# 2021 PRODUCT GUIDE

LIQUID HANDLING PURIFICATION EXTRACTION SERVICES





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### ABOUT US

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

#### **OUR VISION**

Enabling verifiable science and making lab life easier for researchers.

#### **OUR MISSION**

To partner with the scientific community and help researchers advance the pace of discovery by creating instruments and services that improve their results.

#### A GLOBAL PRESENCE

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





### **COVID-19 SOLUTIONS**

#### SUPPORTING YOU IN THE FIGHT AGAINST COVID-19

We want to do our part in supporting the scientific community in the fight against COVID-19. We've consolidated our tools, technology, services, and resources that could help you as you ramp up testing capabilities or study the virus. Gilson is your partner in this fight. We want to enable you to be as efficient, and safe as possible using the most reliable sample prep technology on the market.

#### Manual Liquid Handling

Our manual liquid handling products can be used in every step of the COVID-19 testing workflow, where accurate and reproducible transfer of samples and reagents is required.

- Full range of manual pipettes, including single and multichannel and Bluetooth® connected
- Complementary range of Gilson PIPETMAN® DIAMOND tips, in a range of sizes and packaging options
- Get absolute protection from cross-contamination with MICROMAN E and capillary piston (CP) tips: you, the sample and the pipette are protected
- PIPETMAN® M 1200  $\mu$ L can be used for the preparation of KingFisher RNA extraction deep well plates
- Gilson's Accredited Pipette Service Center can provide onsite pipette clinics or back to base service programs to the exact level and frequency of service and calibration required by your facility

#### **Pipette Tips**

Either for air-displacement or positive-displacement pipettes, we offer an extensive range of tips. From standard grade to high purity sterile filter tips, they are proposed in easy-toidentify packaging that fits your budget and your needs, ensuring sample integrity.



#### **Connected Products**

PIPETMAN<sup>®</sup> M Connected and TRACKMAN<sup>®</sup> Connected offer enhanced manual pipetting with the ability to add sample traceability in conjunction with offer enhanced pipetting.

- Full range of programmable, electronic pipettes
- PIPETMAN M Connected works in conjunction with TRACKMAN Connected tablet and accessories
- Full traceability for transfers from tubes to plates
- qPCR template to plan and execute your qPCR or RT-LAMP test
- Import your sample list
- Scan bar codes and record results with the built-in camera
- Results saved in SciNote's electronic lab notebook (ELN)



#### Automated Liquid Handling

PIPETMAX<sup>®</sup> helps automate the many COVID-19 protocols, freeing up your time for other laboratory tasks.

- Low cost entry level automation
- qPCR Assistant enables you to design and run your qPCR COVID-19 tests automatically. The Protocol Builder allows to easily build protocols for any methods
- New 4x1200 pipette head enables fast sample transfers from tubes to plates
- Bespoke PCR cabinet with UV light and HEPA filtration
- Final report tracks can be directly imported into your thermocycler





We offer a customizable, automated viral transport media system that fits your budget.

- Compact, low cost tube filling system
- Flexible tube/vial/plate holders
- Peristaltic pumping technology for dispensing
- Small footprint for use in biosafety cabinets
- Quick start-up and installation
- Easy-to-sterilize flow path for minimized contamination

#### **Instrument Service**

Keep your instruments running like new with our preventative maintenance programs, extended warranty contracts, rapid in-house or on-site repair service and performance verification.

#### **Benchtop Products**

Our flexible, low cost benchtop products include dry baths, vortexers, and centrifuges.

#### **Dry Baths**

- For heat inactivation of the virus
- RT-LAMP test development

#### Plate and Tube Centrifuge

- To mix samples and reagents
- To remove air bubbles from PCR plates

#### Vortex Mixers

- High-speed mixing of samples and reagents
- Mixing of Mastermix components
- Mixing of sample and lysis buffer

Find more tools and resources for the fight against COVID-19 at gilson.com.



### SERVICE EXPERTS READY TO HELP

#### 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.

#### MANUAL LIQUID HANDLING

#### Have our expert technicians restore your pipettes

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

#### AUTOMATED LIQUID HANDLING

#### Avoid unexpected system downtime and assure accuracy

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

### **SERVICES & SUPPORT**

#### QUALITY PIPETTE SERVICE MADE EASY

Never question the integrity of your samples. Our flexible, tiered service level offerings, along with the option for ISO 17025 accredited service, are tailored to fit your lab's needs. By regularly servicing your pipettes, you can minimize unplanned, costly repairs while increasing the lifespan of your pipettes.

PIPETTE SERVICE DETAILS										
	Lite	Pro	Premium							
Visual & Functional Inspection	•	•	•							
Internal & External Cleaning	•	•	•							
Leak Test	•	•	•							
Gravimetric Check	•	•	•							
Preventative Maintenance	•	•	•							
Re-grease As Needed	•	•	•							
Pipette Label	•	•	•							
Mail-In or Onsite Service Available	•	•	•							
Calibration and Detailed Certificate		•	•							
ISO 17025 Calibration Available		•	•							
Lifetime Warranty			•							
Free Repairs			•							



#### ISO 17025 ACCREDITED SERVICE AVAILABLE

As an accredited ISO 17025 calibration company, Gilson can offer additional reporting on your calibration certificates for maximum traceability, perfect for GLP/GMP compliant labs.

We can provide ISO 17025 compliant service both in our dedicated Service Centers as well as on-site in your lab. You can be sure your pipettes maintain their original accuracy, precision, and performance capabilities.



#### ENSURE ACCURACY AND RELIABILITY FOR YOUR **INSTRUMENTS & SYSTEMS**

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

These pipette service offerings are only available in select locations. Visit gilson.com to learn more about our service and support options for your pipettes, instruments, and lab systems.



# **OEM CAPABILITIES**

#### **ORIGINAL EQUIPMENT MANUFACTURER PRODUCTS**

Bring your ideas to market faster and with lower development and manufacturing costs by becoming an Original Equipment Manufacturer (OEM) partner with Gilson. We provide reliable and precise liquid handling components or complete systems that can be easily integrated into your core instrument, with support from a worldwide network you can depend on. Our philosophy is simple: build and support relationships that are as strong and reliable as our products.

#### GET TO MARKET FASTER WITH OUR OEM SOLUTIONS

As a partner with Gilson, you will work closely with our research and development scientists and engineers and draw on their technical expertise to solve problems and develop your product. From proposal development to finished product and beyond, our team of experts is here to help you every step of the way.



#### **CUSTOM BRANDING CAPABILITIES**

Draw on our proven experience and strong engineering and manufacturing capabilities to help develop your custom product. We offer expertise and assistance throughout the entire process—from development and integration of the product, to support and on-going training.

- Custom Products
- Software Control Options
- Fully Tested and Validated Product
- Custom Branding
- Outstanding Service and Support
- Modular Design for Easy Integration
- ISO 9001 Certified
- Regulatory Compliance
- Custom Packaging and Literature



#### GET TO MARKET FASTER WITH AUTOMATED LIQUID HANDLING SYSTEMS

Gilson can provide standard liquid handling instruments to highly customized instrumentation across a wide variety of applications. Customization can be applied to simple, small components or to complete liquid handlers tailored to your unique specifications. Gilson has the liquid handling solutions to meet your requirements. Whether you want to aspirate, collect, dispense, inject, mix, or pump liquids, we can provide reliable, quality OEM products to fit your application.



#### ELIMINATE VARIABILITY WITH MANUAL LIQUID HANDLING SYSTEMS BUILT FOR PRECISION

Reducing pipetting variation is critical for method consistency. As the industry leader in manual pipetting, we can provide customized liquid handling tools that deliver the precise control needed for accurate sample and reagent volume transfers. We offer a variety of mechanical and electronic pipettes in a range of ergonomic designs and volume sizes, as well as pipette controllers, tips, and accessories. We also offer an OEM/ Private Label pipette line that features the latest innovation in ergonomics and comfort.



#### AUTOMATE YOUR KITS THROUGH A VALUE ADDED PARTNERSHIP (VAP)

The Value Added Partnership (VAP) is a shared cooperation in which Gilson maintains ownership of installation and support at your customers' sites. Our VAP option is ideal for reagent manufacturers who wish to offer a complete, automated assay method to their customers without investing in sales or hardware support. In a VAP, you will work with our technical team to automate your method and validate your protocol on a specified Gilson liquid handling system. This shared cooperation allows you to benefit from our technical expertise and global coverage while increasing your kit and consumable revenue.



# 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





### **PIPETTE FAMILIES**

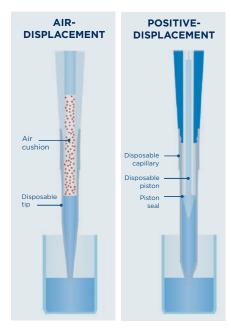
### WHAT ARE MANUAL AIR-DISPLACEMENT PIPETTES?

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

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

### WHAT ARE ELECTRONIC AIR-DISPLACEMENT PIPETTES?

Electronic pipettes work like manual air-displacement pipettes under the action of an air cushion. The manual movement of the piston is carried out by an electronic



motor, requiring virtually zero pipetting forces. They decrease the risk of RSI-type injuries caused by repetitive pipetting and improve comfort as well as reproducibility at the bench.

#### WHAT ARE POSITIVE-DISPLACEMENT PIPETTES?

Positive-displacement technology is ideal when working with infectious, viscous, foaming, hot, cold, or volatile liquids because the disposable piston within the capillary piston (CP) tip is in direct contact with the sample. The CP technology thus removes any air cushion inside the pipette and ensures the volume accuracy is not affected by the fluid's properties. This also helps prevent contamination and protects both the user and the pipette.

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

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



# trackman®

#### MAKE YOUR LAB AS SMART AS YOUR SCIENCE

CONNECTED

TRACKMAN<sup>®</sup> Connected is a tablet with exclusive applications and accessories that make pipetting on different labware more reliable, improving the efficiency and traceability of your experiment.



#### **BOOST YOUR EXPERIMENT RELIABILITY**

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

#### **GET IMMEDIATE REPRODUCIBILITY**

With the digitally documented protocol, your team can be confident that a protocol is being executed the same each time.

#### IMPROVE THE TRACEABILITY OF YOUR EXPERIMENT

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

#### ACCESS PIPETTE ANALYTICS AND CALIBRATION HISTORY

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



#### **INSIDE YOUR KIT**



#### TABLET WITH PIPETTEPILOT® AND PIPETTESCOPE® APPS

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

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

#### **ENVIRONMENT SENSOR**



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

#### **BENCHTOP PIPETTING ACCESSORIES**

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

#### PAIR IT WITH PIPETMAN<sup>®</sup> M CONNECTED

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

For more information about PIPETMAN M Connected, refer to page 16.

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

TRACKMAN <sup>®</sup> CONNECTED								
Model	Part Number							
TRACKMAN Connected EU Plug	FB1020							
TRACKMAN Connected UK Plug	FB1021							
TRACKMAN Connected US Plug	FB1022							

Full range of pipette accessories 28



# pipetman<sup>®</sup>

#### PIPETTE SMARTER. REPORT FASTER. CONFIDENTLY.

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

#### MAKE MANUAL PROCESSES VERIFIABLE

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

#### GILSON APPLICATIONS

#### **PIPETTEPILOT®**

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

#### **PIPETTESCOPE®**

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

#### PIPETMAN M CONNECTED SOFTWARE

Executing custom protocols has never been easier. PIPETMAN M Connected Software allows you to create, save, and transfer up to ten custom protocols into PIPETMAN M Connected. Download it for free on our website. **Download it for free on our website**.

