



TEST WEIGHTS

Weights yesterday and today

For centuries now, weight pieces have been used in scales for weighing procedures. This original purpose has now almost disappeared. Today, weights are used almost exclusively for adjusting and testing = calibration of electronic balances. They are now named "test weights" as this is their contemporary purpose.

Adjustment or calibration?

► **Adjusting** a balance means that you are intervening in the weighing system, to make sure that the display is set to show the correct nominal value. With ► **calibration** on the other hand, there is no intervention, you are testing whether the display is correct and documenting any deviation.

Testing, the right way!

The internationally valid norm OIML R111:2004 classifies test weights hierarchically in accuracy classes, where E1 is the most accurate and M3 is the least accurate weight class. With KERN you get the whole test weight range in all OIML accuracy classes E1, E2, F1, F2, M1, M2, M3.

As the test weight only becomes an ► **ISO 9000ff**-compliant test instrument when its accuracy has been proven, we offer the appropriate ► **Calibration certificate with accreditation symbol** (in connection with a box) for all KERN test weights. For further details see *Accredited Calibration Service*.

KERN offers you the appropriate test weight package for your balance, consisting of the test weight, box and Calibration certificate with accreditation symbol as proof of its accuracy. The best prerequisite for a correct adjustment or checking of your scales.

► **See the Glossary**

Classes of accuracy of test weights E, F, M and their general relation to the types of balances.

The appropriate OIML tolerance class for the test weight is selected based on the scale's resolution. The key factor for this is the scale's increment count:

$$\text{Increment count [n]} = \frac{\text{Maximum capacity [Max]}}{\text{Division value [d]}}$$

- E1 Test weights for customers who require a high degree of accuracy for the most demanding applications. For high-resolution balances with $d > 1,000,000$ Use recommended with Calibration certificate with accreditation symbol only.
- E2 Most accurate test weights for high resolution analytical balances of verification class I $\geq 100,000 e$
- F1 Test weights for analytical balances/precision balances for verification class I/II $\leq 100,000 e$
- F2 Test weights for precision balances of verification class II $\leq 30,000 e$
- M1 Test weights for industrial and commercial scales of verification class III $\leq 10,000 e$

The appropriate test weight for your new KERN balance can also be found directly in the accessories of the balance in our webshop.

KERN Delivery times & Shipping type	Total weight ≤ 30 kg (gross weight, incl. packaging)	Total weight > 30 kg (gross weight, incl. packaging)
Standard Service Class E2 – M3		
Standard Service Class E1, 1 mg – 500 mg and recalibration 1 g – 10 kg with a known volume		
Class E1, ≥ 1 g, incl. volume determination (new weights)		
Special weights, Newton weights, heavy duty weights, weight carriers, containers for individual weight sets etc.	on request	

Just lean back – we have just the right test weight for your measuring device

KERN offers you a large range of OIML test weights, which you can use at any time to quickly and reliably check your measuring instrument. From milligram weights to tonne weights, from the classic OIML design to special weights which are specifically manufactured to your specifications, we can offer you just the right test weight, and naturally the weights have the relevant calibration certificate with accreditation symbol or factory calibration certificate.

On the following pages you will see a selection of standard test weights for OIML error limit classes E1, E2, F1, F2, M1, M2, M3. We will be happy to manufacture special (large) weights, weight containers, Newton weights or weights with special weight values for you on request. Our test weights product specialist will be happy to give you expert, comprehensive advice.

Note: In our webshop you can conveniently select test weights for your scale that have been calculated and matched to your safety requirements and intended use – with or without calibration. We will be happy to determine the minimum sample quantity according to USP Chapter <41> and recommend a KERN Safety Set especially designed for your scale.



PREMIUM⁺ TEST WEIGHTS

Note: Our highly-accurate OIML test weights are also available as **PREMIUM⁺ test weights** for that extra level of safety. Thanks to the most modern manufacturing technology, these test weights can also be adjusted within the specified error limit classes (= tolerances).

I.e. this means that these **PREMIUM⁺ test weights** have a significantly longer service life, thanks this guaranteed positive tolerance. This is of particular benefit with intensive use of the test weights.

For all the details on this **PREMIUM⁺ service** please see www.kern-lab.com/premium+ or look at the weight you want in our online shop at www.kern-sohn.com

Marking – never lose track again!

With the large variety of test equipment used then it is essential that they are identified accurately. We can help you with this and mark your test weights according to your ideas by etching, with impact numbers or laser engraved. Whether it's letters, numbers, your logo, barcodes or something else – it's your choice.

Our product specialist "Test weights" will gladly help you with any questions about this service, prices, etc.



SAFELY LOOKED AFTER

KERN weight boxes made of polyoxymethylene (“POM”) – for the most demanding requirements in highly-sensitive environments such as laboratories and clean rooms

You can rely on the highest quality and safety when storing your KERN test weights for clean room areas. KERN weight boxes made of polyoxymethylene (“POM”) are secure and easy to clean and are essential aids in clean rooms, laboratories or production environments because they protect your test weights perfectly and this enables consistently accurate and reliable measurements.

The robust construction means that there are no edges or padding which could collect dirt. This means that the boxes are particularly easy to clean hygienically.

For test weights in weight classes from E1 to M1, KERN clean room boxes offer further advantages in addition to protection, in order to meet the highest requirements in terms of cleanliness and absence of contamination. They do not require maintenance and are resistant to a range of cleaning products, acids, alkalis, disinfectants and solvents. They can also be cleaned in thermo disinfectors without any problems. In addition, repeated disinfection and cleaning ensures that they meet the highest standards of the clean room environment.

Please note: Our clean room boxes are also available in an antistatic version on request – for additional safety in hazardous areas.



All the advantages of KERN clean room boxes at a glance:

- extremely stable and robust
- can be fully disinfected
- easy to clean
- without padding or edges which could collect dirt
- maintenance-free and long-lasting
- for maximum safety and measurement results



Convenient screw thread without edges which could trap dirt – KERN clean room boxes in detail

→ Do you have any special requirements?

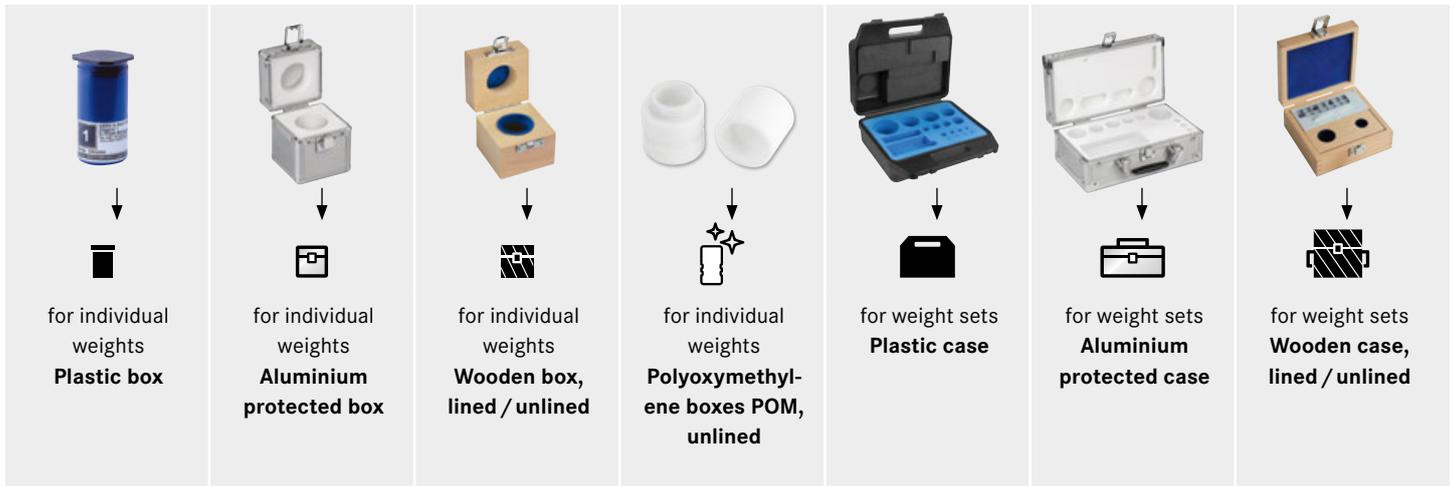
High-quality weight boxes e.g. on request we can also manufacture boxes for rectangular weights or complete weight sets to suit your individual requirements.

We will be happy to advise you.



Product Specialist
Test Weights
Hanna Blackschleger
Tel. +49 7433 9933-305
hanna.blackschleger@kern-sohn.com

Our KERN weight cases at a glance:



It's your choice!

To protect your test weights we can offer you an appropriate weight case. Choose the right box for your needs. You have the choice between plastic, aluminium protected, wood or polyoxymethylene. The available weight cases are shown as a symbol in the test weight tables on the following pages. This way you have all the materials, versions, sizes and prices at a glance, listed in a concise way.



On request only:
for weight sets
Clean room boxes POM (polyoxymethylene), unlined



It's so easy to order your suitable test weight



According to your safety requirements or the specifications of your QM system, you select the test weight with the appropriate weight value and the required tolerance.

We offer many test weights in different designs, giving you complete freedom to decide which test weights you want to use for your application. It goes without saying that all our test weights comply with the OIML R111:2004 directive.

To protect your high-quality test equipment, we offer you cases in various designs.

A calibration certificate with accreditation symbol – the auditor's favourite! With this certificate you provide the standard-compliant proof of all important values of your test equipment and are on the safe side when operating and testing your measuring equipment.

1		2				3			4				
Weight	Tol +/- mg	Individual weights, compact shape		Individual weights, knob shape		Plastic box	Aluminium protected box	Wooden box	DAkkS-accredited certificate				
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€		
1 g	0,03	316-01	41,-	317-01	51,-	317-020-400	5,-	317-010-600	14,-	317-010-100	32,-	962-331	36,-
2 g	0,04	316-02	42,-	317-02	53,-	317-020-400	5,-	317-020-600	14,-	317-020-100	30,-	962-332	36,-
5 g	0,05	316-03	43,-	317-03	55,-	317-030-400	5,-	317-030-600	14,-	317-030-100	32,-	962-333	36,-
10 g	0,06	316-04	47,-	317-04	57,-	317-040-400	5,-	317-040-600	14,-	317-040-100	32,-	962-334	36,-
20 g	0,08	316-05	48,-	317-05	64,-	317-050-400	5,-	317-050-600	14,-	317-050-100	32,-	962-335	36,-
	0,10	316-06	53,-	317-06	71,-	317-060-400	5,-	317-060-600	14,-	317-060-100	32,-	962-336	36,-

1		2		3		4		
Weight	Knob shape in plastic case	Knob shape in aluminium protected case		Knob shape in wooden case		DAkkS-accredited certificate		
	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	328-22	165,-	328-226	230,-	-	-	962-450	128,-
1 mg - 50 g	333-024	365,-	333-026	410,-	333-02	370,-	962-401	215,-
1 mg - 100 g	333-034	400,-	333-036	450,-	333-03	405,-	962-402	225,-
1 mg - 200 g	333-044	480,-	333-046	520,-	333-04	490,-	962-403	250,-
1 mg - 500 g	333-054	540,-	333-056	600,-	333-05	560,-	962-404	260,-
1 mg - 1 kg	333-064	710,-	333-066	750,-	333-06	710,-	962-405	280,-
1 mg - 2 kg	333-074	950,-	333-076	-	-	-	-	-

Selection of the appropriate test weight for your balance

A balance can never be more accurate than the test weight that is used to adjust it, it all depends on its tolerance. **The accuracy of the test weight should correspond to the readout [d] of the balance, or rather be more precise.**

Nominal test weight value is shown in adjust mode "CAL" in the balance display. Given a choice, the heaviest weight is the most suitable for accurate measurement.

