GILSON®

2019 PRODUCT GUIDE

ABOUT US

Since 1972, we have proudly offered a wide and reliable range of purification, extraction, and liquid handling solutions to help scientists in their daily work.

With our family of products, you'll find tailored solutions and cost-effective ways to manage your liquid samples. The pipetting system is our signature specialty, and we take great joy in sharing our knowledge with pipette users, helping them to achieve their goals. Gilson offers a diverse range of manual to automated liquid handling solutions, including single channel pipettes, multichannel pipettes, semi-automated and automated pipetting solutions, pipette tips, pipette accessories, and tailor-made services. With our products, you'll find smart solutions and cost-effective ways to manage your liquid samples, empowering you to successfully complete your research and have total confidence in your sample preparation steps.

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SERVICES AND 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

Locate contact information for your local Gilson representative at www.gilson.com.

MANUAL LIQUID HANDLING

HAVE OUR EXPERT TECHNICIANS RESTORE YOUR PIPETTES

Gilson is the expert on pipettes with decades of experience. Regular maintenance of your pipettes will ensure they operate within specification and deliver reproducible data with the accuracy you need. Regular maintenance will also minimize downtime in your lab, will reduce the likelihood of unplanned, costly repairs and increase the lifespan of your pipettes. Gilson service technicians are factory trained, use manufacturer parts, as well as proprietary Volumetrics GV® Software. Volumetrics GV 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. Plus, maintain confidence in the accuracy and reliability of your results from knowing your instrument is operating within original specifications.
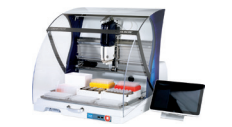
LIQUID HANDLING

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

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SHOP ONLINE **WWW.GILSON.COM**

pipetman®
M

PIPETTE SMARTER. REPORT FASTER. CONFIDENTLY.

PIPETMAN® M is an electronic 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 helps reduce pipetting fatigue and increase pipetting efficiency. PIPETMAN M is available in 20 models covering a volume range from 0.5 µL to 10 mL in single channel, and 0.5 µL to 1200 µL in multichannel.

EASE-OF-USE
Simple-to-use, motorized pipette—two-button operation. With a streamlined user interface, five pipetting modes, control of your sample prep is at your fingertips. Switch into custom mode to create a new protocol. Save and transfer your protocol securely into PIPETMAN® M Software for recall at a later date.

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

PIPETMAN® M CONNECTED
PIPETMAN M Connected is a Bluetooth®-enabled electronic pipette that offers complete access to your pipette information through the PipetteScope™ app available on Google Play.

Know exactly when your pipette needs to be calibrated. In one location, access service history reports and gain visibility of the pipette usage analytics.

PIPETMAN M Connected is available in Europe and the United States only.

PIPETMAN M/PIPETMAN M CONNECTED SINGLE CHANNEL

Model	PIPETMAN® DIAMOND Tips		Part Number M / M Connected	Gilson Specifications				REPETITIVE Mode Volume
				Volume Range	Standard PIPET mode			
					Volume (µL)	Systematic Error (µL)	Random Error (µL)	
P10M	D10 DL10	DF10 DFL10	F81022 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
P20M	D200	DF30	F81023 F81041	2–20 µL	2 10 20	± 0.075 ± 0.100 ± 0.150	≤ 0.025 ≤ 0.035 ≤ 0.050	2–20 µL
P100M	D200	D100	F81013 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
P200M	D200 D300	DF200 DF300	F81024 F81043	20–200 µL	20 100 200	± 0.40 ± 0.80 ± 1.00	≤ 0.15 ≤ 0.22 ≤ 0.26	5–200 µL
P300M	D200 D300	DF200 DF300	F81014 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
P1200M	D1000 D1200	DF1000 DF1200	F81015 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
P5000M	D5000		F81016 F81046	500–5000 µL	500 2500 5000	± 10 ± 15 ± 25	≤ 2 ≤ 4 ≤ 7	100–5000 µL
P10mLM	D10mL		F81017 F81047	1–10 mL	1 mL 5 mL 10 mL	± 25 ± 30 ± 50	≤ 4 ≤ 8 ≤ 12	200 µL–10 mL

PIPETMAN M/PIPETMAN M CONNECTED MULTICHANNEL

Model	PIPETMAN® DIAMOND Tips		Part Number M / M Connected	Volume Range	Volume (µL)	Systematic Error (µL)	Random Error (µL)	REPETITIVE Mode Volume
P8x10M	D10 DL10	DF10 DFL10	F81025 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
P12x10M			F81026 F81049					
P8x20M	DL10 D200	DFL10 DF30	F81027 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
P12x20M			F81028 F81051					
P8x100M	D200	DF100	F81018 F81052	10–100 µL	10 50 100	± 0.25 ± 0.50 ± 0.80	≤ 0.14 ≤ 0.20 ≤ 0.25	5–100 µL
P12x100M			F81019 F81053					
P8x200M	D200 D300	DF100 DF200 DF300	F81029 F81054	20–200 µL	20 100 200	± 0.50 ± 1.00 ± 2.00	≤ 0.16 ≤ 0.30 ≤ 0.50	5–200 µL
P12x200M			F81030 F81055					
P8x300M	D200 D300	DF200 DF300	F81031 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
P12x300M			F81032 F81057					
P8x1200M	D1200	DF1200	F81020 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
P12x1200M			F81021 F81059					