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

				G	ilson Spe	cifications		1	SO 8655-2	
Model		PIPETMAN DIAMOND		Standard PIPE	T mode			REPETITIVE	Systematic	Random
	Tips		Number	Volume Range	Volume (μL)	Systematic error (µL)	Random error (µL)	mode volume	Systematic error (µL)	error (µL)
ріом	D10 DL10	DF10ST DFL10ST	F81040	0.5-10 μL	0.5 1 5 10	± 0.040 ± 0.025 ± 0.060 ± 0.080	≤ 0.013 ≤ 0.012 ≤ 0.020 ≤ 0.025	0.5-10 μL	± 0.12 ± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08 ≤ 0.08
P20M	D200	DF30ST	F81041	2-20 μL	2 10 20	± 0.075 ± 0.100 ± 0.150	≤ 0.025 ≤ 0.035 ≤ 0.050	2-20 μL	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
ріоом	D200	DF100ST	F81042	5-100 μL	5 10 50 100	± 0.35 ± 0.30 ± 0.38 ± 0.40	≤ 0.10 ≤ 0.10 ≤ 0.12 ≤ 0.15	5-100 μL	± 0.8 ± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3 ≤ 0.3
P200M	<b>D200</b> D300	DF200ST DF300ST	F81043	20-200 μL	20 100 200	± 0.40 ± 0.80 ± 1.00	≤ 0.15 ≤ 0.22 ≤ 0.26	5-200 μL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P300M	D200 D300	DF200ST DF300ST	F81044	20-300 μL	20 30 150 300	± 0.80 ± 0.70 ± 0.90 ± 1.05	≤ 0.16 ≤ 0.20 ≤ 0.23 ≤ 0.30	10-300 μL	± 4.0 ± 4.0 ± 4.0 ± 4.0	≤ 1.5 ≤ 1.5 ≤ 1.5 ≤ 1.5 ≤ 1.5
P1200M	D1000 D1200	DF1000ST DF1200ST	F81045	100-1200 μL	100 120 600 1200	± 2.5 ± 2.4 ± 3.6 ± 6.0	≤ 0.4 ≤ 0.4 ≤ 0.8 ≤ 1.2	20-1200 μL	± 16 ± 16 ± 16 ± 16	≤ 6.0 ≤ 6.0 ≤ 6.0 ≤ 6.0
P5000M	D5000		F81046	500-5000 μL	500 2500 5000	± 10 ± 15 ± 25	≤ 2 ≤ 4 ≤ 7	100-5000 μL	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mLM	D10mL		F81047	1–10 mL	1 mL 5 mL 10 mL	± 25 ± 30 ± 50	≤ 4 ≤ 8 ≤ 12	200 μL-10 mL	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0
			PIPE	TMAN <sup>®</sup> M CC	NNECT	ED MULT	ICHANN	EL		
P8x10M	D10 DL10	DF10ST DFL10ST	F81048 F81049	0.5-10 μL	0.5 1 5 10	± 0.05 ± 0.04 ± 0.08	≤ 0.02 ≤ 0.02 ≤ 0.04	0.5-10 μL	± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16
P8x20M			F81050		1	± 0.10 ± 0.08	≤ 0.06 ≤ 0.05		± 0.24	≤ 0.16 ≤ 0.2
P12x20M	DL10 D200	DFL10ST DF30ST	F81051	— 1-20 μL	2 10 20	± 0.09 ± 0.15 ± 0.25	≤ 0.06 ≤ 0.10 ≤ 0.12	1-20 μL	± 0.4 ± 0.4 ± 0.4	≤ 0.2 ≤ 0.2 ≤ 0.2
P8x100M			F81052		10	± 0.25	≤ 0.14		± 1.6	≤ 0.6
P12x100M	D200	DF100ST	F81053	10-100 μL	50 100	± 0.50 ± 0.80	≤ 0.20 ≤ 0.25	5-100 μL	± 1.6 ± 1.6	≤ 0.6 ≤ 0.6
P8x200M	D200	DF100ST DF200ST DF300ST	F81054	20-200 μL	20 100 200	± 0.50 ± 1.00 + 2.00	≤ 0.16 ≤ 0.30 < 0.50	5-200 μL	± 3.2 ± 3.2 + 3.2	≤ 1.2 ≤ 1.2 < 1.2

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

10-300 μL

50-1200 μL

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).

10

30

150

300

50

120

600

1200

± 2.00

± 1.00

± 1.00

± 1.50 ± 2.40

± 4.0

± 4.0

± 6.0

± 9.6

≤ 0.50

≤ 0.18

≤ 0.18

≤ 0.375

≤ 0.45

 $\leq 0.7$ 

≤ 0.7

 $\leq 1.5$ 

≤ 1.8

#### Full range of pipette accessories **28**

DF300ST

DF200ST

DF300ST

DF1200ST

F81055

F81056

F81057

F81058

F81059

P12x200M

P8x300M

P12x300M

P8x1200M

P12x1200M

D200

D300

D1200

± 3.2

± 8.0

± 8.0

± 8.0

± 8.0

± 32

± 32

± 32

+ 32

10-300 μL

50-1200 μL

 $\leq 1.2 \\ \leq 1.2 \\ \leq 1.2$ 

≤ 3.0

 $\leq 3.0$ 

≤ 3.0

≤ 3.0

 $\leq 12$ 

 $\leq 12$ 

 $\leq 12$ 

≤ 12

# pipetman<sup>®</sup>

#### GUARANTEED PERFORMANCE WITH OUTSTANDING ACCURACY

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

Μ

#### **ON-TARGET PERFORMANCE**

Trust your results with guaranteed performance in both standard and repetitive pipetting modes.

#### **PIPETTING COMFORT**

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

#### EASE-OF-USE

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

PIPETMAN M is only available in select locations. For more information, please contact your local Gilson representative.



					PIPETMAN	MSIN	GLE CHA	NNEL			
					G	ilson Spe	cifications		ISO 8655-2		
	Model	PIPETMA DIAMON		Part Number	Standard PIPET mode				REPETITIVE	Systematic	Random
			5 1155	Tumber	Volume Range	Volume (µL)	Systematic error (µL)	Random error (µL)	mode volume	error (μL)	error (μL)
PN C M B5-10pL	P10M	D10 DL10	DF10ST DFL10ST	F81022	0.5-10 μL	0.5 1 5 10	± 0.040 ± 0.025 ± 0.060 ± 0.080	≤ 0.013 ≤ 0.012 ≤ 0.020 ≤ 0.025	0.5-10 μL	± 0.12 ± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08 ≤ 0.08
P28 TM 2-29 pL	P20M	D200	DF30ST	F81023	2-20 μL	2 10 20	± 0.075 ± 0.100 ± 0.150	≤ 0.025 ≤ 0.035 ≤ 0.050	2-20 μL	± 0.2 ± 0.2 ± 0.2 ± 0.2	$\leq 0.1 \\ \leq 0.1 \\ \leq 0.1 \\ \leq 0.1 \\ \leq 0.1$
F100 pl	P100M	D200	DF100ST	F81013	5-100 μL	5 10 50 100	± 0.35 ± 0.30 ± 0.38 ± 0.40	≤ 0.10 ≤ 0.10 ≤ 0.12 ≤ 0.15	5-100 μL	± 0.8 ± 0.8 ± 0.8 ± 0.8	$\leq 0.3 \\ \leq 0.3 \\ \leq 0.3 \\ \leq 0.3 \\ \leq 0.3$
F200 FT1 20-230 µL	P200M	D200 D300	DF200ST DF300ST	F81024	20-200 μL	20 100 200	± 0.40 ± 0.80 ± 1.00	≤ 0.15 ≤ 0.22 ≤ 0.26	5-200 μL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P38 TT 33-500 yt	P300M	D200 D300	DF200ST DF300ST	F81014	20-300 μL	20 30 150 300	± 0.80 ± 0.70 ± 0.90 ± 1.05	≤ 0.16 ≤ 0.20 ≤ 0.23 ≤ 0.30	10-300 μL	± 4.0 ± 4.0 ± 4.0 ± 4.0	≤ 1.5 ≤ 1.5 ≤ 1.5 ≤ 1.5
P1288	P1200M	D1000 D1200	DF1000ST DF1200ST	F81015	100-1200 μL	100 120 600 1200	± 2.5 ± 2.4 ± 3.6 ± 6.0	≤ 0.4 ≤ 0.4 ≤ 0.8 ≤ 1.2	20-1200 μL	± 16 ± 16 ± 16 ± 16	$\leq 6.0 \\ \leq 6.0 \\ \leq 6.0 \\ \leq 6.0 \\ \leq 6.0$
P5000 @ m	P5000M	D5000		F81016	500-5000 μL	500 2500 5000	± 10 ± 15 ± 25	≤ 2 ≤ 4 ≤ 7	100-5000 μL	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
PileL - MI 1-19 mL	P10mLM	D10mL		F81017	1-10 mL	1 mL 5 mL 10 mL	± 25 ± 30 ± 50	≤ 4 ≤ 8 ≤ 12	200 μL-10 mL	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0

#### **PIPETMAN® M MULTICHANNEL**

0.5-10 µL	P8x10M	D10 DL10	DF10ST DFL10ST	F81025	0.5-10 μL	0.5 1 5	± 0.05 ± 0.04 ± 0.08	≤ 0.02 ≤ 0.02 ≤ 0.04	0.5-10 μL	± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16		
$\bigcirc$	P12x10M			F81026		10	± 0.10	≤ 0.06		± 0.24	≤ 0.16		
+ P20 - M	P8x20M	DL10	DFL10ST	F81027	1-20 μL	1 2	± 0.08 ± 0.09	≤ 0.05 ≤ 0.06	1-20 μL	± 0.4 ± 0.4	≤ 0.2 ≤ 0.2		
1-20 µL	P12x20M	D200	DF30ST	DF30ST	F81028	1-20 μΕ	10 20	± 0.15 ± 0.25	≤ 0.10 ≤ 0.12	1-20 μΕ	± 0.4 ± 0.4	≤ 0.2 ≤ 0.2	
P100 -	P8x100M	D200 DF1005	DF100ST	F81018	10-100 μL	10 50	± 0.25 ± 0.50	≤ 0.14 ≤ 0.20	5-100 μL	± 1.6 ± 1.6	≤ 0.6 ≤ 0.6		
10-100 µL	P12x100M	0200	DI 10001	F81019		100	± 0.80	≤ 0.25	5 100 µL	± 1.6	≤ 0.6		
P200 m	P8x200M	D200	DF100ST		DF100ST F81029	F81029	20-200 μL	20 100	± 0.50 ± 1.00	≤ 0.16 ≤ 0.30	F 200	± 3.2 ± 3.2	≤ 1.2 ≤ 1.2
20-200 µL	P12x200M	D300	DF200ST DF300ST	F81030	20-200 μΕ	200	± 2.00	≤ 0.30 ≤ 0.50	5-200 μL	± 3.2 ± 3.2	≤ 1.2 ≤ 1.2		
P300 0 M	P8x300M	D200	DF200ST	F81031	10-300 μL	10 30	± 1.00 ± 1.00	≤ 0.18 ≤ 0.18	10-300 μL	± 8.0 ± 8.0	≤ 3.0 ≤ 3.0		
10-300 µL	P12x300M	D300	DF300ST	F81032	10-300 με	150 300	± 1.50 ± 2.40	≤ 0.375 ≤ 0.45	10-300 μΕ	± 8.0 ± 8.0	≤ 3.0 ≤ 3.0		
P1200 om	P8x1200M	D1000 DE1000CT		F81020	50-1200 μL	50 120	± 4.0 ± 4.0	≤ 0.7 ≤ 0.7	50-1200 μL	± 32 ± 32	≤ 12 ≤ 12		
50-1200 µL		D1200	DF1200ST	F81021	30-1200 με	600 1200	± 6.0 ± 9.6	≤ 1.5 ≤ 1.8	50-1200 μL	± 32 ± 32	≤ 12 ≤ 12		

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

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

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

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# pipetm<u>an</u>®

#### INCREASE PRODUCTIVITY WITHOUT SACRIFICING COMFORT

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

#### ALL DAY PIPETTING COMFORT

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

#### SECURE PIPETTING

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

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

PIPETMAN L is also available as a fixed volume pipette, refer to page 26.

