

# OIML R111-1 2004

**Tolerance for weights of denominations between those listed can be determined as follows:**

- If the unit of measure is non-metric, convert the nominal value to a metric unit.
- For weights that are between those listed, the tolerance for the next lower weight shall be applied

Nominal Size		Class E2		Class F1		Class M1	
1mg		0.006 mg		0.020 mg		0.20 mg	
<small>Tolerances have been converted fromavoirdupois to metric and rounded to two significant figures.</small>							
Nominal Size		Class 0	Class 1	Class 2	Class 3	Class 4	
5m	1g	0.017 mg	0.034 mg	0.054 mg	0.10 mg	0.20 mg	
10	2g	0.017 mg	0.034 mg	0.054 mg	0.13 mg	0.26 mg	
20	5g	0.017 mg	0.034 mg	0.054 mg	0.18 mg	0.36 mg	
50	10g	0.025 mg	0.050 mg	0.074 mg	0.25 mg	0.5 mg	
10	50g	0.060 mg	0.12 mg	0.25 mg	0.60 mg	1.2 mg	
20	100g	0.13g mg	0.25 mg	0.50 mg	1.0 mg	2.0 mg	
50	200g	0.25 mg	0.50 mg	1.0 mg	2.0 mg	4.0 mg	
1g	500g	0.60 mg	1.2 mg	2.5 mg	5.0 mg	10 mg	
2g	1kg	1.3 mg	2.5 mg	5.0 mg	10 mg	20 mg	
5g	2kg	2.5 mg	5.0 mg	10 mg	20 mg	40 mg	
10	5kg	6.0 mg	12 mg	25 mg	50 mg	100 mg	
20	10kg	13 mg	25 mg	50 mg	100 mg	200 mg	
500g		0.8 mg		2.5 mg		25.0 mg	
1kg		1.6 mg		5 mg		50.0 mg	
2kg		3.0 mg		10 mg		100.0 mg	



# ASTM E617

Tolerances have been converted from avoirdupois to metric and rounded to two significant figures.

Nominal Size	Class 0	Class 1	Class 2	Class 3	Class 4
OIML R111-I 2004	0.017 mg	0.034 mg	0.054 mg	0.10 mg	0.20 mg
Tolerance for weights of denominations between those listed can be determined as follows: - If the unit of measure is non-metric, convert the nominal value to a metric unit. - For weights that are between those listed, the tolerance for the next lower weight shall be applied					
2g	Class E2		Class F1		
	Nominal Size				
	1mg	0.006 mg		0.020 mg	
5g	2mg	0.006 mg		0.020 mg	
	5mg	0.006 mg		0.020 mg	
10g	10mg	0.008 mg		0.025 mg	
	20mg	0.010 mg		0.03 mg	
	50mg	0.012 mg		0.04 mg	
50g	100mg	0.016 mg		0.05 mg	
	200mg	0.020 mg		0.06 mg	
	500mg	0.025 mg		0.08 mg	
100g	1g	0.030 mg		0.10 mg	
	2g	0.040 mg		0.12 mg	
	5g	0.050 mg		0.16 mg	
200g	10g	0.060 mg		0.20 mg	
	20g	0.080 mg		0.25 mg	
	50g	0.10 mg		0.30 mg	
500g	100g	0.16 mg		0.5 mg	
	200g	0.30 mg		1.0 mg	
	500g	0.8 mg		2.5 mg	
1kg	1kg	1.6 mg		5 mg	
	2kg	3.0 mg		10 mg	
2kg	2.5 mg	5.0 mg	10 mg	20 mg	40 mg
5kg	6.0 mg	12 mg	25 mg	50 mg	100 mg
10kg	13 mg	25 mg	50 mg	100 mg	200 mg