

# Test weights

## Weights yesterday and today

Weights have always been used to carry out weighing procedures. This original purpose has almost disappeared. Today, weights are used almost exclusively for adjusting and testing = calibration of electronic balances. We therefore call them "test weights" as this is their purpose of use.

### 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 OIML norm 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 ► **DAkKS-calibration certificate** or verification certificate (in connection with a box) for all KERN test weights. For further details, see the calibration service section on page 202.







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

► **See the glossary on page 215–217**

Test weights: classes of accuracy E, F, M and their general relation to the types of balances:

- 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 DAkKS calibration certificate 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 DAkKS delivery times & shipping type	Total weight $\leq 30$ kg (gross weight, incl. packaging)	Total weight $> 30$ kg (gross weight, incl. packaging)
DAkKS standard service Class E2 – M3	 4 DAYS	 4 DAYS
DAkKS standard service Class E1, 1 mg – 500 mg and recalibration 1 g – 10 kg with a known volume	 10 DAYS	 10 DAYS
Class E1, $\geq 1$ g, incl. volume determination (new weights)	 15 DAYS	 15 DAYS
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 balance, force-measuring device, etc.. 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 DAkkS calibration certificate 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 accuracy 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.



### 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 or with impact numbers. 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.

## PREMIUM<sup>+</sup> TEST WEIGHTS

**Note:** Our highly-accurate OIML test weights are also available as **PREMIUM<sup>+</sup> 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<sup>+</sup> 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<sup>+</sup> service** please see [www.kern-lab.com/premium+](http://www.kern-lab.com/premium+) or look at the weight you want in our online shop at [www.kern-sohn.com](http://www.kern-sohn.com)





## KERN SAFETY SETS

### All the security you need!

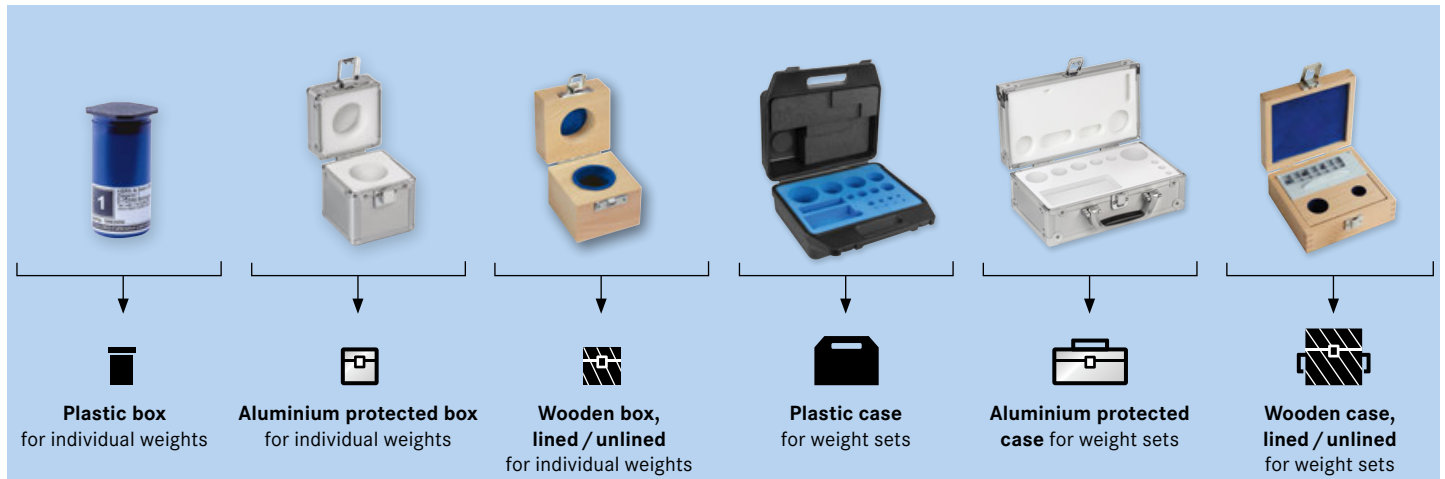
“KERN Safety Sets” which have been specially developed, put together and contain the right test weights to test and monitor your balance. They each consist of a test weight for checking the sensitivity, i.e. the correct adjustment of your scale, and a small test weight for checking at the lower end of the weighing range, the so-called minimum sample weight. As an option, the “KERN Safety Set” has space for another test weight, for testing your balance at a weight which is relevant for you.

Useful accessories which have been selected to suit that particular “KERN Safety Set”, such as, for example, special gloves, tweezers, weight grips, brushes, etc. will assist you in handling your test weights properly. Stored in the practical protective case next to your balance, you can check and ensure the high precision of your balance at any time.

Just ask our test weight product specialist, he will be happy to recommend the right “KERN Safety Set” for your balance. You can also find the matching “KERN Safety Set” for each model on the Internet at [www.kern-sohn.com](http://www.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. If there are no legal or normative specifications, then you have the choice between plastic, aluminium protected or wood. The available weight cases are shown as a symbol in the test weight tables on the following pages. In this way you have all the materials, versions, sizes and prices at a glance, listed in a concise way.

## It's so easy to order your suitable test weight

1. 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 (see page 179/180).
2. 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.
3. To protect your high-quality test equipment, we offer you cases in various designs. From low-priced plastic weight cases to aluminium protected weight cases to classic, high-quality wooden weight cases.
4. A DAkkS calibration certificate – 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.

Weight	Tol +/- mg	Individual weights, compact shape		Individual weights, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	0,03	316-01	36,-	317-01	52,-	317-020-400	4,-	317-010-600	14,-	317-010-100	26,-	962-331	30,-
2 g	0,04	316-02	36,-	317-02	53,-	317-020-400	4,-	317-020-600	14,-	317-020-100	26,-	962-332	30,-
5 g	0,05	316-03	37,-	317-03	56,-	317-030-400	4,-	317-030-600	14,-	317-030-100	26,-	962-333	30,-
10 g	0,06	316-04	38,-	317-04	60,-	317-040-400	4,-	317-040-600	14,-				30,-
20 g	0,08	316-05	43,-	317-05	68,-	317-050-400	4,-						
		316-06	46,-	317-06	73,-								

Weight	Knob shape in plastic case		Knob shape in aluminium protected case		Knob shape in wooden case		DAkkS certificate	
	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	338-22	143,-	338-226	183,-			962-450	110,-
1 mg - 50 g	333-024	345,-	333-026	365,-	333-02	370,-	962-401	184,-
1 mg - 100 g	333-034	385,-	333-036	400,-	333-03	405,-	962-402	196,-
1 mg - 200 g	333-044	450,-	333-046	465,-	333-04	470,-	962-403	220,-
1 mg - 500 g	333-054	510,-	333-056	530,-	333-05	540,-	962-404	230,-
1 mg - 1 kg	333-064	630,-	333-066	650,-	333-06	660,-	962-405	240,-
1 mg - 2 kg	333-074	890,-	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 better.**

Nominal 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 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 and table at page 180.

