

Table 1 Descriptive statistics of various distributions. Parameters of distributions of lengths, surfaces, and volumes of *Escherichia coli* cells growing in steady state at 37°C. Sample A1 had a doubling time of 125 min and divided with 5.2% imprecision. Sample A2 had a doubling time of 21 min and partitioned with 4.3% imprecision. Sample K1 had a doubling time of 106 min and terminated with 9.3% imprecision. Length is given in μm , surface in μm^2 , and volume in μm^3 . The variation coefficient q applies to the overall distribution (n total number of cells in the sample)

Dimension	Dataset	n	Min	Max	Mean	q	Skewness	% Constricted
Lenght	A1 λ	1,767	0.92	2.93	1.665	0.233	0.717	9.6
	A1 Φ	769	1.90	3.80	2.499	0.086	0.650	100
	A2 λ	4,097	1.73	7.04	3.487	0.229	0.638	28.4
	A2 Φ	1,162	3.44	7.70	5.066	0.111	0.621	100
	K1 λ	5,896	1.12	6.30	2.706	0.260	0.687	9.2
	K1 Φ	874	2.29	6.30	3.972	0.143	0.475	100
Surface	A1 λ	1,767	1.68	5.80	3.172	0.226	0.667	9.6
	A1 Φ	769	3.69	7.22	4.813	0.090	0.667	100
	A2 λ	4,097	5.99	23.03	11.794	0.235	0.584	28.4
	A2 Φ	1,162	12.21	25.65	16.924	0.117	0.563	100
	K1 λ	5,896	1.93	9.55	4.267	0.252	0.696	9.2
	K1 Φ	874	3.46	10.19	6.297	0.134	0.460	100
Volume	A1 λ	1,767	0.16	0.66	0.322	0.238	0.649	9.6
	A1 Φ	769	0.35	0.73	0.494	0.123	0.505	100
	A2 λ	4,097	0.93	4.28	2.122	0.251	0.574	28.4
	A2 Φ	1,162	2.00	4.92	3.007	0.139	0.545	100
	K1 λ	5,896	0.13	0.89	0.360	0.276	0.802	9.2
	K1 Φ	874	0.25	0.95	0.535	0.169	0.609	100