

## 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 appropriate test weight is only classed as checking equipment according to ► **ISO 9000ff** if it has the relevant proof of accuracy, all KERN test weights come with an appropriate ► **DAkKS-calibration certificate**. For further details, see the calibration service section on page 182.

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 pre-requisite for proper balance calibration.

► **See the glossary on page 191–193**

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

KERN DAkKS delivery times & shipping type	Total weight $\leq 40$ kg (gross weight, incl. packaging)	Total weight $> 40$ 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, wooden boxes for individual weight sets etc. (e.g. 334-14 1ff, 347-14 1ff, 346-8 1ff, 315-040-100ff, 335-040-200ff)	on request	



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## Selection of the appropriate test weight for your balance

Correctly selected test weights with DAkkS calibration certificate are the pre-requisite for ensuring that your balances are not only correctly adjusted, but also correctly calibrated. Scheduled testing of your balances with such test weights helps to guarantee your quality requirements and to maintain your quality targets.

### Here's how you find the right test weight for your balance:

A balance can never be more accurate than the test weight used to adjust it, it all depends on its tolerance.

**Accuracy of the test weight:** Should correspond to the readout [d] of the balance, or rather be better.

**Nominal weight value:** This 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 164.

### 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 327-72, see page 169.

### 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 brass to stainless steel - the right test weight for every situation



Test weight →	Cylindrical shape with lifting knob, polished stainless steel	Compact shape with carrying grip, polished stainless steel	Cylindrical shape with lifting knob, polished stainless steel or nickelplated and polished brass	Compact shape with carrying grip, finely turned stainless steel	Cylindrical shape with lifting knob, finely turned stainless steel	Cylindrical shape with lifting knob, finely turned brass
Features ↓						
Conforms to OIML:R111	yes	yes	yes	no	yes	yes
Available classes	E1, E2	E2, F1	F1	adjusted to F1 error limit class	F2, M1	M1, M2, M3
Upper surface	polished	polished	polished	finely turned	finely turned	finely turned
Material	Stainless steel	Stainless steel	Stainless steel or nickel-plated brass	Stainless steel	Stainless steel	Brass
Adjusting cavity	no	no	yes	yes, from 20 g	yes, from 20 g	yes, from 20 g
Marking (Milligram weights, generally none)	no	E2: None F1: Nominal value, etched	Nominal value, etched	Nominal value, etched	F2: Class + nominal value, etched; M1: Class + nominal value, adopted	Class + nominal value, adopted
Verification possible	yes	yes	yes	no	yes	yes, M1 only
Checking equipment for verification purposes	approved	approved	approved	not approved	approved	approved, M1 only
Ideal as checking equipment in QM systems (e.g. ISO 9000 ff)	yes	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>• Ideal shape of the top for good grip</li> </ul>	<ul style="list-style-type: none"> <li>• Affordable test weight for in-house checking of precision balances</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>	<ul style="list-style-type: none"> <li>• Affordable test weight for commercial and industrial scales</li> <li>• Ideal shape of the top for good grip</li> </ul>

**The key points from the OIML norm R111:2004**

OIML (Organisation Internationale de Metrologie Legale) 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 191–193*

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

Composition table, valid for all KERN 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		
Weight set ↓	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	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						

**Class E1 • Milligram weights, wire shape, stainless steel**



Test weight material: stainless steel  
Box material: Wood

Milligram weight				+	Box		+	DAkkS certificate		=	Package price	
KERN		Tol ± mg	€		KERN	€		KERN	€		KERN	€
308-31	1 mg	0,003	58,-		338-090-200	14,-		962-251	52,-			124,-
308-32	2 mg	0,003	58,-		338-090-200	14,-		962-252	52,-			124,-
308-33	5 mg	0,003	58,-		338-090-200	14,-		962-253	52,-			124,-
308-34	10 mg	0,003	58,-		338-090-200	14,-		962-254	52,-			124,-
308-35	20 mg	0,003	58,-		338-090-200	14,-		962-255	52,-			124,-
308-36	50 mg	0,004	58,-		338-090-200	14,-		962-256	52,-			124,-
308-37	100 mg	0,005	58,-		338-090-200	14,-		962-257	52,-			124,-
308-38	200 mg	0,006	58,-		338-090-200	14,-		962-258	52,-			124,-
308-39	500 mg	0,008	58,-		338-090-200	14,-		962-259	52,-			124,-

**Class E1 • Individual weights, cylindrical shape, polished stainless steel**



Test weight material: Polished stainless steel  
Box material: Lined wood

Individual weight				+	Box		+	DAkkS certificate Initial calibration*		=	Package price	DAkkS certificate Recalibration	
KERN		Tol ± mg	€		KERN	€		KERN	€		€	KERN	€
307-01	1 g	0,010	83,-		317-010-100	28,-		963-231	193,-		304,-	962-231R	52,-
307-02	2 g	0,012	89,-		317-020-100	28,-		963-232	193,-		310,-	962-232R	52,-
307-03	5 g	0,016	96,-		317-030-100	28,-		963-233	193,-		317,-	962-233R	52,-
307-04	10 g	0,020	104,-		317-040-100	28,-		963-234	193,-		325,-	962-234R	52,-
307-05	20 g	0,025	113,-		317-050-100	28,-		963-235	193,-		334,-	962-235R	52,-
307-06	50 g	0,03	135,-		317-060-100	28,-		963-236	193,-		356,-	962-236R	52,-
307-07	100 g	0,05	162,-		317-070-100	28,-		963-237	193,-		383,-	962-237R	52,-
307-08	200 g	0,10	194,-		317-080-100	28,-		963-238	193,-		415,-	962-238R	52,-
307-09	500 g	0,25	280,-		317-090-100	31,-		963-239	193,-		504,-	962-239R	52,-
307-11	1 kg	0,5	425,-		317-110-100	35,-		963-241	193,-		653,-	962-241R	52,-
307-12	2 kg	1,0	630,-		317-120-100	44,-		963-242	465,-		1139,-	962-242R	64,-
307-13	5 kg	2,5	1060,-		317-130-100	66,-		963-243	465,-		1591,-	962-243R	64,-
307-14	10 kg	5,0	1530,-		317-140-100	89,-		963-244	465,-		2084,-	962-244R	64,-
307-15	20 kg	10,0	3100,-		317-150-100	340,-		963-245	1160,-		4600,-	962-245R	590,-
307-16	50 kg	25,0	5900,-		317-160-100	415,-		963-246	1360,-		7675,-	962-246R	660,-

For weights ≤ 500 g

For weights ≥ 1 kg

\* 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, cylindrical shape, polished stainless steel**

Test weight material: Polished stainless steel  
Case material: Lined wood. Milligram weights 1 mg – 500 mg in plastic box



Weight set			+	DAkkS certificate Initial calibration		=	Package price		DAkkS certificate Recalibration	
KERN		€		KERN	€		KERN	€	KERN	€
308-42	1 mg – 500 mg	780,-		962-250	350,-		1130,-		962-250R	350,-
303-02	1 mg – 50 g	1540,-		963-201	1070,-		2610,-		962-201R	560,-
303-03	1 mg – 100 g	1700,-		963-202	1170,-		2870,-		962-202R	580,-
303-04	1 mg – 200 g	2090,-		963-203	1350,-		3440,-		962-203R	630,-
303-05	1 mg – 500 g	2420,-		963-204	1440,-		3860,-		962-204R	660,-
303-06	1 mg – 1 kg	2840,-		963-205	1530,-		4370,-		962-205R	700,-
303-07	1 mg – 2 kg	4150,-		963-206	2000,-		6150,-		962-206R	750,-
303-08	1 mg – 5 kg	5300,-		963-207	2450,-		7750,-		962-207R	770,-
303-09	1 mg – 10 kg	6890,-		963-208	2900,-		9790,-		962-208R	800,-
304-02	1 g – 50 g	910,-		963-215	770,-		1680,-		962-215R	245,-
304-03	1 g – 100 g	1070,-		963-216	860,-		1930,-		962-216R	270,-
304-04	1 g – 200 g	1460,-		963-217	1040,-		2500,-		962-217R	320,-
304-05	1 g – 500 g	1790,-		963-218	1130,-		2920,-		962-218R	350,-
304-06	1 g – 1 kg	2210,-		963-219	1230,-		3440,-		962-219R	375,-
304-07	1 g – 2 kg	3520,-		963-220	1780,-		5300,-		962-220R	425,-
304-08	1 g – 5 kg	4670,-		963-221	2230,-		6900,-		962-221R	450,-
304-09	1 g – 10 kg	6260,-		963-222	2690,-		8950,-		962-222R	485,-

**Class E2 • Milligram weights, flat polygonal sheet, aluminium/German silver**

Test weight material: Aluminium 1 mg – 5 mg / German silver 10 mg – 500 mg  
 Container material: Lined plastic