### 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, see page 186.

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

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

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



Test weight →	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
Features ↓					
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)	no	none	Nominal value, etched	Nominal value, etched	F2: Class + nominal value, etched; M1: Class + nominal value, adopted
Verification possible	yes (E2)	yes	yes	no	yes (M1)
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"> <li>• High-quality test weight for analytical and precision balances</li> <li>• Highly-refined surface</li> <li>• Ideal shape of the top for good grip</li> </ul>	<ul style="list-style-type: none"> <li>• Affordable test weight for analytical and precision balances</li> <li>• Highly refined surface</li> </ul>	<ul style="list-style-type: none"> <li>• Ideal, high-quality test weight for precision balances</li> <li>• No visible adjustment chamber</li> <li>• High long-term stability</li> <li>• Ideal shape of the top for good grip</li> </ul>	<ul style="list-style-type: none"> <li>• Affordable test weight for analytical and precision balances</li> <li>• Highly refined surface</li> <li>• Optimum shape of the top for good grip</li> </ul>	<ul style="list-style-type: none"> <li>• Ideal test weight for commercial and industrial scales</li> <li>• Ideal shape of the top for good grip</li> </ul>

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	1	2	2	5	10	
Test weight set ↓	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	g	g	g	g	g	g	g	g	g	g	g
1 mg-500 mg	Total weight												1,11 g										
1 mg-50 g													111,11 g										
1 mg-100 g													211,11 g										
1 mg-200 g													611,11 g										
1 mg-500 g													1.111,11 g										
1 mg-1 kg													2.111,11 g										
1 mg-2 kg													6.111,11 g										
1 mg-5 kg													11.111,11 g										
1 mg-10 kg													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 recommendation 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 ► **DAkkS calibration certificate** 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/m<sup>3</sup>, air density is 1.2 kg/m<sup>3</sup> and measuring temperature is 20 °C.

**KERN test weights:** Unless otherwise specified, they conform to OIML R111:2004 in every detail.

► *See the glossary, page 215-217*

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  
 $\leq 50$  g

Plastic box, lined,  
for individual weights  
 $\geq 100$  g

Wooden box, lined,  
for individual weights  $\leq 500$  g

Wooden box, lined,  
for individual weights  $\geq 1$  kg



Milligram weight  
set in plastic box  
(308-42)

Milligram weight  
set in aluminium  
protected box,  
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, stainless steel**

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, wire shape		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,003	308-31	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-251	63,-
2 mg	0,003	308-32	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-252	63,-
5 mg	0,003	308-33	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-253	63,-
10 mg	0,003	308-34	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-254	63,-
20 mg	0,003	308-35	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-255	63,-
50 mg	0,004	308-36	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-256	63,-
100 mg	0,005	308-37	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-257	63,-
200 mg	0,006	308-38	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-258	63,-
500 mg	0,008	308-39	65,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-259	63,-

**Class E1 · Individual weights, knob shape, stainless steel polished**

Test weight material: stainless steel polished

Weight	Tol +/- mg	Individual weight, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate Initial calibration*		DAkkS certificate Recalibration	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	0,010	307-01	87,-	317-020-400	4,-	317-010-600	14,-	317-010-100	26,-	963-231	230,-	962-231 R	63,-
2 g	0,012	307-02	95,-	317-020-400	4,-	317-020-600	14,-	317-020-100	26,-	963-232	230,-	962-232 R	63,-
5 g	0,016	307-03	98,-	317-030-400	4,-	317-030-600	14,-	317-030-100	26,-	963-233	230,-	962-233 R	63,-
10 g	0,020	307-04	106,-	317-040-400	4,-	317-040-600	14,-	317-040-100	26,-	963-234	230,-	962-234 R	63,-
20 g	0,025	307-05	113,-	317-050-400	4,-	317-050-600	14,-	317-050-100	26,-	963-335	230,-	962-235 R	63,-
50 g	0,030	307-06	135,-	317-060-400	5,20	317-060-600	14,-	317-060-100	28,-	963-236	230,-	962-236 R	63,-
100 g	0,050	307-07	170,-	317-070-400	5,20	317-070-600	14,-	317-070-100	30,-	963-237	230,-	962-237 R	63,-
200 g	0,100	307-08	210,-	317-080-400	6,-	317-080-600	14,-	317-080-100	30,-	963-238	230,-	962-238 R	63,-
500 g	0,250	307-09	280,-	317-090-400	7,40	317-090-600	15,-	317-090-100	32,-	963-239	230,-	962-239 R	63,-
1 kg	0,500	307-11	450,-	317-110-400	9,-	317-110-600	22,-	317-110-100	52,-	963-241	230,-	962-241 R	63,-
2 kg	1,000	307-12	630,-	317-120-400	12,-	317-120-600	26,-	317-120-100	59,-	963-242	510,-	962-242 R	77,-
5 kg	2,500	307-13	1060,-	317-130-400	23,-	317-130-600	45,-	317-130-100	86,-	963-243	510,-	962-243 R	77,-
10 kg	5,000	307-14	1620,-	317-140-400	23,-	317-140-600	63,-	317-140-100	104,-	963-244	510,-	962-244 R	77,-
20 kg	10,000	307-15	4200,-	-	-	317-150-600	110,-	317-150-100	580,-	963-245	1280,-	962-245 R	650,-
50 kg	25,000	307-16	8050,-	-	-	317-160-600	240,-	317-160-100	690,-	963-246	1500,-	962-246 R	730,-

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

**Class E1 · Weight sets, knob shape, stainless steel polished**

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 certificate Initial calibration*		DAkkS certificate Recalibration	
	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	308-42	900,-	308-426	870,-			962-250	405,-	962-250 R	405,-
1 mg - 50 g	303-024	1550,-	303-026	1570,-	303-02	1600,-	963-201	1300,-	962-201 R	670,-
1 mg - 100 g	303-034	1730,-	303-036	1750,-	303-03	1780,-	963-202	1420,-	962-202 R	690,-
1 mg - 200 g	303-044	2140,-	303-046	2160,-	303-04	2190,-	963-203	1640,-	962-203 R	760,-
1 mg - 500 g	303-054	2470,-	303-056	2490,-	303-05	2520,-	963-204	1740,-	962-204 R	790,-
1 mg - 1 kg	303-064	2910,-	303-066	2930,-	303-06	2990,-	963-205	1850,-	962-205 R	850,-
1 mg - 2 kg	303-074	4210,-	303-076	4230,-	303-07	4290,-	963-206	2410,-	962-206 R	900,-
1 mg - 5 kg	303-084	5370,-	303-086	5390,-	303-08	5490,-	963-207	2700,-	962-207 R	940,-
1 mg - 10 kg	-	-	303-096	7150,-	303-09	7250,-	963-208	3070,-	962-208 R	970,-
1 g - 50 g	304-024	900,-	304-026	920,-	304-02	950,-	963-215	940,-	962-215 R	295,-
1 g - 100 g	304-034	1070,-	304-036	1090,-	304-03	1120,-	963-216	1030,-	962-216 R	320,-
1 g - 200 g	304-044	1490,-	304-046	1510,-	304-04	1540,-	963-217	1250,-	962-217 R	385,-
1 g - 500 g	304-054	1800,-	304-056	1820,-	304-05	1850,-	963-218	1360,-	962-218 R	425,-
1 g - 1 kg	304-064	2210,-	304-066	2230,-	304-06	2290,-	963-219	1490,-	962-219 R	450,-
1 g - 2 kg	304-074	3570,-	304-076	3590,-	304-07	3650,-	963-220	2090,-	962-220 R	520,-
1 g - 5 kg	304-084	4670,-	304-086	4690,-	304-08	4790,-	963-221	2450,-	962-221 R	540,-
1 g - 10 kg	-	-	304-096	6490,-	304-09	6590,-	963-222	2850,-	962-222 R	580,-



