

**See the full line of high precision laboratory
standard weights from 5 kg to 1 mg [here](#).**

**Metric Weight Tolerances - all tolerances stated in milligram (mg)
American Society of Testing & Measurement ASTM E617**

Denomi- nation Metric	Sartorius Ultra Class U	Class 1 mg	Class 2 mg	Class 3 mg	Class 4 mg	Class 5 mg	Class 6 mg	Class 7 mg
5 kg	6.00	12	25	50	100	250	500	1400
3 kg	3.80	7.5	15	30	60	150	300	1000
2 kg	2.50	5.0	10	20	40	100	200	750
1 kg	1.25	2.5	5.0	10	20	50	100	470
500 g	0.600	1.2	2.5	5.0	10	30	50	300
300 g	0.380	0.75	1.5	3.0	6.0	20	30	210
200 g	0.250	0.50	1.0	2.0	4.0	15	20	160
100 g	0.125	0.25	0.50	1.0	2.0	9	10	100
50 g	0.060	0.12	0.25	0.60	1.2	5.6	7	
30 g	0.037	0.074	0.15	0.45	0.90	4.0	5	44
20 g	0.037	0.074	0.10	0.35	0.70	3.0	3	33
10 g	0.025	0.050	0.074	0.25	0.50	2.0	2	21
5 g	0.017	0.034	0.054	0.18	0.36	1.3	2	13
3g	0.017	0.034	0.054	0.15	0.30	0.95	2	9.4
2 g	0.017	0.034	0.054	0.13	0.26	0.75	2	7.0
1 g	0.017	0.034	0.054	0.10	0.20	0.50	2	4.5
500 mg	0.005	0.010	0.025	0.080	0.16	0.38	1	3.0
200 mg	0.005	0.010	0.025	0.060	0.12	0.26	1	1.8
100 mg	0.005	0.010	0.025	0.050	0.10	0.20	1	1.2
200 mg	0.005	0.010	0.025	0.060	0.12	0.26	1	1.8
100 mg	0.005	0.010	0.025	0.050	0.10	0.20	1	1.2
50 mg	0.005	0.010	0.014	0.042	0.085	0.16	0.5	0.88
20 mg	0.005	0.010	0.014	0.035	0.070	0.12	0.5	0.56
10 mg	0.005	0.010	0.014	0.030	0.060	0.10	0.5	0.4
5 mg	0.005	0.010	0.014	0.028	0.055	0.080	0.2	
2 mg	0.005	0.010	0.014	0.025	0.050	0.060	0.2	
1 mg	0.005	0.010	0.014	0.025	0.050	0.050	0.1	

The table above is a listing of the tolerances of various classes of masses. The weight value can deviate above or below the nominal value by the tolerance defined. To determine the tolerance of a mass, look at the denomination or nominal value of the weight and the [appropriate class you need](#).

Custom weight sets are available upon request by calling