

**STATUS PASSED**

# CALIBRATION REPORT

DEVICE ID 18520848

DESCRIPTION

Variable Volume 10-100ul

METHOD ID VQ100

DATE

18/09/2018

## ENVIRONMENTAL FACTORS

TEMP.	20.00 C	BARO.PRESSURE	750.00 mmHg	REL.HUMIDITY	30.00 %
AIR DENSITY	0.001200 g/cm <sup>3</sup>	Z. FACTOR	1.002899 cm <sup>3</sup> /g	CUBIC EXP.	0.0000cm <sup>3</sup> /deg C

SAMPLE				INACCURACY E%							
Vol	No	Wt.	Vol	Vol	Mean	SD	Actual	Target	Status	Imprecision	CV %
10.00	1	9.98	10.01	10.00	9.98	0.059	0.20	8.00	PASSED	<	3.00
10.00	2	9.99	10.02	50.00	49.88	1.295	0.24	1.60	PASSED	<	0.60
10.00	3	9.87	9.90	100.0	100.6	1.191	0.63	0.80	PASSED	<	0.30
50.00	1	50.10	50.25								
50.00	2	48.30	48.44								
50.00	3	50.80	50.95								
100.00	1	99.60	99.88								
100.00	2	99.80	100.0								
100.00	3	101.80	102.0								

Checked by

Inspector Q-C

Approved by

Incharge Q-C



Volume	Above 10 µl to 100 µl	Above 100 µl to 1000 µl	Above 1 ml to 10 ml	Above 10 ml to 100 ml	Based on data in the records.
Uncertainty (k=2)	0.1 µl	0.1 µl	0.1 µl	4 µl	

- \* Specifications conform to ISO:8655 standards.
- \* Each instrument is individually calibrated on electronic balance.
- \* 750 mmHg = 99.98 kPa.
- \* Weight in mg or g.
- \* Volume, Mean & S.D. in ml or µl.

### Reference standard

The instrument is calibrated using a standard electronic balance with calibration traceability to NPL.

The reported expanded uncertainty of measurement is calculated by multiplying the standard uncertainty of measurement by the coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.