# Test weights and boxes

## Class E2



Milligram weights, flat polygonal sheet



Individual weights, compact shape



Individual weights, knob shape



Plastic box, lined, for individual weights  $\leq 50$  g



Plastic box, lined, for individual weights  $\geq 100$  g



Aluminium protected box, lined, for individual weights



Wooden box, lined, for individual weights  $\leq 500$  g



Wooden box, lined, for individual weights  $\geq 1$  kg



Milligram weight set in plastic box (318-22)



Milligram weight set in aluminium protected box, 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, flat polygonal sheet, stainless steel**

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 mg	0,006	318-01	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-351	30,-
2 mg	0,006	318-02	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-352	30,-
5 mg	0,006	318-03	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-353	30,-
10 mg	0,008	318-04	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-354	30,-
20 mg	0,010	318-05	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-355	30,-
50 mg	0,012	318-06	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-356	30,-
100 mg	0,016	318-07	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-357	30,-
200 mg	0,020	318-08	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-358	30,-
500 mg	0,025	318-09	24,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-359	30,-





**Class E2 · Individual weights, compact shape or knob shape, polished stainless steel**

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 certificate	
		KERN	€	KERN	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 g	0,03	316-01	36,-	317-01	52,-	317-020-400	4,-	317-010-600	14,-	317-010-100	26,-	962-331	30,-
2 g	0,04	316-02	36,-	317-02	53,-	317-020-400	4,-	317-020-600	14,-	317-020-100	26,-	962-332	30,-
5 g	0,05	316-03	37,-	317-03	56,-	317-030-400	4,-	317-030-600	14,-	317-030-100	26,-	962-333	30,-
10 g	0,06	316-04	38,-	317-04	60,-	317-040-400	4,-	317-040-600	14,-	317-040-100	26,-	962-334	30,-
20 g	0,08	316-05	43,-	317-05	68,-	317-050-400	4,-	317-050-600	14,-	317-050-100	26,-	962-335	30,-
50 g	0,10	316-06	46,-	317-06	73,-	317-060-400	5,20	317-060-600	14,-	317-060-100	28,-	962-336	30,-
100 g	0,16	316-07	51,-	317-07	80,-	317-070-400	5,20	317-070-600	14,-	317-070-100	30,-	962-337	38,-
200 g	0,30	316-08	62,-	317-08	101,-	317-080-400	6,-	317-080-600	14,-	317-080-100	30,-	962-338	38,-
500 g	0,80	316-09	93,-	317-09	168,-	317-090-400	7,40	317-090-600	15,-	317-090-100	32,-	962-339	38,-
1 kg	1,60	316-11	135,-	317-11	245,-	317-110-400	9,-	317-110-600	22,-	317-110-100	52,-	962-341	38,-
2 kg	3,00	316-12	230,-	317-12	380,-	317-120-400	12,-	317-120-600	26,-	317-120-100	59,-	962-342	47,-
5 kg	8,00	316-13	360,-	317-13	550,-	317-130-400	23,-	317-130-600	45,-	317-130-100	86,-	962-343	47,-
10 kg	16,00	316-14	530,-	317-14	800,-	317-140-400	23,-	317-140-600	63,-	317-140-100	104,-	962-344	47,-
20 kg	30,00	-	-	317-15	2280,-	-	-	317-150-600	110,-	317-150-100	580,-	962-345	61,-
50 kg	80,00	-	-	317-16	4730,-	-	-	317-160-600	240,-	317-160-100	690,-	962-346	70,-

**Class E2 · Weight sets, compact shape or knob shape, polished stainless steel**

Test weight material: Milligramm weights stainless steel, individual weights: polished stainless steel.

Weight sets	Compact shape in plastic case		Knob shape in plastic case		Knob shape in aluminium protected case		Knob shape in wooden case		DAkkS certificate	
	KERN 	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 mg - 500 mg	318-22	325,-	-	-	318-226	380,-	-	-	962-350	210,-
1 mg - 50 g	-	-	313-024	840,-	313-026	850,-	313-02	880,-	962-301	345,-
1 mg - 100 g	-	-	313-034	910,-	313-036	920,-	313-03	960,-	962-302	375,-
1 mg - 200 g	-	-	313-044	1110,-	313-046	1130,-	313-04	1160,-	962-303	435,-
1 mg - 500 g	-	-	313-054	1230,-	313-056	1250,-	313-05	1340,-	962-304	460,-
1 mg - 1 kg	-	-	313-064	1520,-	313-066	1540,-	313-06	1600,-	962-305	495,-
1 mg - 2 kg	-	-	313-074	2330,-	313-076	2350,-	313-07	2410,-	962-306	540,-
1 mg - 5 kg	-	-	313-084	2880,-	313-086	2900,-	313-08	3060,-	962-307	580,-
1 mg - 10 kg	-	-	-	-	313-096	3800,-	313-09	3950,-	962-308	620,-
1 g - 50 g	312-024	390,-	314-024	550,-	314-026	570,-	314-02	590,-	962-315	142,-
1 g - 100 g	312-034	445,-	314-034	620,-	314-036	640,-	314-03	670,-	962-316	170,-
1 g - 200 g	312-044	560,-	314-044	790,-	314-046	810,-	314-04	860,-	962-317	225,-
1 g - 500 g	312-054	650,-	314-054	970,-	314-056	990,-	314-05	1050,-	962-318	255,-
1 g - 1 kg	312-064	880,-	314-064	1230,-	314-066	1250,-	314-06	1310,-	962-319	285,-
1 g - 2 kg	312-074	1220,-	314-074	2050,-	314-076	2070,-	314-07	2130,-	962-320	350,-
1 g - 5 kg	312-084	1560,-	314-084	2600,-	314-086	2620,-	314-08	2780,-	962-321	395,-
1 g - 10 kg	-	-	-	-	314-096	3490,-	314-09	3670,-	962-322	430,-

**Note**

Our highly-accurate OIML test weights are also available as **Premium+** weights for that extra level of safety. See all details page 176 or on [www.kern-lab.com/premium+](http://www.kern-lab.com/premium+)

# Test weights and boxes

## Class F1



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



Plastic box,  
lined, for  
individual  
weights  
≥ 500 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 box  
(328-22)



Milligram weight  
set in aluminium  
protected box,  
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