Once accuracy and nominal test weight value are specified, the suitable test weight is selected according to the tolerances "Tol" of the individual accuracy classes E2 – M3, see column "Tol ± mg" at the respective weight.

Example:

Balance with weighing range [Max] 2000 g = 2 kg and readout [d] = 0,01 g = 10 mg

- The accuracy of the required test weight is determined by readout [d]: max. tolerance ± 10 mg.
- Displayed weight size on "CAL" mode: 1000 g or 2000 g. The required test weight has a 2 kg weight size.
- Suitable test weights with ± 10 mg tolerance and 2 kg weight size, can be found in accuracy class F1. KERN-No 326-12 or KERN-No 327-12.

Exception: analytical balances (readout [d] ≤ 0,1 mg):

E1 test weights are recommended. Depending on the safety requirements, E2 test weights with a calibration certificate with accreditation symbol will also be sufficient.

From finely turned to polished stainless steel – the right test weight for every situation

Test weight					
Features	→ Knob shape with lifting knob, polished stainless steel	Compact shape with carrying grip, polished stainless steel	Knob shape with lifting knob, polished stainless steel	ECO shape, polished stainless steel	Knob shape with lifting knob, finely turned stainless steel
Conforms to OIML:R111	↓ yes	yes	yes	yes	yes
Available classes	E1, E2	E2	F1	F1	F2, M1
Upper surface	polished	polished	polished	polished	finely turned
Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Adjusting cavity	no	no	yes	yes, from 50 g, readjustment can only be carried out by KERN	yes, from 20 g
Marking (Milligram weights, generally none)	none	none	Nominal value, etched	Nominal value, etched	F2: Class + nominal value, etched; M1: Class + nominal value, adopted
Checking equipment for verification purposes	approved (E2)	approved	approved	approved	approved (M1)
Ideal as checking equipment in QM systems (e.g. ISO 9000 ff)	yes	yes	yes	yes	yes
Benefits	<ul style="list-style-type: none"> • High-quality test weight for analytical and precision balances • Highly-refined surface • Ideal shape of the top for good grip 	<ul style="list-style-type: none"> • Affordable test weight for analytical and precision balances • Highly refined surface 	<ul style="list-style-type: none"> • Ideal, high-quality test weight for precision balances • No visible adjustment chamber • High long-term stability • Ideal shape of the top for good grip 	<ul style="list-style-type: none"> • Affordable test weight for analytical and precision balances • Highly refined surface • Optimum shape of the top for good grip 	<ul style="list-style-type: none"> • Ideal test weight for commercial and industrial scales • Ideal shape of the top for good grip

Composition table, valid for all KERN test weight sets from 1 mg

Individual weights per set	1	2	2	5	10	20	20	50	100	200	200	500	1	2	2	5	10			
	mg												g					kg		
1 mg-500 mg	Σ = 1,11 g																			
1 mg-50 g	Σ = 111,11 g																			
1 mg-100 g	Σ = 211,11 g																			
1 mg-200 g	Σ = 611,11 g																			
1 mg-500 g	Σ = 1.111,11 g																			
1 mg-1 kg	Σ = 2.111,11 g																			
1 mg-2 kg	Σ = 6.111,11 g																			
1 mg-5 kg	Σ = 11.111,11 g																			
1 mg-10 kg	Σ = 21.111,11 g																			

The key points from the OIML norm R111:2004

OIML (Organisation Internationale de Métrologie Légale) has established the exact metrological requirements for weights in verified applications in approx. 100 states all over the world.

The OIML guideline R111 (2004 Edition) for weights relates to sizes 1 mg – 5000 kg. Statements are made on the accuracy, materials, geometric shape, marking and storage of the weights.

Error limits for weights of classes E1 to M3

The error limit classes are in fixed hierarchical levels in the proportion of 1:3, where E1 is the most accurate and M3 is the least accurate weight class. When testing weights with other weights, the correct test class is the next highest class.

Error limit classes (= tolerances)

The values given in the table below (tolerances ± ... mg) are the respective permitted fabrication tolerances.

They are to be equal to the

- ▶ **measuring uncertainty** of the weight, if no
- ▶ **Calibration certificate with accreditation symbol** is available.

Conventional mass

The problem is the air buoyancy, which makes the weight appear lighter. In order to avoid this “distortion” in daily use, all weights are adjusted to the unit specifications as given in R111, e.g. it is accepted that: material density of the weights is 8000 kg/m³, air density is 1.2 kg/m³ and measuring temperature is 20 °C.

KERN test weights:

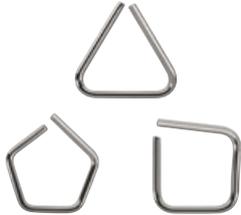
Unless otherwise specified, they conform to OIML R111:2004 in every detail.

▶ **See the Glossary**

Nominal value OIML R111:2004 Maximum permissible errors for weights = permissible tolerances “Tol ± mg”

↓	E1	E2	F1	F2	M1	M2	M3
1 mg	± 0,003 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	-	-
2 mg	± 0,003 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	-	-
5 mg	± 0,003 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	-	-
10 mg	± 0,003 mg	± 0,008 mg	± 0,025 mg	± 0,08 mg	± 0,25 mg	-	-
20 mg	± 0,003 mg	± 0,010 mg	± 0,03 mg	± 0,10 mg	± 0,3 mg	-	-
50 mg	± 0,004 mg	± 0,012 mg	± 0,04 mg	± 0,12 mg	± 0,4 mg	-	-
100 mg	± 0,005 mg	± 0,016 mg	± 0,05 mg	± 0,16 mg	± 0,5 mg	± 1,6 mg	-
200 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	± 0,6 mg	± 2,0 mg	-
500 mg	± 0,008 mg	± 0,025 mg	± 0,08 mg	± 0,25 mg	± 0,8 mg	± 2,5 mg	-
1 g	± 0,010 mg	± 0,03 mg	± 0,10 mg	± 0,3 mg	± 1,0 mg	± 3,0 mg	± 10 mg
2 g	± 0,012 mg	± 0,04 mg	± 0,12 mg	± 0,4 mg	± 1,2 mg	± 4,0 mg	± 12 mg
5 g	± 0,016 mg	± 0,05 mg	± 0,16 mg	± 0,5 mg	± 1,6 mg	± 5,0 mg	± 16 mg
10 g	± 0,020 mg	± 0,06 mg	± 0,20 mg	± 0,6 mg	± 2,0 mg	± 6,0 mg	± 20 mg
20 g	± 0,025 mg	± 0,08 mg	± 0,25 mg	± 0,8 mg	± 2,5 mg	± 8,0 mg	± 25 mg
50 g	± 0,03 mg	± 0,10 mg	± 0,3 mg	± 1,0 mg	± 3,0 mg	± 10 mg	± 30 mg
100 g	± 0,05 mg	± 0,16 mg	± 0,5 mg	± 1,6 mg	± 5,0 mg	± 16 mg	± 50 mg
200 g	± 0,10 mg	± 0,3 mg	± 1,0 mg	± 3,0 mg	± 10 mg	± 30 mg	± 100 mg
500 g	± 0,25 mg	± 0,8 mg	± 2,5 mg	± 8,0 mg	± 25 mg	± 80 mg	± 250 mg
1 kg	± 0,5 mg	± 1,6 mg	± 5,0 mg	± 16 mg	± 50 mg	± 160 mg	± 500 mg
2 kg	± 1,0 mg	± 3,0 mg	± 10 mg	± 30 mg	± 100 mg	± 300 mg	± 1 000 mg
5 kg	± 2,5 mg	± 8,0 mg	± 25 mg	± 80 mg	± 250 mg	± 800 mg	± 2 500 mg
10 kg	± 5,0 mg	± 16 mg	± 50 mg	± 160 mg	± 500 mg	± 1 600 mg	± 5 000 mg
20 kg	± 10 mg	± 30 mg	± 100 mg	± 300 mg	± 1 000 mg	± 3 000 mg	± 10 g
50 kg	± 25 mg	± 80 mg	± 250 mg	± 800 mg	± 2 500 mg	± 8 000 mg	± 25 g
100 kg	-	± 160 mg	± 500 mg	± 1 600 mg	± 5 000 mg	± 16 g	± 50 g
200 kg	-	± 300 mg	± 1 000 mg	± 3 000 mg	± 10 g	± 30 g	± 100 g
500 kg	-	± 800 mg	± 2 500 mg	± 8 000 mg	± 25 g	± 80 g	± 250 g
1 000 kg	-	± 1 600 mg	± 5 000 mg	± 16 g	± 50 g	± 160 g	± 500 g
2 000 kg	-	-	± 10 g	± 30 g	± 100 g	± 300 g	± 1 000 g
5 000 kg	-	-	± 25 g	± 80 g	± 250 g	± 800 g	± 2 500 g

TEST WEIGHTS AND BOXES CLASS E1



Milligram weights, wire shape



Individual weights, knob shape



Wooden box, for milligram weights



Plastic box, lined,
for individual
weights ≤ 50 g



Plastic box, lined,
for individual
weights ≥ 100 g



Wooden box, lined,
for individual weights ≤ 500 g



Wooden box, lined,
for individual weights ≥ 1 kg



Milligram weight
set in plastic case
(308-42)



Milligram weight
set in aluminium
protected case,
lined (308-426)



Plastic case, lined, for weight sets,
compact shape/knob shape



Aluminium protected case, lined,
for weight sets, knob shape



Wooden case, lined,
for weight sets, knob shape

Class E1 · Milligram weights, wire shape

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, wire shape		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,003	308-31	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-251	72,-
2 mg	0,003	308-32	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-252	72,-
5 mg	0,003	308-33	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-253	72,-
10 mg	0,003	308-34	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-254	72,-
20 mg	0,003	308-35	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-255	72,-
50 mg	0,004	308-36	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-256	72,-
100 mg	0,005	308-37	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-257	72,-
200 mg	0,006	308-38	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-258	72,-
500 mg	0,008	308-39	90,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-259	72,-

