GILSON 2020
PRODUCT GUIDE

LIQUID HANDLING | PURIFICATION | EXTRACTION | SERVICES

GILSON®

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ABOUT US

Gilson is a family-owned global manufacturer of sample management and purification solutions for the life sciences industry. We help researchers advance the pace of discovery by creating easy-to-use lab devices that improve reproducibility and traceability. Since 1957, we've been developing innovative products, such as the first continuously adjustable-volume pipette, PIPETMAN®. By partnering closely with the scientific community, we have advanced our portfolio offerings, adding automated pipetting systems and chromatography instruments, plus intuitive software management capabilities. Backed by worldwide R&D, service, and support, Gilson strives to enable verifiable science and to make lab life easier for our customers.

A GLOBAL PRESENCE

Whether through its integrated network (POs and MOs) or through its team of distributors, the Gilson brand is present and recognized in laboratories all over the world.

- Product Organization (PO)
- Market Organization (MO)
- Gilson Distributor

SERVICES & SUPPORT

WE'RE HERE TO HELP

We are committed to the highest caliber of quality and complete customer satisfaction with our suite of products and services. This commitment doesn't end with your purchase—it only just begins. We provide custom solutions to help you meet a wide range of laboratory requirements including: service, preventative maintenance, calibration, and general product support. Gilson has dedicated service, support, and training teams worldwide to help you maintain maximum performance of your instruments, make your lab life easier, and ensure reliability of your data.

EXPERTS READY TO HELP

CUSTOMER SERVICE   **TECHNICAL SUPPORT**   **SERVICE CENTER**

Find contact information for your local Gilson representative at www.gilson.com/contactus.

MANUAL LIQUID HANDLING

HAVE OUR EXPERT TECHNICIANS RESTORE YOUR PIPETTES

Gilson is the expert on pipettes with over 65 years of experience in the industry. Regular maintenance of your pipettes ensures they operate within specification and deliver reproducible data with the accuracy you need. Regular service also helps minimize downtime in your lab, reduces the likelihood of unplanned, costly repairs, and increases the lifespan of your pipettes. Gilson service technicians are factory trained and use manufacturer parts along with proprietary software, such as Gilson Volumetrics™. Gilson Volumetrics utilizes automatic data transfer from our analytical balances and environmental probes to generate your service documentation with the utmost attention to detail and accuracy of data. Gilson is an ISO 9001-certified company and ISO 17025-accredited service is available throughout the organization.

AUTOMATED LIQUID HANDLING

AVOID UNEXPECTED SYSTEM DOWNTIME AND ASSURE ACCURACY

Keep your instruments running like new by signing up for preventative maintenance services. With regularly scheduled preventative maintenance, you'll extend the life of your instruments and save time and money by avoiding unexpected interruptions to your work. Additionally, you can have confidence in the accuracy and reliability of your results because we'll ensure your instruments are operating within original specifications.

LIQUID HANDLING

TRUSTED RESULTS BEGIN WITH TRUSTED LIQUID HANDLING TOOLS

Gilson liquid handling tools deliver the precise control you need for sample and reagent volume transfers, ensuring reproducible results while making life in the lab easier. Beginning with the legendary PIPETMAN® technology, our liquid handling tools have evolved with your needs. Ergonomically designed with scientists like you in mind, we offer durable solutions from manual, single channel units to completely automated liquid handling systems.

PIPETTE SELECTION GUIDE

	DESCRIPTION		BENEFITS	THROUGHPUT	COMFORT
SINGLE CHANNEL, AIR DISPLACEMENT	PIPETMAN® M PIPETMAN® M Connected		• Ease-of-Use • On-Target Performance • PIPETMAN® M Connected Makes Manual Processes Verifiable	L — **M — H** Medium to High	
	PIPETMAN® L		• All Day Pipetting Comfort • Secure Pipetting • Fully Autoclavable	**L — M** — H Low to Medium	
	PIPETMAN® G		• Pipetting Comfort • Reliable Results • Built-to-Last and Convenient	**L — M** — H Low to Medium	
	PIPETMAN® Classic		• Built-to-Last • Extremely Easy to Maintain	**L** — M — H Low	
MULTICHANNEL	PIPETMAN® M PIPETMAN® M Connected		• Ease-of-Use • On-Target Performance • PIPETMAN® M Connected Makes Manual Processes Verifiable	L — **M — H** Medium to High	
	PIPETMAN® L		• All Day Pipetting Comfort • Secure Pipetting • Fully Autoclavable	L — **M — H** Medium to High	
	PIPETMAN® G		• Pipetting Comfort • Reliable Results • Built-to-Last and Convenient	**L — M** — H Low to Medium	
SPECIALTY	MICROMAN® E		• Reliable Results Even with Non-Aqueous Liquids • Overall Protection • Designed with Comfort in Mind	**L** — M — H Low	
SEMI-AUTO	PLATEMASTER®		• Save Time and Increase Your Productivity • Simplifies Sample Prep • Convenient for any Microplate Application	L — M — **H** High	
AUTOMATED	PIPETMAX®		• Upgrade to Automation for Reliable, Accurate Pipetting • Free Yourself from Tedious Sample Prep Work • Stay Flexible—For Now and For the Future • PIPETMAN® Inside	L — M — **H** High	

PIPETTE FAMILIES

WHAT ARE MANUAL AIR DISPLACEMENT PIPETTES?

Air displacement pipettes are very accurate for standard pipetting applications. The piston, integrated in the lower part of the pipette, moves the liquid under the action of an air cushion (called dead volume) between the pipette and the liquid sample.

It is recommended to use an air displacement pipette with aqueous and non-viscous samples. Temperature and atmospheric pressure, as well as the specific weight and viscosity of the solution, can affect the performance of air displacement pipettes.

## WHAT ARE ELECTRONIC AIR DISPLACEMENT PIPETTES?

Electronic pipettes work like manual air displacement pipettes under the action of an air cushion. The manual movement of the piston is carried out by an electronic motor, requiring virtually zero pipetting forces. They decrease the risk of RSI-type injuries caused by repetitive pipetting and improve comfort as well as reproducibility at the bench.

WHAT ARE POSITIVE DISPLACEMENT PIPETTES?

In positive displacement pipettes, the piston is not integrated inside the pipette. It is part of the capillary and is in direct contact with the liquid. The capillary piston (CP) tips eliminate the air cushion between the sample and piston so volume accuracy is not affected by the sample's properties. The disposable capillary piston also prevents contamination since it makes direct contact with the sample, ensuring the user and the pipette are protected.

Air cushion

Disposable tip

Air Displacement Pipettes

Disposable capillary

Disposable piston

Piston seal
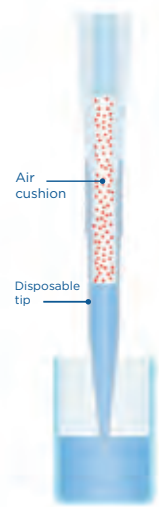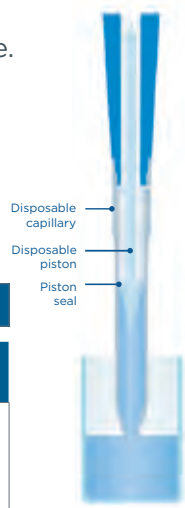
Positive Displacement Pipettes

THE RIGHT CHOICE FOR YOUR LIQUID HANDLING			
Liquid Types	Applications	Your Gilson Solution	Associated Gilson Consumables
Aqueous (ex. water, sucrose, Tris, buffer with a pH of 7)	Biology Biochemistry Clinical assays and immunoassays Cell culture Analytical chemistry	PIPETMAN® Classic PIPETMAN® G PIPETMAN® L PIPETMAN® M PIPETMAN® M Connected	PIPETMAN® DIAMOND Tips
Viscous (ex. glycerol, surfactants, oil)	Molecular Biology Petrochemistry Point of Care Diagnostic Pharmaceutical Cosmetic Environment Food Quality Control	MICROMAN® E DISTRIMAN® REPETMAN®	Capillary Pistons DISTRITIPS® REPET-TIPS
Volatile (ex. ethanol, hexane, formaldehyde)			
Hot or cold			
Foaming			
Contaminated or toxic (ex. blood, infectious bacteria or viruses, hazardous radioactive isotopes)			
Corrosive (ex. hydrochloric or sulfuric acid)			

The performances of PIPETMAN are optimal with PIPETMAN DIAMOND Tips.
These products have been developed as a complete pipetting system.

trackman®

CONNECTED

MAKE YOUR LAB AS SMART AS YOUR SCIENCE

TRACKMAN® Connected is a tablet with exclusive applications and accessories that make pipetting on different labware more reliable, improving the efficiency and traceability of your experiment.
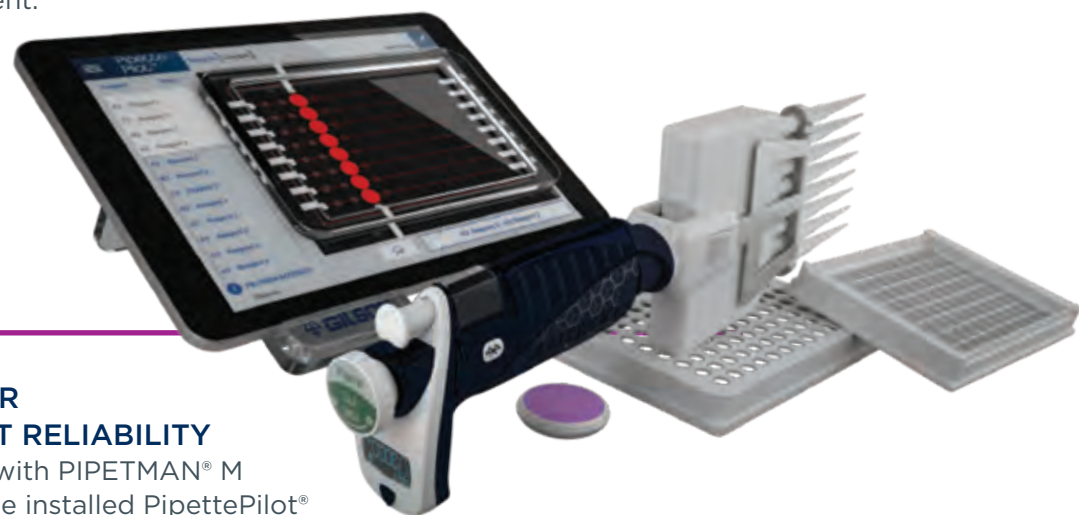
BOOST YOUR EXPERIMENT RELIABILITY

When paired with PIPETMAN® M Connected, the installed PipettePilot® app guides you through your microplate method. The app displays where, when, and how much to pipette with real-time interactions to prevent errors.

GET IMMEDIATE REPRODUCIBILITY

Effortlessly create and share your protocols. Compatibility with SciNote lets you structure your work into projects, experiments, and tasks, making it easy to visualize your work progress. Sync your results for a comprehensive view of your pipetting actions, samples, and protocols.

IMPROVE THE TRACEABILITY OF YOUR EXPERIMENT

Integrate connected tools into your protocols in a safe and convenient way. TRACKMAN Connected offers complete traceability of your experiments by recording pipetting actions and environmental conditions.

ACCESS PIPETTE ANALYTICS AND CALIBRATION HISTORY

PipetteScope® informs you exactly when your pipette needs to be calibrated. Through the app, you can easily request a calibration appointment and also view service history reports in one central location. PipetteScope gives you instant access to the pipette usage analytics as well as access to the user guide.

INSIDE YOUR KIT

TABLET WITH PIPETTEPILOT® AND PIPETTESCOPE® APPS

Interact with all your apps at the bench with the tablet included in your kit. The tablet comes preloaded with PipettePilot to create and track pipetting tasks. The app displays where and when to pipette with real time interactions to prevent pipetting errors and provides you with a report for complete traceability of your experiment.

Our other application, PipetteScope, helps you keep tabs on your pipette last calibration, user's guide, and other useful pipetting metrics.

ENVIRONMENT SENSOR

Monitor temperature, pressure, and humidity during your experiment with your environment sensor.

BENCHTOP PIPETTING ACCESSORIES

Get all the accessories to integrate your tablet at the bench in a safe way: microplate holder, tempered glass screen protector, 5V power adapter, microplate adapter, and strip adapters.

PAIR IT WITH PIPETMAN® M CONNECTED

Explore new possibilities in protocol execution assistance, traceability, and data acquisition through its Bluetooth® connection to Gilson applications.

For more information about PIPETMAN M Connected, refer to page 12.

TRACKMAN Connected and PIPETMAN M Connected are available in Benelux, France, Germany, Italy, Spain, Switzerland, the United-Kingdom, Canada, and the United States only, through Gilson direct sales and related distributors.

TRACKMAN® CONNECTED	
Model	Part Number
TRACKMAN Connected EU Plug	FB1020
TRACKMAN Connected UK Plug	FB1021
TRACKMAN Connected US Plug	FB1022

pipetman®

M CONNECTED

PIPETTE SMARTER.
REPORT FASTER. CONFIDENTLY.

PIPETMAN® M Connected is an electronic, Bluetooth®-enabled pipette that offers accuracy and precision in both standard and repetitive pipetting modes. Requiring virtually no pipetting forces to aspirate and dispense samples, PIPETMAN M Connected helps reduce pipetting fatigue and increase pipetting efficiency. PIPETMAN M Connected is available in 20 models, covering a volume range from 0.5 µL to 10 mL for single channel models, and 0.5 µL to 1200 µL for multichannel models.

MAKE MANUAL PROCESSES VERIFIABLE

With PIPETMAN M Connected, explore new possibilities in protocol execution assistance and data acquisition through the Bluetooth connection to Gilson applications. The pipette interacts in real time with your TRACKMAN® Connected system for increased accuracy and efficiency in both standard and repetitive modes.

GILSON APPLICATIONS

PIPETTEPILOT®

The PipettePilot app comes preloaded on the TRACKMAN Connected tablet. The app displays where and when to pipette in real time to prevent pipetting errors. The app also provides you with a report for complete traceability of your experiment.

PIPETTESCOPE®

With PipetteScope, know exactly when your pipette needs to be calibrated, request a calibration appointment, and view service history reports, all in one location. Additionally, with the app, you'll gain visibility into your pipette's usage analytics and get quick access to user's guides. Download it for free on Google Play.

PIPETMAN M CONNECTED SOFTWARE

Executing custom protocols has never been easier. PIPETMAN M Connected Software allows you to create, save, and transfer up to ten custom protocols into PIPETMAN M Connected.

PIPETMAN M Connected is available in Benelux, France, Germany, Italy, Spain, Switzerland, United Kingdom, Canada, and the United States only.

PIPETMAN® M CONNECTED SINGLE CHANNEL

Model	PIPETMAN DIAMOND Tips		Part Number	Gilson Specifications				ISO 8655-2		
				Standard PIPET mode				REPETITIVE mode volume	Systematic error (µL)	Random error (µL)
				Volume Range	Volume (µL)	Systematic error (µL)	Random error (µL)			
P10M	D10 DL10	DF10 DFL10	F81040	0.5–10 µL	0.5 1 5 10	± 0.040 ± 0.025 ± 0.060 ± 0.080	≤ 0.013 ≤ 0.012 ≤ 0.020 ≤ 0.025	0.5–10 µL	± 0.12 ± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08 ≤ 0.08
P20M	D200	DF30	F81041	2–20 µL	2 10 20	± 0.075 ± 0.100 ± 0.150	≤ 0.025 ≤ 0.035 ≤ 0.050	2–20 µL	± 0.2 ± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1 ≤ 0.1
P100M	D200	DF100	F81042	5–100 µL	5 10 50 100	± 0.35 ± 0.30 ± 0.38 ± 0.40	≤ 0.10 ≤ 0.10 ≤ 0.12 ≤ 0.15	5–100 µL	± 0.8 ± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3 ≤ 0.3
P200M	D200 D300	DF200 DF300	F81043	20–200 µL	20 100 200	± 0.40 ± 0.80 ± 1.00	≤ 0.15 ≤ 0.22 ≤ 0.26	5–200 µL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P300M	D200 D300	DF200 DF300	F81044	20–300 µL	20 30 150 300	± 0.80 ± 0.70 ± 0.90 ± 1.05	≤ 0.16 ≤ 0.20 ≤ 0.23 ≤ 0.30	10–300 µL	± 4.0 ± 4.0 ± 4.0 ± 4.0	≤ 1.5 ≤ 1.5 ≤ 1.5 ≤ 1.5
P1200M	D1000 D1200	DF1000 DF1200	F81045	100–1200 µL	100 120 600 1200	± 2.5 ± 2.4 ± 3.6 ± 6.0	≤ 0.4 ≤ 0.4 ≤ 0.8 ≤ 1.2	20–1200 µL	± 16 ± 16 ± 16 ± 16	≤ 6.0 ≤ 6.0 ≤ 6.0 ≤ 6.0
P5000M	D5000		F81046	500–5000 µL	500 2500 5000	± 10 ± 15 ± 25	≤ 2 ≤ 4 ≤ 7	100–5000 µL	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mLM	D10mL		F81047	1–10 mL	1 mL 5 mL 10 mL	± 25 ± 30 ± 50	≤ 4 ≤ 8 ≤ 12	200 µL–10 mL	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0

PIPETMAN® M CONNECTED MULTICHANNEL

Model	PIPETMAN DIAMOND Tips		Part Number	Volume Range	Volume (µL)	Systematic error (µL)	Random error (µL)	REPETITIVE mode volume	Systematic error (µL)	Random error (µL)
P8x10M	D10 DL10	DF10 DFL10	F81048	0.5–10 µL	0.5 1 5 10	± 0.05 ± 0.04 ± 0.08 ± 0.10	≤ 0.02 ≤ 0.02 ≤ 0.04 ≤ 0.06	0.5–10 µL	± 0.24 ± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16 ≤ 0.16
P12x10M			F81049							
P8x20M	DL10 D200	DFL10 DF30	F81050	1–20 µL	1 2 10 20	± 0.08 ± 0.09 ± 0.15 ± 0.25	≤ 0.05 ≤ 0.06 ≤ 0.10 ≤ 0.12	1–20 µL	± 0.4 ± 0.4 ± 0.4 ± 0.4	≤ 0.2 ≤ 0.2 ≤ 0.2 ≤ 0.2
P12x20M			F81051							
P8x100M	D200	DF100	F81052	10–100 µL	10 50 100	± 0.25 ± 0.50 ± 0.80	≤ 0.14 ≤ 0.20 ≤ 0.25	5–100 µL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P12x100M			F81053							
P8x200M	D200 D300	DF100 DF200 DF300	F81054	20–200 µL	20 100 200	± 0.50 ± 1.00 ± 2.00	≤ 0.16 ≤ 0.30 ≤ 0.50	5–200 µL	± 3.2 ± 3.2 ± 3.2	≤ 1.2 ≤ 1.2 ≤ 1.2
P12x200M			F81055							
P8x300M	D200 D300	DF200 DF300	F81056	10–300 µL	10 30 150 300	± 1.00 ± 1.00 ± 1.50 ± 2.40	≤ 0.18 ≤ 0.18 ≤ 0.375 ≤ 0.45	10–300 µL	± 8.0 ± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0 ≤ 3.0
P12x300M			F81057							
P8x1200M	D1200	DF1200	F81058	50–1200 µL	50 120 600 1200	± 4.0 ± 4.0 ± 6.0 ± 9.6	≤ 0.7 ≤ 0.7 ≤ 1.5 ≤ 1.8	50–1200 µL	± 32 ± 32 ± 32 ± 32	≤ 12 ≤ 12 ≤ 12 ≤ 12
P12x1200M			F81059							

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.