Gilson maximum permissible errors are guaranteed only when PIPETMAN® pipettes are used with the recommended PIPETMAN® DIAMOND Tips. For more information about guaranteed performance, visit **www.gilson.com**. 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

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

For our full range of pipette accessories, see page 19.

pipetman®
L

INCREASE PRODUCTIVITY WITHOUT SACRIFICING COMFORT

PIPETMAN® L is the latest mechanical pipette from Gilson, built on ergonomics, comfort, and traceability research. This pipette combines the legendary robustness of the PIPETMAN® Classic, a newly designed body, and state of the art mechanism.

ALL DAY PIPETTING COMFORT
Balance is key to a comfortable pipette. PIPETMAN L has the ideal weight, handle shape and tip ejection to maximize just that.

SECURE PIPETTING
PIPETMAN L features a true volume-locking mechanism to guarantee no accidental volume change during pipetting cycles, which could alter accuracy and precision.

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.

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, as well as protection from cross-contamination.

*To determine if your PIPETMAN L is autoclavable, check to see if the serial number begins with NK.

PIPETMAN® L Multichannel

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	DF10 DFL10	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	DF10 DFL10	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	DF30	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	DF100	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	DF200 DF300	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	DF1000 DF1200	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)	Gilson Systematic Error (µL)	Gilson Random Error (µL)	ISO 8655 Systematic Error (µL)	ISO 8655 Random Error (µL)
P8x10L	D10 DL10	DF10 DFL10	FA10013	0.5 1 5 10	± 0.08 ± 0.08 ± 0.20 ± 0.20	≤ 0.04 ≤ 0.05 ≤ 0.10 ≤ 0.10	± 0.24 ± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16 ≤ 0.16
P12x10L			FA10014					
P8x20L	DL10 D200	DFL10 DF30	FA10009	2 10 20	± 0.10 ± 0.20 ± 0.40	≤ 0.08 ≤ 0.10 ≤ 0.15	± 0.4 ± 0.4 ± 0.4	≤ 0.20 ≤ 0.20 ≤ 0.20
P12x20L			FA10010					
P8x200L	D200 D300	DF200 DF300	FA10011	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
P12x200L			FA10012					
P8x300L	D200 D300	DF200 DF300	FA10015	20 30 150 300	± 1.00 ± 1.00 ± 1.50 ± 3.00	≤ 0.35 ≤ 0.35 ≤ 0.60 ≤ 1.00	± 8.0 ± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0 ≤ 3.0
P12x300L			FA10016					

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

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

pipetman®
G

PREMIUM PIPETTING COMFORT

PIPETMAN® G builds a new level of comfort into the Gilson range with a redesigned piston mechanism that significantly reduces the force needed to aspirate and dispense liquids. PIPETMAN G maintains the trusted durability, accuracy, and reliability of the PIPETMAN® Classic, but with added comfort.

PIPETTING COMFORT
Offers one of the lowest pipetting forces available on the market due to a new easy glide piston displacement for hours of comfortable pipetting.

RELIABLE RESULTS
Offers Gilson's legendary accuracy, precision, and robustness with added comfort.

ROBUST AND FLEXIBLE
Available with plastic or stainless steel ejectors.

Plastic ejector recommended for working with corrosive samples.

GUIDE TO PIPETTING
Third Edition
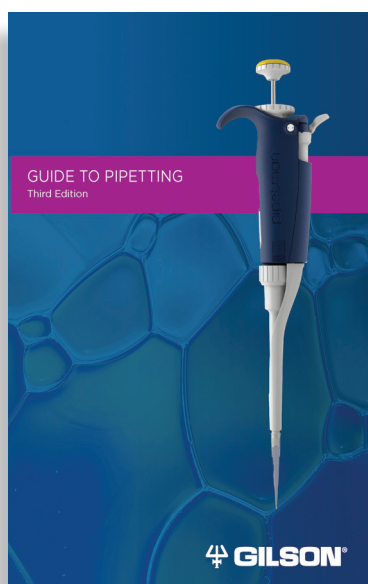
For nearly five decades, Gilson has been designing pipettes that exceed expectations when it comes to accurate and precise sample measurement. We want to share our expertise in pipetting with you through the *Gilson Guide to Pipetting*, a book that is a great resource for selecting the right pipette for your application, pipetting best practices, pipetting techniques, and more.