#### FULLY AUTOCLAVABLE\*

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

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



100 - 1200

			Part N	lumber		Ma	aximu <u>m Pe</u> i	missible Erro	rs
		N I ®			Volume	Gils		ISO 8	
Model	PIPETMAN <sup>®</sup> DIAMOND Tips		With Stainless Steel Ejector	With Plastic Ejector	(μL)	Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Randor Error (L
P2L	D10 DL10	DF10ST DFL10ST	FA10001M	FA10001P	0.2 0.5 1 2	± 0.024 ± 0.025 ± 0.027 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.013 ≤ 0.014	± 0.08 ± 0.08 ± 0.08 ± 0.08	≤ 0.04 ≤ 0.04 ≤ 0.04 ≤ 0.04
P10L*	D10 DL10	DF10ST DFL10ST	FA10002M	FA10002P	1 5 10	± 0.025 ± 0.075 ± 0.100	≤ 0.012 ≤ 0.030 ≤ 0.040	± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08
P20L	D200	DF30ST	FA10003M	FA10003P	2 10 20	± 0.10 ± 0.10 ± 0.20	≤ 0.030 ≤ 0.050 ≤ 0.060	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
P100L	D200	DF100ST	FA10004M	FA10004P	10 50 100	± 0.35 ± 0.40 ± 0.80	≤ 0.10 ≤ 0.12 ≤ 0.15	± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3
P200L	D200 D300	DF200ST DF300ST	FA10005M	FA10005P	20 100 200	± 0.50 ± 0.80 ± 1.60	≤ 0.20 ≤ 0.25 ≤ 0.30	± 1.6 ± 1.6 ± 1.6	$\begin{array}{c} \leq 0.6 \\ \leq 0.6 \\ \leq 0.6 \end{array}$
P1000L	D1000 D1200	DF1000ST DF1200ST	FA10006M	FA10006P	100 500 1000	± 3.0 ± 4.0 ± 8.0	≤ 0.6 ≤ 1.0 ≤ 1.5	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0
P5000L**	D5000		FA10007		500 2500 5000	± 12 ± 15 ± 30	≤ 3 ≤ 5 ≤ 8	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mLL**	D10mL		FA10008		1000 5000 10000	± 30 ± 40 ± 60	≤ 6 ≤ 10 ≤ 16	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0
			PIPE.	TMAN® L MU	LTICHAI	NNEL			
P8x10L	D10	DF10ST	FA10013		0.5 1	± 0.08 ± 0.08	≤ 0.04 ≤ 0.05	± 0.24 ± 0.24	≤ 0.16 ≤ 0.16
P12x10L	DL10	DFL10ST	FA10014		5 10	± 0.20 ± 0.20	≤ 0.03 ≤ 0.10 ≤ 0.10	± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16
P8x20L	DL10	DFL10ST	FA10009		2	± 0.10	≤ 0.08	± 0.4	≤ 0.20
P12x20L	D200	DF30ST	FA10010		10 20	± 0.20 ± 0.40	≤ 0.10 ≤ 0.15	± 0.4 ± 0.4	≤ 0.20 ≤ 0.20 ≤ 0.20
P8x200L	D200	DF200ST	FA10011		20	± 0.50 ± 1.00	≤ 0.25	± 3.2 ± 3.2	≤ 1.2 < 1.2
P12x200L	D300	DF300ST	FA10012		200	± 1.00 ± 2.00	≤ 0.40 ≤ 0.50	± 3.2 ± 3.2	≤ 1.2 ≤ 1.2
P8x300L	D200	DF200ST	FA10015		20 30	± 1.00 ± 1.00	≤ 0.35 ≤ 0.35	± 8.0 ± 8.0	≤ 3.0 ≤ 3.0
P12x300L	D300	DF300ST	FA10016		150 300	± 1.50 ± 3.00	≤ 0.60 ≤ 1.00	± 8.0 ± 8.0	≤ 3.0 ≤ 3.0
P8x1200L	- D1200	DF1200ST	FA10039		100 120	± 6.00 ± 6.00	≤ 0.9 ≤ 0.9	± 32 ± 32	≤ 12 ≤ 12
P12x1200L	51200	01120031	FA10040		600 1200	± 8.00 ± 10.00	≤ 1.2 ≤ 1.5	± 32 ± 32	≤ 12 ≤ 12

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

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	PIPETMAN <sup>®</sup> 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							

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# pipetman®

#### **MINIMIZED PIPETTING FORCES**

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

#### **RELIABLE RESULTS**

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

#### **BUILT-TO-LAST AND CONVENIENT**

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



			PIPETMAN*	G SINGLE				
					M	laximum Peri	nissible Error	's
Mode	PIPETM, Tips	AN® DIAMOND	Part Number	Volume (µL)	Gil	son	ISO	8655
	TIPS			(με)	Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P2G	D10 DL10	DF10ST DFL10ST	F144054M	0.2 0.5 1 2	± 0.024 ± 0.025 ± 0.025 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.012 ≤ 0.012	± 0.08 ± 0.08 ± 0.08 ± 0.08	≤ 0.04 ≤ 0.04 ≤ 0.04 ≤ 0.04
P10G*	D10 DL10	DF10ST DFL10ST	F144055M	1 5 10	± 0.025 ± 0.075 ± 0.100	≤ 0.012 ≤ 0.030 ≤ 0.040	± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08
P20G	D200	DF30ST	F144056M	2 10 20	± 0.10 ± 0.10 ± 0.20	≤ 0.030 ≤ 0.050 ≤ 0.060	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
P100G	D200	DF100ST	F144057M	10 50 100	± 0.35 ± 0.40 ± 0.80	≤ 0.10 ≤ 0.12 ≤ 0.15	± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3
P200G	D200 D300	DF200ST DF300ST	F144058M	20 100 200	± 0.50 ± 0.80 ± 1.60	≤ 0.20 ≤ 0.25 ≤ 0.30	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P1000	D1000 D1200	DF1000ST DF1200ST	F144059M	100 500 1000	± 3.0 ± 4.0 ± 8.0	≤ 0.6 ≤ 1.0 ≤ 1.5	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0
P5000	G** D5000		F144066	500 2500 5000	± 12 ± 15 ± 30	≤ 3 ≤ 5 ≤ 8	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mL	G** D10mL		F144067	1000 5000 10000	± 30 ± 40 ± 60	≤ 6 ≤ 10 ≤ 16	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0

#### PIPETMAN® G MULTICHANNEL

	PIPETMAN® DIAMOND Tips		Part Number		М	aximum Perr	nissible Error	s
Model				Volume	Gilson		ISO 8	3655
				(μL)	Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P8x10G P12x10G	D10 DL10	DF10ST DFL10ST	F144068 F144069	1 5 10	± 0.08 ± 0.20 ± 0.20	≤ 0.05 ≤ 0.10 ≤ 0.10	± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16
P8x20G P12x20G	DL10 D200	DFL10ST DF30ST	F144070 F144071	2 10 20	± 0.10 ± 0.20 ± 0.40	≤ 0.08 ≤ 0.10 ≤ 0.20	± 0.4 ± 0.4 ± 0.4	≤ 0.20 ≤ 0.20 ≤ 0.20
P8x200G P12x200G	D200 D300	DF200ST DF300ST	F144072 F144073	20 100 200	± 0.50 ± 1.00 ± 2.00	≤ 0.25 ≤ 0.40 ≤ 0.50	± 3.2 ± 3.2 ± 3.2	≤ 1.2 ≤ 1.2 ≤ 1.2
P8x300G P12x300G	D200 D300	DF200ST DF300ST	F144074 F144075	30 150 300	± 1.00 ± 1.50 ± 3.00	≤ 0.35 ≤ 0.60 ≤ 1.00	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0

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

		PIPETMA	N <sup>®</sup> G KITS	
Model	Part Number	er G Models PIPETMAN* DIAMOND Tips		Accessories
PIPETMAN G Starter Kit	F167900	P20G P200G P1000G	D200 D1000	3 SINGLE™ pipette holders 3 plastic ejectors 3 Comfort Handles Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN G Micro-volume Kit	E167800		DL10 D200	3 SINGLE™ pipette holders 3 plastic ejectors Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN G Large-volume Kit	F167920	P5000G P10mLG	-	2 bags of 10 filters
PIPETMAN G Four Pipette Kit	F167360	P2G P20G P200G P1000G	DL10 D200 D1000	4 SINGLE <sup>™</sup> pipette holders 4 Comfort Handles Gilson Guide to Pipetting 1 Two-minute inspection poster

PLASTIC EJEC	CTORS
Model	Part Number
P2/P10 with adapter	F107027
P20	F107028
P100	F107029
P200	F107030
P1000	F107031
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# pipetman<sup>®</sup>

#### THE WORLD PIPETTING STANDARD

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

#### **BUILT TO LAST**

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

#### **EXTREMELY EASY TO MAINTAIN**

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

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

#### AN EVOLUTION



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

					Ma	aximum Peri	missible Error	s
Model		* DIAMOND	Part	Volume	Gils	on	ISO 8	655
	Tips		Number	(μL)	Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Randon Error (µL)
P2	D10 DL10	DF10ST DFL10ST	F144801	0.2 0.5 1 2	± 0.024 ± 0.025 ± 0.025 ± 0.030	≤ 0.012 ≤ 0.012 ≤ 0.012 ≤ 0.012 ≤ 0.014	± 0.08 ± 0.08 ± 0.08 ± 0.08	≤ 0.04 ≤ 0.04 ≤ 0.04 ≤ 0.04
P10	D10 DL10	DF10ST DFL10ST	F144802	1 5 10	± 0.025 ± 0.075 ± 0.100	≤ 0.012 ≤ 0.030 ≤ 0.040	± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08
P20	D200	DF30ST	F123600	2 5 10 20	± 0.10 ± 0.10 ± 0.10 ± 0.20	≤ 0.030 ≤ 0.040 ≤ 0.050 ≤ 0.060	± 0.2 ± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1 ≤ 0.1
P100	D200	DF100ST	F123615	10 50 100	± 0.35 ± 0.40 ± 0.80	≤ 0.10 ≤ 0.12 ≤ 0.15	± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3
P200	D200 D300	DF200ST DF300ST	F123601	20 100 200	± 0.50 ± 0.80 ± 1.60	≤ 0.20 ≤ 0.25 ≤ 0.30	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
P1000	D1000 D1200	DF1000ST DF1200ST	F123602	100 500 1000	± 3.0 ± 4.0 ± 8.0	≤ 0.6 ≤ 1.0 ≤ 1.5	± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0
P5000*	D5000		F123603	500 2500 5000	± 12 ± 15 ± 30	≤ 3 ≤ 5 ≤ 8	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
P10mL*	D10mL		F161201	1000 2000 5000 10000	± 30 ± 30 ± 40 ± 60	≤ 6 ≤ 6 ≤ 10 ≤ 16	± 60 ± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0 ≤ 30.0

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

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

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# FIXED PIPETTE MODELS pipetman®

#### COMFORTABLE PIPETTING WITH SECURED FIXED VOLUME

The PIPETMAN<sup>®</sup> L Fixed pipettes offer the same comfortable, lightweight design as the variable volume models, but the volume can't be changed. This makes them an ideal choice for clinical diagnostics, quality control, and any routine testing applications. Fifteen models of the air-displacement-based PIPETMAN L Fixed pipettes are available, covering a volume range of 1 µL to 5 mL.

				PIPETM	1AN® L Fi>	ed Models			
		Deut			Malaura	Gilson		ISO8655	
	Model	Part Number	PIPETM/ DIAMON		Volume (μL)	Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
	F1L	FA10017	D10 DL10	DF10ST DFL10ST	1	± 0.02	≤ 0.015	± 0.05	≤ 0.05
ATTA	F2L	FA10018	D10 DL10	DF10ST DFL10ST	2	± 0.05	≤ 0.02	± 0.08	≤ 0.04
	F5L	FA10019	D10 DL10	DF10ST DFL10ST	5	± 0.05	≤ 0.025	± 0.13	≤ 0.08
	F10L	FA10020	D10 DL10	DF10ST DFL10ST	10	± 0.06	≤ 0.03	± 0.12	≤ 0.08
	F20L	FA10021	D200	DF30ST	20	± 0.10	≤ 0.05	± 0.20	≤ 0.10
_	F25L	FA10022	D200	DF30ST	25	± 0.20	≤ 0.07	± 0.50	≤ 0.20
and a state	F50L	FA10023	D200	DF100ST	50	± 0.35	≤ 0.12	± 0.50	≤ 0.20
	F100L	FA10024	D200	DF100ST	100	± 0.55	≤ 0.15	± 0.80	≤ 0.30
	F200L	FA10025	D200	DF200ST	200	± 1.2	≤ 0.30	± 1.60	≤ 0.60
9	F250L	FA10026	D300	DF300ST	250	± 1.50	≤ 0.75	± 4.00	≤ 1.50
	F300L	FA10027	D1000	DF1000ST	300	± 2.4	≤ 0.50	± 4.00	≤ 1.50
STR.	F400L	FA10028	D1000	DF1000ST	400	± 2.4	≤ 0.80	± 4.00	≤ 1.50
8	F500L	FA10029	D1000	DF1000ST	500	± 3.0	≤ 0.80	± 4.00	≤ 1.50
	F1000L	FA10030	D1000	DF1000ST	1000	± 5.0	≤ 1.3	± 8.00	≤ 3.00
	F5000L	FA10031	D5000		5000	± 20.0	≤ 7.0	± 40.00	≤ 15.00

Fixed volume PIPETMAN L are equipped with a plastic ejector. Depending on your needs and applications, metal ejectors are available as spare parts. Please contact your local Gilson representative for ordering information.

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LIQUID HANDLING

# pipetman®

FIXED

#### MAXIMUM ACCURACY AND PRECISION

PIPETMAN<sup>®</sup> Fixed is a fixed-volume, air-displacement pipette that offers the same accuracy and reliability than the legendary PIPETMAN<sup>®</sup> standard. Fourteen models are available covering a large volume range from 2  $\mu$ L to 5000  $\mu$ L. The volume is easily adjustable, once reset, the new volume cannot be changed accidently. With a single volume mechanism, PIPETMAN Fixed is a reliable and economical choice for clinical diagnostics, quality control, and routine testing.