Under these conditions, Gilson volumetric specifications in standard pipetting (PIPET mode) are guaranteed with a performance exceeding ISO 8655-2 recommendations for this mode. In the absence of ISO recommendations for repetitive pipetting mode for air displacement pipettes, Gilson volumetric specifications for repetitive pipetting (REPETITIVE mode) are guaranteed within ISO 8655-2 recommendations for standard pipetting (Cf. ISO 8655-2 table 1).

pipetman®

GUARANTEED PERFORMANCE WITH OUTSTANDING ACCURACY

The PIPETMAN® M electronic pipette combines the simplicity of a mechanical pipette with the consistency of an electronic liquid handling tool. The PIPETMAN M range has been designed for guaranteed accuracy and precision in both standard and repetitive modes for reliable sample preparation.

ON-TARGET PERFORMANCE
Trust your results with guaranteed performance in both standard and repetitive pipetting modes.

PIPETTING COMFORT
Lightweight and perfectly balanced with low ejection and volume setting forces, for hours of pipetting comfort.

EASE-OF-USE
With a streamlined user interface and four pipetting modes, control of your sample prep is at your fingertips. Switch to custom mode to execute your own protocol transferred from the PIPETMAN M Software.

PIPETMAN® M SINGLE CHANNEL

Model	PIPETMAN DIAMOND Tips	Part Number	Gilson Specifications — Standard PIPET mode — Volume Range	Volume (µL)	Systematic error (µL)	Random error (µL)	ISO 8655-2 — REPETITIVE mode volume	Systematic error (µL)	Random error (µL)
P10M	D10 DL10 / DF10 DFL10	F81022	0.5–10 µL	0.5 / 1 / 5 / 10	± 0.040 / ± 0.025 / ± 0.060 / ± 0.080	≤ 0.013 / ≤ 0.012 / ≤ 0.020 / ≤ 0.025	0.5–10 µL	± 0.12 / ± 0.12 / ± 0.12 / ± 0.12	≤ 0.08 / ≤ 0.08 / ≤ 0.08 / ≤ 0.08
P20M	D200 / DF30	F81023	2–20 µL	2 / 10 / 20	± 0.075 / ± 0.100 / ± 0.150	≤ 0.025 / ≤ 0.035 / ≤ 0.050	2–20 µL	± 0.2 / ± 0.2 / ± 0.2 / ± 0.2	≤ 0.1 / ≤ 0.1 / ≤ 0.1 / ≤ 0.1
P100M	D200 / DF100	F81013	5–100 µL	5 / 10 / 50 / 100	± 0.35 / ± 0.30 / ± 0.38 / ± 0.40	≤ 0.10 / ≤ 0.10 / ≤ 0.12 / ≤ 0.15	5–100 µL	± 0.8 / ± 0.8 / ± 0.8 / ± 0.8	≤ 0.3 / ≤ 0.3 / ≤ 0.3 / ≤ 0.3
P200M	D200 D300 / DF200 DF300	F81024	20–200 µL	20 / 100 / 200	± 0.40 / ± 0.80 / ± 1.00	≤ 0.15 / ≤ 0.22 / ≤ 0.26	5–200 µL	± 1.6 / ± 1.6 / ± 1.6	≤ 0.6 / ≤ 0.6 / ≤ 0.6
P300M	D200 D300 / DF200 DF300	F81014	20–300 µL	20 / 30 / 150 / 300	± 0.80 / ± 0.70 / ± 0.90 / ± 1.05	≤ 0.16 / ≤ 0.20 / ≤ 0.23 / ≤ 0.30	10–300 µL	± 4.0 / ± 4.0 / ± 4.0 / ± 4.0	≤ 1.5 / ≤ 1.5 / ≤ 1.5 / ≤ 1.5
P1200M	D1000 D1200 / DF1000 DF1200	F81015	100–1200 µL	100 / 120 / 600 / 1200	± 2.5 / ± 2.4 / ± 3.6 / ± 6.0	≤ 0.4 / ≤ 0.4 / ≤ 0.8 / ≤ 1.2	20–1200 µL	± 16 / ± 16 / ± 16 / ± 16	≤ 6.0 / ≤ 6.0 / ≤ 6.0 / ≤ 6.0
P5000M	D5000	F81016	500–5000 µL	500 / 2500 / 5000	± 10 / ± 15 / ± 25	≤ 2 / ≤ 4 / ≤ 7	100–5000 µL	± 40 / ± 40 / ± 40	≤ 15.0 / ≤ 15.0 / ≤ 15.0
P10mLM	D10mL	F81017	1–10 mL	1 mL / 5 mL / 10 mL	± 25 / ± 30 / ± 50	≤ 4 / ≤ 8 / ≤ 12	200 µL–10 mL	± 60 / ± 60 / ± 60	≤ 30.0 / ≤ 30.0 / ≤ 30.0

PIPETMAN® M MULTICHANNEL

Model	PIPETMAN DIAMOND Tips	Part Number	Gilson Specifications — Standard PIPET mode — Volume Range	Volume (µL)	Systematic error (µL)	Random error (µL)	ISO 8655-2 — REPETITIVE mode volume	Systematic error (µL)	Random error (µL)
P8x10M	D10 DL10 / DF10 DFL10	F81025	0.5–10 µL	0.5 / 1 / 5 / 10	± 0.05 / ± 0.04 / ± 0.08 / ± 0.10	≤ 0.02 / ≤ 0.02 / ≤ 0.04 / ≤ 0.06	0.5–10 µL	± 0.24 / ± 0.24 / ± 0.24 / ± 0.24	≤ 0.16 / ≤ 0.16 / ≤ 0.16 / ≤ 0.16
P12x10M		F81026							
P8x20M	DL10 D200 / DFL10 DF30	F81027	1–20 µL	1 / 2 / 10 / 20	± 0.08 / ± 0.09 / ± 0.15 / ± 0.25	≤ 0.05 / ≤ 0.06 / ≤ 0.10 / ≤ 0.12	1–20 µL	± 0.4 / ± 0.4 / ± 0.4 / ± 0.4	≤ 0.2 / ≤ 0.2 / ≤ 0.2 / ≤ 0.2
P12x20M		F81028							
P8x100M	D200 / DF100	F81018	10–100 µL	10 / 50 / 100	± 0.25 / ± 0.50 / ± 0.80	≤ 0.14 / ≤ 0.20 / ≤ 0.25	5–100 µL	± 1.6 / ± 1.6 / ± 1.6	≤ 0.6 / ≤ 0.6 / ≤ 0.6
P12x100M		F81019							
P8x200M	D200 D300 / DF100 DF200 DF300	F81029	20–200 µL	20 / 100 / 200	± 0.50 / ± 1.00 / ± 2.00	≤ 0.16 / ≤ 0.30 / ≤ 0.50	5–200 µL	± 3.2 / ± 3.2 / ± 3.2	≤ 1.2 / ≤ 1.2 / ≤ 1.2
P12x200M		F81030							
P8x300M	D200 D300 / DF200 DF300	F81031	10–300 µL	10 / 30 / 150 / 300	± 1.00 / ± 1.00 / ± 1.50 / ± 2.40	≤ 0.18 / ≤ 0.18 / ≤ 0.375 / ≤ 0.45	10–300 µL	± 8.0 / ± 8.0 / ± 8.0 / ± 8.0	≤ 3.0 / ≤ 3.0 / ≤ 3.0 / ≤ 3.0
P12x300M		F81032							
P8x1200M	D1200 / DF1200	F81020	50–1200 µL	50 / 120 / 600 / 1200	± 4.0 / ± 4.0 / ± 6.0 / ± 9.6	≤ 0.7 / ≤ 0.7 / ≤ 1.5 / ≤ 1.8	50–1200 µL	± 32 / ± 32 / ± 32 / ± 32	≤ 12 / ≤ 12 / ≤ 12 / ≤ 12
P12x1200M		F81021							

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.

Under these conditions, Gilson volumetric specifications in standard pipetting (PIPET mode) are guaranteed with a performance exceeding ISO 8655-2 recommendations for this mode. In the absence of ISO recommendations for repetitive pipetting mode for air displacement pipettes, Gilson volumetric specifications for repetitive pipetting (REPETITIVE mode) are guaranteed within ISO 8655-2 recommendations for standard pipetting (Cf. ISO 8655-2 table 1).

ACCESSORIES

Description	Part Number
PIPETMAN M Power Carrousel	FB1001
PIPETMAN M Stand Adaptor	F807023

pipetman®

L

INCREASE PRODUCTIVITY WITHOUT SACRIFICING COMFORT

Built for traceability and comfort, PIPETMAN® L is designed to increase daily productivity, giving you the ability to pipette longer without fatigue. This pipette combines the legendary durability of the PIPETMAN® Classic, a newly designed body, and a state-of-the-art mechanism.

ALL DAY PIPETTING COMFORT

Balance is key for a comfortable pipetting experience. Every aspect of the PIPETMAN L has been designed with your hand in mind to help increase daily productivity and pipette longer without fatiguing your hand.

SECURE PIPETTING

PIPETMAN L features a true volume-locking mechanism that guarantees no accidental volume change during pipetting cycles, which could alter accuracy and precision.

Additionally, PIPETMAN L multichannel models offer optimized performance across channels for a uniform sample delivery.

PIPETMAN L is also available as a fixed volume pipette.

FULLY AUTOCLAVABLE*

PIPETMAN L variable volume models are fully autoclavable without disassembly for maximum convenience and protection from cross-contamination.

*To determine if your PIPETMAN L is autoclavable, check to see if the serial number begins with NK or newer versions. If you're unsure, please contact your local Gilson representative.

FULLY
VARIABLE
VOLUME
MODELS
AUTOCLAVABLE

PIPETMAN® L SINGLE CHANNEL—VARIABLE VOLUME MODELS

Model	PIPETMAN® DIAMOND Tips		Part Number		Volume (µL)	Maximum Permissible Errors			
			With Stainless Steel Ejector	With Plastic Ejector		Gilson		ISO 8655	
						Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P2L	D10 DL10	DF10ST DFL10ST	FA10001M	FA10001P	0.2 0.5 1 2	± 0.024 ± 0.025 ± 0.027 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.013 ≤ 0.014	± 0.08 ± 0.08 ± 0.08 ± 0.08	≤ 0.04 ≤ 0.04 ≤ 0.04 ≤ 0.04
P10L*	D10 DL10	DF10ST DFL10ST	FA10002M	FA10002P	1 5 10	± 0.025 ± 0.075 ± 0.100	≤ 0.012 ≤ 0.030 ≤ 0.040	± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08
P20L	D200	DF30ST	FA10003M	FA10003P	2 10 20	± 0.10 ± 0.10 ± 0.20	≤ 0.030 ≤ 0.050 ≤ 0.060	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
P100L	D200	DF100ST	FA10004M	FA10004P	10 50 100	± 0.35 ± 0.40 ± 0.80	≤ 0.10 ≤ 0.12 ≤ 0.15	± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3
P200L	D200 D300	DF200ST DF300ST	FA10005M	FA10005P	20 100 200	± 0.50 ± 0.80 ± 1.60	≤ 0.20 ≤ 0.25 ≤ 0.30	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P1000L	D1000 D1200	DF1000ST DF1200ST	FA10006M	FA10006P	100 500 1000	± 3.0 ± 4.0 ± 8.0	≤ 0.6 ≤ 1.0 ≤ 1.5	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0
P5000L**	D5000		FA10007		500 2500 5000	± 12 ± 15 ± 30	≤ 3 ≤ 5 ≤ 8	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mLL**	D10mL		FA10008		1000 5000 10000	± 30 ± 40 ± 60	≤ 6 ≤ 10 ≤ 16	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0

PIPETMAN® L MULTICHANNEL

Model	PIPETMAN® DIAMOND Tips		Part Number	Volume (µL)	Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P8x10L	D10 DL10	DF10ST DFL10ST	FA10013	0.5 1	± 0.08 ± 0.08	≤ 0.04 ≤ 0.05	± 0.24 ± 0.24	≤ 0.16 ≤ 0.16
P12x10L			FA10014	5 10	± 0.20 ± 0.20	≤ 0.10 ≤ 0.10	± 0.24 ± 0.24	≤ 0.16 ≤ 0.16
P8x20L	DL10 D200	DFL10ST DF30ST	FA10009	2 10	± 0.10 ± 0.20	≤ 0.08 ≤ 0.10	± 0.4 ± 0.4	≤ 0.20 ≤ 0.20
P12x20L			FA10010	20	± 0.40	≤ 0.15	± 0.4	≤ 0.20
P8x200L	D200 D300	DF200ST DF300ST	FA10011	20 100	± 0.50 ± 1.00	≤ 0.25 ≤ 0.40	± 3.2 ± 3.2	≤ 1.2 ≤ 1.2
P12x200L			FA10012	200	± 2.00	≤ 0.50	± 3.2	≤ 1.2
P8x300L	D200 D300	DF200ST DF300ST	FA10015	20 30	± 1.00 ± 1.00	≤ 0.35 ≤ 0.35	± 8.0 ± 8.0	≤ 3.0 ≤ 3.0
P12x300L			FA10016	150 300	± 1.50 ± 3.00	≤ 0.60 ≤ 1.00	± 8.0 ± 8.0	≤ 3.0 ≤ 3.0

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.
* P10L model can be used up to 0.5 µL.
** P5000L and P10mLL do not have tip ejectors.
For a pipette with a plastic tip ejector, the part number ends with the letter P,
For a pipette with a stainless steel tip ejector, the part number is ends with the letter M.

PIPETMAN® L KITS

Model	Part Number	PIPETMAN L Models	PIPETMAN® DIAMOND Tips	Accessories
PIPETMAN L Starter Kit	F167350	P20L P200L P1000L	D200 D1000	3 SINGLE™ pipette holders 3 plastic ejectors 1 Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN L Micro-volume Kit	F167550	P2L P10L P100L	DL10 D200	3 SINGLE™ pipette holders 3 plastic ejectors 1 Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN L 4-pipette Kit	F167370	P2L P20L P200L P1000L	DL10 D200 D1000	4 SINGLE™ pipette holders 1 Gilson Guide to Pipetting 1 Two-minute inspection poster

For our full range of pipette accessories, see page 23.

pipetman®

G

PREMIUM PIPETTING COMFORT

PIPETMAN® G offers one of the lowest pipetting forces commercially available. With a redesigned piston assembly system and high-quality piston grease, PIPETMAN G guarantees hours of comfortable pipetting.

RELIABLE RESULTS

PIPETMAN G relies on the legendary accuracy, precision, and reliability of PIPETMAN®, with improved pipetting comfort.

BUILT-TO-LAST AND CONVENIENT

Made of PVDF and stainless steel, PIPETMAN G offers premium durability. The PIPETMAN G clip ejector allows for convenient access to serviceable parts.

PIPETMAN® G KITS

Model	Part Number	PIPETMAN G Models	PIPETMAN DIAMOND Tips	Accessories
PIPETMAN G Starter Kit	F167900	P20G P200G P1000G	D200 D1000	3 SINGLE™ pipette holders 3 plastic ejectors 3 Comfort Handles Gilson Guide to Pipetting Two-minute inspection poster
PIPETMAN G Micro-volume Kit	F167800	P2G P10G P100G	DL10 D200	3 SINGLE™ pipette holders 3 plastic ejectors Gilson Guide to Pipetting Two-minute inspection poster
PIPETMAN G Large-volume Kit	F167920	P5000G P10mLG	-	2 bags of 10 filters
PIPETMAN G Four Pipette Kit	F167360	P2G P20G P200G P1000G	DL10 D200 D1000	4 SINGLE™ pipette holders 4 Comfort Handles Gilson Guide to Pipetting Two-minute inspection poster

PIPETMAN® G SINGLE CHANNEL

Model	PIPETMAN® DIAMOND Tips		Part Number	Volume (µL)	Maximum Permissible Errors			
					Gilson		ISO 8655	
					Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P2G	D10 DL10	DF10ST DFL10ST	F144054M	0.2 0.5 1 2	± 0.024 ± 0.025 ± 0.025 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.012 ≤ 0.014	± 0.08 ± 0.08 ± 0.08 ± 0.08	≤ 0.04 ≤ 0.04 ≤ 0.04 ≤ 0.04
P10G*	D10 DL10	DF10ST DFL10ST	F144055M	1 5 10	± 0.025 ± 0.075 ± 0.100	≤ 0.012 ≤ 0.030 ≤ 0.040	± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08
P20G	D200	DF30ST	F144056M	2 10 20	± 0.10 ± 0.10 ± 0.20	≤ 0.030 ≤ 0.050 ≤ 0.060	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
P100G	D200	DF100ST	F144057M	10 50 100	± 0.35 ± 0.40 ± 0.80	≤ 0.10 ≤ 0.12 ≤ 0.15	± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3
P200G	D200 D300	DF200ST DF300ST	F144058M	20 100 200	± 0.50 ± 0.80 ± 1.60	≤ 0.20 ≤ 0.25 ≤ 0.30	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P1000G	D1000 D1200	DF1000ST DF1200ST	F144059M	100 500 1000	± 3.0 ± 4.0 ± 8.0	≤ 0.6 ≤ 1.0 ≤ 1.5	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0
P5000G**	D5000		F144066	500 2500 5000	± 12 ± 15 ± 30	≤ 3 ≤ 5 ≤ 8	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mLG**	D10mL		F144067	1000 5000 10000	± 30 ± 40 ± 60	≤ 6 ≤ 10 ≤ 16	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0

PIPETMAN® G MULTICHANNEL

Model	PIPETMAN® DIAMOND Tips		Part Number	Volume (µL)	Maximum Permissible Errors			
					Gilson		ISO 8655	
					Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P8x10G P12x10G	D10 DL10	DF10ST DFL10ST	F144068 F144069	1 5 10	± 0.08 ± 0.20 ± 0.20	≤ 0.05 ≤ 0.10 ≤ 0.10	± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16
P8x20G P12x20G	DL10 D200	DFL10ST DF30ST	F144070 F144071	2 10 20	± 0.10 ± 0.20 ± 0.40	≤ 0.08 ≤ 0.10 ≤ 0.20	± 0.4 ± 0.4 ± 0.4	≤ 0.20 ≤ 0.20 ≤ 0.20
P8x200G P12x200G	D200 D300	DF200ST DF300ST	F144072 F144073	20 100 200	± 0.50 ± 1.00 ± 2.00	≤ 0.25 ≤ 0.40 ≤ 0.50	± 3.2 ± 3.2 ± 3.2	≤ 1.2 ≤ 1.2 ≤ 1.2
P8x300G P12x300G	D200 D300	DF200ST DF300ST	F144074 F144075	30 150 300	± 1.00 ± 1.50 ± 3.00	≤ 0.35 ≤ 0.60 ≤ 1.00	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0

Gilson maximum permissible errors are guaranteed only when PIPETMAN® pipettes are used with the recommended PIPETMAN® DIAMOND Tips.
*P10G model can be used up to 0.5 µL.
** P5000G and P10mLG do not have tip ejectors.