PIPETMAN® G SINGLE CHANNEL

Model	PIPETMAN® DIAMOND Tips	Part Number With Stainless Steel Ejector	Part Number With Plastic Ejector	Volume (µL)	Maximum Permissible Errors Gilson Systematic Error (µL)	Gilson Random Error (µL)	ISO 8655 Systematic Error (µL)	ISO 8655 Random Error (µL)
P2G	D10 DL10	DF10ST DFL10ST	F144054M	F144054P	0.2 0.5 2	± 0.024 ± 0.025 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.014	± 0.08 ± 0.08 ± 0.08	≤ 0.04 ≤ 0.04 ≤ 0.04
P10G*	D10 DL10	DF10ST DFL10ST	F144055M	F144055P	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	F144056P	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	F144057P	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	F144058P	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	F144059P	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

Gilson maximum permissible errors are guaranteed only when PIPETMAN® pipettes are used with the recommended PIPETMAN® DIAMOND Tips.
For more information about guaranteed performance, visit **www.gilson.com**.
*P10G model can be used up to 0.5 µL.
** P5000G and P10mLG do not have tip ejectors.

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 PIPETMAN Comfort Handles 1 User Guide 1 Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN G Micro-volume Kit	F167800	P2G P10G P100G	D10 D200	3 SINGLE™ pipette holders 3 plastic ejectors 3 PIPETMAN Comfort Handles 1 User Guide 1 Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN G Four Pipette Kit	F167360	P2G P20G P200G P1000G	DL10 D200 D1000	4 SINGLE™ pipette holders 4 PIPETMAN Comfort Handles 1 User Guide 1 Gilson Guide to Pipetting 1 Two-minute inspection poster

ACCESSORIES

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

For our full range of pipette accessories, see page 19.

pipetman®
CLASSIC

THE WORLD PIPETTING STANDARD

PIPETMAN® Classic has become the benchmark for pipetting excellence across the world. The volume is easily adjustable and many scientists enjoy the classic feel and weight of the pipette. Laboratories rely on the PIPETMAN Classic for a consistently high level of performance and trusted results.

LEGENDARY PERFORMANCE
PIPETMAN Classic accuracy and precision has become the benchmark for pipetting excellence.

PREMIUM ROBUSTNESS
Built to last, many laboratories are happily using PIPETMAN Classic pipettes that are over ten years old.

AN EVOLUTION

1969 The Original PIPETMAN	1972 PIPETMAN® Classic	2007 PIPETMAN® Neo	2011 PIPETMAN® G	2012 PIPETMAN® L
The PIPETMAN story began more than 40 years ago with the invention of the original PIPETMAN, the world's first adjustable volume pipette.	PIPETMAN Classic is the world standard in pipetting. It boasts accuracy, precision, and reliability.	PIPETMAN Neo contains all the benefits that built the reputation of the legendary PIPETMAN Classic with the added bonus of increased comfort.	PIPETMAN G provides the robustness and dependable accuracy in results of the PIPETMAN Classic and offers lower pipetting forces.	PIPETMAN L is the latest mechanical pipette from Gilson, built on ergonomics, comfort, and traceability research.

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

LIQUID HANDLING

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 2	± 0.024 ± 0.025 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.014	± 0.08 ± 0.08 ± 0.08	≤ 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 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
P100	D200	DF100ST	F123615	20 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	50 100 200	± 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	200 500 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	1000 2500 5000	± 12 ± 15 ± 30	≤ 3 ≤ 5 ≤ 8	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mL	D10mL		F161201	1000 5000 10000	± 30 ± 40 ± 60	≤ 6 ≤ 10 ≤ 16	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0

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 x 10 Protection 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

pipetmaX®

MAXIMIZE REPRODUCIBILITY OF YOUR BIOLOGICAL SAMPLE PREP

Increase reproducibility and the pace of your experiments with this easy-to-use, affordable, 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
Use any reagent or kit, and adapt your pipetting protocols to meet the unique needs of your research.

PIPETMAN INSIDE
With PIPETMAN inside, you can trust your pipetting to be reliable and consistent–plate to plate, lot to lot, 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 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)
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	
Accessory	**Part Number**
FC10022	PIPETMAX MAX8X20 Pipette Head
FC10021	PIPETMAX MAX8X200 Pipette Head
32000274	Tip Disposal Bin
32000177	PIPETMAX Riser Off-Bed Tip Disposal
32000320	TRILUTION® micro Software for PC
32000321	TRILUTION® micro Software Tablet

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.

platemaster®

FAST MICROPLATE PIPETTING

PLATEMASTER® is an easy-to-use, accurate 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	Weight
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	16 kg
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	16 kg

*Validated for use with 394-well plates

LIQUID HANDLING

PIPETTE ACCESSORIES

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.

Keeps your PIPETMAN M always 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.

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 pipette securely.

Compact design for space savings.

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**)

pipetman®
DIAMOND TIPS

HIGHEST QUALITY TIPS FOR SUPERIOR RESULTS

Not all pipette tips are created equal. Trust Gilson 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. Only by using PIPETMAN DIAMOND Tips in conjunction with your Gilson pipette can you guarantee the 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, every lab can afford the highest quality PIPETMAN DIAMOND Tips for 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.

LIQUID HANDLING

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 box

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

One-hand system operation

Fully autoclavable

Available sterilized

TIPACK

New 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 device quality plastic

Sterilization guaranteed for 5 years

400 individually wrapped sterilized tips

pipetman®

DIAMOND 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
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

LIQUID HANDLING

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
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
BLISTER FILTER PACK	▉ 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

microman® E

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. Therefore, 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.