Milligram weight			+	Container		+	DAkkS certificate		=	Package price	
KERN		Tol ± mg	€	KERN	€	KERN	€	KERN	€	KERN	€
318-01	1 mg	0,006	24,-	347-009-400	2,-	962-351	26,-				52,-
318-02	2 mg	0,006	24,-	347-009-400	2,-	962-352	26,-				52,-
318-03	5 mg	0,006	24,-	347-009-400	2,-	962-353	26,-				52,-
318-04	10 mg	0,008	24,-	347-009-400	2,-	962-354	26,-				52,-
318-05	20 mg	0,010	24,-	347-009-400	2,-	962-355	26,-				52,-
318-06	50 mg	0,012	24,-	347-009-400	2,-	962-356	26,-				52,-
318-07	100 mg	0,016	24,-	347-009-400	2,-	962-357	26,-				52,-
318-08	200 mg	0,020	24,-	347-009-400	2,-	962-358	26,-				52,-
318-09	500 mg	0,025	24,-	347-009-400	2,-	962-359	26,-				52,-

**Class E2 • Individual weights, compact shape, polished stainless steel**

Test weight material: Polished stainless steel  
 Container material: Lined plastic



Individual weight			+	Container		+	DAkkS certificate		=	Package price	
KERN		Tol ± mg	€	KERN	€	KERN	€	KERN	€	KERN	€
316-01	1 g	0,03	33,-	317-020-400	6,-	962-331	26,-				65,-
316-02	2 g	0,04	35,-	317-020-400	6,-	962-332	26,-				67,-
316-03	5 g	0,05	37,-	317-030-400	6,-	962-333	26,-				69,-
316-04	10 g	0,06	39,-	317-040-400	6,-	962-334	26,-				71,-
316-05	20 g	0,08	45,-	317-050-400	6,-	962-335	26,-				77,-
316-06	50 g	0,10	48,-	317-060-400	6,-	962-336	26,-				80,-
316-07	100 g	0,16	52,-	317-070-400	6,-	962-337	33,-				91,-
316-08	200 g	0,3	66,-	317-080-400	6,-	962-338	33,-				105,-
316-09	500 g	0,8	111,-	317-090-400	9,-	962-339	33,-				153,-
316-11	1 kg	1,6	161,-	317-110-400	9,-	962-341	33,-				203,-
316-12	2 kg	3,0	260,-	317-120-400	9,-	962-342	41,-				310,-
316-13	5 kg	8,0	375,-	317-130-400	15,-	962-343	41,-				431,-
316-14	10 kg	16,0	530,-	317-140-400	20,-	962-344	41,-				591,-

**Class E2 • Individual weights, cylindrical shape, polished stainless steel**

Test weight material: Polished stainless steel  
 Container material: Lined plastic or wooden box (317-150-100 and 317-160-100)



Individual weight			+	Container		+	DAkkS certificate		=	Package price	
KERN		Tol ± mg	€	KERN	€	KERN	€	KERN	€	KERN	€
317-01	1 g	0,03	47,-	317-020-400	6,-	962-331	26,-				79,-
317-02	2 g	0,04	50,-	317-020-400	6,-	962-332	26,-				82,-
317-03	5 g	0,05	54,-	317-030-400	6,-	962-333	26,-				86,-
317-04	10 g	0,06	56,-	317-040-400	6,-	962-334	26,-				88,-
317-05	20 g	0,08	65,-	317-050-400	6,-	962-335	26,-				97,-
317-06	50 g	0,10	76,-	317-060-400	6,-	962-336	26,-				108,-
317-07	100 g	0,16	82,-	317-070-400	6,-	962-337	33,-				121,-
317-08	200 g	0,3	104,-	317-080-400	6,-	962-338	33,-				143,-
317-09	500 g	0,8	175,-	317-090-400	9,-	962-339	33,-				217,-
317-11	1 kg	1,6	260,-	317-110-400	9,-	962-341	33,-				302,-
317-12	2 kg	3,0	415,-	317-120-400	9,-	962-342	41,-				465,-
317-13	5 kg	8,0	590,-	317-130-400	15,-	962-343	41,-				646,-
317-14	10 kg	16,0	850,-	317-140-400	20,-	962-344	41,-				911,-
317-15	20 kg	30,0	1680,-	317-150-100	340,-	962-345	52,-				2072,-
317-16	50 kg	80,0	3500,-	317-160-100	415,-	962-346	64,-				3979,-

For individual weights, wooden boxes are also available as an alternative to the plastic containers.  
 For more details on this, please see page 180

For weights ≤ 500 g      For weights ≥ 1 kg



**Class E2 • Weight sets, compact shape, polished stainless steel**



Test weight material: Polished stainless steel  
Case material: Lined plastic

Weight set			+ DAKkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
312-024	1 g - 50 g	370,-	962-315	127,-		497,-
312-034	1 g - 100 g	410,-	962-316	150,-		560,-
312-044	1 g - 200 g	500,-	962-317	196,-		696,-
312-054	1 g - 500 g	610,-	962-318	220,-		830,-
312-064	1 g - 1 kg	810,-	962-319	245,-		1055,-
312-074	1 g - 2 kg	1310,-	962-320	305,-		1615,-
312-084	1 g - 5 kg	1650,-	962-321	340,-		1990,-

**Class E2 • Weight sets, cylindrical shape, polished stainless steel**



Test weight material: Individual weights, polished stainless steel,  
milligram weights aluminium/German silver  
Case material: Lined plastic. Milligram weights 1 mg - 500 mg in plastic box

Weight set			+ DAKkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
318-22	1 mg - 500 mg	320,-	962-350	190,-		510,-
313-024	1 mg - 50 g	820,-	962-301	315,-		1135,-
313-034	1 mg - 100 g	910,-	962-302	340,-		1250,-
313-044	1 mg - 200 g	1110,-	962-303	385,-		1495,-
313-054	1 mg - 500 g	1270,-	962-304	410,-		1680,-
313-064	1 mg - 1 kg	1630,-	962-305	435,-		2065,-
313-074	1 mg - 2 kg	2460,-	962-306	495,-		2955,-
313-084	1 mg - 5 kg	3050,-	962-307	530,-		3580,-
314-024	1 g - 50 g	540,-	962-315	127,-		667,-
314-034	1 g - 100 g	620,-	962-316	150,-		770,-
314-044	1 g - 200 g	830,-	962-317	196,-		1026,-
314-054	1 g - 500 g	1010,-	962-318	220,-		1230,-
314-064	1 g - 1 kg	1340,-	962-319	245,-		1585,-
314-074	1 g - 2 kg	2180,-	962-320	305,-		2485,-
314-084	1 g - 5 kg	2760,-	962-321	340,-		3100,-

**Class E2 • Weight sets, cylindrical shape, polished stainless steel**



Test weight material: Individual weights, polished stainless steel,  
milligram weights aluminium /German silver  
Case material: Lined wood. Milligram weights 1 mg - 500 mg in plastic box

Weight set			+ DAKkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
318-22	1 mg - 500 mg	320,-	962-350	190,-		510,-
313-02	1 mg - 50 g	880,-	962-301	315,-		1195,-
313-03	1 mg - 100 g	960,-	962-302	340,-		1300,-
313-04	1 mg - 200 g	1170,-	962-303	385,-		1555,-
313-05	1 mg - 500 g	1400,-	962-304	410,-		1810,-
313-06	1 mg - 1 kg	1670,-	962-305	435,-		2105,-
313-07	1 mg - 2 kg	2550,-	962-306	495,-		3045,-
313-08	1 mg - 5 kg	3250,-	962-307	530,-		3780,-
313-09	1 mg - 10 kg	4180,-	962-308	560,-		4740,-
314-02	1 g - 50 g	590,-	962-315	127,-		717,-
314-03	1 g - 100 g	670,-	962-316	150,-		820,-
314-04	1 g - 200 g	880,-	962-317	196,-		1076,-
314-05	1 g - 500 g	1120,-	962-318	220,-		1340,-
314-06	1 g - 1 kg	1380,-	962-319	245,-		1625,-
314-07	1 g - 2 kg	2260,-	962-320	305,-		2565,-
314-08	1 g - 5 kg	2960,-	962-321	340,-		3300,-
314-09	1 g - 10 kg	3890,-	962-322	370,-		4260,-

**Class F1 • Milligram weights, flat polygonal sheet, aluminium/German silver**

Test weight material: Aluminium 1 mg – 5 mg/German silver 10 mg – 500 mg  
 Container material: Lined plastic