ACCESSORIES

Description	Part Number
CARROUSEL STAND, 7 PIPETTES	F161401
TRIO STAND, 3 PIPETTES	F161405

For single channel models, plastic tip ejectors are available as accessories. For our full range of pipette accessories, see page 23.

pipetman®

THE WORLD PIPETTING STANDARD

The PIPETMAN® Classic line, one of the world standards in pipetting, offers a wide range of continuously adjustable, air-displacement pipettes with legendary accuracy and precision. The PIPETMAN Classic line is available in eight single channel models covering a range of volumes from 0.2 µL to 10 mL.

BUILT TO LAST

Made of highly resistant materials like PVDF and stainless steel, PIPETMAN Classic offers uncontested durability and reliability. Built to last, it is the economical solution for years of pipetting.

EXTREMELY EASY TO MAINTAIN

Routine cleaning and maintenance are all that is required to keep PIPETMAN Classic in pristine condition for years.

The PIPETMAN Classic design allows for easy access to user-serviceable parts, along with a fully autoclavable tip holder and ejector.

AN EVOLUTION

1969 The Original PIPETMAN	1972 PIPETMAN® Classic	2007 PIPETMAN® Neo	2011 PIPETMAN® G	2012 PIPETMAN® L
The PIPETMAN story began more than 50 years ago with the invention of the original PIPETMAN, the world's FIRST continuously adjustable variable volume pipette.	PIPETMAN Classic is one of the world standards in pipetting. It boasts accuracy, precision, and reliability.	PIPETMAN Neo contains all the benefits that built the reputation of the legendary PIPETMAN Classic, with lower pipetting forces.	PIPETMAN G provides the durability and dependable accuracy in results of the PIPETMAN Classic with the added bonus of increased comfort.	Built for traceability and comfort, PIPETMAN L is designed to increase daily productivity, giving you the ability to pipette longer without fatigue.

For more information about PIPETMAN Neo, please contact your local Gilson representative.

PIPETMAN® CLASSIC SINGLE CHANNEL—VARIABLE VOLUME MODELS

Model	PIPETMAN® DIAMOND Tips		Part Number	Volume (µL)	Maximum Permissible Errors			
					Gilson		ISO 8655	
					Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P2	D10 DL10	DF10ST DFL10ST	F144801	0.2 0.5 1 2	± 0.024 ± 0.025 ± 0.025 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.012 ≤ 0.014	± 0.08 ± 0.08 ± 0.08 ± 0.08	≤ 0.04 ≤ 0.04 ≤ 0.04 ≤ 0.04
P10	D10 DL10	DF10ST DFL10ST	F144802	1 5 10	± 0.025 ± 0.075 ± 0.100	≤ 0.012 ≤ 0.030 ≤ 0.040	± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08
P20	D200	DF30ST	F123600	2 5 10 20	± 0.10 ± 0.10 ± 0.10 ± 0.20	≤ 0.030 ≤ 0.040 ≤ 0.050 ≤ 0.060	± 0.2 ± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1 ≤ 0.1
P100	D200	DF100ST	F123615	10 50 100	± 0.35 ± 0.40 ± 0.80	≤ 0.10 ≤ 0.12 ≤ 0.15	± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3
P200	D200 D300	DF200ST DF300ST	F123601	20 100 200	± 0.50 ± 0.80 ± 1.60	≤ 0.20 ≤ 0.25 ≤ 0.30	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P1000	D1000 D1200	DF1000ST DF1200ST	F123602	100 500 1000	± 3.0 ± 4.0 ± 8.0	≤ 0.6 ≤ 1.0 ≤ 1.5	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0
P5000*	D5000		F123603	500 2500 5000	± 12 ± 15 ± 30	≤ 3 ≤ 5 ≤ 8	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mL*	D10mL		F161201	1000 2000 5000 10000	± 30 ± 30 ± 40 ± 60	≤ 6 ≤ 6 ≤ 10 ≤ 16	± 60 ± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0 ≤ 30.0

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.
*P5000 and P10mL do not have tip ejectors.

PIPETMAN® CLASSIC KITS

Model	Part Number	PIPETMAN Classic Models	PIPETMAN® DIAMOND Tips	Accessories
PIPETMAN Classic Starter Kit	F167300	P20 P200 P1000	D200 D1000	3 SINGLE™ pipette holders 1 Gilson Guide to Pipetting
PIPETMAN Classic Micro-volume Kit	F167500	P2 P10 P100	DL10 D200	3 SINGLE™ pipette holders 1 Gilson Guide to Pipetting
PIPETMAN Classic Large-Volume Kit	F167400	P5000 P10mL	-	2 bags of 10 filters
PIPETMAN Classic Four Pipette Kit	F167380	P2 P20 P200 P1000	DL10 D200 D1000	4 SINGLE™ pipette holders 4 PIPETMAN Comfort Handles 1 Gilson Guide to Pipetting 1 Two-minute inspection poster

PIPETTE ACCESSORIES

PLASTIC EJECTORS

For PIPETMAN® Classic and PIPETMAN® G

ORDERING INFORMATION

Plastic ejector P2/P10 with adapter (PN **F107027**)

Plastic ejector P20 (PN **F107028**)

Plastic ejector P100 (PN **F107029**)

Plastic ejector P200 (PN **F107030**)

Plastic ejector P1000 (PN **F107031**)

PIPETMAN® M CONNECTED

Connect your PIPETMAN M Software to your PC, through a Bluetooth® connection.

ORDERING INFORMATION

Bluetooth® USB Dongle
(PN **F807027**)

CARROUSEL™ PIPETTE STAND

Protects pipettes from shocks and contamination

Holds up to seven Gilson pipettes for space saving

ORDERING INFORMATION

CARROUSEL, stand for 7 pipettes
(PN **F161401**)

POWER CARROUSEL™

PIPETMAN® M charging stand

Charge up to five at once in one hour

Always keeps your PIPETMAN M operational

ORDERING INFORMATION

Power CARROUSEL (PN **FB1001**)

COLORIS™ IDENTIFICATION CLIPS

Identify or personalize your PIPETMAN®

Write your name or application to avoid mix-ups and then snap into place

ORDERING INFORMATION

10 Coloris Identification Clips, mixed colors (PN **F161301**)

10 Coloris Identification Clips, red (PN **F161302**)

10 Coloris Identification Clips, yellow (PN **F161303**)

10 Coloris Identification Clips, green (PN **F161304**)

10 Coloris Identification Clips, blue (PN **F161305**)

10 Coloris Identification Clips, white (PN **F161306**)

COMFORT HANDLE

Clips on to PIPETMAN® Classic, PIPETMAN® Neo, and PIPETMAN® G models.

Reduces the force needed to grip the pipette for maximum comfort

ORDERING INFORMATION

COMFORT HANDLE pack of 3, blue (PN **F161486**)

COMFORT HANDLE pack of 3, white (PN **F161488**)

COMFORT HANDLE pack of 50, blue (PN **F161485**)

COMFORT HANDLE pack of 50, white (PN **F161487**)

COMFORT HANDLE stickers, 120 (PN **F161499**)

SINGLE™ PIPETTE HOLDER

Holds your single or multichannel PIPETMAN

Sticks to any smooth, dry surface

Prevents liquid from running inside shaft

ORDERING INFORMATION

Single Pipette Holder (PN **F161406**)

GILSON REAGENT RESERVOIRS

Disposable, ideal for dispensing reagent with multichannel pipettes

25 mL and 50 mL available

ORDERING INFORMATION

Reagent Reservoir 25 mL, 100 (PN **F267660**)

Reagent Reservoir 50 mL, 100 (PN **F267670**)

TRIO™ PIPETTE STAND

Safely stores and protects three PIPETMAN pipettes

Helps organize your workbench

ORDERING INFORMATION

Trio Pipette Stand for 3 pipettes (PN **F161405**)

UNIVERSAL MULTICHANNEL STAND

Holds any brand of 8- or 12-channel pipettes securely

Compact design to save space

ORDERING INFORMATION

Universal Multichannel Stand (PN **F161417**)

JIMMY™ MICROTUBE OPENER

Clips on to pipette

Increases pipetting efficiency

Lessens the fatigue associated with manual tube opening

ORDERING INFORMATION

The JIMMY Microtube Opener (PN **F144983**)

SHOP ONLINE **WWW.GILSON.COM**

pipetman®

DIAMOND TIPS

HIGHEST QUALITY TIPS FOR SUPERIOR RESULTS

Not all pipette tips are created equal. Trust Gilson's PIPETMAN® DIAMOND Tips to deliver the accuracy and precision your experiments demand. All tips are manufactured using the highest quality materials and state-of-the-art manufacturing techniques so you can be assured of consistent lot-to-lot performance.

GUARANTEE YOUR PIPETMAN® RESULTS

PIPETMAN DIAMOND Tips are designed to fit your PIPETMAN perfectly. Using PIPETMAN DIAMOND Tips in conjunction with your Gilson pipette can guarantee maximum accuracy and precision.

AFFORDABLE AND VERSATILE FOR EVERY APPLICATION

Your needs, budget, and tip consumption vary according to your specific research activity. With our extensive range of packaging, PIPETMAN DIAMOND Tips are an affordable option for every lab and every application.

CONTAMINATION-FREE

Our tips are made of the highest-grade material within a fully traceable clean room environment, ensuring they offer low retention and are free of contaminates that can alter your experiments. From mold to bench, they are guaranteed, certified, and traceable to meet the most stringent demands in many applications.

Also available are PIPETMAN DIAMOND Filter Tips offering total protection against aerosol contamination and PIPETMAN DIAMOND Sterilized Tips, which are gamma irradiated (SAL of 10-6) and certified free of DNA, RNA, RNases, DNases, ATP proteases and trace metals.

WIDE RANGE OF TIP PACKAGING

BLISTER REFILL

Individually wrapped racks of tips that are convenient, clean, and eco-friendly

Ready to use, just peel the lid and insert into the empty box

Uses 45% less plastic than regular rack box

Fully autoclavable

Available as sterilized and filter tips

TOWERPACK

A quick, easy, and affordable rack refill system

Uses 60% less space on your bench and 70% less plastic than regular rack boxes

The whole range of TOWERPACK fits the amazingly easy-to-use universal reload box

One-hand system operation

Fully autoclavable

Available sterilized

TIPACK

The design is more compact, convenient, ergonomic and eco-friendly

Patented ROCKY RACK system and hinged 180° angled lid makes it extremely easy to fit tips on multichannel pipettes

Fully autoclavable

Available as sterilized and filter tips

RELOAD PACK

Quickest way to reload empty box

Uses 70% less plastic, recyclable packaging is eco-friendly

Easy to store, takes up less bench space

Affordable and convenient

Fully autoclavable

EASYPACK AND ECOPACK

Purchase in bulk and save money by simply reloading these tips into empty racks

Bags are sealed with rapid-sealing strip for easy access and to prevent contamination

Minimal waste

Fully autoclavable

EASYPACK: 5 bags x 200 tips

ECOPACK: 10 bags x 1000 tips

STERILPACK

Individually wrapped sterilized tips

Complete protection from contaminants up to the moment of use

Wrapped in medical-grade quality plastic

Sterilization guaranteed for 5 years

400 individually wrapped sterilized tips

STANDARD PIPETMAN® DIAMOND TIPS

	Description	Volume Range	Tip Length	Qty/Pack	Autoclavable Tips Part Number	Sterilized Tips Part Number
RELOAD PACK	DL10 RELOAD PACK	0.1–20 µL	45 mm	960	F167012	-
	D200 RELOAD PACK	2–200 µL	51 mm	960	F167013	-
	D1000 RELOAD PACK	100–1000 µL	66 mm	576	F167014	-
BLISTER REFILL	DL10 BLISTER REFILL	0.1–20 µL	45 mm	960	F172200	F172201
	D200 BLISTER REFILL	2–200 µL	51 mm	960	F172300	F172301
	D300 BLISTER REFILL	10–300 µL	51 mm	960	F172400	F172401
	D1000 BLISTER REFILL	100–1000 µL	66mm	960	F172500	F172501
	D1200 BLISTER REFILL	100–1200 µL	84 mm	960	F172800	F172801
TIPACK	D10 TIPACK	0.1–10 µL	30 mm	960	F171100	F171101
	DL10 TIPACK	0.1–20 µL	45 mm	960	F171200	F171201
	D200 TIPACK	2–200 µL	51 mm	960	F171300	F171301
	D300 TIPACK	10–300 µL	51 mm	960	F171400	F171401
	D1000 TIPACK	100–1000 µL	66 mm	960	F171500	F171501
	D1200 TIPACK	100–1200 µL	84 mm	960	F171600	F171601
	D5000 TIPACK	0.5–5 mL	10.4 cm	600	F161370	-
	D10mL TIPACK	1–10 mL	16 cm	240	F161230	-
TOWERPACK	D10 TOWERPACK	0.1–10 µL	30 mm	960	F167101	F167201
	DL10 TOWERPACK	0.1–20 µL	45 mm	960	F167102	F167202
	D200 TOWERPACK	2–200 µL	51 mm	960	F167103	F167203
	D300 TOWERPACK	10–300 µL	51 mm	960	F167105	F167205
	D1000 TOWERPACK	100–1000 µL	66 mm	672	F167104	F167204
ECOPACK	D10 ECOPACK	0.1–10 µL	30 mm	10,000	F161630	-
	DL10 ECOPACK	0.1–20 µL	45 mm	10,000	F161450	-
	D200 ECOPACK	2–200 µL	51 mm	10,000	F161930	-
	D300 ECOPACK	10–300 µL	51 mm	10,000	F161730	-
	D1000 ECOPACK	100–1000 µL	66 mm	10,000	F161670	-
	D1200 ECOPACK	100–1200 µL	84 mm	10,000	F161110	-
EASYPACK	D10 EASYPACK (5 bags of 200)	0.1–10 µL	30 mm	1,000	F161631	-
	DL10 EASYPACK (5 bags of 200)	0.1–20 µL	45 mm	1,000	F161451	-
	D200 EASYPACK (5 bags of 200)	2–200 µL	51 mm	1,000	F161931	-
	D300 EASYPACK (5 bags of 200)	10–300 µL	51 mm	1,000	F161731	-
	D1000 EASYPACK (5 bags of 200)	100–1000 µL	66 mm	1,000	F161671	-
	D1200 EASYPACK (5 bags of 200)	100–1200 µL	84 mm	1,000	F161111	-
	D5000 EASYPACK (3 bags of 334)	0.5–5 mL	10.4 cm	1,002	F161571	-
	D10mL EASYPACK (1 box of 200)	1–10 mL	16 cm	200	F161210	-
STERILPACK	D200ST STERILPACK	2–200 µL	51 mm	400	-	F161330
	D1000ST STERILPACK	100–1000 µL	66 mm	400	-	F161340

PIPETMAN® DIAMOND FILTER TIPS

	Description	Volume Range	Tip Length	Qty/Pack	Sterilized Tips Part Number
BLISTER REFILL	DFL10ST BLISTER REFILL	0.1 - 10 µL	45 mm	960	F172203
	DF30ST BLISTER REFILL	2 - 30 µL	51 mm	960	F172303
	DF100ST BLISTER REFILL	10 - 100 µL	51 mm	960	F172403
	DF200ST BLISTER REFILL	20- 200 µL	51 mm	960	F172503
	DF300ST BLISTER REFILL	10 - 300 µL	51 mm	960	F172703
	DF1000ST BLISTER REFILL	100 - 1000 µL	66 mm	960	F172603
	DF1200ST BLISTER REFILL	100 - 1200 µL	84 mm	960	F172803
TIPACK	DF10ST Filter TIPACK	0.1 - 10 µL	30 mm	960	F171103
	DFL10ST Filter TIPACK	0.1 - 10 µL	45 mm	960	F171203
	DF30ST Filter TIPACK	2 - 30 µL	51 mm	960	F171303
	DF100ST Filter TIPACK	10 - 100 µL	51 mm	960	F171403
	DF200ST Filter TIPACK	20 - 200 µL	51 mm	960	F171503
	DF300ST Filter TIPACK	10 - 300 µL	51 mm	960	F171603
	DF1000ST Filter TIPACK	100 - 1000 µL	66 mm	960	F171703
	DF1200ST Filter TIPACK	100 - 1200 µL	84 mm	960	F171803

D10 are short collar tips. DL10 are long collar tips.