PIPETMAN* Fixed Models								
					Ma	aximum Pei	rmissible Errc	ors
Model	PIPETMA	٧®	Part	Volume	Gils	son	ISO 8	3655
Model	DIAMONE	) Tips	Number	(μL)	Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
F2	D200	DF30ST	F123770	2	± 0.08	≤ 0.03	± 0.08	≤ 0.04
F5	D200	DF30ST	F123771	5	± 0.10	≤ 0.04	± 0.125	≤ 0.075
F10	D200	DF30ST	F123772	10	± 0.10	≤ 0.05	± 0.12	≤ 0.08
F20	D200	DF30ST	F123604	20	± 0.20	≤ 0.06	± 0.2	≤ 0.1
F25	D200	DF30ST	F123775	25	± 0.25	≤ 0.07	± 0.5	≤ 0.2
F50	D200	DF100ST	F123778	50	± 0.40	≤ 0.15	± 0.5	≤ 0.2
F100	D200	DF100ST	F123784	100	± 0.80	≤ 0.25	± 0.8	≤ 0.3
F200	D200 D300	DF200ST DF300ST	F123605	200	± 1.6	≤ 0.30	± 1.6	≤ 0.6
F250	D1000	DF1000ST	F123787	250	± 3.0	≤ 0.75	± 4	≤ 1.5
F300	D1000	DF1000ST	F123788	300	± 3.5	≤ 0.75	± 4	≤ 1.5
F400	D1000	DF1000ST	F123789	400	± 3.6	≤ 0.80	± 4	≤ 1.5
F500	D1000	DF1000ST	F123790	500	± 4.0	≤ 1.0	± 4	≤ 1.5
F1000	D1000	DF1000ST	F123606	1000	± 8.0	≤ 1.3	± 8	≤ 3
F5000	D5000		F123607	5000	± 30.0	≤ 8.0	± 40	≤ 15

Full range of pipette accessories 28



### **PIPETTE ACCESSORIES**

CARROUSEL™ PIPETTE S	TAND	
Protects pipettes from shocks contamination	and	
Holds up to seven Gilson pipe saving	ttes for space	0.10
Ordering information		
CARROUSEL, stand for 7 pipettes	F161401	

SINGLE™ PIPETTE HOL	DER	
lolds your single or multich	annel PIPETMAN	
ticks to any smooth, dry su	ırface	
Prevents liquid from running	g inside shaft	
Ordering information		
ingle Pipette Holder	F161406	



UNIVERSAL MULTICHANNEL STAND
------------------------------

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

Compact design to save space

Ordering information

Universal Multichannel Stand F161417



TRIO™ PIPETTE STAND		rno
Safely stores and protects thre PIPETMAN pipettes	e	
Helps organize your workbencl	h	
Ordering information		
TRIO Pipette Stand for 3 pipettes	F161405	POLEON
		l
GILSON REAGENT RESER	VOIRS	
Disposable, ideal for dispensi multichannel pipettes	ng reagent with	

25 mL and 50 mL available

#### Ordering information

Reagent Reservoir 25 mL, 100	F267660
Reagent Reservoir 50 mL, 100	F267670



#### COLORIS<sup>™</sup> IDENTIFICATION CLIPS

Identify or personalize your  $\mbox{PIPETMAN}^{\ast}$ 

Write your name or application to avoid mixups and then snap into place

F161301
F161302
F161303
F161304
F161305
F161306

COMFORT HANDLE					
Clips on to PIPETMAN <sup>®</sup> Classic, PIPETMAN <sup>®</sup> Neo, and PIPETMA					
Reduces the force needed to g for maximum comfort	rip the pipette				
Ordering information					
COMFORT HANDLE pack of 3, blue	F161486				
COMFORT HANDLE pack of 3, white	F161488				
COMFORT HANDLE pack of 50, blue	F161485				
COMFORT HANDLE pack of 50, white	F161487				
COMFORT HANDLE stickers, 120	F161499				

#### **PLASTIC EJECTORS** FOR PIPETMAN<sup>®</sup> CLASSIC AND PIPETMAN<sup>®</sup> G Ordering information Plastic ejector P2/P10 with adapter F107027 Plastic ejector P20 F107028 Plastic ejector P100 F107029 PLASTIC EJECTORS Plastic ejector P200 F107030 Plastic ejector P1000 F107031

#### JIMMY<sup>™</sup> MICROTUBE OPENER

Clips on to pipette

Increases pipetting efficiency

Lessens the fatigue associated with manual tube opening

#### Ordering information

The JIMMY Microtube Opener F144983



#### **PIPETMAN® M CONNECTED**

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

#### Ordering information

Bluetooth<sup>®</sup> USB Dongle

F807027





# pipet<u>man</u>®

DIAMOND TIPS

#### HIGHEST QUALITY TIPS FOR SUPERIOR RESULTS

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

#### **GUARANTEE YOUR PIPETMAN® RESULTS**

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

#### AFFORDABLE AND VERSATILE FOR EVERY APPLICATION

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

#### **CONTAMINATION-FREE**

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

Detailed quality and conformity information can be found on our quality certificates, available for download at http://go.gilson.com/TIPQC.

### 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

# DS

#### TOWERPACK

A quick, easy, and affordable rack refill system

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

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

One-hand system operation

Fully autoclavable

Available sterilized

#### ТІРАСК™

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

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

Fully autoclavable

Available as sterilized and filter tips



Quickest way to reload empty box Uses 70% less plastic, recyclable packaging is eco-friendly

Easy to store, takes up less bench space

Affordable and convenient

Fully autoclavable

#### EASYPACK AND ECOPACK

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

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

Minimal waste

Fully autoclavable

EASYPACK: 5 bags x 200 tips

ECOPACK: 10 bags x 1000 tips



#### STERILPACK

Individually wrapped sterilized tips

Complete protection from contaminants up to the moment of use

Wrapped in medical-grade quality plastic

Sterilization guaranteed for 5 years

400 individually wrapped sterilized tips





# pipetman<sup>®</sup>

DIAMOND TIPS

STANDARD PIPETMAN* DIAMOND TIPS							
	Description		Volume Range	Tip Length	Qty/Pack	Autoclavable Tips	Sterilized Tips
			Range	Length		Part Number	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	-
		DL10 BLISTER REFILL	0.1-20 μL	45 mm	960	F172200	F172201
KE FIL		D200 BLISTER REFILL	2-200 μL	51 mm	960	F172300	F172301
BLISTER REFILL		D300 BLISTER REFILL	10-300 μL	51 mm	960	F172400	F172401
SLIS <sup>-</sup>		D1000 BLISTER REFILL	100-1000 μL	66mm	960	F172500	F172501
		D1200 BLISTER REFILL	100-1200 μL	84 mm	960	F172800	F172801
		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
TIPACK™		D300 TIPACK	10-300 μL	51 mm	960	F171400	F171401
TIPA		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	-
		D10 TOWERPACK	0.1-10 μL	30 mm	960	F167101	F167201
ACK		DL10 TOWERPACK	0.1-20 μL	45 mm	960	F167102	F167202
TOWERPACK		D200 TOWERPACK	2-200 μL	51 mm	960	F167103	F167203
TOW		D300 TOWERPACK	10-300 μL	51 mm	960	F167105	F167205
		D1000 TOWERPACK	100-1000 μL	66 mm	672	F167104	F167204
		D10 ECOPACK	0.1-10 μL	30 mm	10,000	F161630	-
		DL10 ECOPACK	0.1-20 μL	45 mm	10,000	F161450	-
ACK		D200 ECOPACK	2-200 μL	51 mm	10,000	F161930	-
ECOPACK		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	-
		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	-
ACK		D300 EASYPACK (5 bags of 200)	10-300 μL	51 mm	1,000	F161731	-
EASYPACK		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	-
STERIL PACK		D200ST STERILPACK	2-200 μL	51 mm	400	-	F161330
		D1000ST STERILPACK	100-1000 μL	66 mm	400	-	F161340

#### PIPETMAN® DIAMOND FILTER TIPS

	Description		Volume Range	Tip Length	Qty/Pack	Sterilized Tips			
	Des	cription	volume Range		GLY/Pack	Part Number			
BLISTER REFILL		DFL10ST BLISTER REFILL	0.1 - 10 μL	45 mm	960	F172203			
		DF30ST BLISTER REFILL	2 - 30 μL	51 mm	960	F172303			
		DF100ST BLISTER REFILL	10 - 100 μL	51 mm	960	F172403			
		DF200ST BLISTER REFILL	20- 200 μL	51 mm	960	F172503			
		DF300ST BLISTER REFILL	10 - 300 μL	51 mm	960	F172703			
		DF1000ST BLISTER REFILL	100 - 1000 μL	66 mm	960	F172603			
		DF1200ST BLISTER REFILL	100 - 1200 μL	84 mm	960	F172803			
		DF10ST Filter TIPACK	0.1 - 10 μL	30 mm	960	F171103			
		DFL10ST Filter TIPACK	0.1 - 10 μL	45 mm	960	F171203			
TIPACK <sup>TM</sup>		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.



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.

EMPTY RELOAD 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				
EMPTY RELOAD RACKS						
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				

#### **BLISTER REFILL FOR PIPETMAX\*-CERTIFIED 384-WELL**

	Description	Volume Range	Tip Length	Qty/ Pack	Autoclavable Tips	Sterilized Tips
					Part Number	Part Number
-i	DSL10 BLISTER REFILL 384-Certified	0.1-20 μL	45 mm	960	F172210	F172211
REFILL	DS200 BLISTER REFILL 384-Certified	2-200 μL	51 mm	960	F172310	F172311
BLISTER	DS1000 BLISTER REFILL 384-Certified	100-1000 μL	66 mm	960	F172510	F172511
	D1200 BLISTER REFILL 384-Certified	50-1000 μL	84 mm	960	-	F172800
REFILL	DSFL10ST BLISTER REFILL 384-Certified	0.1-10 μL	45 mm	960	-	F172213
FILTER BLISTER RI	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



# pipet<u>man</u>®

EXPERT TIPS

PIPETMAN* EXPERT TIPS								
	Description		Volume Range	Tip Length	Pack		Case	
					Qty	Part Number	Qty	Part Number
SdI-		EF10ST Sterilized Filter Tips	0.1 - 10 μL	28.83 mm	960	F1731031	4,800	F1731032
		EFL10ST Sterilized Filter Tips	0.1 - 10 μL	45.34 mm	768	F1732031	3,072	F1732032
		EF20ST Sterilized Filter Tips	1 - 20 μL	51.44 mm	768	F1733031	3,072	F1733032
FILTER TIPS		EF100ST Sterilized Filter Tips	1 - 100 μL	51.44 mm	768	F1734031	3,072	F1734032
FILT		EF200ST Sterilized Filter Tips	1 - 200 μL	58.57 mm	768	F1735031	3,072	F1735032
		EF300ST XL Sterilized Filter Tips	1 - 300 μL	77.50 mm	384	F1736031	3,072	F1736032
		EF1000ST XL Sterilized Filter Tips	50 - 1250 μL	102.2 mm	384	F1737031	3,072	F1737032
		E10 TIPACK	0.1 - 10 μL	28.83 mm	960	F1731001	4,800	F1731002
КTM		EL10 TIPACK	0.1 - 20 μL	45.34 mm	768	F1732001	3,072	F1732002
TIPACK <sup>TM</sup>		E200 TIPACK	1 - 200 μL	51.44 mm	768	F1733001	3,072	F1733002
F		E300 TIPACK	1 - 300 μL	58.57 mm	768	F1736001	3,072	F1736002
		E1000 XL TIPACK	50 - 1250 μL	102.2 mm	384	F1735001	3,072	F1735002
ACK		E10ST Sterilized TIPACK	0.1 - 10 μL	28.83 mm	960	F1731011	4,800	F1731012
TIP/		EL10ST Sterilized TIPACK	0.1 - 20 μL	45.34 mm	768	F1732011	3,072	F1732012
STERILIZED TIPACK		E200ST Sterilized TIPACK	1 - 200 μL	51.44 mm	768	F1733011	3,072	F1733012
RILI		E300ST Sterilized TIPACK	1 - 300 μL	58.57 mm	768	F1736011	3,072	F1736012
STE		E1000ST XL Sterilized TIPACK	50 - 1250 μL	102.2 mm	384	F1735011	3,072	F1735012
		EL10 TOWERPACK Reload System	0.1 - 20 μL	45.34 mm	960	F1732051	3,840	F1732052
		E200 TOWERPACK Reload System	1 - 200 μL	51.44 mm	960	F1733051	3,840	F1733052
X		E300 TOWERPACK Reload System	1 - 300 μL	58.57 mm	960	F1736051	3,840	F1736052
TOWERPACK		E1000 XL TOWERPACK Reload System	50 - 1250 μL	102.2 mm	768	F1735051	3,072	F1735052
WER		EL10 TOWERPACK Reload Kits	0.1 - 20 μL	45.34 mm	960	F1732061	-	-
TO		E200 TOWERPACK Reload Kits	1 - 200 μL	51.44 mm	960	F1733061	-	-
		E300 TOWERPACK Reload Kits	1 - 300 μL	58.57 mm	960	F1736061	-	-
		E1000 TOWERPACK Reload Kits	50 - 1250 μL	102.2 mm	768	F1735061	-	-
		EL10ST Sterilized MEGAPACK	0.1 - 20 μL	45.34 mm	960	F1732071	4,800	F1732072
ACK		EL200ST Sterilized MEGAPACK	1 - 200 μL	51.44 mm	960	F1733071	4,800	F1733072
EASYPACK		EL10 EASYPACK	0.1 - 20 μL	45.34 mm	1,000	F1734511	10,000	F1734512
/ EA:		E200 EASYPACK	1 - 200 μL	51.44 mm	1,000	F1739311	10,000	F1739312
CK /		10 μL Empty Racks	-	-	1	F1732021	24	F1732022
APA		200 μL Empty Racks	-	-	1	F1733021	24	F1733022
MEGAPACK		300 μL Empty Racks	-	-	1	F1734021	24	F1734022
		1000 μL Empty Racks	-	-	1	F1735021	16	F1735022
		E10 Gel Loading Flat Tips	0.1 - 10 μL	45.72 mm	200	F1731181	800	F1731182
TIPS		E10 Gel Loading Round Tips	0.1 - 10 μL	45.72 mm	200	F1731281	800	F1731282
GEL LOADING TIPS		E200 Gel Loading Flat Tips	1 - 200 μL	82.55 mm	200	F1733181	800	F1733182
		E200ST Sterilized Gel Loading Flat Tips	1 - 200 μL	82.55 mm	200	F1733381	800	F1733382
		E200 Gel Loading Round Tips	1 - 200 μL	82.55 mm	200	F1733281	800	F1733282
		E200ST Sterilized Gel Loading Round Tips	1 - 200 μL	82.55 mm	200	F1733481	800	F1733482
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Certified Free - RNase/DNase, Human DNA, Pyrogens, PCR Inhibitors