Milligram weight			+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€		KERN	€		KERN	€	KERN	€	KERN	€	
328-01	1 mg	0,020	11,-		347-009-400	2,-		962-451	18,-				31,-	
328-02	2 mg	0,020	11,-		347-009-400	2,-		962-452	18,-				31,-	
328-03	5 mg	0,020	11,-		347-009-400	2,-		962-453	18,-				31,-	
328-04	10 mg	0,025	11,-		347-009-400	2,-		962-454	18,-				31,-	
328-05	20 mg	0,03	11,-		347-009-400	2,-		962-455	18,-				31,-	
328-06	50 mg	0,04	11,-		347-009-400	2,-		962-456	18,-				31,-	
328-07	100 mg	0,05	11,-		347-009-400	2,-		962-457	18,-				31,-	
328-08	200 mg	0,06	11,-		347-009-400	2,-		962-458	18,-				31,-	
328-09	500 mg	0,08	11,-		347-009-400	2,-		962-459	18,-				31,-	

**Individual weights, compact shape, finely turned stainless steel**

Test weight material: finely turned stainless steel  
 Container material: Lined plastic

**■ Build type: Does not conform to OIML:R111, adjusted to F1 error limit class, however no mention of the OIML error limit classes on the calibration certificate**



Individual weight			+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€		KERN	€		KERN	€	KERN	€	KERN	€	
329-01	1 g	0,10	18,-		347-030-400	2,-		962-431	18,-				38,-	
329-02	2 g	0,12	19,-		347-030-400	2,-		962-432	18,-				39,-	
329-03	5 g	0,16	20,-		347-030-400	2,-		962-433	18,-				40,-	
329-04	10 g	0,20	23,-		347-050-400	2,-		962-434	18,-				43,-	
329-05	20 g	0,25	25,-		347-050-400	2,-		962-435	18,-				45,-	
329-06	50 g	0,3	27,-		347-070-400	2,-		962-436	18,-				47,-	
329-07	100 g	0,5	31,-		347-070-400	2,-		962-437	20,-				53,-	
329-08	200 g	1,0	41,-		347-080-400	2,-		962-438	20,-				63,-	
329-09	500 g	2,5	58,-		347-090-400	3,-		962-439	20,-				81,-	
329-11	1 kg	5,0	83,-		347-110-400	3,-		962-441	20,-				106,-	
329-12	2 kg	10	127,-		347-120-400	3,-		962-442	25,-				155,-	
329-13	5 kg	25	220,-		347-130-400	9,-		962-443	25,-				254,-	
329-14	10 kg	50	410,-		347-140-400	9,-		962-444	25,-				444,-	

**Class F1 • Individual weights, compact shape, polished stainless steel**

Test weight material: Polished stainless steel  
 Container material: Lined plastic



Individual weight			+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€		KERN	€		KERN	€	KERN	€	KERN	€	
326-01	1 g	0,10	22,-		347-030-400	2,-		962-431	18,-				42,-	
326-02	2 g	0,12	23,-		347-030-400	2,-		962-432	18,-				43,-	
326-03	5 g	0,16	25,-		347-030-400	2,-		962-433	18,-				45,-	
326-04	10 g	0,20	28,-		347-050-400	2,-		962-434	18,-				48,-	
326-05	20 g	0,25	29,-		347-050-400	2,-		962-435	18,-				49,-	
326-06	50 g	0,3	32,-		347-070-400	2,-		962-436	18,-				52,-	
326-07	100 g	0,5	36,-		347-070-400	2,-		962-437	20,-				58,-	
326-08	200 g	1,0	49,-		347-080-400	2,-		962-438	20,-				71,-	
326-09	500 g	2,5	68,-		347-090-400	3,-		962-439	20,-				91,-	
326-11	1 kg	5,0	101,-		347-110-400	3,-		962-441	20,-				124,-	
326-12	2 kg	10	150,-		347-120-400	3,-		962-442	25,-				178,-	
326-13	5 kg	25	260,-		347-130-400	9,-		962-443	25,-				294,-	
326-14	10 kg	50	485,-		347-140-400	9,-		962-444	25,-				519,-	

**Class F1 • Individual weights, cylindrical shape, nickel-plated and polished brass**

Test weight material: Nickel-plated and polished brass

Container material: Lined plastic or lined wooden box (317-150-100 and 317-160-100)



Individual weight				+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€		
327-61	1 g	0,10	23,-	347-030-400	2,-	962-431	18,-							43,-	
327-62	2 g	0,12	24,-	347-030-400	2,-	962-432	18,-							44,-	
327-63	5 g	0,16	26,-	347-030-400	2,-	962-433	18,-							46,-	
327-64	10 g	0,20	29,-	347-050-400	2,-	962-434	18,-							49,-	
327-65	20 g	0,25	31,-	347-050-400	2,-	962-435	18,-							51,-	
327-66	50 g	0,3	34,-	347-070-400	2,-	962-436	18,-							54,-	
327-67	100 g	0,5	38,-	347-070-400	2,-	962-437	20,-							60,-	
327-68	200 g	1,0	52,-	347-080-400	2,-	962-438	20,-							74,-	
327-69	500 g	2,5	72,-	347-090-400	3,-	962-439	20,-							95,-	
327-71	1 kg	5,0	106,-	347-110-400	3,-	962-441	20,-							129,-	
327-72	2 kg	10	158,-	347-120-400	3,-	962-442	25,-							186,-	
327-73	5 kg	25	270,-	347-130-400	9,-	962-443	25,-							304,-	
327-74	10 kg	50	510,-	347-140-400	9,-	962-444	25,-							544,-	
327-75	20 kg	100	960,-	317-150-100	340,-	962-445	28,-							1328,-	
327-76	50 kg	250	1800,-	317-160-100	415,-	962-446	39,-							2254,-	

**Class F1 • Individual weights, cylindrical shape, polished stainless steel**

Test weight material: Polished stainless steel

Container material: Lined plastic or lined wooden box (317-150-100 and 317-160-100)



Individual weight				+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€		
327-01	1 g	0,10	30,-	347-030-400	2,-	962-431	18,-							50,-	
327-02	2 g	0,12	31,-	347-030-400	2,-	962-432	18,-							51,-	
327-03	5 g	0,16	33,-	347-030-400	2,-	962-433	18,-							53,-	
327-04	10 g	0,20	37,-	347-050-400	2,-	962-434	18,-							57,-	
327-05	20 g	0,25	41,-	347-050-400	2,-	962-435	18,-							61,-	
327-06	50 g	0,3	45,-	347-070-400	2,-	962-436	18,-							65,-	
327-07	100 g	0,5	55,-	347-070-400	2,-	962-437	20,-							77,-	
327-08	200 g	1,0	72,-	347-080-400	2,-	962-438	20,-							94,-	
327-09	500 g	2,5	118,-	347-090-400	3,-	962-439	20,-							141,-	
327-11	1 kg	5,0	165,-	347-110-400	3,-	962-441	20,-							188,-	
327-12	2 kg	10	250,-	347-120-400	3,-	962-442	25,-							278,-	
327-13	5 kg	25	375,-	347-130-400	9,-	962-443	25,-							409,-	
327-14	10 kg	50	680,-	347-140-400	9,-	962-444	25,-							714,-	
327-15	20 kg	100	1350,-	317-150-100	340,-	962-445	28,-							1718,-	
327-16	50 kg	250	2900,-	317-160-100	415,-	962-446	39,-							3354,-	



**Alternative to plastic container:**

Wooden boxes for individual weights. For more details on this, please see page 180



**Weight sets, compact shape, finely turned stainless steel**



Check weight material: finely turned stainless steel, Case material: Lined plastic

**Build type: Does not conform to OIML:R111, adjusted to F1 error limit class, however no mention of the OIML error limit classes on the calibration certificate**

Weight set			+		DAkkS certificate		=		Package price			
KERN			€		KERN		€		KERN		€	
321-024	1 g - 50 g	185,-	962-415	67,-					252,-			
321-034	1 g - 100 g	215,-	962-416	77,-					292,-			
321-044	1 g - 200 g	280,-	962-417	98,-					378,-			
321-054	1 g - 500 g	320,-	962-418	109,-					429,-			
321-064	1 g - 1 kg	460,-	962-419	119,-					579,-			
321-074	1 g - 2 kg	640,-	962-420	151,-					791,-			
321-084	1 g - 5 kg	820,-	962-421	166,-					986,-			

**Class F1 • Weight sets, compact shape, polished stainless steel**



Test weight material: Polished stainless steel

Case material: Lined plastic

Weight set			+		DAkkS certificate		=		Package price			
KERN			€		KERN		€		KERN		€	
322-024	1 g - 50 g	235,-	962-415	67,-					302,-			
322-034	1 g - 100 g	270,-	962-416	77,-					347,-			
322-044	1 g - 200 g	350,-	962-417	98,-					448,-			
322-054	1 g - 500 g	410,-	962-418	109,-					519,-			
322-064	1 g - 1 kg	580,-	962-419	119,-					699,-			
322-074	1 g - 2 kg	810,-	962-420	151,-					961,-			
322-084	1 g - 5 kg	1030,-	962-421	166,-					1196,-			