EMPTY RELOAD RACKS/BOXES

Description	Qty/Pack	Part Number
Universal Reload Box (1 rack) for TOWERPACK	1	F167100
DL10/D200 Empty Box for BLISTER REFILL and RELOAD Pack	2	F171204
D1000 Empty Box	2	F171504

Description	Qty/Pack	Part Number
D10 Empty Racks	2	F171102
DL10 Empty Racks	2	F171202
D200 Empty Racks	2	F171302
D300 Empty Racks	2	F171402
D1000/D1200 Empty Racks	2	F171502
D5000 Empty Rack	1	F161360
D10mL Empty Rack	1	F161220

Universal Reload box for use with TOWERPACKS.

Empty Box for use with RELOAD Pack and BLISTER REFILL.

Empty Rack for use with ECOPACK and EASYPACK loose tips.

BLISTER REFILL FOR PIPETMAX®-CERTIFIED 384-WELL

	Description	Volume Range	Tip Length	Qty/Pack	Autoclavable Tips Part Number	Sterilized Tips Part Number
BLISTER REFILL	DSL10 BLISTER REFILL 384-Certified	0.1–20 µL	45 mm	960	F172210	F172211
	DS200 BLISTER REFILL 384-Certified	2–200 µL	51 mm	960	F172310	F172311
	DS1000 BLISTER REFILL 384-Certified	100–1000 µL	66 mm	960	F172510	F172511
FILTER BLISTER REFILL	DSFL10ST BLISTER REFILL 384-Certified	0.1–10 µL	45 mm	960	-	F172213
	DSF30ST BLISTER REFILL 384-Certified	2–30 µL	51 mm	960	-	F172313
	DSF200ST BLISTER REFILL 384-Certified	20–200 µL	51 mm	960	-	F172513
	DSF1000ST BLISTER REFILL 384-Certified	100–1000 µL	66 mm	960	-	F172613

pipetman®

EXPERT TIPS

PIPETMAN® EXPERT TIPS

	Description	Volume Range	Tip Length	Pack Qty	Pack Part Number	Case Qty	Case Part Number
FILTER TIPS	EF10ST Sterilized Filter Tips	0.1 - 10 µL	28.83 mm	960	F1731031	4,800	F1731032
	EFL10ST Sterilized Filter Tips	0.1 - 10 µL	45.34 mm	768	F1732031	3,072	F1732032
	EF20ST Sterilized Filter Tips	1 - 20 µL	51.44 mm	768	F1733031	3,072	F1733032
	EF100ST Sterilized Filter Tips	1 - 100 µL	51.44 mm	768	F1734031	3,072	F1734032
	EF200ST Sterilized Filter Tips	1 - 200 µL	58.57 mm	768	F1735031	3,072	F1735032
	EF300 XL Sterilized Filter Tips	1 - 300 µL	77.50 mm	384	F1736031	3,072	F1736032
	EF1000ST XL Sterilized Filter Tips	50 - 1250 µL	102.2 mm	384	F1737031	3,072	F1737032
TIPACK	E10 TIPACK	0.1 - 10 µL	28.83 mm	960	F1731001	4,800	F1731002
	EL10 TIPACK	0.1 - 20 µL	45.34 mm	768	F1732001	3,072	F1732002
	E200 TIPACK	1 - 200 µL	51.44 mm	768	F1733001	3,072	F1733002
	E300 TIPACK	1 - 300 µL	58.57 mm	768	F1736001	3,072	F1736002
	E1000 XL TIPACK	50 - 1250 µL	102.2 mm	384	F1735001	3,072	F1735002
STERILIZED TIPACK	E10ST Sterilized TIPACK	0.1 - 10 µL	28.83 mm	960	F1731011	4,800	F1731012
	EL10ST Sterilized TIPACK	0.1 - 20 µL	45.34 mm	768	F1732011	3,072	F1732012
	E200ST Sterilized TIPACK	1 - 200 µL	51.44 mm	768	F1733011	3,072	F1733012
	E300ST Sterilized TIPACK	1 - 300 µL	58.57 mm	768	F1736011	3,072	F1736012
	E1000ST XL Sterilized TIPACK	50 - 1250 µL	102.2 mm	384	F1735011	3,072	F1735012
TOWERPACK	EL10 TOWERPACK Reload System	0.1 - 20 µL	45.34 mm	960	F1732051	3,840	F1732052
	E200 TOWERPACK Reload System	1 - 200 µL	51.44 mm	960	F1733051	3,840	F1733052
	E300 TOWERPACK Reload System	1 - 300 µL	58.57 mm	960	F1736051	3,840	F1736052
	E1000 XL TOWERPACK Reload System	50 - 1250 µL	102.2 mm	768	F1735051	3,072	F1735052
	EL10 TOWERPACK Reload Kits	0.1 - 20 µL	45.34 mm	960	F1732061	-	-
	E200 TOWERPACK Reload Kits	1 - 200 µL	51.44 mm	960	F1733061	-	-
	E300 TOWERPACK Reload Kits	1 - 300 µL	58.57 mm	960	F1736061	-	-
	E1000 TOWERPACK Reload Kits	50 - 1250 µL	102.2 mm	768	F1735061	-	-
MEGAPACK / EASYPACK	EL10ST Sterilized MEGAPACK	0.1 - 20 µL	45.34 mm	960	F1732071	4,800	F1732072
	EL200ST Sterilized MEGAPACK	1 - 200 µL	51.44 mm	960	F1733071	4,800	F1733072
	EL10 EASYPACK	0.1 - 20 µL	45.34 mm	1,000	F1734511	10,000	F1734512
	E200 EASYPACK	1 - 200 µL	51.44 mm	1,000	F1739311	10,000	F1739312
	10 µL Empty Racks	-	-	1	F1732021	24	F1732022
	200 µL Empty Racks	-	-	1	F1733021	24	F1733022
	300 µL Empty Racks	-	-	1	F1734021	24	F1734022
	1000 µL Empty Racks	-	-	1	F1735021	16	F1735022
GEL LOADING TIPS	E10 Gel Loading Flat Tips	0.1 - 10 µL	45.72 mm	200	F1731181	800	F1731182
	E10 Gel Loading Round Tips	0.1 - 10 µL	45.72 mm	200	F1731281	800	F1731282
	E200 Gel Loading Flat Tips	1 - 200 µL	82.55 mm	200	F1733181	800	F1733182
	E200ST Sterilized Gel Loading Flat Tips	1 - 200 µL	82.55 mm	200	F1733381	800	F1733382
	E200 Gel Loading Round Tips	1 - 200 µL	82.55 mm	200	F1733281	800	F1733282
	E200ST Sterilized Gel Loading Round Tips	1 - 200 µL	82.55 mm	200	F1733481	800	F1733482

Certified Free - RNase/DNase, Human DNA, Pyrogens, PCR Inhibitors

PIPETMAN EXPERT Tips are not available in all countries.

WIDE RANGE OF TIP PACKAGING

TIPACK

Filter, Autoclavable, Sterilized

Uniquely designed TIPACK features a dual-purpose lid

Hinged to easily open and close while using tips

Pull it out of the hinges to set on top or discard for high-throughput tip usage

MEGAPACK

Autoclavable, Sterilized

Uses 70% less plastic

Sterilized MEGAPACKS give you the choice to expose 96 tips at a time or 192

Ideal for high throughput pipetting

EASYPACK

Autoclavable

Purchase in bulk and save money by simply reloading these tips into empty racks

Resealable bags for easy access

EASYPACK: 5 bags x 200 tips

TOWERPACK

A quick, easy and affordable rack refill system

Uses 60% less space on your bench and 70% less plastic than regular rack box

One-hand system operation

CERTIFIED CONTAMINANT FREE
These tips are certified free of human DNA, RNases, DNases, PCR inhibitors, and pyrogens.

GILSON UNIVERSAL FIT TIPS
Designed to fit perfectly and provide the best results with Gilson pipettes, the universal design of PIPETMAN EXPERT Tips allows them to be used with most leading pipette brands. Additionally, because of the universal fit, PIPETMAN EXPERT Tips allow you to stock up on one brand of tips with practical packaging options, saving you time, money, and bench space.

SPACE SAVING ENVIRONMENT FRIENDLY PACKAGING
The TOWERPACK and MEGAPACK configurations allow labs to store more tips using less space on the bench. Less packaging material is used and the plastic is recyclable.

GEL LOADING TIP SOLUTIONS
Receive maximum accuracy and the best possible results when using PIPETMAN EXPERT long, round tips and the specially patented flat gel loading tips.

RNase/DNase Human DNA
CERTIFIED FREE
Pyrogens PCR Inhibitors

microman®

ERGONOMIC PIPETTING FOR NON-AQUEOUS LIQUIDS

MICROMAN® E positive-displacement pipettes, along with capillary pistons, offer the highest precision when ergonomically pipetting non-aqueous samples, such as viscous or volatile liquids. Working like a syringe, capillary pistons eliminate the air cushion between the sample and disposable piston, ensuring the accuracy of the pipette is not affected by the physical properties of the sample.

CONTAMINATION-FREE PIPETTING

Minimize the potential for pipette, sample, and human contamination with MICROMAN E. Dispose of the capillary piston (CP) tip safely with the click of the push button.

RELIABLE RESULTS EVEN WITH NON-AQUEOUS LIQUIDS

Whether a viscous, volatile, hot, or cold sample, MICROMAN E can handle the job with accuracy and precision.

Have complete confidence in your results with the new volume-locking switch that reduces the risk of accidental volume adjustment.

PROTECT YOUR PIPETTES

Positive-displacement technology makes the ideal solution for volatile liquids that can contaminate and corrode mechanical pipette pistons.

Volume-Locking Switch

MICROMAN® E

Model	Part Number	Capillary Piston	Volume	Maximum Permissible Errors			
				Gilson		ISO 8655	
				Systematic error (µL)	Random error (µL)	Systematic error (µL)	Random error (µL)
M10E	FD10001	CP10 CP10ST	1 5 10	± 0.09 ± 0.10 ± 0.15	≤ 0.03 ≤ 0.03 ≤ 0.06	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
M25E	FD10002	CP25 CP25ST	3 10 25	± 0.25 ± 0.27 ± 0.30	≤ 0.08 ≤ 0.08 ≤ 0.10	± 0.7 ± 0.7 ± 0.7	≤ 0.3 ≤ 0.3 ≤ 0.3
M50E	FD10003	CP50 CP50ST	20 50	± 0.34 ± 0.70	≤ 0.20 ≤ 0.30	± 0.7 ± 0.7	≤ 0.3 ≤ 0.3
M100E	FD10004	CP100 CP100ST	10 50 100	± 0.50 ± 0.75 ± 1.00	≤ 0.20 ≤ 0.30 ≤ 0.40	±1.5 ±1.5 ±1.5	≤ 0.6 ≤ 0.6 ≤ 0.6
M250E	FD10005	CP250 CP250ST	50 100 250	± 1.50 ± 1.70 ± 2.50	≤ 0.30 ≤ 0.30 ≤ 0.50	± 6 ± 6 ± 6	≤ 2.0 ≤ 2.0 ≤ 2.0
M1000E	FD10006	CP1000 CP1000ST	100 500 1000	± 3.0 ± 5.0 ± 8.0	≤ 1.6 ≤ 2.5 ≤ 4.0	± 12 ± 12 ± 12	≤ 4.0 ≤ 4.0 ≤ 4.0

CAPILLARY PISTONS

100% PROTECTION AGAINST CONTAMINATION

The disposable piston is located inside the capillary tip so users can be assured that no harmful samples will contaminate the pipette.

- Dye-free—no risk of chemical contamination
- Slender profile—fits most tubes

CAPILLARY PISTONS

Capillary Piston	MICROMAN E Model	Part Number	Qty/Box
CP10	M10E	F148412	192
		F148312	960
CP25	M25E	F148112	200
		F148012	960
CP50	M50E	F148113	200
		F148013	960
CP100	M100E	F148414	192
		F148314	960
CP250	M250E	F148114	200
		F148014	960
CP1000	M1000E	F148560	182

STERILIZED CAPILLARY PISTONS

Capillary Piston	MICROMAN E Model	Part Number	Qty/Box
CP10ST	M10E	F148413	192
		F148313	960
CP25ST	M25E	F148712	576
CP50ST	M50E	F148713	576
CP100ST	M100E	F148415	192
		F148315	960
CP250ST	M250E	F148714	576
CP1000ST	M1000E	F148180	182

repetman®

THE MOTORIZED REPETITIVE DISPENSING SOLUTION

The REPETMAN® electronic, positive-displacement pipette provides fast and convenient repetitive transfers. REPETMAN features three operational modes that cover transfer volumes from 1 µL to 50 mL. It is well suited for routine applications in the clinical, biological, food and beverage, chemistry, environmental, and other fields.

COMFORTABLE PIPETTING WITH NO FORCE REQUIRED
It fits naturally in either hand and increases operator comfort.

IMPROVES RESULTS WHILE REDUCING OPERATOR ERROR
Motorized pipette with automatic recognition of the associated REPET-TIPS. REPETMAN is a positive-displacement pipette with a large choice of REPET-TIPS consumables, including standard or sterile from 0.1 mL to 50 mL, covering a wide range of dispensed volumes from 1 µL to 50 mL.

REPETMAN®	
Description	Part Number
REPETMAN, EU plug	F164501
REPETMAN, US plug	F164502
REPETMAN, UK plug	F164503
REPETMAN, Australian plug (230V/50Hz)	F164504
NiMH battery pack	F164595

REPET-TIPS				REPET-TIPS		
REPET-TIPS	Non-Sterile	Sterile*		REPET-TIPS	Non-Sterile	Sterile*
Repet-Tip (0.1 mL, box of 100)	F164510	F164515		Repet-Tip (10.0 mL, box of 100)	F164557	F164558
Repet-Tip (0.5 mL, box of 100)	F164520	F164525		Repet-Tip (12.5 mL, box of 100)	F164560	F164565
Repet-Tip (1.0 mL, box of 100)	F164527	F164528		Repet-Tip (25 mL, box of 50)**	F164570	-
Repet-Tip (1.25 mL, box of of 100)	F164530	F164535		Repet-Tip (25 mL, box of 25)**	-	F164575
Repet-Tip (2.5 mL, box of 100)	F164540	F164545		Repet-Tip (50 mL, box of 25)**	F164580	F164585
Repet-Tip (5.0 mL, box of 100)	F164550	F164555		Adapter for 25/50 mL Repet-Tip (set of 10)	F164591	-
				Adapter for 25/50 mL Repet-Tip (set of 5)	-	F164592

* Sterile / Endotoxin-free (less than 0.01 I.U/mL)
** One autoclavable adapter is provided in each box

REPETMAN is not available in the United States.

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distriman®

FASTER MULTIPLE DISPENSING

DISTRIMAN® is a positive-displacement, continuously adjustable, repetitive pipette with direct read out designed to simplify multiple dispensing when used with DISTRITIPS syringes. With DISTRIMAN, you can dispense the exact volume required for any protocol, even fractional volumes. It is ideal for repetitive dispensing in clinical, hospital, biological, chemical, food and beverage, pharmaceutical, cosmetics, and forensics labs.

SIMPLIFIES MULTIPLE DISPENSING
Dispense exact volumes without tedious calculations and ensure optimal pipetting results even with volatile or viscous liquids.

SAVE MONEY
DISTRIMAN covers a large volume range with only three DISTRITIPS syringes, making it very economical. DISTRITIPS are available in standard or sterilized form (boxes of 50).

DISTRIMAN is the only continuously adjustable mechanical repetitive pipette with direct volume readout available on the market.

DISTRIMAN®	
Description	Part Number
DISTRIMAN (1 µL to 1.25 mL)	F164001

DISTRITIPS				Maximum Permissible Errors			
DISTRITIPS (Pack of 50)	Aliquot Range	Part Number	Volume (µL)	Gilson		ISO 8655	
				Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
125 µL Micro Micro ST*	1–12.5 µL	F164100 F164130	2 5 10	± 0.100 ± 0.125 ± 0.200	≤ 0.080 ≤ 0.075 ≤ 0.100	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
1250 µL Mini Mini ST*	10–125 µL	F164110 F164140	20 50 100	± 0.80 ± 1.00 ± 1.00	≤ 0.20 ≤ 0.40 ≤ 0.60	± 1.5 ± 1.5 ± 1.5	≤ 0.6 ≤ 0.6 ≤ 0.6
12.5 mL Maxi Maxi ST*	0.1–1.25 mL	F164120 F164150	200 500 1000	± 6.0 ± 7.5 ± 10.0	≤ 1.0 ≤ 1.5 ≤ 2.5	± 12.0 ± 12.0 ± 12.0	≤ 4.0 ≤ 4.0 ≤ 4.0

*ST means sterilized syringes (individually wrapped)

macroman®

THE EFFICIENT SOLUTION FOR PIPETTING UP TO 100 MILLILITERS AT ONCE

MACROMAN® is a reliable pipette controller for glass and plastic serological pipettes from 1 to 100 mL.

OPTIMAL SPEED CONTROL

The aspirating and dispensing speed can be set using pressure sensitive triggers or by using the thumbwheel while pipetting. The speed is adjustable up to 25 mL in less than three seconds.

The screen continuously displays battery status as well as the aspiration and dispensing speed setting.

COMFORTABLE USE

Prevent hand fatigue with MACROMAN's ergonomic handle featuring wide triggers for maximum comfort and stress-free pipetting.

The Lithium-Ion battery enables a longer, vibration-free use with reduced charging time.

Increase precision by choosing your flow rate mode from slow drops to rapid dispensing.

All stands are included with MACROMAN for stable and easy storage on the bench.

MACROMAN®		
Description	Volume Range	Part Number
MACROMAN	0.1 to 100 mL	F110120

MACROMAN ACCESSORIES			
Description	Part Number	Description	Part Number
Charging desk stand	F107200	Filter, 0.45 µm, sterile (set of 10)	F107207
Wall mount	F107201	Power supply	F107203
Magnetic wall mount	F107202	Lithium-Ion battery	F107208
Filter, 0.22 µm, standard (set of 10)	F107204	Nosepiece	F107209
Filter, 0.22 µm, sterile (set of 10)	F107205	Adjustable side stand	F107210
Filter, 0.45 µm, standard (set of 10)	F107206	Pipette adaptor	F107211

serological

PIPETTES

OPTIMIZED PIPETTING CONTROL

Ideal for scientists who need to easily and quickly transfer liquid aliquots from one container to another with precision, the Gilson disposable plastic serological pipettes are perfect for use with MACROMAN® to help you in your daily cell-culture, molecular biology, and microbiology applications.