Class E1 · Individual weights, knob shape

Test weight material: stainless steel polished

Weight	Tol +/- mg	Individual weight, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate Initial calibration*		DAkkS-accredited certificate Recalibration	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	0,010	307-01	83,-	317-020-400	5,-	317-010-600	14,-	317-010-100	32,-	963-231	260,-	962-231 R	87,-
2 g	0,012	307-02	89,-	317-020-400	5,-	317-020-600	14,-	317-020-100	30,-	963-232	260,-	962-232 R	87,-
5 g	0,016	307-03	90,-	317-030-400	5,-	317-030-600	14,-	317-030-100	32,-	963-233	260,-	962-233 R	87,-
10 g	0,020	307-04	97,-	317-040-400	5,-	317-040-600	14,-	317-040-100	30,-	963-234	260,-	962-234 R	87,-
20 g	0,025	307-05	100,-	317-050-400	5,-	317-050-600	14,-	317-050-100	31,-	963-235	260,-	962-235 R	87,-
50 g	0,030	307-06	118,-	317-060-400	9,-	317-060-600	14,-	317-060-100	35,-	963-236	260,-	962-236 R	87,-
100 g	0,050	307-07	145,-	317-070-400	10,-	317-070-600	14,-	317-070-100	35,-	963-237	260,-	962-237 R	87,-
200 g	0,100	307-08	186,-	317-080-400	10,-	317-080-600	14,-	317-080-100	39,-	963-238	260,-	962-238 R	87,-
500 g	0,250	307-09	270,-	317-090-400	11,-	317-090-600	18,-	317-090-100	46,-	963-239	260,-	962-239 R	87,-
1 kg	0,500	307-11	395,-	317-110-400	10,-	317-110-600	26,-	317-110-100	61,-	963-241	260,-	962-241 R	87,-
2 kg	1,000	307-12	570,-	317-120-400	13,-	317-120-600	30,-	317-120-100	68,-	963-242	600,-	962-242 R	107,-
5 kg	2,500	307-13	1020,-	317-130-400	27,-	317-130-600	53,-	317-130-100	101,-	963-243	600,-	962-243 R	107,-
10 kg	5,000	307-14	1640,-	317-140-400	25,-	317-140-600	75,-	317-140-100	123,-	963-244	600,-	962-244 R	107,-
20 kg	10,000	307-15	4280,-	-	-	317-150-600	105,-	317-150-100	580,-	963-245	1.390,-	962-245 R	810,-
50 kg	25,000	307-16	8190,-	-	-	317-160-600	260,-	317-160-100	710,-	963-246	1.620,-	962-246 R	900,-

* For E1 weights > 1g at the point of DAkkS-accredited initial calibration, a volume determination will be carried out in accordance with OIML:R111. When DAkkS-accredited recalibration, this is not required.

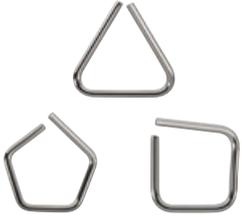
Class E1 · Weight sets, knob shape

Test weight material: stainless steel polished

Weight set	Knob shape in plastic case		Knob shape in aluminium protected case		Knob shape in wooden case		DAkkS-accredited certificate Initial calibration*		DAkkS-accredited certificate Recalibration	
	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	308-42	1050,-	308-426	1140,-	-	-	962-250	470,-	962-250 R	560,-
1 mg - 50 g	303-024	1930,-	303-026	1830,-	303-02	1970,-	963-201	1510,-	962-201 R	920,-
1 mg - 100 g	303-034	2010,-	303-036	1980,-	303-03	2000,-	963-202	1650,-	962-202 R	950,-
1 mg - 200 g	303-044	2250,-	303-046	2270,-	303-04	2310,-	963-203	1890,-	962-203 R	1050,-
1 mg - 500 g	303-054	2590,-	303-056	2610,-	303-05	2650,-	963-204	2020,-	962-204 R	1090,-
1 mg - 1 kg	303-064	3140,-	303-066	3260,-	303-06	3200,-	963-205	2140,-	962-205 R	1180,-
1 mg - 2 kg	303-074	4260,-	303-076	4370,-	303-07	4340,-	963-206	2790,-	962-206 R	1250,-
1 mg - 5 kg	303-084	5270,-	303-086	5660,-	303-08	5460,-	963-207	3130,-	962-207 R	1300,-
1 mg - 10 kg	-	-	303-096	6860,-	303-09	7170,-	963-208	3560,-	962-208 R	1350,-
1 g - 50 g	304-024	840,-	304-026	620,-	304-02	900,-	963-215	1090,-	962-215 R	410,-
1 g - 100 g	304-034	980,-	304-036	1130,-	304-03	1040,-	963-216	1190,-	962-216 R	445,-
1 g - 200 g	304-044	1350,-	304-046	1500,-	304-04	1410,-	963-217	1450,-	962-217 R	530,-
1 g - 500 g	304-054	1610,-	304-056	1780,-	304-05	1740,-	963-218	1580,-	962-218 R	580,-
1 g - 1 kg	304-064	2050,-	304-066	2130,-	304-06	2120,-	963-219	1730,-	962-219 R	630,-
1 g - 2 kg	304-074	3200,-	304-076	3330,-	304-07	3300,-	963-220	2430,-	962-220 R	720,-
1 g - 5 kg	304-084	4210,-	304-086	4620,-	304-08	4420,-	963-221	2840,-	962-221 R	740,-
1 g - 10 kg	-	-	304-096	5820,-	304-09	6120,-	963-222	3310,-	962-222 R	810,-

TEST WEIGHTS AND BOXES

CLASS E2



Milligram weights, wire shape



Milligram weights, flat polygonal sheet



Individual weights, compact shape



Individual weights, knob shape



Plastic box, lined, for individual weights ≤ 50 g



Plastic box, lined, for individual weights ≥ 100 g



Aluminium protected box, lined, for individual weights



Wooden box, lined, for individual weights ≤ 500 g



Wooden box, lined, for individual weights ≥ 1 kg



Milligram weight set in plastic case (318-22)



Milligram weight set in aluminium protected case, lined (318-226)



Plastic case, lined, for weight sets, compact shape/knob shape



Aluminium protected case, lined, for weight sets, compact shape/knob shape



Wooden case, lined, for weight sets, compact shape/knob shape

Class E2 · Milligram weights, wire shape

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,006	318-31	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-351	36,-
2 mg	0,006	318-32	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-352	36,-
5 mg	0,006	318-33	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-353	36,-
10 mg	0,008	318-34	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-354	36,-
20 mg	0,010	318-35	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-355	36,-
50 mg	0,012	318-36	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-356	36,-
100 mg	0,016	318-37	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-357	36,-
200 mg	0,020	318-38	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-358	36,-
500 mg	0,025	318-39	51,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-359	36,-
1 mg - 500 mg	-	318-42	610,-	-	-	-	-	-	-	-	-

Class E2 · Milligram weights, flat polygonal sheet

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,006	318-01	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-351	36,-
2 mg	0,006	318-02	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-352	36,-
5 mg	0,006	318-03	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-353	36,-
10 mg	0,008	318-04	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-354	36,-
20 mg	0,010	318-05	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-355	36,-
50 mg	0,012	318-06	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-356	36,-
100 mg	0,016	318-07	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-357	36,-
200 mg	0,020	318-08	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-358	36,-
500 mg	0,025	318-09	28,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-359	36,-

Class E2 · Individual weights, compact shape or knob shape

Test weight material: stainless steel polished

Weight	Tol +/- mg	Individual weights, compact shape		Individual weights, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	0,03	316-01	41,-	317-01	51,-	317-020-400	5,-	317-010-600	14,-	317-010-100	32,-	962-331	36,-
2 g	0,04	316-02	42,-	317-02	53,-	317-020-400	5,-	317-020-600	14,-	317-020-100	30,-	962-332	36,-
5 g	0,05	316-03	43,-	317-03	55,-	317-030-400	5,-	317-030-600	14,-	317-030-100	32,-	962-333	36,-
10 g	0,06	316-04	47,-	317-04	57,-	317-040-400	5,-	317-040-600	14,-	317-040-100	30,-	962-334	36,-
20 g	0,08	316-05	48,-	317-05	64,-	317-050-400	5,-	317-050-600	14,-	317-050-100	31,-	962-335	36,-
50 g	0,10	316-06	53,-	317-06	71,-	317-060-400	9,-	317-060-600	14,-	317-060-100	35,-	962-336	36,-
100 g	0,16	316-07	59,-	317-07	80,-	317-070-400	10,-	317-070-600	14,-	317-070-100	35,-	962-337	44,-
200 g	0,30	316-08	69,-	317-08	106,-	317-080-400	10,-	317-080-600	14,-	317-080-100	39,-	962-338	44,-
500 g	0,80	316-09	102,-	317-09	156,-	317-090-400	11,-	317-090-600	18,-	317-090-100	46,-	962-339	44,-
1 kg	1,60	316-11	150,-	317-11	215,-	317-110-400	10,-	317-110-600	26,-	317-110-100	61,-	962-341	44,-
2 kg	3,00	316-12	210,-	317-12	315,-	317-120-400	13,-	317-120-600	30,-	317-120-100	68,-	962-342	55,-
5 kg	8,00	316-13	405,-	317-13	510,-	317-130-400	27,-	317-130-600	53,-	317-130-100	101,-	962-343	55,-
10 kg	16,00	316-14	700,-	317-14	780,-	317-140-400	25,-	317-140-600	75,-	317-140-100	123,-	962-344	55,-
20 kg	30,00	-	-	317-15	2330,-	-	-	317-150-600	105,-	317-150-100	580,-	962-345	70,-
50 kg	80,00	-	-	317-16	4810,-	-	-	317-160-600	260,-	317-160-100	710,-	962-346	81,-

Tip:

Our highly-accurate OIML test weights are also available as **PREMIUM+ weights** for that extra level of safety. See all details page 175 or on www.kern-lab.com/premium+

Class E2 · Weight sets, compact shape

Test weight material: Milligram weights stainless steel, individual weights: polished stainless steel

Weight sets	Compact shape in plastic case		Compact shape in aluminium protected case		DAkkS-accredited certificate	
	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	318-22	325,-	318-226	400,-	962-350	240,-
1 g - 50 g	312-024	465,-	312-026	435,-	962-315	165,-
1 g - 100 g	312-034	520,-	312-036	500,-	962-316	196,-
1 g - 200 g	312-044	650,-	312-046	630,-	962-317	255,-
1 g - 500 g	312-054	750,-	312-056	730,-	962-318	300,-
1 g - 1 kg	312-064	970,-	312-066	970,-	962-319	330,-
1 g - 2 kg	312-074	1350,-	312-076	1400,-	962-320	405,-
1 g - 5 kg	312-084	1780,-	312-086	1870,-	962-321	460,-
1 g - 10 kg	-	-	312-096	2510,-	962-322	500,-

Class E2 · Weight sets, knob shape

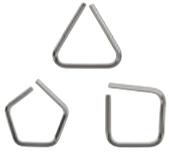
Test weight material: Milligram weights stainless steel, individual weights: polished stainless steel