**Class F1 • Weight sets, cylindrical shape, polished and nickel-plated brass or polished stainless steel**



Test weight material: Individual weights – nickel-plated and polished brass or polished stainless steel, milligram weights - aluminium 1 mg – 5 mg/German silver 10 mg – 500 mg

Case material: Lined plastic. Milligram weights 1 mg – 500 mg in plastic box

Weight set			+		DAkkS certificate		=		Package price			
KERN			€		KERN		€		KERN		€	
328-22	1 mg - 500 mg	175,-	962-450	100,-					275,-			
<b>Polished and nickel-plated brass</b>												
323-624	1 mg - 50 g	400,-	962-401	167,-					567,-			
323-634	1 mg - 100 g	435,-	962-402	178,-					613,-			
323-644	1 mg - 200 g	530,-	962-403	199,-					729,-			
323-654	1 mg - 500 g	590,-	962-404	210,-					800,-			
323-664	1 mg - 1 kg	750,-	962-405	220,-					970,-			
323-674	1 mg - 2 kg	1030,-	962-406	250,-					1280,-			
323-684	1 mg - 5 kg	1270,-	962-407	265,-					1535,-			
324-624	1 g - 50 g	260,-	962-415	67,-					327,-			
324-634	1 g - 100 g	300,-	962-416	77,-					377,-			
324-644	1 g - 200 g	380,-	962-417	98,-					478,-			
324-654	1 g - 500 g	450,-	962-418	109,-					559,-			
324-664	1 g - 1 kg	630,-	962-419	119,-					749,-			
324-674	1 g - 2 kg	900,-	962-420	151,-					1051,-			
324-684	1 g - 5 kg	1140,-	962-421	166,-					1306,-			
<b>Polished stainless steel</b>												
323-024	1 mg - 50 g	500,-	962-401	167,-					667,-			
323-034	1 mg - 100 g	560,-	962-402	178,-					738,-			
323-044	1 mg - 200 g	700,-	962-403	199,-					899,-			
323-054	1 mg - 500 g	820,-	962-404	210,-					1030,-			
323-064	1 mg - 1 kg	1070,-	962-405	220,-					1290,-			
323-074	1 mg - 2 kg	1570,-	962-406	250,-					1820,-			
323-084	1 mg - 5 kg	1920,-	962-407	265,-					2185,-			
324-024	1 g - 50 g	340,-	962-415	67,-					407,-			
324-034	1 g - 100 g	400,-	962-416	77,-					477,-			
324-044	1 g - 200 g	540,-	962-417	98,-					638,-			
324-054	1 g - 500 g	660,-	962-418	109,-					769,-			
324-064	1 g - 1 kg	890,-	962-419	119,-					1009,-			
324-074	1 g - 2 kg	1400,-	962-420	151,-					1551,-			
324-084	1 g - 5 kg	1750,-	962-421	166,-					1916,-			

**Class F1 • Weight sets, cylindrical shape, nickel-plated and polished brass or polished stainless steel**

Test weight material: Individual weights polished or nickel-plated brass or polished stainless steel, milligram weights aluminium 1 mg – 5 mg/German silver 10 mg – 500 mg  
 Case material: Lined wood. Milligram weights 1 mg – 500 mg in plastic box



Weight set			+ DAKkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
328-22	1 mg - 500 mg	175,-	962-450	100,-		275,-
<b>Polished and nickel-plated brass</b>						
323-62	1 mg - 50 g	455,-	962-401	167,-		622,-
323-63	1 mg - 100 g	485,-	962-402	178,-		663,-
323-64	1 mg - 200 g	580,-	962-403	199,-		779,-
323-65	1 mg - 500 g	700,-	962-404	210,-		910,-
323-66	1 mg - 1 kg	790,-	962-405	220,-		1010,-
323-67	1 mg - 2 kg	1120,-	962-406	250,-		1370,-
323-68	1 mg - 5 kg	1470,-	962-407	265,-		1735,-
323-69	1 mg - 10 kg	1990,-	962-408	285,-		2275,-
324-62	1 g - 50 g	310,-	962-415	67,-		377,-
324-63	1 g - 100 g	350,-	962-416	77,-		427,-
324-64	1 g - 200 g	435,-	962-417	98,-		533,-
324-65	1 g - 500 g	560,-	962-418	109,-		669,-
324-66	1 g - 1 kg	660,-	962-419	119,-		779,-
324-67	1 g - 2 kg	980,-	962-420	151,-		1131,-
324-68	1 g - 5 kg	1330,-	962-421	166,-		1496,-
324-69	1 g - 10 kg	1850,-	962-422	182,-		2032,-
<b>Polished stainless steel</b>						
323-02	1 mg - 50 g	560,-	962-401	167,-		727,-
323-03	1 mg - 100 g	610,-	962-402	178,-		788,-
323-04	1 mg - 200 g	750,-	962-403	199,-		949,-
323-05	1 mg - 500 g	930,-	962-404	210,-		1140,-
323-06	1 mg - 1 kg	1100,-	962-405	220,-		1320,-
323-07	1 mg - 2 kg	1650,-	962-406	250,-		1900,-
323-08	1 mg - 5 kg	2110,-	962-407	265,-		2375,-
323-09	1 mg - 10 kg	2880,-	962-408	285,-		3165,-
324-02	1 g - 50 g	390,-	962-415	67,-		457,-
324-03	1 g - 100 g	450,-	962-416	77,-		527,-
324-04	1 g - 200 g	600,-	962-417	98,-		698,-
324-05	1 g - 500 g	760,-	962-418	109,-		869,-
324-06	1 g - 1 kg	940,-	962-419	119,-		1059,-
324-07	1 g - 2 kg	1480,-	962-420	151,-		1631,-
324-08	1 g - 5 kg	1950,-	962-421	166,-		2116,-
324-09	1 g - 10 kg	2710,-	962-422	182,-		2892,-

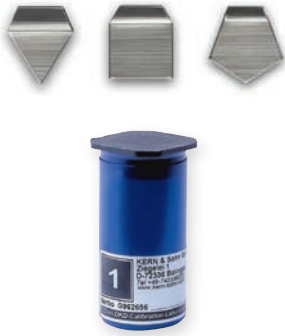


**You can create your own individual weight set yourself:**

It contains only the weights which you need for testing purposes. KERN will customise your own personal box out of plastic, wood or aluminium. For more details on this, please see page 181

**Class F2 • Milligram weights, flat polygonal sheet, aluminium/German silver**

Test weight material: Aluminium 1 mg – 5 mg/German silver 10 mg – 500 mg  
 Container material: Lined plastic



Milligram weight				+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€	KERN		€	KERN		€	KERN		€	KERN		€
<b>338-01</b>	1 mg	0,06	<b>10,-</b>	347-009-400	<b>2,-</b>		962-451	<b>18,-</b>							<b>30,-</b>
<b>338-02</b>	2 mg	0,06	<b>10,-</b>	347-009-400	<b>2,-</b>		962-452	<b>18,-</b>							<b>30,-</b>
<b>338-03</b>	5 mg	0,06	<b>10,-</b>	347-009-400	<b>2,-</b>		962-453	<b>18,-</b>							<b>30,-</b>
<b>338-04</b>	10 mg	0,08	<b>10,-</b>	347-009-400	<b>2,-</b>		962-454	<b>18,-</b>							<b>30,-</b>
<b>338-05</b>	20 mg	0,10	<b>10,-</b>	347-009-400	<b>2,-</b>		962-455	<b>18,-</b>							<b>30,-</b>
<b>338-06</b>	50 mg	0,12	<b>10,-</b>	347-009-400	<b>2,-</b>		962-456	<b>18,-</b>							<b>30,-</b>
<b>338-07</b>	100 mg	0,16	<b>10,-</b>	347-009-400	<b>2,-</b>		962-457	<b>18,-</b>							<b>30,-</b>
<b>338-08</b>	200 mg	0,20	<b>10,-</b>	347-009-400	<b>2,-</b>		962-458	<b>18,-</b>							<b>30,-</b>
<b>338-09</b>	500 mg	0,25	<b>10,-</b>	347-009-400	<b>2,-</b>		962-459	<b>18,-</b>							<b>30,-</b>

**Class F2 • Individual weights, cylindrical shape, finely turned stainless steel**

Test weight material: finely turned stainless steel  
 Container material: Lined plastic or wooden box (337-150-200 and 337-160-200)