RELIABLE

Gilson serological pipettes are made with USP Class VI polystyrene and are free of contaminants that can alter your experiment. They are gamma-sterilized, non-pyrogenic, and certified free of detectable RNase/DNase.

The polyester fiber plug provides a high level of protection against over-pipetting and contamination by liquids and aerosols.

EASY VOLUME CONTROL

Our serological pipettes offer precise volume control and have color-coded rings for easy size identification, as well as dark ascending and descending graduations so you can easily read the aspirated and dispensed volumes. They also have negative graduations for extra capacity.

FLEXIBLE

Available in models ranging from 1 to 50 mL, these serological pipettes are recommended for use with MACROMAN but can also be used with any pipette controller. They enable precise and convenient dispensing of different kinds of liquids for a variety of tasks.
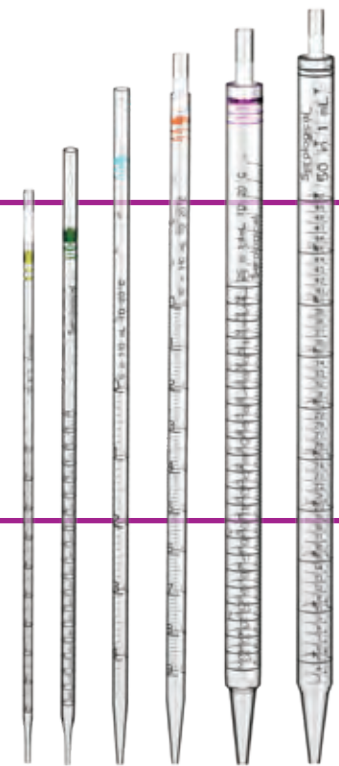
SEROLOGICAL PIPETTES				
Description	Qty/Case	Part Number	Volume	Ring
Serological Pipettes - Sterile Bags				
40 sterile bags of 25 units	1000	F110121	1 mL	🟡
	1000	F110123	2 mL	🟢
20 sterile bags of 25 units	500	F110125	5 mL	🔵
	500	F110127	10 mL	🔴
10 sterile bags of 20 units	200	F110129	25 mL	🟣
Serological Pipettes - Sterile Individually Wrapped				
10 bags of 100 sterile, individually wrapped units	1000	F110122	1 mL	🟡
	1000	F110124	2 mL	🟢
4 bags of 50 sterile, individually wrapped units	200	F110126	5 mL	🔵
	200	F110128	10 mL	🔴
	200	F110130	25 mL	🟣
4 bags of 25 sterile, individually wrapped units	100	F110131	50 mL	⚫

platemaster®

FAST MICROPLATE PIPETTING

PLATEMASTER® is an easy-to-use, solution for high throughput pipetting of 96- and 384-well microplates.

SAVE TIME AND INCREASE YOUR PRODUCTIVITY

With minimal setup, you can fill 96- or 384-well plates in less than one minute by significantly reducing the number of pipetting steps.

SIMPLIFIES SAMPLE PREP

PLATEMASTER requires no programming, no power, and minimal training, so you can start pipetting right away.

CONVENIENT FOR ANY MICROPLATE APPLICATION

From plate transfer to supernatant, achieve accuracy and precision on the bench or under the hood.

PLATEMASTER® ACCESSORIES	
Description	**Part Number**
384-well adapter, positioned done by wheel	F1077602
384-well adapter, positioned done by hand	F1077603
Alu-heater block for PLATEMASTER, 96 x 0.2 mL, for PCR tubes, stripes, and PCR plates Ø 7.8 mm	F1077604
Pipetting head height adjusters (2 units)	F1077605
Lubrication box of O-rings PLATEMASTER	F1077606

PLATEMASTER				
Model	Part Number	PIPETMAN® DIAMOND Tips	Volume	Dimensions
PLATEMASTER P20	F110761	D200, DS200, D200ST, DS200ST, DF100ST, DF200ST, DFS200ST	0.5 µL–20 µL Adjustable in 0.1 µL increments	300 x 450 x 400 mm
PLATEMASTER P220	F110762	D200, DS200, D300, D200ST, DS200ST, D300ST, DF200ST, DFS200ST, DF300ST	2 µL–220 µL Adjustable in 1 µL increments	300 x 450 x 400 mm

pipetmaX®
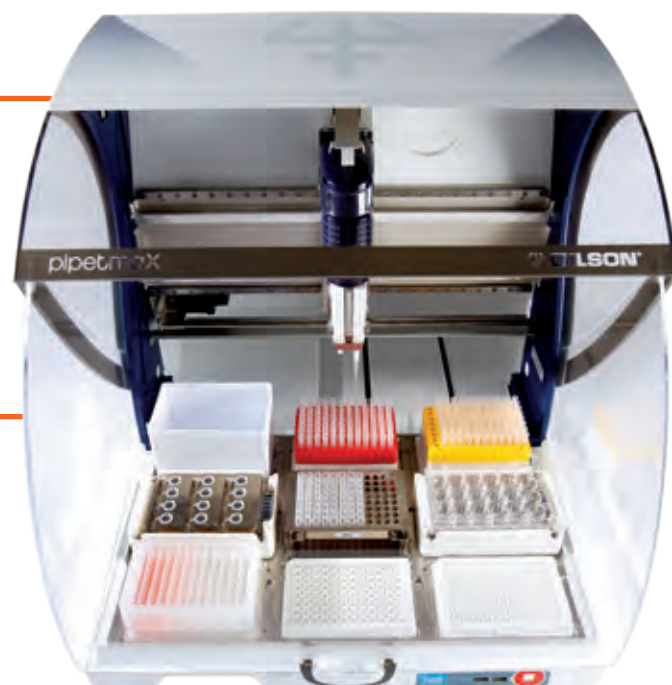
MAXIMIZE REPRODUCIBILITY OF YOUR BIOLOGICAL SAMPLE PREP

Increase reproducibility and the pace of your experiments with this easy-to-use, affordable, and automated liquid handling platform.

UPGRADE TO AUTOMATION FOR RELIABLE, ACCURATE PIPETTING

Protect your important samples from procedural errors and maximize accuracy and precision with fully automated pipetting protocols utilizing PIPETMAN® technology.

FREE YOURSELF FROM TEDIOUS SAMPLE PREP WORK

Let PIPETMAX® prepare samples for you! Enjoy more freedom away from the bench and focus on what's important—your next discovery.

STAY FLEXIBLE—FOR NOW AND FOR THE FUTURE

Using any reagent or kit, adapt your pipetting protocols to meet the unique needs of your research.

PIPETMAN INSIDE

With PIPETMAN technology inside, you can trust your pipetting to be reliable and consistent plate-to-plate, lot-to-lot, and time-after-time.

PIPETMAX®	
Specification	**Description**
Removable Tray Capacity	Two Options: 9-position removable tray (microplate footprints, but not for 384-well microplates) 9-position removable tray for 384-well microplates
Control	Touchscreen tablet or PC control via USB and TRILUTION® micro software
Pipette Head Options	Eight channel 1 µL–20 µL Eight channel 20 µL –200 µL Four channel 100µL - 1200µL Single channel 1000 µL
Pipette Head Mounts	Two PIPETMAX pipetting heads
Labware Compatibility	Standard shallow- and deep-well microplates and microcentrifuge tubes
Dimensions (W x D x H)	**PIPETMAX with rotating cover** 54.4 x 65.5 x 53.1 cm (21.4 x 25.8 x 20.9 in)
	PIPETMAX with rotating cover installed on optional riser assembly for off-bed tip disposal 54.4 x 65.5 x 69.6 cm (21.4 x 25.8 x 27.4 in)
	PIPETMAX without cover 50.8 x 64.3 x 49.5 cm (20 x 25.3 x 19.5 in)
	PIPETMAX without rotating cover installed on optional riser assembly for off-bed tip disposal 52.3 x 65 x 65.8 cm (20.6 x 25.6 x 25.9 in)
Environmental Conditions	Indoor use Altitude: up to 2000 m Temperature range: 5°C–40°C Humidity: Maximum relative humidity 80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C

ACCESSORIES	
Part Number	**Description**
FC10022	PIPETMAX MAX8X20 Pipette Head
FC10021	PIPETMAX MAX8X200 Pipette Head
FC10023	PIPETMAX Max4x1200 Pipette Head
32000391	PIPETMAX D1200 Tip Reload Box
32000274	Tip Disposal Bin
32000177	PIPETMAX Riser Off-Bed Tip Disposal
32000340	TRILUTION micro V3 for PC
32000341	PIPETMAX Standard V3 Tablet Kit

APPLICATION VERSATILITY

- qPCR
- NGS Library Preparation
- ELISA
- Custom Liquid Handling
- Cell Based Assays
- Agencourt® AMPure® XP PCR kits
- Protein Assays

- Illumina Nextera® XT System DNA Library Preps for Miseq®
- Enzymatic Reactions
- Promega GoTaq® Probe 1-Step RT-qPCR®
- PCR
- Promega GoTaq® PCR Core System
- Kinase Assays

Download application notes at www.gilson.com.

BENCHTOP INSTRUMENTS

safe aspiration

STATION

QUICK AND EASY ASPIRATION OF LIQUID WASTE

The Safe Aspiration Station is a stand–alone motorized vacuum unit, ideal for cell culture, ELISA tests, and liquid waste disposal. The closed unit is designed to prevent contamination hazards, and all parts in contact with liquids are fully autoclavable. Associated with the Safe Aspiration Kit, which includes a set of different adapters, the Safe Aspiration Station is easy to use on a bench or in laminar flow cabinets

SAFE AND CONTAMINATION–FREE

The station is equipped with a 4–liter Polypropylene (PP) bottle, a level detection system to prevent liquid overflow, and an in-line hydrophobic filter that traps aerosols for safe disposal of contaminated or hazardous liquids.

ADAPTABLE AND CONVENIENT

The station also ensures an adjustable aspiration level indicated by a board of LEDs.

The choice of the adapter and the easy setting of the vacuum level enable quick and accurate aspiration of liquids from a variety of vessels.

The ergonomic hand operator can be stored on the bottle handle. The Safe Aspiration Kit also contains a stand with storing gaps for the adapters and the hand operator to help your workspace remain clean and organized.

SAFE ASPIRATION STATION	
Description	Part Number
Safe Aspiration Station, EU Plug	F110744
Safe Aspiration Station, US Plug	F110745
Safe Aspiration Station, UK Plug	F110746
Safe Aspiration Station, AU Plug	F110747
Safe Aspiration Station, JP Plug	F110748
Safe Aspiration Station, CN Plug	F110749

SAFE ASPIRATION KIT	
Description	Part Number
Safe Aspiration Kit	F110750

dispensman®

DISPENSE LIQUIDS SIMPLY AND ACCURATELY

DISPENSMAN® is a bottle-top dispenser for convenient, safe, and precise delivery of common laboratory solutions and solvents. Its innovative, three-position nozzle controls the dispensing of liquids, the removal of air in the system to avoid liquid loss, and includes an anti-drip safety feature that returns liquid to the bottle.

PRECISE
Dispense just the liquid needed every time with a quick, easy, and precise volume setting.

NO LOSS OF LIQUID
Prime your operation by purging the air in RECYCLE position keeping the liquid inside the bottle and avoiding any loss of liquid.

SAFE
Keep your bench and other devices safe with the anti-drip system and the return of liquid into the bottle after use.

FLEXIBLE
- Numerous bottle adaptors
- Adaptable to every type of liquid with an easy calibration by the user
- Fully autoclavable at 121°C
- Convenient 3-position nozzle

DISPENSMAN®							
				Maximum Permissible Errors			
				Gilson		ISO 8655	
Model	Part Number	Volume Range	Scaling (mL)	Systematic Error (mL)	Random Error (mL)	Systematic Error (mL)	Random Error (mL)
DISPENSMAN 2.5 mL	F110101	0.25–2.5 mL	0.05	± 0.012	≤ 0.002	± 0.030	≤ 0.010
DISPENSMAN 5.0 mL	F110102	0.5–5 mL	0.10	± 0.030	≤ 0.005	± 0.030	≤ 0.010
DISPENSMAN 10 mL	F110103	1–10 mL	0.20	± 0.060	≤ 0.010	± 0.060	≤ 0.020
DISPENSMAN 25 mL	F110104	2.5–25 mL	0.50	± 0.150	≤ 0.025	± 0.150	≤ 0.050
DISPENSMAN 50 mL	F110105	5–50 mL	1.00	± 0.300	≤ 0.050	± 0.300	≤ 0.100

trackman®

GUIDING YOU TO SUCCESS

Get on track and stay on track as you pipette flawlessly from one microplate to another with the help of TRACKMAN®.
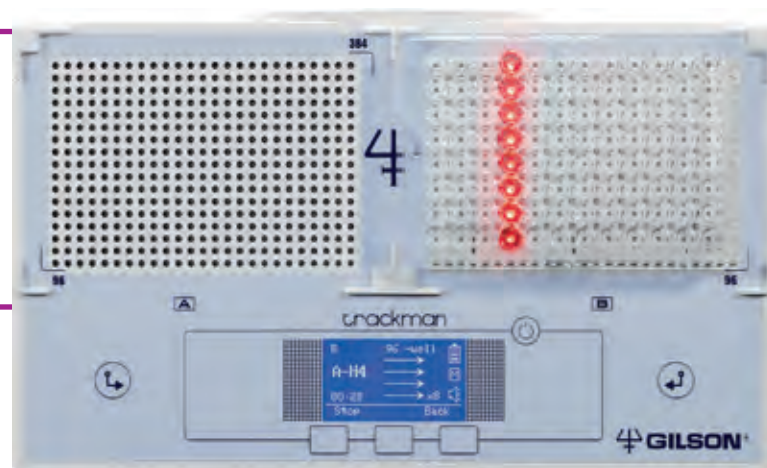
SECURE YOUR RESULTS

TRACKMAN simplifies your work, improves your productivity, and helps eliminate pipetting errors and cross-contamination.

VERSATILE PERFORMANCE

The LED lights on TRACKMAN help you place your 96- and 384-well microplates in the correct position on the light panel, while fixed notches secure your plates firmly in place.

COMPLETE YOUR EQUIPMENT

Expand the functionality of your TRACKMAN with the versatile microtube–holder to transfer liquids from one microtube to another (0.5 mL, 1.5 mL, and 2 mL).

TRACKMAN®	
Description	Part Number
TRACKMAN	F70301

TRACKMAN ACCESSORIES	
Description	Part Number
Microtube Holder	F70105
Pedal for TRACKMAN	F70261

digital dry bath

UNIFORM TEMPERATURE DELIVERY FOR A VARIETY OF TUBE SIZES

The compact Digital Dry Bath Series delivers precise temperatures to your samples using digital temperature and time controls with built-in calibration functionality, improving reliability and reproducibility. The aluminum blocks (sold separately) accommodate tubes from 0.5–50 mL. Custom blocks are available.

DIGITAL DRY BATH SERIES					
One-Block Digital Dry Bath		Two-Block Digital Dry Bath		Four-Block Digital Dry Bath	
Description	Part Number	Description	Part Number	Description	Part Number
One-Block Digital Dry Bath 115V, US Plug	36110300	Two-Block Digital Dry Bath 115V, US Plug	36110400	Four-Block Digital Dry Bath 115V, US Plug	36110500
One-Block Digital Dry Bath, 230V, EU Plug	36110310	Two-Block Digital Dry Bath, 230V, EU Plug	36110410	Four-Block Digital Dry Bath, 230V, EU Plug	36110510
One-Block Digital Dry Bath, 230V, UK Plug	36110320	Two-Block Digital Dry Bath, 230V, UK Plug	36110420	Four-Block Digital Dry Bath, 230V, UK Plug	36110520

roto-mini

FLEXIBLE VARIABLE SPEED ROTATOR FOR A RANGE OF APPLICATIONS

With speeds from 5–70 rpm, the Roto-Mini Plus variable speed rotator offers three operational mixing modes (Mix, Pause, and Rock) and accommodates standard tube sizes from 0.5–50 mL, making it a flexible addition to any lab.

ROTO-MINI PLUS	
Description	Part Number
Roto-Mini Plus with tube holders, 115V, US Plug	36110100
Roto-Mini Plus with tube holders, 230V, EU Plug	36110110
Roto-Mini Plus with tube holders, 230V, UK plug	36110120

mini vortex

SMALL SIZE, POWERFUL MIXING

With touch-activated operation, the Mini Vortex Mixer delivers a fixed speed of 2,800 rpm for mixing tubes up to 50 mL. The entire operation is quiet, smooth, and contained in a small footprint.

MINI VORTEX MIXER	
Description	**Part Number**
Mini Vortex Mixer, 100–240V, US Plug	36110700
Mini Vortex Mixer, 100–240V, EU Plug	36110710
Mini Vortex Mixer, 100–240V, UK Plug	36110720

vortex

MIXER

MAXIMIZE MIXING, MINIMIZE NOISE, AND VIBRATION

With a unique counter-balance system, the powerful Vortex Mixer offers instant vortex mixing without the noise and vibration. The mixer features both touch and continuous operation with speeds from 200–3,200 rpm and can be used in a range of temperature environments (+4–65°C). Several optional mixing heads are available.

VORTEX MIXER	
Description	**Part Number**
Vortex Mixer with standard cup head, 115V, US Plug	36110740
Vortex Mixer with standard cup head, 230V, EU Plug	36110750
Vortex Mixer with standard cup head, 230V, UK Plug	36110760

ACCESSORIES	
Description	**Part Number**
Vortexer Flat head	36117310
COMBO™ Head	36117320
Optional Foam Rack for 12 x 15mL tubes	36117330
Optional Foam Rack for 5 x 50 mL tubes	36117340
Horizontal Head, for 12 x 1.5 mL	36117350
Horizontal Head, for 4 x 15 mL	36117360
Horizontal Head, for 2 x 50 mL	36117370

digital mini

INCUBATOR

SELF-CONTAINED TEMPERATURE CONTROLS IMPROVE INCUBATION ACCURACY

Using digital temperature controls, the Digital Mini Incubator allows you to accurately set the internal temperature without an external thermometer. The compact incubator accommodates 2 L flasks and has a built-in internal universal outlet for other electrical connections. Models for heating only or heating and cooling are available.

