease your work.

The **Elbow Pad** helps you to feel more comfortable while pipetting, especially in long pipetting series. The viscoelastic material of the pad relieves contact stress, pain and discomfort under your elbow.

The **Reagent Vessel** is designed for easy liquid aspiration, and is a perfect fit for a multichannel pipette. Made of polypropylene, the autoclavable and durable liquid reservoir is chemically resistant to all common reagents.



Elbow Pad



Reagent Vessel

Elbow Pad Features

- Improves pipetting ergonomics
- Conforms to any elbow size or shape
- Coating is pleasant to the skin
- The compact size takes up little desk space
- Very durable
- Easy to clean with soapy water, or ethanol (70 %)

Accessories

Item	Description	Qty/Unit	US List Price (\$)
723103	Elbow Pad	1	85
783500	Reagent Vessel (capacity 120 ml)	16	67

Item	Description	US List Price (\$)
730981	Charging Stand for one pipette	215
730991	Charging Carousel for 4 pipettes	530
LH-725630	Carousel Stand for 6 pipettes (Tacta® and mLINE®)	132
LH-727640	Pipette Holder for 1 pipette (Tacta®)	10
725620	Linear Stand (non-charging)	132
726203	Calibration tool Tube opener	46
726001	Color coding caps, 5 pcs	33

Pre-Delivery Calibration Certificates (for more info, see page xxx)

84JOP04	Single Channel 5.3 Calibration Electronic Pipette	59
84JOP05	(8) Channel 5.3 Calibration Electronic Pipette	92
84JOP12	(12) Channel 5.3 Calibration Electronic Pipette	115

Extended Warranty (for more info, see page xxx)

84WAP04	12 months Electronic Single Channel Pipette	165
84WAP05	12 months Electronic (8) Channel Pipette	250
84WAP12	12 months Electronic (12) Channel Pipette	295

Charging stands include universal AC-adaptor (EU, UK, US | JPN and CHN plugs)



Carousel Stand

Biotrate Digital Burette

Biotrate Premium Digital Burette for Convenient Titration

Sartorius Biotrate is a premium digital burette equipped with sophisticated functions for easy titration. Biotrate offers high chemical resistance and it is a smart solution for titrating various liquids accurately and safely. Biotrate is easy and convenient to use, with its large and clear electronic display, smooth operating wheels, and 360° rotating dispensing.



Features

- Extremely high chemical resistance
- Smooth and light to operate with soft touch operating wheels
- Media recirculation system that allows unused media to be recovered from the device and returned to the bottle
- 360° rotating dispensing head
- Universal connector at the back of the unit for drying tubes and filters
- Easy to attach aspiration tube with a secure threaded connection
- Easily replaceable valves
- Supplied with UV-protected replacement window for protection of light-sensitive media
- Long-life CR2032 battery
- Easy custom adjustment for various liquids
- Wide range of accessories
- Autoclavable liquid pathway

Benefits

- Titration is convenient and more accurate, due to the electronic measurement system
- The exact amount of the titrated liquid can be seen on the display
- Setting up the system is quick and it is easy to carry out a titration series with Biotrate's enabling ergonomic and light tip attachment and ejection

Specifications & Pricing

Model No.	Nominal Volume (ml)	Reliability (ml)	Test Volume (ml)	Systematic Error (%)*	Systematic Error (ml)*	Random Error (%)*	Random Error (ml)*	US List Price (\$)
LH-723080	10	0.1	10	0.3	0.03	0.1	0.01	1,200
LH-723081	20	0.1	20	0.2	0.04	0.1	0.02	1,200
LH-723082	50	0.1	50	0.2	0.10	0.1	0.05	1,200

* The listed systematic and random error values can be achieved under strictly controlled conditions during type tests as per ISO 8655. Due to our continuous product development, the systematic and random error values may change without prior notice.

Common Specifications

Weight	844 g (20 ml)
Length	260 mm (20 ml)
Autoclavability	Autoclavable liquid pathway (121°C, 20 min, 1 bar/100 kPa)
Threaded bottle fitting	A45
Bottle adapters included	A32, A38, S40
Battery	CR2032

Limitations The accuracy and precision values are valid under the controlled conditions described in ISO 8655.
Test temperature: +15°C to +30°C +/-0,5°C Relative humidity: >50%

Prospenser & Prospenser Plus Bottle-top Dispensers

Safe, Convenient & Customizable

Prospenser and Prospenser Plus are premium bottle-top dispensers available in volume ranges from 0.2 to 60 ml. These high quality bottle-top dispensers with excellent chemical resistance are perfect for a wide range of dispensing needs.



Features

- Extremely high chemical and thermal resistance due to ceramic piston, glass cylinder, and highly resistant fluoroplastic parts
- Incremental volume setting ensures accurate and repeatable results
- Smooth and light to operate
- Easy to attach aspiration tube with a secure threaded connection
- User-replaceable valves
- Wide range of accessories
- Fully autoclavable
- Universal connector at back of unit for drying tubes and filter

Prospenser Plus Advanced Features

- Media recirculation system that allows unused media to be recovered from the device and returned to the bottle
- 360° rotating dispensing head
- Universal connector at the back of the unit for drying tubes and filters

Specifications & Pricing

Model No.	Volume Range (ml)	Increment (ml)	Test Volume (ml)	Systematic Error (%)*	Systematic Error (ml)*	Random Error (%)*	Random Error (ml)*	US List Price (\$)
Prospenser Models								
LH-723060	0.2-1	0.05	1	0.6	0.006	0.2	0.002	490
LH-723061	0.4-2	0.05	2	0.6	0.012	0.2	0.004	490
LH-723062	1-5	0.10	5	0.6	0.03	0.2	0.01	490
LH-723063	2-10	0.25	10	0.6	0.06	0.2	0.02	490
LH-723064	5-30	0.50	30	0.6	0.18	0.2	0.06	560
LH-723065	10-60	1.00	60	0.6	0.36	0.2	0.02	645
Prospenser Plus Models								
LH-723070	0.2-1	0.05	1	0.6	0.006	0.2	0.002	535
LH-723071	0.4-2	0.05	2	0.6	0.012	0.2	0.004	535
LH-723072	1-5	0.10	5	0.6	0.03	0.2	0.01	535
LH-723073	2-10	0.25	10	0.6	0.06	0.2	0.02	535
LH-723074	5-30	0.50	30	0.6	0.18	0.2	0.06	625
LH-723075	10-60	1.00	60	0.6	0.36	0.2	0.02	670
Common Specifications								
Weight	200 g (5 ml, Prospenser) 388 g (5 ml, Prospenser Plus)							
Length	143 mm (5 ml, Prospenser) 175 mm (5 ml, Prospenser Plus)							
Autoclavability	Fully autoclavable (121°C, 20 min, 1 bar/100 kPa)							
Threaded bottle fitting	A32 (Prospenser) A45 (Prospenser Plus)							
Bottle adapters included	A28, S40, A45 (Prospenser) A32, A38, S40 (Prospenser Plus)							

* The listed systematic and random error values can be achieved under strictly controlled conditions during type tests as per ISO 8655. Due to our continuous product development, the systematic and random error values may change without prior notice.

Biotrate & Prospenser Accessories

Model No.	Description	Material	For Use With:	US List Price (\$)
LH-721647	Discharge unit	FEP	Prospenser Plus, Biotrate	36
LH-721648	Discharge unit, flexible spiral 1m, 1,5mm, fine tip	FEP	Prospenser Plus, Biotrate	99
LH-721649	Discharge unit, flexible spiral 1m, 3,0mm	FEP	Prospenser Plus, Biotrate	99
LH-721650	Discharge unit for titration	FEP	Titrisart	36
LH-721651	Discharge unit for titration, with fine tip	FEP	Titrisart	49
LH-721652	Discharge unit for titration, adjustable 0,4m	FEP	Titrisart	65
LH-721653	Discharge unit with Luer lock connection	FEP/PP	Prospenser Plus, Biotrate	94
LH-721654	Discharge unit with Luer lock connection	FEP/PFA	Prospenser Plus, Biotrate	131
LH-721655	Discharge unit	FEP	Prospenser 1, 2, 5 & 10ml models	14
LH-721656	Discharge unit	FEP	Prospenser 30 & 60ml models	34
LH-721657	Discharge unit, flexible spiral 1m	FEP	Prospenser 1, 2, 5 & 10ml models	94
LH-721658	Discharge unit, flexible spiral 1m	FEP	Prospenser 30 & 60ml models	99
LH-721659	Discharge unit with Luer lock connection	FEP/PP	Prospenser 30 & 60ml models	94
LH-721660	Discharge unit with Luer lock connection	FEP/PFA	Prospenser 30 & 60ml models	94
LH-721678	Suction unit, 310mm - aspiration tube	FEP	Prospenser Plus, Prospenser 30 & 60ml models, Biotrate	15
LH-721679	Suction unit, 400mm - aspiration tube	FEP	Prospenser Plus, Prospenser 30 & 60ml models, Biotrate	19
LH-721680	Suction unit, 310mm - aspiration tube	FEP	Prospenser 1, 2, 5 & 10ml models	15
LH-721681	Suction unit, 400mm - aspiration tube	FEP	Prospenser 1, 2, 5 & 10ml models	19
LH-721682	Recirculation unit, 70mm	FEP	Prospenser Plus, Biotrate	8.20
LH-721683	Thread adapter, A32	PP	Prospenser Plus, Biotrate	16
LH-721684	Thread adapter, A28	PP	Prospenser Plus, Biotrate	16
LH-721685	Thread adapter, A38/430	PP	Prospenser Plus, Biotrate	16
LH-721686	Thread adapter, A38	PP	Prospenser Plus, Biotrate	16
LH-721687	Thread adapter, S40	PP	Prospenser Plus, Biotrate	16
LH-721688	Thread adapter, A32	ETFE	Prospenser Plus, Biotrate	29
LH-721689	Thread adapter, A28	ETFE	Prospenser Plus, Biotrate	29
LH-721732	Thread adapter, A38/430	ETFE	Prospenser Plus, Biotrate	29
LH-721733	Thread adapter, A38	ETFE	Prospenser Plus, Biotrate	29
LH-721734	Thread adapter, S40	ETFE	Prospenser Plus, Biotrate	29
LH-721735	Thread adapter, NS29/32	Silicone	Prospenser Plus, Biotrate	38
LH-721736	Thread adapter, A25	PP	Prospenser	13
LH-721737	Thread adapter, A28	PP	Prospenser	13
LH-721738	Thread adapter, A38	PP	Prospenser	13
LH-721739	Thread adapter, A45	PP	Prospenser	13
LH-721740	Thread adapter, S40	PP	Prospenser	13
LH-721741	Thread adapter, A45	ETFE	Prospenser	29
LH-721742	Thread adapter, S40	ETFE	Prospenser	29
LH-721743	Bottle support, for bottles 75 - 120mm	-	Biotrate	160
LH-721744	Light protection window for sensitive media, brown	-	Biotrate	20

Midi Plus™

Easy and Ergonomic Large-volume Pipetting

Midi Plus™ is a light-weight electronic pipette controller, which allows easy liquid aspiration from bottles and large tubes. Its ergonomic design helps to minimize the need for arm and hand raises that are often required while using serological or volumetric pipettes. In addition the electronic operation of Midi Plus™ reduces the need for finger force compared to a pipette-filler with a squeezable bulb. These qualities ease the workload during long periods of pipetting and protect you from repetitive strain injury (RSI).

Features & Benefits

Ergonomic Design Protects You From RSI (Repetitive Strain Injury)

- The ergonomic design helps to minimize the need for arm and hand raises that are often required while using serological or volumetric pipettes.
- The electronic operation reduces the needed finger force compared to a pipette-filler with a squeezable bulb

Stepless Speed Control for Accurate Dispensing

- Aspiration and dispensing speeds can easily be controlled by using the adjustment wheel or by adjusting finger pressure on the operating buttons
- The speed can be selected according to your application and pipette volume
- Possibility to dispense by the force of gravity for slow, drop-by-drop dispensing. Just by applying a very small force on the dispensing button
- Direct charging cable enables operation while charging

Compatible with a Wide Range of Pipettes and Tips

- Compatible with commonly used glass or plastic pipettes in the 1–100 ml volume range
- Compatible also with Sartorius 5 ml and 10 ml Optifit Tips that can be used when accuracy is not essential

Hydrophobic Filters Prevent Over-Aspiration

- The hydrophobic Sartorius filter prevents over-aspiration, which prevents the pipette controller from contamination
- Filters are available as sterile and non-sterile, to match your purity requirements

Applications

- Cell culture
- Liquid preparation in large volumes



Midi Plus™ & Accessories – Specifications & Pricing

Item	Description	US List Price (\$)
710931	Midi Plus™ w/stand	375
LH-7129120	Replacement filter, 0.45 µm, non-sterile, autoclavable, 5 pcs	88
LH-7129130	Replacement filter, 0.2 µm, sterile, 5 pcs	92
LH-711019	Adapter set (standard) including nose-cone and the silicone adapter	91
LH-711017	Adapter set for 5 ml pipette tip, autoclavable, including nose-cone and the silicone adapter	91
LH-711018	Adapter set for 10 ml pipette tip, autoclavable, including nose-cone and the silicone adapter	91
780300	Optifit Tip 5 ml, 100 pcs	28
780308	Optifit Tip 5 ml, 1000 pcs	153
780310	Optifit Tip 10 ml (extra long tip for Midi Plus), 100 pcs	59

Centrisart® A-14 and A-14C

Micro-Centrifuge

The high-performance, space-saving Centrisart® A-14 micro-centrifuge features an extremely compact footprint. With a top speed of 14,800 rpm and a capacity of 12 x 2 ml reaction vials, this micro-centrifuge is ideally suited for applications in molecular biology ranging from DNA, RNA and protein isolation to PCR. With the oversized control keys and a large display, the centrifuge is easy and convenient to operate. The centrifuge is also available in a refrigerated model, the Centrisart® A-14C.



Features & Benefits

Space-saving design

Easily set up the centrifuge on any laboratory bench top for easy sample loading and unloading.

Very quiet

Extremely low noise level ensures a pleasant working atmosphere.

Special rotor

Specifically designed to support Vivaspin® 500 vials.

Highest safety standards

Secure lid that electronically locks and rotor cover caps that protect against aerosol emissions.

Applications

- Antibody solutions
- Sample deionization
- Buffer adjustment
- Removal of contaminants with small or very large molecular weights

Specifications & Pricing

Model	Description	Max Speed (rpm)	Max Capacity	Max (g) Force	Refrigeration	US List Price (\$)
A-14-1US	Centrifuge 100-120V 50/60Hz	14,800	12 x 1.5-2ml	16,162	No	1,745
A-14-1US-SET	Centrifuge 100-120V 50/60Hz & YCSR-A1C	14,800	12 x 1.5-2ml	16,162	No	2,320
A-14C-1US	Centrifuge with cooling 100-120V 50/60Hz	15,000	24 x 1.5-2ml	16,602	Yes	5,145
A-14C-1US-SET	Centrifuge with cooling 100 – 120 V & YCSR-A1C	15,000	24 x 1.5-2ml	16,602	Yes	5,525



Centrisart® D-16C

Refrigerated All Purpose Benchtop Centrifuge

The Centrisart® D-16C is a universal benchtop centrifuge with a mid-sized capacity of 400 ml. This compact, refrigerated centrifuge has a small footprint and features designed for a versatile range of lab applications. An option permitting a high speed of 15,300 rpm makes it useful for molecular biology applications. An ergonomic design, easy to read display and low noise level simplify sample loading and unloading, ensure convenient operation and provide a quiet work environment.



Features & Benefits

High-capacity centrifuge

Specifically developed for a flexible range of applications.

Gradual deceleration and acceleration curve

Prevents samples from churning and mixing, permitting gentle separation of sensitive material.

High cooling efficiency

Strong compressor supplies fast cooling of samples and protects them from heat.

Highest safety standards

Secure lid that electronically locks and rotor cover caps that protect against aerosol emissions.

Applications

- Low-speed applications requiring gentle handling of cells | sensitive samples
- Tissue and cell processing
- High-throughput DNA isolation
- Ultrafiltration
- Microtiter plates

Specifications & Pricing

Model	Description	Max Speed (rpm)	Max Capacity	Max (g) Force	Refrigeration	US List Price (\$)
D-16C-1US	Centrifuge with cooling 100-120V 50/60Hz	15,300	4 x 100ml	21,913 g	Yes	6,790

Centrisart® G-16 and G-16C

All Purpose Benchtop Centrifuge

The Centrisart® G-16 benchtop centrifuge was specifically developed for high-capacity applications. It features an option for a high speed of 15,300 rpm, making it useful for molecular biology applications. The low profile allows the unit to fit on nearly any laboratory benchtop while the damping system ensures quiet operation. Rotor options are available to accommodate various vessel types and low or high throughput applications. The Centrisart G-16C model also offers refrigeration.



Features & Benefits

High-capacity centrifuge

Easily set up the centrifuge on any laboratory bench top for easy sample loading and unloading.

Variety of rotor options

Accommodates a variety of vessel types for low to high throughput applications.

Large program memory

Options for storing and retrieving several programs at any time.

Gradual deceleration and acceleration curve

Prevents samples from churning and mixing, permitting gentle separation of sensitive material.

High cooling efficiency

Strong compressor supplies fast cooling of samples and protects them from heat allowing flexible range of application.

Highest safety standards

Secure lid that electronically locks and rotor cover caps that protect against aerosol emissions.

Applications (Centrisart® G-16)

- Phase separation of solutions
- Milk or lipoprotein assays
- PCR
- Separation of nanomaterials

Applications (Centrisart® G-16C)

- Cell harvesting in cell culture or fermentation applications
- Protein isolation and purification
- Ultrafiltration
- Molecular biology
- PCR
- Food technology

Specifications & Pricing

Model	Description	Max Speed (rpm)	Max Capacity	Max (g) Force	Refrigeration	US List Price (\$)
G-16-1US	Centrifuge 100-120V 50/60Hz	15,300	4 x 400ml	21,460	No	5,870
G-16C-1US	Centrifuge with cooling 100-120V 50/60Hz	15,300	4 x 400ml	21,460	Yes	8,235



Centrisart® G-16



Centrisart® G-16C

Centrisart® G-26C

Universal High-Speed Centrifuge

With a maximum gravitational force of up to 62,000 g, the high-speed, refrigerated Centrisart® G-26C is ideally suited for high speed applications. A low profile allows the unit to fit on nearly any laboratory benchtop while a damping system ensures quiet operation. Rotor options are available to accommodate various vessel types and low to high throughput applications.



Features & Benefits

Ultra high-speed centrifuge

Ideally suited for high-speed applications involving separation and sedimentation of homogeneous materials and solutions.

Variety of rotor options

Accommodates a variety of vessel types for low to high throughput applications.

Large program memory

Options for storing and retrieving several programs at any time.

Gradual deceleration and acceleration curve

Prevents samples from churning and mixing, permitting gentle separation of sensitive material.

High cooling efficiency

Strong compressor supplies fast cooling of samples and protects them from heat.

Highest safety standards

Secure lid that electronically locks and rotor cover caps that protect against aerosol emissions.

Applications

- Virus isolation
- Isolation of organelles or membranes
- Precipitation of proteins
- Purification in molecular biology
- Ultrafiltration



Specifications & Pricing

Model	Description	Max Speed (rpm)	Max Capacity	Max (g) Force	Refrigeration	US List Price (\$)
G-26C-1US-2P	Centrifuge with cooling 208 V 60 Hz, 2 Phases	26,000	6 x 85ml	61,973	Yes	16,480

Centrisart® Accessories

Item	Description	US List Price (\$)	A-14	A-14C	D-16C	G-16	G-16C	G-26C
Rotors, Fixed Angle and Swinging								
YCSR-A1C	Fixed angle rotor made of polypropylene for 12 × 1.5 2.0 ml conical reaction tubes or 12 × Vivaspin® 500, incl. polysulfone lid YCSM-A1C	445	✓	✓				
YCSR-A2B	Fixed angle rotor for 24 × 1.5 2.0 ml conical reaction tubes, incl. polysulfone lid YCSM-A1B	445		✓				
YCSR-A4B	Fixed angle rotor 24 × 1.5-2 ml reaction vials, include hermetic aluminum lid	1,645			✓			
YCSR-A9B	Fixed angle rotor for 6 × 50 ml culture tubes include hermetic aluminum lid	2,310			✓			
YCSR-S1B	Swinging rotor, 4 inserts, for buckets YCSB-B9B	1,410			✓			
YCSR-S5B	Complete set – Swinging rotor, 2 place, for microtiter plates, including 2 buckets YCSA-S5B for microtiter plates. Max. plate height 56 mm; max. load per bucket 335 g	2,690			✓			
YCSR-A5B	Fixed angle rotor for 6 × 50 ml round bottom culture tubes (d 28.8 × 107 mm), incl. hermetically sealing aluminium lid	2,680				✓	✓	✓
YCSR-A6B	Fixed angle rotor for 24 × 1.5 2.0 ml conical reaction tubes, incl. hermetically sealing aluminium lid	1,645				✓	✓	✓
YCSR-A7B	Fixed angle rotor for 4 × 80 85 ml round bottom culture tubes (d 38 × 112 mm), incl. hermetically sealing aluminium lid	2,690				✓	✓	✓
YCSR-A8B	Fixed angle rotor for 6 × 85 ml round bottom culture tubes (d 38 × 112 mm), incl. hermetically sealing aluminium lid	3,090				✓	✓	✓
YCSR-A0B	Fixed angle rotor for 6 × 50 ml conical culture tubes, incl. hermetically sealing aluminium lid	2,680				✓	✓	✓
YCSR-S2B	Swinging rotor, 4 inserts, for buckets YCSB-B8B	1,410				✓	✓	
YCSR-S6B	Complete set – Swinging rotor, 2 place, for microtiter plates, including 2 buckets YCSA-S6B for microtiter plates and lids YCSM-B1C. Max. plate height 55 mm; max. load per bucket 290 g	3,280				✓	✓	
YCSR-S3B	Swinging rotor, 4 inserts, for buckets YCSB-B9B	1,685						✓
Buckets and Adapters								
YCSB-B9B	Round bucket for swinging rotor YCSR-S1B, sealable with cap, 1 set = 2 pcs.	525			✓			✓
YCSM-B9B	Round polysulfone sealing cap for round bucket YCSB-B9B, clear, 1 set = 2 pcs.	126			✓			✓
YCSA-RDB	Rubber cushion for YCSB-B9B for 100 ml glass tube, 1 set = 2 pcs.	21			✓			✓
YCSA-RAB	Adapter for YCSB-B9B for 4 conical reaction tubes 1.5 2.0 ml, max. d 11 mm, 1 set = 2 pcs.	179			✓			✓
YCSA-R0B	Adapter for YCSB-B9B for 2 conical culture tubes 15 ml, lid max. d 23 mm, 1 set = 2 pcs.	179			✓			✓
YCSA-R9B	Adapter for YCSB-B9B for 1 conical culture tube 50 ml, 1 set = 2 pcs.	179			✓			✓
YCSA-RBB	Adapter for YCSB-B9B for 1 flat bottom culture tube 30 ml, d 25 31 + 65 - 95 mm, 1 set = 2 pcs.	179			✓			✓
YCSA-RCB	Adapter for YCSB-B9B for 3 conical reaction tubes 5.0 ml, 1 set = 2 pcs.	179			✓			✓
YCSB-B8B	Round bucket for adapters YCSA-C2B – YCSA-C8B, sealable with lid YCSM-B8B (max. tube length 110 mm), 1 set = 2 pcs.	1,110						
YCSM-B8B	Round locking cap for buckets YCSB-B8B	250				✓	✓	
YCSA-C2B	Adapter for YCSB-B8B for 10 conical reaction tubes 5.0 ml, 1 set = 2 pcs.	335				✓	✓	
YCSA-C3B	Adapter for YCSB-B8B for 5 conical culture tubes 15 ml, lid max. d 23 mm, 1 set = 2 pcs.	335				✓	✓	
YCSA-C4B	Adapter for YCSB-B8B for 3 conical culture tubes 50 ml, 1 set = 2 pcs.	335				✓	✓	
YCSA-C5B	Adapter for YCSB-B8B for 1 flat bottom bottle 250 ml, max. d 61.5 + 90 - 125 mm, 1 set = 2 pcs.	335				✓	✓	
YCSA-C6B	Adapter for YCSB-B8B for 20 conical reaction tubes 1.5 2.0 ml, max. d 11 mm, 1 set = 2 pcs.	335				✓	✓	
YCSA-C7B	Adapter for YCSB-B8B for 9 conical culture tubes 15 ml, lid max. d 23 mm, 1 set = 2 pcs. (not usable with cap YCSM-B8B)	335				✓	✓	
YCSA-C8B	Adapter for YCSB-B8B for 4 conical culture tubes 50 ml, 1 set = 2 pcs. (not usable with cap YCSM-B8B)	335				✓	✓	

Item	Description	US List Price (\$)	A-14	A-14C	D-16C	G-16	G-16C	G-26C
Buckets and Adapters (con't)								
YCSA-1	Adapter for 0.25 0.4 ml reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	21	✓	✓	✓	✓	✓	✓
YCSA-2	Adapter for 0.5 0.75 ml reaction tubes d 7.9 10 × 28 31 mm for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	21	✓	✓	✓	✓	✓	✓
YCSA-3	Adapter for > 20,000 g for 1.5 ml reaction tubes in rotor YCSR-A6B, 1 set = 2 pcs.	21						✓
YCSA-4	Adapter for 0.2 ml PCR reaction tubes for rotors YCSR-A2B, YCSR-A4B and YCSR-A6B, 1 set = 2 pcs.	21	✓	✓	✓	✓	✓	✓
YCSA-5	Adapter for 1 conical culture tube 15 ml for rotor YCSR-A9B and YCSR-A0B, 1 set = 2 pcs.	105			✓	✓	✓	✓
Tables								
YCST-D16C	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors (W × D × H = 550 × 600 × 497 mm)	2,480			✓			
YCST-G16	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors (W × D × H = 490 × 684 × 515 mm)	2,480				✓		
YCST-G16C	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors (W × D × H = 650 × 647 × 496 mm)	2,480					✓	
YCST-G26C	Table for centrifuge made of sheet-steel, varnished, with 2 doors and space for accessories, movable on lockable castors (W × D × H = 570 × 616 × 481 mm)	2,480						✓
Services								
84ICM06	Installation	955	✓	✓				
84ICM08	Installation	1,135			✓		✓	
84ICM07	Installation	1,060				✓		
84ICM09	Installation	1,135						✓
84CUME	Temperature Calibration	186	✓	✓	✓	✓	✓	✓
84CUMD	Speed Time Calibration	75	✓	✓	✓	✓	✓	✓
84QAM06	Device Qualification (IQ OQ)	2,645	✓	✓				
84QAM08	Device Qualification (IQ OQ)	2,645			✓		✓	
84QAM07	Device Qualification (IQ OQ)	2,645				✓		
84QAM09	Device Qualification (IQ OQ)	2,645						✓
84MBM06	Preventive Maintenance	235	✓	✓				
84MBM08	Preventive Maintenance	455			✓		✓	
84MBM07	Preventive Maintenance	375				✓		
84MBM09	Preventive Maintenance	455						✓

arium® pro Ultrapure Water Systems

arium® pro for Highest Consistent Water Quality

arium® pro ultrapure water systems meet and exceed ASTM Type 1 water quality at unmatched cost of ownership for any application. Available in a choice of different modular systems, it offers the widest selection of features and options for customized configuration. The glass display with touch-activated functions and intuitive menu navigation ensures error-free operation, even while you are wearing gloves.



Features & Benefits

Five Systems to Choose

Allows to configure the system by application for individual needs.

Optimized Components and Cartridge Materials

Guarantees a long service life and maximize water purification.

High Efficiency UV Lamp (185/254 nm) & TOC Monitoring

Eliminates bacteria and organics for reliable high water quality and reproducible results.

Display with Touch-Function and Intuitive Menu Navigation

Ensures an easy operation in any situation even with gloves.

Integrated Real Time Monitoring

Allows to control water quality without extra costs for reproducible results.

High System Flexibility

Saves maximum space in limited lab environments and ensures optimal operation at eye level.

Applications

- HPLC
- GC-MS, AAS, ICP-MS
- Ion chromatography
- TOC analysis
- PCR
- Electrophoresis
- Endotoxin analysis
- Immunocytochemistry
- Nutrient media for cell culture
- Production of monoclonal antibodies
- Photometry



arium® pro – Specifications & Pricing

Model	Qty.	Description	US List Price (\$)
arium® pro DI and pro systems for producing ASTM Type 1 ultrapure water			
Equipment supplied: 1 arium® pro and Connection Set			
H2Obasic-T	1	pro Bench-Top System*	4,545
H2Obasic-B	1	pro Wall-Mounted System incl. Wall Bracket for the system*	4,545
H2Opro-DI-T	1	pro DI Bench-Top System	6,020
H2Opro-DI-B	1	pro DI Wall-Mounted System incl. Wall Bracket for the system	6,020
arium® pro UF systems for producing ASTM Type 1 ultrapure water			
Equipment supplied: 1 arium® pro with Ultrafilter and Connection Set			
H2Opro-UF-T	1	pro UF Bench-Top System, incl. Ultrafilter	7,025
H2Opro-UF-B	1	pro UF Wall-Mounted System incl. wall bracket for the system and Ultrafilter	7,025
arium® pro UV systems for producing ASTM Type 1 ultrapure water			
Equipment supplied: 1 arium® pro with UV Lamp (185 254 nm) and Connection Set			
H2Opro-UV-T	1	pro UV Bench-Top System, incl. UV Lamp	7,325
H2Opro-UV-T-TOC	1	pro UV Bench-Top System, incl. UV Lamp and TOC Monitor	8,765
H2Opro-UV-B	1	pro UV Wall-Mounted System incl. Wall Bracket for the system and UV Lamp	7,325
H2Opro-UV-B-TOC	1	pro UV Wall-Mounted System incl. Wall Bracket for the system, UV Lamp and TOC Monitor	8,765
arium® pro VF systems for producing ASTM Type 1 ultrapure water			
Equipment supplied: 1 arium® pro with UV lamp (185 254 nm), Ultrafilter and Connection Set			
H2Opro-VF-T	1	pro VF Bench-Top System, incl. UV Lamp and Ultrafilter	8,130
H2Opro-VF-T-TOC	1	pro VF Bench-Top System, incl. UV Lamp, Ultrafilter and TOC Monitor	9,460
H2Opro-VF-B	1	pro VF Wall-Mounted System incl. Wall Bracket for the system, UV Lamp and Ultrafilter	8,130
H2Opro-VF-B-TOC	1	pro VF Wall-Mounted System incl. Wall Bracket for the system, UV Lamp, Ultrafilter and TOC Monitor	9,460

Consumables

Model	Qty.	Description	Maintenance Interval	US List Price (\$)
H2O-A-PACK	1	Analytical Kit for arium® pro VF & pro UV Ultrapure Water Systems	as needed or 1 yr.	850
H2O-B-PACK	1	Biological Kit for arium® pro UF Ultrapure Water Systems	as needed or 1 yr.	850
H2O-E-PACK	1	Elemental Kit for arium® basic & pro DI Ultrapure Water Systems	as needed or 1 yr.	850
H2O-U-PACK	1	Universal Kit for arium® Ultrapure Water Systems with Tap Water Feed	as needed or 1 yr.	545
5441307H4--CE	1	Sterile Final Filter	30 days	118
611CDU5	1	Ultrafilter	1 year	1,180
611CEL1	1	UV Lamp	1 year	230
611CDS1	1	Sanitization Syringe#	3 months	49

Accessories

Model	Qty.	Description	US List Price (\$)
H2Opro-AMDG1	1	arium® Dispense Gun incl. Height-Adjustable Stand	1,110
H2Opro-AMDG2	1	arium® Dispense Gun incl. Wall Mounting Kit	680
H2Opro-ADM1	1	arium® Display Mounting Kit for arium® Built-In System	750
H2O-ADD	1	arium® Multifunction Stand for arium® Built-In Systems	1,395
H2O-AFS1	1	Footswitch for External Control of the Time Volume Dispense	330
610AWG1	1	Water Guard	590
H2O-ACK-D	1	Conversion Kit for Below Bench Mounting or Remote Displays.	695
YDP30	1	Premium GLP lab printer (paper not included)	1,440
69Y03285	1	Printer paper for YDP30 (ink ribbon set for GLP)	103
69Y03287	5	Standard thermal paper rolls for YDP30	95
SB-12-01-0250	1	Connection cable YDP30 to arium®	112

*No volumetric dispensing and can not connect to a dispense gun

#Six month shelf life

For extended warranty and service options, please see page 196.

arium® Type 2 Pure Water Systems

arium® advance EDI the Ultimate Reliable Type 2 Pure Water System

First-class Type II water: The arium® advance EDI Type 2 water system features the highest ion retention at production rates of up to 10 l/h. Directly from potable feed water source, the system produces the pure water at consistent highest quality at values of 5 to 15 Ω .cm. Its proprietary, unique EDI technology combined with the innovative iJust function optimizes your water consumption and ensures a time and labor-saving operation over long periods.



