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TEST WEIGHTS

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

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

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

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

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***

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

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

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

E1	Test weights for customers who require a high degree of accuracy for the most demanding applications. For high-resolution balances with d > 1,000,000 Use recommended with DAkkS calibration certificate only.
E2	Most accurate test weights for high resolution analytical balances of verification class I ≥ 100,000 e
F1	Test weights for analytical balances/precision balances for verification class I/II ≤ 100,000 e
F2	Test weights for precision balances of verification class II ≤ 30,000 e
M1	Test weights for industrial and commercial scales of verification class III ≤ 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 ≤ 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
ClassE1, ≥ 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	

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

KERN offers you a large range of OIML test weights, which you can use at any time to quickly and reliably check your measuring instrument. From milligram weights to tonne weights, from the classic OIML design to special weights which are specifically manufactured to your specifications, we can offer you just the right test weight, and naturally the weights have the relevant 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 safety requirements and intended use – with or without calibration. We will be happy to determine the minimum sample quantity according to USP Chapter <41> and recommend a KERN Safety Set especially designed for your scale.

PREMIUM^{+} TEST WEIGHTS

Note: Our highly-accurate OIML test weights are also available as

PREMIUM^{+} test weights for that extra level of safety. Thanks to the most modern manufacturing technology, these test weights can also be adjusted within the specified error limit classes (= tolerances).

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

For all the details on this **PREMIUM^{+} service** please look at the weight you want in our online shop

Marking – never lose track again!

With the large variety of test equipment used then it is essential that they are identified accurately. We can help you with this and mark your test weights according to your ideas by etching, with impact numbers or laser engraved. Whether it's letters, numbers, your logo, barcodes or something else – it's your choice.
Our product specialist "Test weights" will gladly help you with any questions about this service, prices, etc.

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SAFELY LOOKED AFTER

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

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

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

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

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

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

→ extremely stable and robust

→ can be fully disinfected

→ easy to clean

→ without padding or edges which could collect dirt

→ maintenance-free and long-lasting

→ for maximum safety and measurement results

NEW

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

New from KERN:
The practical test weight trolley
KERN 313-112-400

The KERN transport case is your essential companion for a professional appearance. It offers you direct access at all times to your full set of weights, so that you can work quickly and efficiently. With this case, you can not only increase your productivity, but also leave a lasting impression on your customers. Suitable for all weights in classes E1 – M1, see *Test weights*

NEW

→ Do you have any special requirements?
High-quality weight boxes e.g. on request we can also manufacture boxes for rectangular weights or complete weight sets to suit your individual requirements. We will be happy to advise you.

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Our KERN weight cases at a glance:

for individual weights **Plastic box**

for individual weights **Aluminium protected box**

for individual weights **Wooden box, lined / unlined**

NEW

for individual weights **Polyoxymethylene boxes POM, unlined**

for weight sets **Plastic case**

for weight sets **Aluminium protected case**

for weight sets **Wooden case, lined / unlined**

It's your choice!

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

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

It's so easy to order your suitable test weight

1 → **2** → **3** → **4**

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

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

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

A 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.

1 **2** **3** **4**

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	41,-	317-01	59,-	317-020-400	4,80	317-010-600	14,-	317-010-100	30,-	962-331	33,-
2 g	0,04	316-02	41,-	317-02	60,-	317-020-400	4,80	317-020-600	17,-	317-020-100	30,-	962-332	33,-
5 g	0,05	316-03	43,-	317-03	63,-	317-030-400	4,80	317-030-600	15,-	317-030-100	32,-	962-333	33,-
10 g	0,06	316-04	44,-	317-04	67,-	317-040-400	4,80	317-040-600					33,-
20 g	0,08	316-05	47,-	317-05	76,-	317-050-400	4,80						
		316-06	53,-	317-06	80,-								

1 **2** **3** **4**

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	159,-	338-226	200,-	-	-	962-450	118,-
1 mg - 50 g	333-024	390,-	333-026	410,-	333-02	410,-	962-401	197,-
1 mg - 100 g	333-034	435,-	333-036	450,-	333-03	455,-	962-402	210,-
1 mg - 200 g	333-044	510,-	333-046	520,-	333-04	520,-	962-403	235,-
1 mg - 500 g	333-054	580,-	333-056	600,-	333-05	610,-	962-404	245,-
1 mg - 1 kg	333-064	730,-	333-066	750,-				255,-
1 mg - 2 kg	333-074	1030,-	333-076					