## Test weights class F1

### Class F1 · Milligram weights, flat polygonal sheet, stainless steel

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 mg	0,020	328-01	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-451	20,-
2 mg	0,020	328-02	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-452	20,-
5 mg	0,020	328-03	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-453	20,-
10 mg	0,025	328-04	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-454	20,-
20 mg	0,03	328-05	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-455	20,-
50 mg	0,04	328-06	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-456	20,-
100 mg	0,05	328-07	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-457	20,-
200 mg	0,06	328-08	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-458	20,-
500 mg	0,08	328-09	11,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-459	20,-

### Class F1 · Individual weights, ECO shape or knob shape, polished stainless steel

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 certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	0,10	326-01	28,-	327-01	34,-	347-030-400	2,-	317-010-600	14,-	317-010-100	26,-	962-431	20,-
2 g	0,12	326-02	29,-	327-02	34,-	347-030-400	2,-	317-020-600	14,-	317-020-100	26,-	962-432	20,-
5 g	0,16	326-03	30,-	327-03	35,-	347-030-400	2,-	317-030-600	14,-	317-030-100	26,-	962-433	20,-
10 g	0,20	326-04	31,-	327-04	39,-	347-050-400	2,-	317-040-600	14,-	317-040-100	26,-	962-434	20,-
20 g	0,25	326-05	32,-	327-05	44,-	347-050-400	2,-	317-050-600	14,-	317-050-100	26,-	962-435	20,-
50 g	0,30	326-06	34,-	327-06	51,-	347-070-400	2,-	317-060-600	14,-	317-060-100	28,-	962-436	20,-
100 g	0,50	326-07	38,-	327-07	56,-	347-070-400	2,-	317-070-600	14,-	317-070-100	30,-	962-437	22,-
200 g	1,00	326-08	49,-	327-08	76,-	347-080-400	2,-	317-080-600	14,-	317-080-100	30,-	962-438	22,-
500 g	2,50	326-09	79,-	327-09	121,-	347-090-400	3,-	317-090-600	15,-	317-090-100	32,-	962-439	22,-
1 kg	5,00	326-11	104,-	327-11	154,-	347-110-400	3,10	317-110-600	22,-	317-110-100	52,-	962-441	22,-
2 kg	10	326-12	179,-	327-12	240,-	347-120-400	4,-	317-120-600	26,-	317-120-100	59,-	962-442	28,-
5 kg	25	326-13	260,-	327-13	355,-	347-130-400	9,10	317-130-600	45,-	317-130-100	86,-	962-443	28,-
10 kg	50	326-14	485,-	327-14	650,-	347-140-400	12,-	317-140-600	63,-	317-140-100	104,-	962-444	28,-
20 kg	100	-	-	327-15	1790,-	-	-	317-150-600	110,-	317-150-100	580,-	962-445	31,-
50 kg	250	-	-	327-16	3850,-	-	-	317-160-600	240,-	317-160-100	690,-	962-446	43,-

### Class F1 · Block weights, stainless steel polished

Block weight material: stainless steel polished

Weight	Tol +/- mg	Block weight, stainless steel		Aluminium protected case		DAkkS certificate	
		KERN	€	KERN	€	KERN	€
5 kg	25	326-36	910,-	346-060-600	80,-	962-443	28,-
10 kg	50	326-37	1310,-	346-070-600	100,-	962-444	28,-
20 kg	100	326-38	1730,-	346-080-600	130,-	962-445	31,-
50 kg	250	326-39	4290,-	346-090-600	180,-	962-446	43,-




### Class F1 · Test weights, stainless steel polished, stackable

Test weight material: stainless steel polished

Weight	Tol +/- mg	Test weight, stainless steel		Wooden case		DAkkS certificate	
		KERN	€	KERN	€	KERN	€
10 kg	50	327-141	1220,-	337-141-100	340,-	962-444	28,-
20 kg	100	327-151	1570,-	337-151-100	370,-	962-445	31,-
50 kg	250	327-161	3700,-	337-161-100	570,-	962-446	43,-




## Class F1 · Weight sets, ECO shape, polished stainless steel

Test weight material: Milligramm 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 certificate	
	KERN	 €	KERN	 €	KERN	 €	KERN	€
1 mg - 500 mg	328-22	<b>184,-</b>	328-226	<b>215,-</b>			962-450	<b>110,-</b>
1 mg - 50 g	325-024	<b>485,-</b>	325-026	<b>505,-</b>	325-022	<b>530,-</b>	962-401	<b>184,-</b>
1 mg - 100 g	325-034	<b>520,-</b>	325-036	<b>540,-</b>	325-032	<b>570,-</b>	962-402	<b>196,-</b>
1 mg - 200 g	325-044	<b>600,-</b>	325-046	<b>620,-</b>	325-042	<b>650,-</b>	962-403	<b>220,-</b>
1 mg - 500 g	325-054	<b>680,-</b>	325-056	<b>700,-</b>	325-052	<b>800,-</b>	962-404	<b>230,-</b>
1 mg - 1 kg	325-064	<b>870,-</b>	325-066	<b>880,-</b>	325-062	<b>900,-</b>	962-405	<b>240,-</b>
1 mg - 2 kg	325-074	<b>1120,-</b>	325-076	<b>1140,-</b>	325-072	<b>1190,-</b>	962-406	<b>275,-</b>
1 mg - 5 kg	325-084	<b>1360,-</b>	325-086	<b>1400,-</b>	325-082	<b>1530,-</b>	962-407	<b>290,-</b>
1 mg - 10 kg	-	-	325-096	<b>2050,-</b>	325-092	<b>2030,-</b>	962-408	<b>315,-</b>
1 g - 50 g	326-024	<b>325,-</b>	326-026	<b>340,-</b>	326-022	<b>380,-</b>	962-415	<b>74,-</b>
1 g - 100 g	326-034	<b>360,-</b>	326-036	<b>380,-</b>	326-032	<b>420,-</b>	962-416	<b>85,-</b>
1 g - 200 g	326-044	<b>455,-</b>	326-046	<b>470,-</b>	326-042	<b>520,-</b>	962-417	<b>108,-</b>
1 g - 500 g	326-054	<b>520,-</b>	326-056	<b>540,-</b>	326-052	<b>650,-</b>	962-418	<b>120,-</b>
1 g - 1 kg	326-064	<b>710,-</b>	326-066	<b>730,-</b>	326-062	<b>760,-</b>	962-419	<b>131,-</b>
1 g - 2 kg	326-074	<b>950,-</b>	326-076	<b>970,-</b>	326-072	<b>1050,-</b>	962-420	<b>166,-</b>
1 g - 5 kg	326-084	<b>1200,-</b>	326-086	<b>1220,-</b>	326-082	<b>1400,-</b>	962-421	<b>183,-</b>
1 g - 10 kg	-	-	326-096	<b>1790,-</b>	326-092	<b>1890,-</b>	962-422	<b>200,-</b>