TWO MODELS ARE AVAILABLE:
• Heat only—temperature range of +5°C–60°C
• Heat and cooling—temperature range of -15°C–60°C

DIGITAL MINI INCUBATOR	
Description	**Part Number**
Digital Mini Incubator, with heating only 100–230V US Plug	36110800
Digital Mini Incubator, with heating only 100–230V, EU Plug	36110810
Digital Mini Incubator, with heating only 100–230V, UK Plug	36110820
Digital Mini Incubator, with heating and cooling 100–230V, US Plug	36110840
Digital Mini Incubator, with heating and cooling 100–230V, EU Plug	36110850
Digital Mini Incubator, with heating and cooling 100–230V, UK Plug	36110860

ACCESSORY	
Description	**Part Number**
Extra Shelf 10.5 x 8"	36117380

CENTRIFUGES

centry™ 117

IMPROVED TEMPERATURE STABILITY KEEPS SAMPLES SAFE

Reaching speeds of up to 13,500 rpm, the CENTRY™ 117 Microcentrifuge has an easy-to-use touchscreen and built-in timer and offers one-button recall of up to nine stored custom run programs. Its proprietary air-flow system ensures temperature stability, preserving sample integrity on extended runs. The rotor design accommodates either 1.5–2.0 mL tubes or PCR strips.

CENTRY™ 117 MICROCENTRIFUGE	
Description	**Part Number**
CENTRY 117 Microcentrifuge, 115V, US Plug	36110200
CENTRY 117 Microcentrifuge, 230V, EU Plug	36110210
CENTRY 117 Microcentrifuge, 230V, UK Plug	36110220

centry™ 101

NO MORE SPILLS WITH SPECIAL ROTOR DESIGN

With its patented swing-out rotor design, the CENTRY™ 101 Plate Centrifuge prevents microplate contents from spilling, increasing the reliability of your reactions. The two-plate capacity centrifuge accepts most popular PCR plates and microplates and easily fits into hoods and on crowded benchtops.

CENTRY™ 101 PLATE CENTRIFUGE	
Description	**Part Number**
CENTRY 101 Plate Centrifuge, 115V, US Plug	36117390
CENTRY 101 Plate Centrifuge, 230V, EU Plug	36117400
CENTRY 101 Plate Centrifuge, 230V, UK Plug	36117410

centry™ 103

QUICK AND SAFE SAMPLE CENTRIFUGATION

The CENTRY™ 103 Minicentrifuge is an to easy-to-use and portable benchtop device ideal for the quick separation of particles from a supernatant. It also enables a quick spin down of a drop of liquid from the walls of microtubes.

RELIABLE AND SAFE

CENTRY 103 Minicentrifuge integrates several safety features: it automatically stops after six minutes of continuous spinning, opening the lid anytime engages the brake, a pinch-type connector tightly secures the rotor, and a red light indicates when the power is switched on.

USER-FRIENDLY

Thanks to its ergonomic design, small footprint, and optional battery control, the CENTRY 103 Minicentrifuge can be used anywhere.

The quick and easy starting and ending operations are controlled by pressing down on the lid. The CENTRY 103 Minicentrifuge instantly reaches a fixed speed of 6,000 rpm, without adjustment.

CENTRY™ 103 MINICENTRIFUGE	
Description	**Part Number**
CENTRY 103 Minicentrifuge (Universal Plug)	F110736

minipuls®

3

The compact MINIPULS® 3 Peristaltic Pump is a high-performance, low-pulse, peristaltic pump with interchangeable pump heads for delivering a diverse variety of liquids—from biological to chemical—without altering the critical components within the liquid. Six different channel and flow rate configurations are available.

PULSE-FREE LIQUID TRANSFER
Utilizing positive displacement pump technology, liquid flows nearly pulse-free as a result of ten stainless steel rollers. MINIPULS 3 produces smooth flows with excellent accuracy and precision, even at high flow rates.

FLOW RATES TO MEET YOUR NEEDS
With a choice of six quickly interchangeable pump heads, you'll have a wide range of flow rates to use for your applications.

Four standard models (1, 2, 4, or 8 channels): 0.3 µL/min to 30 mL/min

Two high flow models (2 or 4 channels): 1 mL/min to 220 mL/min

EASY TO OPERATE
MINIPULS 3 is easy to install, simple to operate, and easy to maintain. With a simple keypad control and easy-to-read LCD screen, start/stop, flow direction, increase/decrease flow rate, and prime functions are easily accessible. Remote start/stop is also possible.

SELECT THE RIGHT TUBING
The most suitable material according to your sample's chemical compatibility.

Contains a large variety of internal diameters to reach desired flow rates.

Features appropriate connectors and extension tubing.

Request a quote today at www.gilson.com or from your local Gilson representative.

MINIPULS TUBING

Material	Internal Diameter (mm)	Reference Tubing (Calibrated Tubing)	Color Coded Stops		Extension Tubing 3 m (118 in.)	Connectors	Maximum Flow Rate (mL/min)
PVC	0.25	F117932	●	●	F117952	F117985	0.574
	0.38	F117933	●	●	F117953	F117986	1.22
	0.51	F117934	●	●	F117954	F117986	1.90
	0.76	F117936	●	●	F117956	F117987	3.00
	1.02	F117938	○	○	F117958	F1179941	6.0
	1.30	F117940	◉	◉	F117960	F1179941	9.0
	1.52	F117942	●	●	F117962	F1179941	14
	1.65	F117943	●	●	F117963	F1179941	16
	2.06	F117945	●	●	F117965	F1179941	25
	2.29	F117946	●	●	F117966	F1179941	29
	2.79	F117948	●	○	F117968	F1179951	39
	3.18	F117949	●	○	F117969	F1179951	47
Iso-Versinic® or Viton®	0.5	F1817741	●	●	F117740	F117986	2.9
	1.0	F1817743	●	●	F117742	F1179941	10
	2.0	F1817745	●	●	F117744	F1179941	24
	3.0	F117747	●	●	F117746	F1179951	55
	4	F117749	●	●	F117748	-	70
Silicone	0.64	F1825111	●	○	F1825131	F117987	3.2
	1.02	F1825112	○	○	F1825132	F1179941	7
	2.06	F1825113	●	●	F1825133	F1179951	21
	2.79	F1825114	●	○	F117975	F1179951	31
Santroprene™ or PharMed®	0.51	F1825101	●	●	F1825121	F117986	2.5
	1.02	F1825102	○	○	F1825122	F1179941	7
	2.06	F1825103	●	●	F1825123	F1179941	24

TUBING FOR R1, R2, R4, R8, PUMP HEADS — Length = Approximately 40 cm (16 in.)

Material	Internal Diameter (mm)	Reference Tubing (Calibrated)	Maximum Flow Rate (mL/min)
PVC	2.06	F117965	24
	2.29	F117966	29
	2.79	F117968	41
	3.16	F117969	49
	4.0	F117970	75
	5.0	F117980	113
	6.0	F117981	163
	8.0	F117982	213
Iso-Versinic® or Viton®	2.0	F117744	23
	3.0	F117746	48
	4.0	F117748	86
	6.0	F117750	181
Silicone	2.0	F1825133	25
	3.0	F117975	44
	4.0	F117976	71
	5.0	F117977	115
	6.0	F117978	150
	7.0	F117979	220
Santroprene™ or PharMed®	2.0	F1825123	25
	3.2	F1825124	57
	6.4	F1825125	171

TUBING FOR R2HF & R4HF HIGH FLOWPUMP HEADS — Length = 3 m (118 in.)

MINIPULS 3

Description	Part Number	Maximum Flow Rate	Number of Channels
Pump Module MINIPULS 3	F155001	-	-
R1 Pump Head	F117604	up to 30 mL/min	1
R2 Pump Head	F117800	up to 30 mL/min	2
R4 Pump Head	F117606	up to 30 mL/min	4
R8 Pump Head	F117608	up to 30 mL/min	8
R2/HF Pump Head (High Flow)	F117830	up to 220 mL/min	2
R4/HF Pump Head (High Flow)	F117831	up to 220 mL/min	4

FRACTION COLLECTORS

IDEAL SOLUTIONS FOR SMALL TO LARGE CAPACITY COLLECTION

Gilson offers advanced solutions for fraction collection with a complete line of stand-alone and software-controlled fraction collectors ranging from small footprint to large vessel capacity models. The built-in, easy-to-use keypad makes setup and operation simple and capable of interfacing with any HPLC system or control the system through your PC with TRILUTION® LC Software.

fraction collector

FC 203B

The compact, lower capacity FC 203B Fraction Collector collects samples based on time, drop, or peak, making it the preferred choice for a range of LC applications. The collector accommodates a wide variety of collection vessels, including microplates, vials, and tubes and can be used with any HPLC system.

VERSATILE COLLECTION OPTIONS
Choose among peak, drop, or time collection options with the FC 203B. For example, in peak mode, the FC 203B monitors a detector signal and identifies peaks using either an adaptive-slope algorithm or a specified millivolt threshold. With up to ten programmable time windows to use, collect only what you want and discard the column void volume, peaks of no interest, and equilibration volumes. Multicolumn adapters are available for collecting up to 18 separate channels and an optional 3-way diverter valve prevents contamination of collected fractions.

FC 203B FRACTION COLLECTOR	
Description	**Part Number**
FC 203B, 110/220 V	171011

fraction collector

FC 204

The FC 204 Fraction Collector is a large-bed fraction collector capable of handling test tubes, vials, and up to eight shallow- or deep-well microplates. Fractions can be collected by drop, peak, or time, and the collector can be used with any HPLC system.

ADAPTABLE TO MANY COLLECTION STRATEGIES
Collect samples by peak, drop, or time. When collecting using drop counting, up to 9,999 drops may be collected per fraction with a maximum drop rate of 20 drops/second. The 3-way diverter valve prevents contamination of fractions. Multicolumn adapters allow for collection from up to 18 separate channels.

FC 204 FRACTION COLLECTOR	
Description	**Part Number**
FC 204, 110/220 V	171041
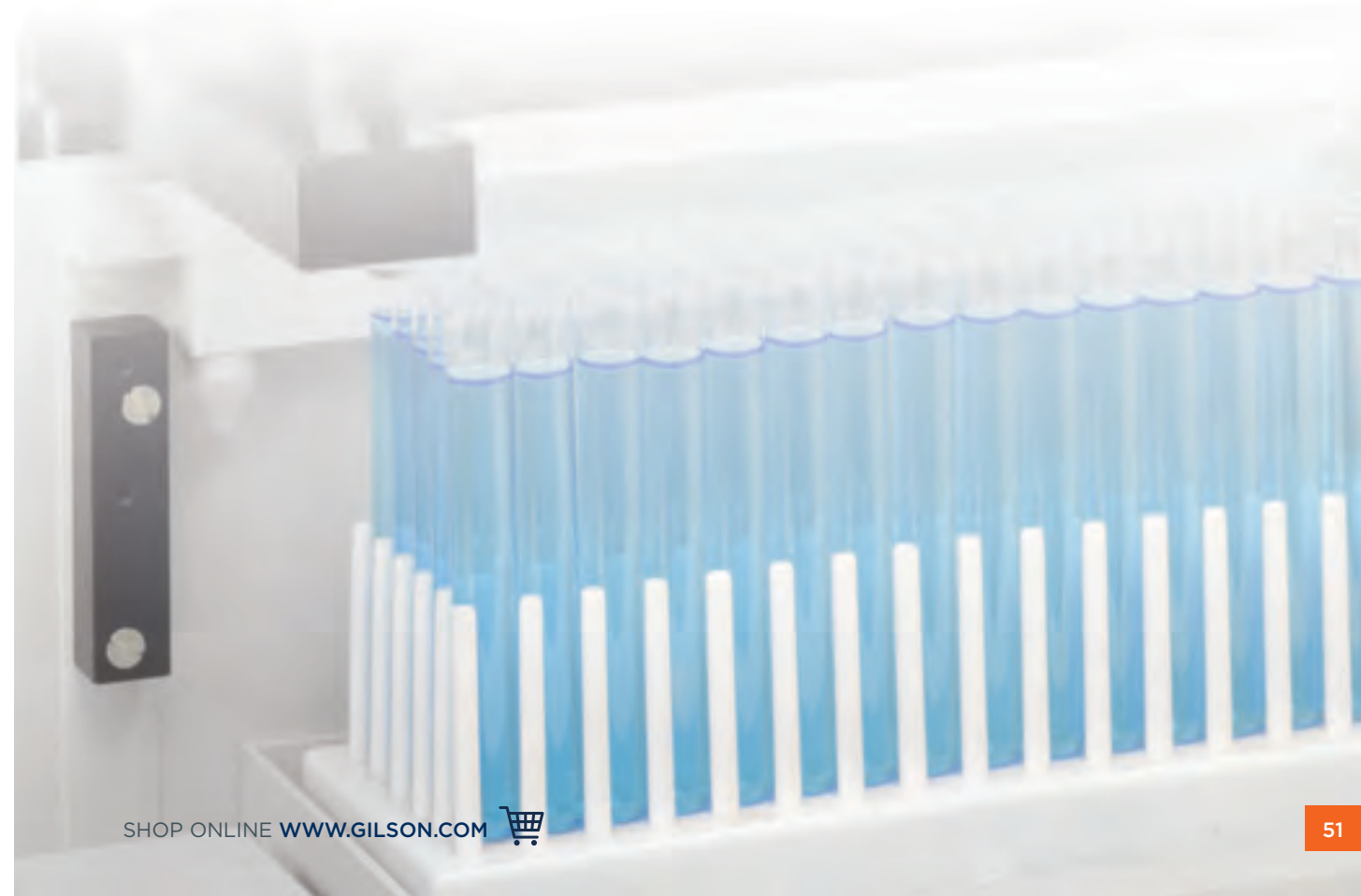
LIQUID HANDLERS

Gilson liquid handling tools deliver the precise control you need for sample and reagent volume transfers, ensuring reproducible results while making life in the lab easier. Beginning with the legendary PIPETMAN® technology, our liquid handling tools have evolved with your needs. We offer completely automated liquid handling systems.

LIQUID HANDLER SELECTION GUIDE

GX-241 Liquid Handler		The GX-241 Liquid Handler offers a two-rack platform for large or small volume injection and automatic fraction collection using tubes, vials, or microplates. Its small footprint makes it an ideal choice for labs where bench space is limited.
GX-271 Liquid Handler		The GX-271 Liquid Handler offers a small footprint, medium capacity liquid handler and autosampler offers small-to-large volume injection, fraction collection, and liquid handling capabilities. Its dynamic syringeless pumping system is capable of delivering microliters to hundreds of milliliters, with no change in hardware.
GX-274 Liquid Handler		The GX-274 Liquid Handler increases the throughput and efficiency of liquid transfers, serial dilutions, and other common tasks by processing up to four samples in parallel.
GX-281 Liquid Handler		This GX-281 Liquid Handler provides a versatile, large capacity platform that can be configured for injection, fraction collection, and re-injection as part of a semi-preparative or preparative HPLC purification system. With optional accessories, it can also be used as a flexible liquid handler for performing a wide variety of automated, unattended liquid handling applications.

gx-271
LIQUID HANDLER

This small footprint, medium capacity liquid handler and autosampler offers small-to-large volume injection, fraction collection, and liquid handling capabilities. Its dynamic syringeless pumping system is capable of delivering microliters to hundreds of milliliters, with no change in hardware.
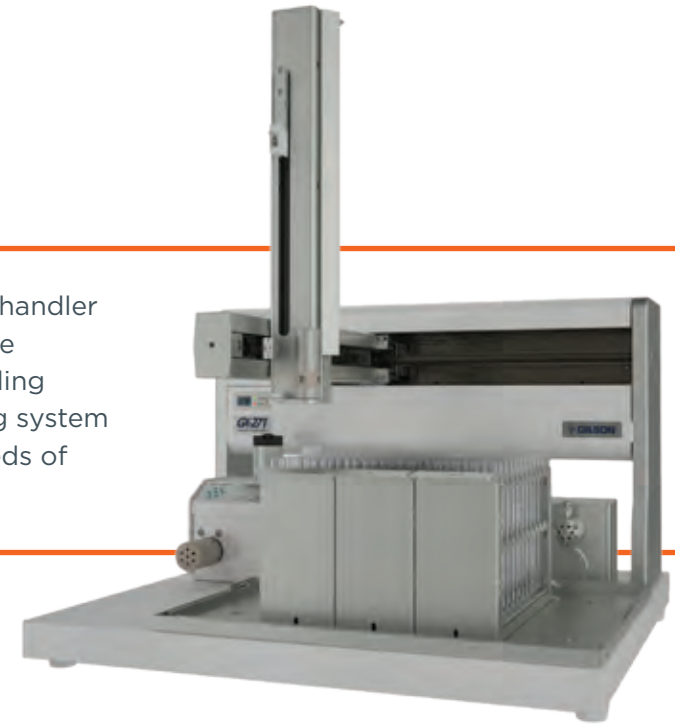
INNOVATIVE INJECTION MODULES
This mid-throughput liquid handler can be configured with a GX Direct Injection Module for injection onto an HPLC or LC/MS system. An innovative injection port design that attaches directly to the injection valve reduces void volumes and minimizes carryover associated with calibrated connection tubing, allowing injection volumes from 2 µL up to 25 mL. The continuous flow path design on all injection valves allows the system flow to continue even as the injection valve switches from load to inject, ensuring consistent pressure and flow.

VERSATILE, SPACE-SAVING DESIGN
With a small footprint of only 23 inches of linear bench space and a mid-size bed capacity, you'll have the perfect blend of size, performance, and capacity. On-bed reservoirs provide access for up to four solvents without utilizing a position on the bed. The modular design supports the use of Code 20-, 200-, or 34X-series racks and easily accommodates a variety of tubes, vials, and microplates.

Request a quote today at www.gilson.com or from your local Gilson representative.

PUMPS

Gilson offers unsurpassed flexibility in HPLC pumping systems with an extensive product range and accommodations.