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

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

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

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

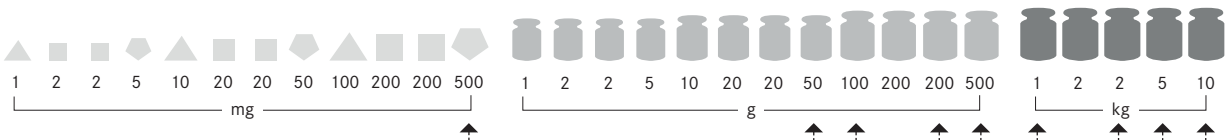
- The accuracy of the required test weight is determined by readout [d]: max. tolerance ± 10 mg.
- Displayed weight size on “CAL” mode: 1000 g or 2000 g. The required test weight has a 2 kg weight size.
- Suitable test weights with ± 10 mg tolerance and 2 kg weight size, can be found in accuracy class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

Exception: analytical balances (readout [d] ≤ 0,1 mg):
E1 test weights are recommended. Depending on the safety requirements, E2 test weights with a DAkkS calibration certificate will also be sufficient.

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

Test weight → / Features ↓	Knob shape with lifting knob, polished stainless steel	Compact shape with carrying grip, polished stainless steel	Knob shape with lifting knob, polished stainless steel	ECO shape, polished stainless steel	Knob shape with lifting knob, finely turned stainless steel
Conforms to OIML:R111	yes	yes	yes	yes	yes
Available classes	E1, E2	E2	F1	F1	F2, M1
Upper surface	polished	polished	polished	polished	finely turned
Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Adjusting cavity	no	no	yes	yes, from 50 g, readjustment can only be carried out by KERN	yes, from 20 g
Marking (Milligram weights, generally none)	none	none	Nominal value, etched	Nominal value, etched	F2: Class + nominal value, etched; M1: Class + nominal value, adopted
Verification possible	yes (E2)	no	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	• High-quality test weight for analytical and precision balances • Highly-refined surface • Ideal shape of the top for good grip	• Affordable test weight for analytical and precision balances • Highly refined surface	• Ideal, high-quality test weight for precision balances • No visible adjustment chamber • High long-term stability • Ideal shape of the top for good grip	• Affordable test weight for analytical and precision balances • Highly refined surface • Optimum shape of the top for good grip	• Ideal test weight for commercial and industrial scales • Ideal shape of the top for good grip

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



Test weight set	
1 mg–500 mg	∑ = 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

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The key points from the OIML norm R111:2004
OIML (Organisation Internationale de Métrologie Légale) has established the exact metrological requirements for weights in verified applications in approx. 100 states all over the world.

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

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

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

They are to be equal to the
▸ ***measuring uncertainty*** of the weight, if no
▸ ***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^3, air density is 1.2 kg/m^3 and measuring temperature is 20 °C.