## Class F1 · Weight sets, knob shape, polished stainless steel

Test weight material: Milligramm 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 certificate	
	KERN	 €	KERN	 €	KERN	 €	KERN	€
1 mg - 500 mg	328-22	<b>184,-</b>	328-226	<b>215,-</b>			962-450	<b>110,-</b>
1 mg - 50 g	323-024	<b>560,-</b>	323-026	<b>580,-</b>	323-02	<b>590,-</b>	962-401	<b>184,-</b>
1 mg - 100 g	323-034	<b>610,-</b>	323-036	<b>630,-</b>	323-03	<b>640,-</b>	962-402	<b>196,-</b>
1 mg - 200 g	323-044	<b>760,-</b>	323-046	<b>780,-</b>	323-04	<b>810,-</b>	962-403	<b>220,-</b>
1 mg - 500 g	323-054	<b>890,-</b>	323-056	<b>910,-</b>	323-05	<b>1000,-</b>	962-404	<b>230,-</b>
1 mg - 1 kg	323-064	<b>1140,-</b>	323-066	<b>1160,-</b>	323-06	<b>1170,-</b>	962-405	<b>240,-</b>
1 mg - 2 kg	323-074	<b>1510,-</b>	323-076	<b>1530,-</b>	323-07	<b>1590,-</b>	962-406	<b>275,-</b>
1 mg - 5 kg	323-084	<b>1840,-</b>	323-086	<b>1870,-</b>	323-08	<b>2010,-</b>	962-407	<b>290,-</b>
1 mg - 10 kg	-	-	323-096	<b>2650,-</b>	323-09	<b>2750,-</b>	962-408	<b>315,-</b>
1 g - 50 g	324-024	<b>395,-</b>	324-026	<b>405,-</b>	324-02	<b>445,-</b>	962-415	<b>74,-</b>
1 g - 100 g	324-034	<b>450,-</b>	324-036	<b>470,-</b>	324-03	<b>510,-</b>	962-416	<b>85,-</b>
1 g - 200 g	324-044	<b>600,-</b>	324-046	<b>620,-</b>	324-04	<b>670,-</b>	962-417	<b>108,-</b>
1 g - 500 g	324-054	<b>720,-</b>	325-092	<b>740,-</b>	324-05	<b>860,-</b>	962-418	<b>120,-</b>
1 g - 1 kg	324-064	<b>970,-</b>	324-066	<b>990,-</b>	324-06	<b>1020,-</b>	962-419	<b>131,-</b>
1 g - 2 kg	324-074	<b>1350,-</b>	324-076	<b>1370,-</b>	324-07	<b>1450,-</b>	962-420	<b>166,-</b>
1 g - 5 kg	324-084	<b>1680,-</b>	324-086	<b>1760,-</b>	324-08	<b>1870,-</b>	962-421	<b>183,-</b>
1 g - 10 kg	-	-	324-096	<b>2510,-</b>	324-09	<b>2600,-</b>	962-422	<b>200,-</b>

# 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  $\leq 200$  g

Plastic box, lined, for individual weights  $\geq 500$  g



Aluminium protected box, lined, for individual weights



Wooden box, not lined for individual weights  $\leq 500$  g



Wooden box, not lined, for individual weights  $\geq 1$  kg



Milligram weight set in plastic box (338-22)



Milligram weight set in aluminium protected box, 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

## Test weights class F2




### Class F2 · Milligram weights, flat polygonal sheet, stainless steel

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 mg	0,06	338-01	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-451	20,-
2 mg	0,06	338-02	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-452	20,-
5 mg	0,06	338-03	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-453	20,-
10 mg	0,08	338-04	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-454	20,-
20 mg	0,10	338-05	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-455	20,-
50 mg	0,12	338-06	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-456	20,-
100 mg	0,16	338-07	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-457	20,-
200 mg	0,20	338-08	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-458	20,-
500 mg	0,25	338-09	9,-	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-459	20,-


### Class F2 · Individual weights, knob shape, finely turned stainless steel

Test weight material: finely turned polished

Weight	Tol +/- mg	Individual weight, knob shape		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 g	0,3	337-01	19,-	347-030-400	2,-	317-010-600	14,-	337-010-200	18,-	962-431	20,-
2 g	0,4	337-02	20,-	347-030-400	2,-	317-020-600	14,-	337-020-200	17,-	962-432	20,-
5 g	0,5	337-03	21,-	347-030-400	2,-	317-030-600	14,-	337-030-200	18,-	962-433	20,-
10 g	0,6	337-04	23,-	347-050-400	2,-	317-040-600	14,-	337-040-200	18,-	962-434	20,-
20 g	0,8	337-05	25,-	347-050-400	2,-	317-050-600	14,-	337-050-200	18,-	962-435	20,-
50 g	1,0	337-06	27,-	347-070-400	2,-	317-060-600	14,-	337-060-200	18,-	962-436	20,-
100 g	1,6	337-07	30,-	347-070-400	2,-	317-070-600	14,-	337-070-200	20,-	962-437	22,-
200 g	3,0	337-08	40,-	347-080-400	2,-	317-080-600	14,-	337-080-200	20,-	962-438	22,-
500 g	8,0	337-09	57,-	347-090-400	3,-	317-090-600	15,-	337-090-200	23,-	962-439	22,-
1 kg	16	337-11	80,-	347-110-400	3,10	317-110-600	22,-	337-110-200	36,-	962-441	22,-
2 kg	30	337-12	120,-	347-120-400	4,-	317-120-600	26,-	337-120-200	37,-	962-442	28,-
5 kg	80	337-13	205,-	347-130-400	9,10	317-130-600	45,-	337-130-200	62,-	962-443	28,-
10 kg	160	337-14	395,-	347-140-400	12,-	317-140-600	63,-	337-140-200	65,-	962-444	28,-
20 kg	300	337-15	690,-	-	-	317-150-600	110,-	337-150-200	365,-	962-445	31,-
50 kg	800	337-16	1240,-	-	-	317-160-600	240,-	337-160-200	590,-	962-446	43,-


### Class F2 · Test weights, finely turned stainless steel

Test weight material: finely turned stainless steel

Weight	Tol +/- mg	Test weight, stainless steel		Wooden box		DAkkS certificate	
		KERN	€	KERN 	€	KERN	€
10 kg	160	337-141	600,-	337-141-200	345,-	962-444	28,-
20 kg	300	337-151	730,-	337-151-200	385,-	962-445	31,-
50 kg	800	337-161	1970,-	337-161-200	570,-	962-446	43,-




### Class F2 · Block weights, stainless steel glass bead blasted

Block weight material: stainless steel glass bead blasted

Weight	Tol +/- mg	Block weight, stainless steel		Aluminium protected case		DAkkS certificate	
		KERN	€	KERN 	€	KERN	€
5 kg	80	336-36	510,-	346-060-600	80,-	962-443	28,-
10 kg	160	336-37	680,-	346-070-600	100,-	962-444	28,-
20 kg	300	336-38	860,-	346-080-600	130,-	962-445	31,-
50 kg	800	336-39	2280,-	346-090-600	180,-	962-446	43,-