Weight sets	Knob shape in plastic case		Knob shape in aluminium protected case		Knob shape in wooden case		DAkkS-accredited certificate	
	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	318-22	325,-	318-226	400,-			962-350	240,-
1 mg - 50 g	313-024	880,-	313-026	760,-	313-02	930,-	962-301	400,-
1 mg - 100 g	313-034	960,-	313-036	1030,-	313-03	1010,-	962-302	430,-
1 mg - 200 g	313-044	1220,-	313-046	1250,-	313-04	1220,-	962-303	500,-
1 mg - 500 g	313-054	1360,-	313-056	1390,-	313-05	1440,-	962-304	540,-
1 mg - 1 kg	313-064	1620,-	313-066	1700,-	313-06	1690,-	962-305	570,-
1 mg - 2 kg	313-074	2240,-	313-076	2360,-	313-07	2330,-	962-306	630,-
1 mg - 5 kg	313-084	2920,-	313-086	2910,-	313-08	2940,-	962-307	670,-
1 mg - 10 kg	-	-	313-096	3950,-	313-09	3790,-	962-308	710,-
1 g - 50 g	314-024	550,-	314-026	460,-	314-02	600,-	962-315	165,-
1 g - 100 g	314-034	620,-	314-036	710,-	314-03	690,-	962-316	196,-
1 g - 200 g	314-044	830,-	314-046	900,-	314-04	900,-	962-317	255,-
1 g - 500 g	314-054	1070,-	314-056	1100,-	314-05	1110,-	962-318	300,-
1 g - 1 kg	314-064	1290,-	314-066	1380,-	314-06	1360,-	962-319	330,-
1 g - 2 kg	314-074	1910,-	314-076	2040,-	314-07	2000,-	962-320	405,-
1 g - 5 kg	314-084	2410,-	314-086	2590,-	314-08	2620,-	962-321	460,-
1 g - 10 kg	-	-	314-096	3630,-	314-09	3460,-	962-322	500,-

Tip:

Our highly-accurate OIML test weights are also available as **PREMIUM+ weights** for that extra level of safety. See all details page 175 or on www.kern-lab.com/premium+

TEST WEIGHTS AND BOXES CLASS F1



Milligram weights,
wire shape



Milligram weights,
flat polygonal sheet



Individual weights/
Weight sets,
ECO shape



Individual weights/
Weight sets,
knob shape



Test weights (10 – 50 kg),
polished stainless steel,
KERN 327-141 ff,
optional: Wooden box



Block weight,
polished stainless steel



Plastic box, lined, for
• individual weights ≤ 200 g
• individual weights ≥ 500 g



Aluminium protected box, lined,
for individual weights



Wooden box, lined, for
• individual weights ≤ 500 g
• individual weights ≥ 1 kg



Milligram weight
set in plastic case
(328-22)



Milligram weight
set in aluminium
protected case,
lined (328-226)



Plastic case, lined for weight sets,
ECO shape/knob shape



Aluminium protected case, lined,
for weight sets ECO shape/
knob shape



Wooden case, lined, for weight sets
ECO shape/knob shape

Class F1 · Milligram weights, wire shape

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,02	328-31	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-451	23,-
2 mg	0,02	328-32	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-452	23,-
5 mg	0,02	328-33	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-453	23,-
10 mg	0,025	328-34	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-454	23,-
20 mg	0,03	328-35	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-455	23,-
50 mg	0,04	328-36	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-456	23,-
100 mg	0,05	328-37	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-457	23,-
200 mg	0,06	328-38	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-458	23,-
500 mg	0,08	328-39	21,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-459	23,-
1 mg - 500 mg	-	328-42	265,-	-	-	-	-	-	-	-	-

Class F1 · Milligram weights, flat polygonal sheet

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,02	328-01	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-451	23,-
2 mg	0,02	328-02	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-452	23,-
5 mg	0,02	328-03	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-453	23,-
10 mg	0,025	328-04	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-454	23,-
20 mg	0,03	328-05	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-455	23,-
50 mg	0,04	328-06	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-456	23,-
100 mg	0,05	328-07	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-457	23,-
200 mg	0,06	328-08	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-458	23,-
500 mg	0,08	328-09	13,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-459	23,-

Class F1 · Individual weights, ECO shape or knob shape

Test weight material: stainless steel polished

Weight	Tol +/- mg	Individual weight, ECO shape		Individual weight, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	0,10	326-01	19,-	327-01	33,-	347-030-400	3,-	317-010-600	14,-	317-010-100	32,-	962-431	23,-
2 g	0,12	326-02	19,-	327-02	33,-	347-030-400	3,-	317-020-600	14,-	317-020-100	30,-	962-432	23,-
5 g	0,16	326-03	21,-	327-03	34,-	347-030-400	3,-	317-030-600	14,-	317-030-100	32,-	962-433	23,-
10 g	0,20	326-04	23,-	327-04	37,-	347-050-400	3,-	317-040-600	14,-	317-040-100	30,-	962-434	23,-
20 g	0,25	326-05	30,-	327-05	42,-	347-050-400	3,-	317-050-600	14,-	317-050-100	31,-	962-435	23,-
50 g	0,30	326-06	39,-	327-06	47,-	347-070-400	3,-	317-060-600	14,-	317-060-100	35,-	962-436	23,-
100 g	0,50	326-07	45,-	327-07	54,-	347-070-400	3,-	317-070-600	14,-	317-070-100	35,-	962-437	25,-
200 g	1,00	326-08	49,-	327-08	66,-	347-080-400	4,-	317-080-600	14,-	317-080-100	39,-	962-438	25,-
500 g	2,50	326-09	98,-	327-09	124,-	347-090-400	5,-	317-090-600	18,-	317-090-100	46,-	962-439	25,-
1 kg	5,00	326-11	130,-	327-11	163,-	347-110-400	6,-	317-110-600	26,-	317-110-100	61,-	962-441	25,-
2 kg	10	326-12	215,-	327-12	245,-	347-120-400	8,-	317-120-600	30,-	317-120-100	68,-	962-442	33,-
5 kg	25	326-13	340,-	327-13	395,-	347-130-400	17,-	317-130-600	53,-	317-130-100	101,-	962-443	33,-
10 kg	50	326-14	560,-	327-14	680,-	347-140-400	24,-	317-140-600	75,-	317-140-100	123,-	962-444	33,-
20 kg	100	-	-	327-15	1830,-	-	-	317-150-600	105,-	317-150-100	580,-	962-445	37,-
50 kg	250	-	-	327-16	3930,-	-	-	317-160-600	260,-	317-160-100	710,-	962-446	49,-

Class F1 · Block weights

Block weight material: stainless steel polished

Weight	Tol +/- mg	Block weight		Aluminium protected box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€
5 kg	25	326-36	950,-	346-060-600	71,-	962-443	33,-
10 kg	50	326-37	1380,-	346-070-600	95,-	962-444	33,-
20 kg	100	326-38	1830,-	346-080-600	125,-	962-445	37,-
50 kg	250	326-39	4370,-	346-090-600	260,-	962-446	49,-

Class F1 · Test weights, stackable

Test weight material: stainless steel polished

Weight	Tol +/- mg	Test weight		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€
5 kg	25	327-131	1000,-	337-131-100	485,-	962-443	33,-
10 kg	50	327-141	1340,-	337-141-100	395,-	962-444	33,-
20 kg	100	327-151	1680,-	337-151-100	495,-	962-445	37,-
50 kg	250	327-161	3880,-	337-161-100	600,-	962-446	49,-

Class F1 · Weight sets, ECO shape

Test weight material: Milligram weights stainless steel, Individual weights: polished stainless steel

Weight sets	ECO shape in plastic case		ECO shape in aluminium protected case		ECO shape in wooden case		DAkkS-accredited certificate	
	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	328-22	165,-	328-226	230,-	-	-	962-450	128,-
1 mg - 50 g	325-024	550,-	325-026	485,-	325-022	600,-	962-401	215,-
1 mg - 100 g	325-034	600,-	325-036	620,-	325-032	650,-	962-402	225,-
1 mg - 200 g	325-044	720,-	325-046	710,-	325-042	740,-	962-403	250,-
1 mg - 500 g	325-054	800,-	325-056	810,-	325-052	910,-	962-404	260,-
1 mg - 1 kg	325-064	1010,-	325-066	1020,-	325-062	1060,-	962-405	280,-
1 mg - 2 kg	325-074	1300,-	325-076	1320,-	325-072	1370,-	962-406	320,-
1 mg - 5 kg	325-084	1620,-	325-086	1620,-	325-082	1780,-	962-407	335,-
1 mg - 10 kg	-	-	325-096	2340,-	325-092	2390,-	962-408	360,-
1 g - 50 g	326-024	390,-	326-026	360,-	326-022	435,-	962-415	85,-
1 g - 100 g	326-034	435,-	326-036	440,-	326-032	490,-	962-416	99,-
1 g - 200 g	326-044	540,-	326-046	550,-	326-042	600,-	962-417	125,-
1 g - 500 g	326-054	620,-	326-056	640,-	326-052	750,-	962-418	139,-
1 g - 1 kg	326-064	860,-	326-066	850,-	326-062	900,-	962-419	152,-
1 g - 2 kg	326-074	1170,-	326-076	1140,-	326-072	1220,-	962-420	191,-
1 g - 5 kg	326-084	1490,-	326-086	1480,-	326-082	1630,-	962-421	210,-
1 g - 10 kg	-	-	326-096	2070,-	326-092	2240,-	962-422	230,-

Class F1 · Weight sets, knob shape

Test weight material: Milligram weights stainless steel, Individual weights: polished stainless steel

Weight sets	Knob shape in plastic case		Knob shape in aluminium protected case		Knob shape in wooden case		DAkkS-accredited certificate	
	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	328-22	165,-	328-226	230,-	-	-	962-450	128,-
1 mg - 50 g	323-024	550,-	323-026	465,-	323-02	600,-	962-401	215,-
1 mg - 100 g	323-034	610,-	323-036	660,-	323-03	650,-	962-402	225,-
1 mg - 200 g	323-044	730,-	323-046	800,-	323-04	790,-	962-403	250,-
1 mg - 500 g	323-054	860,-	323-056	940,-	323-05	980,-	962-404	260,-
1 mg - 1 kg	323-064	1110,-	323-066	1180,-	323-06	1170,-	962-405	280,-
1 mg - 2 kg	323-074	1580,-	323-076	1590,-	323-07	1730,-	962-406	320,-
1 mg - 5 kg	323-084	1960,-	323-086	1960,-	323-08	2160,-	962-407	335,-
1 mg - 10 kg	-	-	323-096	2790,-	323-09	2900,-	962-408	360,-
1 g - 50 g	324-024	385,-	324-026	330,-	324-02	445,-	962-415	85,-
1 g - 100 g	324-034	435,-	324-036	485,-	324-03	500,-	962-416	99,-
1 g - 200 g	324-044	650,-	324-046	640,-	324-04	720,-	962-417	125,-
1 g - 500 g	324-054	770,-	324-056	770,-	324-05	880,-	962-418	139,-
1 g - 1 kg	324-064	1020,-	324-066	1020,-	324-06	1070,-	962-419	152,-
1 g - 2 kg	324-074	1460,-	324-076	1420,-	324-07	1570,-	962-420	191,-
1 g - 5 kg	324-084	1840,-	324-086	1840,-	324-08	2040,-	962-421	210,-
1 g - 10 kg	-	-	324-096	2650,-	324-09	2830,-	962-422	230,-