#### PIPETMAN EXPERT Tips are not available in all countries.

### WIDE RANGE OF TIP PACKAGING

#### ТІРАСК™

Filter, Autoclavable, Sterilized

Uniquely designed TIPACK features a dual-purpose lid

Hinged to easily open and close while using tips

Pull it out of the hinges to set on top or discard for highthroughput tip usage





#### MEGAPACK

Autoclavable, Sterilized Uses 70% less plastic Sterilized MEGAPACKS give you the choice to expose 96 tips at a time or 192

Ideal for high throughput pipetting



#### TOWERPACK

A quick, easy and affordable rack refill system

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

One-hand system operation

#### **CERTIFIED CONTAMINANT FREE**

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





#### GILSON UNIVERSAL FIT TIPS

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

#### SPACE SAVING ENVIRONMENT FRIENDLY PACKAGING

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

#### **GEL LOADING TIP SOLUTIONS**

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



# microman®

### **ERGONOMIC PIPETTING FOR NON-AQUEOUS LIQUIDS**

E

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. Capillary pistons eliminate the air cushion between the sample and disposable piston, ensuring the accuracy of the pipette is not affected by the physical properties of the sample.

### **CONTAMINATION-FREE PIPETTING**

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



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 the ideal solution to prevent from aerosols or volatile liquid vapors that can contaminate or corrode the inside of the pipette.

Part Number	Capillary Piston	Volume	Gi	Maximum Peri	nissible Errors	
		Volume	Gi	loon		
Number	Piston			ison	ISO 8655	
1			Systematic error (μL)	Random error (µL)	Systematic error (µL)	Random error (µL)
FD1000	1 CP10 CP10ST	1 5 10	± 0.09 ± 0.10 ± 0.15	$\leq 0.03 \\ \leq 0.03 \\ \leq 0.06$	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
FD1000	2 CP25 CP25ST	3 10 25	± 0.25 ± 0.27 ± 0.30	≤ 0.08 ≤ 0.08 ≤ 0.10	± 0.7 ± 0.7 ± 0.7	$\leq 0.3 \\ \leq 0.3 \\ \leq 0.3$
FD1000	3 CP50 CP50ST	20 50	± 0.34 ± 0.70	≤ 0.20 ≤ 0.30	± 0.7 ± 0.7	$\leq 0.3 \leq 0.3$
E FD1000	4 CP100 CP100ST	10 50 100	± 0.50 ± 0.75 ± 1.00	≤ 0.20 ≤ 0.30 ≤ 0.40	±1.5 ±1.5 ±1.5	$\leq 0.6 \\ \leq 0.6 \\ \leq 0.6$
E FD1000	5 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
	6 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
		<b>FD10005</b> CP250 CP250ST	FD10005         CP250 CP250ST         50 100 250           FD10006         CP1000 CP1000ST         500 500	E = FD10005 CP250 CP250ST CP250ST CP250ST CP250ST CP250ST CP250ST CP250ST CP250ST CP1000ST CP100ST CP10ST CP1	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

### **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	
CPIO	MICE	F148312	960	
CD25	M25E	F148112	200*	
CP25	MZSE	F148012	960	
CDEO	MEOE	F148113	200*	
CP50	M50E	F148013	960	
CP100	M100E	F148414	192	
CPIOO	MIOUE	F148314	960	
CD250	Maror	F148114	200*	
CP250	M250E	F148014	960	
CP1000	M1000E	F148560	182	

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	STERIL	IZED CAPILLA	RY PISTONS	
	Capillary Piston	MICROMAN E Model	Part Number	Qty/ Box
	CP10ST	M10E	F148413	192
	CPIUST		F148313	960
	CP25ST	M25E	F148712	576
	CP50ST	M50E	F148713	576
	CD100ST	MIDOF	F148415	192
	CP100ST	M100E	F148315	960
	CP250ST	M250E	F148714	576

F148180

182

M1000E

CP1000ST

\* bulk to be assembled



# distriman®

### FASTER MULTIPLE DISPENSING

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

### SIMPLIFIES MULTIPLE DISPENSING

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

### AN ECONOMICAL SOLUTION

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

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

DISTRIMAN*			
Part Number			
F164001			

DISTRITIPS							
				1	Maximum Peri	nissible Error	S
DISTRITIPS	Aliguot Part		Volume	Gilson		ISO 8655	
(Pack of 50)	Range	Number	(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 sterlized syringes (individually wrapped)

# repet-tips

### REPET-TIPS FOR MOTORIZED REPETITIVE DISPENSING SOLUTION

Specifically made for the REPETMAN® positive-displacement electronic pipette, the REPET-TIPS® cover volumes from 0.1 to 50 mL, in either sterile or non-sterile formats as well as adaptors for 25 and 50 mL tips. The tip-size encoding system of the REPETMAN automatically identifies the REPET-TIP when placed on the pipette, and displays the appropriate volume on the LCD screen.

REPET-TIPS							
REPET-TIPS	Non-Sterile	Sterile*		REPET-TIPS	Non-Sterile	Sterile*	
Repet-Tip (0.1 mL, box of of 100)	F164510	F164515		Repet-Tip (10.0 mL, box of 100)	F164557	F164558	
Repet-Tip (0.5 mL, box of of 100)	F164520	F164525		Repet-Tip (12.5 mL, box of 100)	F164560	F164565	
Repet-Tip (1.0 mL, box of of 100)	F164527	F164528		Repet-Tip (25 mL, box of 50)**	F164570	-	
Repet-Tip (1.25 mL, box of of 100)	F164530	F164535		Repet-Tip (25 mL, box of 25)**	-	F164575	
Repet-Tip (2.5 mL, box of of 100)	F164540	F164545		Repet-Tip (50 mL, box of 25)**	F164580	F164585	
Repet-Tip (5.0 mL, box of of 100)	F164550	F164555		Adapter for 25/50 mL Repet-Tip (set of 10)	F164591	-	
* Sterile / Endotoxin-free (less than 0.01 I.U/mL) ** One autoclavable adapter is provided in each box				Adapter for 25/50 mL Repet-Tip (set of 5)	-	F164592	



For the 25 and 50 mL sizes, a special adaptor is used that is supplied with the tips.

The adaptors are also available separately, non-sterile (Part No. F164591) and sterile (Part. No. F164592).

### REPET-TIPS can fit motorized repetitive dispensers from other brands. Please contact your local Gilson representative for more information.

**REPET-TIPS** are not available in the United States.



# macroman®

## THE EFFICIENT SOLUTION FOR PIPETTING UP TO 100 MILLILITERS AT ONCE

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

### **OPTIMAL SPEED CONTROL**

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

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

### **COMFORTABLE USE**

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

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

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

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

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

macroman



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

# serological

### **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<sup>®</sup> to help you in your daily cell-culture, molecular biology, and microbiology applications.

### RELIABLE

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

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

### EASY VOLUME CONTROL

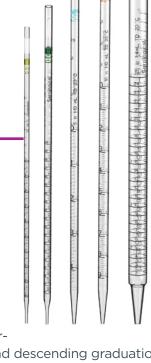
Our serological pipettes offer precise volume control and have colorcoded rings for easy size identification, as well as dark ascending and descending graduations so you can easily read the aspirated and dispensed volumes. They also have negative graduations for extra capacity.

### FLEXIBLE

Available in models ranging from 1 to 50 mL, these serological pipettes are recommended for use with MACROMAN but can also be used with any pipette controller. They enable precise and convenient dispensing of different kinds of liquids for a variety of tasks.

SEROLOGICAL PIPETTES					
Description	Qty/Case	Part Number	Volume	Ring	
Serological Pipettes - Sterile Bags					
	1000	F110121	1 mL	•	
40 sterile bags of 25 units	1000	F110123	2 mL		
	500	F110125	5 mL	•	
20 sterile bags of 25 units	500	F110127	10 mL		
10 sterile bags of 20 units	200	F110129	25 mL		
Serological Pipettes - Steril	e Individually	Wrapped			
10 bags of 100 sterile,	1000	F110122	1 mL	•	
individually wrapped units	1000	F110124	2 mL		
	200	F110126	5 mL		
4 bags of 50 sterile, individually wrapped units	200	F110128	10 mL		
, , , , , , , , , , , , , , , , , , ,	200	F110130	25 mL		
4 bags of 25 sterile, individually wrapped units	100	F110131	50 mL	•	







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# platemaster

### FAST MICROPLATE PIPETTING

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

### SAVE TIME AND INCREASE YOUR PRODUCTIVITY

With minimal setup, you can fill 96- or 384-well plates in less than one minute and significantly reduce 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-to-plate transfers to supernatant removal, achieve accuracy and precision on the bench or under the hood.

PLATEMASTER						
Model	Part Number	PIPETMAN <sup>®</sup> DIAMOND Tips	Volume	Dimensions		
PLATEMASTER P20	F110761	D200, DS200, D200ST, DS200ST, DF100ST, DF200ST, DFS200ST, DF30ST	0.5 μL-20 μL Adjustable in 0.1 μL increments	300 x 450 x 400 mm		
PLATEMASTER P220	F110762	D200, DS200, D300, D200ST, DS200ST, D300ST, DF200ST, DFS200ST, DF300ST, DF30ST	2 μL-220 μL Adjustable in 1 μL increments	300 x 450 x 400 mm		

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			





# pipetmaX®

### MAXIMIZE REPRODUCIBILITY OF YOUR BIOLOGICAL SAMPLE PREP

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

### UPGRADE TO AUTOMATION FOR RELIABLE, ACCURATE PIPETTING

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



### FREE YOURSELF FROM TEDIOUS SAMPLE PREP WORK

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

### STAY FLEXIBLE—FOR NOW AND FOR THE FUTURE

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

### **PIPETMAN INSIDE**

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

### **APPLICATION VERSATILITY**

### PCR, qPCR, RT-qPCR

- Promega GoTaq<sup>®</sup> Probe 1-Step RTqPCR
- Promega GoTaq<sup>®</sup> PCR Core System II
- Takara One Step PrimeScript<sup>™</sup> RT-PCR Kit (Perfect Real Time)

#### Download application notes at www.gilson.com.

### NGS LIBRARY PREPARATION

- Lucigen NxSeq®DNA Sample Prep Kit
- Illumina® Nextera® XT DNA Library Preparation Kit
- Agencourt<sup>®</sup> AMPure<sup>®</sup> XP PCR purification system
- NEBNext<sup>®</sup> Ultra<sup>™</sup> II DNA Library Prep Kit for Illumina<sup>®</sup>
- NEBNext<sup>®</sup> Ultra II Directional RNA Library Prep Kit for Illumina<sup>®</sup>

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

ACCESSORIES			
Part Number	Description		
FC10022	PIPETMAX MAX8X20 Pipette Head		
FC10021	PIPETMAX MAX8X200 Pipette Head		
FC10023	PIPETMAX MAX4x1200 Pipette Head		
32000391	PIPETMAX D1200 Tip Reload Box		
32000274	Tip Disposal Bin		
32000177	PIPETMAX Riser Off-Bed Tip Disposal		
32000340	TRILUTION micro V3 for PC		
32000341	PIPETMAX Standard V3 Tablet Kit		