Features & Benefits

Unique EDI Technology

Ensures reliably, high Type 2 water quality for consistent analytical results.

iJust

Optimizes product water quality and water consumption based on the individual feed water condition.

arium® bagtank

Saves maintenance time and avoids handling with chemical cleaning agents for safe and secure daily operation.

First-Rate RO Module Equipment

Reduces investment costs and saves time for fast and easy installation.

High System Flexibility

Saves maximum space in limited lab environments and ensures optimal operation at eye level.

Visual SOP Monitoring

Always allows an easy and safe operation by displaying all important information at a glance.

Display with Touch-Function and Intuitive Menu Navigation

Ensures an easy operation in any situation even with gloves.

Applications

- Microbiological media and reagents
- Solutions for chemical analysis and synthesis
- Histology
- ELISA, RIA
- Buffers and pH solutions
- Feed water for laboratory devices, such as autoclaves, glassware washers, humidifiers, water baths, etc.



arium® EDI



arium® advance EDI –Specifications & Pricing

Model	Qty.	Description	US List Price (\$)
arium® advance EDI for Producing Type 2 Pure Water			
Equipment supplied: 1 arium® advance EDI, RO module(s) (reverse osmosis) and Connection Set			
H2O-EDI-1-T	1	advance EDI Benchtop System, Type 2 Product Water Flow Rate 5 l/h	6,330
H2O-EDI-1-B	1	advance EDI Wall-Mounted System, incl. Wall Bracket, Type 2 Water Flow Rate 5 l/h	6,330
H2O-EDI-2-T	1	advance EDI Bench-Top System, Type 2 Product Water Flow Rate 10 l/h	8,325
H2O-EDI-2-B	1	advance EDI Wall-Mounted System, incl. Wall Bracket, Type 2 Product Water Flow Rate 10 l/h	8,325

Consumables

Item	Qty.	Description	Maintenance Interval	US List Price (\$)
H2O-CPFAD-1	1	Pre-Filter	3 months	355
H2O-CRO-H-2	2	RO Modules for advance EDI (10 l/h)	as needed or 2 yrs.	1,590
H2O-CRO-H-1	1	RO Module for advance EDI (5 l/h)	as needed or 2 yrs.	795
H2O-CSO-1	1	Softener Cartridges	6 months	87
H2O-CCS	1	Cleaning Set *	3 months or iJust recommendation	82
H2O-CBS-20	2	20L bag for bagtank 20	6 months	123
H2O-CBS-50	2	50L bag for bagtank 50 & 100	6 months	153
5441307H4--CE	1	Sterile Final Filter	30 days	118

Accessories

Item	Qty.	Description	US List Price (\$)
H2O-AOV-20	1	20L bagtank (Pump not included)	1,510
H2O-ADP-20-US	1	Distribution Pump for 20 l bagtank, 115 VAC, 60 Hz	540
H2O-AOV-50-US	1	50L bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,435
H2O-AOV-100-US	1	100L bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,980
H2O-ATR	4	Rollers for bagtank 50L & 100L	133
H2O-ATB	1	Wall Bracket for bagtank 20L	215
610AWG1	1	Water Guard	590
613-AMDG1	1	Dispense Gun with Height Adjustable Stand	1,055
613-AMDG2	1	Dispense Gun with Wall Bracket	570
H2O-ACK-D	1	Conversion Kit for Below Bench Mounting or Remote Displays	695

*Six month shelf life

For extended warranty and service options, please see page 196.

arium® Type 3 Reverse Osmosis Pure Water Systems

First-class Type 3 Reverse Osmosis Water

arium® advance RO features the highest ion retention at production rates of up to 24 l/h. Directly connected to the potable feed water source, the system produces the pure water at highest quality. Its outstanding RO technology combined with the innovative iJust function optimizes your water consumption and ensures a time and labor-saving operation over long periods.



Features & Benefits

iJust

Optimizes product water quality and water consumption based on the individual feed water condition.

arium® bagtank

Saves maintenance time and avoids handling with chemical cleaning agents for safe and secure daily operation.

First-Rate RO Module Equipment

Reduces investment costs and saves time for fast and easy installation.

High System Flexibility

Saves maximum space in limited lab environments and ensures optimal operation at eye level.

Visual SOP Monitoring

Always allows an easy and safe operation by displaying all important information at a glance.

Display with Touch-Function and Intuitive Menu Navigation

Ensures an easy operation in any situation even with gloves.

Applications

- Feed water for ultrapure water systems
- Rinsing glassware and laboratory vessels
- Feed water for diverse laboratory, e.g. humidifiers, autoclaves and dishwasher



advance RO





arium® advance RO – Specifications & Pricing

Model	Qty.	Description	US List Price (\$)
arium® advance RO reverse osmosis system for producing type 3 pure water			
Equipment supplied: 1 arium® advance H2ORO, RO (reverse osmosis) module(s) and Connection Set			
H2O-RO-1-T	1	advance RO Bench-Top System, Type 3 Product Water Flow Rate, 8 l/h	5,815
H2O-RO-1-B	1	advance RO Wall-Mounted System, Type 3 Product Water Flow Rate 8 l/h	5,815
H2O-RO-2-T	1	advance RO Bench-Top System, Type 3 Product Water Flow Rate 16 l/h	6,580
H2O-RO-2-B	1	advance RO Wall-Mounted System, incl. Wall Bracket, Type 3 Product Water Flow Rate 16 l/h	6,580
H2O-RO-3-T	1	advance RO Bench-Top System, Type 3 Product Water Flow Rate 24 l/h	7,535
H2O-RO-3-B	1	advance RO Wall-Mounted System, incl. Wall Bracket, Type 3 Product Water Flow Rate 24 l/h	7,535

Consumables

Item	Qty.	Description	Maintenance Interval	US List Price (\$)
H2O-CPFAD-1	1	Pre-Filter	3 months	355
613CPM4	1	RO Module for advance RO & comfort I (8 l/h)	as needed or 2 yrs.	610
613CPM4-----V	2	RO Modules for advance RO & comfort I 16 l/h)	as needed or 2 yrs.	1,220
H2O-CCS	1	Cleaning Set*	3 months or iJust recommendation	82
H2O-CBS-20	2	20L bag for bagtank 20	6 months	123
H2O-CBS-50	2	50L bag for bagtank 50 & 100	6 months	153
5441307H4--CE	1	Sterile Final Filter	30 days	118

Accessories

Item	Qty.	Description	US List Price (\$)
H2O-AOV-20	1	20L Bagtank (Pump not included)	1,510
H2O-ADP-20-US	1	Distribution Pump for 20 l bagtank, 115 VAC, 60 Hz	540
H2O-AOV-50-US	1	50L Bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,435
H2O-AOV-100-US	1	100L Bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,980
H2O-ATR	4	Rollers for Bagtank 50L & 100L	133
H2O-ATB	1	Wall Bracket for bagtank 20L	215
610AWG1	1	Water Guard	590
613-AMDG1	1	Tank Dispense Gun with Hight Adjustable Stand	1,055
613-AMDG2	1	Tank Dispense Gun with Wall Bracket	570
H2O-ACK-D	1	Conversion Kit for Below Bench Installation or Remote Display	695

*Six month shelf life

For extended warranty and service options, please see page 196.

arium® comfort I Combined Water Systems

arium® comfort I All-in-One System

The arium® comfort I delivers ASTM Type 1 ultrapure and Type 3 pure water all in one system. Directly connected to the potable feed water source the system uses outstanding RO technology combined with a unique ion exchange cartridge to produce consistent final water quality at the highest level. Additionally the innovative iJust function optimizes your water consumption and ensures a time and labor-saving operation over a long period.



Features & Benefits

iJust

Optimizes product water quality and water consumption based on the individual feed water condition.

arium® bagtank

Saves maintenance time and avoids handling with chemical cleaning agents for safe and secure daily operation.

First-Rate RO Module Equipment

Reduces investment costs and saves time for fast and easy installation.

High System Flexibility

Saves maximum space at limited lab environment and ensures always best operation at eye level.

Highest Water Quality

Guarantees reproducible results for critical, analytical applications.

Visual SOP Monitoring

Always allows an easy and safe operation by displaying all important information at a glance.

Display with Touch-Function and Intuitive Menu Navigation

Ensures an easy operation in any situation even with gloves.

Applications

- HPLC
- GC-MS, AAS, ICP-MS
- Ion chromatography
- TOC-Analysis
- Photometry
- Buffer and pH-solutions
- Feed water for ultrapure water systems
- Rinsing glassware and laboratory vessels
- Feed water for diverse laboratory, e.g. humidifiers, autoclaves and dish washer
- PCR*
- Endotoxin analysis*
- Production of monoclonal antibodies*

*With the use of arium® CellPlus Ultrafilter



arium® comfort I Combined Water Systems – Specifications & Pricing

Model	Qty.	Description	US List Price (\$)
arium® comfort I systems for producing ASTM Type 1 ultrapure water and Type 3 pure water			
Equipment supplied: 1 arium® comfort I, Reverse Osmosis Module(s) and Connection Set, optional with UV Lamp, TOC Monitor			
H2O-I-1-T	1	comfort I Bench-Top System, Type 3 Product Water Flow Rate 8 l/h	6,865
H2O-I-1-B	1	comfort I Wall-Mounted System, incl. Wall Bracket, Type 3 Product Water Flow Rate 8 l/h	6,865
H2O-I-1-UV-T	1	comfort I Bench-Top System with UV, Type 3 Product Water Flow Rate 8 l/h	7,245
H2O-I-1-UV-B	1	comfort I Wall-Mounted System, incl. Wall Bracket, UV, Type 3 Product Water Flow Rate 8 l/h	7,245
H2O-I-1-TOC-T	1	comfort I Bench-Top System with UV & TOC, Type 3 Product Water Flow Rate 8 l/h	7,990
H2O-I-1-TOC-B	1	comfort I Wall-Mounted System, incl. Wall Bracket, UV & TOC, Type 3 Product Water Flow Rate 8 l/h	7,990
H2O-I-2-T	1	comfort I Bench-Top System, Type 3 Product Water Flow Rate 16 l/h	7,990
H2O-I-2-B	1	comfort I Wall-Mounted System, incl. Wall Bracket, Type 3 Product Water Flow Rate 16 l/h	7,990
H2O-I-2-UV-T	1	comfort I Bench-Top System UV, Type 3 Product Water Flow Rate 16 l/h	8,335
H2O-I-2-UV-B	1	comfort I Wall-Mounted System, incl. Wall Bracket, UV, Type 3 Product Water Flow Rate 16 l/h	8,335
H2O-I-2-TOC-T	1	comfort I Bench-Top System with UV & TOC, Type 3 Product Water Flow Rate 16 l/h	9,800
H2O-I-2-TOC-B	1	comfort I Wall-Mounted System, incl. Wall Bracket, UV & TOC, Type 3 Product Water Flow Rate 16 l/h	9,800

Consumables

Item	Qty.	Description	Maintenance Interval	US List Price (\$)
H2O-CPFCO-1	1	Pre-Filter	3 months	380
613CPM4	1	RO Module for advance RO & comfort I	as needed or 2 yrs.	610
613CPM4-----V	2	RO Modules for advance RO & comfort I	as needed or 2 yrs.	1,220
H2O-C-Pack	1	comfort Ultrapure Water Cartridge	as needed or 1 yr.	495
611CEL1	1	UV Lamp	1 year	230
H2O-CCS	1	Cleaning Set*	3 months or iJust recommendation	82
H2O-CBS-20	2	20L bag for bagtank 20	6 months	123
H2O-CBS-50	2	50L bag for bagtank 50 & 100	6 months	153
5441307H4--CE	1	Sterile Final Filter	30 days	118

Accessories

Item	Qty.	Description	US List Price (\$)
H2O-AOV-20	1	20L Bagtank (Pump not included)	1,510
H2O-ADP-20-US	1	Distribution Pump for 20L bagtank, 115 VAC, 60 Hz	540
H2O-AOV-50-US	1	50L Bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,435
H2O-AOV-100-US	1	100L Bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,980
H2O-CUF	1	arium® CellPlus Filter	300
H2O-ATR	4	Rollers for Bagtank 50L & 100L	133
H2O-ATB	1	Wall Bracket for Bagtank 20L	215
610AWG1	1	Water Guard	590
613-AMDG1	1	Tank Dispense Gun with Height Adjustable Stand	1,055
613-AMDG2	1	Tank Dispense Gun with Wall Bracket	570
H2Opro-AMDG1	1	Dispense Gun with Height Adjustable Stand	1,110
H2Opro-AMDG2	1	Dispense Gun with Wall Bracket	680
H2Opro-ADM1	1	Height Adjustable Display Stand	750
H2O-ADD	1	Multifunction Stand	1,395
H2O-AFS1	1	Foot Switch	330
H2O-ACK-D	1	Conversion Kit for Under Bench Mounting or Remote Display	695
YDP30	1	Premium GLP lab printer (paper not included)	1,440
69Y03285	1	Printer paper for YDP30 (ink ribbon set for GLP)	103
69Y03287	5	Standard thermal paper rolls for YDP30	95
SB-12-01-0250	1	Connection cable YDP30 to arium®	112

* Six month shelf life

For extended warranty and service options, please see page 196.

arium® comfort II Combined Water Systems

arium® comfort II Water Purification with Added Value

The arium® comfort II delivers ASTM Type 1 ultrapure and Type 2 pure water all in one system. Directly connected to your potable feed water source the system uses proprietary EDI technology combined with a unique ion exchange cartridge to produce consistent final water quality at the highest level. Additionally the innovative iJust function optimizes your water consumption and ensures a time and labor-saving operation over a long period.



Features & Benefits

Unique EDI Technology

Reliably, high Type 2 water quality for consistent analytical results.

iJust

Optimizes product water quality and water consumption based on the individual feed water condition.

arium® bagtank

Saves maintenance time and avoids handling with chemical cleaning agents for safe and secure daily operation.

First-Rate RO Module Equipment

Reduces investment costs and saves time for fast and easy installation.

High System Flexibility

Saves maximum space in limited lab environments and ensures optimal operation at eye level.

Highest Water Quality

Guarantees reproducible results for critical, analytical applications.

Visual SOP Monitoring

Always allows an easy and safe operation by displaying all important information at a glance.

Display with Touch-Function and Intuitive Menu Navigation

Ensures an easy operation in any situation even with gloves.

Applications

- HPLC
- AAS
- Ion chromatography
- Photometry
- Microbiological media and reagents
- Histology
- ELISA, RIA
- Buffers and pH solutions
- Feed water for laboratory devices, such as autoclaves, glassware washers, humidifiers, water baths, etc.
- PCR*
- Endotoxin analysis*
- Production of monoclonal antibodies*

*With the use of arium® CellPlus Ultrafilter



arium® comfort II – Specifications & Pricing

Model	Qty.	Description	US List Price (\$)
arium® comfort II for producing ASTM Type 1 ultrapure water and Type 2 pure water			
Equipment supplied: 1 arium® comfort II, RO module(s) (reverse osmosis) and connection set, optional with UV Lamp, TOC Monitor			
H2O-II-1-T	1	comfort II Bench-Top System, Type 2 Product Water Flow Rate 5 l/h	12,330
H2O-II-1-B	1	comfort II Wall-Mounted System, Type 2 Product Water Flow Rate 5 l/h	12,330
H2O-II-1-UV-T	1	comfort II Bench-Top System with UV, Type 2 Product Water Flow Rate 5 l/h	13,135
H2O-II-1-UV-B	1	comfort II Wall-Mounted System with UV, Type 2 Product Water Flow Rate 5 l/h	13,135
H2O-II-1-TOC-T	1	comfort II Bench-Top System with UV & TOC Monitor, Type 2 Product Water Flow Rate 5 l/h	14,460
H2O-II-1-TOC-B	1	comfort II Wall-Mounted System with UV & TOC Monitor, Type 2 Product Water Flow Rate 5 l/h	14,460
H2O-II-2-T	1	comfort II Bench-Top System without UV & TOC, Type 2 Product Water Flow Rate 10 l/h	18,980
H2O-II-2-B	1	comfort II Wall-Mounted System without UV & TOC, Type 2 Product Water Flow Rate 10 l/h	18,980
H2O-II-2-UV-T	1	comfort II Bench-Top System with UV, Type 2 Product Water Flow Rate 10 l/h	19,180
H2O-II-2-UV-B	1	comfort II Wall-Mounted System with UV, Type 2 Product Water Flow Rate 10 l/h	19,185
H2O-II-2-TOC-T	1	comfort II Bench-Top System with UV & TOC, Type 2 Product Water Flow Rate 10 l/h	20,635
H2O-II-2-TOC-B	1	comfort II Wall-Mounted System with UV & TOC, Type 2 Product Water Flow Rate 10 l/h	20,635

Consumables

Item	Qty.	Description	Maintenance Interval	US List Price (\$)
H2O-CPFCO-1	1	Pre-Filter	3 months	380
H2O-CRO-H-1	1	RO Module for advance EDI & comfort II (5 l/h)	as needed or 2 yrs.	795
H2O-CRO-H-2	2	RO Modules for advance EDI & comfort II (10 l/h)	as needed or 2 yrs.	1,590
H2O-CSO-1	1	Softener Cartridges	6 months	87
H2O-C-Pack	1	Comfort Ultrapure Water Cartridge	as needed or 1 yr.	495
611CEL1	1	UV Lamp	1 year	230
H2O-CCS	1	Cleaning Set*	3 months or iJust recommendation	82
H2O-CBS-20	2	20L bag for bagtank 20	6 months	123
H2O-CBS-50	2	50L bag for bagtank 50 & 100	6 months	153
5441307H4--CE	1	Sterile Final Filter	30 days	118

Accessories

Item	Qty.	Description	US List Price (\$)
H2O-AOV-20	1	20L Bagtank (No pump included)	1,510
H2O-ADP-20-US	1	Distribution Pump for 20L bagtank, 115 VAC, 60 Hz	540
H2O-AOV-50-US	1	50L Bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,435
H2O-AOV-100-US	1	100L Bagtank incl. 115 VAC, 60 Hz Distribution Pump	2,980
H2O-CUF	1	arium® CellPlus Filter	300
H2O-ATR	4	Rollers for bagtank 50L & 100L	133
H2O-ATB	1	Wall Bracket for bagtank 20L	215
610AWG1	1	Water Guard	590
613-AMDG1	1	Tank Dispense Gun with Height Adjustable Stand	1,055
613-AMDG2	1	Tank Dispense Gun with Wall Bracket	570
H2Opro-AMDG1	1	Dispense Gun with Height Adjustable Stand	1,110
H2Opro-AMDG2	1	Dispense Gun with Wall Bracket	680
H2Opro-ADM1	1	Height Adjustable Display Stand	750
H2O-ADD	1	Multifunction Stand	1,395
H2O-AFS1	1	Foot Switch	330
H2O-ACK-D	1	Conversion Kit for Under Bench Mounting or Remote Display	695
YDP30	1	Premium GLP lab printer (paper not included)	1,440
69Y03285	1	Printer paper for YDP30 (ink ribbon set for GLP)	103
69Y03287	5	Standard thermal paper rolls for YDP30	95
SB-12-01-0250	1	Connection cable YDP30 to arium®	112

*Six month shelf life

For extended warranty and service options, please see page 196.

arium® mini, mini plus and mini essential

3...2...1... High Purity Water

The arium® mini is exclusively made of high-grade materials. With its intuitive operator guidance, closed bag system and the practical arium® aqua stop, the unit is ideal for a daily consumption of up to 10 liters of ultrapure water. Moreover, this compact laboratory-grade water purification system stands out by virtue of its superior reliability and user-friendliness.



Features & Benefits

Dispenses 18.2 MΩ x cm water from DI Source or direct from Tap Water

Consistently delivers the highest water quality.

Simple no-hassle installation

Easy to set-up on your own. Plug and play functionality.

Bagtank Technology (mini & mini plus)

No tank cleaning or chemical cleaning agents needed

Large color touch-activated display

Ensures an easy operation in any situation, even with gloves.

Slender design with a width of only 28 cm

Fits into any laboratory environment.

Direct access to all available dispensing options

Ensures fast, reliable and comfortable operation.

High capacity cartridges

Saves costs per liter.

Optional UV lamp and ultrafilter

To be flexible for analytical or cell culture application.

Serial Integrated Aqua Stop

Ensures permanent optimum protection against water leakage.

Applications*

- Sample dilution & Blanks
- Buffer and media preparation
- HPLC,
- ICP-MS
- GC-MS
- SPE
- Photometry
- Electrophoresis
- ELISA

* Depending on the application, the system type and optional accessory may vary

Selection Guide

Type of System	Feed Water
arium® mini	Pretreated water from a supply container
arium® mini plus	Directly connects to tap water
arium® mini essential	Directly connects to a pretreated water supply line (RO DI EDI)



arium® mini, mini plus and mini essential – Specifications & Pricing

Model	Qty.	Description	US List Price (\$)
arium® mini (for producing ASTM Type 1 ultrapure water)			
H2O-MM-T-US	1	arium® mini	3,325
H2O-MM-UV-T-US	1	arium® mini with UV Lamp	3,830
arium® mini plus (for producing ASTM Type 1 and Type 3 ultrapure water)			
H2O-MA-T-US	1	arium® mini plus	4,740
H2O-MA-UV-T-US	1	arium® mini plus incl. UV Lamp	5,325
arium® mini essential			
H2O-MU-T-US	1	arium® mini essential	4,220
H2O-MU-UV-T-US	1	arium® mini essential UV	4,805

arium® mini, mini plus and mini essential Starter Packages – Specifications & Pricing

Model	Qty.	Description	US List Price (\$)
arium® mini Starter Packages			
H2O-MM-SET-US	1	arium® mini H2O-MM-T, Scientific Pack, 5 l Bag, Sterile Final Filter	3,805
H2O-MM-UV-SET-US	1	arium® mini H2O-MM-UV-T, Scientific Pack, 5 l Bag, Sterile Final Filter	4,310
arium® mini plus Starter Packages			
H2O-MA-SET-US	1	arium® mini plus H2O-MA-T Pretreatment & Scientific Pack, 5 l Bag, Sterile Final Filter	5,610
H2O-MA-UV-SET-US	1	arium® mini plus H2O-MA-UV-T Pretreatment & Scientific Pack, 5 l Bag, Sterile Final Filter	6,190
arium® mini essential Starter Packages			
H2O-MU-SET-US	1	arium® mini essential H2O-MU-T, Scientific back, Sterile Final Filter	4,650
H2O-MU-UV-Set-US	1	arium® mini essential with UV H2O-MU-UV-T, Scientific Pack, Sterile Final Filter	4,805

Consumables

Model	Qty.	Description	US List Price (\$)
H2O-CPR	1	mini plus Pretreatment Cartridge, Qty 1	390
H2O-S-Pack	1	Scientific Pack	320
H2O-CEL1	1	UV Lamp (185 254 nm)	405
H2O-CBS-5-S	1	5 l Bag	42
H2O-CUF	1	arium® CellPlus Filter	300
5441307H4--CE	1	Sterile Final Filter (Sartopore® 2 150 Capsule, 0.2 µm microorganisms)	118

Vivaspin® Centrifugal Concentrators

Flexible and Efficient Protein Concentration

Vivaspin® products offer a comprehensive range of devices for fast protein concentration from 0.5 ml to 20 ml volume capacities. The large range of different molecular weight cut offs, from 2 kDa to 1000 kDa and 0.2µm offer a solution to every concentration need. Unique Vivaspin 20 can be pressurized and centrifuged simultaneously for processing difficult samples.



Features & Benefits

Dead stop pocket

Guaranteed sample recovery – no risk of concentrating to dryness

Unique housing design feature

Collection tube fit under concentrator body for increased sample volume access in Vivaspin® 6 and Vivaspin® 20

Vertical membrane configuration

Fast sample concentration

Flexibility

Easy to find the perfect ultrafiltration device for your application due to large product selection. Widest volume capacity range and molecular weight cut off ranges.

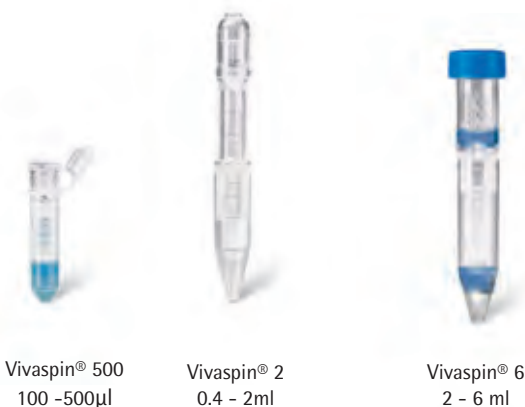
Applications

- Protein concentration
- Virus concentration
- Nanoparticle concentration
- Sample desalting / diafiltration

Specifications & Pricing

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)
Vivaspin® 500 – Polyethersulfone			
VS0191	3,000	25	118
VS0192	3,000	100	415
VS0111	5,000	25	118
VS0112	5,000	100	415
VS0101	10,000	25	118
VS0102	10,000	100	415
VS0121	30,000	25	118
VS0122	30,000	100	415
VS0131	50,000	25	118
VS0132	50,000	100	415
VS0141	100,000	25	118
VS0142	100,000	100	415
VS0151	300,000	25	118
VS0152	300,000	100	415
VS0161	1,000,000	25	118
VS0162	1,000,000	100	415
VS0171	0.2µm	25	109
VS0172	0.2µm	100	415
VS01S1	5 each of 5,000/10,000/ 30,000/50,000/100,000	25	118

See page 119 for Accessories



Vivaspin® 500
100 – 500µl

Vivaspin® 2
0.4 – 2ml

Vivaspin® 6
2 – 6 ml



Vivaspin® 15R
4 – 15ml

Vivaspin® 20
6 – 20ml

Specifications & Pricing

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)
Vivaspin® 2 - Polyethersulfone			
VS0291	3,000	25	131
VS0292	3,000	100	460
VS0211	5,000	25	131
VS0212	5,000	100	460
VS0201	10,000	25	131
VS0202	10,000	100	460
VS0221	30,000	25	131
VS0222	30,000	100	460
VS0231	50,000	25	131
VS0232	50,000	100	460
VS0241	100,000	25	131
VS0242	100,000	100	460
VS0251	300,000	25	131
VS0252	300,000	100	460
VS0261	1,000,000	25	131
VS0262	1,000,000	100	460
VS0271	0.2µm	25	131
VS0272	0.2µm	100	460
VS02S1	5 each of 5,000/10,000/ 30,000/50,000/100,000	25	131
Vivaspin® 2 - Cellulose Triacetate			
VS02U1	5,000	25	131
VS02U2	5,000	100	460
VS02V1	10,000	25	131
VS02V2	10,000	100	460
VS02X1	20,000	25	131
VS02X2	20,000	100	460
Vivaspin® 2 - Hydrosart			
VS02H91	2,000	25	131
VS02H92	2,000	100	460
VS02H11	5,000	25	131
VS02H12	5,000	100	460
VS02H01	10,000	25	131
VS02H02	10,000	100	460
VS02H21	30,000	25	131
VS02H22	30,000	100	460

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)
Vivaspin® 6 - Polyethersulfone			
VS0691	3,000	25	148
VS0692	3,000	100	485
VS0611	5,000	25	148
VS0612	5,000	100	485
VS0601	10,000	25	148
VS0602	10,000	100	485
VS0621	30,000	25	148
VS0622	30,000	100	485
VS0631	50,000	25	148
VS0632	50,000	100	485
VS0641	100,000	25	148
VS0642	100,000	100	485
VS0651	300,000	25	148
VS0652	300,000	100	485
VS0661	1,000,000	25	148
VS0662	1,000,000	100	485
VS0671	0.2µm	25	148
VS0672	0.2µm	100	485
VS06S1	5 each of 5,000/10,000/ 30,000/50,000/100,000	25	148
Vivaspin® 15R - Hydrosart®			
VS15RH91	2,000	12	131
VS15RH92	2,000	48	445
VS15RH11	5,000	12	131
VS15RH12	5,000	48	445
VS15RH01	10,000	12	131
VS15RH02	10,000	48	445
VS15RH21	30,000	12	131
VS15RH22	30,000	48	445
Vivaspin® 20 - Polyethersulfone			
VS2091	3,000	12	147
VS2092	3,000	48	535
VS2011	5,000	12	147
VS2012	5,000	48	535
VS2001	10,000	12	147
VS2002	10,000	48	535
VS2021	30,000	12	147
VS2022	30,000	48	535
VS2031	50,000	12	147
VS2032	50,000	48	535
VS2041	100,000	12	147
VS2042	100,000	48	535
VS2051	300,000	12	147
VS2052	300,000	48	535
VS2061	1,000,000	12	147
VS2062	1,000,000	48	535
VS2071	0.2 µm	12	147
VS2072	0.2 µm	48	535
VS20S1	2 each of 5,000/10,000/ 30,000/ 50,000/ 100,000	12	147

Vivaspin® Turbo Centrifugal Concentrators

High Speed & Recovery Protein Concentration

Vivaspin® Turbo 4 and 15 centrifugal concentrators are disposable ultrafiltration devices for processing sample volumes of 2-4 ml and 15 ml respectively. A new design, featuring a polyethersulfone UF membrane in a pH resistant housing, offers the fastest concentration with low non-specific binding. A patent-pending angular dead stop pocket prevents centrifuging to dryness while supporting high concentrate recoveries due to easy pipette access.



Features & Benefits

Twin vertical membranes assembled in an optimized design
Fastest ultrafiltration device on the market for high speed protein concentration that saves time and retains protein activity.

Unique angular dead stop pocket
Patent pending angular design guarantees complete sample recovery with a pipette, while eliminating the risk of concentrating to dryness.

Low binding and pH resistant polystyrene housing material
Negligible non-specific binding, for high recoveries- combined with high chemical compatibility.

Applications

- Protein concentration
- Virus concentration
- Nanoparticle concentration
- Sample desalting / diafiltration
- Buffer exchange

Specifications & Pricing

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)	Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)
Vivaspin® Turbo 4				Vivaspin® Turbo 15 - Polyethersulfone			
VS04T91	3,000	25	152	VS15T91	3,000	12	149
VS04T92	3,000	100	535	VS15T92	3,000	48	565
VS04T11	5,000	25	152	VS15T11	5,000	12	149
VS04T12	5,000	100	535	VS15T12	5,000	48	565
VS04T01	10,000	25	152	VS15T01	10,000	12	149
VS04T02	10,000	100	535	VS15T02	10,000	48	565
VS04T21	30,000	25	152	VS15T21	30,000	12	149
VS04T22	30,000	100	535	VS15T22	30,000	48	565
VS04T31	50,000	25	152	VS15T31	50,000	12	149
VS04T32	50,000	100	535	VS15T32	50,000	48	565
VS04T41	100,000	25	152	VS15T41	100,000	12	149
VS04T42	100,000	100	535	VS15T42	100,000	48	565



Vivaspin® Turbo 4



Vivaspin® Turbo 15

Centrisart® I Reverse Centrifugal Concentrators

Ultrafiltration of Biological Samples

Centrisarts are ready-to-use units for separation of proteins from low molecular weight substances in biological samples. They feature a unique design that allows ultrafiltration in the direction opposite of the centrifugal force which effectively prevents premature blockage of the filter. This permits deproteinization of whole blood samples.



Centrisart I

Specifications & Pricing

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)
Cellulose Triacetate			
13229-----E	5,000	12	81
13239-----E	10,000	12	81
13249-----E	20,000	12	81
Polyethersulphone			
13269-----E	100,000	12	81
13279-----E	300,000	12	81
Starter Pack			
13209-----E	3 units each of 5k, 10k, 20k, 100k	12	81

Applications

- Serum / blood deproteinization
- Concentration of viscous samples
- Hormone / metabolite determination in serum

Vivaclear® Centrifugal Filters

Clarification of Biological Samples

Vivaclear® Centrifugal Filters are microfiltration devices for fast and reliable clarification of biological samples such as plasma, serum, cells and cell debris as well as simple removal of particles.



Specifications & Pricing

Model	Description	Qty. PK	US List Price (\$)
VK01P042	Vivaclear® Mini 0.8 µM PES	100	315

Vivaflow® Crossflow Devices

Plug and Play Crossflow Devices for Sample Concentration

Disposable and reusable tangential | crossflow cassettes for concentration, diafiltration and buffer exchange of biological samples and nanoparticles from 0.1 – 5 l with MWCOs from 3 kDa to 1000 kDa. Available with PES and Hydrosart® ultrafiltration membranes, Vivaflow® 50, 50R and 200 are the only true laboratory crossflow cassettes on the market. They are simple to set up and can be operated with any laboratory pump with flow rates of 200 – 400 ml/min.



Features & Benefits

Various membrane types and molecular weight cut offs

Allows selection of the optimal membrane based on filterability and chemical compatibility.

Plug and Play Systems

Simple system set-up. Tubing is connected via luer lock connectors. Everything necessary for operation comes with the device. Only a laboratory peristaltic pump is needed for operation.