**Class F2 · Weight sets, knob shape, finely turned stainless steel**

Test weight material: Milligramm 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 certificate	
	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 mg - 500 mg	338-22	143,-	338-226	183,-			962-450	110,-
1 mg - 50 g	333-024	345,-	333-026	365,-	333-02	370,-	962-401	184,-
1 mg - 100 g	333-034	385,-	333-036	400,-	333-03	405,-	962-402	196,-
1 mg - 200 g	333-044	450,-	333-046	465,-	333-04	470,-	962-403	220,-
1 mg - 500 g	333-054	510,-	333-056	530,-	333-05	540,-	962-404	230,-
1 mg - 1 kg	333-064	630,-	333-066	650,-	333-06	660,-	962-405	240,-
1 mg - 2 kg	333-074	890,-	333-076	910,-	333-07	920,-	962-406	275,-
1 mg - 5 kg	333-084	1150,-	333-086	1180,-	333-08	1190,-	962-407	290,-
1 mg - 10 kg	-	-	333-096	1640,-	333-09	1650,-	962-408	315,-
1 g - 50 g	334-024	220,-	334-026	235,-	334-02	240,-	962-415	74,-
1 g - 100 g	334-034	260,-	334-036	270,-	334-03	275,-	962-416	85,-
1 g - 200 g	334-044	345,-	334-046	365,-	334-04	370,-	962-417	108,-
1 g - 500 g	334-054	410,-	334-056	425,-	334-05	430,-	962-418	120,-
1 g - 1 kg	334-064	520,-	334-066	530,-	334-06	540,-	962-419	131,-
1 g - 2 kg	334-074	760,-	334-076	800,-	334-07	810,-	962-420	166,-
1 g - 5 kg	334-084	990,-	334-086	1060,-	334-08	1070,-	962-421	183,-
1 g - 10 kg	-	-	334-096	1520,-	334-09	1530,-	962-422	200,-



# 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  $\leq 200$  g, for hook weights and slotted weights  $\leq 50$  g



Plastic box, lined, for individual weights  $\geq 500$  g, for hook weights and slotted weights  $\geq 100$  g



Aluminium protected box, lined, for individual weights



Wooden box, not lined, for individual weights  $\leq 500$  g



Wooden box, not lined, for individual weights  $\geq 1$  kg



Milligram weight set in plastic box (348-22)



Milligram weight set in aluminium protected box, 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, for fixing slotted weights, aluminium or finely turned stainless steel

\* | \*\* | \*\*\* see page 194






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



## Test weights class M1




### Class M1 · Milligram weights, flat polygonal sheet, stainless steel

Test weight material: stainless steel

Weight	Tol +/- mg	Milligram weight, flat polygonal sheet		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 mg	0,20	348-01	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-651	16,-
2 mg	0,20	348-02	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-652	16,-
5 mg	0,20	348-03	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-653	16,-
10 mg	0,25	348-04	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-654	16,-
20 mg	0,30	348-05	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-655	16,-
50 mg	0,40	348-06	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-656	16,-
100 mg	0,50	348-07	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-657	16,-
200 mg	0,60	348-08	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-658	16,-
500 mg	0,80	348-09	4,40	347-009-400	2,-	317-009-600	15,-	338-090-200	19,-	962-659	16,-


### Class M1 · Individual weights, knob shape, stainless steel

Test weights material: stainless steel

Weight	Tol +/- mg	Individual weight, stainless steel		Plastic box		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 g	1,0	347-01	7,70	347-030-400	2,-	317-010-600	14,-	337-010-200	18,-	962-631	16,-
2 g	1,2	347-02	7,70	347-030-400	2,-	317-020-600	14,-	337-020-200	17,-	962-632	16,-
5 g	1,6	347-03	7,80	347-030-400	2,-	317-030-600	14,-	337-030-200	18,-	962-633	16,-
10 g	2,0	347-04	8,20	347-050-400	2,-	317-040-600	14,-	337-040-200	18,-	962-634	16,-
20 g	2,5	347-05	12,-	347-050-400	2,-	317-050-600	14,-	337-050-200	18,-	962-635	16,-
50 g	3,0	347-06	13,-	347-070-400	2,-	317-060-600	14,-	337-060-200	18,-	962-636	16,-
100 g	5,0	347-07	16,-	347-070-400	2,-	317-070-600	14,-	337-070-200	20,-	962-637	18,-
200 g	10	347-08	19,-	347-080-400	2,-	317-080-600	14,-	337-080-200	20,-	962-638	18,-
500 g	25	347-09	30,-	347-090-400	3,-	317-090-600	15,-	337-090-200	23,-	962-639	18,-
1 kg	50	347-11	45,-	347-110-400	3,10	317-110-600	22,-	337-110-200	36,-	962-641	18,-
2 kg	100	347-12	82,-	347-120-400	4,-	317-120-600	26,-	337-120-200	37,-	962-642	19,-
5 kg	250	347-13	180,-	347-130-400	9,10	317-130-600	45,-	337-130-200	62,-	962-643	19,-
10 kg	500	347-14	350,-	347-140-400	12,-	317-140-600	63,-	337-140-200	65,-	962-644	19,-


### Class M1 · Block weights, lacquered cast iron or stainless steel glass bead blasted

Block weight material: cast iron or stainless steel, surface and edges refined

Weight	Tol +/- g	Block weight, cast iron		Block weight, stainless steel		Aluminium protected case		DAkkS certificate	
		KERN	€	KERN	€	KERN 	€	KERN	€
5 kg	0,25	346-86	64,-	346-06	380,-	346-060-600	80,-	962-643	19,-
10 kg	0,50	346-87	111,-	346-07	510,-	346-070-600	100,-	962-644	19,-
20 kg	1,00	346-88	205,-	346-08	680,-	346-080-600	130,-	962-645	24,-
50 kg	2,50	346-89	500,-	346-09	1820,-	346-090-600	180,-	962-646	26,-

### Class M1 · ECO Block weights, lacquered cast iron





ECO Block weight material: cast iron, surface and edges machined

Weight	Tol +/- g	ECO Block weight, cast iron		Aluminium protected case		DAkkS certificate	
		KERN	€	KERN 	€	KERN	€
5 kg	0,25	346-76	51,-	346-060-600	80,-	962-643	19,-
10 kg	0,50	346-77	86,-	346-070-600	100,-	962-644	19,-
20 kg	1,00	346-78	157,-	346-080-600	130,-	962-645	24,-
50 kg	2,50	346-79	380,-	346-090-600	180,-	962-646	26,-

## Test weights class M1

### Class M1 · Test weights, stainless steel, stackable

Test weight material: finely turned stainless steel

Weight	Tol +/- g	Test weight, stainless steel		Wooden box		DAkkS certificate		
		KERN	€	KERN		€	KERN	€
10 kg	0,5	347-141	600,-	337-141-200		345,-	962-644	19,-
20 kg	1,0	347-151	740,-	337-151-200		385,-	962-645	24,-
50 kg	2,5	347-161	1970,-	337-161-200		570,-	962-646	26,-

### Class M1 · Heavy duty weights, lacquered cast iron, stackable

Heavy duty weight material: cast iron

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

Dimensions: see internet on [www.kern-sohn.com](http://www.kern-sohn.com)

#### Note

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



Weight	Tol +/- g	Heavy duty weight, cast iron		DAkkS certificate	
		KERN	€	KERN	€
100 kg	5	346-81	2070,-	962-691	69,-
200 kg	10	346-82	2730,-	962-692	69,-
500 kg	25	346-83	4970,-	962-693	69,-
1000 kg	50	346-84	8610,-	962-694	150,-
2000 kg	100	346-85	16140,-	962-695	275,-