Volume-Locking Switch

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 it the ideal pipette for volatile liquids that can contaminate and corrode mechanical pipette pistons.

				Maximum Permissible Errors			
				Gilson		ISO 8655	
Model	Part Number	Capillary Piston	Volume	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.
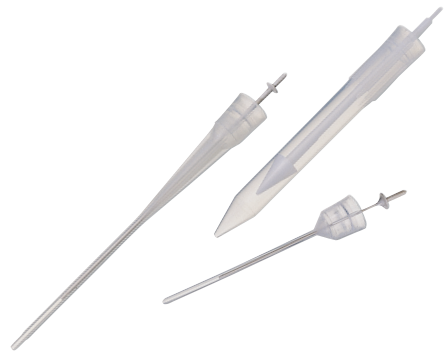
CAPILLARY PISTONS

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. The 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 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 - 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-TIPS (0.1 mL)	F164510	F164515		REPET-TIPS (10.0 mL)	F164557	F164558
REPET-TIPS (0.5 mL)	F164520	F164525		REPET-TIPS (12.5 mL)	F164560	F164565
REPET-TIPS (1.0 mL)	F164527	F164528		REPET-TIPS (25 mL, box of 50)**	F164570	-
REPET-TIPS (1.25 mL)	F164530	F164535		REPET-TIPS (25 mL, box of 25)**	-	F164575
REPET-TIPS (2.5 mL)	F164540	F164545		REPET-TIPS (50 mL)**	F164580	F164585
REPET-TIPS (5.0 mL)	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.

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.

Optimal pipetting results even with volatile or viscous liquids.

SAVE MONEY

DISTRIMAN covers a large volume range with only three DISTRITIPS syringes—very economical and 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			
					Gilson		ISO 8655	
DISTRITIPS (Pack of 50)	Aliquot Range	Part Number	Volume (µL)		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 pipettes from 1 to 100 mL.

OPTIMAL SPEED CONTROL

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 and 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

LIQUID HANDLING

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.
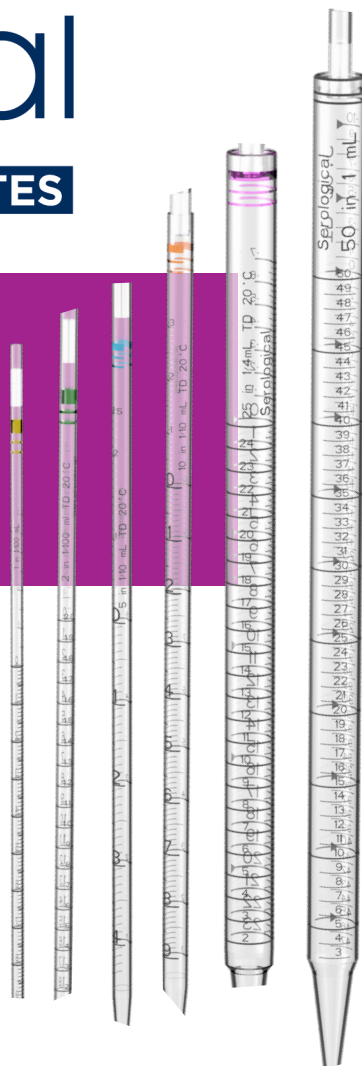
RELIABLE

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, offering a high level of protection against over-pipetting and contamination by liquids and aerosols.

EASY VOLUME CONTROL

These serological pipettes offer precise volume control and have color-coded rings for easy size identification, 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			
Model	Volume	Part Number	Ring
Sterile bags of 25 units	1 mL	F110121	🟡
	2 mL	F110123	🟢
	5 mL	F110125	🔵
	10 mL	F110127	🔴
Sterile bags of 20 units	25 mL	F110129	🟣
Sterile, individually wrapped	1 mL	F110122	🟡
	2 mL	F110124	🟢
	5 mL	F110126	🔵
	10 mL	F110128	🔴
	25 mL	F110130	🟣
	50 mL	F110131	⚫

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

LIQUID HANDLING

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.
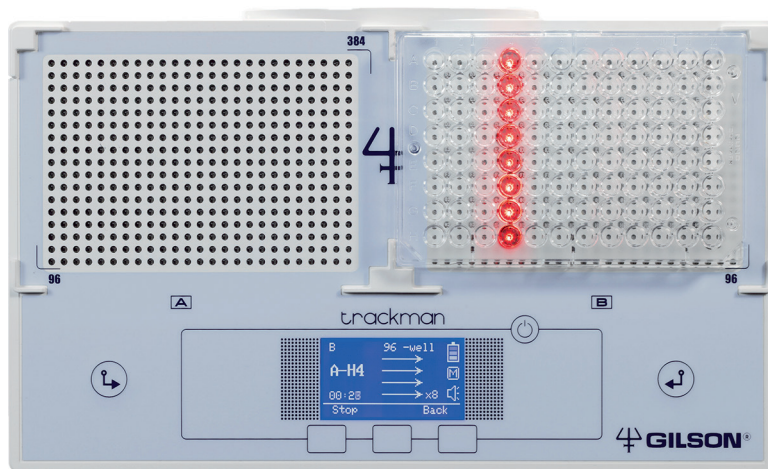
COMPLETE YOUR EQUIPMENT