Choice between disposable and reusable products

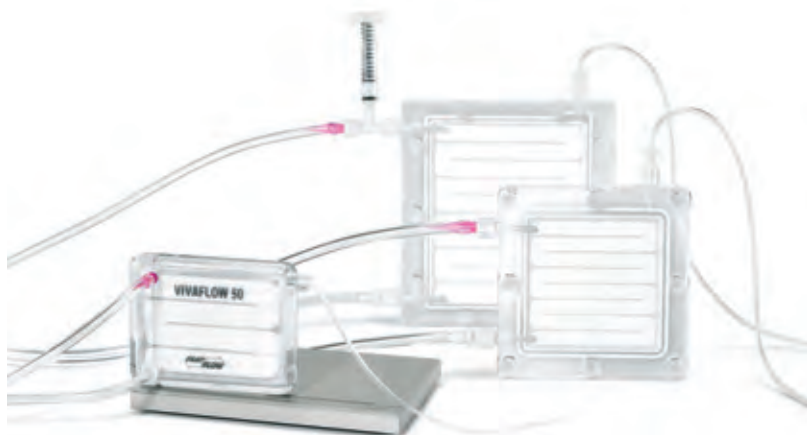
Vivaflow® 50 is disposable for convenience in applications such as virus concentration. Vivaflow® 50R and Vivaflow® 200 can be reused for standard applications.

Serial/parallel operation of multiple devices

Increases filtration area, thus enabling faster filtration and/or increasing total volume throughput.

Applications

- Protein concentration
- Virus concentration
- Nanoparticle concentration
- Sample desalting / diafiltration



Specifications & Pricing

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)
Vivaflow® 50R Crossflow Cassettes - Hydrosart®			
VF05H1	5,000	1	245
VF05H0	10,000	1	245
VF05H2	30,000	1	245
VF05H4	100,000	1	245
Vivaflow® 50 Crossflow Cassettes - Polyethersulfone			
VF05P9	3,000	2	174
VF05P1	5,000	2	174
VF05P0	10,000	2	174
VF05P2	30,000	2	174
VF05P3	50,000	2	174
VF05P4	100,000	2	174
VF05P7	0.2µm	2	174
Vivaflow® 50 Complete System Comprises			
VFS504	Pump (115 V), Easy load pump head (size 16), tubing, 500ml sample diafiltration reservoir, module stand, pressure indicator, T connectors, series interconnectors		1,735
PVC Tubing and Fittings			
VFA004	Size 16 PVC pump tubing (3m, 3.2 x 1.6mm)		55
VFA009	Flow restrictor set (2 x 0.4, 0.6, 0.8mm)		17
VFA030	T connectors for running 2 stacks (2 pieces)		18
VFA031	Series interconnectors (6 pieces)		37
VFA032	Female luer fittings (10 pieces)		18
VFA034	VF50 tubing Kit (2 x 1 mm size 16 PVC tubing with inlet fittings, 2 x 50 cm size 16 PVC tubing with 0.6mm flow restrictors, 1 x series interconnector)		73
VFA035	Flow restrictor 0.6mm (6 pieces)		18
Accessories			
VFP001	Masterflex economy drive variable speed peristaltic pump (240 V)		810
VFP002	Masterflex economy drive variable speed peristaltic pump (115 V)		920
VFA006	500 ml sample and/or diafiltration reservoir		184
VFA012	Masterflex easy load pump head- size 16		525
VFA013	Masterflex easy load pump head- size 15		525
VFA016	Vivaflow 50 stand		184
VFA020	Pressure indicator (1 -3 bar)		37

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty. PK	US List Price (\$)
Vivaflow® 200 Crossflow Cassettes - Polyethersulfone			
VF20P9	3,000	1	450
VF20P1	5,000	1	450
VF20P0	10,000	1	450
VF20P2	30,000	1	450
VF20P3	50,000	1	450
VF20P4	100,000	1	450
VF20P7	0.2µm	1	450
Vivaflow® 200 Crossflow Cassettes - Hydrosart			
VF20H9	2,000	1	450
VF20H1	5,000	1	450
VF20H0	10,000	1	450
VF20H2	30,000	1	450
VF20H4	100,000	1	450
Vivaflow® 200 Complete System Comprises			
VFS204	Pump (115 V), Easy load pump head (size 16), tubing, 500ml sample diafiltration reservoir		1,410
Tubing and Fittings			
VFA003	Size 15 PVC pump tubing (3m, 4.8 x 2.6mm)		55
VFA004	Size 16 PVC pump tubing (3m, 3.2 x 1.6mm)		55
VFA005	Y connector (size 15 to 2 x size 16)		12
VFA009	Flow restrictor set (2 x 0.4, 0.6, 0.8mm)		17
VFA032	Female luer fittings (10 pieces)		18
VFA035	Flow restrictor 0.6mm (6 pieces)		18
VFA036	Female luer fittings size 15 (10 pieces)		18

Vivacon Centrifugal Concentrators

For High Recovery Concentration of Diluted DNA and Peptide Samples

Vivacon centrifugal units for DNA concentration and buffer exchange are available for initial sample volumes of 500 µl to 2 ml. They are the product of choice for peptide fractionation applications, like FASP*. Select cut offs are available in sterile and DNA-free** versions for DNA concentration and rebuffing applications in which even trace of DNA contamination is harmful. The use of Hydrosart® membranes results in high recoveries from even highly diluted samples.



Features & Benefits

Hydrosart® modified regenerated cellulose membrane

Offers the lowest binding and highest concentrate recoveries. This is ideal for applications working with ng sample quantities.

Reverse spin possibility

Allows complete and reproducible concentrate recovery in a fresh collection tube.

PCR Grade devices for DNA-free products**

Ideal for forensic applications in which even trace DNA is problematic.

Horizontal membrane design

Horizontal configuration of the ultrafiltration membranes leads to improved results when concentrating or fractionating extremely dilute samples.

Applications

- Genomic DNA concentration of forensic samples
- Peptide fractionation (FASP*)
- Primer removal
- Plasmid DNA concentrations / desalting

* Filter aided sample preparation, Jacek R. Wisniewski, Dorota F. Zielinska and Matthias Mann (2010). Anal Biochem Dec 14, 2010

**qPCR assay over 55 cycles with a verified limit of detection < 2 pg



Conversion Table for MWCO to Base Pair Cut-Off

Membrane	MWCO	Double-Stranded Nucleotide Cut-Off (bp)
Hydrosart®	2 kDa	> 10
Hydrosart®	10 kDa	> 30
Hydrosart®	30 kDa	> 50
Hydrosart®	50 kDa	> 300
Hydrosart®	100 kDa	> 600
Cellulose Acetate	125 kDa	> 650

Ordering Information

Model	Description	Qty/Pk	US List Price (\$)
Vivacon 500			
VN01H91	2,000 MWCO	25	134
VN01H92	2,000 MWCO	100	440
VN01H01	10,000 MWCO	25	134
VN01H02	10,000 MWCO	100	440
VN01H21	30,000 MWCO	25	134
VN01H22	30,000 MWCO	100	440
VN01H31	50,000 MWCO	25	134
VN01H32	50,000 MWCO	100	440
VN01H41	100,000 MWCO	25	134
VN01H42	100,000 MWCO	100	440
VN01H81	125,000 MWCO	25	134
VN01H82	125,000 MWCO	100	440
VN01H83	125,000 MWCO	500	2,100
VN01HL12	Sample Kit L (4 units each of 2, 10, 30 K)	12	73
VN01HH12	Sample Kit H (4 units each of 30, 50, 100 K)	12	73
Vivacon 500 PCR Grade			
VN01H21ETO	30,000 MWCO	25	147
VN01H22ETO	30,000 MWCO	100	480
VN01H31ETO	50,000 MWCO	25	147
VN01H32ETO	50,000 MWCO	100	480
VN01H41ETO	100,000 MWCO	25	147
VN01H42ETO	100,000 MWCO	100	480
VN01H81ETO	125,000 MWCO	25	147
VN01H82ETO	125,000 MWCO	100	480

Accessories

Item	Description	Qty/Pk	US List Price (\$)
VNCT01	Collection Tubes	100	81

Ordering Information

Model	Molecular Weight Cut-Off (MWCO) in daltons	Qty/Pk	US List Price (\$)
Vivacon 2 – Hydrosart			
VN02H91	2,000	25	158
VN02H92	2,000	100	565
VN02H93	2,000	500	2,495
VN02H01	10,000	25	158
VN02H02	10,000	100	565
VN02H03	10,000	500	2,495
VN02H21	30,000	25	158
VN02H22	30,000	100	565
VN02H31	50,000	25	158
VN02H32	50,000	100	565
VN02H41	100,000	25	158
VN02H42	100,000	100	565
Vivacon 2 PCR Grade – Hydrosart			
VN02H21ETO	30,000	25	177
VN02H22ETO	30,000	100	635
VN02H3SETO	50,000	4	32
VN02H31ETO	50,000	25	177
VN02H32ETO	50,000	100	635
VN02H41ETO	100,000	25	177
VN02H42ETO	100,000	100	635
Vivacon Accessories			
VNA001	Vivacon 2 Rack	1	31
VNCT01	Collection Tubes	100	81



Vivapure® Virus Purification and Concentration Kits

Easy to Use and Fast Adenovirus Type 5 and VSV-G Lentivirus Purification

Adenovirus and Lentivirus purification kits utilize Sartobind® ion exchange membrane chromatography technology for fast and safe virus purification in volumes from 20 ml to 1000 ml. These ready to use kits contain all buffers and devices needed for virus purification in just a few hours. The AdenoPACK kits can recover up to 3×10^{13} purified recombinant adenovirus particles for in vitro transfection. The LentiSELECT kits recover up to 5×10^9 infective Lentivirus particles per ml for in vitro transfection or animal studies.



Features & Benefits

Syringe filter or spin columns based purification columns

No need for expensive ultracentrifuges. Additionally, Sartobind® membrane adsorbers lead to much faster purification of the viruses, compared to traditional methods.

Flexible product range. Applicable from initial construct screening to large scale virus purification as different kit formats are available.

Complete kits. One stop shopping – the kits contain everything needed for Adenovirus and Lentivirus purification – including filtration devices, purification units, Vivaspin ultrafiltration devices and buffers.

Applications

- Adenovirus Type 5 purification
- VSV-G pseudotyped lentivirus purification

Ultrafiltration | Vivapure

Specifications & Pricing

Model	Description	Sample Size	Qty/PK	US List Price (\$)
Vivapure® AdenoPACK				
VS-AVPQ020	AdenoPACK 20	6 x 20ml	1	310
VS-AVPQ101	AdenoPACK 100	4 x 60ml	1	555
VS-AVPQ501	AdenoPACK 500	500ml	1	1,220
Vivapure® AdenoPACK Accessories				
VS-AVPA001	AdenoPACK Pump Tubing Set (for Adenopack 100)	n/a	1	45
Vivapure® LentiSELECT				
VS-LVPQ040	LentiSELECT 40	4 x 40ml	1	790
VS-LVPQ500	LentiSELECT 500	500ml	1	1,545
VS-LVPQ1000	LentiSELECT 1000	1000ml	1	2,570



Vivapore Static Concentrators

Ready to Use and Flexible Protein Concentration

Vivapore static concentrators offer fast and economic concentration of bodily fluids such as urine and cerebrospinal fluid prior to analysis by electrophoresis or immunoelectrophoresis (e.g. Bence Jones proteins in urine). An absorbent pulls solvent and salts through the ultrafiltration membrane, concentrating the sample without the need for additional equipment. Static concentrators are the most economic and user friendly concentration technique available for clinical applications.



Features & Benefits

Single-use devices

Reduce the risk of cross contamination.

Integrated dead stop

Prevents concentrating the sample to dryness. Sample can be left to concentrate unattended overnight.

Easy recovery

Complete concentrate is easily recovered by single-use pipettes provided in every pack.

Economical product

Low budget solution, as no additional instruments are needed.

CE mark

Product is offered for in vitro diagnostic use.

Applications

- Bence Jones Protein concentration from body fluids such as urine

Specifications & Pricing

Model	Description	Qty. PK	US List Price (\$)
Vivapore 5			
VP0503	7,500 MWCO PES. Includes stand and recovery pipettes	4	30
VP0501	7,500 MWCO PES. Includes stand and recovery pipettes	30	205
VP0502	7,500 MWCO PES. No stand	100	520
Vivapore 10 20			
VP2003	7,500 MWCO PES. Includes stand and recovery pipettes	4	44
VP2001	7,500 MWCO PES. Includes stand and recovery pipettes	30	225
VP2002	7,500 MWCO PES. No stand	100	570

Accessories

Model	Description	Qty. PK	US List Price (\$)
VPA002	Disposable stands for 4 units	6	34
VPA005	Plastic recovery pipettes (Vivapore 10 20)	100	37
VPA006	10 ml expansion reservoir (Vivapore 10 20)	10	25
VPA007	Plastic recovery pipettes (Vivapore 5)	100	23

Vivapure® Ion Exchange Membrane Chromatography

Ready-to-use Protein Purification Spin Columns

Vivapure® ion exchange spin columns are ready-to-use centrifugal devices incorporating Sartobind Membrane Adsorber technology into their chromatography matrix. This makes protein purification as easy as filtration. The rapid 1-2-3 bind- wash-elute protocol can replace time-consuming and tedious column chromatography. Available in three membrane chemistries: Sulphonic acid (S), Quaternary ammonium (Q), and Diethylamine (D).



Features & Benefits

Ready to use

Devices are ready to use out of the box – no column packing necessary. Vivapure makes protein purification as easy as filtration.

Centrifugal devices

Centrifugal devices can be run in parallel – optimal for purification or screening applications.

Scalable

Process scale modules are available with the same Ion Exchange membrane adsorber matrix.

Applications

- Protein purification
- DNA purification
- Sample fractionation
- Endotoxin removal

Specifications & Pricing

Model	Description	Qty. PK	US List Price (\$)
Vivapure® Mini Ion Exchange Spin Columns			
VS-IX01DH24	Vivapure D Mini H (24 columns, 48 collection tubes)	24	205
VS-IX01QH24	Vivapure Q Mini H (24 columns, 48 collection tubes)	24	205
VS-IX01SH24	Vivapure S Mini H (24 columns, 48 collection tubes)	24	205
VS-IX01SQ16	Vivapure S & Q Mini H (8 each of S & Q, 32 collection tubes)	16	143
Vivapure® Maxi Ion Exchange Spin Columns			
VS-IX20DH08	Vivapure D Maxi H (8 columns, 16 collection tubes)	8	390
VS-IX20QH08	Vivapure Q Maxi H (8 columns, 16 collection tubes)	8	390
VS-IX20SH08	Vivapure S Maxi H (8 columns, 16 collection tubes)	8	390

Claristep® Filtration System

The Easy Choice – Syringeless and Fast

Sartorius has developed a new, easy-to-use and straightforward filtration setup. The manually operated Claristep® Filtration System, which consists of a station and filter units, offers a novel way to easily clarify your samples prior to analysis.



Features & Benefits

- Up to 8 samples are processed simultaneously
- No syringe required
- No need for a vacuum source or a power supply
- For low sample volumes ranging from 60 µL to 600 µL
- Hold-up volume < 30 µL

Filter 8 samples simultaneously – without needing any power supply or a vacuum | pressure source. Simply place the filters on your vials, gently close the station and press on the station lid to filter – that's it!

The Claristep® Station consists of a base, a lid and an exchangeable tray for easy and accurate positioning of sample vials and Claristep® Filter units. The patent-pending design features unique grooves in the station's lid and matching guide ridges on Claristep® Filter units to enable intuitively correct alignment and convenient handling of the system.

Grooves automatically guide the filter unit caps into the correct positions for simultaneous and accurate cap closure.

Claristep® Filter units are made of the purest materials. Another major benefit is that the contact time of the samples with the filters and the caps is extremely short, ensuring optimal, contamination-free results.

Filtered liquids are collected in any 12 × 32 mm outer diameter vials of your choice based on the analytical method to be performed.

Applications

- HPLC Sample Prep
- LC-MS Sample Prep
- Multiple Sample Prep-up to 8 samples simultaneously



Specifications & Pricing

Model	EFD ¹	Membrane	Housing	Pore Size	Sterile	Qty. Pk	US List Price (\$)
Claristep® Filters							
17C07FT---96	9.7 mm	RC	PP	0.2 µm	No	96	250
17C07FT--480	9.7 mm	RC	PP	0.2 µm	No	480	1,065
17C06FT---96	9.7 mm	RC	PP	0.45 µm	No	96	250
17C06FT--480	9.7 mm	RC	PP	0.45 µm	No	480	1,065

¹ Effective Filtration Diameter
RC = Regenerated Cellulose

Model	Description	Qty. Pk.	US List Price (\$)
Claristep® Station			
17C--M8	Claristep® Station complete	1	350
17C--S1	Claristep® Single Tray	1	82



Chemical Compatibility Chart

For Minisart® Syringe Filters

	PES membrane	SFCA membrane	PTFE membrane	RC membrane	Nylon XXX Nylon Membrane	Nylon Membrane GF depth filter	Housing MBS	Housing PP	Minisart® HighFlow	Minisart® NML Ophthalsart	Minisart® plus Microsart® NML Plus	Minisart® GF	Minisart® HY	Minisart® RC	Minisart® NY	Minisart® SRP
Filter	PES	SFCA	PTFE	RC	PA	GF			PES	SFCA	SFCA GF + GF	GF	PTFE	RC	PA	PTFE
Housing							MBS	PP	MBS	MBS	MBS	MBS	MBS	PP	PP	PP
Sterilization																
Ethylene oxide	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
Gamma irradiation	++	++	- ¹	++	-	++	++	-	++	++	++	++	-	-	-	-
Autoclaving 121 °C, 30 min	++	++	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Solvents																
Acetone	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Acetonitrile	-	-	++	++	n.a.	++	-	++	-	-	-	-	-	++	n.a.	++
Gasoline	+	+	++	++	++	++	++	++	+	+	+	++	++	++	++	++
Benzene	-	+	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Benzyl alcohol	-	-	++	++	++	++	-	+	-	-	-	-	-	+	+	+
n-Butyl acetate	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
n-Butanol	+	+	++	++	++	++	++	++	+	+	+	++	++	++	++	++
Cellosolve	++	-	++	++	++	++	-	-	-	-	-	-	-	-	-	-
Chloroform	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Cyclohexane	-	+	++	++	++	++	+	+	-	+	+	+	+	+	+	+
Cyclohexanone	-	+	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Diethylacetamide	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Diethyl ether	-	+	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Dimethyl formamide	-	-	++	+	+	++	-	+	-	-	-	-	-	+	+	+
Dimethylsulfoxide	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Dioxane	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Ethanol, 98%	++	+	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Ethyl acetate	-	-	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Ethylene glycol	++	+	++	++	++	++	++	++	++	+	+	++	++	++	++	++
Formamide	++	-	++	+	++	++	++	++	++	-	-	++	++	+	++	++
Glycerin	++	+	++	++	++	++	+	+	+	+	+	+	+	+	+	+
n-Heptane	++	+	++	++	++	++	+	++	+	+	+	+	+	++	++	++
n-Hexane	++	+	++	++	++	++	+	+	+	+	+	+	+	+	+	+
Isobutanol	++	+	++	++	++	++	++	-	++	+	+	++	++	-	-	-
Isopropanol	++	+	++	++	++	++	-	++	-	-	+	-	-	++	++	++
Isopropyl acetate	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Methanol, 98%	+	-	++	++	++	++	-	+	+	-	-	-	-	+	+	+
Methyl acetate	-	-	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Methylene chloride	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Methyl ethyl ketone	-	-	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Methyl isobutyl ketone	-	-	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Monochlorobenzene	-	-	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Nitrobenzene	-	-	++	++	+	++	-	+	-	-	+	-	-	+	+	+
n-Pentane	++	+	++	++	++	++	+	++	+	+	+	+	+	++	++	++
Perchloroethylene	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++

Chemical Compatibility Chart

For Minisart® Syringe Filters

	PES membrane	SFCA membrane	PTFE membrane	RC membrane	Nylon Membrane	GF depth filter	Housing MBS	Housing PP	Minisart® HighFlow	Minisart® NML Ophthalsart	Microsart® NML Plus	Minisart® GF	Minisart® HY	Minisart® RC	Minisart® NY	Minisart® SRP
Filter	PES	SFCA	PTFE	RC	PA	GF			PES	SFCA	SFCA + GF	GF	PTFE	RC	PA	PTFE
Housing							MBS	PP	MBS	MBS	MBS	MBS	MBS	PP	PP	PP
Sterilization																
Pyridine	-	-	++	++	++	++	-	++	-	-	-	-	-	++	++	++
Carbon tetrachloride	-	-	++	++	++	++	-	-	-	-	-	-	-	-	-	-
Tetrahydrofuran	-	-	++	++	++	++	-	++	-	-	++	-	-	++	++	++
Toluene	-	+	++	++	++	++	-	++	-	-	++	-	-	++	++	++
Trichloroethane	-	-	++	++	++	++	-	n.a.	-	-	-	-	-	n.a.	n.a.	n.a.
Trichloroethylene	-	+	++	++	++	++	-	++	-	-	++	-	-	++	++	++
Xylene	-	+	++	++	++	++	-	+	-	-	-	-	-	+	+	+
Acids																
Acetic acid, 25%	+	+	++	++	-	++	-	+	-	-	-	-	-	+	-	+
Acetic acid, 80%	n.a.	-	++	++	-	++	-	+	-	-	-	-	-	+	-	+
Hydrofluoric acid, 25%	+	-	++	+	-	++	+	+	+	-	-	+	+	+	-	+
Hydrofluoric acid, 50%	+	-	++	+	-	++	+	+	+	-	-	+	+	+	-	+
Perchloric acid, 25%	-	-	++	-	-	++	n.a.	+	-	-	-	n.a.	n.a.	-	-	+
Phosphoric acid, 1%	++	+	++	-	-	++	+	+	+	+	+	+	+	-	-	+
Phosphoric acid, 86%	++	+	++	-	-	++	+	+	+	+	+	+	+	-	-	+
Nitric acid, 30%	+	-	++	-	-	++	+	+	+	-	-	+	+	-	-	+
Nitric acid, conc.	-	-	++	-	-	++	-	-	-	-	-	-	-	-	-	-
Hydrochloric acid, 15%	++	+	++	-	-	++	+	+	+	+	+	+	+	-	-	+
Hydrochloric acid, 20%	++	-	++	-	-	++	+	+	+	-	-	+	+	-	-	+
Sulfuric acid, 25%	+	-	++	+	-	++	+	++	+	-	-	+	+	+	-	++
Sulfuric acid, 98%	-	-	++	-	-	++	-	+	-	-	-	-	-	-	-	+
Trichloroacetic acid, 25%	n.a.	-	++	++	-	++	-	+	-	-	-	-	-	+	-	+
Bases																
Ammonia, 1N	++	-	++	+	++	++	-	++	-	-	-	-	-	+	++	++
Ammonium hydroxide, 25%	+	+	++	+	++	+	-	+	-	-	-	-	-	+	+	+
Potassium hydroxide, 32%	++	-	++	-	+	+	-	++	-	-	-	-	-	-	+	++
Sodium hydroxide, 32%	++	-	++	-	+	+	-	+	-	-	-	-	-	-	+	+
Sodium hydroxide, 1N	++	-	++	+	++	+	-	++	-	-	-	-	-	+	++	++
Aqueous solutions																
Formalin, 30%	+	++	++	+	++	++	+	+	+	+	+	+	+	+	+	+
Sodium hypochlorite, 5%	++	-	++	-	-	++	+	+	+	-	-	+	+	-	-	+
Hydrogen peroxide, 35%	++	-	++	-	-	++	+	++	+	-	-	+	+	-	-	++
pH range																
pH 1-14	-	-	++	-	-	++	-	++								
pH 1-13	++	-	++	-	-	++	-	++								
pH 3-14	+	-	++	+	++	++	-	++								
pH 3-12	++	-	++	++	++	++	+	++								
pH 4-8	++	++	++	++	++	++	++	++								

Legend

Compatible

++

Limited compatibility

+

Not compatible

-

not analyzed

n.a.

¹⁾ gamma irradiation feasible for Minisart® Air

Contact time: 24 hours at 20 °C. Chemical compatibilities can be influenced by various factors. Therefore, we recommend that you confirm compatibility with the liquid you want to filter by performing a trial filtration run before you start your actual filtration.

Minisart® Syringe Filters – Sample Preparation

Reliable Removal of Particles and Microorganisms from Liquids to Protect Your Analytical Instruments

Elimination of particles from your samples prior to HPLC or other chromatographic analysis is essential in order to maintain the integrity of your chromatography column and to maximize its operating life. Minisart® syringe filters for sample preparation consist of a PP housing and membrane components featuring maximum chemical compatibility and minimum extractables to ensure excellent results.



Features & Benefits

Low adsorption.

Lowest non-specific binding for minimal analyte loss.

Maximum chemical compatibility.

Minisart® are suitable for sample preparation across multiple application areas.

Minimum extractables or leachables.

Low background noise and pure analytical results.

Superior flow rate.

Fast and easy sample preparation.

In-production integrity leakage test

Highest quality Minisart® syringe filters for reliable results.

Applications

- Sample preparation prior to analytical methods
- Filtration of organic solvents, running buffers, and harsh chemical solutions
- Sterile filtration of gases and air with Minisart SRP



* Sterile Minisarts are individually packaged. If not stated otherwise, Minisarts have been sterilized by ethylene oxide. The following Minisarts are NOT presterilized unless specifically noted. RC, PTFE and Nylon can be sterilized by autoclaving at 121°C for 30 min/or by using ethylene oxide (EO).

Specifications & Pricing

Minisart® RC (Regenerated Cellulose)

Model	Ø mm	Membrane	Housing	Pore Size	Connector Outlet	Color/Printing	Sterile*	Qty/Pk	US List Price (\$)
17764-----ACK	25 mm	RC	PP	0.2 µm	Male Luer Slip	White, Printed	Yes	50	135
17764-----K	25 mm	RC	PP	0.2 µm	Male Luer Slip	White, Printed	No	50	120
17764-----S	25 mm	RC	PP	0.2 µm	Male Luer Slip	White, Printed	No	200	385
17764-----Q	25 mm	RC	PP	0.2 µm	Male Luer Slip	White, Printed	No	500	830
17765-----K	25 mm	RC	PP	0.45 µm	Male Luer Slip	White, Printed	No	50	120
17765-----S	25 mm	RC	PP	0.45 µm	Male Luer Slip	White, Printed	No	200	385
17765-----Q	25 mm	RC	PP	0.45 µm	Male Luer Slip	White, Printed	No	500	830
17761-----ACK	15 mm	RC	PP	0.2 µm	Male Luer Slip	White, Printed	Yes	50	120
17761-----K	15 mm	RC	PP	0.2 µm	Male Luer Slip	White, Printed	No	50	110
17761-----Q	15 mm	RC	PP	0.2 µm	Male Luer Slip	White, Printed	No	500	790
17762-----K	15 mm	RC	PP	0.45 µm	Male Luer Slip	White, Printed	No	50	110
17762-----Q	15 mm	RC	PP	0.45 µm	Male Luer Slip	White, Printed	No	500	790
17821-----K	4 mm	RC	PP	0.2 µm	Male Luer Slip	Blue Tray	No	50	77
17821-----Q	4 mm	RC	PP	0.2 µm	Male Luer Slip	Blue Tray	No	500	670
17822-----K	4 mm	RC	pp	0.45 µm	Male Luer Slip	Yellow Tray	No	50	77
17822-----Q	4 mm	RC	PP	0.45 µm	Male Luer Slip	Yellow Tray	No	500	670

Minisart® SRP (Hydrophobic PTFE)

17575-----ACK	25 mm	PTFE	PP	0.2 µm	Male Luer Slip	White, Printed	Yes	50	169
17575-----K	25 mm	PTFE	PP	0.2 µm	Male Luer Slip	White, Printed	No	50	152
17575-----S	25 mm	PTFE	PP	0.2 µm	Male Luer Slip	White, Printed	No	200	505
17575-----Q	25 mm	PTFE	PP	0.2 µm	Male Luer Slip	White, Printed	No	500	915
17576-----K	25 mm	PTFE	PP	0.45 µm	Male Luer Slip	White, Printed	No	50	152
17576-----S	25 mm	PTFE	PP	0.45 µm	Male Luer Slip	White, Printed	No	200	505
17576-----Q	25 mm	PTFE	PP	0.45 µm	Male Luer Slip	White, Printed	No	500	915
17558-----K	15 mm	PTFE	PP	0.2 µm	Male Spike	White, Printed	No	50	141
17558-----Q	15 mm	PTFE	PP	0.2 µm	Male Spike	White, Printed	No	500	800
17573-----ACK	15 mm	PTFE	PP	0.2 µm	Male Luer Slip	White, Printed	Yes	50	146
17573-----K	15 mm	PTFE	PP	0.2 µm	Male Luer Slip	White, Printed	No	50	135
17573-----Q	15 mm	PTFE	PP	0.2 µm	Male Luer Slip	White, Printed	No	500	795
17559-----K	15 mm	PTFE	PP	0.45 µm	Male Spike	White, Printed	No	50	141
17559-----Q	15 mm	PTFE	PP	0.45 µm	Male Spike	White, Printed	No	500	800
17574-----K	15 mm	PTFE	PP	0.45 µm	Male Luer Slip	White, Printed	No	50	135
17574-----Q	15 mm	PTFE	PP	0.45 µm	Male Luer Slip	White, Printed	No	500	795
17844-----Q	4 mm	PTFE	PP	0.2 µm	Male Luer Slip	Blue Tray	No	500	670
17820-----K	4 mm	PTFE	PP	0.45 µm	Male Luer Slip	Yellow Tray	No	50	77
17820-----Q	4 mm	PTFE	PP	0.45 µm	Male Luer Slip	Yellow Tray	No	500	670

Minisart® NY (Nylon) & NY25 Plus (Glass Fiber 1.2 µm + Nylon)

17845-----ACK	25 mm	Nylon	PP	0.2 µm	Male Luer Slip	White, Printed	Yes	50	135
17845-----Q	25 mm	Nylon	PP	0.2 µm	Male Luer Slip	White, Printed	No	500	830
17846-----ACK	25 mm	Nylon	PP	0.45 µm	Male Luer Slip	White, Printed	Yes	50	135
17846-----Q	25 mm	Nylon	PP	0.45 µm	Male Luer Slip	White, Printed	No	500	830
1776B-----K	15 mm	Nylon	PP	0.2 µm	Male Luer Slip	White, Printed	No	50	110
1776B-----Q	15 mm	Nylon	PP	0.2 µm	Male Luer Slip	White, Printed	No	500	790
1776C-----K	15 mm	Nylon	PP	0.45 µm	Male Luer Slip	White, Printed	No	50	110
1776C-----Q	15 mm	Nylon	PP	0.45 µm	Male Luer Slip	White, Printed	No	500	790
1784B-----K	25 mm	Nylon+GF	PP	0.2 µm	Male Luer Slip	White, Printed	No	50	169
1784B-----Q	25 mm	Nylon+GF	PP	0.2 µm	Male Luer Slip	White, printed	No	500	1,190
1784C-----K	25 mm	Nylon+GF	PP	0.45 µm	Male Luer Slip	White, printed	No	50	169
1784C-----Q	25 mm	Nylon+GF	PP	0.45 µm	Male Luer Slip	White, printed	No	500	1,190

Minisart® Syringe Filters – Aqueous Liquids

Make Your Choice from a Broad Range of Pore Sizes, Materials and Formats

For clarification and sterilization of liquids, filtration is the optimal method. It removes all microorganisms and particles reliably, without any effects on the ingredients, due to adsorption or decomposition. Minisart® filters, made of MBS housing, provide high flow rates and the lowest adsorption characteristics. The MBS housing is color-coded for an easy pore size identification.



Features & Benefits

Low adsorption

Lowest non-specific binding for minimal loss of dissolved reagents, biomolecules and drugs.

Minimum leachables and particulates

Pure filtrates.

Superior flow rates

Fast and easy filtration of liquids.

High total throughput

Optimal filtration volume.

In-production integrity leakage test

Ensures highest quality Minisart® syringe filters for reliable results.