Individual weight				+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€	KERN		€	KERN		€	KERN		€	KERN		€
<b>337-01</b>	1 g	0,3	<b>19,-</b>	347-030-400	<b>2,-</b>		962-431	<b>18,-</b>							<b>39,-</b>
<b>337-02</b>	2 g	0,4	<b>20,-</b>	347-030-400	<b>2,-</b>		962-432	<b>18,-</b>							<b>40,-</b>
<b>337-03</b>	5 g	0,5	<b>22,-</b>	347-030-400	<b>2,-</b>		962-433	<b>18,-</b>							<b>42,-</b>
<b>337-04</b>	10 g	0,6	<b>24,-</b>	347-050-400	<b>2,-</b>		962-434	<b>18,-</b>							<b>44,-</b>
<b>337-05</b>	20 g	0,8	<b>26,-</b>	347-050-400	<b>2,-</b>		962-435	<b>18,-</b>							<b>46,-</b>
<b>337-06</b>	50 g	1,0	<b>28,-</b>	347-070-400	<b>2,-</b>		962-436	<b>18,-</b>							<b>48,-</b>
<b>337-07</b>	100 g	1,6	<b>32,-</b>	347-070-400	<b>2,-</b>		962-437	<b>20,-</b>							<b>54,-</b>
<b>337-08</b>	200 g	3,0	<b>42,-</b>	347-080-400	<b>2,-</b>		962-438	<b>20,-</b>							<b>64,-</b>
<b>337-09</b>	500 g	8,0	<b>60,-</b>	347-090-400	<b>3,-</b>		962-439	<b>20,-</b>							<b>83,-</b>
<b>337-11</b>	1 kg	16	<b>84,-</b>	347-110-400	<b>3,-</b>		962-441	<b>20,-</b>							<b>107,-</b>
<b>337-12</b>	2 kg	30	<b>129,-</b>	347-120-400	<b>3,-</b>		962-442	<b>25,-</b>							<b>157,-</b>
<b>337-13</b>	5 kg	80	<b>220,-</b>	347-130-400	<b>9,-</b>		962-443	<b>25,-</b>							<b>254,-</b>
<b>337-14</b>	10 kg	160	<b>415,-</b>	347-140-400	<b>9,-</b>		962-444	<b>25,-</b>							<b>449,-</b>
<b>337-15</b>	20 kg	300	<b>710,-</b>	337-150-200	<b>220,-</b>		962-445	<b>28,-</b>							<b>958,-</b>
<b>337-16</b>	50 kg	800	<b>1290,-</b>	337-160-200	<b>345,-</b>		962-446	<b>39,-</b>							<b>1674,-</b>



**Alternative to plastic container:**

Wooden boxes for individual weights. For more details on this, please see page 180

**Class F2 • Test weights, stainless steel, stackable**

Test weight material: finely turned stainless steel  
 Box material: Wood



Test weight				+		Container		+		DAkkS certificate		=		Package price		
KERN		Tol ± mg	Dimens. Ø × H	€	KERN		€	KERN		€	KERN		€	KERN		€
<b>337-141</b>	10 kg	160	137×132 mm	<b>550,-</b>	337-141-200	<b>190,-</b>		962-444	<b>25,-</b>						<b>765,-</b>	
<b>337-151</b>	20 kg	300	137×217 mm	<b>670,-</b>	337-151-200	<b>235,-</b>		962-445	<b>28,-</b>						<b>933,-</b>	
<b>337-161</b>	50 kg	800	198×250 mm	<b>1790,-</b>	337-161-200	<b>345,-</b>		962-446	<b>39,-</b>						<b>2174,-</b>	

**Class F2 • Weight sets, cylindrical shape, finely turned stainless steel**

Test weight material: I Individual weights - finely turned stainless steel, milligram weights - aluminium 1 mg - 5 mg/German silver 10 mg - 500 mg  
Case material: Lined plastic. Milligram weights 1 mg - 500 mg in plastic box



Weight set			+ DAkkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
338-22	1 mg - 500 mg	143,-	962-450	100,-		243,-
333-024	1 mg - 50 g	365,-	962-401	167,-		532,-
333-034	1 mg - 100 g	405,-	962-402	178,-		583,-
333-044	1 mg - 200 g	495,-	962-403	199,-		694,-
333-054	1 mg - 500 g	570,-	962-404	210,-		780,-
333-064	1 mg - 1 kg	690,-	962-405	220,-		910,-
333-074	1 mg - 2 kg	970,-	962-406	250,-		1220,-
333-084	1 mg - 5 kg	1250,-	962-407	265,-		1515,-
334-024	1 g - 50 g	225,-	962-415	67,-		292,-
334-034	1 g - 100 g	265,-	962-416	77,-		342,-
334-044	1 g - 200 g	360,-	962-417	98,-		458,-
334-054	1 g - 500 g	425,-	962-418	109,-		534,-
334-064	1 g - 1 kg	560,-	962-419	119,-		679,-
334-074	1 g - 2 kg	850,-	962-420	151,-		1001,-
334-084	1 g - 5 kg	1120,-	962-421	166,-		1286,-

**Class F2 • Weight sets, cylindrical shape, finely turned stainless steel**

Test weight material: Individual weights - finely turned stainless steel, milligram weights - aluminium 1 mg - 5 mg/German silver 10 mg - 500 mg  
Case material: Wood. Milligram weights 1 mg - 500 mg in plastic box



Weight set			+ DAkkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
338-22	1 mg - 500 mg	143,-	962-450	100,-		243,-
333-02	1 mg - 50 g	365,-	962-401	167,-		532,-
333-03	1 mg - 100 g	405,-	962-402	178,-		583,-
333-04	1 mg - 200 g	495,-	962-403	199,-		694,-
333-05	1 mg - 500 g	570,-	962-404	210,-		780,-
333-06	1 mg - 1 kg	690,-	962-405	220,-		910,-
333-07	1 mg - 2 kg	970,-	962-406	250,-		1220,-
333-08	1 mg - 5 kg	1250,-	962-407	265,-		1515,-
333-09	1 mg - 10 kg	1750,-	962-408	285,-		2035,-
334-02	1 g - 50 g	225,-	962-415	67,-		292,-
334-03	1 g - 100 g	265,-	962-416	77,-		342,-
334-04	1 g - 200 g	360,-	962-417	98,-		458,-
334-05	1 g - 500 g	425,-	962-418	109,-		534,-
334-06	1 g - 1 kg	560,-	962-419	119,-		679,-
334-07	1 g - 2 kg	850,-	962-420	151,-		1001,-
334-08	1 g - 5 kg	1120,-	962-421	166,-		1286,-
334-09	1 g - 10 kg	1610,-	962-422	182,-		1792,-



**You can create your own individual weight set yourself:**

It contains only the weights which you need for testing purposes. KERN will customise your own personal box out of plastic, wood or aluminium. For more details on this, please see page 181



**Class M1 • Milligram weights, flat polygonal sheet, aluminium/German silver**

Test weight material: Aluminium 1 mg – 5 mg/German silver 10 mg – 500 mg  
 Container material: Lined plastic



Milligram weight				+	Container		+	DAkkS certificate		=	Package price	
KERN		Tol ± mg	€		KERN	€		KERN	€		KERN	€
348-01	1 mg	0,20	4,10		347-009-400	2,-		962-651	15,-			21,10
348-02	2 mg	0,20	4,10		347-009-400	2,-		962-652	15,-			21,10
348-03	5 mg	0,20	4,10		347-009-400	2,-		962-653	15,-			21,10
348-04	10 mg	0,25	4,10		347-009-400	2,-		962-654	15,-			21,10
348-05	20 mg	0,3	4,10		347-009-400	2,-		962-655	15,-			21,10
348-06	50 mg	0,4	4,10		347-009-400	2,-		962-656	15,-			21,10
348-07	100 mg	0,5	4,10		347-009-400	2,-		962-657	15,-			21,10
348-08	200 mg	0,6	4,10		347-009-400	2,-		962-658	15,-			21,10
348-09	500 mg	0,8	4,10		347-009-400	2,-		962-659	15,-			21,10

**Class M1 • Individual weights, cylindrical shape, finely turned brass or finely turned stainless steel**

Test weight material: Individual weights - finely turned brass or finely turned stainless steel  
 Container material: Lined plastic