### CELL-BASED ASSAYS

- Promega ADP-Glo™ Kinase Assay
- CellTiter-Glo<sup>®</sup> Luminescent Cell Viability Assay
- Promega MultiTox-Fluor Multiplex Cytotoxicity Assay
- Promega Caspase- Glo<sup>®</sup> 3/7 Assay
- Promega CellTox<sup>™</sup> Green Cytotoxicity Assay

### CUSTOM AND GENERAL APPLICATIONS

- Normalization import volumes or concentrations as a .csv
- Pooling
- Cherry-picking import wells as a .csv
- Serial Dilutions •
- 96 to 384 transfers
- 2 custom protocols included with PMAX



# **BENCHTOP INSTRUMENTS**

# safe aspiration

### STATION

### **QUICK AND EASY ASPIRATION OF LIQUID WASTE**

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

### SAFE AND CONTAMINATION-FREE

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

### ADAPTABLE AND CONVENIENT

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

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

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

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

SAFE ASPIRATION KIT			
Description	Part Number		
Safe Aspiration Kit	F110750		

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# GILSON

# dispensman®

### DISPENSE LIQUIDS SIMPLY AND ACCURATELY

DISPENSMAN<sup>®</sup> 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

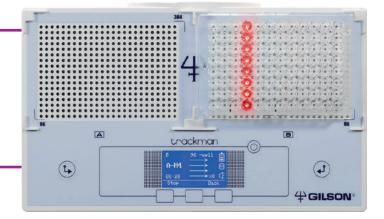
DISPENSMAN*							
		Volume Range	Scaling (mL)	Maximum Permissible Errors			
Model				Gilson		ISO 8655	
				Systematic Error (mL)	Random Error (mL)	Systematic Error (mL)	Random Error (mL)
DISPENSMAN 2.5 mL	F110101	0.25-2.5 mL	0.05	± 0.012	≤ 0.002	± 0.030	≤ 0.010
DISPENSMAN 5.0 mL	F110102	0.5-5 mL	0.10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



# trackman®

### **GUIDING YOU TO SUCCESS**

Get on track and stay on track as you pipette flawlessly from one microplate to another with the help of TRACKMAN<sup>®</sup>.



### SECURE YOUR RESULTS

TRACKMAN simplifies your

work, improves your productivity, and helps eliminate pipetting errors and crosscontamination.

### VERSATILE PERFORMANCE

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

### COMPLETE YOUR EQUIPMENT

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

TRACKMAN*			
Description	Part Number		
TRACKMAN	F70301		

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

# digital dry bath

### UNIFORM TEMPERATURE DELIVERY FOR A VARIETY OF TUBE SIZES

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



# roto-mini

PLUS

### FLEXIBLE VARIABLE SPEED ROTATOR FOR A RANGE OF APPLICATIONS

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

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





# mini vortex

MIXER

### SMALL SIZE, POWERFUL MIXING

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

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



### MAXIMIZE MIXING, MINIMIZE NOISE, AND VIBRATION

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

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

ACCESSORIES				
rt Number				
117310				
117320				
117330				
117340				
117350				
117360				
117370				

**BENCHTOP INSTRUMENTS** 

# digital mini

INCUBATOR

### SELF-CONTAINED TEMPERATURE CONTROLS IMPROVE INCUBATION ACCURACY

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



### TWO MODELS ARE AVAILABLE:

- Heat only-temperature range of +5°C-60°C
- Heat and cooling-temperature range of -15°C-60°C

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

ACCESSORY		
Description	Part Number	
Extra Shelf 10.5 x 8"	36117380	



# CENTRIFUGES

## centry™ 103

### QUICK AND SAFE SAMPLE CENTRIFUGATION

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

### **RELIABLE AND SAFE**

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

### **USER-FRIENDLY**

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

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

CENTRY™ 103 MINICENTRIFUGE		
Part Number		
F110736		
P		





### IMPROVED TEMPERATURE STABILITY KEEPS SAMPLES SAFE

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

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



### NO MORE SPILLS WITH SPECIAL ROTOR DESIGN

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

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







# PERISTALTIC PUMP



The compact MINIPULS® 3 Peristaltic Pump is a high-performance, low-pulse, peristaltic pump with interchangeable pump heads for delivering a variety of liquids—from biological to chemical. Six different channel and flow rate configurations are available.

### LOW-PULSE 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  $\mu L/min$  to 30 mL/min

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

### EASY TO OPERATE

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

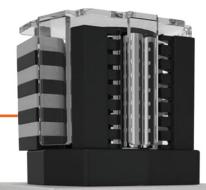
### SELECT THE RIGHT TUBING

The most suitable material according to your sample's chemical compatibility.

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

Features appropriate connectors and extension tubing.

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





### **MINIPULS TUBING**

### TUBING FOR R1, R2, R4, R8, 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)
	0.25	F117932	•		F117952	F117985	0.4
	0.38	F117933	•		F117953	F117986	0.7
	0.51	F117934	•	•	F117954	F117986	1.4
	0.76	F117936			F117956	F117987	2.1
	1.02	F117938	0	0	F117958	F1179941	4.1
PVC	1.30	F117940	0	0	F117960	F1179941	6.2
é	1.52	F117942	•		F117962	F1179941	9.1
	1.65	F117943			F117963	F1179941	10.5
	2.06	F117945			F117965	F1179941	15.7
	2.29	F117946			F117966	F1179941	19.7
	2.79	F117948		0	F117968	F1179951	23.2
	3.18	F117949		0	F117969	F1179951	29.0
or	0.5	F1817741			F117740	F117986	1.8
nic °	1.0	F1817743			F117742	F1179941	4.0
∕ersini¢ Viton®	2.0	F1817745			F117744	F1179941	12.6
lso-Versinic° or Viton°	3.0	F117747			F117746	F1179951	27.3
_	4	F117749			F117748	-	33.0
	0.64	F1825111	•	0	F1825131	F117987	1.5
Silicone	1.02	F1825112	0	0	F1825132	F1179941	4.1
Silic	2.06	F1825113			F1825133	F1179951	14.7
	2.79	F1825114		0	F117975	F1179951	22.8
ed。	0.51	F1825101	•	•	F1825121	F117986	1.4
Santroprene™ or PharMed®	1.02	F1825102	0	0	F1825122	F1179941	4.8
Sar	2.06	F1825103	•	•	F1825123	F1179941	15.0

MaterialInternal biameterReference bibinguelMaximum For Rate functional200F117960242.29F117960292.79F117960402.79F117960403.16F117970753.16F117970755.0F117980136.0F117981136.0F1179812133.0F117740234.0F117740246.0F117740246.0F117740247.0F117970136.0F117970145.0F117970156.0F117970155.0F117970156.0F1179701507.0F117970207.0F117970207.0F117970306.0F117970307.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970507.0F117970	HIGH FLOWPUMP HEADS Length = 3 m (118 in.)				
Process         Process         Process           2.29         F117966         29           2.79         F117968         41           3.16         F117969         49           4.0         F117970         75           5.0         F117980         113           6.0         F117981         163           8.0         F117982         213           2.0         F117744         23           3.0         F117746         48           4.0         F117746         48           4.0         F117746         48           4.0         F117746         44           3.0         F117975         44           4.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117978         150           7.0         F117979         220           Thirpere         2.0         F1825123         25           3.2         F1825124         53	Material	Diameter	Tubing (Calibrated	Flow Rate	
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3.16F117969494.0F117970755.0F1179801136.0F1179801638.0F1179811638.0F1179812132.0F117744233.0F117748864.0F117748866.0F1177501818.0F1177501818.0F11797544900155.0F1179767.0F1179781506.0F1179781507.0F11797922090016F117979220900175.3F182512390018S.2F182512490019S.2F1825124		2.29	F117966	29	
A.O         F11797O         75           5.0         F11798O         113           6.0         F117981         163           8.0         F117982         213           8.0         F117982         213           3.0         F117744         23           3.0         F117746         48           4.0         F117748         86           6.0         F117750         181           2.0         F1825133         25           3.0         F117976         71           5.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117979         220           7.0         F117979         220           5.2         S.2         F1825123         25		2.79	F117968	41	
4.0         F117970         75           5.0         F117980         113           6.0         F117981         163           8.0         F117982         213           2.0         F117744         23           3.0         F117748         86           6.0         F117750         181           2.0         F1825133         25           3.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117979         220           5.0         F117978         150           7.0         F117978         50           7.0         F117978         53	2 2	3.16	F117969	49	
6.0         F117981         163           8.0         F117982         213           8.0         F117982         213           9001         F117744         23           3.0         F117746         48           4.0         F117748         86           6.0         F117740         181           9001         F117750         181           10.0         F117975         44           10.0         F117975         44           10.0         F117976         71           5.0         F117977         115           6.0         F117978         500           7.0         F117978         150           7.0         F117978         220           11.0         F117979         220	۵.	4.0	F117970	75	
8.0         F117982         213           9000         F117744         23           3.0         F117746         48           4.0         F117748         86           6.0         F117750         181           2.0         F1825133         25           3.0         F117976         71           5.0         F117976         71           5.0         F117978         150           7.0         F117978         220           7.0         F117978         50           7.0         F11825123         25           3.2         F1825124         53		5.0	F117980	113	
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3.0         F117746         48           4.0         F117748         86           6.0         F117750         181           2.0         F1825133         25           3.0         F117975         44           4.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117979         220           2.0         F1825123         25           3.2         F1825124         53		8.0	F117982	213	
6.0         F117750         181           2.0         F1825133         25           3.0         F117975         44           4.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117979         220           2.0         F1825123         25           3.2         F1825124         53	ຶບ	2.0	F117744	23	
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6.0         F117750         181           2.0         F1825133         25           3.0         F117975         44           4.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117979         220           2.0         F1825123         25           3.2         F1825124         53	or Vi	4.0	F117748	86	
3.0         F117975         44           4.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117979         220           2.0         F1825123         25           3.2         F1825124         53	<u>s</u>	6.0	F117750	181	
4.0         F117976         71           5.0         F117977         115           6.0         F117978         150           7.0         F117979         220           2.0         F1825123         25           3.2         F1825124         53		2.0	F1825133	25	
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7.0     F117979     220       2.0     F1825123     25       3.2     F1825124     53	Silic	5.0	F117977	115	
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аларана ал		7.0	F117979	220	
3.2         F1825124         53           6.4         F1825125         171	ed®	2.0	F1825123	25	
र्ज़ <b>ठे</b> 6.4 F1825125 171	ntropre PharM	3.2	F1825124	53	
	Sar	6.4	F1825125	171	

**TUBING FOR R2HF & R4HF** 

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



# FRACTION COLLECTORS

### IDEAL SOLUTIONS FOR SMALL TO LARGE CAPACITY COLLECTION

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

# Praction collector

The Fraction Collector collects samples based on time, drop, or peak," making it the preferred choice for a range of separation applications. The collector accommodates a wide variety of collection vessels, including microplates, vials, and tubes and can be used with any FPLC, FLASH or HPLC system.

Multicolumn adapters are available for parallel collection from multiple channels. With up to ten programmable time windows to use, and an optional 3-way diverter valve allows for diversion of column void volumes, peaks of no interest, and equilibration volumes to be diverted to a waste vessel.

### COMPACT AND PORTABLE

With one rack and up to 128 fractions, the compact, lower capacity FC 203B Fraction Collector is commonly configured with a MINIPULS 3 for low pressure chromatography. Contact closures allow the pump to be stopped after all fractions have been collected.

\*Peak collection requires a detector and a 3-way valve.

FC 203B Fraction Collector		
Description	Part Number	
FC 203B, 110/220 V	171011	
FC203B with 3-way valve	171011DV	
MULTIPLE COLUMN ADAPTER	174732	



# Praction collector

FC 204

The FC 204 Fraction Collector is a large-bed fraction collector capable of handling up to 768 test tubes, vials, and up to eight shallow- or deep-well microplates.

### ADAPTABLE TO MANY COLLECTION STRATEGIES

Collect samples by peak\*, drop, or time.

The FC 204 standard model is equipped with a 3-way valve to divert the fluid path to waste. A high flow model is also

available for flow rates up to 200 mL/min. With repetitive collection in the same set of tubes or in different tubes, the FC204 is ideal for LC purification works. The optional Multicolumn adapter allows for collection from up to 18 separate channels.

- Compact, low cost tube filling system
- Flexible tube/vial/plate holders
- Peristaltic pumping technology for dispensing
- Small footprint for use in biosafety cabinets
- Quick start-up and installation
- Easy-to-sterilize flow path for minimized contamination

\*Peak collection requires a detector and a 3-way valve.