Applications

- Clarification of aqueous solutions prior to downstream applications
- Sterile filtration of aqueous liquids, protein solutions, buffers, etc.
- Sterile filtration of cell culture buffers and additives



Specifications & Pricing

Minisart® High Flow (PES – Polyethersulfone)

Model	Ø mm	Membrane	Housing	Pore Size	Connector Outlet	Color/Printing	Sterile*	Qty/Pk	US List Price (\$)
16553-----K	28 mm	PES	MBS	0.1 µm	Male Luer Lock	Dark Red	Yes	50	141
16532-----GUK	28 mm	PES	MBS	0.2 µm	Male Luer Lock	Royal Blue	Yes#	50	141
16532-----K	28 mm	PES	MBS	0.2 µm	Male Luer Lock	Royal Blue	Yes	50	141
16541-----K	28 mm	PES	MBS	0.2 µm	Male Luer Slip	Royal Blue	Yes	50	141
16532-----Q	28 mm	PES	MBS	0.2 µm	Male Luer Lock	Royal Blue	No	500	785
16541-----Q	28 mm	PES	MBS	0.2 µm	Male Luer Slip	Royal Blue	No	500	785
16537-----K	28 mm	PES	MBS	0.45 µm	Male Luer Lock	Amber	Yes	50	141
16537-----Q	28 mm	PES	MBS	0.45 µm	Male Luer Lock	Amber	No	500	785
16533-----GUK	28 mm	PES	MBS	0.45 µm	Male Luer Slip	Amber	Yes#	50	141
16533-----K	28 mm	PES	MBS	0.45 µm	Male Luer Slip	Amber	Yes	50	141
16533-----Q	28 mm	PES	MBS	0.45 µm	Male Luer Slip	Amber	No	500	785

Minisart® NML (SFCA – Surfactant-free Cellulose Acetate)

16534-----K	28 mm	SFCA	MBS	0.2 µm	Male Luer Lock	Blue	Yes	50	141
16534-----GUK	28 mm	SFCA	MBS	0.2 µm	Male Luer Lock	Blue	Yes#	50	141
16534-----Q	28 mm	SFCA	MBS	0.2 µm	Male Luer Lock	Blue	No	500	815
17597-----K	28 mm	SFCA	MBS	0.2 µm	Male Luer Slip	Blue	Yes	50	141
17597-----Q	28 mm	SFCA	MBS	0.2 µm	Male Luer Slip	Blue	No	500	815
16555-----K	28 mm	SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	Yes	50	141
16555-----GUK	28 mm	SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	Yes#	50	141
16555-----Q	28 mm	SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	No	500	815
17598-----K	28 mm	SFCA	MBS	0.45 µm	Male Luer Slip	Yellow	Yes	50	141
17598-----Q	28 mm	SFCA	MBS	0.45 µm	Male Luer Slip	Yellow	No	500	815
16569-----K	28 mm	SFCA	MBS	0.65 µm	Male Luer Slip	Pink	Yes	50	131
16592-----K	28 mm	SFCA	MBS	0.8 µm	Male Luer Lock	Green	Yes	50	131
16592-----GUK	28 mm	SFCA	MBS	0.8 µm	Male Luer Lock	Green	Yes#	50	131
16592-----Q	28 mm	SFCA	MBS	0.8 µm	Male Luer Lock	Green	No	500	790
17593-----K	28 mm	SFCA	MBS	1.2 µm	Male Luer Lock	Red	Yes	50	131
17593-----Q	28 mm	SFCA	MBS	1.2 µm	Male Luer Lock	Red	No	500	790
17594-----K	28 mm	SFCA	MBS	5 µm	Male Luer Lock	Brown	Yes	50	141
17594-----Q	28 mm	SFCA	MBS	5 µm	Male Luer Lock	Brown	No	500	815

Minisart® NML Plus (Glass Fiber 1.2 µm + SFCA)

17823-----K	28 mm	GF+SFCA	MBS	0.2 µm	Male Luer Lock	Blue	Yes	50	158
17823-----Q	28 mm	GF+SFCA	MBS	0.2 µm	Male Luer Lock	Blue	No	500	930
17829-----K	28 mm	GF+SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	Yes	50	158
17829-----Q	28 mm	GF+SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	No	500	930
17825-----Q	28 mm	GF+SFCA	MBS	1.2 µm	Male Luer Lock	Red	No	500	930
17824-----K	28 mm	GF	MBS	0.7 µm	Male Luer Lock	White	No	50	87
17824-----Q	28 mm	GF	MBS	0.7 µm	Male Luer Lock	White	No	500	685

* Sterilized Minisarts are individually packaged. If not stated otherwise, Minisarts are sterilized by ethylene oxide.

#-Mark indicates sterilization by gamma irradiation.

Minisarts on this page are supplied individually wrapped and sterile, except in packs of 500 (Q). PES, SFCA, GF+SFCA and GF can be sterilized by ethylene oxide or gamma irradiation.

Minisart® Syringe Filters – Venting & Special Applications

Make Your Choice from a Broad Range of Pore Sizes, Materials and Formats

Minisart® syringe filters are available in a broad range of pore sizes. They are ideal for clarification of liquids laden with particles, e.g. for preparation of pharmaceuticals or infusion solutions. Syringe filters are ideal for sterilization and removal of particles from air and other gases as well as the sterile venting of containers, bioreactors, fermenters and tubing systems. Minisart® syringe filters are available in a wide choice of membranes, connectors and housing materials.



Features & Benefits

In-production integrity leakage test

Highest quality Minisart® syringe filters for reliable results.

Low adsorption

Lowest non-specific binding for minimal loss of biomolecules and drugs.

Superior flow rates

Fast and easy filtration of liquids or optimal sterile venting of containers.

Minimum leachables and particulates

Purify filtered solutions or gases without contamination.

Various connectors

Many choices of connector inlets and outlets for optimal usage or assembling to tubing systems.

Applications

- Particulate removal from liquids and gasses
- Sterile filtration of biomolecules and drug solutions
- Sterile venting of bags, fermenters and bioreactors
- Moisture barriers for electronic and other devices



Specifications & Pricing

Minisart® NML (SFCA – Cellulose Acetate) Aqueous Filtration

Model	Ø mm	Membrane	Housing	Pore Size	Connector Outlet	Color/Printing	Sterile*	Qty/Pk	US List Price (\$)
16534-----K	28 mm	SFCA	MBS	0.2 µm	Male Luer Lock	Blue	Yes	50	141
16534-----GUK	28 mm	SFCA	MBS	0.2 µm	Male Luer Lock	Blue	Yes#	50	141
16534-----Q	28 mm	SFCA	MBS	0.2 µm	Male Luer Lock	Blue	No	500	815
17597-----K	28 mm	SFCA	MBS	0.2 µm	Male Luer Slip	Blue	Yes	50	141
17597-----Q	28 mm	SFCA	MBS	0.2 µm	Male Luer Slip	Blue	No	500	815
16555-----K	28 mm	SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	Yes	50	141
16555-----GUK	28 mm	SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	Yes#	50	141
16555-----Q	28 mm	SFCA	MBS	0.45 µm	Male Luer Lock	Yellow	No	500	815
17598-----K	28 mm	SFCA	MBS	0.45 µm	Male Luer Slip	Yellow	Yes	50	141
17598-----Q	28mm	SFCA	MBS	0.45	Male Luer Slip	Yellow	No	500	815
17594-----K	28 mm	SFCA	MBS	5 µm	Male Luer Lock	Brown	Yes	50	141

Minisart® Ophthalsart (SFCA – Cellulose Acetate) Aqueous Filtration

17528-----K	28 mm	Ophthalsart	MBS	0.2 µm	Male Luer Slip	Pink	Yes	50	141
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Minisart® High Flow (PES – Polyethersulfon) Aqueous Filtration

16553-----K	28 mm	PES	MBS	0.1 µm	Male Luer Lock	Dark Red	Yes	50	141
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Minisart® (PES – Polyethersulfon) Aqueous Filtration

1776D-----ACK	15 mm	PES	PP	0.2 µm	Male Luer Slip	White	Yes	50	146
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Minisart® Air (hydrophobic PTFE) Venting & Gas Filtration

1751A-----Q	15 mm	PTFE	MBS	0.2 µm	Male Luer Slip	Yellow	No	500	815
16596-----HNK	15 mm	PTFE	MBS	0.2 µm	Male Luer Slip + Needle	Yellow	Yes#	50	230

Minisart® HY (hydrophobic PTFE) CE-marked Venting & Gas Filtration

16596-----HYK	26 mm	PTFE	MBS	0.2 µm	Male Luer Lock	Clear	Yes	50	141
16596-----HYQ	26 mm	PTFE	MBS	0.2 µm	Male Luer Lock	Clear	No	500	815
16599-----HYQ	26 mm	PTFE	MBS	0.2 µm	Male Luer Lock ^a	Clear	No	500	815
40078-----Q	26 mm	PTFE	MBS	0.2 µm	Hose Barbs ^b	Clear	No	500	815
1659A-----HYQ	26 mm	PTFE	MBS	1 µm	Male Luer Lock	Clear	No	500	815
1659B-----HYQ	26 mm	PTFE	MBS	1 µm	Hose Barbs ^b	Clear	No	500	815

Minisart® Acticosart with Dome Reservoir + hydrophobic PTFE Venting & Ultracleaning of Gases

17840-----Q	26 mm	active carbon reservoir +PTFE	MBS	0.45 µm	Male Luer Slip ^a	Blue	No	500	2,090
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Minisart® SRP (hydrophobic PTFE) CE-marked Venting, Gas Filtration & Filtration of Solvents

17575-----ACK	25 mm	PTFE	PP	0.2 µm	Male Luer Slip	White	Yes	50	169
1757A-----Q	26 mm	PTFE	PP	0.2 µm	Hose Barb	White	No	500	1,075

* Sterilized Minisarts are individually packaged. If not stated otherwise, Minisarts are sterilized by ethylene oxide.

#-mark indicates sterilization by gamma irradiation

Minisarts NOT presterilized: SFCA can be sterilized by ethylene oxide or gamma irradiation. PTFE can be sterilized by ethylene oxide.

^a Connector inlet: Male Luer slip (all other Minisarts have female luer lock inlets)

^b Hose barbs, inlet and outlet, 5 mm diameter

Sartolab® Filter Units

Sterile Filtration of Sample Volumes Up to 5 Liter

Sartolab® filters are ready-to-use filtration units for sterile filtration of tissue culture media and components, biological fluids, and other aqueous solutions. The large filtration area and the optimal design guarantees high flow rates with high total throughput. Sartolab® P20 disposable filters are designed for pressure filtration of volumes from 100 ml to 5 l. Sartolab® RF/BT or 150V filter systems are designed for the vacuum filtration of volumes from 100 ml to 15 l.



Features & Benefits

Lowest adsorption with Sartolab® P20 SFCA
For lowest non-specific binding and minimal loss of dissolved reagents, biomolecules and drugs

Highest flow rates with Sartolab® P20 PES
For fastest processing of solutions

High total throughput
For optimal filtration volumes

Applications

- Sterile filtration of media and aqueous solutions
- Filtration of sera and difficult-to-filter solutions with Sartolab® P20 Plus with incorporated prefilter

Pricing & Specifications

Model	Pore Size	Membrane	Housing	Inlet	Outlet	Sterile	Qty/Pk	US List Price (\$)
Sartolab® P20								
18052-----D	0.2µm	SFCA	PC	Hose Nipple	Hose Nipple	Yes	10	96
18053-----D	0.2µm	SFCA	PC	Luer Lock	Hose Nipple	Yes	10	96
18075-----D	0.2µm	PES	PC	Luer Lock	Hose Nipple	Yes	10	100
Sartolab® P20 Plus								
18056-----D	0.2µm	SFCA + GF	PC	Hose Nipple	Hose Nipple	Yes	10	135
18058-----D	0.2µm	SFCA + GF	PC	Luer Lock	Hose Nipple	Yes	10	135
18068-----D	0.2µm	PES + GF	PC	Luer Lock	Hose Nipple	Yes	10	135

SFCA - Cellulose Acetate, PES - Polyethersulfone, GF - Glass Fiber Prefilter, PC - Polycarbonate



Sartolab® RF/BT & Sartolab® 150V

Vacuum Filter Systems and Bottle Top Filters

Features

- Sartolab® RF and BT units with optimized support grid
For maximum flow rate, reduced foaming and protein denaturation
- Sartolab® RF and BT units with enlarged, square filtration area
For higher total throughput and optimized preparation time
- Sartolab® 150V capsule with 150 cm² pleated PES membrane surface
For highest filtration volumes up to 15 l

Applications

- Vacuum filtration of tissue culture media and components, biological fluids, and other aqueous solutions
- Sartolab® RF including receiver flasks – a complete systems including containers for storage down to -20°C
- Sartolab® BT bottle top filters – gasket design ensures a vacuum-tight seal with a choice of receiver bottles
- Sartolab® 150V capsules – compatible with various receiver flask bottle neck diameters for collection of high filtrate volumes

Pricing & Specifications

Model	Volume	Filter Area	Membrane	Qty/Pk	US list Price (\$)
Sartolab® RF Filtration System Including Collection Bottle					
180C1-----E	150 ml	18 cm ²	0.2 µm PES	12	88
180C7-----E	250 ml	24 cm ²	0.2 µm PES	12	99
180C2-----E	500 ml	39 cm ²	0.2 µm PES	12	163
180C3-----E	1,000 ml	62 cm ²	0.2 µm PES	12	235
180A1-----E	250 ml	24 cm ²	0.45 µm CA	12	130
180A2-----E	500 ml	39 cm ²	0.45 µm CA	12	215
180A3-----E	1,000 ml	62 cm ²	0.45 µm CA	12	315
180C8-----E	1,000 ml	62 cm ²	0.1 µm PES	12	245
Sartolab® 150V Filtration Capsule					
18080-----M	n/a	150 cm ²	0.22 µm PES	3	110
Sartolab® BT Bottle Top Filters Without Integrated Collection Bottle					
180C4-----K	150 ml	18 cm ²	0.2 µm PES	48	275
180C5-----E	500 ml	39 cm ²	0.2 µm PES	12	104
180C6-----E	1,000 ml	62 cm ²	0.2 µm PES	12	158
180A4-----E	500 ml	39 cm ²	0.45 µm CA	12	135



Sartoclear Dynamics® Lab V-Series

For Direct Harvest of Mammalian Cell Cultures up to 1L

The Sartoclear Dynamics® Lab V Kits combine the use of a filter aid for clarification and a vacuum filtration unit with a 0.22 µm polyethersulfone membrane for sterile filtration of up to 1 L of mammalian cell cultures. The filter aid is provided in pouches ready-to-use, dust-free and gamma irradiated. The accompanying pre-sterilized, Sartolab® RF bottle-top filters with receiving flasks are available in capacities ranging from 150 mL to 1,000 mL.

Features

- Pre-wetted, pharmaceutical-grade filtration aid
- Pre-sterilized vacuum filtration unit
- Body feed filtration process
- Disposable, single-use system
- Available in volumes ranging from 150 mL to 1,000 mL

Applications

- Direct harvest of mammalian cell cultures

Benefits

Reduces preparation time

The pre-packaged, dust-free filtration aid and pre-sterilized filtration unit come ready to use.

Faster harvesting

The porous structure of the pharmaceutical grade filtration aid acts as a spacer between solids that build up on the membrane to avoid clogging and increase throughput.

Easy, single-step processing

The simple body feed filtration process provides a product that is free of cell debris and sterile.

Eliminates the need for centrifugation

Samples are processed quickly using a small vacuum pump without the need for time-consuming centrifugation.

Avoids the need for cleaning between samples

The disposable filter and membrane are designed for single use, eliminating the need for cleaning between samples.

Pricing & Specifications

Model	Description	Qty/Pk	US List Price (\$)
Sartolab® P20			
SDLV-1000-40C--E	Sartoclear Dynamics Lab V, 1000 ml, 40 g	12	485
SDLV-1000-20C--E	Sartoclear Dynamics Lab V, 1000 ml, 20 g	12	450
SDLV-1000-10C--2	Sartoclear Dynamics Lab V, 1000 ml, 10 g	24	830
SDLV-0500-20C--E	Sartoclear Dynamics Lab V, 500 ml, 20 g	12	330
SDLV-0500-10C--2	Sartoclear Dynamics Lab V, 500 ml, 10 g	24	580
SDLV-0500-05C--2	Sartoclear Dynamics Lab V, 500 ml, 5 g	24	525
SDLV-0250-10C--2	Sartoclear Dynamics Lab V, 250 ml, 10 g	24	470
SDLV-0250-05C--2	Sartoclear Dynamics Lab V, 250 ml, 5 g	24	415
SDLV-0150-05C--2	Sartoclear Dynamics Lab V, 150 ml, 5 g	24	385
SDLV-0150-02C--E	Sartoclear Dynamics Lab V, 150 ml, 2 g	12	179



Sartoclear Dynamics® Lab P15

For Clarification and Sterile Filtration of Mammalian Cell Culture in a Single Step

Ready-to-use Sartoclear Dynamics® Lab P15 takes the pain out of protein harvesting by enabling clarification and sterile filtration of 15 mL cell culture stock in one simple step. The Sartoclear Dynamics Lab P15 kit combines a syringe pre-filled with a pharmaceutical grade filtration aid for clarification and an integrated 0.2µm polyethersulfone filter for sterile filtration.



Features

- Ready-to-use
- Pharmaceutical grade filtration aid
- Single step methodology
- Disposable
- 15 ml sample capacity

Applications

- Cell culture harvesting

Benefits

- Reduces preparation time**
The pre-packed syringe comes ready to use.
- Faster cell culture harvesting**
The porous structure of the filtration aid acts as a spacer between solids that build up on the membrane to avoid clogging and increase throughput.
- Easy, single-step processing**
A simple push of the plunger provides a product that is both free of cell debris and sterile.
- Eliminates the need for additional equipment**
Samples are processed without the need for a power supply or additional equipment.
- Avoids the need for cleaning between samples**
The product is designed for one time use, eliminating the need for cleaning between samples.

Pricing & Specifications

Model	Description	US List Price (\$)
SDLP--0015-----C	6 x 20 mL syringes, pre-filled with 0.5 g DE, including caps and filling tubes, 6 x sterile filters	139



Ultrafiltration Membrane Discs

For Flexible Sample Concentration

Ultrafiltration membrane discs for sample concentration are available in three materials: Polyethersulfone (PES) with high flux provides no hydrophobic or hydrophilic interactions and low fouling characteristics, cellulose triacetate (CTA) for high hydrophilicity and high ultrafiltrate recovery and Hydrosart® modified regenerated cellulose for extremely low protein binding and extended chemical resistance. Our ultrafiltration membrane discs are available in various MWCOs and diameters.



Specifications & Pricing

Model	Molecular Weight Cut-Off (MWCO) in daltons	Diameter (mm)	Qty. PK	US List Price (\$)
Polyethersulfone				
14609--47-----D	1,000	47	10	106
14609--63-----D	1,000	63	10	128
14609--76-----D	1,000	76	10	210
14629--25-----D	5,000	25	10	79
14629--47-----D	5,000	47	10	109
14629--63-----D	5,000	63	10	151
14629--76-----D	5,000	76	10	255
14639--25-----D	10,000	25	10	79
14639--63-----D	10,000	63	10	151
14639--76-----D	10,000	76	10	255
14639-150-----D	10,000	150	10	470
14659--25-----D	30,000	25	10	68
14659--63-----D	30,000	63	10	151
14659--76-----D	30,000	76	10	255
14650--25-----D	50,000	25	10	68
14650--47-----D	50,000	47	10	109
14650--76-----D	50,000	76	10	210
14679--25-----D	300,000	25	10	73
14679--47-----D	300,000	47	100	109
14679--76-----D	300,000	76	10	210
Hydrosart				
14429--25-----D	5,000	25	10	98
14429--44-----D	5,000	44	10	129
14429--63-----D	5,000	63	10	188
14429--76-----D	5,000	76	10	310
14439--25-----D	10,000	25	10	98
14439--47-----D	10,000	47	10	133
14439--63-----D	10,000	63	10	188
14439--76-----D	10,000	76	10	310
14459--25-----D	30,000	25	10	85
14459--47-----D	30,000	47	10	133
14459--63-----D	30,000	63	10	188
14459--76-----D	30,000	76	10	265

Model	Molecular Weight Cut-Off (MWCO) in daltons	Diameter (mm)	Qty. PK	US List Price (\$)
Cellulose Triacetate				
14529--25-----D	5,000	25	10	68
14529--47-----D	5,000	47	10	109
14539--25-----D	10,000	25	10	68
14439--47-----D	10,000	47	10	133
14539--50-----D	10,000	50	10	109
14549--25-----D	20,000	25	10	64
14549--43-----D	20,000	43	10	103
14549--63-----D	20,000	47	10	157

Hydrophobic PTFE

Membrane Filters

For filtration of air, gases or chemicals. These filters are made of PTFE (polytetrafluoroethylene) only and are therefore permanently hydrophobic. Unlike other (hydrophilic) filter types, they are not wetted by air humidity, allowing unhindered passage of air at low differential pressures. PTFE membrane filters have an excellent chemical compatibility (pH 1-14), and are therefore suitable for filtration of solvents and acids. Due to their hydrophobic characteristics, they must be pre-wetted with ethanol or methanol before the filtration of aqueous media.



Features

- Resistant to all known solvents (pH 1-14)
- Very low protein binding
- Hydrophobic
- Good thermal resistance up to 200 °C
- Available in pore sizes 0.2, 0.45, 1.2 & 5 µm

Applications

- Particle removal in solvents
- Sterile venting
- Filtration of air & gases (environment)

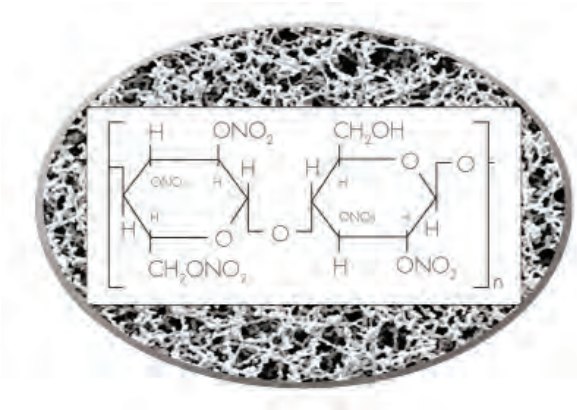
Specifications & Pricing

Model	Grade	Pore Size (µm)	Thickness (µm)	Bubble point (bar)	Isopropanol flow rate (ml/min/cm ² /bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
11807--13-----N	11807	0.2	65	1.0	11	13	100	235
11807--25-----N						25	100	285
11807--47-----N						47	100	425
11807--50-----N						50	100	405
11807--90-----G						90	25	425
11807-100-----G						100	25	425
11806--13-----N	11806	0.45	80	0.8	20	13	100	235
11806--25-----N						25	100	285
11806--37-----N						37	100	425
11806--47-----N						47	100	425
11806--50-----N						50	100	425
11806--90-----G						90	25	425
11806-100-----G						100	25	45
11803--13-----N	11803	1.2	100	0.45	80	13	100	285
11803--25-----N						25	100	330
11803--47-----N						47	100	425
11803--50-----N						50	100	425
11803--90-----G						90	25	330
11803-100-----G						100	25	425
11842--25-----N	11842	5	100	0.10	210	25	100	330
11842--42-----N						42	100	575
11842--47-----G						47	25	142
11842--47-----N						47	100	425
11842--50-----N						50	100	425
11842-100-----G						100	25	425

Cellulose Nitrate

Membrane Filters

Cellulose nitrate membrane filters are used for many general laboratory applications where a membrane with a high non-specific adsorption is suitable. They are hydrophilic, have high flow rates due to their symmetric structure and are compatible with aqueous solutions (pH 4-8), hydrocarbons and several other organic solvents. The cellulose nitrate membranes are available in different pore sizes from 0.2 µm to 8 µm.



Features

- High protein adsorption
- Hydrophilic
- High flow rates
- Compatible with aqueous solutions (pH 4-8), hydrocarbons and several other organic solvents
- Available in pore sizes from 0.2 µm to 8 µm

Applications

- General laboratory applications where a high non-specific adsorption is suitable
- Particle and cell retention in aqueous solutions & air

Specifications & Pricing

Model	Grade	Pore Size (µm)	Thickness (µm)	Bubble point (bar)	Water flow rate (ml/min/cm ² /bar)	Burst pressure (bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
11327--25-----N	11327	0.2	130	4.2	25	≥ 0.35	25	100	77
11306--13-----N	11306	0.45		2.4	70	≥ 0.3	13	100	99
11306--20-----N							20	100	105
11306--25-----N							25	100	111
11306--30-----N							30	100	135
11306--37-----N							37	100	155
11306--47-----N							47	100	130
11306--50-----N							50	100	130
11306--85-----N							85	100	510
11306--90-----G							90	25	130
11306--90-----N							90	100	495
11306-100-----G							100	25	185
11306-100-----N							100	100	540
11306-110-----N							110	100	570
11305--13-----N	11305	0.65	130	2	130	≥ 0.25	13	100	116
11305--25-----N							25	100	116
11305--47-----N							47	100	159

Specifications & Pricing

Model	Grade	Pore Size (µm)	Thickness (µm)	Bubble point (bar)	Water flow rate (ml/min/cm²/bar)	Burst pressure (bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
11305--50-----N							50	100	130
11305-100-----N							100	100	715
11304--13-----N	11604	0.8	130	1.4	200	≥ 0.2	13	100	84
11304--20-----N							20	100	135
11304--25-----N							25	100	111
11304--37-----N							37	100	135
11304--47-----N							47	100	158
11304--50-----N							50	100	158
11304--90-----G							90	25	220
11304-100-----G							100	25	158
11303--13-----N	11603	1.2	130	1	200	≥ 0.2	13	100	111
11303--25-----N							25	100	99
11303--47-----N							47	100	180
11303--50-----N							50	100	154
11303--90-----G							90	25	225
11303-100-----G							100	25	155
11302--13-----N	11602	3	130	0.5	430	≥ 0.2	13	100	84
11302--25-----N							25	100	111
11302--47-----N							47	100	141
11302--50-----N							50	100	154
11302--90-----G							90	25	225
11302-100-----G							100	25	174
11342--13-----N	11642	5	130	0.5	570	≥ 0.15	13	100	111
11342--25-----N							25	100	141
11342--47-----N							47	100	185
11342--50-----N							50	100	195
11342--90-----G							90	25	245
11342-100-----G							90	25	245
11301--13-----N	11601	8	130	0.3	750	≥ 0.1	13	100	84
11301--25-----N							25	100	111
11301--37-----N							37	100	141
11301--47-----N							47	100	182
11301--50-----N							50	100	154
11301--70-----G							70	25	155
11301-100-----G							100	25	174
11301-100-----N							100	100	495

Cellulose Acetate

Membrane Filters

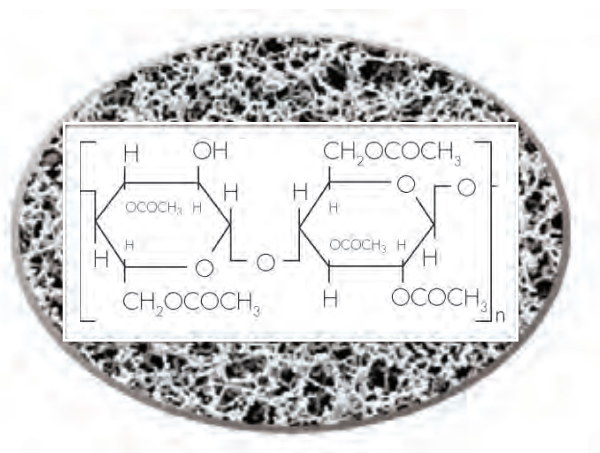
Cellulose acetate membranes combine high flow rates and thermal stability with very low adsorption characteristics, and are therefore excellently suited for use in pressure filtration devices. They are hydrophilic, have a symmetric structure and are compatible with aqueous solutions (pH 4-8), oils, alcohols and other organic solvents. The 0.2 μm membrane is the filter of choice for sterile filtration of aqueous solutions, such as nutrient media, buffers and sera.

Features

- Very low protein adsorption
- High flow rates
- Thermally stable
- Compatible with aqueous solutions (pH 4-8), oils, alcohols and other organic solvents
- Available in pore sizes from 0.2 μm to 5 μm

Applications

- Particle removal & retention
- Sterility testing
- Use in pressure filtration devices



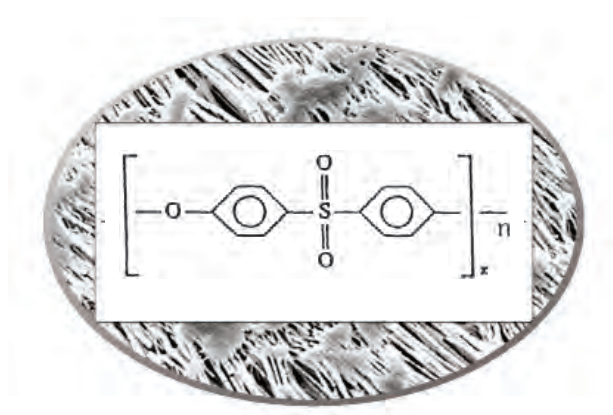
Specifications & Pricing

Model	Grade	Pore Size (µm)	Thickness (µm)	Bubble point (bar)	Water flow rate (ml/min/cm²/bar)	Burst pressure (bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
11107--13-----N	11507	0.2	120	2.9	24	0.8	13	100	72
11107--25-----N							25	100	84
11107--30-----N							30	100	114
11107--47-----N							47	100	111
11107--50-----N							50	100	111
11107--90-----G							90	25	130
11107-100-----G							100	25	185
11107-100-----N							100	100	585
11106--13-----N	11506	0.45	120	1.9	69	0.7	13	100	34
11106--25-----N							25	100	34
11106--30-----N							30	100	29
11106--37-----N							37	100	135
11106--47-----N							47	100	109
11106--50-----N							50	100	63
11106--85-----N							85	100	490
11106--90-----G							90	25	130
11106-100-----G							100	25	34
11106-100-----N							100	100	465
11106-110-----N							110	100	575
11105--25-----N	11505	0.65	120	1	200	0.7	25	100	72
11105--47-----N							47	100	72
11105--50-----N							50	100	72
11105--90-----G							90	25	172
11104--13-----N	11504	0.8	120	1	200	0.5	13	100	125
11104--25-----N							25	100	225
11104--47-----N							47	100	103
11104--50-----N							50	100	115
12303--25-----N	12303	1.2	140	0.8	320	0.4	25	100	375
12303--47-----N							47	100	375
12303--50-----N							50	100	265
12303-100-----G							100	25	375
12342--25-----N	12342	5	140	0.4	570	0.25	25	100	141
12342--47-----N							47	100	195

Polyethersulfone

Membrane Filters

Polyethersulfone (PES) membrane filters are hydrophilic, have high flow rates, symmetric structure, and a low non-specific protein adsorption. They are chemically resistant over a pH range of 1-14, and are therefore recommended for the filtration of aqueous solutions as well as for the filtration of proteins. A low level of extractables also makes them suitable for environmental analysis.



Features

- Low protein binding
- Low level of extractables
- Hydrophilic
- High flow rates
- High thermal resistance with max. 200°C
- High solvent resistance (pH 1-14)
- Available in pore sizes 0.1, 0.2 & 0.45 µm

Applications

- Filtration of aqueous solutions
- Filtration of cell culture media, buffers
- Environmental analyses

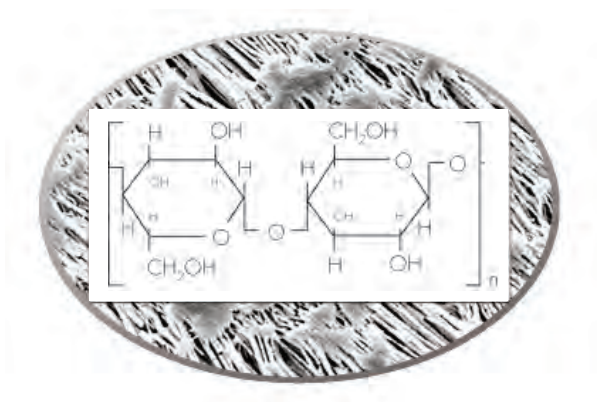
Specifications & Pricing

Model	Grade	Pore Size (µm)	Thickness (µm)	Bubble point (bar)	Water flow rate (ml/min/cm ² /bar)	Burst pressure (bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
15458--25-----N	15458	0.1	150	3.8	10	≥ 0.6	25	100	124
15458--47-----N							47	100	180
15458--50-----N							50	100	180
15407--25----MIN	15407	0.2	150	3.5	25	≥ 0.5	25	100	124
15407--47----MIN							47	100	180
15407--50----MIN							50	100	180
15406--25-----N	15406	0.45	150	2.6	46	≥ 0.5	25	100	186
15406--47-----N							47	100	180
15406--50-----N							50	100	171

Regenerated Cellulose

Membrane Filters

These very low adsorption membranes are hydrophilic, solvent-resistant (pH 3 – 12) and ideally suited for particle removal from solvents. The membrane is asymmetric and reinforced with nonwoven cellulose.



Features

- Very low non-specific adsorption
- Hydrophilic
- High thermal resistance with max. 200°C
- High solvent resistance (pH 3-12)
- Available in pore sizes 0.2 µm & 0.45 µm

Applications

- General purpose filtration
- Particle removal from solvents
- Degassing

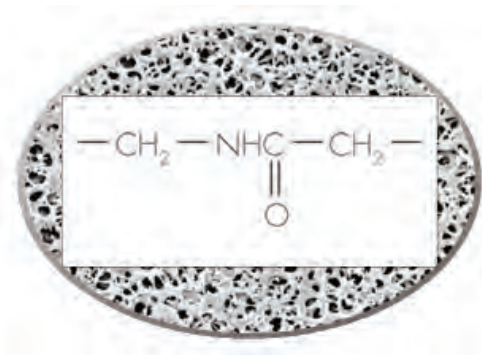
Specifications & Pricing

Model	Grade	Pore Size (µm)	Thickness (µm)	Bubble point (bar)	Water flow rate (ml/min/cm²/bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
18407--13-----N	18407	0.2	170	4.4	15	13	100	124
18407--25-----N						25	100	136
18407--47-----N						47	100	180
18407--50-----N						50	100	180
18407-100-----G						100	25	180
18406--13-----N	18406	0.45	170	2.9	30	100	100	124
18406--25-----N						100	100	136
18406--47-----N						100	100	180
18406--50-----N						100	100	310
18406-100-----G						100	25	136

Polyamide

Membrane Filters

Polyamide membrane filters are hydrophilic and chemically resistant to alkaline solutions and organic solvents. They are therefore recommended for the particle removal from aqueous solutions and solvents for analytical determination such as HPLC, for the sterile filtration of these liquids as well as for applications in which a membrane with a relatively high non-specific adsorption is suitable.