### Class M1 · Weight sets, knob shape, stainless steel

Test weight material: Milligramm weights stainless steel, individual weights stainless steel

Weight	Knob shape, finely turned stainless steel, in plastic case		Knob shape, finely turned stainless steel, in wooden case		Knob shape, finely turned stainless steel, in aluminium protected case		DAkkS certificate	
	KERN	€	KERN	€	KERN	€	KERN	€
1 mg - 500 mg	348-22	85,-	-	-	348-226	142,-	962-650	63,-
1 mg - 50 g	343-024	235,-	343-02	215,-	343-026	215,-	962-601	117,-
1 mg - 100 g	343-034	250,-	343-03	240,-	343-036	230,-	962-602	123,-
1 mg - 200 g	343-044	290,-	343-04	280,-	343-046	270,-	962-603	138,-
1 mg - 500 g	343-054	315,-	343-05	310,-	343-056	300,-	962-604	144,-
1 mg - 1 kg	343-064	475,-	343-06	445,-	343-066	380,-	962-605	151,-
1 mg - 2 kg	343-074	630,-	343-07	620,-	343-076	570,-	962-606	167,-
1 mg - 5 kg	343-084	790,-	343-08	840,-	343-086	770,-	962-607	176,-
1 mg - 10 kg	-	-	343-09	1160,-	343-096	1110,-	962-608	184,-
1 g - 50 g	344-024	158,-	344-02	128,-	344-026	151,-	962-615	46,-
1 g - 100 g	344-034	174,-	344-03	151,-	344-036	167,-	962-616	54,-
1 g - 200 g	344-044	210,-	344-04	197,-	344-046	205,-	962-617	67,-
1 g - 500 g	344-054	240,-	344-05	235,-	344-056	235,-	962-618	75,-
1 g - 1 kg	344-064	400,-	344-06	350,-	344-066	315,-	962-619	81,-
1 g - 2 kg	344-074	550,-	344-07	530,-	344-076	500,-	962-620	98,-
1 g - 5 kg	344-084	710,-	344-08	740,-	344-086	710,-	962-621	106,-
1 g - 10 kg	-	-	344-09	1060,-	344-096	1050,-	962-622	114,-

### Class M1 · Hook weights, finely turned stainless steel

Hook weight material: finely turned stainless steel

Weight	Tol +/- mg	Hook weight, stainless steel		Plastic box, lined		DAkkS certificate	
		KERN	€	KERN	€	KERN	€
1 g	1,0	347-016	22,-	347-030-400	2,-	962-631	16,-
2 g	1,2	347-026	22,-	347-030-400	2,-	962-632	16,-
5 g	1,6	347-036	22,-	347-030-400	2,-	962-633	16,-
10 g	2,0	347-046	22,-	347-050-400	2,-	962-634	16,-
20 g	2,5	347-056	24,-	347-050-400	2,-	962-635	16,-
50 g	3,0	347-066	30,-	347-070-400	2,-	962-636	16,-
100 g	5,0	347-076	31,-	347-090-400	3,-	962-637	18,-
200 g	10,0	347-086	35,-	347-090-400	3,-	962-638	18,-
500 g	25,0	347-096	64,-	347-110-400	3,10	962-639	18,-
1 kg	50,0	347-116	82,-	347-120-400	4,-	962-641	18,-
2 kg	100,0	347-126	132,-	347-130-400	9,10	962-642	19,-
5 kg	250,0	347-136	250,-	347-140-400	12,-	962-643	19,-
10 kg	500,0	347-146	390,-	-	-	962-644	19,-

### Class M1 · Slotted weights, finely turned stainless steel

Slotted weight material: finely turned stainless steel

Weight	Tol +/- mg	Slotted weight, stainless steel		Plastic box, lined		DAkkS certificate	
		KERN	€	KERN	€	KERN	€
1 g	1,0	347-015	22,-	347-030-400	2,-	962-631	16,-
2 g	1,2	347-025	20,-	347-030-400	2,-	962-632	16,-
5 g	1,6	347-035	22,-	347-030-400	2,-	962-633	16,-
10 g	2,0	347-045	23,-	347-030-400	2,-	962-634	16,-
20 g	2,5	347-055	24,-	347-080-400	2,-	962-635	16,-
50 g	3,0	347-065	26,-	347-080-400	2,-	962-636	16,-
100 g	5,0	347-075	28,-	347-090-400	3,-	962-637	18,-
200 g	10	347-085	38,-	347-090-400	3,-	962-638	18,-
500 g	25	347-095	58,-	347-110-400	3,10	962-639	18,-
1 kg	50	347-115	98,-	347-130-400	9,10	962-641	18,-
2 kg	100	347-125	146,-	347-130-400	9,10	962-642	19,-
5 kg	250	347-135	230,-	347-140-400	12,-	962-643	19,-
10 kg	500	347-145	425,-	347-140-400	12,-	962-644	19,-

### 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 <sup>(1)</sup>	Largest slotted weight possible	Material	Length	Beam bar		DAkkS certificate	
					KERN	€	KERN	€
10 g	200 g	100 g	Aluminium	117,5	347-445-100*	32,-	962-634	16,-
100 g	2 kg	1 kg	Stainless steel	238	347-075-100**	53,-	962-637	18,-
500 g	20 kg	10 kg	Stainless steel	639	347-095-100***	77,-	962-639	18,-
1 kg	40 kg	10 kg	Stainless steel	1020	347-115-100***	115,-	962-641	18,-

<sup>(1)</sup> 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”;

\* | \*\* | \*\*\* see page 191

### 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 location of use and postal code.

**DAkkS calibration certificate 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  $\leq 500$  g,  
not appropriate for  
cast iron weights



Wooden box, not lined, for  
individual weights  $\geq 1$  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

## Test weights classes M2


### Class M2 · Individual weights, knob shape, finely turned stainless steel

Test weight material: finely turned stainless steel

Weight	Tol +/- mg	Individual weight, knob shape		Plastic box, lined		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN 	€	KERN 	€	KERN 	€	KERN	€
1 g	3	357-01	4,00	347-030-400	2,-	317-010-600	14,-	337-010-200	18,-	962-631	16,-
2 g	4	357-02	4,00	347-030-400	2,-	317-020-600	14,-	337-020-200	17,-	962-632	16,-
5 g	5	357-03	4,10	347-030-400	2,-	317-030-600	14,-	337-030-200	18,-	962-633	16,-
10 g	6	357-04	4,40	347-050-400	2,-	317-040-600	14,-	337-040-200	18,-	962-634	16,-
20 g	8	357-05	8,00	347-050-400	2,-	317-050-600	14,-	337-050-200	18,-	962-635	16,-
50 g	10	357-06	9,40	347-070-400	2,-	317-060-600	14,-	337-060-200	18,-	962-636	16,-
100 g	16	357-07	12,-	347-070-400	2,-	317-070-600	14,-	337-070-200	20,-	962-637	18,-
200 g	30	357-08	17,-	347-080-400	2,-	317-080-600	14,-	337-080-200	20,-	962-638	18,-
500 g	80	357-09	31,-	347-090-400	3,-	317-090-600	15,-	337-090-200	23,-	962-639	18,-
1 kg	160	357-11	46,-	347-110-400	3,10	317-110-600	22,-	337-110-200	36,-	962-641	18,-
2 kg	300	357-12	84,-	347-120-400	4,-	317-120-600	26,-	337-120-200	37,-	962-642	19,-
5 kg	800	357-13	183,-	347-130-400	9,10	317-130-600	45,-	337-130-200	62,-	962-643	19,-
10 kg	1600	357-14	360,-	347-140-400	12,-	317-140-600	63,-	337-140-200	65,-	962-644	19,-