	FC 204 Fraction Collector		
	Description	Part Number	
	FC 204, 110/220 V	171041	
	FC 204, 110/220V, 200ML/MIN	171043	
	MULTIPLE COLUMN ADAPTER	174732	
1			



# 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<sup>®</sup> technology, our liquid handling tools have evolved with your needs. We offer completely automated liquid handling systems.

### LIQUID HANDLER SELECTION GUIDE





This small footprint, medium capacity liquid handler and autosampler offers small-to-large volume injection, fraction collection, and liquid handling capabilities. Its optional 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  $\mu$ L up to 25 mL. The continuous flow path design on all injection valves allows the system flow to continue even as the injection valve switches from load to inject, ensuring consistent pressure and flow.

### VERSATILE, SPACE-SAVING DESIGN

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

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



# **PUMPS**

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

### **PUMP SELECTION GUIDE**

VERITY <sup>®</sup> 3011 ISOCRATIC PUMP	VORCU SO VORCU SO VORCU VO VORCU VO VO VO VO VO VO VO VO VO VO VO VO VO	IDEAL PUMPING SOLUTION FOR CHEMICAL REACTION 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		<b>COST-EFFECTIVE, DEPENDABLE PUMPING SOLUTION</b> Available in isocratic, binary, and ternary configurations Interchangeable pump heads to accommodate flow rates from 10 $\mu$ L/min to 200 mL/min at pressure up to 508-8700 psi (35-600 bar)
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
333/334 HPLC PUMPS		<b>THE PUMPING CHOICE FOR PREPARATIVE HPLC</b> Accommodates flow rates ranging from 1 mL/min to 200 mL/min at pressures up to 3,040 psi (210 bar) using columns up to 50 mm ID Multi-solvent selection with a Valvemate II Module Features a variable-volume, dynamic mixer for optimized high pressure gradient performance



### MAKE YOUR LAB LIFE EASIER

The VERITY<sup>®</sup> 3011 Isocratic Pump is an innovative liquid delivery solution for chemical reaction monitoring in petroleum applications and for gel permeation chromatography (GPC) in environmental, food and beverage testing applications.



### SIMPLE HEAD CHANGING

The VERITY 3011 Isocratic Pump features a virtually pulse-free, stable solvent flow rate, ensuring stable flow delivery to detectors, and allowing for a wider range of application capabilities on one pump. The pump also features an easily interchangeable quick-connect pump head, making maintenance simple and reducing costly downtime.

The reproducibility and accuracy in reactions when using this pump, coupled with its low operation and maintenance costs, makes the VERITY 3011 Pump an ideal choice for many laboratories that pursue improved results and are trying to minimize costs, operators, and downtime.

### **FEATURES**

The VERITY 3011 Isocratic Pump offers a stand-alone pumping system with high valued features:

- Quick-connect pump heads for easy installation, and simple maintenance
- High pressure rating for accommodating industrial level applications in the petroleum industry
- Integrated touchscreen controller for convenient, stand-alone operation
- Compact and stackable design that fits easily into a refrigeration unit or a fume hood
- Flow rates from 0.01 to 10 mL/min, depending on the pump head, and pressures of • up to 600 bar (8702 psi)

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

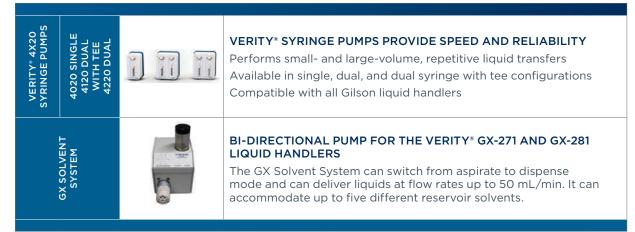


# LOADING SYSTEMS

Gilson provides loading systems, allowing for sample transfers and other liquid handling tasks. These reliable systems can fit in any automated liquid handling platform or in HPLC semi-preparative and prepative systems.

### LOADING SYSTEM SELECTION GUIDE

62 260







The VERITY® 4120 Dual with Tee Syringe Pump is equipped with two syringes that are userselectable. 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). Single syringe and standard dual (no tee) models are also available.

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 <sup>®</sup> 4120 Dual with Tee Syringe Pump		
Description	Part Number	
VERITY® 4120 Dual with Tee Syringe Pump	31130002	

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

# DETECTORS

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

### **DETECTOR SELECTION GUIDE**

157 UV-VIS Detector 159 UV-VIS Detector		<ul> <li>157 UV/VIS SINGLE WAVELENGTH DETECTOR</li> <li>Highly flexible and compact design</li> <li>Offers a single, but variable wavelength range of</li> <li>190-750 nm</li> <li>Wide range of flow cells available from analytical and preparative HPLC to pilot-scale</li> </ul>
		<b>159 UV/VIS MULTIPLE WAVELENGTH DETECTOR</b> 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 eight specific wavelengths simultaneously Flexible fiber optic light paths Interchangeable flow cell design
prepELS <sup>™</sup> 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	P DA ADAY	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

SHOP ONLINE WWW.GILSON.COM

# PURIFICATION

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

### PURIFICATION SYSTEM SELECTION GUIDE

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



The VERITY<sup>®</sup> CPC Lab system combines a PLC Purification system with a centrifugal partition chromatography (CPC) column for high-level target compound purification. The techniques of CPC and PLC supported on a single RUN platform provides scientists the possibility to perform flash chromatography, preparative HPLC, or CPC separations on the same purification system.

### **IDEAL FOR NATURAL PRODUCT PURIFICATION**

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

### **EFFICIENT AND STREAMLINED WORKFLOW**

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

#### EASY-TO-USE

This fully automated system 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.



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The VERITY<sup>®</sup> CPC Process system performs silica-free chromatography for process-scale purification and extraction. It combines a newly designed rotor with a capacity range of 1 to 5 liters when combined with the VERITY<sup>®</sup> SKID. This is the solution for annually processing tons of sample with higher resolution and the best return on investment.

### **RELIABLE AND POWERFUL**

- The VERITY CPC Process customizable rotor benefits from a new cell design and rotation speeds ranging from 100 to 1800 rpm, allowing for processing of several tons of samples per year with higher resolution
- The accompanying VERITY SKID, provides a fast 3-liter per minute flow rate with 2% accuracy and 0.5% repeatability, which optimizes production time, cost, and quality
- The transmitters, alarms, and sensors present along the fluidic journey make for constant control and improved performance

### EASY-TO-USE AND FLEXIBLE

- The VERITY CPC Process system is easy-to-use and has broad applicability across natural extract, cosmetics, and pharmaceutical industries
- It allows for automated stack injections, and a preset list of methods for automated production
- The system also features automatic valves for ascending and descending modes, which allows for safer and easier use with dual rinsing and dual modes



### SAFE AND COMPLIANT

- Developed with safety and compliance in mind, the VERITY CPC Process meets EU 2006/42/EU (machinery) and 2014/34/EC (ATEX) directives, with UL coming in 2021
- The system is controlled by a certified 21 CFR part 11-compliant software and includes multiple, customizable securities for improved operator safety and system preservation
- The VERITY CPC Process comes with FDA-compliant spare parts and consumables

This system benefits from Gilson's unique network of Service Engineers and Application Specialists. VERITY CPC Process owners can access local support to keep their investment running at peak performance, with applications tailored after their business strategy.

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



# LC PURIFICATION SYSTEMS

With the capability to purify compounds by preparative HPLC and flash chromatography on the same instrument, Gilson's PLC 2050/2250/2500 Purification Systems simplify and streamline compound purification. These compact systems feature UV/VIS detection, an integrated pumping system, fraction collector, touchscreen control, and Gilson Glider Software. These customizable instruments are available in simple configurations for basic applications, but with a wide range of upgrade options to meet your lab's demands. PLC 2050 and PLC 2250 Purification Systems with Autosampler are configured with a VERITY® GX-241 Liquid Handler for automated sample injections and increased throughput. These systems allow you to queue samples and create multiple, unattended runs.



### **HIGH PERFORMANCE FEATURES**

- Intuitive touchscreen interface for easy method writing and modifying of parameters
- Built-in automatic injection valve
- Two or four independent solvent inlets for binary or quaternary gradients
- Three-rack fraction collector capacity with unlimited collection cycles
- Variable dynamic mixing chamber
- Dual reciprocating pump technology
- Four-wavelength UV/VIS or DAD detector
- Conductivity/pH monitor
- Evaporative light scattering detection (ELSD Option)

### PLC PURIFICATION SYSTEMS FOR EACH COLUMN SIZE

### PLC 2050: Flow rates up to 50 mL/min with pressure up to 300 bar

- Prep HPLC: 10-30 mm diameter ID columns
- Flash Chromatography: 2.5-70 g cartridges

### PLC 2250: Flow rates up to 250 mL/min with pressure up to 230 bar

- Prep HPLC: 10-50 mm diameter ID columns
- Flash Chromatography: 10-600 g cartridges

### PLC 2500: Flow rates up to 500 mL/min with pressure up to 110 bar

- Prep HPLC: 20-100 mm diameter ID columns
- Flash Chromatography: up to 1.2 kg cartridges

# GILSON GLIDER SOFTWARE

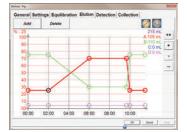
The Gilson Glider Software supports the PLC Purification Systems, creating a single, advanced tool for HPLC, flash chromatography, and CPC applications.

### MONITOR IN REAL TIME

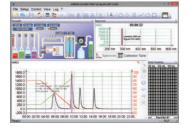
Powered by Gilson Glider Software and its customizable, integrated touchscreen interface, monitor real-time operating parameters and display state of solvent containers, with direct access to all parameters while running. The software tracks up to six detector signals simultaneously and its real-time color display matches peaks with tubes. Programmed gradients are automatically converted to isocratic steps when a peak is recognized.

### EASY TO USE

With its tab-based method editor, easily edit the instrument configuration and settings, specifying solvents, columns, gradient conditions, detector settings, collection parameters, and more. All methods can be pre-programmed or written as needed, and saved for later use. Free offline software can also be installed on PCs for method preparation and data processing. With seven USB ports on the PLC instruments, printing reports or exporting them as PDFs is simple.



Interactive method creation window allows methods to be created simply and visually



Optomize methods efficiently using "click and drag" gradient modification during the run



The "Synoptic" view allows users to quickly see and modify system parameters by clicking on any part of the diagram





#### ISOLATE, ANALYZE, AND DESALT OLIGONUCLEOTIDES IN ONE CONTINUOUS RUN

The VERITY® Oligonucleotide Purification System offers a single, automated HPLC system for the purification, analysis, and desalting of reagent-grade synthetic oligonucleotides in one continuous run. The system seamlessly changes between preparative and analytical scales, saving time and equipment space, while built-in error handling allows for unattended operation.



#### A SINGLE SYSTEM TO SAVE SPACE AND MONEY

This single platform system replaces the need for multiple systems to perform all the steps in an oligonucleotide purification process. Purification, analysis, and system scale-up are all accomplished with this one system. Not only does it free up precious lab space, but it also saves money on instrument purchases and maintenance.

#### ZERO DOWNTIME WITH CONTINUOUS SAMPLE PROCESSING

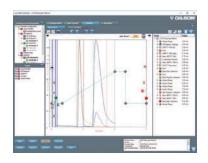
Monitor real-time data from previous runs while conducting additional preparative, analytical, and desalting runs.

#### **AUTOMATED OPERATION**

When combined with the VALVEMATE® II Valve Actuator, the system automatically switches between columns, helping you to complete other work without the need to change configurations between different techniques. Built-in, software-based error handling conditions for each process stage can be customized for fully automated, unattended operation without fear of sample loss.

#### ONE SOFTWARE PACKAGE, ALL TECHNIQUES

TRILUTION<sup>®</sup> LC software facilitates a seamless exchange of preparative and analytical methods without manual intervention and little to no instrument downtime. The easy-to-use software helps you to perform successful purifications and gives you the ability to customize your methods.

