King Square

ZADP-5ML Z-Axis Pipetting Module

Z-axis liquid-handling module in the 5 mL series.



Technical specifications

Power supply	DC24V, peak current2000 mA
Power	7-corehigh-flex cable
Communication	RS-485/CAN
Operating environment	Temperature 15 °C-35 °C, RH 20%-85%non-condensing
Effective travel	180 mm (customizable)
Maximum speed	Z-axis speed 120 mm/s, pump speed 3,000 µL/s
Rated full-travel life	1,000,000 cycles
Positioning repeatability	±0.05 mm
Force-controlled tip pickup range	50 N–60 N
Dimensions and mass	height 340 mm, width 140 mm, depth 60 mm, mass 3000 g

Product features

- Designed for high-speed motion.
- Force-controlled tip pickup for compatible disposable tips.
- One-way damping helps retain axis position during power loss.
- RS-485 and CAN communication.
- Designed for low-noise operation.

Pipetting performance

Operating mode	Tip capacity	Test volume	Precision (CV)	Accuracy
Single aspiration / single dispense	BT5M-R-CS (B)	10 µL	4%	±8%
Single aspiration / single dispense	BT5M-R-CS (B)	50 µL	2.5%	±5%
Single aspiration / single dispense	BT5M-R-CS (B)	500 µL	1.5%	±2%
Single aspiration / single dispense	BT5M-R-CS (B)	1000 µL	1%	±1.5%
Single aspiration / single dispense	BT5M-R-CS (B)	5000 µL	0.5%	±1%
Single aspiration / multiple dispenses	BT5M-R-CS (B)	50 µL	3.5%	±5%
Single aspiration / multiple dispenses	BT5M-R-CS (B)	500 µL	2.5%	±2%