Individual weight				+	Container		+	DAkkS certificate		=	Package price	
KERN		Tol ± mg	€		KERN	€		KERN	€		KERN	€
<b>Finely turned brass</b>												
347-41	1 g	1,0	4,10		347-030-400	2,-		962-631	15,-			21,10
347-42	2 g	1,2	4,40		347-030-400	2,-		962-632	15,-			21,40
347-43	5 g	1,6	4,80		347-030-400	2,-		962-633	15,-			21,80
347-44	10 g	2,0	5,30		347-050-400	2,-		962-634	15,-			22,30
347-45	20 g	2,5	6,30		347-050-400	2,-		962-635	15,-			23,30
347-46	50 g	3,0	7,50		347-070-400	2,-		962-636	15,-			24,50
347-47	100 g	5,0	9,50		347-070-400	2,-		962-637	16,-			27,50
347-48	200 g	10	13,-		347-080-400	2,-		962-638	16,-			31,-
347-49	500 g	25	28,-		347-090-400	3,-		962-639	16,-			47,-
347-51	1 kg	50	43,-		347-110-400	3,-		962-641	16,-			62,-
347-52	2 kg	100	77,-		347-120-400	3,-		962-642	17,-			97,-
347-53	5 kg	250	165,-		347-130-400	9,-		962-643	17,-			191,-
347-54	10 kg	500	310,-		347-140-400	9,-		962-644	17,-			336,-
<b>Finely turned stainless steel</b>												
347-01	1 g	1,0	4,60		347-030-400	2,-		962-631	15,-			21,60
347-02	2 g	1,2	4,90		347-030-400	2,-		962-632	15,-			21,90
347-03	5 g	1,6	5,40		347-030-400	2,-		962-633	15,-			22,40
347-04	10 g	2,0	5,80		347-050-400	2,-		962-634	15,-			22,80
347-05	20 g	2,5	6,50		347-050-400	2,-		962-635	15,-			23,50
347-06	50 g	3,0	8,20		347-070-400	2,-		962-636	15,-			25,20
347-07	100 g	5,0	11,-		347-070-400	2,-		962-637	16,-			29,-
347-08	200 g	10	16,-		347-080-400	2,-		962-638	16,-			34,-
347-09	500 g	25	34,-		347-090-400	3,-		962-639	16,-			53,-
347-11	1 kg	50	54,-		347-110-400	3,-		962-641	16,-			73,-
347-12	2 kg	100	92,-		347-120-400	3,-		962-642	17,-			112,-
347-13	5 kg	250	196,-		347-130-400	9,-		962-643	17,-			222,-
347-14	10 kg	500	385,-		347-140-400	9,-		962-644	17,-			411,-

**Class M1 • Test weights, stainless steel, stackable**

Test weight material: Stainless steel, finely turned  
 Box material: Wood



Test weight					+	Container		+	DAkkS certificate		=	Package price	
KERN	Tol ± g	Dim. Ø x H	€		KERN	€		KERN	€		KERN	€	
347-141	10 kg	0,50	137×132 mm	490,-	337-141-200	190,-		962-644	17,-			697,-	
347-151	20 kg	1,00	137×217 mm	590,-	337-151-200	235,-		962-645	22,-			847,-	
347-161	50 kg	2,50	198×250 mm	1600,-	337-161-200	345,-		962-646	24,-			1969,-	



**Class M1 • Weight sets, cylindrical shape, finely turned brass or finely turned stainless steel**

Test weight material: Individual weights finely turned brass or finely turned stainless steel, milligram weights aluminium 1 mg – 5 mg/German silver 10 mg – 500 mg  
Case material: Lined plastic. Milligram weights 1 mg – 500 mg in plastic box



Weight set			+ DAkkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
348-22	1 mg - 500 mg	69,-	962-650	63,-		132,-
<b>Finely turned brass</b>						
343-424	1 mg - 50 g	149,-	962-601	106,-		255,-
343-434	1 mg - 100 g	162,-	962-602	112,-		274,-
343-444	1 mg - 200 g	191,-	962-603	125,-		316,-
343-454	1 mg - 500 g	220,-	962-604	131,-		351,-
343-464	1 mg - 1 kg	340,-	962-605	137,-		477,-
343-474	1 mg - 2 kg	485,-	962-606	152,-		637,-
343-484	1 mg - 5 kg	710,-	962-607	160,-		870,-
344-424	1 g - 50 g	94,-	962-615	42,-		136,-
344-434	1 g - 100 g	100,-	962-616	49,-		149,-
344-444	1 g - 200 g	126,-	962-617	61,-		187,-
344-454	1 g - 500 g	158,-	962-618	68,-		226,-
344-464	1 g - 1 kg	280,-	962-619	74,-		354,-
344-474	1 g - 2 kg	430,-	962-620	89,-		519,-
344-484	1 g - 5 kg	650,-	962-621	96,-		746,-
<b>Finely turned stainless steel</b>						
343-024	1 mg - 50 g	155,-	962-601	106,-		261,-
343-034	1 mg - 100 g	170,-	962-602	112,-		282,-
343-044	1 mg - 200 g	205,-	962-603	125,-		330,-
343-054	1 mg - 500 g	245,-	962-604	131,-		376,-
343-064	1 mg - 1 kg	335,-	962-605	137,-		472,-
343-074	1 mg - 2 kg	540,-	962-606	152,-		692,-
343-084	1 mg - 5 kg	800,-	962-607	160,-		960,-
344-024	1 g - 50 g	92,-	962-615	42,-		134,-
344-034	1 g - 100 g	102,-	962-616	49,-		151,-
344-044	1 g - 200 g	139,-	962-617	61,-		200,-
344-054	1 g - 500 g	179,-	962-618	68,-		247,-
344-064	1 g - 1 kg	285,-	962-619	74,-		359,-
344-074	1 g - 2 kg	490,-	962-620	89,-		579,-
344-084	1 g - 5 kg	750,-	962-621	96,-		846,-

**Class M1 • Weight sets, cylindrical shape, finely turned brass or finely turned stainless steel**

Test weight material: Individual weights finely turned brass or finely turned stainless steel, milligram weights aluminium 1 mg – 5 mg/German silver 10 mg – 500 mg  
Case material: Wood. Milligram weights 1 mg – 500 mg in plastic box



Weight set			+ DAkkS certificate		= Package price	
KERN		€	KERN	€	KERN	€
348-22	1 mg - 500 mg	69,-	962-650	63,-		132,-
<b>Finely turned brass</b>						
343-42	1 mg - 50 g	149,-	962-601	106,-		255,-
343-43	1 mg - 100 g	162,-	962-602	112,-		274,-
343-44	1 mg - 200 g	191,-	962-603	125,-		316,-
343-45	1 mg - 500 g	220,-	962-604	131,-		351,-
343-46	1 mg - 1 kg	305,-	962-605	137,-		442,-
343-47	1 mg - 2 kg	485,-	962-606	152,-		637,-
343-48	1 mg - 5 kg	710,-	962-607	160,-		870,-
343-49	1 mg - 10 kg	1090,-	962-608	167,-		1257,-
344-42	1 g - 50 g	90,-	962-615	42,-		132,-
344-43	1 g - 100 g	100,-	962-616	49,-		149,-
344-44	1 g - 200 g	126,-	962-617	61,-		187,-
344-45	1 g - 500 g	158,-	962-618	68,-		226,-
344-46	1 g - 1 kg	280,-	962-619	74,-		354,-
344-47	1 g - 2 kg	430,-	962-620	89,-		519,-
344-48	1 g - 5 kg	650,-	962-621	96,-		746,-
344-49	1 g - 10 kg	1020,-	962-622	104,-		1124,-

Continuation: **Class M1 Weight sets, cylindrical shape, finely turned brass or finely turned stainless steel**



Weight set		+	DAkkS certificate		=	Package price	
KERN	€		KERN	€		KERN	€
<b>Finely turned stainless steel</b>							
343-02	1 mg - 50 g	155,-	962-601	106,-			261,-
343-03	1 mg - 100g	170,-	962-602	112,-			282,-
343-04	1 mg - 200 g	205,-	962-603	125,-			330,-
343-05	1 mg - 500 g	245,-	962-604	131,-			376,-
343-06	1 mg - 1 kg	335,-	962-605	137,-			472,-
343-07	1 mg - 2 kg	540,-	962-606	152,-			692,-
343-08	1 mg - 5 kg	800,-	962-607	160,-			960,-
343-09	1 mg - 10 kg	1250,-	962-608	167,-			1417,-
344-02	1 g - 50 g	92,-	962-615	42,-			134,-
344-03	1 g - 100 g	102,-	962-616	49,-			151,-
344-04	1 g - 200 g	139,-	962-617	61,-			200,-
344-05	1 g - 500 g	179,-	962-618	68,-			247,-
344-06	1 g - 1 kg	285,-	962-619	74,-			359,-
344-07	1 g - 2 kg	490,-	962-620	89,-			579,-
344-08	1 g - 5 kg	750,-	962-621	96,-			846,-
344-09	1 g - 10 kg	1190,-	962-622	104,-			1294,-

**You can create your own individual weight set yourself:**

It contains only the weights which you need for testing purposes. KERN will customise your own personal box out of plastic, wood or aluminium. For more details on this, please see page 181