### Class M2 · Block weights, lacquered cast iron

Block weight material: cast iron, surface and edges refined

Weight	Tol +/- g	Block weight, cast iron		Aluminium protected box		DAkkS certificate	
		KERN	€	KERN 	€	KERN	€
5 kg	0,8	356-86	64,-	346-060-600	80,-	962-643	19,-
10 kg	1,6	356-87	111,-	346-070-600	100,-	962-644	19,-
20 kg	3,0	356-88	205,-	346-080-600	130,-	962-645	24,-
50 kg	8,0	356-89	500,-	346-090-600	180,-	962-646	26,-



### Class M2 · ECO Block weights, lacquered cast iron

ECO Block weight material: lacquered cast iron, surface and edges machined

Weight	Tol +/- g	ECO block weight, cast iron		Aluminium protected box		DAkkS certificate	
		KERN	€	KERN 	€	KERN	€
5 kg	0,8	356-76	51,-	346-060-600	80,-	962-643	19,-
10 kg	1,6	356-77	86,-	346-070-600	100,-	962-644	19,-
20 kg	3,0	356-78	157,-	346-080-600	130,-	962-645	24,-
50 kg	8,0	356-79	380,-	346-090-600	180,-	962-646	26,-

### Class M2 · Weight sets, knob shape, stainless steel

Test weight material: finely turned stainless steel

Weight	Knob shape, in aluminium protected case		Knob shape, in wooden case		DAkkS certificate	
	KERN 	€	KERN 	€	KERN	€
1 g - 50 g	354-026	117,-	354-02	93,-	962-615	46,-
1 g - 100 g	354-036	128,-	354-03	113,-	962-616	54,-
1 g - 200 g	354-046	162,-	354-04	153,-	962-617	67,-
1 g - 500 g	354-056	194,-	354-05	198,-	962-618	75,-
1 g - 1 kg	354-066	275,-	354-06	315,-	962-619	81,-
1 g - 2 kg	354-076	480,-	354-07	495,-	962-620	98,-
1 g - 5 kg	354-086	710,-	354-08	730,-	962-621	106,-
1 g - 10 kg	354-096	1140,-	354-09	1150,-	962-622	114,-

## Test weights classes M3

### Class M3 · Individual weights, knob shape, stainless steel

Test weight material: finely turned stainless steel

Weight	Tol +/- mg	Individual weight, knob shape		Plastic box, lined		Aluminium protected box		Wooden box		DAkkS certificate	
		KERN	€	KERN	€	KERN	€	KERN	€	KERN	€
1 g	10	367-01	7,60	347-030-400	2,-	317-010-600	14,-	337-010-200	18,-	962-631	16,-
2 g	12	367-02	7,60	347-030-400	2,-	317-020-600	14,-	337-020-200	17,-	962-632	16,-
5 g	16	367-03	7,70	347-030-400	2,-	317-030-600	14,-	337-030-200	18,-	962-633	16,-
10 g	20	367-04	8,10	347-050-400	2,-	317-040-600	14,-	337-040-200	18,-	962-634	16,-
20 g	25	367-05	11,-	347-050-400	2,-	317-050-600	14,-	337-050-200	18,-	962-635	16,-
50 g	30	367-06	12,-	347-070-400	2,-	317-060-600	14,-	337-060-200	18,-	962-636	16,-
100 g	50	367-07	15,-	347-070-400	2,-	317-070-600	14,-	337-070-200	20,-	962-637	18,-
200 g	100	367-08	18,-	347-080-400	2,-	317-080-600	14,-	337-080-200	20,-	962-638	18,-
500 g	250	367-09	29,-	347-090-400	3,-	317-090-600	15,-	337-090-200	23,-	962-639	18,-
1 kg	500	367-11	44,-	347-110-400	3,10	317-110-600	22,-	337-110-200	36,-	962-641	18,-
2 kg	1000	367-12	81,-	347-120-400	4,-	317-120-600	26,-	337-120-200	37,-	962-642	19,-

### Class M3 · Individual weights, knob and cylindrical shape, lacquered cast iron

Test weight material: cast iron

Weight	Tol +/- g	Individual weight, knob and cylindrical shape		DAkkS certificate	
		KERN	€	KERN	€
100 g*	0,05	366-91	22,-	962-637	18,-
200 g*	0,10	366-92	25,-	962-638	18,-
500 g**	0,25	366-93	32,-	962-639	18,-
1 kg**	0,50	366-94	40,-	962-641	18,-
2 kg**	1,0	366-95	67,-	962-642	19,-
5 kg**	2,5	366-96	123,-	962-643	19,-
10 kg**	5,0	366-97	215,-	962-644	19,-



### Class M3 · Block weights, lacquered cast iron

Block weight material: cast iron, surface and edges refined

Weight	Tol +/- g	Block weight, cast iron		Aluminium protected box		DAkkS certificate	
		KERN	€	KERN	€	KERN	€
5 kg	2,5	366-86	54,-	346-060-600	80,-	962-643	19,-
10 kg	5,0	366-87	90,-	346-070-600	100,-	962-644	19,-
20 kg	10	366-88	158,-	346-080-600	130,-	962-645	24,-
50 kg	25	366-89	395,-	346-090-600	180,-	962-646	26,-

### Class M3 · ECO Block weights, lacquered cast iron

ECO Block weight material: lacquered cast iron, surface and edges machined

Weight	Tol +/- g	ECO block weight, cast iron		Aluminium protected box		DAkkS certificate	
		KERN	€	KERN	€	KERN	€
5 kg	2,5	366-76	51,-	346-060-600	80,-	962-643	19,-
10 kg	5,0	366-77	86,-	346-070-600	100,-	962-644	19,-
20 kg	10	366-78	157,-	346-080-600	130,-	962-645	24,-
50 kg	25	366-79	380,-	346-090-600	180,-	962-646	26,-

### Class M3 · Weight sets, knob and cylindrical shape, stainless steel and lacquered cast iron

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

Weight	Knob and cylindrical shape, in wooden block		DAkkS certificate	
	KERN	€	KERN	€
1 g - 1 kg	362-96	220,-	962-619	81,-
1 g - 2 kg	362-97	360,-	962-620	98,-
1 g - 5 kg	362-98	450,-	962-621	106,-
1 g - 10 kg	362-99	620,-	962-622	114,-