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

centry™ 117

MICROCENTRIFUGE

IMPROVED TEMPERATURE STABILITY KEEPS SAMPLES SAFE

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

INTUITIVE USE

The CENTRY 117 Microcentrifuge has a full-color, touchscreen control that displays speed (rpm or rcf), set time, and remaining run time. Easily program and store up to nine custom run programs, which are simply accessed through a single button. The CENTRY 117 Microcentrifuge achieves speeds from 1,000 to 13,500 rpm (100 to 16,800 x g), which can be set in 100 rpm increments. The built-in timer lets you set any time from 1 to 99 minutes.

IMPROVED TEMPERATURE ACCURACY

The CENTRY 117 Microcentrifuge offers improved temperature controls, guaranteeing that your samples remain at constant temperature, even during longer runs. The centrifuge can also be used in a cold room.

ADAPTABLE DESIGN

With its combination rotor design, the CENTRY 117 Microcentrifuge can accommodate up to 24 1.5–2.0-mL tubes or two PCR strips (16 x 0.2 mL) without needing separate adapters, making this ideal for many labs. In addition, its compact footprint takes up less of your precious benchtop.

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

PLATE CENTRIFUGE

NO MORE SPILLS WITH SPECIAL ROTOR DESIGN

The CENTRY™ 101 Plate Centrifuge prevents microplate contents from spilling, increasing the reliability of your microplate reactions. The centrifuge accepts most popular PCR plates and microplates.

DECREASED SPILL RISK

The CENTRY 101 Plate Centrifuge offers a patented swing-out rotor design that keeps the microplate contents from spilling out while concentrating all reaction components in the well bottom, improving the accuracy of your reactions, such as sensitive PCR reactions. The rotor carriers rest at a 75° angle, allowing you to insert plates without sealing tape or caps. At speed, the microplates run horizontally. The two-plate capacity CENTRY 101 Plate Centrifuge accommodates most PCR and microplates.

SMALL, BUT FAST

Samples are spun down in less than 20 seconds at 2,550 rpm (600 x g). The centrifuge automatically stops when the lid is open and smoothly decelerates to a stop in four seconds. With a small footprint (23 x 26 cm, 9.2 x 10.2 in.), the CENTRY 101 Plate Centrifuge 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

digital dry bath
SERIES

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. The aluminum blocks concisely fit tubes from 0.5 mL to 50 mL. Three models are available that accommodate one, two, or four blocks.

ACCURATE TEMPERATURE DELIVERY

The Dry Bath Series offers convenient digital temperature and time controls with built-in calibration functionality, improving the reliability and reproducibility of your reactions without external thermometers or timers. The Dry Bath Series provides a temperature range of +5°C to 150°C that is adjustable in 0.1°C increments. The timer can be set for up to 999 minutes.

UNIFORM TEMPERATURE ACROSS ALL SAMPLES

The Dry Bath Series accommodates a wide variety of high-grade aluminum blocks that are precisely engineered to the shape of 0.5, 1.5, 2.0, 15, and 50 mL tubes, providing uniform temperature delivery to all your samples and improving reliability across reactions. Blocks are sold separately; custom blocks are available upon request. Each dry bath is supplied with an insulated block lifter to remove hot blocks.

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

LIQUID HANDLING

digital hotplate
STIRRER

PRECISE SPEED AND TEMPERATURE MIXING

Using advanced microprocessing technology, the Digital Hotplate Stirrer quickly delivers precise speed and temperature adjustments, up to 1,500 rpm and 380°C, respectively.

RELIABLE TEMPERATURE AND SPEED

The Digital Hotplate Stirrer relies on improved microprocessors to control temperature and speed, quickly and precisely. Temperature and speed are easily monitored on the large LCD display. A safety light indicates when the plate is above 50°C. The hotplate has a temperature range of 5°C–380°C and the magnetic stirrer speed ranges from 200 to 1,500 rpm.

For more stringent applications, an optional temperature probe is available that transmits the actual sample temperature in real time to the microprocessor for continual adjustment within +/−0.5°C. An optional support rod for external thermometers or probes is also available.

VERSATILE SIZING

With a compact footprint 17.75 x 26.5 x 10 cm (7 x 10.5 x 4 in.), the Hotplate Stirrer fits easily onto the most crowded benchtop. The chemical-resistant, white ceramic top (16.5 cm/6.5 in. square) handles a range of popular glass flask and beaker sizes.