**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,-. 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,-.

**Class M1 • Hook weights, finely turned brass**

Test weight material: Finely turned brass  
Container material: Lined plastic



Hook weight			+	Container		+	DAkkS certificate		=	Package price	
KERN	Tol ± mg	€		KERN	€		KERN	€		KERN	€
347-416	1 g	1,0	14,-	347-030-400	2,-		962-631	15,-			31,-
347-426	2 g	1,2	15,-	347-030-400	2,-		962-632	15,-			32,-
347-436	5 g	1,6	15,-	347-030-400	2,-		962-633	15,-			32,-
347-446	10 g	2,0	15,-	347-050-400	2,-		962-634	15,-			32,-
347-456	20 g	2,5	16,-	347-050-400	2,-		962-635	15,-			33,-
347-466	50 g	3,0	20,-	347-070-400	2,-		962-636	15,-			37,-
347-476	100 g	5	23,-	347-090-400	3,-		962-637	16,-			42,-
347-486	200 g	10	31,-	347-090-400	3,-		962-638	16,-			50,-
347-496	500 g	25	46,-	347-110-400	3,-		962-639	16,-			65,-
347-516	1 kg	50	66,-	347-120-400	3,-		962-641	16,-			85,-
347-526	2 kg	100	107,-	347-130-400	9,-		962-642	17,-			133,-
347-536	5 kg	250	200,-	347-140-400	9,-		962-643	17,-			226,-
347-546	10 kg	500	350,-	-	-		962-644	17,-			367,-

**Class M1 • Slotted weights, finely turned brass**

Test weight material: Finely turned brass  
 Container material: Lined plastic



Slotted weight				+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€	KERN	€	KERN	€	KERN	€	KERN	€	KERN	€		
347-415	1 g	1,0	14,-	347-030-400	2,-	962-631	15,-								31,-
347-425	2 g	1,2	15,-	347-030-400	2,-	962-632	15,-								32,-
347-435	5 g	1,6	16,-	347-030-400	2,-	962-633	15,-								33,-
347-445	10 g	2,0	19,-	347-030-400	2,-	962-634	15,-								36,-
347-455	20 g	2,5	20,-	347-080-400	2,-	962-635	15,-								37,-
347-465	50 g	3,0	22,-	347-080-400	2,-	962-636	15,-								39,-
347-475	100 g	5,0	25,-	347-090-400	3,-	962-637	16,-								44,-
347-485	200 g	10	30,-	347-090-400	3,-	962-638	16,-								49,-
347-495	500 g	25	48,-	347-110-400	3,-	962-639	16,-								67,-
347-515	1 kg	50	77,-	347-130-400	9,-	962-641	16,-								102,-
347-525	2 kg	100	118,-	347-130-400	9,-	962-642	17,-								144,-
347-535	5 kg	250	215,-	347-140-400	9,-	962-643	17,-								241,-
347-545	10 kg	500	375,-	347-140-400	9,-	962-644	17,-								401,-

**Class M1 • Beam bars, aluminium or finely turned brass, for fixing slotted weights**



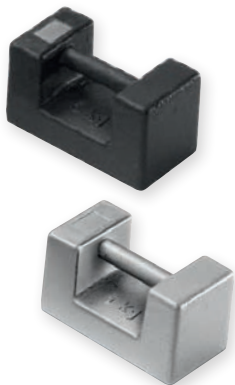
Beam bar material: Brass, aluminium (347-445-100)

Beam bar					+		DAkkS certificate	
KERN	Size	Largest slotted weight possible	Maximum total load <sup>1)</sup>	€	KERN	€	KERN	€
347-445-100*	10 g	100 g	200 g	30,-	962-634	15,-		
347-475-100**	100 g	1 kg	2 kg	50,-	962-637	16,-		
347-495-100***	500 g	10 kg	20 kg	79,-	962-639	16,-		
347-515-100***	1000 g	10 kg	40 kg	118,-	962-641	16,-		

<sup>1)</sup> is exclusive of the weight of the beam bar ("Size")

**Class M1 • Block weights, lacquered cast iron/stainless steel**

Test weight material: Lacquered cast iron/stainless steel (in OIML classes F1 and F2 on request)



Block weight			+		DAkkS certificate		=		Package price	
KERN	Tol ± g	€	KERN	€	KERN	€	KERN	€	KERN	€
<b>Lacquered cast iron</b>										
346-86	5 kg	0,25	71,-		962-643	17,-				88,-
346-87	10 kg	0,50	95,-		962-644	17,-				112,-
346-88	20 kg	1,00	118,-		962-645	22,-				140,-
346-89	50 kg	2,50	400,-		962-646	24,-				424,-
<b>Stainless steel</b>										
346-06	5 kg	0,25	315,-		962-643	17,-				332,-
346-07	10 kg	0,50	455,-		962-644	17,-				472,-
346-08	20 kg	1,00	580,-		962-645	22,-				602,-
346-09	50 kg	2,50	1490,-		962-646	24,-				1514,-

**Class M1 • Heavy duty weights, cast iron, stackable**

Designed to be lifted with forklift trucks or cranes

Test weight material: Lacquered cast iron, delivery time is approx. 4 weeks



Heavy duty weight				+		DAkkS certificate	
KERN	Tol ± g	Dimensions W×D×H	€	KERN	€	KERN	€
346-81	100 kg	5	340×225×280 mm	1390,-	962-691	63,-	
346-82	200 kg	10	465×340×291 mm	1800,-	962-692	63,-	
346-83	500 kg	25	750×500×314 mm	3350,-	962-693	63,-	
346-84	1000 kg	50	750×500×500 mm	5500,-	962-694	136,-	
346-85	2000 kg	100	1000×750×500 mm	10300,-	962-695	250,-	

**Class M2 • Individual weights, cylindrical shape, finely turned brass**

Test weight material: finely turned brass  
 Container material: Lined plastic



Individual weight				+		Container		+		DAkkS certificate		=		Package price	
KERN		Tol ± mg	€			KERN	€			KERN	€			KERN	€
357-41	1 g	3	3,60			347-030-400	2,-			962-631	15,-				20,60
357-42	2 g	4	3,90			347-030-400	2,-			962-632	15,-				20,90
357-43	5 g	5	4,30			347-030-400	2,-			962-633	15,-				21,30
357-44	10 g	6	4,70			347-050-400	2,-			962-634	15,-				21,70
357-45	20 g	8	6,30			347-050-400	2,-			962-635	15,-				23,30
357-46	50 g	10	7,40			347-070-400	2,-			962-636	15,-				24,40
357-47	100 g	16	9,50			347-070-400	2,-			962-637	16,-				27,50
357-48	200 g	30	13,-			347-080-400	2,-			962-638	16,-				31,-
357-49	500 g	80	26,-			347-090-400	3,-			962-639	16,-				45,-
357-51	1 kg	160	41,-			347-110-400	3,-			962-641	16,-				60,-
357-52	2 kg	300	69,-			347-120-400	3,-			962-642	17,-				89,-
357-53	5 kg	800	149,-			347-130-400	9,-			962-643	17,-				175,-
357-54	10 kg	1600	295,-			347-140-400	9,-			962-644	17,-				321,-

**Alternative to plastic container:**

Wooden boxes for individual weights. For more details on this, please see page 180

**Class M2 • Block weights, lacquered cast iron**

Test weight material: Lacquered cast iron



Block weight			+		DAkkS certificate		=		Package price		
KERN		Tol ±g	€			KERN	€			KERN	€
356-86	5 kg	0,8	65,-			962-643	17,-				82,-
356-87	10 kg	1,6	90,-			962-644	17,-				107,-
356-88	20 kg	3,0	113,-			962-645	22,-				135,-
356-89	50 kg	8,0	390,-			962-646	24,-				414,-

**Class M2 • Weight sets, cylindrical shape, finely turned brass**

Test weight material: Finely turned brass  
 Case material: Wood



Weight set			+		DAkkS certificate		=		Package price	
KERN		€			KERN	€			KERN	€
354-42	1 g - 50 g	76,-			962-615	42,-				118,-
354-43	1 g - 100 g	86,-			962-616	49,-				135,-
354-44	1 g - 200 g	119,-			962-617	61,-				180,-
354-45	1 g - 500 g	153,-			962-618	68,-				221,-
354-46	1 g - 1 kg	240,-			962-619	74,-				314,-
354-47	1 g - 2 kg	390,-			962-620	89,-				479,-
354-48	1 g - 5 kg	590,-			962-621	96,-				686,-
354-49	1 g - 10 kg	940,-			962-622	104,-				1044,-