PUMP SELECTION GUIDE

VERITY® 3011 ISOCRATIC PUMP	**IDEAL PUMPING SOLUTION FOR CHEMICAL REACTION MONITORING IN PETROLEUM APPLICATIONS AND GPC CLEANUP IN ENVIRONMENTAL APPLICATIONS** High-pressure rating, up to 8,700 psi (600 bar), for accommodating industrial level applications Quick-connect pump heads for simple maintenance and reduced downtime Flow rates from 10 µL/min to 10 mL/min and integrated touchscreen controller for convenient, stand-alone operation
305 HPLC PUMP 306 HPLC PUMP	**COST-EFFECTIVE, DEPENDABLE PUMPING SOLUTION** Available in isocratic, binary, and ternary configurations Interchangeable pump heads to accommodate flow rates from 10 µL/min to 200 mL/min
322 HPLC PUMP	**MULTI SOLVENT PUMP FOR ANALYTICAL TO SEMI-PREPARATIVE HPLC** Accommodates flow rates from 0.15 mL/min up to 30 mL/min at pressures up to 8,700 psi (600 bar) High-pressure dynamic mixer Performs a binary gradient with a single unit
331/332 HPLC PUMPS	**THE PUMPING CHOICE FOR SEMI-PREPARATIVE HPLC** Accommodates flow rates ranging from 0.5 mL/min to 50 mL/min at pressures up to 8,700 psi (600 bar) using columns up to 30 mm ID Multi-solvent selection with a Valvemate II Module Features a variable-volume, dynamic mixer for optimized high pressure gradient performance
333/334 HPLC PUMPS	**THE PUMPING CHOICE FOR PREPARATIVE HPLC** Accommodates flow rates ranging from 1 mL/min to 200 mL/min at pressures up to 3,040 psi (210 bar) using columns up to 50 mm ID Multi-solvent selection with a Valvemate II Module Features a variable-volume, dynamic mixer for optimized high pressure gradient performance
VERITY® 4X20 SYRINGE PUMPS 4020 SINGLE 4120 DUAL WITH TEE 4220 DUAL	**VERITY® SYRINGE PUMPS PROVIDE SPEED AND RELIABILITY** Performs small- and large-volume, repetitive liquid transfers Available in single, dual, and dual syringe with tee configurations Compatible with all Gilson liquid handlers

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verity® 4120

The VERITY® 4120 Dual with Tee Syringe Pump is equipped with two syringes that are user-selectable. The capacity of the left syringe must be greater than or equal to the right syringe. The instrument includes one valve to direct liquid from reservoir or probe (on the left) and a tee connected via junction tubing (on the right).

The VERITY 4120 Dual with Tee Syringe Pump assures accuracy in sample transfers, dilutions, reagent additions, mixing, and other liquid handling tasks. It offers speed and reliability for liquid handling tasks.

VERITY® 4120 DUAL WITH TEE SYRINGE PUMP

Technical Specification	Definition
Communication	USB
Dimensions (W x D x H)	22.6 x 17.1 x 26.9 cm (8.9 x 6.7 x 10.6 in.)
Precision	1%
Syringe Capacity	100 µL, 250 µL, 500 µL, 1 mL, 5 mL, 10 mL, or 25 mL
Software Control	PC control via USB and TRILUTION® LH or TRILUTION® LC Software
Tee	**Type:** Three port, no moving parts **Diameter of channels:** 1.5 mm **Length of channels:** 14 mm **Angle between channels:** 120° **Liquid contact material:** PEEK **Dead volume:** 51 µL
Volumetric Accuracy	±2% (10%–90% syringe capacity, water)
Weight	6.8 kg (15.0 lbs.)

VERITY® 4120 DUAL WITH TEE SYRINGE PUMP

Part Number	Description
31130002	VERITY® 4120 Dual with Tee Syringe Pump

Request a quote today at www.gilson.com or from your local Gilson representative.

DETECTORS

Gilson offers a complete line of HPLC detection solutions that are ideal for analytical, semi-preparative, and preparative HPLC applications.

DETECTOR SELECTION GUIDE

157 UV-VIS Detector 159 UV-VIS Detector		**157 UV/VIS SINGLE WAVELENGTH DETECTOR** Highly flexible and compact design Offers a single, but variable wavelength range of 190–750 nm Wide range of flow cells available from analytical and preparative HPLC to pilot-scale
		159 UV/VIS MULTIPLE WAVELENGTH DETECTOR Monitors up to four different wavelengths simultaneously while acquiring spectral data from 190–750 nm, allowing you to more easily track impurities Best-in-its-class value for noise, drift, and linearity achieved through smart optical bench technology and the use of optimized components Wide range of flow cells available from analytical and preparative HPLC to pilot-scale
171 Diode Array Detector 172 Diode Array Detector		Delivers accurate UV/VIS and spectrum data with up to seven specific wavelengths simultaneously Flexible fiber optic light paths Interchangeable flow cell design
prepELS™ Detector		Expand detection capabilities for preparative or analytical HPLC applications Precise control of the spray chamber and drift tube temperature Revolutionary filtering capabilities allow for effective baseline noise reduction without affecting peak height or shape Easy-to-use and low maintenance
VERITY® 1810 Conductivity and pH Monitor		State-of-the-art detection instrument for biological purifications Compact instrument with an integrated conductivity sensor and an external optional pH sensor Integrates into any Gilson VERITY® System
VERITY® 1910 MS Detector		Chip-based, single quadrupole mass spectrometry detector Provides a mass-directed purification solution Mass range detection capabilities from 50 to 1400 m/z Integrate with PLC Purification System and VERITY HPLC systems for HPLC, FLASH chromatography, or CPC

REACH RESULTS FASTER WITH MORE TARGETED FRACTION COLLECTION AND NO NEED FOR SUBSEQUENT ANALYSIS

The VERITY® 1910 MS Detector provides a complete, compact, and fully packaged solution for mass spectrometry (MS) purification.

MAKE YOUR LAB LIFE EASIER

Save valuable time by confirming the molecular weight of the contents of every collected fraction during the purification process, which eliminates the need for subsequent analytical verification. The VERITY® 1910 MS Detector is a unique, chip-based mass detector that can be integrated into purification systems for HPLC, flash chromatography, or centrifugal partition chromatography (CPC).

IT'S ABOUT YOUR SCIENCE

Easy-to-use MS purification systems controlled by intuitive software allow you to focus on your work.

VERITY® 1910 MS DETECTOR

The VERITY 1910 MS Detector offers a mass range of 50–1400 m/z with the ability to collect full scan signals and up to four selected ion monitoring (SIM) channels simultaneously. The chip-based technology removes the routine maintenance and operation costs of a traditional MS detector and meets the high demands of purification applications.

The MiDas™ module features a make-up pump and MRA splitter to deliver consistent flow to the VERITY 1910 MS Detector and allows for split ratios from 1:100 to 1:100,000 for purifying large amounts of compound, based on a target mass signal.

Request a quote today at www.gilson.com or from your local Gilson representative.

VERITY® 1910 MS DETECTOR	
Technical Specification	**Definition**
Detector	Electron multiplier detector
Flow Rate Range	0.3–2000 µL/min
Interface	Off-axis vac-chip™ microengineered atmospheric pressure interface
Ionization Modes	Positive and negative ESI modes
Ion Source	Spraychip® electrospray ionization source
Mass Analyzer	ionchip® quadrupole mass filter
Mass Range	m/z 50–1400 with ionchip 150
Pumping System	Integrated oil-free pumps
Scan Modes	Full scan, SIM (4 m/z channels)
Scan Rate	m/z 1,500/s (7,500 pts/s)
Sensitivity	10 pg of reserpine yields a peak in SIM mode with a S/N ratio of 10:1 (RMS)
Software Control	PC control via Ethernet and TRILUTION® LC Software Control via Ethernet and Gilson Glider Prep Software (GGP) and Masscape® Software Software
Weight	32 kg (70.5 lbs.)

PURIFICATION

Get the accuracy and precision you need for trusted results with VERITY® purification systems. Whether you isolate large or small molecules or need milligram to kilogram purifications, our VERITY systems offer you a wide array of components to build the perfect system to meet your specific needs. All systems are easily controlled by intuitive software, letting you focus on the science. Backed by Gilson's long history in chromatography, rest reassured that VERITY solutions are built to last and will make your life in the lab easier.

PURIFICATION SYSTEM SELECTION GUIDE

VERITY® 241 HPLC System		**LOW TO MEDIUM FLOW RATE HPLC SYSTEM** Small footprint modular system with a multitude of options GX-241 Liquid Handler small bed capacity platform for liquid handling/injection/fraction collection Controlled by powerful and flexible TRILUTION® LC software
VERITY® 271 HPLC System		**MID-SIZE AND THROUGHPUT HPLC SYSTEM** Optimized footprint modular system with a multitude of options GX-271 Liquid Handler mid-range bed capacity platform for liquid handling/injection/fraction collection Controlled by powerful and flexible TRILUTION LC software
VERITY® 281 HPLC System		**LARGE CAPACITY AND THROUGHPUT HPLC SYSTEM** Space-saving design, yet large capacity GX-281 Liquid Handler large bed capacity platform for liquid handling/injection/fraction collection Modular system with a multitude of options Controlled by powerful and flexible TRILUTION LC software
VERITY® Compact LC System		**PLC PURIFICATION SYSTEM FOR PREPARATIVE AND FLASH CHROMATOGRAPHY** Compact footprint and easy to use with flexible features Intuitive and integrated Gilson Glider Prep Software (GGP)
VERITY® Compact CPC System		**CENTRIFUGAL PARTITION CHROMATOGRAPHY (CPC) SYSTEM** Liquid-liquid purification technique that utilizes reusable, silica-free chromatographic columns Ideal for natural product purification Easy-to-use, efficient and streamlined workflow thanks to Gilson Glider CPC Software (GGC)
VERITY® Oligonucleotide Purification System		**ISOLATE, ANALYZE, AND DESALT OLIGONUCLEOTIDES IN ONE RUN** All-in-one system saves space and money Automation operation: zero downtime with continuous sample processing All steps controlled by one software package: TRILUTION LC

COMPACT CPC

The VERITY® Compact CPC System combines a PLC Purification System with a centrifugal partition chromatography (CPC) column for high-level target compound purification. The technique of CPC and PLC supported on a single platform provides scientists the possibility to perform flash chromatography, preparative HPLC, or CPC separations on the same purification system configuration.

IDEAL FOR NATURAL PRODUCT PURIFICATION
Based on liquid-liquid purification technique, CPC does not denature fragile molecules. CPC columns tackle tough separations of complex samples in a single step without prior purification, making it an ideal choice for natural product isolation. It achieves 95% recoveries with greater than 99% purity.

EFFICIENT AND STREAMLINED WORKFLOW
The reusable, silica-free columns offer high injection capacities of milligrams to kilograms. Cost-effective and reusable CPC columns use approximately five times less solvent than more traditional columns and eliminate column replacement and silica recycling costs.

EASY TO USE
This fully automated system with dedicated Glider CPC Software offers flexible reporting capabilities and an intuitive touchscreen interface that enables easy method writing and modifying of parameters. The system and the software can be adapted to customer needs with the additional detectors or activation of the 21CFR compliance option.

Request a quote today at www.gilson.com or from your local Gilson representative.

PURIFICATION WITH MS

Save valuable time by confirming the molecular weight of the contents of every collected fraction during the purification process, which eliminates the need for subsequent analytical verification. The VERITY® 1910 MS Detector is a unique, chip-based mass detector that can be integrated into purification systems for HPLC, flash chromatography, or CPC.

PURIFICATION WITH MS SYSTEM SELECTION GUIDE

VERITY® 241 LCMS System		**MASS-DIRECTED PURIFICATION FOR ALL VERITY HPLC SYSTEMS** Expand your detection capacity with VERITY 1910 MS Detector: a powerful and miniaturized single quadrupole mass spectrometer, with reduce operational costs thanks to low N2 consumption and easy-to-maintain components
VERITY® 271 LCMS System		Obtain results faster by confirming the molecular weight of the fractions as they are collected Combine separation power of HPLC with detection power of MS in a single system controlled by TRILUTION® LC Software, available with low to high throughput automated liquid handling platforms
VERITY® 281 LCMS System		
VERITY® Compact LCMS System		**COMBINE THE PLC PURIFICATION SYSTEM WITH A VERITY® 1910 MS DETECTOR** Compact, easy-to-use, all-in-one instrument controlled by GGP software Mass-directed purification of target compounds by preparative HPLC and flash chromatography
VERITY® CPC-MS System		**COMBINE A CENTRIFUGAL PARTITION CHROMATOGRAPHY (CPC) SYSTEM WITH THE VERITY® 1910 MS DETECTOR** Automated, cost-effective, liquid-liquid purification technique controlled by GGC software Mass spectrometry detection to streamline your workflow and allow you to quickly isolate specific molecules with high yields and purity

verity® 281 LCMS

The VERITY® 281 LCMS System is a large capacity, high throughput preparative liquid chromatography (LC) system, that combines the separation power of HPLC with the detection power of a mass spectrometry (MS) detector. This reliable system enables mass-directed purification.

HIGHLY MODULAR SYSTEM
VERITY 281 LCMS System offers modular components for increased flexibility. The system configuration includes a GX-281 Liquid Handler for injection and fraction collection, Gilson pumping system, Gilson detectors with VERITY® 1910 MS Detector, and powerful Gilson TRILUTION® LC Software.

OBTAIN RESULTS FASTER
By moving to mass spec detection using the VERITY 1910 MS Detector, reach your results faster thanks to more targeted fraction collection, quicker cleaning, and no need for subsequent analysis.

EASY TO MAINTAIN
The VERITY 1910 MS Detector has miniaturized, interchangeable components that are easier to maintain, lowering its operational costs when compared to traditional single quadrupole detectors. The compact, stackable design fits into most fume hoods and produces less heat and noise than conventional MS detectors.

Request a quote today at www.gilson.com or from your local Gilson representative.

ACCESSORIES

OPTIMIZE YOUR INSTRUMENTATION

Complementing durable and flexible instruments, Gilson accessories optimize instrumentation to fit application requirements for the ultimate solution.

ACCESSORIES SELECTION GUIDE

VALVEMATE® II Valve Actuator		**INCREASE THE FLEXIBILITY OF YOUR SYSTEM** Extends the capability of any chromatography or liquid handling system by offering options for solvent selection, column switching, and sample trapping Wide variety of valves, available in stainless steel or in biocompatible materials Fully controlled either via keypad or by TRILUTION® LC Software
Orbital Shaker		The Orbital Shaker is specifically designed to satisfy liquid handling needs for on-line or off-line vortexing and mixing. It is a fully functional, stand-alone instrument. It is a compact shaker that fits on one rack position of a GX-281 Liquid Handler bed. The shaker provides a range of customer-controlled shaking (20 to 720 rpm) allowing vortexing on various vessel sizes and sample volumes. **COMPATIBLE WITH A WIDE RANGE OF RACKS** The Orbital Shaker is compatible with all Code 200-series racks. A single rack attaches easily using set screws; rack placement is accurately guided by locator pins.
Racks		Gilson offers standard and custom SPE racks to meet the needs of any and all applications. A variety of vessels can be accommodated including tubes, vials, or microplates.

RACKS

STANDARD AND CUSTOM RACKS

Gilson offers standard and custom racks to meet the needs of any and all applications. A variety of vessels can be accommodated including tubes, vials, microplates, and microchips.

RACKCOUNT™ SYSTEM

RackCount System overlays add numbering patterns to rack positions allowing you to quickly and easily locate specific samples or collected fractions on the bed of Gilson liquid handlers. The overlays are available in serpentine or non-serpentine numbering patterns.

GEL PERMEATION CHROMATOGRAPHY (GPC)

The VERITY® GPC Cleanup System is an ideal solution for post-extraction cleanup of high-molecular weight interfering substances from environmental samples, food products, and animal tissue prior to analysis using gel permeation chromatography (GPC). Removal of these contaminants leads to more reliable results, fewer sample repeats, and less downtime for downstream chromatography instruments.

GPC SYSTEM SELECTION GUIDE

<table>
<tr>
<td rowspan="2">VERITY® GPC Cleanup System with UV Detector</td>
<td></td>
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AUTOMATED GPC CLEANUP FOR A VARIETY OF SUBSTANCES, MONITORED BY UV DETECTION

Improve column life and decrease downtime

Automated cleanup of up to 80 sample extracts

Modular system all under TRILUTION® LC Software control

Comply with GPC post-extraction guidelines set by the US Environmental Protection Agency (US EPA) and with other governments requirements

Pre-programmed GPC methods included

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verity®
GPC CLEANUP

REMOVE ANALYTICAL INTERFERENCES WHILE IMPROVING METHOD EFFICIENCY AND REPRODUCIBILITY

The VERITY® GPC Cleanup System uses gel permeation chromatography (GPC) to remove contaminants from your sample matrices prior to analysis, producing more reliable results, fewer sample repeats, and less system downtime.
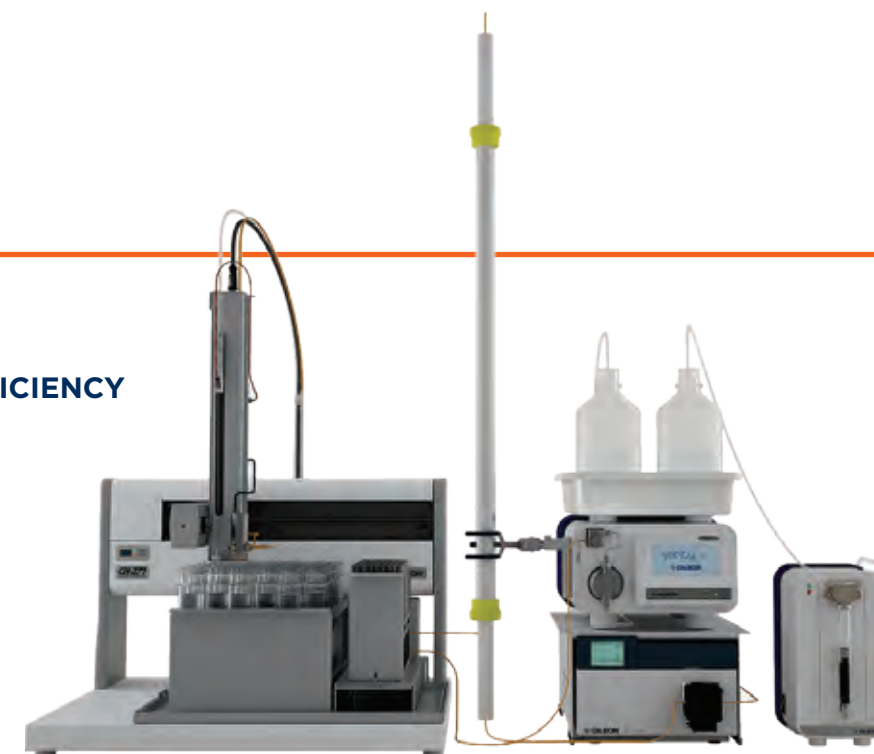
The VERITY® GPC Cleanup System is configured with a GX-271 Liquid Handler, GX Direct Injection Module, VERITY® 4020 Single Syringe Pump, VERITY® 3011 Isocratic Pump, TRILUTION® LC Software, and an optional 157 UV-VIS Detector.