DIGITAL HOTPLATE STIRRER	
Description	Part Number
Digital Hotplate Stirrer, 115V, US Plug	36110600
Digital Hotplate Stirrer, 230V, EU Plug	36110610
Digital Hotplate Stirrer, 230V, UK Plug	36110620

ACCESSORIES	
Description	Part Number
Optional Temperature Probe	36110640
Optional Rod for Hotplate/Stirrer	36110650
Clamp set, includes rods and clamps	36110660

digital mini
INCUBATOR

SELF-CONTAINED TEMPERATURE CONTROLS
IMPROVE INCUBATION ACCURACY

With built-in digital temperature control, the Digital Mini Incubator allows you to accurately set the internal temperature without an external thermometer. Two models are available for heating only or heating and cooling, both with small footprints that accommodate large flasks.

ACCURATE

The Mini Incubator uses digital temperature controls to set and monitor the internal chamber temperature with improved accuracy over external thermometers and analog controls. The large LED panel displays the internal temperature for quick review.

VERSATILE

The Mini Incubator accommodates 2 L flasks in a small footprint that saves benchtop space. It includes two removable shelves and has a built-in internal universal outlet for connecting other instruments such as small shakers.

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

mini vortex
MIXER

SMALL SIZE, POWERFUL MIXING

With touch-activated operation, the Mini Vortex Mixer provides powerful mixing in a small footprint for tubes up to 50 mL.

SMALL SIZE, POWERFUL MIXING

The Mini Vortex Mixer delivers a fixed speed of 2,800 rpm by only applying slight pressure to the center of the spill-resistant vortex head. Remove the pressure and the vortex motor immediately stops. The entire operation is quiet and smooth and contained in a small 10 x 10 cm (4 x 4 in.) footprint.

MINI VORTEX MIXER	
Specifications	
Specification	**Description**
Speed	Fixed, 2800 rpm
Operating Mode	TOUCH mix
Head	Rubber cup for single tube mixing
Orbit	4 mm
Operating Environment	4°C to 65°C
Dimensions (WxDxH)	9.4 x 9.9 x 6.6 cm / 3.7 x 3.9 x 2.6 in.
Weight	0.4 kg / 1 lb.
Electrical	Universal, 100V–240V, 50–60 Hz

Ordering Information	
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 balance system, our powerful Vortex Mixer offers instant vortex mixing without the noise and vibration. The mixer features both touch and continuous operation, variable speeds, and can be used in a range of temperature environments.

MAXIMIZE MIXING, MINIMIZE NOISE

The Vortex Mixer relies on a novel counter-balance system that provides powerful mixing action with decreased noise and vibration over other mixing instruments, even for 50 mL tubes. With its suction feet, the Vortex Mixer remains stable on your bench.

The Vortex Mixer offers instant variable speed control from 200 to 3,200 rpm and can be used in touch or continuous operating modes.

VERSATILE

The Vortex Mixer operates in a wide range of temperatures (+4°C to 65°C) and features spill-proof electronic controls. Several optional heads featuring both flat and multi-tube configurations are also available.

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

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

LIQUID HANDLING

roto-mini
PLUS

FLEXIBLE VARIABLE SPEED ROTATOR FOR A RANGE OF APPLICATIONS

With speeds from 5 to 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 mL to 50 mL, making it a flexible addition to any lab.

FLEXIBLE OPERATIONAL MODES

With speeds from 5 to 70 rpm, the Roto-Mini Plus variable speed rotator provides three different mixing modes to cover many applications, including:

- Mix – samples rotate with oscillations for increased mixing
- Pause – sample rotation includes periodic pauses
- Rock – samples gently rock in a see-saw manner.

ADAPT TO MANY TUBE STYLES

The Roto-Mini Plus includes four holders that cover the following common tube sizes:

- 11 x 1.5/2.0 mL tubes
- 5 x 5/7 mL tubes
- 5 x 10/15 mL tubes
- 6 x 50 mL tubes/24 x 0.5 mL tubes

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

PURITY

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, you are 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
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
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
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 and an efficient and streamlined workflow
VERITY® Oligonucleotide Purification System		**ISOLATE, ANALYZE, AND DESALT OLIGONUCLEOTIDES IN ONE RUN** Single system saves space and money Automation operation: zero downtime with continuous sample processing One software package, all techniques

verity®

COMPACT CPC SYSTEM

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 eliminates 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.

SHOP ONLINE **WWW.GILSON.COM**

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 THE LOWER CAPACITY VERITY® 241 HPLC SYSTEM** Expand your detection capacity with VERITY® 1910 MS Detector Obtain Results Faster
VERITY® 271 LCMS System		**MASS-DIRECTED PURIFICATION FOR THE MID-THROUGHPUT VERITY® 271 HPLC SYSTEM** Add VERITY® 1910 MS Detector: Powerful traditional single quadrupole mass spectrometer, but with lower operational costs Obtain results faster
VERITY® 281 LCMS System		**MASS-DIRECTED PURIFICATION FOR THE HIGH CAPACITY VERITY® 281 HPLC SYSTEM** Add VERITY® 1910 MS Detector: Powerful traditional single quadrupole mass spectrometer, but with lower operational costs Obtain results faster
VERITY® Compact LCMS System		**COMBINE THE PLC PURIFICATION SYSTEM WITH A VERITY® 1910 MS DETECTOR** Compact, easy-to-use, all-in-one instrument 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 Mass spectrometry detection to streamline your workflow and allow you to quickly isolate specific molecules with high yields and purity

verity®
281 LCMS SYSTEM

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 systems 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.