**Class M3 • Individual weights, cylindrical shape, finely turned brass**

Test weight material: Finely turned brass  
 Container material: Lined plastic



Individual weight			Container		DAkkS certificate		Package price	
KERN	Tol ± mg	€	KERN	€	KERN	€	KERN	€
367-41	1 g	10	3,-	347-030-400	2,-	962-631	15,-	20,-
367-42	2 g	12	3,40	347-030-400	2,-	962-632	15,-	20,40
367-43	5 g	16	3,80	347-030-400	2,-	962-633	15,-	20,80
367-44	10 g	20	4,20	347-050-400	2,-	962-634	15,-	21,20
367-45	20 g	25	5,60	347-050-400	2,-	962-635	15,-	22,60
367-46	50 g	30	6,80	347-070-400	2,-	962-636	15,-	23,80
367-47	100 g	50	8,90	347-070-400	2,-	962-637	16,-	26,90
367-48	200 g	100	13,-	347-080-400	2,-	962-638	16,-	31,-
367-49	500 g	250	25,-	347-090-400	3,-	962-639	16,-	44,-
367-51	1 kg	500	37,-	347-110-400	3,-	962-641	16,-	56,-
367-52	2 kg	1000	68,-	347-120-400	3,-	962-642	17,-	88,-

**Class M3 • Individual weights, cylindrical shape, lacquered cast iron**

Test weight material: Lacquered cast iron



Individual weight			DAkkS certificate		Package price	
KERN	Tol ±g	€	KERN	€	KERN	€
366-91	100 g	0,05	12,-	962-637	16,-	28,-
366-92	200 g	0,10	13,-	962-638	16,-	29,-
366-93	500 g	0,25	19,-	962-639	16,-	35,-
366-94	1 kg	0,50	25,-	962-641	16,-	41,-
366-95	2 kg	1,0	44,-	962-642	17,-	61,-
366-96	5 kg	2,5	75,-	962-643	17,-	92,-
366-97	10 kg	5,0	135,-	962-644	17,-	152,-

**Class M3 • Block weights, lacquered cast iron**

Test weight material: lacquered cast iron



Block weight			DAkkS certificate		Package price	
KERN	Tol ±g	€	KERN	€	KERN	€
366-86	5 kg	2,5	64,-	962-643	17,-	81,-
366-87	10 kg	5,0	89,-	962-644	17,-	106,-
366-88	20 kg	10	112,-	962-645	22,-	134,-
366-89	50 kg	25	380,-	962-646	24,-	404,-

**Class M3 • Weight sets, cylindrical, brass and lacquered cast iron**

Test weight material: Brass and lacquered cast iron  
 Case material: Wooden block



Weight set		DAkkS certificate		Package price	
KERN	€	KERN	€	KERN	€
362-96	1 g - 1 kg	160,-	962-619	74,-	234,-
362-97	1 g - 2 kg	260,-	962-620	89,-	349,-
362-98	1 g - 5 kg	350,-	962-621	96,-	446,-
362-99	1 g - 10 kg	500,-	962-622	104,-	604,-



**Tweezers, gloves, dusting brush**



<b>Tweezers</b> to be able to safely grip small test weights					
For class	For weights	KERN	Length	Version	€
E1 – F1	1 mg – 200 g	315-243	105 mm	1	Stainless steel with silicone-coated tips 15,-
E1 – F1	500 g – 2 kg	315-245	250 mm	1	Stainless steel with silicone-coated tips 32,-
F2 – M3	1 mg – 200 g	335-240	100 mm	2	Stainless steel 8,-
E1 – M3	1 mg – 200 g	315-242	100 mm	3	Plastic 6,20



<b>Gloves</b> cotton, 1 pair. Help to protect the test weights when being used daily, from grease from fingers, damp etc.	
KERN	€
317-280	2,50



<b>Gloves</b> leather/cotton, 1 pair. Help to protect the test weights when being used daily, from grease from fingers, damp etc.	
KERN	€
317-290	6,90



<b>Dusting brush</b> to clean the weights	
KERN	€
318-270	4,20

**Boxes for individual weights/test weights**

Box material: Lined wood  
Suitable for individual weights  
KERN-No. 307, 316, 317, 326, 327, 329



For weights ≤ 500 g

<b>Wooden box</b> for individual weights E1 – F1		
For weight	KERN	€
mg	338-090-200	14,-
1 g	317-010-100	28,-
2 g	317-020-100	28,-
5 g	317-030-100	28,-
10 g	317-040-100	28,-
20 g	317-050-100	28,-
50 g	317-060-100	28,-
100 g	317-070-100	28,-
200 g	317-080-100	28,-
500 g	317-090-100	31,-
1 kg	317-110-100	35,-
2 kg	317-120-100	44,-
5 kg	317-130-100	66,-
10 kg	317-140-100	89,-
20 kg	317-150-100	340,-
50 kg	317-160-100	415,-

Box material: Wood  
Suitable for individual weights  
KERN-No. 337, 347, 357, 367



For weights ≤ 500 g

<b>Wooden box</b> for individual weights F2 – M3		
For weight	KERN	€
mg	338-090-200	14,-
1 g	337-010-200	14,-
2 g	337-020-200	14,-
5 g	337-030-200	14,-
10 g	337-040-200	14,-
20 g	337-050-200	14,-
50 g	337-060-200	15,-
100 g	337-070-200	15,-
200 g	337-080-200	16,-
500 g	337-090-200	19,-
1 kg	337-110-200	24,-
2 kg	337-120-200	27,-
5 kg	337-130-200	47,-
10 kg	337-140-200	61,-
20 kg	337-150-200	220,-
50 kg	337-160-200	345,-



For weights ≥ 1 kg



For weights ≥ 10 kg

<b>Wooden box</b> for check weights F2, M1		
For weight	KERN	€
10 kg	337-141-200	190,-
20 kg	337-151-200	235,-
50 kg	337-161-200	345,-



For weights ≥ 10 kg

<b>Aluminium box</b> for individual weights, cylindrical shape, class E1, E2, F1 and F2		
Largest possible weight	KERN	€
10 kg	317-140-600	245,-
20 kg	317-150-600	275,-

## Cases/boxes for individual weight sets

### Individual weight sets:

You can create your own "tailor-made" individual weight sets yourself. KERN will customise your own personal wooden box/plastic carrying case. The largest individual weight which will fit is given in the table.

### Sample order:

Your individual weight set:

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

The correct individual box is **KERN-Nr. 313-080-400** (plastic) or **KERN-Nr. 315-070-100** (wood)



Plastic case for individual weight sets classes E2 – M3, not appropriate for cast iron weights		
KERN	Largest possible weight	€
313-050-400	≤ 500 g	92,-
313-080-400	≤ 5 kg	190,-



Wooden box for individual weight sets classes E1 – F1		
KERN	Largest possible weight	€
315-040-100	≤ 200 g	129,-
315-060-100	≤ 1 kg	205,-
315-070-100	≤ 2 kg	250,-
315-080-100	≤ 5 kg	350,-
315-090-100	≤ 10 kg	465,-



Wooden box for individual weight set classes F2 – M3		
KERN	Largest possible weight	€
335-040-200	≤ 200 g	58,-
335-050-200	≤ 500 g	61,-
335-060-200	≤ 1 kg	108,-
335-070-200	≤ 2 kg	134,-
335-080-200	≤ 5 kg	210,-
335-090-200	≤ 10 kg	300,-

## Plastic carrying case for standard weight sets

### Aluminium case

for safe storage and transportation under harsh industrial conditions

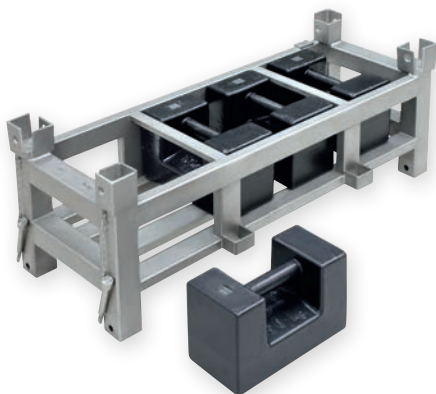


Plastic case for weight sets with standard denomination classes E2 – M3, not appropriate for cast iron weights		
KERN	Largest possible weight	€
313-052-400	≤ 500 g	55,-
313-082-400	≤ 5 kg	154,-



Aluminium case for weight sets with standard denomination classes E1 – M2		
KERN	Largest possible weight	€
313-042-600	≤ 200 g	230,-
313-062-600	≤ 1 kg	320,-
313-082-600	≤ 5 kg	390,-
313-090-600	≤ 10 kg	510,-

## Weight carriers for block weights or other test weights



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:

9 block weights	each 50 kg, class M1 =	450 kg
1 weight container	each 50 kg, class M1 =	50 kg
Total		= 500 kg