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

▸ ***See the Glossary***

Nominal value	OIML R111:2004 Maximum permissible errors for weights = permissible tolerances "Tol ± mg"						
↓	E1	E2	F1	F2	M1	M2	M3
1 mg	± 0,003 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	-	-
2 mg	± 0,003 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	-	-
5 mg	± 0,003 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	-	-
10 mg	± 0,003 mg	± 0,008 mg	± 0,025 mg	± 0,08 mg	± 0,25 mg	-	-
20 mg	± 0,003 mg	± 0,010 mg	± 0,03 mg	± 0,10 mg	± 0,3 mg	-	-
50 mg	± 0,004 mg	± 0,012 mg	± 0,04 mg	± 0,12 mg	± 0,4 mg	-	-
100 mg	± 0,005 mg	± 0,016 mg	± 0,05 mg	± 0,16 mg	± 0,5 mg	± 1,6 mg	-
200 mg	± 0,006 mg	± 0,020 mg	± 0,06 mg	± 0,20 mg	± 0,6 mg	± 2,0 mg	-
500 mg	± 0,008 mg	± 0,025 mg	± 0,08 mg	± 0,25 mg	± 0,8 mg	± 2,5 mg	-
1 g	± 0,010 mg	± 0,03 mg	± 0,10 mg	± 0,3 mg	± 1,0 mg	± 3,0 mg	± 10 mg
2 g	± 0,012 mg	± 0,04 mg	± 0,12 mg	± 0,4 mg	± 1,2 mg	± 4,0 mg	± 12 mg
5 g	± 0,016 mg	± 0,05 mg	± 0,16 mg	± 0,5 mg	± 1,6 mg	± 5,0 mg	± 16 mg
10 g	± 0,020 mg	± 0,06 mg	± 0,20 mg	± 0,6 mg	± 2,0 mg	± 6,0 mg	± 20 mg
20 g	± 0,025 mg	± 0,08 mg	± 0,25 mg	± 0,8 mg	± 2,5 mg	± 8,0 mg	± 25 mg
50 g	± 0,03 mg	± 0,10 mg	± 0,3 mg	± 1,0 mg	± 3,0 mg	± 10 mg	± 30 mg
100 g	± 0,05 mg	± 0,16 mg	± 0,5 mg	± 1,6 mg	± 5,0 mg	± 16 mg	± 50 mg
200 g	± 0,10 mg	± 0,3 mg	± 1,0 mg	± 3,0 mg	± 10 mg	± 30 mg	± 100 mg
500 g	± 0,25 mg	± 0,8 mg	± 2,5 mg	± 8,0 mg	± 25 mg	± 80 mg	± 250 mg
1 kg	± 0,5 mg	± 1,6 mg	± 5,0 mg	± 16 mg	± 50 mg	± 160 mg	± 500 mg
2 kg	± 1,0 mg	± 3,0 mg	± 10 mg	± 30 mg	± 100 mg	± 300 mg	± 1 000 mg
5 kg	± 2,5 mg	± 8,0 mg	± 25 mg	± 80 mg	± 250 mg	± 800 mg	± 2 500 mg
10 kg	± 5,0 mg	± 16 mg	± 50 mg	± 160 mg	± 500 mg	± 1 600 mg	± 5 000 mg
20 kg	± 10 mg	± 30 mg	± 100 mg	± 300 mg	± 1 000 mg	± 3 000 mg	± 10 g
50 kg	± 25 mg	± 80 mg	± 250 mg	± 800 mg	± 2 500 mg	± 8 000 mg	± 25 g
100 kg	-	± 160 mg	± 500 mg	± 1 600 mg	± 5 000 mg	± 16 g	± 50 g
200 kg	-	± 300 mg	± 1 000 mg	± 3 000 mg	± 10 g	± 30 g	± 100 g
500 kg	-	± 800 mg	± 2 500 mg	± 8 000 mg	± 25 g	± 80 g	± 250 g
1 000 kg	-	± 1 600 mg	± 5 000 mg	± 16 g	± 50 g	± 160 g	± 500 g
2 000 kg	-	-	± 10 g	± 30 g	± 100 g	± 300 g	± 1 000 g
5 000 kg	-	-	± 25 g	± 80 g	± 250 g	± 800 g	± 2 500 g

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TEST WEIGHTS AND BOXES CLASS F1

NEW

Milligram weights,
wire shape

Milligram weights,
flat polygonal sheet

Individual weights/
Weight sets,
ECO shape

Individual weights/
Weight sets,
knob shape

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

Block weight,
polished stainless steel

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

Aluminium protected box, lined,
for individual weights

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

Milligram weight
set in plastic case
(328-22)

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

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

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

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

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NEW Class F1 · Milligram weights, wire shape