EXTRACTION

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

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) 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 cleanup
ASPEC® 271 Large Volume System		• Ultimate versatility system for basic and advanced small- to large-volume SPE automation • Up to 16 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 SYSTEM

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.

SHOP ONLINE **WWW.GILSON.COM**

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.

LOT-TO-LOT REPRODUCIBILITY
Reproducible extraction

TIGHT PARTICLE SIZE DISTRIBUTION
- Higher recoveries due to less risk of channeling
- Tighter peaks resulting in concentrated eluates

LARGE SURFACE AREA
- Large loading capacity
- Faster extractions with less sorbent mass, leading to less solvent volume

PRE-CAPPED CARTRIDGES AVAILABLE 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 the need to purchase 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

aspec®
PPM

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.

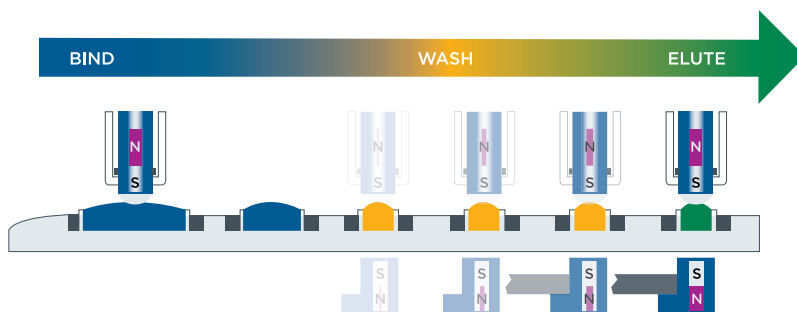**Request a quote today at www.gilson.com or from your local Gilson representative.**

extractman®

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 in the Co-IP process can result in a loss of these interactions. EXTRACTMAN® allows for rapid, yet gentle washing of protein solutions during Co-IP thus isolating more transiently-bound, protein-protein interactions.

RAPID ISOLATION

Exclusion-based Sample Preparation (ESP™) technology enables high yield, high purity isolations without the need for long washing steps.

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.

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

SHOP ONLINE **WWW.GILSON.COM**

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

VERITY® GPC Cleanup System with UV Detector

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

VERITY® GPC Cleanup System

AUTOMATED GPC CLEANUP FOR A VARIETY OF SUBSTANCES

Improve column life and decrease downtime

Automated cleanup of up to 80 sample extracts

Modular system all under TRILUTION® LC Software control

Pre-programmed GPC methods included

verity®

GPC CLEANUP SYSTEM

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.

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 U.S., Canadian, and European Union requirements for GPC cleanup.

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.

ALL UNDER TRILUTION® LC SOFTWARE CONTROL

The VERITY GPC System is controlled by the powerful TRILUTION LC software which contains preprogrammed 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.

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		This 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		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.
GX-274 Liquid Handler		The GX-271 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 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.
PIPETMAX®		PIPETMAX® is an automated pipetting solution for the efficient processing of high-throughput biological assays. It will help you to improve on the accuracy, reproducibility, and consistency among all samples processed. Unlike traditional automation platforms, PIPETMAX comes in a benchtop size that easily fits into any lab

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 with 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** Accommodate 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 an optional four-solvent valve Features a variable-volume, dynamic mixer for optimized high pressure gradient performance
333/334 HPLC PUMPS		**THE PUMPING CHOICE FOR PREPARATIVE HPLC** Accommodate 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 an optional four-solvent valve 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 A pressure sensor is available in some models.

verity® 4120

DUAL WITH TEE SYRINGE PUMP

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.

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 an uncomplicated 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.
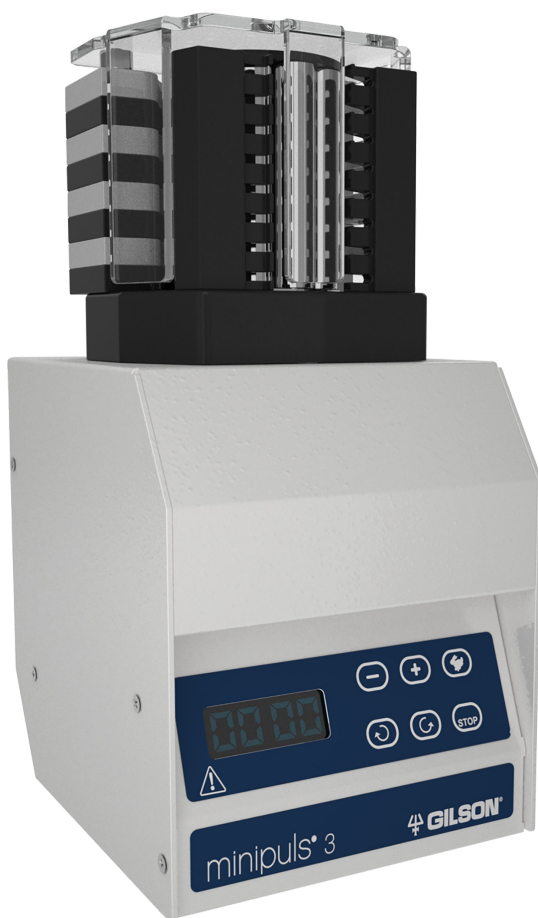
SELECT THE RIGHT TUBING

Most suitable material according to your sample's chemical compatibility.