TEST WEIGHTS AND BOXES

CLASS F2



Milligram weights,
flat polygonal sheet



Individual weights/Weight sets,
knob shape



Block weight, stainless steel



Test weights (10 – 50 kg),
finely turned stainless steel,
KERN 337-141 ff,
optional: Wooden box



Plastic box,
lined, for
individual
weights
≤ 200 g



Plastic box,
lined, for
individual
weights
≥ 500 g



Aluminium protected box, lined,
for individual weights



Wooden box, not lined
for individual weights ≤ 500 g



Wooden box, not lined,
for individual weights ≥ 1 kg



Milligram weight
set in plastic case
(338-22)



Milligram weight
set in aluminium
protected case,
lined (338-226)



Plastic case, lined, for weight sets,
knob shape



Aluminium protected case, lined,
for weight sets, knob shape



Wooden case, for weight sets,
knob shape

Class F2 · Milligram weights, flat polygonal sheet

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate			
		KERN	€	KERN		€	KERN		€	KERN		€	KERN
1 mg	0,06	338-01	8,60	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-451	23,-		
2 mg	0,06	338-02	8,30	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-452	23,-		
5 mg	0,06	338-03	8,60	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-453	23,-		
10 mg	0,08	338-04	8,60	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-454	23,-		
20 mg	0,10	338-05	8,30	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-455	23,-		
50 mg	0,12	338-06	8,60	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-456	23,-		
100 mg	0,16	338-07	8,60	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-457	23,-		
200 mg	0,20	338-08	8,30	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-458	23,-		
500 mg	0,25	338-09	8,60	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-459	23,-		

Class F2 · Individual weights, knob shape

Test weight material: finely turned stainless steel

Weight	Tol +/- mg	Individual weight, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate			
		KERN	€	KERN		€	KERN		€	KERN		€	KERN
1 g	0,3	337-01	17,-	347-030-400	3,-	317-010-600	14,-	337-010-200	21,-	962-431	23,-		
2 g	0,4	337-02	17,-	347-030-400	3,-	317-020-600	14,-	337-020-200	17,-	962-432	23,-		
5 g	0,5	337-03	18,-	347-030-400	3,-	317-030-600	14,-	337-030-200	18,-	962-433	23,-		
10 g	0,6	337-04	20,-	347-050-400	3,-	317-040-600	14,-	337-040-200	18,-	962-434	23,-		
20 g	0,8	337-05	28,-	347-050-400	3,-	317-050-600	14,-	337-050-200	18,-	962-435	23,-		
50 g	1,0	337-06	30,-	347-070-400	3,-	317-060-600	14,-	337-060-200	20,-	962-436	23,-		
100 g	1,6	337-07	34,-	347-070-400	3,-	317-070-600	14,-	337-070-200	22,-	962-437	25,-		
200 g	3,0	337-08	41,-	347-080-400	4,-	317-080-600	14,-	337-080-200	24,-	962-438	25,-		
500 g	8,0	337-09	58,-	347-090-400	5,-	317-090-600	18,-	337-090-200	28,-	962-439	25,-		
1 kg	16	337-11	81,-	347-110-400	6,-	317-110-600	26,-	337-110-200	46,-	962-441	25,-		
2 kg	30	337-12	124,-	347-120-400	8,-	317-120-600	30,-	337-120-200	41,-	962-442	33,-		
5 kg	80	337-13	220,-	347-130-400	17,-	317-130-600	53,-	337-130-200	87,-	962-443	33,-		
10 kg	160	337-14	385,-	347-140-400	24,-	317-140-600	75,-	337-140-200	93,-	962-444	33,-		
20 kg	300	337-15	750,-	-	-	317-150-600	105,-	337-150-200	385,-	962-445	37,-		
50 kg	800	337-16	1430,-	-	-	317-160-600	260,-	337-160-200	590,-	962-446	49,-		

Class F2 · Test weights, stackable

Test weight material: finely turned stainless steel

Weight	Tol +/- mg	Test weight	Wooden box		DAkkS-accredited certificate		
			€	KERN	€	KERN	
5 kg	80	337-131	550,-	337-131-200	380,-	962-443	33,-
10 kg	160	337-141	640,-	337-141-200	360,-	962-444	33,-
20 kg	300	337-151	820,-	337-151-200	385,-	962-445	37,-
50 kg	800	337-161	2080,-	337-161-200	590,-	962-446	49,-

Class F2 · Block weights

Block weight material: stainless steel glass bead blasted

Weight	Tol +/- mg	Block weight	Aluminium protected box		DAkkS-accredited certificate		
			€	KERN	€	KERN	
5 kg	80	336-36	520,-	346-060-600	71,-	962-443	33,-
10 kg	160	336-37	720,-	346-070-600	95,-	962-444	33,-
20 kg	300	336-38	920,-	346-080-600	125,-	962-445	37,-
50 kg	800	336-39	2250,-	346-090-600	260,-	962-446	49,-

Class F2 · Weight sets, knob shape

Test weight material: Milligram weights stainless steel, individual weights finely turned stainless steel

Weight	Knob shape in plastic case		Knob shape in aluminium protected case		Knob shape in wooden case		DAkkS-accredited certificate	
	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 mg - 500 mg	328-22	165,-	328-226	230,-	-	-	962-450	128,-
1 mg - 50 g	333-024	365,-	333-026	410,-	333-02	370,-	962-401	215,-
1 mg - 100 g	333-034	400,-	333-036	450,-	333-03	405,-	962-402	225,-
1 mg - 200 g	333-044	480,-	333-046	520,-	333-04	490,-	962-403	250,-
1 mg - 500 g	333-054	540,-	333-056	600,-	333-05	560,-	962-404	260,-
1 mg - 1 kg	333-064	710,-	333-066	750,-	333-06	710,-	962-405	280,-
1 mg - 2 kg	333-074	950,-	333-076	1050,-	333-07	980,-	962-406	320,-
1 mg - 5 kg	333-084	1170,-	333-086	1330,-	333-08	1390,-	962-407	335,-
1 mg - 10 kg	-	-	333-096	1980,-	333-09	1720,-	962-408	360,-
1 g - 50 g	334-024	255,-	334-026	275,-	334-02	255,-	962-415	85,-
1 g - 100 g	334-034	290,-	334-036	315,-	334-03	295,-	962-416	99,-
1 g - 200 g	334-044	370,-	334-046	415,-	334-04	380,-	962-417	125,-
1 g - 500 g	334-054	430,-	334-056	490,-	334-05	450,-	962-418	139,-
1 g - 1 kg	334-064	600,-	334-066	620,-	334-06	580,-	962-419	152,-
1 g - 2 kg	334-074	840,-	334-076	940,-	334-07	850,-	962-420	191,-
1 g - 5 kg	334-084	1050,-	334-086	1230,-	334-08	1260,-	962-421	210,-
1 g - 10 kg	-	-	334-096	1750,-	334-09	1590,-	962-422	230,-

TEST WEIGHTS AND BOXES CLASS M1



Milligram weights,
flat polygonal sheet



Individual weights/weight sets,
knob shape, finely turned
stainless steel



Hook weights, finely turned
stainless steel



Slotted weights, finely turned
stainless steel



Plastic box, for individual
weights ≤ 200 g, for hook
weights and slotted weights
 ≤ 50 g



Plastic box, lined, for
individual weights ≥ 500 g,
for hook weights and
slotted weights ≥ 100 g



Aluminium protected box,
lined, for individual weights



Wooden box, not lined,
for individual weights
 ≤ 500 g



Wooden box, not lined,
for individual weights ≥ 1 kg



Milligram weight
set in plastic case
(348-22)



Milligram weight
set in aluminium
protected case,
lined (348-226)



Plastic case, lined, for weight sets,
knob shape, finely turned
stainless steel



Aluminium protected case, lined,
for weight sets, knob shape,
finely turned stainless steel



Wooden case, for weight sets,
knob shape, finely turned
stainless steel



Test weights (10 - 50 kg), finely turned
stainless steel KERN 347-141 ff,
optional: Wooden box



Beam bars, aluminium or
stainless steel



Block weights, lacquered cast iron/stainless steel glass bead blasted,
optional: Aluminium protected box, lined



Class M1 · Milligram weights, flat polygonal sheet

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,20	348-01	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-651	19,-
2 mg	0,20	348-02	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-652	19,-
5 mg	0,20	348-03	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-653	19,-
10 mg	0,25	348-04	5,-	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-654	19,-
20 mg	0,30	348-05	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-655	19,-
50 mg	0,40	348-06	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-656	19,-
100 mg	0,50	348-07	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-657	19,-
200 mg	0,60	348-08	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-658	19,-
500 mg	0,80	348-09	5,10	347-009-400	3,-	317-009-600	14,-	338-090-200	34,-	962-659	19,-

Class M1 · Individual weights, knob shape

Test weights material: stainless steel

Weight	Tol +/- mg	Individual weight		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	1,0	347-01	8,70	347-030-400	3,-	317-010-600	14,-	337-010-200	21,-	962-631	19,-
2 g	1,2	347-02	8,70	347-030-400	3,-	317-020-600	14,-	337-020-200	17,-	962-632	19,-
5 g	1,6	347-03	8,90	347-030-400	3,-	317-030-600	14,-	337-030-200	18,-	962-633	19,-
10 g	2,0	347-04	9,30	347-050-400	3,-	317-040-600	14,-	337-040-200	18,-	962-634	19,-
20 g	2,5	347-05	16,-	347-050-400	3,-	317-050-600	14,-	337-050-200	18,-	962-635	19,-
50 g	3,0	347-06	17,-	347-070-400	3,-	317-060-600	14,-	337-060-200	20,-	962-636	19,-
100 g	5,0	347-07	21,-	347-070-400	3,-	317-070-600	14,-	337-070-200	22,-	962-637	21,-
200 g	10	347-08	26,-	347-080-400	4,-	317-080-600	14,-	337-080-200	24,-	962-638	21,-
500 g	25	347-09	37,-	347-090-400	5,-	317-090-600	18,-	337-090-200	28,-	962-639	21,-
1 kg	50	347-11	59,-	347-110-400	6,-	317-110-600	26,-	337-110-200	46,-	962-641	21,-
2 kg	100	347-12	98,-	347-120-400	8,-	317-120-600	30,-	337-120-200	41,-	962-642	22,-
5 kg	250	347-13	210,-	347-130-400	17,-	317-130-600	53,-	337-130-200	87,-	962-643	22,-
10 kg	500	347-14	375,-	347-140-400	24,-	317-140-600	75,-	337-140-200	93,-	962-644	22,-

Class M1 · Block weights

Block weight material: lacquered cast iron, surface and edges machined or unmachined (ECO)