Features

- High protein adsorption
- Low level of extractables
- Hydrophilic
- Compatible with a broad range of solvents (pH 3-14)
- Available in pore sizes 0.2 µm & 0.45 µm

Applications

- Applications in which a non-specific adsorption is suitable
- Particle removal
- Filtration of alkaline solutions

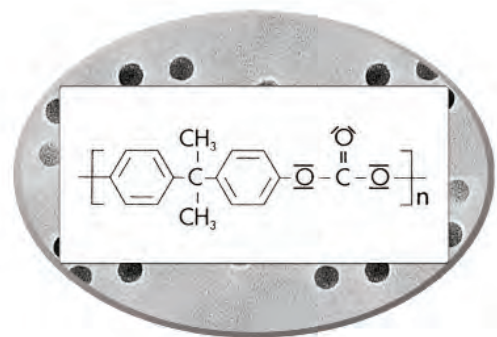
Specifications & Pricing

Model	Grade	Pore Size (µm)	Thickness (µm)	Bubble point (bar)	Water flow rate (ml/min/cm²/bar)	Burst pressure (bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
25007--13-----N	25007	0.2	115	3.2	15	≥ 0.25	13	100	68
25007--25-----N							25	100	152
25007--47-----N							47	100	136
25007--50-----N							50	100	132
25007--90-----G							90	25	124
25006--13-----N	25006	0.45	115	2.3	35	≥ 0.25	13	100	68
25006--25-----N							25	100	148
25006--47-----N							47	100	124
25006--50-----N							50	100	166
25006--90-----G							90	25	124

Polycarbonate Track-Etched

Membrane Filters

These white and hydrophilic polycarbonate membranes are manufactured from high grade polycarbonate film using track-etch technology. Their capillary pore structure is uniform and precise, with a narrow pore size distribution to retain particles on their surface. Track-etched membranes are an excellent choice for accurate fractionation of particulates because of their precise pore size. Track-etch technology offers the user distinct performance advantages with excellent surface capture and high sample visibility.



Features

- True pore size
- Low protein binding
- Low extractables
- Hydrophilic
- Available in defined pore sizes 0.2, 0.4 μm

Applications

- Particulate analyses
- Cytotology
- Epifluorescence Microscopy
- Environmental analyses

Specifications & Pricing

Model	Grade	Pore Size (μm)	Thickness (μm)	Bubble point (bar)	Water flow rate (ml/min/cm ² /0.7 bar)	Burst pressure (bar)	Diameter (mm)	Qty. per pack	US List Price (\$)
23007--25-----N	23007	0.2	25	4.8	≥ 10	≥ 0.7	25	100	127
23007--47-----N	23007	0.2	25	4.8	≥ 10	≥ 0.7	47	100	183
23007--50-----N	23007	0.2	25	4.8	≥ 10	≥ 0.7	50	100	183
23006--25-----N	23006	0.4	25	2.5	≥ 30	≥ 0.7	25	100	127
23006--47-----N	23006	0.4	25	2.5	≥ 30	≥ 0.7	47	100	183

Reusable Syringe Filter Holders

For the Ultracleaning of volumes up to 100 ml

These reusable syringe filter holders are available in PTFE, polycarbonate and stainless steel. With their Luer Lock connectors, they are easy to use with a standard syringe and can be autoclaved.



Features

- Easy connection with Luer connectors (Female Luer Lock inlet, luer slip outlet)
- Low hold-up volumes
- Autoclavable
- Reusable

Applications

- Particle removal from samples and reagents
- Filtration of aqueous liquids
- Clarification
- Sterile filtration

Specifications & Pricing

Model	Material	Filtration area (cm²)	Membrane filter dia. (mm)	Max. autoclaving temperature (°C)	Hold-up volume (ml)	Max. operating procedure	Qty/Pack	US List Price (\$)
16574	PTFE	0.5	13	134	0.3	5 bar/ 500 kPa/ 72.5 psi	1	350
16514-----E	Polycarbonate	0.5	13	121	0.2	7 bar/ 700 kPa/ 101.5 psi	12	102
16517-----E	Polycarbonate	3	25	121	0.3	7 bar/ 700 kPa/ 101.5 psi	12	107
16214	Stainless steel	3	25	134	0.1	7 bar/ 700 kPa/ 101.5 psi	1	265

Glass Vacuum Filter Holders

For Aqueous and Organic Solvent Filtration

These vacuum filter holders are produced from borosilicate glass with a choice of two support screens. The glass frit support ensures uniform distribution of retained particles and therefore recommended when residue on the filter surface is of interest. The PTFE-coated support is easy to clean and is therefore recommended when the filtrate is of interest or when working with liquids difficult to remove from glass frits.



Features

- Borosilicate glass material
- Chemically resistant to most aqueous and solvent solutions
- Sterilizable by autoclave (max. 134°C) or dry heat (max. 180°C)
- Vacuum filtration

Applications

- General laboratory filtration
- Sterility testing
- Microbial enumeration

Specifications & Pricing

Model	Membrane filter diameter (mm)	Filtration area (cm ²)	Funnel capacity (ml)	Capacity of the filtrate flask (l)	Filter support material	O-ring Material	Outlet spouts (mm)	Qty/Pack	US List Price (\$)
16306	24 or 25	3	30	n.a.	Glass	Silicone	12	1	193
16315	24 or 25	3	30	n.a.	PTFE-coated	Silicone	12	1	290
16307	47 or 50	12.5	250	n.a.	Glass	Silicone	15	1	335
16316	47 or 50	12.5	250	n.a.	PTFE-coated	Silicone	15	1	410
16309	47 or 50	12.5	250	1	Glass	Viton	15	1	645

Filter Holders for In-Line Filtration

For the filtration of liter volumes of aqueous solutions

These in-line holders are available in stainless steel and Polycarbonate. They can be connected to a pump or a pressure container due to their excellent pressure resistance.



Features

- Autoclavable
- Leak-proof sealing
- Hose nipple connectors

Applications

- In-Line filtration

Specifications & Pricing

Model	Material	Filtration area (cm ²)	Membrane filter dia. (mm)	Max. autoclaving temperature (°C)	Max. operating procedure	Connectors	Qty/Pack	US List Price (\$)
16508-----B	Polycarbonate	12.5	50	121	7 bar/ 700 kPa/ 101.5 psi	Hose nipples for 10 mm hose	5	270
16251	Stainless steel	3	25	134	5 bar/ 500 kPa/ 72.5 psi	Hose nipples for 10 mm hose	1	350
16254	Stainless steel	13	47	134	20 bar/ 2,000 kPa/ 290 psi	Hose nipples for 10 mm hose	1	665
16278	Stainless steel	13	47	134	20 bar/ 2,000 kPa/ 290 psi	Hose nipples for 4-5 mm hose	1	530

Pressure Filter Holders

For the filtration of aggressive liquids

These pressure filter holders are available either in PTFE or stainless steel. The PTFE holder is resistant to almost all chemicals and has a filtration capacity of 200 ml. The stainless steel version can be used for the filtration of small volumes when connected directly to a pressure source or for the filtration of up to 5 liter volumes when used in combination with a pressure tank. The stainless steel version is also available with a double jacket to keep the temperature of the filtered solution stable.



Features

- Chemically resistant to most aqueous and solvent solutions
- Sterilizable by autoclave (max. 134°C) or dry heat (max. 180°C)

Applications

- General laboratory filtration
- Sterility testing

Specifications & Pricing

Model	Description	Filtration area (cm ²)	Membrane filter dia. (mm)	Max. autoclaving temperature (°C)	Max. operating procedure	Connectors	Qty/Pack	US List Price (\$)
16579	PTFE pressure filter holder with 200 ml capacity	12.5	47	134	5 bar 500 kPa 72.5 psi	M 14 x 1.5 male thread	1	2,900
16249	Stainless steel pressure filter holder up to 200 ml capacity	13	47	134	10 bar 1,000 kPa 145 psi	M 12 x 1 female thread	1	1,120

MYCAP® Bottle Closures

One-for-All, Robust & Reliable Bottle Closure System

MYCAP™ is a one-piece, ready-to-use closure system for bottles. MYCAP™ features integral tubing and a robust platinum-cured silicone seal. MYCAP™ is available pre-installed to plastic containers and gamma irradiated or standalone for field installation and autoclave. MYCAP™ is easily configurable. Modify the number, size or material of tube ports. Design complex manifolds from a variety of components. MYCAP™ may be used in any application.



Features & Benefits

Ready-to-Use

Save time and eliminate waste from non value-added operations.

Single-Use

Every use is the first use. There is no contamination risk from improper or ineffective parts washing or cleaning.

One-For-All Silicone Closure

All MYCAP™ use a silicone closure regardless of the cap configuration, tube material or bottle. Perform material validation on MYCAP™ once and apply it all bottle closure systems.

Secure and Robust Closure

Silicone is proven as a robust container closure over a wide temperature range. MYCAP™ passes microbial ingress testing.

One-Piece Construction with Integral Tubing

The integral tubing eliminates connection points to eliminate the chance of leaks. MYCAP™ is easy-to-handle throughout its life cycle.

Easy Customization

Unique manufacturing process enables quick and efficient customization. Simply request design with more or different tube ports.

Applications

- Buffer and Media Storage
- Buffer and Media Addition
- Bioreactor Feeds
- Sample Collection
- Bulk Harvest
- Product Pooling
- Bulk Intermediate Hold
- Short or Long-Term Storage



MYCAP™ Bottle Closures – Specifications & Pricing

May be attached to glass bottles with GL45 threads. Tube dimensions have been optimized for Corning® Pyrex® Laboratory Bottles and Duran® Protect® Laboratory Bottles. Silicone Tubing, no QUICKSEAL®; Capped male Luer® on inlet; 0.2µm hydrophobic PES vent filter.

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
GL45 MYCAP™ Closure Systems. Not Irradiated			
MYCAP13950100A	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube; for 100mL Glass Bottle	5	79
MYCAP13950250A	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube; for 250mL Glass Bottle	5	79
MYCAP13950500A	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube; for 500mL Glass Bottle	5	80
MYCAP13951000A	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube; for 1000mL Glass Bottle	5	80
MYCAP13952000A	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube; for 2000mL Glass Bottle	5	81
Silicone Tubing with QUICKSEAL®; Capped male Luer® on inlet; 0.2µm hydrophobic PES vent filter. Not Irradiated			
MYCAP13950100C	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®; for 100mL Glass Bottle	5	86
MYCAP13950250C	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®; for 250mL Glass Bottle	5	86
MYCAP13950500C	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®; for 500mL Glass Bottle	5	87
MYCAP13951000C	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®; for 1000mL Glass Bottle	5	87
MYCAP13952000C	2-Port GL45 MYCAP™; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®; for 2000mL Glass Bottle	5	88
C-Flex® Tubing, no QUICKSEAL®; Tube plug on inlet; 0.2µm hydrophobic PES vent filter. Not Irradiated			
MYCAP13950100B	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube; for 100mL Glass Bottle	5	65
MYCAP13950250B	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube; for 250mL Glass Bottle	5	66
MYCAP13950500B	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube; for 500mL Glass Bottle	5	66
MYCAP13951000B	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube; for 1000mL Glass Bottle	5	67
MYCAP13952000B	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube; for 2000mL Glass Bottle	5	67
C-Flex® Tubing with QUICKSEAL®; Tube plug on inlet; 0.2µm hydrophobic PES vent filter. Not Irradiated			
MYCAP13950100D	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®; for 100mL Glass Bottle	5	69
MYCAP13950250D	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®; for 250mL Glass Bottle	5	69
MYCAP13950500D	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®; for 500mL Glass Bottle	5	69
MYCAP13951000D	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®; for 1000mL Glass Bottle	5	70
MYCAP13952000D	2-Port GL45 MYCAP™; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®; for 2000mL Glass Bottle	5	70



QUICKSEAL® Aseptic Disconnect™

C-Flex® is a registered trademark of St. Gobain Performance Plastics
Duran® is a registered trademark of Wheaton Industries
Pyrex® and Corning® is a registered trademark of Corning Incorporated

Nalgene® MYCAP® Bottle Closures – Specifications & Pricing

MYCAP® bottle assemblies on Nalgene® square media bottles are gamma irradiated and ready for immediate use. Each assembly is individually double bagged.

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
Silicone Tubing, no QUICKSEAL®; Capped male Luer® on inlet; 0.2µm hydrophobic PES vent. Gamma Irradiated			
MYCAPNGPG0030A	2-Port MYCAP™; 30mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	99
MYCAPNGPG0060A	2-Port MYCAP™; 60mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	94
MYCAPNGPG0125A	2-Port MYCAP™; 125mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	95
MYCAPNGPG0250A	2-Port MYCAP™; 250mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	106
MYCAPNGPG0500A	2-Port MYCAP™; 500mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	110
MYCAPNGPG1000A	2-Port MYCAP™; 1000mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	118
Silicone Tubing, no QUICKSEAL®; Capped male Luer® on inlet; 0.2µm hydrophobic PES vent. Gamma Irradiated			
MYCAPNGPG0030C	2-Port MYCAP™; 30mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	107
MYCAPNGPG0060C	2-Port MYCAP™; 60mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	101
MYCAPNGPG0125C	2-Port MYCAP™; 125mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	102
MYCAPNGPG0250C	2-Port MYCAP™; 250mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	113
MYCAPNGPG0500C	2-Port MYCAP™; 500mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	117
MYCAPNGPG1000C	2-Port MYCAP™; 1000mL PETG; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	125
C-Flex® Tubing, no QUICKSEAL®; Tube plug on inlet; 0.2µm hydrophobic PES vent filter. Gamma Irradiated			
MYCAPNGPG0030B	2-Port MYCAP™; 30mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube	5	87
MYCAPNGPG0060B	2-Port MYCAP™; 60mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube	5	81
MYCAPNGPG0125B	2-Port MYCAP™; 125mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube	5	81
MYCAPNGPG0250B	2-Port MYCAP™; 250mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube	5	92
MYCAPNGPG0500B	2-Port MYCAP™; 500mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube	5	95
MYCAPNGPG1000B	2-Port MYCAP™; 1000mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube	5	105
C-Flex® Tubing with QUICKSEAL®; Tube plug on inlet; 0.2µm hydrophobic PES vent filter. Gamma Irradiated			
MYCAPNGPG0030D	2-Port MYCAP™; 30mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®	5	90
MYCAPNGPG0060D	2-Port MYCAP™; 60mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®	5	85
MYCAPNGPG0125D	2-Port MYCAP™; 125mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®	5	85
MYCAPNGPG0250D	2-Port MYCAP™; 250mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®	5	95
MYCAPNGPG0500D	2-Port MYCAP™; 500mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®	5	98
MYCAPNGPG1000D	2-Port MYCAP™; 1000mL PETG; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®	5	108



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 Aseptiquik® is a registered trademark of Colder Products Corporation
 Nalgene® is a registered trademark of ThermoFisher Scientific

Falcon® Centrifuge Tube MYCAP® Bottle Assemblies – Specifications & Pricing

MYCAP® bottle assemblies on Falcon® centrifuge tubes are gamma irradiated and ready for immediate use. Each assembly is individually double bagged.

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
Silicone Tubing, no QUICKSEAL®; Capped male Luer® on inlet; 0.2µm hydrophobic PES vent filter. Gamma Irradiated			
MYCAPCPSG0015A	2-Port MYCAP™; 15mL Polystyrene Centrifuge Tube; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	95
MYCAPCPPG0050A	2-Port MYCAP™; 50mL PP Centrifuge Tube; 1/8in.x1/4in. Sil (Pt) w/dip tube	5	90
Silicone Tubing with QUICKSEAL®; Capped male Luer® on inlet; 0.2µm hydrophobic PES vent filter. Gamma Irradiated			
MYCAPCPSG0015C	2-Port MYCAP™; 15mL Polystyrene Centrifuge Tube; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	102
MYCAPCPPG0050C	2-Port MYCAP™; 50mL PP Centrifuge Tube; 1/8in.x1/4in. Sil (Pt) w/dip tube & QUICKSEAL®	5	97
C-Flex® Tubing, no QUICKSEAL®; Tube plug on inlet; 0.2µm hydrophobic PES vent filter. Gamma Irradiated			
MYCAPCPSG0015B	2-Port MYCAP™; 15mL Polystyrene Centrifuge Tube; 1/8in.x1/4in. C-Flex® w/dip tube	5	81
MYCAPCPPG0050B	2-Port MYCAP™; 50mL PP Centrifuge Tube; 1/8in.x1/4in. C-Flex® w/dip tube	5	76
C-Flex® Tubing with QUICKSEAL®; Tube plug on inlet; 0.2µm hydrophobic PES vent filter. Gamma Irradiated			
MYCAPCPSG0015D	2-Port MYCAP™; 15mL Polystyrene Centrifuge Tube; 1/8in.x1/4in. C-Flex® w/dip tube & QUICKSEAL®	5	84
MYCAPCPPG0050D	2-Port MYCAP™; 50mL PP Centrifuge Tube; 1/8in.x1/4in C-Flex® w/dip tube & QUICKSEAL®	5	79

MYCAP® for Media

MYCAP® for Media assemblies include Nalgene® square media bottles, are gamma irradiated and ready for immediate use. Includes a Sartopore® 2 Filter (0.2µm) at the inlet for sterile filtration of media directly into the bottle. Disconnect filled bottles using QUICKSEAL® aseptic disconnect to take filtered media directly to point-of-use in easy-to-handle single bottles. Each assembly is individually double bagged.

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
Single Bottles with 3-port MYCAP® Closure; Sartopore® 2 at inlet (stepped barb 1/4"-1/2"), 1/8"x1/4". Gamma Irradiated			
MCMD1000010204A	3 Port MYCAP™; 1000mL PETG Bottle; silicone with Aseptiquik® S at outlet	5	275
MCMD0500010204A	3 Port MYCAP™; 500mL PETG Bottle; silicone with Aseptiquik® S at outlet	5	235
MCMD0250010204A	3 Port MYCAP™; 250mL PETG Bottle; silicone with Aseptiquik® S at outlet	5	219
MCMD1000010204W	3 Port MYCAP™; 1000mL PETG Bottle; C-Flex® at outlet	5	250
MCMD0500010204W	3 Port MYCAP™; 500mL PETG Bottle; C-Flex® at outlet	5	210
MCMD0250010204W	3 Port MYCAP™; 250mL PETG Bottle; C-Flex® at outlet	5	196
MCMD1000010204B	3 Port MYCAP™; 1000mL PETG Bottle; C-Flex® & Aseptiquik® S at outlet	5	278
MCMD0500010204B	3 Port MYCAP™; 500mL PETG Bottle; C-Flex® & Aseptiquik® S at outlet	5	240
MCMD0250010204B	3 Port MYCAP™; 250mL PETG Bottle; Sartopore®; C-Flex® & Aseptiquik® S at outlet	5	225
Six Bottle Manifold with 3-port MYCAP® Closure. Sartopore® 2 at inlet (stepped barb 1/4"-1/2"), 1/8"x1/4". Gamma Irradiated			
MCMD1000060204A	3 Port MYCAP™; 6x1000mL PETG Bottle; silicone with Aseptiquik® S at outlet	5	1,025
MCMD0500060204A	3 Port MYCAP™; 6x500mL PETG Bottle; silicone with Aseptiquik® S at outlet	5	1,005
MCMD0250060204A	3 Port MYCAP™; 6x250mL PETG Bottle; Aseptiquik® S at outlet	5	965
MCMD1000060204W	3 Port MYCAP™; 6x1000mL PETG Bottle; C-Flex® at outlet	5	890
MCMD0500060204W	3 Port MYCAP™; 6x500mL PETG Bottle; C-Flex® at outlet	5	870
MCMD0250060204W	3 Port MYCAP™; 6x250mL PETG Bottle; C-Flex® at outlet	5	825
MCMD1000060204B	3 Port MYCAP™; 6x1000mL PETG Bottle; C-Flex® & Aseptiquik® S at outlet	5	1,060
MCMD0500060204B	3 Port MYCAP™; 6x500mL PETG Bottle; C-Flex® & Aseptiquik® S at outlet	5	1,045
MCMD0250060204B	3 Port MYCAP™; 6x250mL PETG Bottle; C-Flex® & Aseptiquik® S at outlet	5	1,000

Accessories

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
QSCUTTERSD	QUICKSEAL® cutting tool for QUICKSEAL® collar up to 1/4" (6.4 mm) OD	1	300
QSCUTTERLD	Large Diameter QUICKSEAL Cutter for tubes up to 1.125" (28.6 mm) OD; 120V Battery Charger and two 18V Batteries	1	4,025
QSCUTTERLD230V	Large Diameter QUICKSEAL Cutter for tubes up to 1.125" (28.6 mm) OD; 230V Battery Charger and two 18V Batteries	1	4,105
QS04CAPSILNT	QUICKSEAL® Silicone Caps, 1/4" OD	50	3.50
QS06CAPSILNT	QUICKSEAL® Silicone Caps, 3/8" OD	50	3.50
QS07CAPSILNT	QUICKSEAL® Silicone Caps, 7/16" OD	50	3.50
QS08CAPSILNT	QUICKSEAL® Silicone Caps, 1/2" OD	50	3.50
QS10CAPSILNT	QUICKSEAL® Silicone Caps, 5/8" OD	50	3.50
QS12CAPSILNT	QUICKSEAL® Silicone Caps, 3/4" OD	50	3.50
QS18CAPSILNT	QUICKSEAL® Silicone Caps, 1 1/8" OD	50	3.50

MYCAP® CCX

Expand Outside the Hood

MYCAP® CCX is an all-inclusive cell expansion system for suspension cultures including Erlenmeyer flask and closure system that supports cell growth in the incubator and all fluid transfers – outside of the laminar flow hood.

MYCAP® CCX cap includes the specialized gas exchange cartridge to support cell growth and integral tubing for aseptic fluid transfers. Perform all steps of each passage (media fills, cell inoculation, aseptic sampling and flask-to-flask transfers) outside the laminar flow hood and avoid contaminations.

Features

MYCAP® Family includes:

- **Transfer Caps.** Install to small 125mL & 250mL Erlenmeyer flask for cell passages after initial thaw
- **Growth and Transfer Caps.** All-in-one Closure and Flask. Grow Cell and Aseptically Transfer Liquids including sampling – outside laminar flow hood
- **Transfer Lines.** Aseptically connect media bottles to flasks, flasks to flasks or flasks to seed reactor to transfer liquid

MYCAP® CCX has it all in one revolutionary system:

- Innovative gas exchange cartridge supports vigorous cell growth in the incubator
- Integral tubing for aseptic fluid transfers
- Performance of passages up to 3L Erlenmeyer flasks possible
- Gamma-irradiated & Single-Use
- Based on reliable & robust MYCAP® closure system
- Ready to use



Benefits

- Feed media, inoculate flasks, collect samples and transfer out of flasks outside the laminar flow hood
- Never open a flask. Never change a cap.
- Improve ergonomics and process efficiency by eliminating hood operations and hand-pipetting fluid transfers
- Put an end to contaminations and eliminate wasteful backup passages



Transfer Caps



Growth and Transfer Caps



Transfer Lines

MYCAP™ CCX Transfer Caps

Install to 125mL and 250mL flasks after initial growth to enable aseptic transfer to next flask.
Aseptic connection by Aseptiquik® S or tube welding with C-Flex® Tubing. **Gamma Irradiated.**

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
MCX01250204A	2-Port MYCAP™; for 125mL Corning Erlenmeyer Flask; Aseptiquik® S at outlet	3	121
MCX02500204A	2-Port MYCAP™; for 250mL Corning Erlenmeyer Flask; Aseptiquik® S at outlet	3	121
MCX01250204W	2-Port MYCAP™; for 125mL Corning Erlenmeyer Flask; 1/8"x1/4" C-Flex® at outlet	3	93
MCX02500204W	2-Port MYCAP™; for 250mL Corning Erlenmeyer Flask; 1/8"x1/4" C-Flex® at outlet;	3	93
MCX01250204B	2-Port MYCAP™; for 125mL Corning Erlenmeyer Flask; 1/8"x1/4" C-Flex® & Aseptiquik® S at outlet	3	124
MCX02500204B	2-Port MYCAP™; for 250mL Corning Erlenmeyer Flask; 1/8"x1/4" C-Flex® & Aseptiquik® S at outlet	3	124

MYCAP™ CCX Growth and Transfer Caps

Aseptically fill with media, aseptically inoculate, aseptically sample and grow cells in Erlenmeyer flasks from 500mL to 3000mL without going under laminar flow hood or removing caps. Aseptic connection by Aseptiquik® S or tube welding with C-Flex® Tubing. **Gamma Irradiated. Luer-activated access site for sampling; integrated gas exchange cartridge.**

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
MCX02500204AG	MYCAP™ CCX on 250mL Corning Erlenmeyer Flask; 3 x Aseptiquik® S for inlet outlet	3	294
MCX050002040204A	MYCAP™ CCX on 500mL Corning Erlenmeyer Flask; 3 x Aseptiquik® S for inlet outlet	3	305
MCX100002040204A	MYCAP™ CCX on 1000mL Corning Erlenmeyer Flask; 3 x Aseptiquik® S for inlet outlet	3	322
MCX200002040204A	MYCAP™ CCX on 2000mL Corning Erlenmeyer Flask; 3 x Aseptiquik® S for inlet outlet	3	403
MCX300002040204A	MYCAP™ CCX on 3000mL Corning Erlenmeyer Flask; 3 x Aseptiquik® S for inlet outlet	3	583
MCX02500204WG	MYCAP™ CCX on 250mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® for inlet outlet	3	197
MCX050002040204W	MYCAP™ CCX on 500mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® for inlet outlet	3	222
MCX100002040204W	MYCAP™ CCX on 1000mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® for inlet outlet	3	239
MCX200002040204W	MYCAP™ CCX on 2000mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® for inlet outlet	3	320
MCX300002040204W	MYCAP™ CCX on 3000mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® for inlet outlet	3	500
MCX02500204BG	MYCAP™ CCX on 250mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® & Aseptiquik® S for inlet outlet	3	294
MCX050002040204B	MYCAP™ CCX on 500mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® & Aseptiquik® S for inlet outlet	3	313
MCX100002040204B	MYCAP™ CCX on 1000mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® & Aseptiquik® S for inlet outlet	3	330
MCX200002040204B	MYCAP™ CCX on 2000mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® & Aseptiquik® S for inlet outlet	3	411
MCX300002040204B	MYCAP™ CCX on 3000mL Corning Erlenmeyer Flask; 3 x 1/8"x1/4" C-Flex® & Aseptiquik® S for inlet outlet	3	591

MYCAP™ CCX Transfer Lines

Convenient transfer lines to connect media bottles to flasks, flasks to flasks or flasks to seed reactor. Aseptic connection by Aseptiquik® S or tube welding with C-Flex® Tubing. **Gamma Irradiated.**

Model	Description	Minimum Order Qty.	US List Price/Unit (\$)
X020412W020418A	1/8"x1/4" C-Flex®, 12", plugged; 1/8"x1/4" silicone, 18" w/Aseptiquik®	3	69
X020436AA	1/8"x1/4" silicone, 36" w/Aseptiquik® at each end	3	98
X020436BB	1/8"x1/4" C-Flex®, 36" w/Aseptiquik® at each end	3	97
X040712W020418A	1/4"x7/16" C-Flex®, 12", plugged; 1/8"x1/4" silicone, 18" w/Aseptiquik®	3	72
X020412W020412W	1/8"x1/4" C-Flex®, 12", plugged; 1/8"x1/4" silicone, 18"; 1/8"x1/4" C-Flex®, 12", plugged	3	43
X020412W040712W	1/8"x1/4" C-Flex®, 12", plugged; 1/8"x1/4" silicone, 18"; 1/4"x7/16" C-Flex®, 12", plugged	3	46
XY020403A	1/8"x1/4" silicone, 3" w/Aseptiquik®	3	143
XY020418W	3 x 1/8"x1/4" C-Flex®, 18", plugged	3	49
XY020418B	3 x 1/8"x1/4" C-Flex®, 18" w/Aseptiquik®	3	146

C-Flex® is a registered trademark of St. Gobain Performance Plastics
Aseptiquik® is a registered trademark of Colder Products Corporation

Sterile Membrane Filters, Gridded

Cellulose Nitrate (Cellulose Mixed Ester Membrane Filters)

Individually packaged filters have long become standard for routine microbiological quality control. Pre-sterilized and ready-to-use, they offer several user benefits including reduced preparation time. Individual packaging reduces contamination risk for remaining filters in opened packs, while filter identification and lot number indication on individual filter envelopes provides GLP conformance.

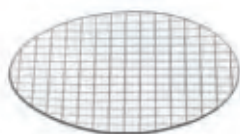


Feature

- Outstanding recovery rates for microorganisms
- 0.45 μm are acc. to ISO 7704
- High flow membranes available
- Four membrane/grid color combinations available
- Certified quality
- Gamma irradiated, 25 kGray
- Shelf life: 4 years

Applications

- Microbial enumeration
- Particle testing
- Microscopy



Specifications and Pricing

White Membrane with Black Grid, for Detection of Bacteria with Dyed Media, Particle Count & Microscopy, Type 114, Individually, Sterile Packaged

Model	Pore Size	Diameter	Pack Size	US List Price (\$)
11407--47----ACN	0.2 µm	47 mm	100	122
11407--47----ACR		47 mm	1,000	550
11407--50----ACN		50 mm	100	124
11407--50----ACR		50 mm	1,000	550
11406--47----ACN	0.45 µm	47 mm	100	122
11406--47----ACR		47mm	1,000	550
11406--50----ACN		50 mm	100	124
11406--50----ACR		50 mm	1,000	550
114H6--47----ACN	0.45 µm High Flow*	47 mm	100	122
114H6--47----ACR		47 mm	1,000	550
114H6--50----ACN		50 mm	100	124
114H6--50----ACR		50 mm	1,000	550
11405--47----ACN	0.65 µm	47 mm	100	122
11405--50----ACN		50 mm	100	124
11404--47----ACN	0.8 µm	47 mm	100	122
11404--47----ACR		47 mm	1,000	550
11404--50----ACN		50 mm	100	124
11403--47----ACN	1.2 µm	47 mm	100	122
11403--47----ACR		47 mm	1,000	550
11403--50----ACN		50 mm	100	124
11403--50----ACR		50 mm	1,000	550

White Membrane with Green Grid, for Detection of Bacteria with Dyed Media, Particle Count & Microscopy, Type 139, Individually, Sterile Packaged

Model	Pore Size	Diameter	Pack Size	US List Price (\$)
13906--47----ACN	0.45 µm	47mm	100	122
13906--47----ACR		47 mm	1,000	550
13906--50----ACN		50 mm	100	124
13906--50----ACR		50 mm	1,000	550
139H6--47----ACN	0.45 µm High Flow*	47 mm	100	122
139H6--47----ACR		47 mm	1,000	545
139H6--50----ACN		50 mm	100	124
13905--47----ACN	0.65 µm	47 mm	100	122
13903--47----ACN	1.2 µm	47 mm	100	122

Green Membrane with Dark Green Grid, Providing Optimal Contrast to Light-Colored or Transparent Bacteria Colonies, Type 138, Individually, Sterile Packed

Model	Pore Size	Diameter	Pack Size	US List Price (\$)
13806--47----ACN	0.45 µm	47mm	100	122
13806--47----ACR		47 mm	1,000	545
13806--50----ACN		50 mm	100	124
13806--50----ACR		50 mm	1,000	550

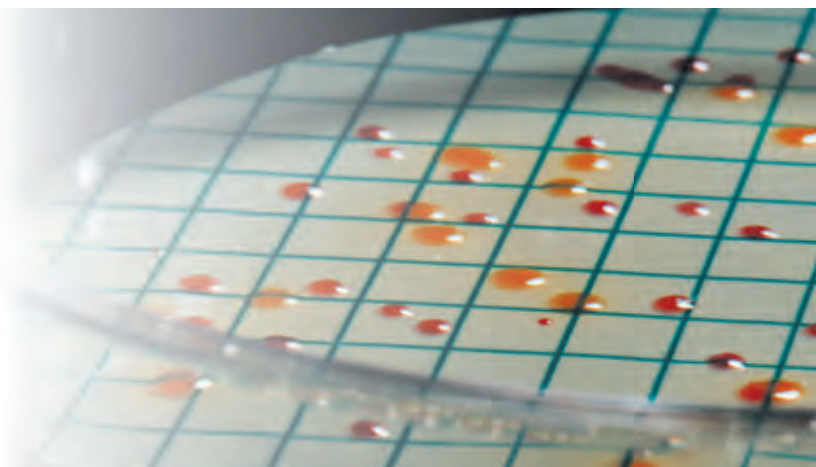
Gray membrane (after wetting, black) with white grid, for detection of yeasts and molds, particle count and microscopy, type 130, individually, sterile packaged

Model	Pore Size	Diameter	Pack Size	US List Price (\$)
13006--47----ACN	0.45 µm	47 mm	100	122
13006--47----ACR		47 mm	1,000	545
13006--50----ACN		50 mm	100	124
13006--50----ACR		50 mm	1,000	550
13005--47----ACN	0.65 µm	47 mm	100	122
13005--50----ACN		50 mm	100	124
13005--50----ACR		50 mm	1,000	550
13004--47----ACN	0.8 µm	47 mm	100	122
13004--47----ACR		47 mm	1,000	545
13004--50----ACN		50 mm	100	124

Non-Sterile Membrane Filters, Gridded

Cellulose Nitrate (Cellulose Mixed Ester) Membrane Filters

Cellulose nitrate (cellulose ester) membrane filters are recommended for applications in which agar plates or absorbent pads wetted with liquid culture media are used instead of nutrient pad sets. These filters can be boiled or autoclaved and are offered in a choice of four membrane/grid color combinations to provide a high contrast to colonies or particles for various applications.

