

# 223 SAMPLE CHANGER

# High-Throughput Programmable Sampler for Automated Sample Preparation and Transfer

## **Options in Flexibility**

Choose between a 402 Syringe Pump, MINIPULS Evolution® or MINIPULS® 3 Peristaltic Pump to add aspirating and dispensing flexibility.



#### 402 Syringe Pump allows systems to deliver both large and small volumes without sacrificing precision. Available in both single and multiple syringe configurations.



#### MINIPULS® 3 Peristaltic Pump delivers high resolution and precision

speed and control for delivering smooth, low pulse flows without sample shearing or degradation.



# MINIPULS Evolution®

Peristaltic Pump combines microprocessor speed control with a high-torque stepper motor.



# The perfect solution

The 223 Sample Changer is a programmable sampler for automated sample preparation and transfer. It provides a cost-effective solution for protocols such as serial dilutions, additions, sampling into vials, timed reactions and tube-totube transfers.

The 223 Sample Changer is ideal for automated transfer of samples in analytical techniques like FIA and spectroscopy (UV/VIS, AA and ICP).

Cross-contamination is minimized by adjusting rinse volumes and using liquid level sensing.

#### Reduce cross-contamination

Optional flow-through rinse station, available on the left and/or right of the support bar, reduces crosscontamination.

## Customize setup options

Accommodates a wide variety of probes as well as standard and custom racks.

## Applications

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# 223 Sample Changer Specifications

Manufacturing Standards	Meets applicable safety and FMC certification standards: III and CF certified	
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Arm Speed	X/Y: 25 cm/sec (9.9 in./sec)	Z: 2.0, 3.0, 6.2, 12.7, 24.7 cm/sec (0.79, 1.18, 2.44, 5.00, 9.72 in./sec)
Communication Interface	RS-232 or GSIOC; Four inputs (contact closure, TTL, or open-collector), four relay outputs and one switched +12V DC (500 mA max.) output	
Liquid Handling	Reproducibility: 0.8% CV at 10 µL	<b>Accuracy:</b> 98.2% at 10 μL
Front Panel	One yellow LED indicator light	
Horizontal Motion Strength	X: 2 kg (5 lbs.)	Y: 1.5 kg (3 lbs.)
Maximum Number of Vials	432 (7 x 40 mm or 10 x 75 mm)	
Number of Racks	Up to four Code 20- or 30-Series racks	
Power Requirements	$\label{eq:Frequency: 50-60 Hz} Frequency: 50-60 Hz Voltage: 90-120 or 220-240V, mains voltage fluctuations not to exceed \pm 10\% of the nominal voltage Current rating: one 2.0A fuse for 100-120V or two 2.0A fuses for 220-240V$	
Probe Positioning Performance	Accuracy: ±1 mm in X/Y/Z dimensions	Repeatability: $\pm$ 0.25 mm in X/Y/Z dimensions
Probe Rinse	Through a dedicated rinse station for rinsing the inside and outside of the probe	
Sampler Type	X/Y/Z with stationary rack design	
Software	Via Gilson TRILUTION™ Software	
Vertical Punch Strength	1 kg (2 lbs.)	
Dimensions (w x d x h*)	53.5 x 43.7 x 60* cm (21.1 x 17.2 x 24* in.)	
Weight	18.6 kg (41 lbs.)	

\*Maximum height. Z-arm height is adjustable to accommodate vessel heights between 1 and 150 mm (dependent on installed Z-arm).

# For additional specifications and information, go to **www.gilson.com**



www.gilson.com | sales@gilson.com | service@gilson.com | training@gilson.com | hr@gilson.com | oem@gilson.com Gilson, Inc. | P.O. Box 620027 | Middleton, WI 53562-0027 | Tel: 800-445-7661 | Fax: 608-831-7661