Weight	Tol +/- g	Block weight		ECO Block weight		Aluminium protected box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€
5 kg	0,25	346-86	85,-	346-76	61,-	346-060-600	71,-	962-643	22,-
10 kg	0,50	346-87	120,-	346-77	97,-	346-070-600	95,-	962-644	22,-
20 kg	1,00	346-88	180,-	346-78	175,-	346-080-600	125,-	962-645	27,-
50 kg	2,50	346-89	440,-	346-79	410,-	346-090-600	260,-	962-646	30,-

Class M1 · Block weights

Block weight material: stainless steel glass bead blasted

Weight	Tol +/- g	Block weight		Aluminium protected box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€
5 kg	0,25	346-06	445,-	346-060-600	71,-	962-643	22,-
10 kg	0,50	346-07	580,-	346-070-600	95,-	962-644	22,-
20 kg	1,00	346-08	810,-	346-080-600	125,-	962-645	27,-
50 kg	2,50	346-09	2050,-	346-090-600	260,-	962-646	30,-

Class M1 · Test weights, stackable

Test weight material: finely turned stainless steel

Weight	Tol +/- g	Test weight		Wooden box		DAkkS-accredited certificate		
		KERN	€	KERN	€	KERN	€	€
5 kg	0,25	347-131	540,-	337-131-200	380,-	962-643	22,-	
10 kg	0,5	347-141	620,-	337-141-200	360,-	962-644	22,-	
20 kg	1,0	347-151	790,-	337-151-200	385,-	962-645	27,-	
50 kg	2,5	347-161	2040,-	337-161-200	590,-	962-646	30,-	

Class M1 · Heavy duty weights, stackable

Heavy duty weight material: lacquered steel

Designed to be lifted with forklift trucks or cranes, delivery time is approx. 6-8 weeks

Dimensions: see internet on www.kern-sohn.com

Weight	Tol +/- g	Heavy duty weight		DAkkS-accredited certificate	
		KERN	€	KERN	€
100 kg	5	346-81	590,-	962-691	80,-
200 kg	10	346-82	1100,-	962-692	80,-
500 kg	25	346-83	2200,-	962-693	80,-
1000 kg	50	346-84	4100,-	962-694	174,-
2000 kg	100	346-85	7900,-	962-695	320,-

Class M1 · Weight sets, knob shape

Test weight material: Milligram weights stainless steel, individual weights finely turned stainless steel

Weight	Knob shape, in plastic case		Knob shape, in aluminium protected case		Knob shape, in wooden case		DAkkS-accredited certificate		
	KERN	€	KERN	€	KERN	€	KERN	€	€
1 mg - 500 mg	348-22	71,-	348-226	127,-	-	-	962-650	80,-	
1 mg - 50 g	343-024	255,-	343-026	245,-	343-02	230,-	962-601	135,-	
1 mg - 100 g	343-034	270,-	343-036	265,-	343-03	255,-	962-602	142,-	
1 mg - 200 g	343-044	320,-	343-046	315,-	343-04	315,-	962-603	160,-	
1 mg - 500 g	343-054	360,-	343-056	350,-	343-05	365,-	962-604	167,-	
1 mg - 1 kg	343-064	530,-	343-066	450,-	343-06	540,-	962-605	175,-	
1 mg - 2 kg	343-074	700,-	343-076	680,-	343-07	730,-	962-606	192,-	
1 mg - 5 kg	343-084	890,-	343-086	920,-	343-08	1040,-	962-607	205,-	
1 mg - 10 kg	-	-	343-096	1350,-	343-09	1400,-	962-608	215,-	
1 g - 50 g	344-024	176,-	344-026	172,-	344-02	153,-	962-615	52,-	
1 g - 100 g	344-034	205,-	344-036	193,-	344-03	184,-	962-616	63,-	
1 g - 200 g	344-044	245,-	344-046	245,-	344-04	240,-	962-617	77,-	
1 g - 500 g	344-054	285,-	344-056	285,-	344-05	300,-	962-618	86,-	
1 g - 1 kg	344-064	455,-	344-066	380,-	344-06	445,-	962-619	94,-	
1 g - 2 kg	344-074	630,-	344-076	610,-	344-07	630,-	962-620	113,-	
1 g - 5 kg	344-084	820,-	344-086	860,-	344-08	930,-	962-621	122,-	
1 g - 10 kg	-	-	344-096	1300,-	344-09	1310,-	962-622	132,-	

Tip:

We also offer a large range of heavy-duty weights in other materials, (e.g. stainless steel) and in other forms (e.g. discs) or individual weight containers, please ask for details.

Class M1 · Slotted weights

Slotted weight material: finely turned stainless steel

Weight	Tol +/- mg	Slotted weight	Plastic box, lined		DAkkS-accredited certificate		
			€	KERN	€	KERN	
		KERN					
1 g	1,0	347-015	28,-	347-030-400	3,-	962-631	19,-
2 g	1,2	347-025	28,-	347-030-400	3,-	962-632	19,-
5 g	1,6	347-035	30,-	347-030-400	3,-	962-633	19,-
10 g	2,0	347-045	33,-	347-030-400	3,-	962-634	19,-
20 g	2,5	347-055	35,-	347-080-400	4,-	962-635	19,-
50 g	3,0	347-065	37,-	347-080-400	4,-	962-636	19,-
100 g	5,0	347-075	43,-	347-090-400	5,-	962-637	21,-
200 g	10	347-085	53,-	347-090-400	5,-	962-638	21,-
500 g	25	347-095	72,-	347-110-400	6,-	962-639	21,-
1 kg	50	347-115	129,-	347-130-400	17,-	962-641	21,-
2 kg	100	347-125	159,-	347-130-400	17,-	962-642	22,-
5 kg	250	347-135	285,-	347-140-400	24,-	962-643	22,-
10 kg	500	347-145	425,-	347-140-400	24,-	962-644	22,-



Class M1 · Beam bars, for fixing slotted weights

Beam bars material: 10 g: aluminium, 100 g-1 kg: finely turned stainless steel

Own weight beam bar	Maximum total load ⁽¹⁾	Largest slotted weight possible	Material	Length	Beam bar	DAkkS-accredited certificate		
						€	KERN	
					KERN	€	KERN	
10 g	200 g	100 g	Aluminium	117,5	347-445-100*	56,-	962-634	19,-
100 g	2 kg	1 kg	Stainless steel	238	347-075-100**	77,-	962-637	21,-
500 g	20 kg	10 kg	Stainless steel	639	347-095-100***	127,-	962-639	21,-
1 kg	40 kg	10 kg	Stainless steel	1020	347-115-100***	160,-	962-641	21,-

⁽¹⁾ is exclusive of the own weight of the beam bar, e.g. the maximum possible total weight is calculated from "Maximum total load" + "own weight beam bar"

Class M1 · Slotted weights

Slotted weight material: finely turned stainless steel (only compatible with the 347-...7-100 series supporting bars)

Weight	Tol +/- mg	Slotted weight	DAkkS-accredited certificate		
			€	KERN	
		KERN	€	KERN	
5 g	1,6	347-037	30,-	962-633	19,-
10 g	2,0	347-047	31,-	962-634	19,-
20 g	2,5	347-057	34,-	962-635	19,-
50 g	3,0	347-067	39,-	962-636	19,-
100 g	5,0	347-077	67,-	962-637	21,-
200 g	10	347-087	75,-	962-638	21,-
500 g	25	347-097	85,-	962-639	21,-
1 kg	50	347-117	220,-	962-641	21,-
2 kg	100	347-127	230,-	962-642	22,-
5 kg	250	347-137	425,-	962-643	22,-
10 kg	500	347-147	550,-	962-644	22,-



Class M1 · Beam bars, for fixing slotted weights

Beam bars material: 10 g: aluminium, 100 g-1 kg: finely turned stainless steel (only compatible with the 347-...7 series slotted weights)

Own weight beam bar	Maximum total load ⁽¹⁾	Largest slotted weight possible	Material	Length	Tol +/- mg	Beam bar	DAkkS-accredited certificate		
							€	KERN	
						KERN	€	KERN	
1 kg	46 kg	10 kg	Stainless steel	300 mm	50	347-117-100	185,-	962-641	21,-
5 kg	95 kg	10 kg	Stainless steel	600 mm	250	347-137-100	450,-	962-643	22,-
10 kg	126 kg	10 kg	Stainless steel	800 mm	500	347-147-100	600,-	962-644	22,-

⁽¹⁾ is exclusive of the own weight of the beam bar, e.g. the maximum possible total weight is calculated from "Maximum total load" + "own weight beam bar"

Class M1 · Hook weights

Hook weight material: finely turned stainless steel

Weight	Tol +/- mg	Hook weight	Plastic box, lined		DAkkS-accredited certificate		
			€	KERN	€	KERN	
		KERN					
1 g	1,0	347-016	26,-	347-030-400	3,-	962-631	19,-
2 g	1,2	347-026	26,-	347-030-400	3,-	962-632	19,-
5 g	1,6	347-036	27,-	347-030-400	3,-	962-633	19,-
10 g	2,0	347-046	27,-	347-050-400	3,-	962-634	19,-
20 g	2,5	347-056	28,-	347-050-400	3,-	962-635	19,-
50 g	3,0	347-066	33,-	347-070-400	3,-	962-636	19,-
100 g	5,0	347-076	37,-	347-090-400	4,50	962-637	21,-
200 g	10,0	347-086	46,-	347-090-400	4,50	962-638	21,-
500 g	25,0	347-096	79,-	347-110-400	5,70	962-639	21,-
1 kg	50,0	347-116	98,-	347-120-400	7,50	962-641	21,-
2 kg	100,0	347-126	140,-	347-130-400	17,-	962-642	22,-
5 kg	250,0	347-136	250,-	347-140-400	24,-	962-643	22,-
10 kg	500,0	347-146	425,-	-	-	962-644	22,-



Newton weights (N):

All hook and slotted weights as well as beam bars are available **with N adjustment according to M1 tolerances**, additional price € 8,-/pc. We need to know the exact location of use of the newton weights (street, postcode, city and country).