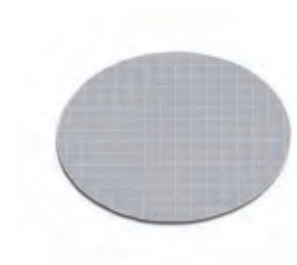


Features

- Outstanding recovery rates for microorganisms
- 0.45 μm are acc. to ISO 7704
- Four membrane/grid color combinations available

Applications

- Microbial enumeration
- Particle testing
- Microscopy



Specifications & Pricing

Model	Pore Size	Diameter	Pack Size	US List Price (\$)
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White Membrane with Black Grid, for Detection of Bacteria with Dyed Media, Particle Count & Microscopy, Type 114, Non-Sterile

11407--25-----N	0.2 µm	25 mm	100	78
11407--47-----N		47 mm	100	109
11407--47-----R		47 mm	1,000	760
11407--50-----N		50 mm	100	111
11406--25-----N	0.45 µm	25 mm	100	78
11406--47-----N		47mm	100	109
11406--47-----R		47 mm	1,000	760
11406--50-----N		50 mm	100	111
11406--50-----R	0.65 µm	50 mm	1,000	765
11405--47-----N		47 mm	100	109
11404--25-----N	0.8 µm	25 mm	100	78
11404--47-----N		47 mm	100	109
11404--50-----N		50 mm	100	111
11403--25-----N	1.2 µm	25 mm	100	78
11403--47-----N		47 mm	100	109
11403--50-----N		50 mm	100	111

White Membrane with Green Grid, for Detection of Bacteria with Dyed Media, Particle Count & Microscopy, Type 139, Non-Sterile

13906--47-----N	0.45 µm	47mm	100	112
13906--47-----R		47 mm	1,000	765
13906--50-----N		50 mm	100	111
13906--50-----R		50 mm	1,000	765

Green Membrane with Dark Green Grid, Providing Optimal Contrast to Light-Colored or Transparent Bacteria Colonies, Type 138, Non-Sterile

13806--47-----N	0.45 µm	47mm	100	112
13806--47-----R		47 mm	1,000	765
13806--50-----N		50 mm	100	111
13806--50-----R		50 mm	1,000	765

Gray Membrane (After Wetting, Black) with White Grid, for Detection of Yeasts and Molds, Particle Count and Microscopy, Type 130, Non-Sterile

13006--25-----N	0.45 µm	25 mm	100	82
13006--47-----N		47 mm	100	109
13006--47-----R		47 mm	1,000	765
13006--50-----N		50 mm	100	111
13005--47-----N	0.65 µm	47 mm	100	109
13005--50-----N		50 mm	100	111
13004--47-----N	0.8 µm	47 mm	100	109
13004--50-----N		47 mm	100	111

Microsart® e.motion Membrane Dispenser & Membrane Rolls

Fully Automated Membrane Dispenser and Sterile Membrane Filter Rolls, Gridded

The Microsart® e.motion membrane dispenser is designed to simplify microbial testing. The fully automated dispenser releases membranes from their sterile packaging at the touch of a button, through hands-free motion detection or via an optional foot pedal. Specifically designed membrane filter rolls insert conveniently and are changed quickly and easily.

Features

Microsart® e.motion Dispenser

- Holds rolls of up to 250 membrane filters at a time for more efficient operation with fewer interruptions
- Three operating modes – foot pedal, sensor or push button for maximum operational flexibility
- Option for standalone, wire-free battery operation
- Compact size makes the unit portable and easy to handle

Applications

- Microbial enumeration



Microsart® e.motion Specifications & Pricing

Model	Description	US List Price (\$)
16713----BO	Microsart® e.motion dispenser with integrated battery and power supply	1,875
16713----PS	Microsart® e.motion dispenser with power supply only	1,600
1ZE---0028	Foot switch for Microsart® e.motion dispenser	72

Membrane Filters Specifications & Pricing

Diameter 47 mm or 50 mm, in Pack of 3 x 100 Membranes, Individually Sterile Packaged, Without Protective Paper

Model	Membrane Filter Color Grid Color	Diameter	Pore Size	US List Price (\$)
11407Z-47----SCM	White black	47 mm	0.2 µm	198
11407Z-50----SCM	White black	50 mm	0.2 µm	198
114H6Z-47----SCM	White black	47 mm	0.45 µm High Flow	220
114H6Z-50----SCM	White black	50 mm	0.45 µm High Flow	220
11406Z-47----SCM	White black	47 mm	0.45 µm	198
11406Z-50----SCM	White black	50 mm	0.45 µm	198
11404Z-47----SCM	White black	47 mm	0.8 µm	198
11403Z-47----SCM	White black	47 mm	1.2 µm	198
11403Z-50----SCM	White black	50 mm	1.2 µm	198
11402Z-47----SCM	White black	47 mm	3 µm	198
139H6Z-47----SCM	White green	47 mm	0.45 µm High Flow	220
13906Z-47----SCM	White green	47 mm	0.45 µm	198
13906Z-50----SCM	Green dark green	50 mm	0.45 µm	198
13806Z-47----SCM	Green dark green	47 mm	0.45 µm	198
130H6Z-50----SCM	Gray* white	50 mm	0.45 µm High Flow	220
13006Z-47----SCM	Gray* white	47 mm	0.45 µm	198
13006Z-50----SCM	Gray* white	50 mm	0.45 µm	198
13005Z-47----SCM	Gray* white	47 mm	0.65 µm	198
13005Z-50----SCM	Gray* white	50 mm	0.65 µm	198
13004Z-47----SCM	Gray* white	47 mm	0.8 µm	198
13004Z-50----SCM	Gray* white	50 mm	0.8 µm	198
114H6Z-47----SFM	White black	47mm	0.45 µm	285
11302Z-47----SFM	White	47mm	3 µm	270
11402Z-47----SFM	White black	47mm	3 µm	270

Diameter 47 mm, in Pack of 4 x 250 Membranes, Individually Sterile Packaged, Without Protective Paper

114H6Z-47----SJR	White black	47 mm	0.45 µm High Flow	615
130H6Z-47----SJR	Gray* white	47 mm	0.45 µm High Flow	615

Sterile Membrane Filters without Grid

Cellulose Nitrate (Cellulose Mixed Ester) and Cellulose Acetate

Individually packaged filters have long become standard for routine microbiological quality control. Pre-sterilized and ready-to-use, they offer several user benefits including reduced preparation time. Individual packaging reduces contamination risk for remaining filters in opened packs, while filter identification and lot number indication on individual filter envelopes provides GLP conformance.



Features

- Outstanding recovery rates for microorganisms
- Defined particle retention
- 0.45 µm are acc. to ISO 7704
- 0.2 µm are validated by BCT
- Certified quality
- Gamma irradiated, 25 kGray

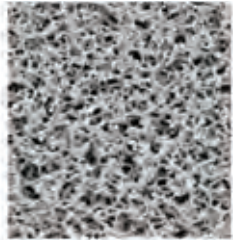
Applications

- Microbial enumeration
- Particle testing
- Microscopy

Specifications & Pricing

Cellulose Nitrate Membrane Filters, White, for Colony Counting, Sterility Testing, Particle Count & Microscopy. Type 113, Individually, Sterile Packaged

Model	Pore Size	Diameter	Pack Size	US List Price (\$)
11306--47---ACN	0.45 µm	47 mm	100	122
11306--50---ACN		50 mm	100	122
11305--47---ACN	0.65 µm	47 mm	100	185
11305--50---ACN		50 mm	100	197
11304--47---ACN	0.8 µm	47 mm	100	185
11304--50---ACN		50 mm	100	197
11303--47---ACN	1.2 µm	47 mm	100	235
11303--50---ACN		50 mm	100	255
11302--47---ACN	3 µm	47 mm	100	235
11302--50---ACN		50 mm	100	235
11301--47---ACN	8 µm	47 mm	100	185
11301--50---ACN		50 mm	100	193



Cellulose Acetate Membrane Filters, White, for Colony Counting, Sterility Testing, Particle Count & Microscopy, Type 111, Individually, Sterile Packaged

11107--47---ACN	0.2 µm	47 mm	100	145
11107--50---ACN		50 mm	100	150
11106--47---ACN	0.45 µm	47 mm	100	145
11106--50---ACN		50 mm	100	150

Microsart® Funnel

Sterile disposable funnels with Click-fit closure

Sterile Microsart® Funnels provide quick filtration for the routine testing of water, food and beverages, pharmaceuticals and cosmetic products. To use, the Microsart® Funnel is simply fitted over a gridded membrane and placed on top of a Microsart® stainless steel filter support. The polypropylene construction provides elasticity for optimal sealing with the Click-fit closure.



Features & Benefits

Reliable results

Use a new, sterile funnel for each test to reduce the risk of cross-contamination.

Time-saving

Eliminate the need for funnel sanitation. Simply change the funnel between samples.

Sample handling

Avoid the need to handle hot funnels and easily see the status of the filtration process.

Applications

- Microbial Testing of water, food and beverages, pharmaceutical and cosmetic products.

Ordering Information

Model	Description	Qty.	US List Price (\$)
16A07--10-----N	Microsart® Funnel 100, sterile in 5 sealed bags. 100 ml	100	138
16A07--25-----N	Microsart® Funnel 250, sterile in 5 sealed bags. 250 ml	96	151

Accessories

Item	Description	US List Price (\$)
16A08	Funnel Dispenser	625
1ZU---0002	Microsart® Base 47 mm, with frit, stainless steel, Click-Fit closure for Microsart® Funnel, sealed by bayonet closure	108
6980274	Silicone O-ring for Microsart® Base, 47 mm male thread (pack size 3)	13
1ZU---0001	Replacement frit for Microsart® Base, stainless steel	103

Nutrient Pad Sets

Dehydrated Media Pads in Petri Dishes with Matching Membrane Filters

Nutrient pads are sterile, dehydrated culture media. Once they are moistened with 3.0–3.5 ml of sterile and demineralized (or distilled) water they are ready for immediate use. Practical and easy to handle, they reduce labor and simplify many microbiological testing procedures. All Nutrient Pad Sets are supplied with the appropriate membrane filters, which are also pre-sterilized and individually packaged.



Features & Benefits

Economical

Eliminates time-consuming and labor-intensive preparation of culture media.

Simple to use

Nutrient pad sets are useful for laboratories that do not have extensive microbiological equipment.

Consistent quality

During production, QA procedures compare growth promoting properties of the nutrient pad sets with corresponding agar media to ensure consistent quality and reproducible results.

Trouble-free storage

Nutrient Pad Sets have a shelf life up to 24 months at room temperature.

Highly versatile

Nutrient Pad Sets can be modified by additives in the solution used to wet them; for example, Wort or Orange Serum Nutrient Pads when wetted with 5 – 8% ethanol promote the growth of acetic-acid bacteria.

Applications

- Microbial quality control of liquid products in water and beverage testing



Pricing & Specifications

Model	Determination of	NPS Type	Pore Size	Mb Color/ Grid Color	Qty.	US List Price (\$)
Nutrient Pad Sets for Total Colony Count, 47mm - Sterile						
14063--47-----N	Total colony count	Caso	0.45 µm	Green/Dark Green	100	199
14084--47-----N	Total colony count	R2A	0.45 µm	Green/Dark Green	100	199
14064--47-----N	Total colony count	Standard	0.45 µm	Green/Dark Green	100	199
14055--47-----N	Total colony count	Standard TTC	0.45 µm	Green/Dark Green	100	199
14076--47-----N	Total colony count	TGE	0.45 µm	Green/Dark Green	100	199
14090--47-----N	Total colony count	Yeast Extract	0.45 µm	Green/Dark Green	100	199
Nutrient Pad Sets for E. coli, Coliforms and Enterobacteria, 47mm - Sterile						
14087--47-----N	E. coli and coliforms	Chromocult	0.45 µm	White/Black	100	199
14082--47-----N	E. coli	ECD	0.45 µm	White/Green	100	199
14053--47-----N	E. coli and coliforms	Endo	0.45 µm	White/Green	100	199
14068--47-----N	E. coli and coliforms	m FC	0.45 µm	White/Green	100	199
14097--47-----N	Enterobacteria and E. coli	MacConkey	0.45 µm	White/Green	100	199
14067--47-----N	E. coli and coliforms	Teepol Lauryl Sulfate	0.45 µm	White/Green	100	199
14056--47-----N	E. coli and coliforms	Tergitol TTC	0.45 µm	White/Green	100	199
Nutrient Pad Sets for other Fecal Bacteria, 47mm - Sterile						
14051--47-----N	Enterococci	Azide	0.45 µm	Green/Dark Green	100	199
14057--47-----N	Salmonellae	Bismuth Sulfite	0.45 µm	Green/Dark Green	100	199
Nutrient Pad Sets for Non-fecal, Pathogenic Bacteria, 47mm - Sterile						
14075--47-----N	Pseudomonas aeruginosa	Cetrimide	0.45 µm	White/Green	100	199
14074--47-----N	Staphylococci, Staph. Aureus	Chapman	0.45 µm	White/Green	100	199
Nutrient Pad Sets for Yeasts and Molds, 47mm - Sterile						
14078--47-----N	Yeasts and molds	Wort NPS & gridded MF	0.65 µm	Gray*/White	100	199
14061--47-----N	Wild yeasts	Lysine	0.65 µm	Gray*/White	100	199
14086--47----CCN	Yeasts and molds	Malt Extract NPS & gridded MF	0.45 µm	Gray*/White	100	199
14080--47-----N	Yeasts and molds	m Green NPS & gridded M	0.8 µm	Gray*/White	100	199
14089--47-----N	Yeasts and molds	WL Nutrient NPS & gridded MF	0.45 µm	Gray*/White	100	199
14058--47-----N	Yeasts and molds	Wort (pH 4.4)	0.65 µm	Gray*/White	100	199
14086--47-----N	Yeasts and molds	Malt Extract	0.8 µm	Gray*/White	100	199
14072--47-----N	Yeasts and molds	m Green NPS & gridded M	1.2 µm	Gray*/White	100	199
14083--47-----N	Yeasts and molds and bacteria	m Green NPS & gridded M	0.45 µm	White/Green	100	199
14069--47-----N	Yeasts and molds	Sabouraud NPS & gridded M	0.45 µm	White/Green	100	199
14070--47-----N	Yeasts and molds	m Green NPS & gridded M	0.65 µm	White/Green	100	199
Nutrient Pad Sets for Product-spoiling Microorganisms, 47mm - Sterile						
14079--47-----N	Leuconostoc oenos and other wine spoiling organ.	Tomato Juice	0.45 µm	Green/Dark Green	100	199
14062--47-----N	Acid-tolerant microorganisms	Orange Serum	0.45 µm	Green/Dark Green	100	199
14065--47-----N	Mesophilic slime forming bacteria esp. Leuconostoc mesenteroides	Weman	0.45 µm	Green/Dark Green	100	199
14066--47-----N	Thermophilic spore formers and mesophilic bacteria	Glucose Tryptone	0.45 µm	White/Green	100	199
14059--47-----N	Lactobacilli and Pediococci and other beer spoiling microorg.	VLB-S7-S	0.45 µm	White/Green	100	199
14077--47-----N	Lactobacilli and other soft drink-spoiling microorganisms	MRS	0.45 µm	Green/Dark Green	100	199

Biosart® 100 Monitors

Sterile funnels, ready-to-use due to the incorporated membrane filter and cellulose pad

Biosart® 100 Monitors have been specifically designed for the detection and enumeration of microorganisms in pharmaceuticals, cosmetics, food, beverages, water and other liquids. These ready-to-use sterile funnels have incorporated membrane filters and cellulose pads. Following filtration, the 100 ml funnel is removed to convert the unit from a funnel to a petri dish, reducing contamination risk.



Features & Benefits

Superior performance

- High flow rate
- High total throughput

Safe & reliable

- Sterile, individually packed
- Certified membrane filters: meet ISO 7704
- Membranes available in various colors
- Without any hydrophobic adhesive areas validated

Economical

- Ready to connect, easy to use and practical handling features
- Minimal amount of equipment

Applications

- Detection and enumeration of microorganisms in pharmaceuticals, cosmetics, food, beverages, water and other liquids



Specifications & Pricing

Model	Pore Size	Membrane Filter* Color Grid Color	US List Price (\$)
Biosart® 100 Monitors, 100 ml, 47 mm, Individually Packaged, Sterile, 48 Units			
16401-47-07--ACK	0.2 µm	CN white black	235
16401-47-06--ACK	0.45 µm	CN white black	235
16402-47-06--ACK	0.45 µm	CN green dark green	235
16403-47-06--ACK	0.45 µm	CN gray white**	235
Biosart® 100 Monitors, 100 ml, 47 mm, Packaged on Trays, Sterile, 48 Units			
16401-47-07----K	0.2 µm	CN white black	153
16401-47-H6----K	0.45 µm High Flow	CN white black	153
16401-47-06----K	0.45 µm	CN white black	148
16402-47-06----K	0.45 µm	CN green dark green	149
16403-47-06----K	0.45 µm	CN gray white**	153
16403-47-04----K	0.8 µm	CN gray white**	153
16404-47-06----K	0.45 µm	RC white	149
Biosart® 100 Monitors, 100 ml, 47 mm, Sterile, 48 Units			
16401-47-H6-V--K	0.45 µm High Flow	CN white black	115
16401-47-06-V--K	0.45 µm	CN white black	115
16403-47-06-V--K	0.45 µm	CN gray white**	115
16403-47-04-V--K	0.8 µm	CN gray white**	115
Biosart® 100 Monitors, 100 ml, 47 mm, Sterile, 48 Units, Membrane Fixed			
16401-47-H6-VWMK	0.45 µm High Flow	CN white black	115
16401-47-06-VWMK	0.45 µm	CN white black	115
16403-47-H6-VWMK	0.45 µm High Flow	CN gray white**	115
16403-47-06-VWMK	0.45 µm	CN gray white**	115

Accessories

Item	Description	Adaptation	US List Price (\$)
16424	Biosart® 100 Adapter, polypropylene and silicone O-ring	Biosart® 100 Monitor onto Sartorius Stedim Biotech stainless steel base 1ZU---0002 Microsart® Base 47 mm (stainless steel base for Combisart® and Microsart® Combi.jet)	16
16415	Biosart® 100 Adapter, polypropylene	Biosart® 100 Monitor onto 50 mm supports (Milliflex)	12
16416	Biosart® 100 Adapter, polypropylene	Biosart® 100 Monitor onto 59 mm supports	12
16417	Biosart® 100 Membrane Lifter, ABS	For easy transfer of the membrane onto agar	8.40

Biosart® 100 Nutrient Media

Sterile Media Ampoules

Biosart® 100 Nutrient Media are used for microbiological testing of pharmaceuticals, food, beverages, water and other liquids. Each box contains 50 ready-to-use ampoules with 2.5 ml sterile nutrient media and lot-specific certification. The nutrient media comply with international regulations and recommendations and supersede the use of glass ampoules.



Features

- Safe & reliable
- Pre-sterilized media
- Certificate of quality for every batch
 - In compliance with international standards
 - Consistent recovery

- Economical
- Ready-to-use
 - Long shelf life

Applications

- Detection and enumeration of microorganisms in pharmaceuticals, cosmetics, food, beverages, water and other liquids

Specifications & Pricing

Model	Determination of	Media Type	US List Price (\$)
Biosart® 100 Nutrient media, 2.5ml, Individually, Sterile-Packed in Ampoules, 50 Units			
16400-02----CA-K	Total Count	Caso (acc.USP)	81
16400-02----RA-K	Total Count	R2A (acc. EP)	81
16400-02----TC-K	Total Count	TGE Total Count	81
16400-02----TZ-K	Total Count	Total Count TTC	81
16400-02----EN-K	E.coli and coliforms	m Endo	81
16400-02----MF-K	E.coli and coliforms	m FC	81
16400-02-----S-K	E.coli and coliforms	Lauryl Sulfate Teepol	81
16400-02----TT-K	E.coli and coliforms	Tergitol TTC	81
16400-02----KF-K	Enterococci	KF Strep Azide	81
16400-02----CE-K	Pseudomonas aeruginosa	Certimide	81
16400-02----SB-K	Yeasts and molds	Sabouraud (acc. USP)	81
16400-02----MG-K	Yeasts and molds	m Green yeast and mold Schaufus Pottinger	81
16400-02----GS-K	Yeasts and molds	m Green yeast and mold selective	81
16400-02----WZ-K	Yeasts and molds	Wort	81
16400-02---WN-K	Yeasts and molds and bacterias	WL Nutrient Wallerstein Differential	81
16400-02-----WL-K	Bacteria in fermentation process	WL Nutrient Wallerstein Differential	81
16400-02----OS-K	Acid-tolerant microorganisms	Orange Serum	81



Microsart® @filter

Sterile Disposable Filter Units for Advanced Colony Counting

Microsart® @filters are ready-to-use combinations of funnel, filter base and gridded membranes in a single unit. Options include 100 ml and 250 ml volume sizes in multiple membrane color variations. They are available stacked in bags for safe removal using the Microsart Funnel Dispenser or as tray versions with lids.



Specifications & Pricing

Model	Membrane Filter® Color Grid Color	Pore Size	US List Price (\$)
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Microsart® @filter 250, Sterile Disposable Filter Units with lid, 47 mm, 250 ml, Packaged on Trays, Ideal for the Use in Clean Benches, 16 Units

16D01--25-07--TF	CN white black	0.2	90
16D01--25-H6--TF	CN white black	0.45, High Flow	90
16D03--25-H6--TF	CN gray white**	0.45, High Flow	90
16D02--25-06--TF	CN green dark green	0.45	90
16D03--25-05--TF	CN gray white**	0.65	90

Microsart® @filter 100, Sterile Disposable Filter Units, 47 mm, 100 ml, Stacked and Packaged in Bags, Ideal for the Use with Microsart® Funnel Dispenser, 60 Units

16D01--10-07--BL	CN white black	0.2	255
16D01--10-H6--BL	CN white black	0.45, High Flow	255
16D03--10-H6--BL	CN gray white**	0.45, High Flow	255
16D02--10-06--BL	CN green dark green	0.45	255
16D05--10-06--BL	RC white (w/o grid)	0.45	255

Microsart® @filter 250, Sterile Disposable Filter Units, 47 mm, 250 ml, Stacked and Packaged in Bags, Ideal for the Use with Microsart® Funnel Dispenser, 48 Units

16D01--25-07--BK	CN white black	0.2	240
16D01--25-H6--BK	CN white black	0.45, High Flow	240
16D03--25-H6--BK	CN gray white**	0.45, High Flow	240
16D02--25-06--BK	CN green dark green	0.45	240

16D03--25-05--BK CN gray | white** 0.65 240

Microsart® @filter 100, Sterile Disposable Filter Units, 47 mm, 100 ml, Stacked and Packaged in Trays, Ideal for the Use with Microsart® Funnel Dispenser, 24 Units

16D01--10-07--TG	CN white black	0.2	120
16D01--10-H6--TG	CN white black	0.45, High Flow	121
16D02--10-06--TG	CN green dark green	0.45	121
16D03--10-H6--TG	CN gray white**	0.45, High Flow	121
16D05--10-06--TG	RC white (w/o grid)	0.45	121

Model	Membrane Filter® Color Grid Color	Pore Size	US List Price (\$)
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Microsart® @filter 100, Sterile Disposable Filter Units, 47 mm, 100 ml, Individually Packaged in Bags with Covers, 27 Units

16D03--10-H6-ACG	CN black white	0.45, High Flow	155
16D01--10-07-ACG	CN white black	0.2	155
16D01--10-H6-ACG	CN white black	0.45, High Flow	155

Microsart® @filter 250, Sterile Disposable Filter Units, 47 mm, 100 ml, Individually Packaged in Bags with Covers, 18 Units

16D03--25-H6-ACF	CN black white	0.45, High Flow	113
16D01--25-07-ACF	CN white black	0.2	113
16D01--25-H6-ACF	CN white black	0.45, High Flow	113

Accessories

Item	Description	US List Price (\$)
16A08	Funnel dispenser for secure removal of single, sterile Microsart® @filter packaged in bags	625

* CN = Cellulose Nitrate (Cellulose ester), RC = Regenerated Cellulose

** Gray membranes after wetting black

Microsart® @media

Advanced System for Agar and Membrane Transfer

Microsart® @media are sterile, ready-to-use media dishes pre-filled with various agar media types. Together with Microsart® @filter units, they provide a new membrane transfer concept for the Microbial Limit Test. The innovative lid of Microsart® @media allows a touch-free membrane transfer from the Microsart® @filter base, minimizing the risk of secondary contamination.



Features & Benefits

Innovative Membrane Transfer Concept

The active lid enables touch-free membrane transfer and, therefore, reduces the risk of secondary contamination. The special design also avoids introduction of air bubbles.

Easy Handling

Fits perfectly onto the Microsart® @filter base and enabling an easy and reliable transfer of the membrane filter onto the agar. No forceful cracking of plastic is required.

Safe & Reliable

Touch-free membrane transfer reduces handling, minimizing major sources of secondary contamination. Results in best growth conditions and reliable results.

Time-saving

Innovative click-fit closure permits fast and easy removal of the funnel after filtration.

Applications

- Microbiological quality control in biopharmaceutical laboratories.

Specifications & Pricing

Model	Media Type	Target Microorganisms	Typical incubation time and Temperature	US List Price (\$)
14313--47----ACN	TSA (Tryptic Soy Agar)	Total Count	48 to 72 hrs (USP) or 1 to 5 days (EP) at 30 to 35°	455
14314--47----ACN	SDA (Sabouraud Dextrose)	Yeasts and Molds	5 to 7 days at 20 to 25°	455
14322--47----ACN	R2A	Total Count	5 to 7 days at 20 to 28°	455

Accessories

Item	Description	US List Price (\$)
166MP-4	Microsart® e.jet Transfer Pump	1,450
1ZU---0002	Microsart® Base 47 mm	108
1ZAS--0007	Silicone tubing, pressure-sided, 1 meter	24
1ZAS--0019	Silicone tubing, pressure-sided, 2 meters	25
1ZAS--0020	Silicone tubing, pressure-sided, 10 meters	84
17575-----ACK	Minisart® SRP25 vent filters	169

Microsart® Combi.jet

2-Branch Stainless Steel Manifold for Microbiological Analysis

The Microsart® Combi.jet is a 2-branch manifold, made of high-grade stainless steel. The manifold has been specifically designed for use with the Microsart® e.jet Transfer Pump. The system is able to create sufficient vacuum for simultaneous filtration and transfer of the filtered liquid directly to waste.



Features & Benefits

Compact Design

Reduces operating complexity due to its small and compact design. No need of suction flasks and water traps.

Quick Connection

Simply push-to-connect for assembly and pull to disconnect the whole system within seconds.

Sterile Venting

The stainless steel three-way valves (taps) allow the vacuum for each filter holder to be individually controlled and each filter station to be sterilely vented.

Maximum Flexibility

The Microsart® Combi.jet enables you to select the optimal hardware and consumables for your needs in microbiological analysis.

Applications

- Microbial enumeration
- Particle testing in liquid products

Compatible with Options Including

- Ready-to-use units Microsart® @filter 100 and 250
- Ready-to-use units Microsart® Funnel 100 and 250
- Ready-to-use units Biosart® 100 Monitors
- Ready-to-use units Biosart® 250 Funnels
- Flammable units such as stainless steel funnels
- Autoclavable glass filter holders
- Autoclavable polycarbonate filter holder

Ordering Information

Model	Description	US List Price (\$)
1ZU---0002	Microsart® Base 47 mm, with frit, stainless steel base for Combisart® and Microsart® Combi.jet Optimized for the use with 47 mm membranes, Click-Fit closure for Microsart® Funnel, Microsart® @filter and other funnel types sealed by bayonet closure	108

Accessories

Item	Description	Qty.	US List Price (\$)
17575-----ACK	Minisart® SRP25, sterile filter for venting, 0.2 µm, individually sterile-packaged, could be autoclaved 5 times	50	169
17012-----E	Plug luer lock, to close the Minisart inlet, if sterile venting is not required	12	8.40
6980274	Silicone O-ring for Microsart® Base 47 mm male thread	3	13
6980235	Silicone O-ring for manifold female threads	3	15
1EAS--0022	Microsart® Combi.jet Coupling, Quick Connection, PVDF	1	69
1EAS--0027	Quick Connections for Microsart® e.jet pump	1	27
1ZAS--0007	Silicone tubing, pressure-sided, 1 meter	1	24
1ZAS--0019	Silicone tubing, pressure-sided, 2 meters	1	24
1ZAS--0020	Silicone tubing, pressure-sided, 10 meters	1	84

Microsart® Combisart®

Individual and Multi-Branch Systems

Used for microbial analysis and particle counting, the Combisart system features a stainless steel manifold designed to accommodate various filter holders and funnels including ready-to-use funnels and stainless steel funnels as well as autoclavable glass and polycarbonate filter holders.



Features

- **Safe & Reliable**
 - Sterile venting of each membrane after filtration
 - Sterilization acc. to ISO 8199
 - Special polished stainless steel surfaces allow easy cleaning & rinsing
 - Filtration of one, three or six samples in parallel
 - Easy pouring out of non-filterable samples
 - Equally easy for right- and left-handed users
- **Economical**
 - Maximum flexibility due to various set-up options
 - Saves autoclave space
 - Stainless steel 304 – long lifecycle

Applications

- Microbiological analysis or particle count in quality assurance

Note: pre-assembled manifolds are supplied with traditional (16840) Base supports that are not compatible with Microsart @filters.