Large variety of internal diameters to reach desired flow rates.

Appropriate connectors and extension tubing.

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

MINIPULS TUBING

Tubing for MF1 and MF4 Pump Heads
Length = Approximately 40 cm (16 in.)

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	orange	blue	F117952	F117985	0.574
	0.38	F117933	orange	green	F117953	F117986	1.22
	0.51	F117934	orange	yellow	F117954	F117986	1.90
	0.76	F117936	black	black	F117956	F117987	3.00
	1.02	F117938	white	white	F117958	F1179941	6.0
	1.30	F117940	grey	grey	F117960	F1179941	9.0
	1.52	F117942	yellow	blue	F117962	F1179941	14
	1.65	F117943	blue	blue	F117963	F1179941	16
	2.06	F117945	purple	purple	F117965	F1179941	25
	2.29	F117946	purple	black	F117966	F1179941	29
	2.79	F117948	purple	white	F117968	F1179951	39
	3.18	F117949	black	white	F117969	F1179951	47
Iso-Versinic® or Viton®	0.5	F1817741	black	black	F117740	F117986	2.9
	1.0	F1817743	black	black	F117742	F1179941	10
	2.0	F1817745	black	black	F117744	F1179941	24
	3.0	F117747	black	black	F117746	F1179951	55
	4	F117749	black	black	F117748	-	70
Silicone	0.64	F1825111	orange	white	F1825131	F117987	3.2
	1.02	F1825112	white	white	F1825132	F1179941	7
	2.06	F1825113	purple	purple	F1825133	F1179951	21
	2.79	F1825114	purple	white	F117975	F1179951	31
Santroprene™ or PharMed®	0.51	F1825101	orange	yellow	F1825121	F117986	2.5
	1.02	F1825102	white	white	F1825122	F1179941	7
	2.06	F1825103	purple	purple	F1825123	F1179941	24

Tubing for HF2 Pump Head
Length = 3 m (118 in.)

Material	Internal Diameter (mm)	Reference Tubing (Calibrated Tubing)	Maximum Flow Rate (mL/min)
PVC	2.06	F117965	33
	2.29	F117966	41
	2.79	F117968	66
	3.16	F117969	85
	4.0	F117970	128
	5.0	F117980	179
	6.0	F117981	218
	8.0	F117982	340
Iso-Versinic® or Viton®	2.0	F117744	30
	3.0	F117746	67
	4.0	F117748	120
	6.0	F117750	246
Silicone	2.0	F1825133	31
	3.0	F117975	57
	4.0	F117976	105
	5.0	F117977	148
	6.0	F117978	207
	7.0	F117979	300
Santroprene™ or PharMed®	2.0	F1825123	31
	3.2	F1825124	77
	6.4	F1825125	240

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

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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 the PLC Purification System for HPLC, flash chromatography, or CPC or with the VERITY HPLC systems

verity® 1910

MS DETECTOR

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

VERITY® 1910 MS DETECTOR

Technical Specification	Definition
Communication	Ethernet
Detector	Electron multiplier detector
Dynamic Range	Three orders of magnitude
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
Sample Inlet	Compatible with standard capillaries and unions e.g., 1/32" tubing
Scan Modes	Full scan, SIM (4 m/z channels), simultaneous scan/SIM, and timed SIM
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.)

Integrate with the PLC Purification System for HPLC, flash chromatography, or CPC or with the VERITY HPLC systems.

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

FRACTION COLLECTORS

FRACTION COLLECTOR SELECTION GUIDE

FC 203B Fraction Collector	
	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 204 Fraction Collector	
	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.

SOFTWARE

SOFTWARE SELECTION GUIDE

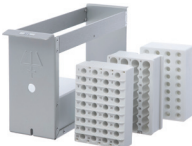|	
TRILUTION® LC Software	TRILUTION® LC Software is a user-friendly software package for controlling high-pressure liquid chromatography systems and automated liquid handling instruments. TRILUTION LC provides fraction collection capabilities, conditional logic collection, worry-free slope collection, 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.

ACCESSORIES

OPTIMIZE YOUR INSTRUMENTATION

Complementing robust 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
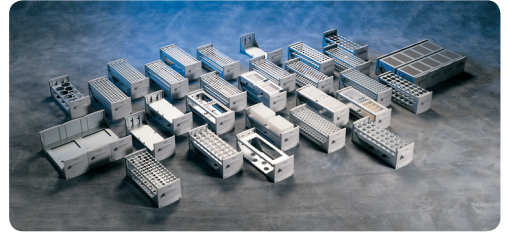
STANDARD AND CUSTOM RACKS

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.