Calibration certificates with accreditation symbol for N weights: identical to DAkkS prices for individual weights **M1**, additional price € 8,-

TEST WEIGHTS AND BOXES

CLASSES M2 · M3



Individual weights/Weight sets,
knob shape, stainless steel



Individual weights/Weight sets,
knob shape, lacquered cast iron



Block weights,
lacquered cast iron



Plastic box, lined,
for individual weights



Aluminium protected box,
lined, for individual weights



Wooden box, not lined, for
individual weights ≤ 500 g,
❗ not appropriate for
cast iron weights



Wooden box, not lined, for
individual weights ≥ 1 kg,
❗ not appropriate for
cast iron weights



Aluminium protected case,
lined, for block weights



Aluminium protected case, lined, for weight
sets knob shape, finely turned stainless steel,
❗ not appropriate for cast iron weights



Wooden case, for weight sets, knob shape,
finely turned stainless steel



Wooden block, for weight sets,
knob shape, lacquered cast iron

Class M2 · Individual weights, knob shape

Test weight material: finely turned stainless steel

Weight	Tol +/- mg	Individual weight, knob shape	Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate		
			€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 g	3	357-01	8,70	347-030-400	3,-	317-010-600	14,-	337-010-200	21,-	962-631	19,-
2 g	4	357-02	8,70	347-030-400	3,-	317-020-600	14,-	337-020-200	17,-	962-632	19,-
5 g	5	357-03	8,90	347-030-400	3,-	317-030-600	14,-	337-030-200	18,-	962-633	19,-
10 g	6	357-04	9,30	347-050-400	3,-	317-040-600	14,-	337-040-200	18,-	962-634	19,-
20 g	8	357-05	16,-	347-050-400	3,-	317-050-600	14,-	337-050-200	18,-	962-635	19,-
50 g	10	357-06	17,-	347-070-400	3,-	317-060-600	14,-	337-060-200	20,-	962-636	19,-
100 g	16	357-07	21,-	347-070-400	3,-	317-070-600	14,-	337-070-200	22,-	962-637	21,-
200 g	30	357-08	26,-	347-080-400	4,-	317-080-600	14,-	337-080-200	24,-	962-638	21,-
500 g	80	357-09	36,-	347-090-400	5,-	317-090-600	18,-	337-090-200	28,-	962-639	21,-
1 kg	160	357-11	59,-	347-110-400	6,-	317-110-600	26,-	337-110-200	46,-	962-641	21,-
2 kg	300	357-12	94,-	347-120-400	8,-	317-120-600	30,-	337-120-200	41,-	962-642	22,-
5 kg	800	357-13	198,-	347-130-400	17,-	317-130-600	53,-	337-130-200	87,-	962-643	22,-
10 kg	1600	357-14	330,-	347-140-400	24,-	317-140-600	75,-	337-140-200	93,-	962-644	22,-

Class M2 · Block weights

Block weight material: lacquered cast iron, surface and edges machined or unmachined (ECO)

Weight	Tol +/- g	Block weight	ECO block weight		Aluminium protected box		DAkkS-accredited certificate		
			€	KERN	€	KERN 	€	KERN	€
5 kg	0,8	356-86	85,-	356-76	57,-	346-060-600	71,-	962-643	22,-
10 kg	1,6	356-87	120,-	356-77	91,-	346-070-600	95,-	962-644	22,-
20 kg	3,0	356-88	180,-	356-78	164,-	346-080-600	125,-	962-645	27,-
50 kg	8,0	356-89	440,-	356-79	385,-	346-090-600	260,-	962-646	30,-

Class M2 · Weight sets, knob shape

Test weight material: finely turned stainless steel

Weight	Knob shape, in aluminium protected case		Knob shape, in wooden case		DAkkS-accredited certificate	
	€	KERN 	€	KERN 	€	KERN
1 g – 50 g	172,-	354-026	153,-	354-02	52,-	962-615
1 g – 100 g	193,-	354-036	184,-	354-03	63,-	962-616
1 g – 200 g	245,-	354-046	240,-	354-04	77,-	962-617
1 g – 500 g	285,-	354-056	300,-	354-05	86,-	962-618
1 g – 1 kg	380,-	354-066	440,-	354-06	94,-	962-619
1 g – 2 kg	600,-	354-076	630,-	354-07	113,-	962-620
1 g – 5 kg	820,-	354-086	910,-	354-08	122,-	962-621
1 g – 10 kg	1210,-	354-096	1290,-	354-09	132,-	962-622

Class M3 · Individual weights, knob shape

Test weight material: finely turned stainless steel

Weight	Tol +/- mg	Individual weight, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS-accredited certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	10	367-01	8,-	347-030-400	3,-	317-010-600	14,-	337-010-200	21,-	962-631	19,-
2 g	12	367-02	7,70	347-030-400	3,-	317-020-600	14,-	337-020-200	17,-	962-632	19,-
5 g	16	367-03	8,-	347-030-400	3,-	317-030-600	14,-	337-030-200	18,-	962-633	19,-
10 g	20	367-04	8,50	347-050-400	3,-	317-040-600	14,-	337-040-200	18,-	962-634	19,-
20 g	25	367-05	14,-	347-050-400	3,-	317-050-600	14,-	337-050-200	18,-	962-635	19,-
50 g	30	367-06	15,-	347-070-400	3,-	317-060-600	14,-	337-060-200	20,-	962-636	19,-
100 g	50	367-07	18,-	347-070-400	3,-	317-070-600	14,-	337-070-200	22,-	962-637	21,-
200 g	100	367-08	24,-	347-080-400	4,-	317-080-600	14,-	337-080-200	24,-	962-638	21,-
500 g	250	367-09	34,-	347-090-400	5,-	317-090-600	18,-	337-090-200	28,-	962-639	21,-
1 kg	500	367-11	57,-	347-110-400	6,-	317-110-600	26,-	337-110-200	46,-	962-641	21,-
2 kg	1000	367-12	92,-	347-120-400	8,-	317-120-600	30,-	337-120-200	41,-	962-642	22,-

Class M3 · Individual weights, knob and cylindrical shape

Test weight material: lacquered cast iron

Weight	Tol +/- g	Individual weight, knob and cylindrical shape		DAkkS-accredited certificate	
		KERN	€	KERN	€
100 g*	0,05	366-91	15,-	962-637	21,-
200 g*	0,10	366-92	16,-	962-638	21,-
500 g**	0,25	366-93	21,-	962-639	21,-
1 kg**	0,50	366-94	25,-	962-641	21,-
2 kg**	1,0	366-95	34,-	962-642	22,-
5 kg**	2,5	366-96	68,-	962-643	22,-
10 kg**	5,0	366-97	103,-	962-644	22,-



Class M3 · Block weights

Block weight material: lacquered cast iron, surface and edges machined or unmachined (ECO)

Weight	Tol +/- g	Block weight	ECO block weight		Aluminium protected box		DAkkS-accredited certificate		
			€	KERN	€	KERN	€	KERN	
5 kg	2,5	366-86	85,-	366-76	55,-	346-060-600	71,-	962-643	22,-
10 kg	5,0	366-87	120,-	366-77	88,-	346-070-600	95,-	962-644	22,-
20 kg	10	366-88	180,-	366-78	158,-	346-080-600	125,-	962-645	27,-
50 kg	25	366-89	440,-	366-79	370,-	346-090-600	260,-	962-646	30,-

Class M3 · Weight sets, knob and cylindrical shape

Test weight material: ≤ 50 g stainless steel, ≥ 100 g lacquered cast iron

Weight	Knob and cylindrical shape, in wooden block	DAkkS-accredited certificate		
		KERN	€	
1 g – 1 kg	362-96	265,-	962-619	94,-
1 g – 2 kg	362-97	370,-	962-620	113,-
1 g – 5 kg	362-98	555,-	962-621	122,-
1 g – 10 kg	362-99	650,-	962-622	132,-



Weight set
1 g – 10 kg

Tweezers, weight grips, gloves, dusting brush



Tweezers

to be able to safely grip small test weights

For class	For weight	Length	Version	KERN	€
E1 - M3	1 mg - 200 g	105 mm	1 Stainless steel with silicone-coated tips	315-243	18,-
E1 - M3	500 g - 2 kg	250 mm	1 Stainless steel with silicone-coated tips	315-245	28,-
E1 - M3	≤ 5 g	130 mm	2 Stainless steel, curved, high-quality plastic tips	315-246*	4,10
E1 - M3	≤ 5 g	136 mm	3 Stainless steel, straight, high quality plastic tips	315-247	4,10
E1 - M3	≤ 200 g	225 mm	4 Stainless steel, straight, high-quality plastic tips, with a special shape for gripping weights of various shapes and sizes	315-248*	36,-
F2 - M3	1 mg - 200 g	100 mm	5 Stainless steel	335-240*	16,-
E1 - M3	1 mg - 200 g	100 mm	6 Plastic	315-242	5,-

! * ONLY WHILE STOCKS LAST

Weight grip

plastic coated

For class	For knob shaped weights	KERN	€
E1 - M3	2 kg	315-273	32,-
E1 - M3	5 kg	315-274	36,-
E1 - M3	10 kg	315-275	41,-
E1 - M3	20 kg	315-276	66,-



! not appropriate for cast iron weights



Gloves

Cotton, 1 pair. Help to protect the test weights when being used daily, from grease from fingers, damp etc. Suitable for test weights up to 2 kg.

KERN	€
317-280	6,-

Gloves

Leather/cotton, 1 pair. Help to protect the test weights when being used daily, from grease from fingers, damp etc. Ideal for test weights from 2 kg.

KERN	€
317-290	6,60

Premium gloves

Nylon, 1 pair. Particularly elastic, one size fits all, with special fingertip coating to ensure a safe grip. Helps to protect the test weights in everyday use from grease from fingers, damp etc. Ideal for all test weights.

KERN	€
317-281	9,-



Dusting brush

to clean the weights

KERN	€
318-270	5,-

Bellows

for cleaning weights

KERN	€
318-271	9,-

Microfibre cloth

for cleaning weights

KERN	€
318-272	6,50

Boxes for individual weights



For weights ≤ 200 g, OIML class E1 - E2:
Box with lid

For weights ≥ 500 g, OIML class E1 - M3:
Box with screw cap

Box material: Plastic, lined, suitable for single weights, KERN No. 307, 316, 317, 327, 337, 347

Box material: Plastic, not lined, suitable for single weights, KERN No. 307, 316, 317, 327, 337, 347

Plastic box, lined
for single weights E1 - E2

Plastic box, not lined
for single weights E1 - M3

For weights	KERN	€
1 - 500 mg (single)	347-009-400	3,-
1 - 2 g (single)	317-020-400	5,-
5 g	317-030-400	5,-
10 g	317-040-400	5,-
20 g	317-050-400	5,-
50 g	317-060-400	9,-
100 g	317-070-400	10,-
200 g	317-080-400	10,-
500 g	317-090-400	11,-
1 kg	317-110-400	10,-
2 kg	317-120-400	13,-
5 kg	317-130-400	27,-
10 kg	317-140-400	25,-

For weights	KERN	€
1 - 500 mg (single)	347-009-400	3,-
1 g - 5 g (single)	347-030-400	3,-
10 g - 20 g (single)	347-050-400	3,-
50 g - 100 g (single)	347-070-400	3,-
200 g	347-080-400	4,-
500 g	347-090-400	5,-
1 kg	347-110-400	6,-
2 kg	347-120-400	8,-
5 kg	347-130-400	17,-
10 kg	347-140-400	24,-



For weights ≤ 500 g, OIML class E1 - F1

For weights ≥ 1 kg, OIML class E1 - F1

For weights ≤ 500 g, OIML class F2 - M3

For weights ≥ 1 kg, OIML class F2 - M3

For test weights ≥ 10 kg, OIML class F1 - M1

Box material: Wood, lined, suitable for single weights, KERN No. 307, 316, 317, 326, 327

Box material: Wood, not lined, suitable for single weights, KERN No. 337, 347, 357, 367
 not suitable for cast iron weights

Box material: Wood, lined/not lined, suitable for single weights, KERN No. 327, 337, 347
 not suitable for cast iron weights