Specifications & Pricing

Model	Description	Capacity	US List Price (\$)
Combisart® Individual System and Multi-Branch Manifolds, Made of High-Grade Stainless Steel, Pre-Assembled with Stainless Steel Funnels and lids			
16219-CS	Combisart® individual filter holder, stainless steel, 100 ml	1 + 100 ml	720
16201-CS	Combisart® individual filter holder, stainless steel, 500 ml	1 + 500 ml	770
16844-CS	Combisart® 1-branch stainless steel manifold, 100 ml	1 + 100 ml	1,000
16845-CS	Combisart® 1-branch stainless steel manifold, 500 ml	1 + 500 ml	1,035
16824-CS	Combisart® 3-branch stainless steel manifold, 100 ml	3 + 100 ml	2,535
16828-CS	Combisart® 3-branch stainless steel manifold, 500 ml	3 + 500 ml	2,590
16832-CS	Combisart® 6-branch stainless steel manifold, 100 ml	6 + 100 ml	4,300
16831-CS	Combisart® 6-branch stainless steel manifold, 500 ml	6 + 500 ml	4,660
Combisart® Individual and Multi-Branch Bases, Made of High-Grade Stainless Steel, without Funnels and lids, to Accommodate Various Funnel Types			
16841	Combisart® individual base, stainless steel, with frit (50 mm), to accommodate stainless steel funnels and Biosart® 100 250		435
16844	Combisart® 1-branch stainless steel manifold, without frit		505
16842	Combisart® 3-branch stainless steel manifold, without frits		1,265
16843	Combisart® 6-branch stainless steel manifold, without frits		1,905
16840	Traditional Base Support		113
1ZU---0002	Microsart® Base 47 mm, with frit, stainless steel base for Combisart® and Microsart® Combi.jet Optimized for the use with 47 mm membranes, Click-Fit closure for Microsart® Funnel, Microsart® @filter and other funnel types sealed by bayonet closure		108

Accessories

Item	Description	Qty.	US List Price (\$)
Accessories and Replacement Parts for the Combisart® System			
17575-----ACK	Minisart® SRP25, sterile filter for venting, 0.2 µm, individually sterile-packaged, could be autoclaved 5 times	50	169
17012-----E	Plug luer lock, to close the Minisart® inlet, if sterile venting is not required	12	8.40
6980274	Silicone O-ring for single base 16840 male thread (also 1ZU---0002)	3	13
1EAS-0026	Quick Connection Nipple, stainless steel	1	tbd
6980235	Silicone O-ring for manifold female threads	3	15
6980124	Silicone flat gasket underneath the frit (16840)	1	6
6980104	PTFE flat gasket underneath the frit (16840)	1	8.40
6980102	Stainless steel frit, 50 mm diameter (16840)	1	100
6980103	Stainless steel frit, 47mm diameter (16840)	1	100
6980272	Hose nipples, stainless steel, DN 10	1	75
1ZU---0001	Stainless steel frit for Microsart® Base 47 mm (1ZU---0002)	1	103
6980271	Combisart end-fitting O-Ring (16x2 mm, silicone)	1	7.40

Item	Description	Capacity	Membrane Filter Dia. (mm)	US List Price (\$)
Funnels, lids, Seals and Filter Holders to Connect on the Combisart® System				
6981065	Stainless steel funnel with closure clamp	100ml	47 50	260
6981063	Lid, stainless steel	for 100 ml funnel		66
6981064	Lid seal, silicone	for 100 ml funnel		9.60
6981002	Stainless steel funnel with closure clamp	500 ml	47 50	285
6981001	Lid, stainless steel	for 500 ml funnel		72
6981003	Lid seal, silicone	for 500 ml funnel		16
6981004	Stainless steel funnel with closure clamp	40 ml	47 50	345
16511	Polycarbonate filter holder, complete with filter support and funnel	250 ml	47	106
16306	Glass filter holder, complete with filter support, funnel and metal clamp	30 ml	25	193
16307	Glass filter holder, complete with filter support, funnel and metal clamp	250 ml	47 50	335

Item	Description	US List Price (\$)
Combisart® Adapter, to Accommodate Various Funnel Types		
16424	Biosart® 100 Adapter, onto 16840 (Combisart® single base) or onto 16841 (individual base)	16
16835	Biosart® 100 Monitors onto Combisart® manifolds 16844, 16842 and 16843	129
16836	16306 15 (glass funnel, 30 ml) onto Combisart® manifolds 16844, 16842 and 16843	129
16837	16307 (glass funnel, 250 ml) onto Combisart® manifolds 16844, 16842 and 16843	129

Item	Description	US List Price (\$)
Vacuum Tubing		
1ZA---0006	Silicone tubing with Quick Connection Coupling (autoclavable), 20 cm, vacuum-sided	29
1ZAS--0016	BSilicone tubing with Quick Connection Coupling (autoclavable), 1 m, vacuum-sided	35

Microsart® mini.vac & maxi.vac

Vacuum Pump

Microsart® mini.vac and maxi.vac are electric neoprene membrane pumps that offer low noise levels and maintenance-free operation. The ability to easily adjust and control the vacuum level reduces damage in sensitive cell applications (e.g. bacteria). This results in higher recovery rates and may allow for shorter incubation periods.



Features

- Neoprene membrane pumps with low noise level
- Oil- and maintenance-free
- Reliable sources of vacuum

Applications

- Microbiological quality control of liquid products and particle testing

Pricing & Specifications

Model	Description	US List Price (\$)
16694-1-60-22	Microsart® maxi.vac for multiple filtration runs, 115 V, 60	1,210
16694-1-60-06	Microsart® mini.vac up to 3 filter stations in parallel, 115 V, 60 Hz	555
Replacement Parts		
1ED---0055	Replacement kit for 16694-2-50-22 and -1-60-22, set of one membrane, two valve springs and two head seals	72
1ED---0054	Replacement kit for 16694-2-50-06 and -1-60-06, set of one membrane, two valve springs and two head seals	tbd
1EH---0002	Sound absorber for 16694-2-50-22 and -1-60-22	57
1EH---0001	Sound absorber for 16694-2-50-06 and -1-60-06	tbd
1EV---0002	Fine adjustment head for 16694-2-50-22 and -1-60-22	tbd
1EV---0001	Fine adjustment head for 16694-2-50-06 and -1-60-06	tbd
1EV---0003	Fine adjustment head for 16694-2-50-06 and -1-60-06, for positive pressure applications	tbd

Microsart® e.jet

Vacuum Pump

The Microsart® e.jet is a laboratory vacuum pump which is capable of simultaneously creating a vacuum and transferring filtered liquids to waste. With the ability to achieve a trans membrane pressure of 600 mbar and a flow rate of 4.0 NI/min (4.0 Normlitters water displacement by air in one minute), it is ideal for sample preparation in microbiological analysis. Constant flow rates and a defined maximum vacuum guarantee smooth and reliable filtration.



Features

- Ideal for microbiology applications
- A defined maximum vacuum guarantees smooth and reliable filtration
- Assembly and disassembly of the whole system is completed in seconds with a push-to-connect and pull-to disconnect design
- Saves 70% of working space
- Reduced operating complexity: No need for suction flasks and water traps
- Safe operation | Maintenance-free

Applications

- Microbiological quality control of liquid products and particle testing

Pricing & Specifications

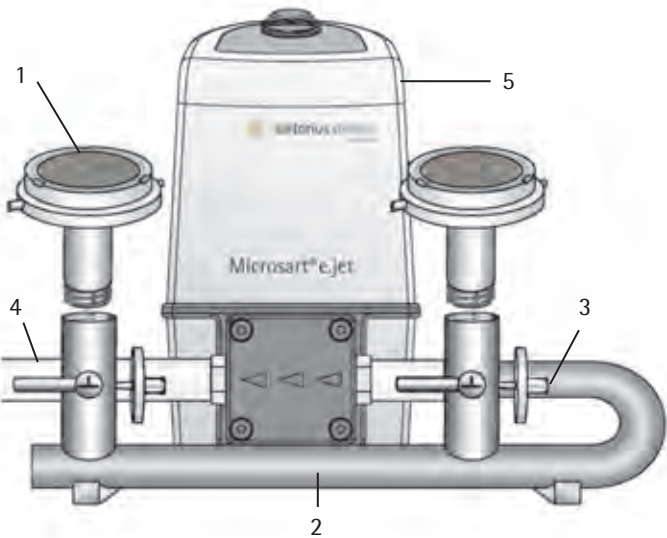
Model	Description	US List Price (\$)
166MP-4	Microsart® e.jet Transfer Pump with Quick Connection, without tubings, inlet and outlet hose nipples for DN 10 tubings	1,450

Accessories

Item	Description	US List Price (\$)
1ZA---0006	Silicone tubing with Quick Connection. Coupling, 20 cm, vacuum-sided	29
1ZAS--0007	Silicone tubing, pressure-sided, 1 m	24
1ZAS--0019	Silicone tubing, pressure-sided, 2 m	25
1ZAS--002	Silicone tubing, pressure-sided, 10 m	84
1ZE---0053	Foot switch for Microsart® e.jet Transfer Pump	375
Replacement Parts		
1EP---0003	Pump head complete for 166MP-4	335
1EE---0012	Power supply complete for 166MP-4	225
Threaded Fittings		
1EAS--0027	Quick Connection set, 2 Nipples (POM) on R3/8" male thread and 2 Couplings (PSU) on DN 10 hose nipple	27

How to Set-Up a Vacuum Filtration System

Microsart® Combi.jet 2-Branch Stainless-Steel Manifold plus Microsart® e.jet

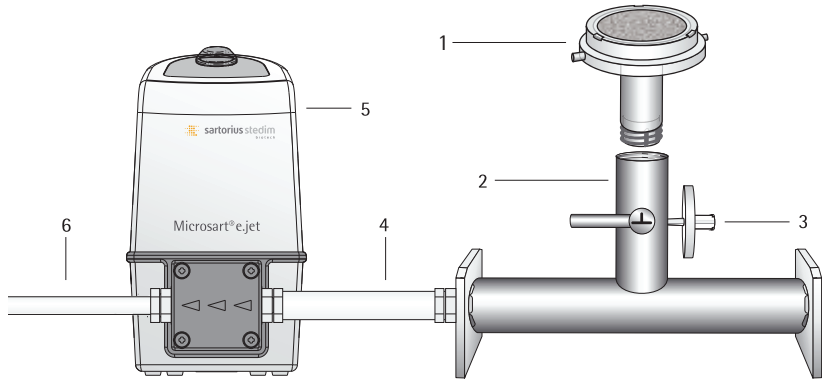


Pos.	Order No.	Qty.	Description
Microsart® Combi.jet stainless-steel equipment:			
1	1ZU---0002	2	Microsart® Base 47 mm
2	16848-CJ	1	Microsart® Combi.jet 2-branch manifold
Sterile venting of the filter station:			
3	17575-----ACK	1	Minisart® SRP25, 0.2 µm
4	1ZAS--0007	2*	Silicone tubing, pressure-sided, 1 m
	1ZAS--0019		Silicone tubing, pressure-sided, 2 m
	1ZAS--0020		Silicone tubing, pressure-sided, 10 m
Vacuum Pump:			
5	166MP-4	1	Microsart® e.jet Transfer Pump, universal power supply

* required length depends on distance between Transfer Pump and drain

The filter stations are directly connected to the Transfer Pump for simultaneous transfer of the filtrate to waste. Easy assembly due to Quick Connection technology.

Combisart® 1 or 3-Branch Stainless-Steel Manifold plus Microsart® e.jet



Pos.	Order No.	Qty.	Description
Combisart® stainless-steel equipment:			
1	1ZU---0002	1 or 3	Microsart® single base
2	16844 (1) or 16842 (3)	1	Combisart® 1 or 3-branch manifold
Sterile venting of the filter station:			
3	17575-----ACK	1	Minisart® SRP25, 0.2 µm
4	1ZA---0006	1	Silicone tubing with Quick Connection Coupling, 20 cm, vacuum-sided
	1ZAS--0016		Silicone tubing with Quick Connection Coupling, 1 m, vacuum-sided
Vacuum Pump:			
5	166MP-4	1	Microsart® e.jet Transfer Pump
6	1ZAS--0007	1*	Silicone tubing, pressure-sided, 1 m
	1ZAS--0019		Silicone tubing, pressure-sided, 2 m
	1ZAS--0020		Silicone tubing, pressure-sided, 10 m

* required length depends on distance between vacuum source and drain

Accessories

For Microbial Enumeration and Vacuum Filtration

Suction Flask

Vacuum-resistant flask made of Duran 50 glass with plastic safety hose nipple according to the – German Industrial Standard No. 12476. Outer diameter of the hose nipple, 9 mm. Inner diameter of the opening, 60 mm.

Model	Description	US List Price (\$)
Suction Flasks		
16672-----1	Suction flask, 5 liters acc. to DIN 12476, incl. stopper 75 D and glass tube	240
16672	Suction flask, 2 liters acc. to DIN 12476, without stopper	179
17204	Tube connector for connecting a Combisart® stainless steel manifold to a suction flask 1 or 2 liters (not necessary when a Vacusart® is connected directly to the bored stopper)	7.20
16606	Suction flask, 1 liter (not available in countries which have safety restrictions on glass hose nipples)	59

Replacement Parts

1EAQ--0017	Glass tube for silicon stopper 75 D for suction flask 5 liters 16672-----1	26
1EAS--0019	Bored stopper 75 D for suction flask 5 liters 16672-----1	91
1EA---0018	Assembling kit for hose barb for suction flask 5 liters 16672-----1	23

Model	Description	Adaptation	US List Price (\$)
Bored Stoppers for Suction Flask 2 liters 16672			
17173	Silicone stopper	Combisart® individual base 16841 or other individual stainless steel filter holders (16201, 16219, 16220) onto the suction flask 16672	31
17174	Silicone stopper	16306 15 (glass funnels, 30 ml) onto the suction flask 16672	32
17175	Silicone stopper	16307 (glass funnel, 250 ml) onto the suction flask 16672	32
Bored Stoppers for Suction Flask 1 liter 16606			
17004	Silicone stopper	Combisart® individual base 16841 or other individual stainless steel filter holders (16201, 16219, 16220) onto the suction flask 16606	8.40
17005	Silicone stopper	16306 15 (glass funnels, 30 ml) onto the suction flask 16606	48
17006	Silicone stopper	16307 16 (glass funnel, 250 ml) onto the suction flask 16606	47

Woulff's Bottle, 500 ml

Used between suction flask and vacuum source. Allows simple control of the vacuum with glass units without a separate tap and prevents the filtrate from overflowing from the suction flask.

Model	Description	US List Price (\$)
16610	Woulff's Bottle, 500 ml	141

Rubber Vacuum Hose (1 Meter)

Thick-walled rubber hose for connecting the system components, e. g. suction flasks, vacuum pumps, etc. When ordering, please state length required in meters.

Model	Description	US List Price (\$)
16623	Rubber Vacuum Hose (1 meter)	15

Colony Counter

Compact, handy battery-operated colony counter, it is as simple to use as a ball-point pen, and has a 4-digit LCD-display. The counter is supplied with an additional marker refill.

Model	Description	US List Price (\$)
17649	Colony counter	320

Stainless Steel Tweezers

Sartorius stainless steel tweezers can be flamed and they are autoclavable. They have blunt-edged tips for a careful, firm hold on the membrane filter.

Model	Description	US List Price (\$)
16625	Stainless steel tweezers	35

Water Traps

Used between suction flask and vacuum source, in order to prevent overflow of filtrate into an electric vacuum pump.

Model	Description	US List Price (\$)
17804-----M	Vacusart® water trap, pack of 3	47

Sterisart® NF

Your Choice For Sterility Testing

International Pharmacopeia require testing for sterility and certification of each batch of sterile product prior to distribution. The Sterisart® NF System is a unique and completely disposable technology based on the membrane filtration method. It enables the sterility testing of pharmaceutical / medical products in full compliance with international Pharmacopeia.



Features

- Unique septum
- Low adsorption
- High mechanical stability
- Sharp metal needle
- Pre-installed color-coded tube clamps
- Product/lot number identification
- Huge variety of adapters and more than 20 unit types

Applications

- Sterility Testing of (bio)pharmaceutical products, medical devices and ophthalmological products in ampoules, vials, bags, syringes, bottles, powders, etc.

Benefits

Unique Septum Version for aseptic sampling

For aseptic sampling during incubation for dilution, rapid detection or inactivation of antibiotics.

Sharp Metal needle

Convenient penetration of septum on bottles, bags and vials.

Pre-installed color-coded tube clamps

Color coded clamps for easy and reliable assignment of the Sterisart NF container.

Product-/lot number identification

Traceability of the product for documentation/security.

Huge variety of adapters and more than 20 different unit types

Pre-Sterilized gamma or ethyleneoxide units double or single packed, for testing of ampoules, vials, bags, syringes, bottles, powders, etc. are available.



Model	Type of Sample	Type of Sample Container	Description	US List Price (\$)
Sterisart® NF – Sterility Test Systems, Gamma Sterilized, 10/box				
16466-----GBD	LVPs	Closed glass bottles with septum	Long dual-needle metal spike, sterile vented	445
16467-----GBD	LVPs; SVP's	Open containers, i.e. glass ampoules, glass bottles, Collapsible bags	60 mm long needle and protective plate, inclusive sterile venting needle	445
16477-----GBD	LVPs, SVPs, Eye drops	Closed plastic containers / vials / ampoules, plastic containers of Blow-Fill-Seal fillings	Long needle, (side opening, with solid pointed tip, non-coring), protective plate, inclusive sterile venting needle	445
16475-----GBD	Lyophilisates, Soluble powders, Liquid antibiotics	Closed glass vials with septum	Two dual-needle metal spikes of different length, one is sterile-vented	450
16468-----GBD	Medical Devices	Tubing systems and bags with Luer Lock	Luer Lock connector, inclusive long needle and sterile venting needle	445
16478-----GBD	Medical devices	Containers / bags with Luer Lock male connectors	Female Luer Lock connector	445
16469-----GBD	Pre-filled syringes	Syringes with and without needles	Universal Luer adapter and long dual-needle spike, sterile venting needle	445
16476-----GBD	SVPs	Closed glass vials with septum	Short dual-needle metal spike, sterile-vented	445
Sterisart® CA – Sterility Test Systems, Gamma Sterilized, CA Membrane, 10/box				
1646601-----GBD	LVPs	Closed glass bottles with septum	Long dual-needle metal spike, sterile	460
1646701-----GBD	LVPs; SVPs	Open containers, i.e. glass ampoules, glass bottles, Collapsible bags	Sterisart 6-cm metal needle for open containers	460
Sterisart® NF – Sterility Test Systems, Gamma Sterilized, Septum, 10/box				
16466-----GSD	LVPs	Closed glass bottles with septum	Sterisart NF alpha, dual-needle metal spike for closed containers	480
16467-----GSD	LVPs; SVPs	Open containers, i.e. glass ampoules, glass bottles, Collapsible bags	Sterisart NF alpha, 6-cm metal needle for open containers	480
16475-----GSD	Lyophilisates, Soluble powders, Liquid antibiotics	Closed glass vials with septum	Two dual-needle metal spikes of different length, one is sterile-vented	480
16469-----GSD	Pre-filld syringes	Syringes with and without needles	Universal Luer adapter and long dual-needle spike, sterile vented	480
16476-----GSD	SVPs	Closed glass vials with septum	Short dual-needle metal spike, sterile-vented	480
Sterisart® NF – Accessories				
16470-----GBD	Sterisart® NF gamma tubing systems with two dual-needle metal spikes of different length, needles made of flammable stainless steel; g-sterile; 10pk		Tubing system with two dual-needle metal spikes of different length, needles made of flammable SS	187
16471-----GBD	Transfer Kit for liquids			149
16596-----HNK	Minisart® Air Syringe Filter – 0.2 µm PTFE membrane; MBS housing; 25mm; Luer Slip outlet; Gamma sterile; Individually packaged for isolators; Air/gas filtration; 50/pk			230
1ZGL--0033	Bottle Holder for 16420 Et 16419			230
Millipore Pump Adapters				
1ZA---0028	Sterisart® NF canister adapter for Millipore Symbio pumps			82
1ZG---0014	Sterisart® NF adapter for Millipore Equinox Pumps*			29

*Contact your Microbiology Sales Specialist to discuss adapters for using Sterisart® Canisters on Millipore Pumps. Many adapters need to be custom-ordered as Millipore regularly changes their pumps. Information needed: Model and Serial number of the Millipore pump.

Sterisart® Universal Pump

Ergonomic and User-friendly Pump for Sterility Testing

The Sterisart® Universal pump is specially designed for sample and media transfer into the Sterisart NF systems. It is suitable for use in cleanrooms and isolators. The pump surface is made of high grade stainless steel and all critical parts can be easily cleaned, disinfected and autoclaved. In addition to the basic version, an upgraded version featuring a display, barcode scanner and user software is also available.



Features

- Closed system – no ventilation
- Sophisticated & modular design
- Easy to clean
- Barcode Scanner
- Programmable
- Ergonomic Handling

Applications

- Liquid transfer during sterility test

Benefits

Closed system – no ventilation

Enhanced safety concerning particle release.

Sophisticated & modular design

Compact design.

Easy to clean

With Peracetic acid, H₂O₂ and acetic acid (2.5%); Quaternary ammonium; Formaldehyde and glutaraldehyde; Isopropyl alcohol, Ethanol 70%.

Barcode Scanner

Enhanced traceability and documentation of the used media and products.

Ergonomic Handling

Adjustable display

Specifications & Pricing

Model	Description	US List Price (\$)
16420	Sterisart® Universal pump, upgraded version with display and user software	15,565
16419	Sterisart® Universal pump, basic version	11,005

Note: The following items must now be ordered separately as optional accessories:

Ampoule breaker (1ZW---0002)

Draining container cover (Millipore sterility test units) (1ZG---0024)

Footswitch (1ZE---0033) [footswitch is highly recommended]

Accessories

Item	Description	US List Price (\$)
1ZE---0033	Footswitch	181
1ZG---0014	Adapter for Sterisart® NF units, fitting into container for draining of Millipore Equinox pumps*	29
1ZW---0002	Ampoule breaker	590
1ZG---0024	Cover drain container (Millipore Steritest Canisters)	126
1ZE---0039	Transport trolley	285
1ZE---0050	Installation kit for isolators	715
1ZG---0028	Container for draining	565
1ZA---0002	Drain Tubing	32
1ZGF--0020	Sterisart® 10-fold holder	305
1ZGD--0031	Sterisart Rotor Cover (Stainless Steel)	tbd

*Contact your Microbiology Sales Specialist do discuss adapters for using Sterisart® Canisters on Millipore Pumps. Many adapters need to be custom-ordered as Millipore regularly changes their pumps. Information needed: Model and Serial number of the Millipore pump.

Microsart® RESEARCH Bacteria

For Detection of Bacterial Contamination in Hours, Not Days

Designed specifically for R&D use, Microsart® RESEARCH Bacteria provides rapid (2-4 hour) and reliable detection of >95% of all known bacteria. Use of a special Taqman® probe and integration of an inhibition control in the master mix provide high result confidence and minimize prep time. Microsart® RESEARCH Bacteria is compatible with any qPCR cyclers that detects FAM® and ROX® so you can begin testing immediately using your existing equipment.



Features

- Rapid, real-time qPCR
- No DNA extraction or gel electrophoresis required
- Highly specific primers and special Taqman® probe
- Negative (inhibition) control integrated into a ready-to-use master mix
- Easy, color-coded protocol
- Compatible with any qPCR cycler that detects fluorescent dyes FAM® and ROX®
- Lyophilized reagents and validation standards
- Expert validation guidance

Benefits

- Rapid, real-time PCR provides yes/no results in just 2-4 hours
- Reduces hands on time to approximately ½ hour
- Reliable detection of >95% of all known bacteria
- Integrated control provides high result confidence and minimizes prep time
- Simplified testing process
- Permits use of existing lab equipment
- Reduced risk of infection

Applications

- PCR
- Rapid testing for bacterial contamination

Specifications & Pricing

Model	Description	US List Price (\$)
SMB95-1009	Microsart® RESEARCH Bacteria (Bacteria Detection Kit for qPCR, 25 reactions)	590
SMB95-1010	Microsart® RESEARCH Bacteria (Bacteria Detection Kit for qPCR, 100 reactions)	2,400

Accessories

Item	Description	US List Price (\$)
SMB95-2001	Microsart® Bacteria Extraction, 50 extractions (optional)	tbd



Microsart® RESEARCH Mycoplasma

Fast and easy monitoring of Mycoplasma contamination

Microsart® RESEARCH Mycoplasma enables a fast and reliable detection of Mycoplasma DNA in cell culture supernatants most applicable to R&D applications. Carefully selected primer | probe combinations are highly specific for a region within the 16S rRNA gene of at least 110 Mycoplasma species. The detection procedure can be performed within 3 hours. The use of TaqMan® probes adds specificity to the PCR detection system. Only 2 µL of starting material is required. A standard qPCR cyclers is used for amplification and evaluation is performed with standard cyclers software.



Benefits

Microsart® RESEARCH Mycoplasma is based on Real-time PCR technology:
Easy-to-use and Fast: Results in hours not days!

Primers and probes detect a highly conserved region of the 16S rRNA gene of numerous Mycoplasma species
High specificity to detect all 9 Mycoplasma species according to EP & easy result interpretation .

No specific hardware requirements
Uses common lab equipment reducing the need for additional hardware expenses.

Technical Specifications

Each kit contains reagents for 25 to 100 reactions. The expiry date of the unopened package is specified on the package label. The kit components are to be stored until use at +2 to 8°C and must be stored after opening and rehydration below -18°C. The lot specific Certificate of Analysis can be downloaded from the manufacturer's website (www.minerva-biolabs.com).

Kit Component	25 Reactons	100 Reactions
Model	SMB95-1005	SMB95-1006
Mycoplasma Mix	1 x lyophilized	4 x lyophilized
Rehydration Buffer	1 x 1.0 ml	2 x 1.0 ml
Positive Control	1 x lyophilized	1 x lyophilized
PCR grade Water	1 x 1.0 ml	4 x 1.0 ml

Pricing & Specifications

Model	Description	Qty.	US List Price (\$)
SMB95-1005	Microsart RESEARCH Mycoplasma	25	350
SMB95-1006	Microsart RESEARCH Mycoplasma	100	1,255

Accessories

Item	Description	Qty.	US List Price (\$)
SMB95-2003	Microsart® AMP Extraction	50 extractions	580

Applications

- Mycoplasma contamination control in research & development

Notice to purchaser: Limited License

Purchase of this product includes an immunity from suit under patents specified in the product insert to use only the amount purchased solely in industrial microbiology QA/QC field and also for the purchaser's own internal research. No other patent rights are conveyed expressly, by implication, or by estoppel. Further information on purchasing licenses may be obtained by contacting:

Director of Licensing, Applied Biosystems,
850 Lincoln Centre Drive,
Foster City, California 94404, USA

Microsart® ATMP and AMP Mycoplasma Kits

Fast and easy detection of Mycoplasma contamination

Reduce your testing time from weeks to 3 hours with the Microsart® ATMP and AMP Mycoplasma kits. The kits utilize quantitative, real-time PCR and are suitable for the sensitive but robust detection of Mycoplasma contamination in various raw materials in the biopharmaceutical process. With the ability to be very flexible in sample volume and sample preparation, the kits are specifically designed for the control of fermentation materials, in-process control, and lot release testing of finished products.



Pricing & Specifications

Model	Description	Qty.	US List Price (\$)
SMB95-1003	Microsart® ATMP Mycoplasma	25	580
SMB95-1004	Microsart® ATMP Mycoplasma	100	2,110
SMB95-1001	Microsart® AMP Mycoplasma	25	765
SMB95-1002	Microsart® AMP Mycoplasma	100	2,775
Microsart® Calibration Reagent Mycoplasma			
Each kit contains 1 vials of mycoplasma DNA as well as 3 vials containing buffer for the preparation of comparable negative controls and dilutions. Each vial contains 1x10 ⁶ genomes / µl of the complete Mycoplasma genome.			
SMB95-2021	Argininii		355
SMB95-2022	Orale		355
SMB95-2023	Gallisepticum		355
SMB95-2024	Pneumoniae		355
SMB95-2025	Synoviae		355
SMB95-2026	Fermentans		355
SMB95-2027	Hyorginis		355
SMB95-2028	Laidlawii		355
SMB95-2029	Citri		355
Microsart® AMP Validation Standard Mycoplasma			
Each kit contains 3 vials of mycoplasma particles as well as 2 vials containing the same carrier matrix as the mycoplasma vials for the preparation of comparable negative controls. Each vial contains 10 culture forming units (CFU) of inactivated mycoplasma particles.			
SMB95-2011	Argininii		310
SMB95-2012	Orale		310
SMB95-2013	Gallisepticum		310
SMB95-2014	Pneumoniae		310
SMB95-2015	Synoviae		310
SMB95-2016	Fermentans		310
SMB95-2017	Hyorginis		310
SMB95-2018	Laidlawii		310
SMB95-2019	Spiroplasma citri		310

Accessories

Item	Description	Qty.	US List Price (\$)
SMB95-2003	Microsart® AMP Extraktion	50 extractions	580
VS0641	Vivaspin 6, 100,000 MWCO	25	144
VS2041	Vivaspin 20, 100,000 MWCO	12	147
SMB95-2002	Microsart® AMP Coating Buffer	20 x 2 ml	91

Notice to purchaser: Limited License

Purchase of this product includes an immunity from suit under patents specified in the product insert to use only the amount purchased solely in industrial microbiology QA/QC field and also for the purchaser's own internal research. No other patent rights are conveyed expressly, by implication, or by estoppel. Further information on purchasing licenses may be obtained by contacting:

Director of Licensing, Applied Biosystems,
850 Lincoln Centre Drive,
Foster City, California 94404, USA

Microsart® Geneprep

For rapid and complete concentration and extraction of microbial DNA from liquids

Microsart® Geneprep, offers fast, convenient and reliable DNA concentration and extraction to support rapid contamination testing via any PCR or DNA-based detection assay. The unique, patented membrane dissolving technology of Microsart® Geneprep ensures maximum recovery of all microbes from the membrane while convenient, touch free membrane handling minimizes cross-contamination and the risk to worker safety.



Features

- Fast and flexible DNA extraction platform
- Patented, dissolving membrane
- Touch-free membrane transfer

Applications

- Water testing – Legionella and others
- Beverage testing
- Clinical hygiene and pharmaceutical applications

Benefits

Fast and flexible extraction platform delivers ready to analyze DNA extracts for subsequent use with any PCR or DNA-based detection assay.

Patented dissolving membrane technology improves data quality by ensuring maximum recovery of all microbes.

Convenient filter concentration and touch-free membrane transfer reduce the risk of cross contamination and improve user safety.

Technical Specifications

Each kit contains reagents for 20 filtrations and DNA extractions. The kit components are stored until use at room temperature (18 to 25°C). Rehydrated Carrier RNA has to be stored in aliquots at -18°C.

Kit Component	Quantity
Microsart® @filter	20
Microsart® @solve	20
Membrane Solvent	20 × 800 µl (Glass Vials)
Lysis Buffer	20 × 500 µl (Plastic Tubes)
Separation Paste	20 × prefilled Plastic Tubes
1.5 ml Reaction Tube	20
Carrier RNA	2 Plastic Tubes (lyophilized)
RNA Rehydration Buffer	1 Plastic Tube
Isopropanol	14 ml
70% Ethanol	14 ml
DNA Rehydration Solution	2 × 1.5 ml (Plastic Tubes)
Manual (Instructions for use)	1

Pricing & Specifications

Model	Description	Qty.	US List Price (\$)
SMB95-2004	Microsart Geneprep	20 extractions	775



MD-8 Airscan®

Fixed Sampling System for Microbial Air Monitoring of Controlled Environments

The MD8 Airscan®, together with gelatin membrane filter disposables, constitutes a sampling system for accurate, reproducible and quantitative detection of airborne microorganisms in clean rooms and isolators, whether conventionally ventilated or under laminar flow. This system is capable of detecting even the smallest airborne contaminants, including viruses.

Features

- Proprietary, ready-to-use, USP-approved gelatin membrane filters
- Compact, modular design
- Delayed start feature
- Stainless steel sampling head
- Storage of calibration and test data
- Compatibility with YDP30 thermal transfer printer and all MD8 accessories

Applications

- Microbial air monitoring of controlled environments



Benefits

Non-nutrient based USP-approved gelatin membranes permit continuous air monitoring for 8+ hours and do not promote bacterial growth.

A single command unit can be used in conjunction with multiple sampling heads in various test locations.

Modularity ensures maximum versatility to accommodate current and future needs, fits in small work areas.

Delayed start feature permits personnel to exit the sampling area and minimizes the impact of area traffic on test results.

Sampling head compatibility with in-line sterilization processes allows disinfection and prevention of secondary contamination
System stores calibration data and up to 300 test results.

Specifications & Pricing

Model	Description	US List Price (\$)
16746SHBCOM	MD8 Airscan® System Package with Bayonet Sampling Head (Includes Command Unit, Bayonet Sampling Head, and Cable)	9,025
16746SHTCOM	MD8 Airscan System Package with Tri-Clamp Sampling Head (Includes Command Unit, Tri-Clamp Sampling Head, and Cable)	9,960
16746-01--SHB	MD8 Airscan® Bayonet Sampling Head	4,895
16746-01--SHT	MD8 Airscan® Tri-Clamp Sampling Head	4,895
16746-01--COM	MD-8 Airscan® Command Unit	4,385



Accessories

Item	Description of Upgrade	US List Price (\$)
16756	Calibration unit	6,900
17085	Flexible PVC hose with reinforced ends (2 m)	96
17088	Flexible PVC hose with reinforced ends (5 m)	162
17662	Silicone tubing, sterilizable (1 m, state length required)	100
17658	Connector (air sampler inlet to flexible hose), aluminum	107
17659	Connector (flexible hose to filter holder adapter), aluminum	103
17656	Aluminum Stack for MD8 air samplers	2,040
17660	Middle part replacement	154
17661	End cap replacement	66
17016	Adapter (DN 25 hose barb to 1"-1 1/2" sanitary flange) to connect to isolator via silicone tubing and a filter capsule, stainless steel	tbd
17030	Adapter (DN 30 hose barb to 1"-1 1/2" sanitary flange) to connect to isolator via flexible PVC hose and filter capsule, stainless steel	134
17033	Clamp for 1"-1 1/2" sanitary flanges, stainless steel	tbd
17659---003	Connector (flexible hose to filter holder adapter), tri clamp, stainless steel	590
17801---001	Adapter for gelatine filter disposables, stainless steel	310
17801	Adapter for gelatin membrane filter	86
17659---003	Adapter, Tri-Clamp (TC 50.5) to bayonet, stainless steel	590
1ZAD-0025	Adapter, bayonet to Tri-Clamp (TC 50.5), stainless steel	tbd
16746-01--EXC	MD8 Airscan® Extension cable	tbd

Disposable Gelatine Units, Sterile, Pack of 10

17528--80----ACD	Individually packed in 1 polyethylene bag each	109
17528--80----BZD	Individually packed in 3 polyethylene bags each	120
17528--80----VPD	Individually packed in 3 polyethylene bags each, but label on innermost bag	123

Gelatine Disc Filter, Sterile, Sealed in Units of Five Each in a Polyethylene Bag

12602--80----ALK	80 mm dia. Package Size: 50	275
12602--50----ALN	50 mm dia. Package Size: 100	385
12602--50----ALK	50 mm dia. Package Size: 50	260
12602--47----ALN	47 mm dia. Package Size: 100	410
12602--47----ALK	47 mm dia. Package Size: 50	260
12602--37----ALK	37 mm dia. Package Size: 50	180

Other Consumables

11404--80----ALN	Cellulose nitrate membrane filters, 0.8 µm, white with black grid, pre-sterilized in bags of 5	380
13004--80----ALN	Cellulose nitrate membrane filters, 0.8 µm, gray with white grid, pre-sterilized in bags of 5	370
11301--80----ALN	Cellulose nitrate membrane filters, 8 µm, white no grid, pre-sterilized in bags of 5g	380



Calibration Unit



Gelatine Membrane Filters

MD-8 Airport

A Portable Solution for Microbial Air Monitoring of Controlled Environments

The battery operated, portable MD8 Airport is a convenient solution for microbial air monitoring. The MD8 Airport can be used with either gelatin membrane filters or BACTair culture plates. It provides accurate, reproducible and quantitative detection of airborne microorganisms and is capable of detecting even the smallest airborne contaminants, including viruses.