GPC CLEANUP FOR A VARIETY OF SUBSTANCES

The automated VERITY GPC Cleanup System provides a post-extraction purification solution that removes matrix interferences prior to GC, GC/MS, HPLC, or LC/MS, extending the life of chromatography columns, protecting chromatography instruments, improving analytical accuracy, and lowering detection limits. The VERITY GPC System automates cleanup of up to 80 sample extracts and can collect multiple fractions from the same extract, all with reduced sample carryover. The system meets US, Canadian, and European Union requirements for GPC cleanup.

ALL UNDER TRILUTION® LC SOFTWARE CONTROL

The VERITY GPC System is controlled by the powerful TRILUTION LC software which contains pre-programmed methods for GPC post-extraction cleanup. The software error handling and shutdown methods help to minimize solvent waste and sample loss.

Request a quote today at www.gilson.com or from your local Gilson representative.

EXTRACTION

GET THE MOST FROM YOUR ANALYTICAL SYSTEMS WITH TRUSTED RESULTS

Solid phase extraction (SPE) is a highly selective cleanup technique that eliminates matrix effects and concentrates compounds present as traces to improve analytical detection. The ASPEC® extraction line offers hands-free solutions that provides increased sample throughput and reliable test results while providing the traceability needed when studying metabolites, drugs, or proteins in biological, food, or environmental matrices.

AUTOMATED EXTRACTION SYSTEM SELECTION GUIDE

System		Description
ASPEC® 241 System		• Compact system for basic SPE automation • Up to 36 samples on 1 mL cartridges, 20 on 3 mL and 16 on 6 mL
ASPEC® 271 System		• Ultimate versatility system for basic and advanced SPE automation • Up to 108 samples on 1 mL cartridges, 60 on 3 mL and 48 on 6 mL • Optional dual syringe for accurate transfer down to 10 µL • Optional injection for direct UPLC or LC integration • Compatible with Gel Permeation Chromatography (GPC) and liquid-liquid extraction (LLE) and SLE cleanup applications
ASPEC® 274 System		• High throughput system for basic and advanced SPE automation • Process four samples in parallel • Up to 108 samples on 1 mL cartridges, 60 on 3 mL and 48 on 6 mL • Compatible with LLE and SLE cleanup
ASPEC® 271 Large Volume System		• Ultimate versatility system for basic and advanced small- to large-volume SPE automation • Up to 9 large volume samples on 3 mL and 6 mL cartridges • Segregated aqueous and organic waste • Optional dual syringe for accurate transfer down to 10 µL • Optional injection for direct UPLC or LC integration • Compatible with GPC and LLE cleanup applications
ASPEC® 274 Large Volume System		• High throughput system for small- to large-volume SPE automation • Process four samples in parallel • Up to 32 samples on 3 mL and 6 mL cartridges • Segregated aqueous and organic waste • Compatible with LLE cleanup

aspec®

274

The ASPEC® 274 System for positive pressure solid phase extraction (SPE) maximizes throughput by processing up to four samples in parallel. With its small footprint and multiple probes, it is the ideal choice for high-throughput SPE automation on 1, 3, or 6 mL cartridges. Combined with ASPEC® SPE Cartridges, it generates reproducible and efficient sample cleanup for clinical, forensic, doping, food, and environmental testing labs.

PARALLEL PROCESSING FOR MAXIMUM EFFICIENCY
Four-probe Z-arm enables processing of four samples in parallel, increasing throughput and efficiency.

POSITIVE PRESSURE FOR REPRODUCIBLE EXTRACTIONS
Positive pressure extraction with unique sealing cap design increases reproducibility from sample to sample. The syringe pump delivers accurate volume dispensing.

SMART DESIGN FOR MAXIMIZED PERFORMANCE
Mobile rack technology enables multiple fraction elution and extraction per sample and additional sample transfer after SPE.

INTUITIVE ERROR HANDLING FOR TRUSTED RESULTS
The syringe pump pressure-sensing module provides error handling for high cartridge pressure or clogged liquid lines and monitors pressure on each fluid path individually. Innovative jet wash rinse stations minimize carryover and cross contamination.

VERSATILE SOFTWARE CONTROL FOR OPTIMIZED PRODUCTIVITY
TRILUTION® LH Software allows for multiple liquid handling applications such as liquid-liquid extraction (LLE) and SPE on the same ASPEC system. Optimize throughput and efficiency by processing samples in either batch or sequential mode. Perform multiple elution and parallel solvent testing to quickly automate and optimize method development.

Request a quote today at www.gilson.com or from your local Gilson representative.

aspec®

PPM

IMPROVE MANUAL SPE REPRODUCIBILITY

With uniform and consistent flow rate, the ASPEC® PPM (Positive Pressure Manifold) improves solid phase extraction (SPE) reproducibility and recovery, even with high viscosity samples. It integrates easily into lab workflows, and provides a fast and simple way to prepare samples for subsequent analysis by chromatography.

COMPACT AND EASY TO SET UP FOR QUICK OPERATION
With its small footprint and only a single gas input, the ASPEC PPM is quick to set up and easily fits under fume hoods for extractions that use volatile solvents.

POSITIVE PRESSURE FOR REPRODUCIBLE EXTRACTIONS
With its integrated pressure gauge and intuitive controller, the manifold provides better flow control among samples and between runs than traditional vacuum manifolds, providing greater confidence in your data. Positive pressure ensures that all samples will elute regardless of the viscosity level.

FLEXIBILITY FOR A VARIETY OF APPLICATIONS
Compatible with both popular SPE cartridges and 96-well plates, the ASPEC PPM performs parallel extractions to increase throughput and productivity.

OPTIMIZE WORKFLOW THROUGHPUT
By combining the ASPEC PPM with the ASPEC® SPE Cartridges or plates, and with PIPETMAN® multichannel pipettes or PLATEMASTER®, get the guarantee of accurate and fast samples management and extraction.

Request a quote today at www.gilson.com or from your local Gilson representative.

aspec®

SPE CARTRIDGES

CONSISTENT PERFORMANCE, RELIABLE RESULTS

Get more reliable results with ASPEC® SPE Cartridges. These ready-to-use, high-quality silica and polymer cartridges come in a variety of industry-standard phases and are available in 1, 3, and 6 mL cartridges, or 96-well plates. The ASPEC SPE Cartridges are available with ASPEC caps for cost-effective, automation-ready use on ASPEC automated solutions.

HIGH LOT-TO-LOT REPRODUCIBILITY
Guaranteed reproducible extractions over the years.

TIGHT PARTICLE SIZE DISTRIBUTION
Higher recoveries due to lower risks of channeling and tighter peaks resulting in highly concentrated eluates.

LARGE SURFACE AREA
The ASPEC SPE Cartridges feature a large loading capacity, which allows for faster extractions with less sorbent mass, leading to less solvent volume.

KEY FEATURES OF PRE-CAPPED CARTRIDGES FOR ASPEC AUTOMATION
- Run cartridges right out of the box, saving valuable time with no need for manual capping
- Remove potential health concerns with repetitive manual operations
- Run samples faster
- Prevent run stopping due to improperly installed caps
- Custom phase pre-capped ASPEC cartridges available upon request
- Competitively priced versus uncapped cartridges with separated caps

RETENTION MECHANISMS SELECTION

Sample properties, such as matrix type and compounds of interest solubility and polarity, give a good starting point to identify the recommended sorbent and retention mechanism:

Analyte is soluble in			Analyte polarity	Recommended Phases (SILICA BASED - POLYMERIC)
Aqueous	Sample Matrix Type	Aqueous	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, ASPEC DVB
			Non polar/ Moderately polar	ASPEC C18 NEC, ASPEC C8, ASPEC C4, ASPEC CYANO, ASPEC HLB
			Polar	ASPEC CYANO, ASPEC ACT. CARBON
		Aqueous/Organic	Cationic/Basic	ASPEC SCX, ASPEC SCX-2, ASPEC WCX
			Cationic/Basic (Neutral)	ASPEC X-SCX, ASPEC X-WCX
			Anionic/Acid	ASPEC SAX, ASPEC SAX-2, ASPEC WAX, ASPEC WAX-2
			Anionic/Acid (Neutral)	ASPEC X-SAX, ASPEC X-WAX
		Organic	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, ASPEC DVB, ASPEC HLB
Organic		Aqueous	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, ASPEC DVB, ASPEC HLB
			Cationic/Basic	ASPEC SCX, ASPEC SCX-2, ASPEC WCX
			Cationic/Basic (Neutral)	ASPEC X-SCX, ASPEC X-WCX
			Anionic/Acid	ASPEC SAX, ASPEC SAX-2, ASPEC WAX, ASPEC WAX-2
			Anionic/Acid (Neutral)	ASPEC X-SAX, ASPEC X-WAX
		Organic	Non polar	ASPEC SILICA, ASPEC FLORISIL, ASPEC ALUMINA, ASPEC CYANO, ASPEC DIOL NEC
			Polar	ASPEC SILICA , ASPEC CYANO, ASPEC DIOL NEC

Gilson SupaTop™

SYRINGE FILTERS

CLARIFY YOUR SAMPLES AND EXTEND THE LIFE OF YOUR ANALYTICAL SYSTEMS

For sample volumes up to 100 mL, the range of Gilson SupaTop™ Syringe Filters provides a quick, convenient and reliable method of clarifying liquids intended for further analysis such as HPLC injection to combat particulate clogging of columns.

Gilson SupaTop Syringe Filters are available in two sizes, 13 or 25mm, each with a choice of porosity of 0.22 μm and 0.45 μm.

MAINTAIN SAMPLE INTEGRITY
• Pigment-free and sealant-free polypropylene housing
• HPLC-certified filters with low levels of UV-absorbing extractables

SAVE TIME AND AVOID ERROR
• Color-coded syringe filters to quickly identify membrane and porosity used
• High burst strength and durable construction.

A MEMBRANE FOR ALL YOUR NEEDS
The filter membrane should not interfere with the sample or bind proteins or other macromolecules. The table below provides a good starting point to identify the type of membrane used by application.

MEMBRANE APPLICATIONS	
Application	Membrane Type
(U)HPLC solvents	PTFE or Nylon
Aqueous solution	All except PTFE
Iconic chromatography	PES or PTFE
Protein analysis	PES or PVDF
Environmental and food analysis	PTFE or Nylon
Clinical or toxicological analysis	PES
ICP/AAS metals analysis	PES or Nylon
Cell or Tissue culture media	PES

Gilson SupaTop Syringe Filters are available in Benelux, France, Germany, Italy, Spain, Switzerland, the United Kingdom, and the United States through Gilson direct sales only.

| Membrane	Properties	Color Code	Pore Size	13 mm Diameter		25 mm Diameter	
				Part No.	Pack of	Part No.	Pack of
PES	Polyethersulfone (PES) is widely used for the clarification of biological samples. This low binding membrane is able to resist surfactants and hydrocarbon oils but is not suitable for use with low-polar organic solvents or aromatic hydrocarbons.		0.2 μm	ANR1322	100	ANR2522	100
				ANR1322D	1000	ANR2522C	500
			0.45 μm	ANR1345	100	ANR2545	100
				ANR1345D	1000	ANR2545C	500
MCE	Mixed Cellulose Esters (MCE) contain a blend of cellulose acetate and nitrocellulose fibres providing a more resilient membrane than CA for aqueous-based filtration. Higher binding than pure CA.		0.2 μm	ANM1322	100	ANM2522	100
				ANM1322D	1000	ANM2522C	500
			0.45 μm	ANM1345	100	ANM2545	100
				ANM1345D	1000	ANM2545C	500
NYLON	Polyamide (Nylon) is a popular membrane with superior chemical compatibility than CA or MCE. Able to filter aqueous or mild organic solvents, this membrane is naturally hydrophilic with low extractables.		0.2 μm	ANN1322	100	ANN2522	100
				ANN1322D	1000	ANN2522C	500
			0.45 μm	ANN1345	100	ANN2545	100
				ANN1345D	1000	ANN2545C	500
PVDF	Polyvinylidene Fluoride (PVDF) exhibits great chemical resilience being non-reactive to many solvents, acids, and bases. Appreciated for its low protein binding properties this membrane is used in biological sciences and its wide chemical compatibility range makes it ideal for HPLC sample preparation ahead of injection.		0.2 μm	ANV1322	100	ANV2522	100
				ANV1322D	1000	ANV2522C	500
			0.45 μm	ANV1345	100	ANV2545	100
				ANV1345D	1000	ANV2545C	500
PTFE	Polytetrafluoroethylene (PTFE) has the highest chemical compatibility rating of these filters. Being naturally hydrophobic this membrane is most suited to the clarification of organic solvents and for air venting processes. Not suitable for aqueous sample filtration without pre-wetting.		0.2 μm	ANP1322	100	ANP2522	100
				ANP1322D	1000	ANP2522C	500
			0.45 μm	ANP1345	100	ANP2545	Pack of 100
				ANP1345D	1000	ANP2545C	500

extractman®

EXTRACTMAN® offers a fast and gentle paramagnetic beads-based approach to isolating target proteins and is ideal for isolating elusive, weakly-bound protein complexes critical to protein interaction research.

IDENTIFYING WEAK PROTEINS INTERACTIONS

Co-immunoprecipitation (Co-IP) is a common technique for observing protein-protein interactions; however, weakly-or transiently-bound species often go undetected as aggressive or repeated wash steps can result in a loss of these interactions. EXTRACTMAN differs from traditional magnetic bead-based co-IP techniques by using Exclusion-based Sample Preparation (ESP™) technology, making it ideal for capturing weakly bound protein complexes without exposing them to high shear forces from. Paired with non-porous magnetic beads, EXTRACTMAN enables high-yield, high-purity isolations without the need for long washing steps.

RAPID ISOLATION

ESP-based EXTRACTMAN uses surface tension and hydrophobic properties to gently and rapidly pull PMP-analyte complexes through liquids (and air) in a series of input, wash, and output wells, enriching the sample and excluding unbound contaminants in a matter of seconds.

BIND — WASH — ELUTE
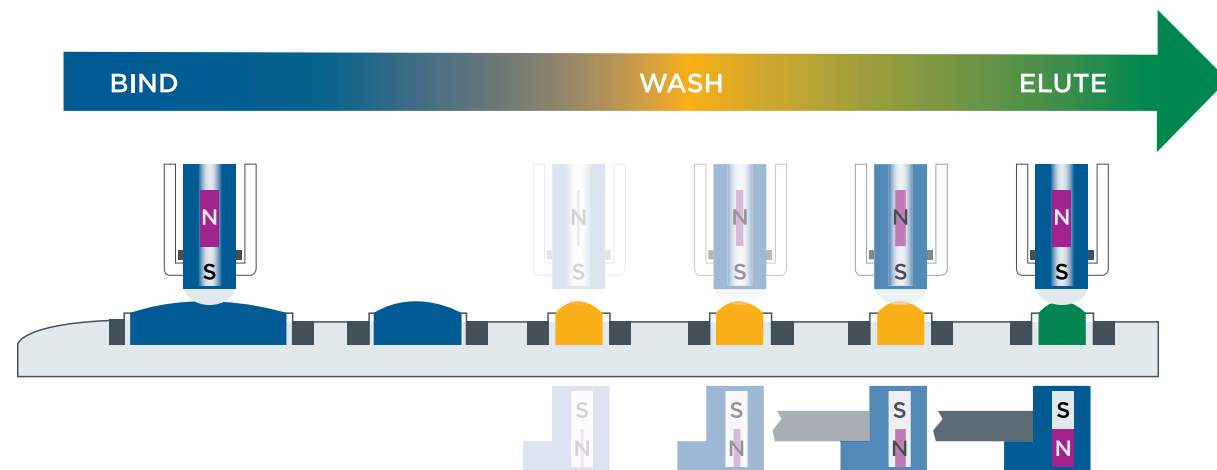
ERGONOMIC AND EASY-TO-USE

Slide-based extraction gently moves four samples in parallel through isolation with a simple slide of the handle.

EXTRACTMAN has been used to rapidly isolate mRNA, DNA, and proteins from crude extracts using an assortment of commercial kits and reagent

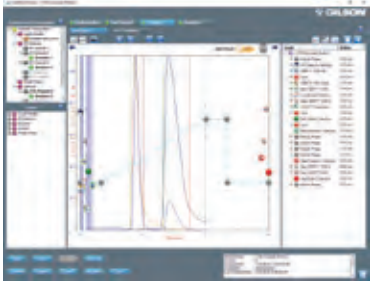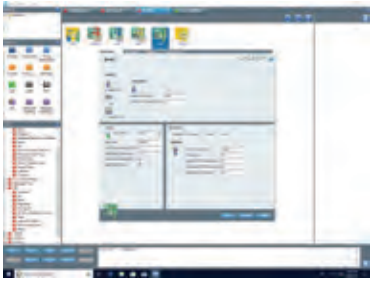**Request a quote today at www.gilson.com or from your local Gilson representative.**

SOFTWARE

SOFTWARE DESIGNED BY SCIENTISTS, FOR SCIENTISTS

Gilson offers powerful software to complement our instruments. With accommodating features, drag-and-drop functionality, and numerous supplied tasks, Gilson software packages allow effortless, complete control of instruments, allowing you to focus on the science rather than the software.

SOFTWARE SELECTION GUIDE

TRILUTION® LC Software		TRILUTION® LC Software is a user-friendly software package for controlling high-pressure liquid chromatography systems and automated liquid handling instruments. TRILUTION LC provides fraction collection capabilities, conditional logic collection, worry-free slope collection, accurate fraction simulation, graphical drag-and-drop user interface, and graphical sample tracking.
TRILUTION® LH Software		TRILUTION® LH Software is a comprehensive software package for seamless automation of all liquid handling (LH) and solid phase extraction (SPE) methods. With its intuitive interface, simple drag-and-drop method creation, and application simulation, it combines flexibility and ease-of-use.
TRILUTION® micro Software		TRILUTION® micro Software is an easy-to-learn software package for PIPETMAX®, which streamlines steps for runtime workflows. The qPCR Assistant and Normalization Assistant add-ons automate repetitive steps, tedious calculations, and sample tracking, improving reliability and traceability for PCR/qPCR and normalization runs.

GILSON®