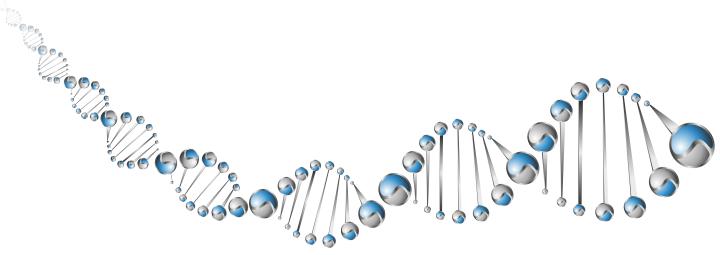


VERITY® Ologonucleotide Purification System			
Description	Part Number		
<ul> <li>GX-271 Liquid Handler</li> <li>GX-Direct Injection Module with Sample Loops</li> <li>GX Solvent System</li> </ul>			
322 HPLC Pump 322 HPLC Pump 159 UV/VIS Detector with Flow Cells VERITY® 1810 Conductivity and pH Monitor Valvemate® II Valve Actuators, each with one Valve	26440001		

#### **OTHER PURIFICATION APPLICATIONS:**

Based on similar modular platforms, contact us to choose for purification of:

- Synthetic Peptides •
- Antibodies (mAbs)
- Bioactives compounds from natural products
- DNA and RNA fragments





### ACCESSORIES

#### **OPTIMIZE YOUR INSTRUMENTATION**

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

#### ACCESSORIES SELECTION GUIDE

VALVEMATE <sup>®</sup> 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 and LH Sotfware
Orbital Shaker		The Orbital Shaker is specifically designed for on-line or off-line liquid handling, vortexing, and mixing. It is a fully functional, stand-alone instrument. This compact shaker 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.
Orb		<b>COMPATIBLE WITH A WIDE RANGE OF RACKS</b> The Orbital Shaker is compatible with all Code 200-series racks.
		A single rack attaches easily using set screws; rack placement is accurately guided by locator pins.
Racks		Gilson offers standard and custom SPE racks to meet the needs of any and all applications. A variety of vessels can be accommodated including tubes, vials, or microplates.

### RACKS

#### STANDARD AND CUSTOM RACKS

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

#### **RACKCOUNT™ SYSTEM**

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



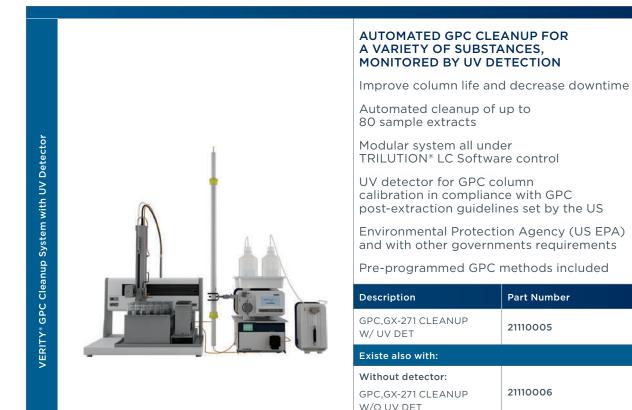




### GEL PERMEATION CHROMATOGRAPHY (GPC)

Fully compliant with official international or governmental methods (EN 1528, 12393, EPA S19...), the VERITY® GPC Clean-up System is an ideal solution for GPC post-extraction cleanup prior to analysis of contaminants such as pesticides, semi-volatiles (i.e. PAHs), and PCBs in environmental samples, food products, and animal tissue. By discarding high molecular weight interfering substances contained in sample extracts (lipids, proteins, cell debris, pigments humic acid, etc.), and recovering analytes of interest into a pure fraction of solvent, GPC is a simple but efficient clean-up technique to eliminate matrix effect and to protect your GC or LC analytical system from killers substances. By automating the process with preprogrammed methods, the VERITY GPC Cleanup leads to more reliable results and fewer sample repeats.

#### **GPC SYSTEM SELECTION GUIDE**



GEL PERMEATION CHROMATOGRAPHY (GPC)

21110007

Large Throughput version with UV detector:

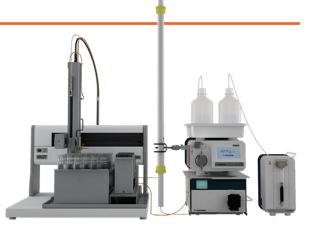
GPC,GX-281 CLEANUP

W/UV DET



#### FULLY AUTOMATED GPC SYSTEM TO IMPROVE EFFICIENCY AND RELIABILITY

The VERITY GPC Cleanup is a fully automated GPC system that includes a GX 271 Liquid Handler configured as a injector/collector, which makes it an ideal tool to minimize human risk factors and improve reproducibility while protecting the technician from repetitive contact with hazardous solvents. With the ability to clean up to 80 samples extracted in the same run with high autonomy, the VERITY GPC Cleanup is a perfect tool to improve efficiency.



The VERITY® GPC Cleanup System is configured with a GX-271 Liquid Handler equipped with 3- ways collection valve, GX Direct Injection Module, VERITY® 4020 Single Syringe Pump, VERITY® 3011 Isocratic Pump, TRILUTION® LC Software, and an optional 157 UV-VIS Detector

#### **COMPLETE WORKFLOW INTEGRATION**

A large choice of racks compatible with different evaporation vessels are available to directly collect compound fractions inside, which prevents any additional manual transfer during post GPC process.

#### SAMPLE INTEGRITY

The septum piercing capability can maintain the integrity of a sample extract by using closed tubes. Independent flow paths between injection and fraction collection avoids cross contamination and produces reliable results.

#### **GPC CLEANUP FOR A VARIETY OF SUBSTANCES**

The automated VERITY GPC Cleanup system is also used for a variety of substances or other chromatography application such as Isocratic High Pressure Liquid chromatography, from analytical to semi-preparative scale.

#### ALL UNDER TRILUTION® LC SOFTWARE CONTROL

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



## EXTRACTION

### GET THE MOST FROM YOUR ANALYTICAL SYSTEMS WITH TRUSTED RESULTS

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

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

#### AUTOMATED EXTRACTION SYSTEM SELECTION GUIDE



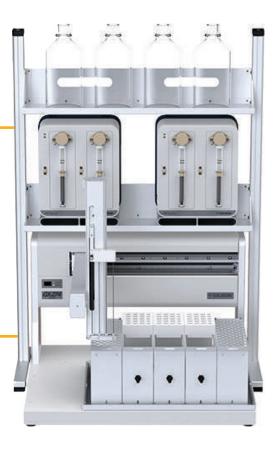




The ASPEC® 274 System for positive pressure solid phase extraction (SPE) maximizes throughput by processing up to four samples in parallel. With its small footprint and multiple probes, it is the ideal choice for high-throughput SPE automation on 1, 3, or 6 mL cartridges. Combined with ASPEC® SPE Cartridges,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

#### SMART DESIGN FOR MAXIMIZED PERFORMANCE

Mobile rack technology enables multiple fractions elution and extractions per sample and additional fractions transfer in closed vials 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<sup>®</sup> 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.



#### IMPROVE MANUAL SPE REPRODUCIBILITY

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

#### COMPACT AND EASY TO SET UP FOR QUICK OPERATION

With its small footprint and only a single gas input, the ASPEC PPM is quick to set up and easily fits under fume hoods for extractions that use volatile solvents.



#### POSITIVE PRESSURE FOR REPRODUCIBLE EXTRACTIONS

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

#### PARALLEL CLEAN UP

Compatible with both popular SPE cartridges and 96-well plates, the ASPEC PPM performs parallel extractions to increase throughput and productivity.

#### **OPTIMIZE WORKFLOW THROUGHPUT**

By combining the ASPEC PPM with PIPETMAN<sup>®</sup> multichannel pipettes or PLATEMASTER<sup>®</sup> for 96 SPE plates, get the guarantee of accurate and fast samples management and extraction.

#### **ONE UNIT - TWO FORMATS**

The base module is compatible with ASPEC SPE cartridges (1, 3 and 6 mL) and 96 well SPE plates for a high throughput clean-up.





#### CONSISTENT PERFORMANCE, RELIABLE RESULTS

Get more reliable results with ASPEC<sup>®</sup> SPE Cartridges, ready-to-use, highquality silica and polymer cartridges. The ASPEC SPE Cartridges are available with ASPEC caps for cost-effective, automation-ready use on ASPEC automated solutions.

#### **KEY FEATURES OF PRE-CAPPED CARTRIDGES FOR ASPEC AUTOMATION**

 Run cartridges right out of the box, saving valuable time with no need for manual capping

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GILSO

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LSON

Gils

- Remove potential health concerns with repetitive manual operations
- Run samples faster
- Prevent run stopping due to improperly installed caps

Competitively priced versus uncapped cartridges with separated caps

#### **HIGHLY SELECTIVE SOLUTIONS**

High performance Solid Phase Extraction sorbents based on specific polymers or molecularly imprinted polymers (MIP) for sample cleanup before chromatographic analytical methods. AFFINIMIP<sup>®</sup> SPE and AttractSPE<sup>™</sup> are now available pre-capped for ASPEC automation.

#### **MYCOTOXINS**

Multimyco LCMSMS Patulin Ochratoxin A Zearalenone Fumonisins Deoxynivalenol...

#### PESTICIDES

Glyphosate - AMPA-Glufosinate

#### **OTHER CONTAMINANTS**

Phenolics PAHs PFCs

#### **ENDOCRINE DISRUPTORS**

Bisphenols Estrogens

#### **DRUGS RESIDUES**

Chloramphenicol Amphetamines Tetracyclines

#### **ASPEC SPE CARTRIDGES - 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 - <u>POLYMERIC</u> )	
		Aqueous	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, <u>ASPEC DVB</u>
Aqueous	Sample Matrix Type		Non polar/ Moderately polar	ASPEC C18 NEC, ASPEC C8, ASPEC C4, ASPEC CYANO, <u>ASPEC HLB</u>
			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
		dueous	Anionic/Acid	ASPEC SAX, ASPEC SAX-2, ASPEC WAX, ASPEC WAX-2
		<	Anionic/Acid (Neutral)	ASPEC X-SAX, ASPEC X-WAX
		Organic	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, <u>ASPEC_DVB, ASPEC HLB</u>	
Organic		Suceaus	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, <u>ASPEC_DVB</u> , <u>ASPEC HLB</u>
			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	Moderately polar	ASPEC SILICA, ASPEC FLORISIL, ASPEC ALUMINA, ASPEC CYANO, ASPEC DIOL NEC
			Polar	ASPEC CYANO, ASPEC DIOL NEC



# Gilson Supatop<sup>™</sup>

#### CLARIFY YOUR SAMPLES AND EXTEND THE LIFE OF YOUR ANALYTICAL SYSTEMS

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

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

#### MAINTAIN SAMPLE INTEGRITY

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

#### SAVE TIME AND AVOID ERROR

- Color-coded syringe filters to quickly identify membrane and porosity used
- High burst strength and durable construction.

#### A MEMBRANE FOR ALL YOUR NEEDS

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

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

Contact us about filtration automation solutions at www.gilson.com or from your local Gilson respresentative.

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

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



## extractman®

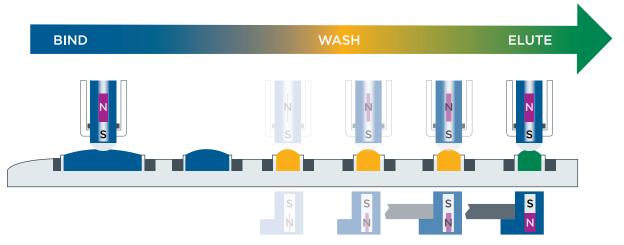
EXTRACTMAN® offers a fast and gentle paramagnetic beads-based approach to isolating target proteins and is ideal for isolating elusive, weakly-bound protein complexes critical to protein interaction research.

#### **IDENTIFYING WEAK PROTEINS INTERACTIONS**

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

#### **RAPID ISOLATION**

EXTRACTMAN<sup>®</sup> uses surface tension and hydrophobic properties for ESP<sup>™</sup>-based extraction. This process gently and rapidly pulls bead-analyte complexes from sample to a series of washes and elute enriched and purified target compounds excluding unbound contaminants in a matter of seconds.



#### ERGONOMIC AND EASY-TO-USE

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

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

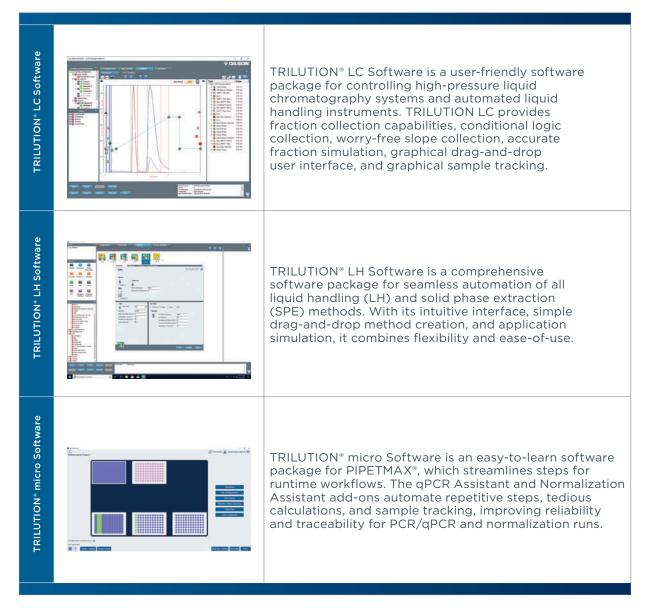


### SOFTWARE

#### SOFTWARE DESIGNED BY SCIENTISTS, FOR SCIENTISTS

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

#### SOFTWARE SELECTION GUIDE



# 4 GILSON®

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