## **OIML** Weights



## **Assorted Calibration Weights - E1 class**

### **Application**

Weights intended to ensure traceability between national mass standards (with values derived from the International Prototype of the kilogram) and weights of class E2 and lower.

Class E1 weights or weight sets shall be accompanied by a calibration certificate.

Used as a primary reference for calibrating other reference standards and weights where the stability of the environment and careful handling are assured. Class E1 weights have no method of adjustment and are not suitable for general laboratory use. The uncertainty is guaranteed to be 1/3 the tolerance.



# **Calibration Weights**

Technical Specifications				
Brand	NSTAR			
Model	As shown in table			
Class	OIML E1			
Material	Austenitic stainless steel (Density 8.00 ± 0.03 g/cm³)			
Cavity	Monoblock construction, No adjustable cavity			
Surface	Highly polished mirror finish, [Rz < 0.5, Ra < 0.1 ( $\mu$ m)]			
Magnetic Properties	Maximum magnetic polarization, $\mu_0 M$ , $(\mu T) < 2.5$			
Contents of Weights	1-2-5-10-20-50-100-200-500 g			
	1-2-5 kg			
Marking	No denomination marking on test weights			
	Distinguish mark is available on second weight			
Standards	OIML R-111, 2004 (E)			
Certificate	NABL accredited certificate - 2 years validity			



2 kg



Shape	Denomination		
Cylindrical knob	1 g to 500 g		
Cylindrical knob	1 kg to 5 kg		

Dimensions							
	1 g to 100 g	200 g	500 g to 1 kg	2 kg	5 kg		
Storage case	Plastic Storage case						
Size*	38 x 38 x 55	44 x 44 x 64	65 x 65 x 98	77 x 77 x 123	101 x 101 x 166		
Gross Weight	upto 130 g	230 g	upto 1.1 kg	2.4 kg	5.9 kg		
External Packing	Corrugated boxes						
Number of package	1 pieces each						

<sup>\*</sup>LxWxHinmm



# **Calibration Weights**



### Tolerance and Uncertainties

Model Number	Capacity	Tolerance <sup>#</sup> (mg)	Uncertainty* (mg)
NC-1-E1-ASS	1 g	0.010	0.0030
NC-2-E1-ASS	2 g	0.012	0.0040
NC-5-E1-ASS	5 g	0.016	0.0050
NC-10-E1-ASS	10 g	0.020	0.0066
NC-20-E1-ASS	20 g	0.025	0.0080
NC-50-E1-ASS	50 g	0.030	0.010
NC-0.1K-E1-ASS	100 g	0.050	0.016
NC-0.2K-E1-ASS	200 g	0.100	0.03
NC-0.5K-E1-ASS	500 g	0.250	0.08
NC-1K-E1-ASS	1 kg	0.500	0.16
NC-2K-E1-ASS	2 kg	1.000	0.32
NC-5K-E1-ASS	5 kg	2.500	0.82

NSTAR Corp is offering assured 1/3<sup>rd</sup> uncertainty to the MPE for OIML E1 class weights.



<sup>#</sup> Maximum Permissible Errors (MPE) as per OIML R-111

<sup>\*</sup> Accredited CMC of Precimass LLP



### India

**NSTAR CORP** 34, Pelican Estate, Road No. 5, Kathwada GIDC, Kathwada, Ahmedabad - 382430, **Gujarat** 



www.calibrationweights.in



+91 7567 222 900



🕅 sales@calibrationweights.in