



Rline[®]
Dispenser
Module
for Your Liquid
Handling Automate

Simplifying Progress

SARTORIUS

Rline[®] Dispenser Module

Proven Technology for Your Automate

The Sartorius Rline[®] Robotic Dispenser Module brings the proven technology of Sartorius electronic pipettes into the field of laboratory automation. The dispensing head module is designed to be used as the liquid handling component of any automated system and has a successful track record in various customer applications stretching back several years.

Save Space

- The compact size and light weight of the Rline[®] module ensures an easy fit with any instrument design.

Save Time

- The dispensing head is easy to connect, ensuring quick integration and rapid time to market.

Achieve Reliable Results

- The innovative, proven features enable high accuracy and precision.



Features

The unique and innovative features of the Rline[®] Robotic Dispenser Module ensure the accuracy and performance of sample processors and automated instrumentation:

- Outstanding accuracy and reliability with the enhanced DC-motor concept, which includes an electronic brake system and optical sensor.
- The combination of Liquid Level Sensor with conductive Robotic Tips enables the detection of the liquid surface in the target vessel. This prevents erroneous attempts to aspirate liquid before the liquid surface has been reached. Liquid level sensing feature is available with Rline 200 and Rline 1,000 models and requires the use of conductive tips.

Rline® Dispenser Module

Suitable for Various Applications

Typical Applications

- Laboratory automation for research and clinical applications
- Laboratory robotics and automated workflows
- Industrial applications and production systems

The Rline® can be used as an off-the-shelf module or tailored to fit a specific application.

Technical Features

- Single-channel models cover a volume range of 5 to 5,000 µl
- Electronic tip ejection
- Communication protocol RS232, 9.6 – 115.2 kbps
- RS485 communication available on request
- Low tip-loading forces, 12 – 45 N
- Operating voltage: 9 – 12 VDC
- Current consumption:
 - idle <100 mA, average <500 mA, peak 2 A
- Power and communication connector: Tyco 609-1427
- Conforms to ISO 8655 requirements
- ISO 17025 accredited calibration certificates available on request
- Customizable as an OEM product on request

Detailed technical manual available on request.

Technical Features

Rline®

Order Code	Channels	Volume Range (µl)	Liquid Level Sensing*	Increment (µl)	Test Mode**	Test Volume (µl)	Systematic Error Limit (%)***	Systematic Error Limit (µl)***	Systematic Error Limit (%)***	Random Error Limit (µl)***
710993	1	5–200	▪	0.5	P	200	1.0	2.00	0.3	0.50
					P	100	0.8	0.80	0.25	0.25
					P	20	2.0	0.40	1.0	0.20
					P	5	4.0	0.20	2.0	0.10
					D	10×20	2.0	0.40	2.0	0.40
710995	1	50–1,000	▪	2.5	P	1,000	0.45	4.5	0.15	1.5
					P	500	0.6	3.0	0.2	1.0
					P	100	2.0	2.0	0.5	0.5
					P	50	4.0	2.0	1.0	0.5
					d	10×100	2.5	2.5	2.0	2.0
710969	1	100–5,000	▪	10	P	5,000	0.5	25	0.15	7.5
					P	2,500	0.7	17.5	0.2	5
					P	500	1.6	8	0.4	2
					P	100	8.0	8	2.0	2
					d	10×500	2.4	12	2.4	12

* Note. Requires conductive robotic tips

** Note. P = pipetting, D = multi-dispensing

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

Development Kits

The unique and innovative features of the Rline® Robotic Dispenser Module ensure the accuracy and performance. To help you to get started with Rline, we also offer development kits for all models. Development kits include: 1 Rline of your choice, complete technical documentation, power supply and data cable, PC software, and a tray of tips.

Development kits can be ordered using the following codes:

LH-710993KIT for Rline 5 – 200 µl

LH-710995KIT for Rline 50 – 1,000 µl

LH-710969KIT for Rline 100 – 5,000 µl

Pipette Tips

Sartorius offers Robotic Tips, which are specially designed for use with the Rline® Liquid Level Sensing model. Conductive Robotic Tips enable the detection of the liquid surface in vessels or microplates. Please contact us for the conductive tips.



Tips

Order Code	Volume Range (µl)	Filtered	Conductive (for level sensing)	Sterile	Quantity (tips)	Compatibility
790200	5 – 200				10 × 96	Rline 5 – 200 µl
790201F	5 – 200	■		■	10 × 96	Rline 5 – 200 µl
780304	100 – 5,000				50	Rline 100 – 5,000 µl

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