Features

- Battery powered and portable
- Compatible with agar-free gelatin membrane filters or culture media plates
- Built-in air flow compensation
- Battery power level indicator
- Ergonomic, easy to clean design
- Adjustable flow and sample volume settings
- User-friendly prompts
- Five language options: English, French, German, Italian and Spanish
- Automatic storage of most recent test parameters
- On-site calibration

Benefits

- Provides maximum flexibility in testing location selection
- High recovery rates
- Fast and simple set-up
- Consistent and reliable performance
- Ease of use

Applications

- Microbial air monitoring of controlled environments

Specifications & Pricing

Model	Description	US List Price (\$)
16757	MD-8 Airport, complete with an adapter (17801) and battery charger (69898525)	3,640

*Each version can be switched from 50 to 60 Hz and back.



Accessories

Item	Description of Upgrade	US List Price (\$)
16756	Calibration unit	6,900
17803	Adapter for BACTair™ on MD-8 Airport sampler	118
17801---001	Adapter for gelatine filter disposables, stainless steel	310
BACTair™ Culture Plates		
12PX-D0002	Covers for BACTair™ Culture Media Plates, 10+ 2 units individually, sterile packaged	18
14301-110-----K	BACTair™ Plates, sterile, without media, qty: 50	81
14320-110----ACD	Tryptic Soy Agar (TSA), 110 mm, single packed, qty: 10	50
14321-110----ACD	Sabouraud Agar, 110 mm, single packed, qty: 10	50
Disposable Gelatine Units, Sterile, Pack of 10		
17528--80----ACD	Individually packed in 1 polyethylene bag each	109
17528--80----BZD	Individually packed in 3 polyethylene bags each	120
17528--80----VPD	Individually packed in 3 polyethylene bags each, but label on innermost bag	123
Gelatine Disc Filter, Sterile, Sealed in Units of Five Each in a Polyethylene Bag		
12602--80----ALK	80 mm dia. Package Size: 50	275
12602--50----ALN	50 mm dia. Package Size: 100	385
12602--50----ALK	50 mm dia. Package Size: 50	260
12602--47----ALN	47 mm dia. Package Size: 100	410
12602--47----ALK	47 mm dia. Package Size: 50	260
12602--37----ALK	37 mm dia. Package Size: 50	180
Other Consumables		
11404--80----ALN	Cellulose nitrate membrane filters, 0.8 µm, white with black grid, pre-sterilized in bags of 5	380
13004--80----ALN	Cellulose nitrate membrane filters, 0.8 µm, gray with white grid, pre-sterilized in bags of 5	370
11301--80----ALN	Cellulose nitrate membrane filters, 8 µm, white no grid, pre-sterilized in bags of 5g	380



Calibration Unit



Gelatine Membrane Filters



BACTair™ Culture Plates

BIOSTAT® A

Your professional start in cell cultivation and microbial fermentation

BIOSTAT® A is an entry-level bioreactor | fermenter designed for easy control of cell growth and fermentation. It is ideal for educational or training of controlled cell growth and scale-up.

BIOSTAT® A is available in configurations for microbial fermentation, and for cell culture applications. Using the advanced package, you can operate it by a tablet, or a smartphone, and can perform fed-batch processes.



Features

- Simple and automatic aeration control
- Easy operation and intuitive control suits all users
- Intuitive operation concept including operation via tablet and smartphone
- Circulated cooling chiller for microbial fermentation
- Fast load pumps heads
- Easy status checks for pH and DO probes
- Easy data storage and data analysis
- Options for glass or single use vessels
- Multi parallel cultivation for faster results

Benefits

- Speeds up training and reduces the risk of operating errors
- Allows fermentation in any lab and minimizes water usage
- No manual adjustment of flow meters and no pulsed aeration
- Easy, fast and safe handling of tubing

Applications

- Microbial Fermentation and Cell Culture
- Academic education and technical training
- Early-Stage research and development

NOTE: Due to the simplicity of BIOSTAT® A configurations there are no FAC numbers for BIOSTAT® A. Valid quotes must be created in the Sartorius Sales Configurator, otherwise orders cannot be accepted.

Specifications & Pricing

Item	Description	US List Price (\$)
BIOSTATACC1S	BIOSTAT A, 1L Univessel Glass, Standard Package, CC Install and Preventive Service BIOSTAT® A,CC Univessel® Glass 1L 115V,STD Package: Control Tower,4-gas O2,N2,CO2,3-pumps,fixed speed,2 ext.analog inputs,4-20 mApH,acid CO2 baseDO,FilterHeater,2-UniVessel® SU,Heating Blkt,Temp Sensor,Safety valve., Laptop Computer	on request
BIOSTATACC1A	BIOSTAT A, 1L Univessel Glass, Advanced Package, CC Install and Preventive ServiceBIOSTAT® A,CC Univessel® Glass 1L 115V,STD Package: Control Tower,4-gas O2,N2,CO2,3-pumps,fixed speed,2 ext.analog inputs,4-20 mApH,acid CO2 baseDO,FilterHeater,2-UniVessel® SU,Heating Blkt,Temp Sensor,Safety valve., Labtop computer. Advanced version for substrate controller and external feed pump and operation via tablet and smartphone. 2 x spare analog inputs	on request
BIOSTATACC2S	BIOSTAT A, 2L Univessel Glass, Standard Package, CC Install and Preventive Service BIOSTAT® A,CC Univessel® Glass 1L 115V,STD Package: Control Tower,4-gas O2,N2,CO2,3-pumps,fixed speed,2 ext.analog inputs,4-20 mApH,acid CO2 baseDO,FilterHeater,2-UniVessel® SU,Heating Blkt,Temp Sensor,Safety valve., Laptop Computer	on request
BIOSTATACC2A	BIOSTAT A, 2L Univessel Glass, Advanced Package, CC Install and Preventive Service BIOSTAT® A,CC Univessel® Glass 1L 115V,STD Package: Control Tower,4-gas O2,N2,CO2,3-pumps,fixed speed,2 ext.analog inputs,4-20 mApH,acid CO2 baseDO,FilterHeater,2-UniVessel® SU,Heating Blkt,Temp Sensor,Safety valve.,Laptop computer. Advanced version for substrate controller and external feed pump and operation via tablet and smartphone. 2 x spare analog inputs	on request

Specifications & Pricing

Item	Description	US List Price (\$)
BIOSTATACC5S	BIOSTAT® A, 5L Univessel Glass, Standard Package, CC Install and Preventive Service BIOSTAT® A,CC UniVessel® Glass 1L 115V,STD Package: Control Tower,4-gas O2,N2,CO2, 3-pumps, fixed speed, 2 ext.analog inputs, 4–20 mApH,acid CO2 baseDO, FilterHeater, 2-UniVessel® SU,Heating Blkt,Temp Sensor,Safety valve, Laptop Computer	on request
BIOSTATACC5A	BIOSTAT® A, 5L Univessel Glass, Advanced Package, CC Install and Preventive Service BIOSTAT® A,CC UniVessel® Glass 1L 115V,STD Package: Control Tower,4-gas O2,N2,CO2,3-pumps,fixed speed,2 ext.analog inputs,4–20 mApH, acid CO2 baseDO, FilterHeater, 2-UniVessel® SU,Heating Blkt, Temp Sensor, Safety valve, Laptop computer. Advanced version for substrate controller and external feed pump and operation via tablet and smartphone. 2 x spare analog inputs	on request
BIOSTATAM01S	BIOSTAT® A, 1L Univessel Glass, Standard Package, MO Install and Preventive Service Biostat A Microbial package with either 1L,2L or 5L glass autoclavable vessel, Base unit with motor, (air/O2 MFC's) aeration(ring sparger), 3 pumps (acid/base/antifoam), pH/DO/temp/foam/agitation(rushton impellers)control. Temp control via Chiller for cooling and Heating blanket. Vessel accessories (dip tubes, baffles,condensor etc). Laptop computer	on request
BIOSTATAM01A	BIOSTAT® A, 1L Univessel Glass, Advanced Package, MO Install and Preventive Service Biostat A Microbial package with either 1L,2L or 5L glass autoclavable vessel, Base unit with motor, (air/O2 MFC's) aeration(ring sparger), 3 pumps (acid/base/antifoam), pH/DO/temp/foam/agitation(rushton impellers)control. Temp control via Chiller for cooling and Heating blanket. Vessel accessories (dip tubes, baffles,condensor etc). Laptop computer with standard or upgrade to Advanced version for substrate controller and external feed pump and operation via tablet and smartphone. 2 x spare analog inputs	on request
BIOSTATAM02S	BIOSTAT® A, 2L Univessel Glass, Standard Package, MO Install and Preventive Service Biostat A Microbial package with either 1L,2L or 5L glass autoclavable vessel, Base unit with motor, (air/O2 MFC's) aeration ring sparger), 3 pumps (acid/base/antifoam),pH/DO/temp/foam/agitation(rushton impellers)control. Temp control via Chiller for cooling and Heating blanket. Vessel accessories (dip tubes, baffles,condensor etc). Laptop computer	on request
BIOSTATAM02A	BIOSTAT® A, 2L Univessel Glass, Advanced Package, MO Install and Preventive Service Biostat A Microbial package with either 1L,2L or 5L glass autoclavable vessel, Base unit with motor, (air/O2 MFC's) aeration (ring sparger), 3 pumps (acid/base/antifoam),pH/DO/temp/foam/agitation(rushton impellers)control. Temp control via Chiller for cooling and Heating blanket. Vessel accessories (dip tubes, baffles,condensor etc). Laptop computer with standard or upgrade to Advanced version for substrate controller and external feed pump and operation via tablet and smartphone. 2 x spare analog inputs	on request
BIOSTATAM05S	BIOSTAT® A, 5L Univessel Glass, Standard Package, MO Install and Preventive Service Biostat A Microbial package with either 1L,2L or 5L glass autoclavable vessel, Base unit with motor, (air/O2 MFC's) aeration (ring sparger), 3 pumps (acid/base/antifoam),pH/DO/temp/foam/agitation(rushton impellers)control. Temp control via Chiller for cooling and Heating blanket. Vessel accessories (dip tubes, baffles,condensor etc). Laptop computer	on request
BIOSTATAM05A	BIOSTAT® A, 5L Univessel Glass, Advanced Package, MO Install and Preventive Service Biostat A Microbial package with either 1L,2L or 5L glass autoclavable vessel, Base unit with motor, (air/O2 MFC's) aeration (ring sparger), 3 pumps (acid/base/antifoam),pH/DO/temp/foam/agitation(rushton impellers)control. Temp control via Chiller for cooling and Heating blanket. Vessel accessories (dip tubes, baffles,condensor etc). Laptop computer with standard or upgrade to Advanced version for substrate controller and external feed pump and operation via tablet and smartphone. 2 x spare analog inputs	on request

Sartorius | lab academy

The Sartorius Lab Academy is a training program presented by our product specialists to convey a new understanding of techniques and applications in the areas of weighing, moisture analysis, lab water, liquid handling and filtration. These courses teach how to enhance the operation of your equipment to maximize performance as well as improve the efficiency and productivity of laboratory workflows. Each academy comes with a select number of modules to choose from. Simply choose the most appropriate module(s) based on your requirements. We can host our Lab Academy courses at your own company or at our Sartorius Applications Center in Bohemia, NY. Certificates can also be provided after course completion.

weighing academy

The Sartorius Weighing Academy provides the core fundamentals of weighing, details the proper location for a balance, identifies common influencing factors that can affect weighing results and suggests the best operating practices for minimizing errors to promote accurate weighing. This academy also discusses the importance of calibration (verification) and the balance qualification process as well as how to comply with regulatory requirements where compliance with international regulations and quality standards (USP Chapter 41, ISO 17025, 21 CFR Part 11, etc.) is mandatory.

Module 1: Weighing Fundamentals (1 hour)

Module 2: Balance Calibration (30 minutes)

Module 3: Weighing in Regulated Environments (45 minutes)

moisture academy

Moisture analysis of materials using the thermogravimetric method can be tricky. Not only does the technology differ from the traditional oven drying method, but there are also differences in heating technologies and sample preparation. The Sartorius Moisture Academy discusses factors to show how differences in technology and sample preparation can affect the final results. Hands-on demonstrations to show proper sample preparation techniques are also reviewed.

Module 1: Thermogravimetric Moisture Analysis of Materials (1.5 hours)

water academy

The Sartorius Water Academy discusses the types of impurities in drinking water, the effect of impurities on water purification systems and measurements, the testing and removing of impurities and how to minimize the risk of recontamination and bacterial growth. This academy also focuses on the classification of water, the definition of water qualities and regulatory affairs and standards. It also identifies the ideal lab water solution for a given application as well as the best practices for efficiency, correct quality and quality consistency.

Module 1: Water Impurities (30 minutes)

Module 2: Water Quality (30 minutes)

Module 3: Lab Water Systems (30 minutes)

pipetting academy

The Sartorius Pipetting Academy gives you the background knowledge and practical insights to work efficiently and safely to receive the most accurate pipetting results. These modules discuss what your pipette is capable of, when to use specific pipetting techniques, how to instruct your co-workers on ergonomic pipetting postures and solutions, and calibrating your pipette correctly to work in accordance with international quality standards (ISO 8655).

Module 1: Basics of Pipetting and Ergonomics (1 hour)

Module 2: Advanced Laboratory Pipetting and Ergonomics (1 hour)

Module 3: Pipetting Techniques for Best Results (1 hour)

Module 4: Best Pipetting Practices for Cell Culture Application (1 hour)

Module 5: Pipette Calibration & Maintenance (1 hour)

filtration academy

Filtration basics are crucial for you to select the right filtration devices and membranes in order to sterilize reagents and to protect chromatography columns. The Sartorius Filtration Academy gives an overview of the most important filtration methods and devices. The practical and theoretical training parts enable you to ensure ergonomic handling and to achieve the fastest process speeds and the highest possible sample recoveries.

Module 1: Basic Filtration (30 minutes)

Module 2: Filtration Devices (30 minutes)

Module 3: Ultrafiltration Devices (30 minutes)

For more information or to schedule a lab academy, please contact your local sales representative.

Pipette Preventive Maintenance Programs

Available for all Sartorius Liquid Handling brand pipettes

All pipettes are precision instruments, with mechanical and/or electronic components that are naturally subject to wear and possibly even damage over time, for example:

- The piston surface can deteriorate, wear, or corrode over time from friction and/or chemical attack
- Tipcones are subject to chemical corrosion and wear, especially in the tip sealing area
- Batteries within electronic pipettes have a normal lifespan of 1-2 years and must be replaced periodically

Pipette failure rates can be significantly reduced with the application of a regular Preventative Maintenance Program. Enhance the reliability of your pipette and the integrity of your data!

Sartorius Liquid Handling recommends Preventive Maintenance programs be applied once a year.

Ordering Information

Pipette Type	PM Program Includes:	US List Price (\$)
1-channel mechanical	Tip cone, piston, calibration	82
8-channel mechanical	Tip cones, pistons, calibration	150
12-channel mechanical	Tip cones, pistons, calibration	172
1-channel electronic	Tip cone, piston, battery, calibration	125
8-channel electronic	Tip cones, pistons, battery, calibration	195
12-channel electronic	Tip cones, pistons, battery, calibration	245

Sartorius Liquid Handling can provide Preventive Maintenance Programs to any Sartorius Liquid Handling pipette, including Proline Plus, Proline Electronic, ePET models, as well as non-biohit pipettes. Contact us for additional details.

Pricing subject to change without notice. May not be combined with any other special offers or promotions. Parts-only pricing without calibration can be quoted separately at a non-promotional level upon request.

Calibration combined with Preventive Maintenance Package

Preventive Maintenance Packages are designed for Biohit-Sartorius pipettes only. A typical Preventive Maintenance Package includes the replacement of the unit's critical parts (piston(s), tip cone(s), and battery on electronic models) and your choice of three service levels.

- Cleaning of the exterior and interior surfaces
- Replacement of the critical parts (tip cone, piston, and battery for electronic units)
- "After Service" evaluation performed (additional "As Found" performance checks available)
- A wide range of calibration levels to meet your Lab's needs
- Visual linearity check performed on all multi-channel units
- All calibration equipment and certificates traceable through NIST

Certificates and Reports

Detailed ISO 17025/NIST compliant service reports and calibration certificates are included with every pipette evaluation and or repair.

Pipette Repairs

Pipette repairs are performed at our service center. We simplify the repair process by providing affordable prices, based on the model type.

Our depot repair service features:

- Genuine factory parts
- Repairs are performed by a factory-trained technician
- Instrument will pass the same quality control guidelines required when the unit was new
- One year guarantee on parts and labor



Contact:
Call: 1.800.635.2906
Email: pipette.service@sartorius.com

arium® Maintenance and Service Contracts

On-site Maintenance and Calibration

Maximized longevity of your water system can be realized by scheduling our factory trained field service engineers for preventive maintenance visits.



Feature

Take advantage of the range of offers from our laboratory service team:

- Needs analysis
- Installation and startup
- Technical support
- Equipment qualification (IQ, OQ) and validation
- Preventive maintenance service and service contracts
- Corrective maintenance and spare part service

Water Systems

The exchanging of consumable items, such as cartridges, filters, and UV bulbs are key elements in reducing unforeseen downtime.

Extended Warranty

Description	Maintenance #	US List Price (\$)
12 months arium® advance RO	84WAB14	1,325
12 months arium® advance EDI	84WAB17	1,325
12 months arium® pro (basic)	84WAB19	725
12 months arium® pro DI	84WAB63	725
12 months arium® pro UF	84WAB64	725
12 months arium® pro UV	84WAB65	725
12 months arium® pro VF	84WAB66	725
12 months arium® pro UV-TOC	84WAB67	725
12 months arium® pro VF-TOC	84WAB68	725
12 months arium® comfort I	84WAB80	1,515
12 months arium® comfort II	84WAB81	1,515
12 months arium® mini H2O-MM-T	84WAB97	540
12 months arium® mini H2O-MM-UV-T	84WAB98	540
12 months arium® mini H2O-MA-T	84WAB85	680
12 months arium® mini H2O-MA-UV-T	84WAB96	680

Installation & Setup

Model	Maintenance #	US List Price (\$)
PRO (basic)	84ICB19	1,060
PRO-DI	84ICB63	1,060
PRO-UF	84ICB64	1,060
PRO-UV	84ICB65	1,060
PRO-VF	84ICB66	1,060
PRO-UV-TOC	84ICB67	1,060
PRO-VF-TOC	84ICB68	1,060
61316RO	84ICB14	1,165
61215 EDI	84ICB17	1,165
Advanced RO-1	84ICB82	1,165
Advanced RO-3	84ICB83	1,165
Comfort I RO-2 + UV + TOC	84ICB80	1,405
Comfort II RO-2 + UV + TOC	84ICB81	1,405
Advance EDI RO-1 + EDI	84ICB84	1,405
Comfort I RO-1	84ICB86	1,405
Comfort I RO-1 + UV	84ICB87	1,405
Comfort I RO-1 + UV + TOC	84ICB88	1,405
Comfort I RO-2	84ICB89	1,405
Comfort I RO-2 + UV	84ICB90	1,405
Comfort II RO-2 + EDI	84ICB91	1,405
Comfort II RO-2 + EDI + UV	84ICB92	1,405
Comfort II RO-1 + EDI	84ICB93	1,405
Comfort II RO-1 + EDI + UV	84ICB94	1,405
Comfort II RO-1 + EDI + UV + TOC	84ICB95	1,405
Pro & Advance Combo	84IAB	call for pricing
arium® mini H2O-MM-T-US	84ICB97	645
arium® mini H2O-MM-UV-T-US	84ICB98	645
arium® mini H2O-MA-T-US	84ICB85	750
arium® mini H2O-MA-UV-T-US	84ICB96	750

Contact:

Call: 1.800.635.2906

Email: LPS.service.NA@sartorius.com

Advanced Preventive Maintenance Packages

Preventive Service and Consumable packages are bundled into a single price. Factory-trained field engineers ensure each system is maintained to deliver optimal performance. The engineer will exchange the consumables that were included with the package.

Model	Maintenance No.	Pre-Treatment Cartridge	Comfort Pre-Treatment Cartridge	RO Module Cleaning Set	Replacement Bag	RO-Modules	RO-Module	EDI RO-Modules	EDI RO-Module	Softener Cartridge	612 Softener Cartridge	Elemental Kit	Biological Kit	Analytical Kit	Comfort Kit	Final Filter	UV Lamp	Ultrafilter	arium® Cleaning Kit	TOC Module
61316 RO System	84MAB14	✓		✓		✓										✓			✓	
61215 EDI System	84MAB17	✓		✓		✓				✓						✓			✓	
Advance RO-1	84MAB82	✓		✓	✓		✓									✓				
Advance RO-2	84MAB14	✓		✓	✓	✓										✓				
Advance RO-3	84MAB83	✓		✓	✓	✓	✓									✓				
Advance EDI RO-1 + EDI	84MAB84	✓		✓	✓			✓	✓							✓				
Advance EDI RO-2 + EDI	84MAB17	✓		✓	✓		✓		✓							✓				
611DI	84MAB10										✓					✓			✓	
611UF	84MAB11											✓				✓		✓	✓	
611UV	84MAB12												✓			✓	✓		✓	
611VF	84MAB13												✓			✓	✓	✓	✓	
pro (Basic)	84MAB19										✓					✓				
pro DI	84MAB63										✓					✓			✓	
pro UF	84MAB64											✓				✓		✓	✓	
pro UV	84MAB65												✓			✓	✓		✓	
pro VF	84MAB66												✓			✓	✓	✓	✓	
pro UV-TOC	84MAB67												✓			✓	✓		✓	✓
pro VF-TOC	84MAB68												✓			✓	✓	✓	✓	✓
comfort I RO-1	84MAB86		✓	✓	✓		✓								✓	✓				
comfort I RO-1 + UV	84MAB87		✓	✓	✓		✓								✓	✓	✓			
comfort I RO-1 + UV + TOC	84MAB88		✓	✓	✓		✓								✓	✓	✓			✓
comfort I RO-2	84MAB89		✓	✓	✓	✓									✓	✓				
comfort I RO-2 + UV	84MAB90		✓	✓	✓	✓									✓	✓	✓			
comfort I RO-2 + UV + TOC	84MAB80		✓	✓	✓	✓									✓	✓	✓			✓
comfort II RO-1 + EDI	84MAB93		✓	✓	✓	✓		✓	✓						✓	✓				
comfort II RO-1 + EDI + UV	84MAB94		✓	✓	✓			✓	✓						✓	✓	✓			
comfort II RO-1 + EDI + UV + TOC	84MAB95		✓	✓	✓			✓	✓						✓	✓	✓			✓
comfort II RO-2 + EDI	84MAB91		✓	✓	✓		✓		✓						✓	✓	✓			
comfort II RO-2 + EDI + UV	84MAB92		✓	✓	✓		✓		✓						✓	✓	✓			
comfort II RO-2 + EDI + UV + TOC	84MAB81		✓	✓	✓		✓		✓						✓	✓	✓			✓

H2O-CPAD-1

H2O-CPFCO-1

H2O-CCS

H2O-CBS-20 / H2O-CBS-50

613CPM4-----V

613CPM4

H2O-CRO-H-2

H2O-CRO-H-1

H2O-CSO-1

612CPS1

H2O-E-Pack

H2O-B-Pack

H2O-A-Pack

H2O-C-Pack

5441307H4--CE

611CEL1

611CDU5

611CD51

84MAB69

Note: ✓ Identifies that the final filter is only to be added when the tank is included

Lab Balance Installations, Maintenance, and Service Contracts

On-site Maintenance and Calibration

Our nationwide field service network makes it convenient and easy for installation and maintenance of all balances and moisture analyzers. Whether you need basic service, general installation, calibration, specific certificates or reports, count on our factory-trained engineers to give the best service experience in the industry.

Installation Service Includes:

- Installation of equipment; tested for reproducibility corner load error, and linearity
- Certificate of calibration
- Basic user training

Installation Service		Item	US List Price (\$)
Lab Balances	Electronic Precision Balance	84ICL01	265
	Electronic Analytical Balance	84ICL02	265
	Electronic Semi-Micro Balance	84ICL03	265
	Electronic Micro Balance	84ICL04	550
Moisture Analysis	Moisture Analyzer (MA units)	84ICL10	550
	Moisture Analyzer (MK 3 units)	84ICL11	660
	Microwave dryer (LMA200)	84ICL13	660
Certificates	ISO 17025 Measurement Uncertainty Certificate	84CENC	125
	USP Chapter 41 Certificate	84CGNA	95

IQQQ		Item	US List Price (\$)
Lab Balances	Electronic Precision Balance	84QAL01	1,110
	Electronic Analytical Balance	84QAL02	1,110
	Electronic Semi-Micro Balance	84QAL03	1,110
	Electronic Micro Balance	84QAL04	1,110
Moisture Analysis	Infrared Moisture Analyzer	84QAL10	1,110
	Moisture Analyzer with Microwave resonance technology	84QAL11	1,110

Regular maintenance ensures continued proper functioning of your equipment and reliability of your measurement results while helping to prevent unscheduled downtime. Whether performed at fixed intervals in the scope of a service contract or as needed, our maintenance service gives you the reliability you need in your equipment.

Preventative Maintenance Contract Includes	Standard Contract	Basic Maintenance
Service technician visit at scheduled intervals	✓	✓
Check workplace-specific functioning of the equipment	✓	✓
Check metrological specifications	✓	✓
Inspect equipment, including mechanical and electrical sub-assemblies	✓	✓
Test device configuration settings	✓	✓
Cleaning, in accordance with equipment use	✓	✓
Adjust equipment as needed	✓	✓
Repair labor discount	✓	
Spare parts discount	✓	
Certificate of Calibration	○	○
ISO 17025 Measurement Uncertainty Certificate	○	○
USP Chapter 41 Certificate	○	○
Temperature record for moisture analyzers	✓	

✓ = included ○ = optional

Contact:

Call: 1.800.635.2906

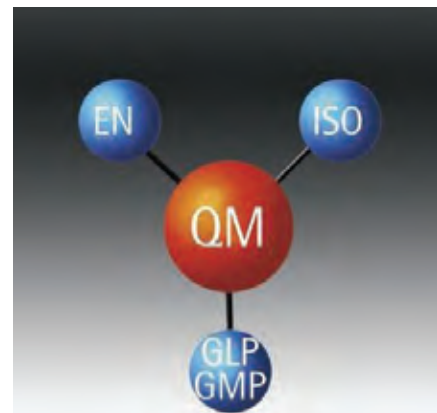
Email: LPS.service.NA@sartorius.com

Calibration, Measurement Uncertainty and USP Chapter 41 Certificates

Sartorius has been accredited by ANAB to issue ISO/IEC 17025 calibration certificates for non-automatic electronic weighing instruments, which is internationally recognized and gives you and your auditors absolute certainty in assessing your results of measurement.

Your advantages:

- Traceability to a national standard and the international prototype kilogram
- Precise indication of the uncertainty of measurement
- Reliability for your monitoring of inspection, measuring, and test equipment
- International validity



USP Chapter 41 – Determination of the Operating Range of a Balance

Our experienced service technicians test your balance to determine the operating range in accordance with USP guidelines and prepare a quantity certificate as described in the USP. A label is then affixed to the weighing instrument indicating the smallest permissible sample quantity in accordance with USP.

- Testing of your weighing instrument in accordance with the latest USP guidelines
- Determination of the operating range as described in USP guidelines
- Affixing the label on your weighing instrument

Original Spare Parts Service

Constant availability of more than 4000 different original spare parts and consumables in our central warehouse guarantees fast repairs. Because spare parts are always required in a hurry, over 95% of all spare parts leave the warehouse within 24 hours of ordering. We would be happy to help you determine which parts you need.

Our services include:

- Constant availability of all the main spare parts
- Spare parts for all current product models up to at least 5 years past the last date of production
- Order by telephone or in our Web-based e-shop
- Availability and net price indicated when you order
- Short delivery times from our central warehouse



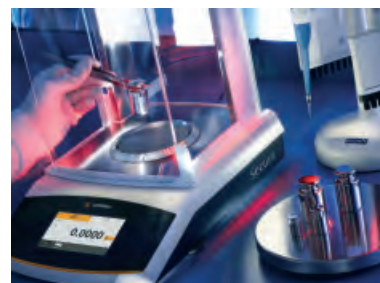
Instrument Repair

Instrument repairs are performed at our service center. We simplify the repair process by providing affordable flat rate prices, based on the model type.

Our depot repair service features:

- Genuine factory parts
- Repairs are performed by a factory-trained technician
- Instrument will pass the same quality control guidelines required when the unit was new
- 90-Day guarantee on parts and labor
- Turnaround is less than 10 business days for most models

Need a repair quote? Give us a call. 1.800.635.2906



After Service Installation Option

We now offer, in local zones only, installation services for repairs performed in the New York Service Center. Customers can opt to have a Sartorius Service Engineer deliver and install their balance after repair. This service is provided where we have local representation.



Extended Warranties | 2019

Model	Description	US List Price (\$)
84WAL01	12 months electronic precision balance	310
84WAL02	12 months electronic analytical balance	310
84WAL03	12 months electronic semi-micro balance	310
84WAL04	12 months electronic micro balance	630
84WAL10	12 months IR moisture analyzer	630
84WAL13	12 months μ w dryer	1,940
84WAB14	12 months arium advance RO	1,325
84WAB17	12 months arium advance EDI	1,325
84WAB19	12 months arium® pro (basic)	725
84WAB63	12 months arium® pro DI	725
84WAB64	12 months arium® pro UF	725
84WAB65	12 months arium® pro UV	725
84WAB66	12 months arium® pro VF	725
84WAB67	12 months arium® pro UV-TOC	725
84WAB68	12 months arium® pro VF-TOC	725
84WAB80	12 months arium® comfort I	1,515
84WAB81	12 months arium® comfort II	1,515
84WAP01	12 months mechanical single channel pipette	113
84WAP02	12 months mechanical 8 channel pipette	205
84WAP03	12 months mechanical 8 channel pipette $\leq 10\mu$ l	205
84WAP04	12 months electronic single channel pipette	172
84WAP05	12 months electronic 8 channel pipette	260
84WAP06	12 months electronic 8 channel pipette $\leq 10\mu$ l	260
84WAP09	12 months Dispenser	235
84WAP10	12 months mechanical 12 channel pipette	235
84WAP11	12 months mechanical 12 channel pipette $\leq 10\mu$ l	235
84WAP12	12 months electronic 12 channel pipette	310
84WAP13	12 months electronic 12 channel pipette $\leq 10\mu$ l	310

For more information on warranty policies, please contact Sartorius, or reference the "Certificate of Warranty" document.

Sartorius Corporation

5 Orville Drive
 Bohemia, NY 11716
 Phone | 800.635.2906
 Fax | 631.254.4252
www.sartorius.us

Warranty Information

Item Description	Duration
Laboratory Balances (Cubis®, Secura®, Quintix®, Practum®, Entris®, Mass Comparators, Spedcal Mobile, etc.)	2 years
Paint Mixing Scales & Terminals	2 years
Cubis® Dosing System	1 year
Balance Accessories	1 year
Infrared Moisture Analyzers	2 years
Microwave Moisture Analyzers	1 year
Safety Powder Hoods	1 year
Pipettes	2 years
pH Meters	2 years
pH Electrodes	1 year
Laboratory Water Systems	2 years
Water System Accessories	1 year
Centrifuges & Accessories	1 year
MD8 Air Samplers	2 years
MD8 Air Sampler Accessories	1 year
e.motion Membrane Dispenser	2 years
Microsart Vacuum, e.Jet, & Pumps	2 years
Pump Accessories	1 year
Combisart® & Combi.jet Manifolds	1 year
Combisart® Accessories	1 year
Sterisart® Universal Pumps	2 years
Sterisart® Pump Accessories	1 year



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All prices and specifications listed herein are subject to change without notice. List prices effective January 1, 2019 through December 31, 2019.
Version 0119