Test weight material: stainless steel

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

Class F1 · Milligram weights, flat polygonal sheet

Test weight material: stainless steel

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

Class F1 · Individual weights, ECO shape or knob shape

Test weight material: stainless steel polished

Weight	Tol +/- mg	Individual weight, ECO shape	Individual weight, knob shape	Plastic box	Aluminium protected box	Wooden box	DAkkS certificate
		KERN	KERN	KERN	KERN	KERN	KERN
1 g	0,10	326-01	327-01	347-030-400	317-010-600	317-010-100	962-431
2 g	0,12	326-02	327-02	347-030-400	317-020-600	317-020-100	962-432
5 g	0,16	326-03	327-03	347-030-400	317-030-600	317-030-100	962-433
10 g	0,20	326-04	327-04	347-050-400	317-040-600	317-040-100	962-434
20 g	0,25	326-05	327-05	347-050-400	317-050-600	317-050-100	962-435
50 g	0,30	326-06	327-06	347-070-400	317-060-600	317-060-100	962-436
100 g	0,50	326-07	327-07	347-070-400	317-070-600	317-070-100	962-437
200 g	1,00	326-08	327-08	347-080-400	317-080-600	317-080-100	962-438
500 g	2,50	326-09	327-09	347-090-400	317-090-600	317-090-100	962-439
1 kg	5,00	326-11	327-11	347-110-400	317-110-600	317-110-100	962-441
2 kg	10	326-12	327-12	347-120-400	317-120-600	317-120-100	962-442
5 kg	25	326-13	327-13	347-130-400	317-130-600	317-130-100	962-443
10 kg	50	326-14	327-14	347-140-400	317-140-600	317-140-100	962-444
20 kg	100	–	327-15	–	317-150-600	317-150-100	962-445
50 kg	250	–	327-16	–	317-160-600	317-160-100	962-446

Class F1 · Block weights

Block weight material: stainless steel polished

Weight	Tol +/- mg	Block weight	Aluminium protected box	DAkkS certificate
		KERN	KERN	KERN
5 kg	25	326-36	346-060-600	962-443
10 kg	50	326-37	346-070-600	962-444
20 kg	100	326-38	346-080-600	962-445
50 kg	250	326-39	346-090-600	962-446

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Class F1 · Test weights, stackable

Test weight material: stainless steel polished

Weight	Tol +/- mg	Test weight	Wooden box	DAkkS certificate
		KERN	KERN	KERN
NEW 5 kg	25	327-131	337-131-100	962-443
10 kg	50	327-141	337-141-100	962-444
20 kg	100	327-151	337-151-100	962-445
50 kg	250	327-161	337-161-100	962-446

Class F1 · Weight sets, ECO shape

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

Weight sets	ECO shape in plastic case	ECO shape in aluminium protected case	ECO shape in wooden case	DAkkS certificate
	KERN	KERN	KERN	KERN
1 mg - 500 mg	328-22	328-226	-	962-450
1 mg - 50 g	325-024	325-026	325-022	962-401
1 mg - 100 g	325-034	325-036	325-032	962-402
1 mg - 200 g	325-044	325-046	325-042	962-403
1 mg - 500 g	325-054	325-056	325-052	962-404
1 mg - 1 kg	325-064	325-066	325-062	962-405
1 mg - 2 kg	325-074	325-076	325-072	962-406
1 mg - 5 kg	325-084	325-086	325-082	962-407
1 mg - 10 kg	-	325-096	325-092	962-408
1 g - 50 g	326-024	326-026	326-022	962-415
1 g - 100 g	326-034	326-036	326-032	962-416
1 g - 200 g	326-044	326-046	326-042	962-417
1 g - 500 g	326-054	326-056	326-052	962-418
1 g - 1 kg	326-064	326-066	326-062	962-419
1 g - 2 kg	326-074	326-076	326-072	962-420
1 g - 5 kg	326-084	326-086	326-082	962-421
1 g - 10 kg	-	326-096	326-092	962-422

Class F1 · Weight sets, knob shape

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

Weight sets	Knob shape in plastic case	Knob shape in aluminium protected case	Knob shape in wooden case	DAkkS certificate
	KERN	KERN	KERN	KERN
1 mg - 500 mg	328-22	328-226	-	962-450
1 mg - 50 g	323-024	323-026	323-02	962-401
1 mg - 100 g	323-034	323-036	323-03	962-402
1 mg - 200 g	323-044	323-046	323-04	962-403
1 mg - 500 g	323-054	323-056	323-05	962-404
1 mg - 1 kg	323-064	323-066	323-06	962-405
1 mg - 2 kg	323-074	323-076	323-07	962-406
1 mg - 5 kg	323-084	323-086	323-08	962-407
1 mg - 10 kg	-	323-096	323-09	962-408
1 g - 50 g	324-024	324-026	324-02	962-415
1 g - 100 g	324-034	324-036	324-03	962-416
1 g - 200 g	324-044	324-046	324-04	962-417
1 g - 500 g	324-054	324-056	324-05	962-418
1 g - 1 kg	324-064	324-066	324-06	962-419
1 g - 2 kg	324-074	324-076	324-07	962-420
1 g - 5 kg	324-084	324-086	324-08	962-421
1 g - 10 kg	-	324-096	324-09	962-422

NEW New model

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