Wooden box, lined
for single weights E1 - F1

Wooden box, not lined
for single weights F2 - M3

Wooden box, not lined
for test weights F1 - M1

For weights	KERN	€
-	-	-
1 g	317-010-100	32,-
2 g	317-020-100	30,-
5 g	317-030-100	32,-
10 g	317-040-100	30,-
20 g	317-050-100	31,-
50 g	317-060-100	35,-
100 g	317-070-100	35,-
200 g	317-080-100	39,-
500 g	317-090-100	46,-
1 kg	317-110-100	61,-
2 kg	317-120-100	68,-
5 kg	317-130-100	101,-
10 kg	317-140-100	123,-
20 kg	317-150-100	580,-
50 kg	317-160-100	710,-

For weights	KERN	€
1 - 500 mg (single)	338-090-200	34,-
1 g	337-010-200	21,-
2 g	337-020-200	17,-
5 g	337-030-200	18,-
10 g	337-040-200	18,-
20 g	337-050-200	18,-
50 g	337-060-200	20,-
100 g	337-070-200	22,-
200 g	337-080-200	24,-
500 g	337-090-200	28,-
1 kg	337-110-200	46,-
2 kg	337-120-200	41,-
5 kg	337-130-200	87,-
10 kg	337-140-200	93,-
20 kg	337-150-200	385,-
50 kg	337-160-200	590,-

For weights	KERN	€
5 kg	337-131-200	380,-
10 kg	337-141-200	360,-
20 kg	337-151-200	385,-
50 kg	337-161-200	590,-

Wooden box, lined
for test weights F1

For weights	KERN	€
5 kg	337-131-100	485,-
10 kg	337-141-100	395,-
20 kg	337-151-100	495,-
50 kg	337-161-100	600,-

Boxes for individual weights



For weights ≤ 5 kg, OIML class E1 – M3

Box material: Aluminium protected, lined, suitable for mg and single weights, KERN No. 307, 308, 316, 317, 318, 326, 327, 328, 337, 338, 347, 348, 357, 367

■ not suitable for cast iron weights

Aluminium protected box, lined

for individual weights, knob and compact shape, class E1 – M3

For weights	KERN	Icon	€
1 - 500 mg (single)	317-009-600		14,-
1 g	317-010-600		14,-
2 g	317-020-600		14,-
5 g	317-030-600		14,-
10 g	317-040-600		14,-
20 g	317-050-600		14,-
50 g	317-060-600		14,-
100 g	317-070-600		14,-
200 g	317-080-600		14,-
500 g	317-090-600		18,-
1 kg	317-110-600		26,-
2 kg	317-120-600		30,-
5 kg	317-130-600		53,-



For weights ≤ 10 kg, OIML class E1 – M3

Box material: Aluminium protected, lined, suitable for single weights, KERN No. 307, 316, 317, 326, 327, 337, 347, 357, 367

■ not suitable for cast iron weights

Aluminium protected box, lined

for individual weights, knob and compact shape, class E1 – M3

For weights	KERN	Icon	€
10 kg	317-140-600		75,-
20 kg	317-150-600		105,-
50 kg	317-160-600		260,-



For block weight ≥ 5 kg, OIML class F1 – M3

Box material: Aluminium protected, lined, suitable for block weights, KERN No. 326, 336, 346, 356, 366

Aluminium protected box, lined

for individual weights F1 – M3

For weights	KERN	Icon	€
5 kg	346-060-600		71,-
10 kg	346-070-600		95,-
20 kg	346-080-600		125,-
50 kg	346-090-600		260,-

Clean room boxes



For weights ≤ 500 g, OIML class E1 – M1
For weights 1 g – 2 kg, OIML class E1 – M1

Box material: POM (Polyoxymethylen), not lined, suitable for single weights, KERN No. 307, 316, 317, 327, 337, 347

Polyoxymethylene boxes POM, unlined

for single weights E1 – M1

For weights	KERN	Icon	€
1 - 500 mg (single)	317-009-700		91,-
1 g	317-010-700		91,-
2 g	317-020-700		91,-
5 g	317-030-700		91,-
10 g	317-040-700		91,-
20 g	317-050-700		91,-
50 g	317-060-700		91,-
100 g	317-070-700		91,-
200 g	317-080-700		101,-
500 g	317-090-700		139,-
1 kg	317-110-700		185,-
2 kg	317-120-700		215,-



For weights 10 kg - 20 kg, OIML class E1 – M1
*Box with handle

Box material: POM (Polyoxymethylen), not lined, suitable for single weights, KERN No. 307, 316, 317, 327, 337, 347

Polyoxymethylene boxes POM, unlined

for single weights E1 – M1

For weights	KERN	Icon	€
5 kg*	317-130-700		495,-
10 kg*	317-140-700		670,-
20 kg*	317-150-700		810,-

Carrying cases/boxes for individual weight sets

Individual weight sets

Configure your weight set according to your requirements.

KERN will manufacture a custom-fit wooden case or plastic case for you – drilled and padded according to your specifications.

Please note: These universal cases are custom-made and therefore cannot be returned. The largest individual weight which will fit is given in the table.

Sample order:

Your individual weight set (class F1):

1 × 50 g, 2 × 100 g, 1 × 500 g, 2 × 1 kg, 1 × 2 kg.

The correct individual box is **KERN No. 313-080-400** (plastic) or **KERN No. 315-070-100** (wood, lined)



Plastic case

for individual weight sets classes E1 – M3, not appropriate for cast iron weights

Largest possible weight	KERN		€
≤ 500 g	313-050-400		166,-
≤ 5 kg	313-080-400		320,-

Wooden case

lined, for individual weight sets classes E1 – F1
* with side handles

Largest possible weight	KERN		€
≤ 200 g	315-040-100		235,-
≤ 1 kg	315-060-100		340,-
≤ 2 kg	315-070-100		385,-
≤ 5 kg*	315-080-100		520,-
≤ 10 kg*	315-090-100		550,-

Wooden case not lined, for individual weight set classes F2 – M3, not appropriate for cast iron weights * with side handles

Largest possible weight	KERN		€
≤ 200 g	335-040-200		148,-
≤ 500 g	335-050-200		148,-
≤ 1 kg	335-060-200		180,-
≤ 2 kg	335-070-200		187,-
≤ 5 kg*	335-080-200		280,-
≤ 10 kg*	335-090-200		310,-

Carrying cases for standard weight sets



Fig. shows 313-010-600

Plastic case for weight sets

with standard denomination classes E1 – M3, not appropriate for cast iron weights

Largest possible weight	KERN		€
≤ 500 g	313-052-400		110,-
≤ 5 kg	313-082-400		215,-

Aluminium protected case

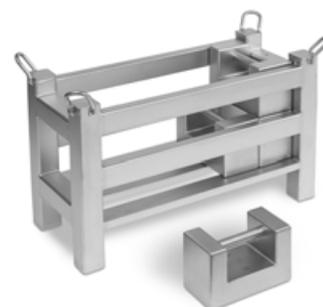
for weight sets with standard denomination classes E1 – M2
*no handle **1 front handle ***2 side handles

For weights	For class	KERN		€
1 mg - 500 mg	E1 - M1	313-010-600*		70,-
1 mg - 50 g	E1 - M1	313-020-600*		94,-
1 mg - 100 g	E1 - M1	313-030-600*		103,-
1 mg - 200 g	E1 - M1	313-040-600*		109,-
1 mg - 500 g	E1 - M1	313-050-600*		132,-
1 mg - 1 kg	E1 - M1	313-060-600*		161,-
1 mg - 2 kg	E1 - M1	313-070-600**		189,-
1 mg - 5 kg	E1 - M1	313-080-600***		250,-
1 mg - 10 kg	E1 - M1	313-090-600***		330,-
1 g - 50 g	E1 - M2	314-020-600*		89,-
1 g - 100 g	E1 - M2	314-030-600*		98,-
1 g - 200 g	E1 - M2	314-040-600*		104,-
1 g - 500 g	E1 - M2	314-050-600*		127,-
1 g - 1 kg	E1 - M2	314-060-600*		156,-
1 g - 2 kg	E1 - M2	314-070-600*		184,-
1 g - 5 kg	E1 - M2	314-080-600***		245,-
1 g - 10 kg	E1 - M2	314-090-600***		330,-

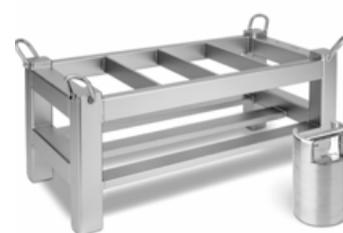
Weight containers for rectangular weights or other test weights, stainless steel glass bead blasted, adjusted to OIML class M1

Preconfigured weight containers for testing high-load floor scales, pallet scales, pallet truck scales, crane scales, etc. This can also be used for storing the weights. This means the weight container and the weights can be placed on the balance in one go, saving you time and money. The weight container is adjusted to OIML accuracy class M1. Other OIML accuracy classes are also available, please ask.

Weight of the weight container, OIML class M1	Tol +/- g	Possible equipment, rectangular weights, OIML class M1	Maximum total weight (weight container incl. weights)	Price (weight container excluding weights)	
				KERN	€
20 kg	1,0	5 × 20 kg	120 kg	346-022-005	1610,-
40 kg	1,5	8 × 20 kg	200 kg	346-042-008	2070,-
50 kg	2,5	10 × 20 kg	250 kg	346-052-010	2070,-
50 kg	2,5	4 × 50 kg	250 kg	346-055-004	2070,-
50 kg	2,5	9 × 50 kg	500 kg	346-055-009	2070,-
60 kg	3,0	8 × 50 kg and 2 × 20 kg	500 kg	346-065-009	2250,-



Weight of the weight container, OIML class M1	Tol +/- g	Possible equipment, test weights, OIML class M1	Maximum total weight (weight container incl. weights)	Price (weight container excluding weights)	
				KERN	€
20 kg	1,0	max. 10 × 10 kg or 5 × 20 kg	120 kg	347-022-005	1610,-
40 kg	2,0	max. 16 × 10 kg or 8 × 20 kg	200 kg	347-042-008	1890,-
50 kg	2,5	max. 20 × 10 kg or 10 × 20 kg	250 kg	347-052-010	2070,-
60 kg	3,0	max. 22 × 20 kg	500 kg	347-062-022	2250,-



Individual weight containers for rectangular weights or other test weights, calibrated to OIML class M1

Individual weight carriers for testing high capacity floor scales, pallet scales, pallet truck scales, crane scales, etc. This can also be used for storing the weights. This means the weight container and the weights can be placed on the scale in one go, saving time and money.

The weight container can be calibrated to OIML accuracy classes M1 – M3. On request, KERN will make you a “tailor-made” weight carrier to your specifications.

Example:

3 block weights	each 50 kg, class M1	=	150 kg
1 weight container	each 50 kg, class M1	=	50 kg
Total		=	200 kg

Weight of the weight container, OIML class M1	Price	
	KERN	€
Individual weight container for rectangular weights	346-000-000	2000,-
Individual weight container for test weights	347-000-000	2000,-



Example illustration