



SimplyCal
BALANCE CALIBRATION



WEIGHTS FOR THE BEST

WEIGHTS AND
WEIGHT SETS 2025



Certified to
DIN EN ISO 9001:2015



Deutsche
Akkreditierungsstelle
D-K-15192-01-00

Accredited to
DIN EN ISO/IEC 17025:2018



Member of
Deutscher
Kalibrierdienst



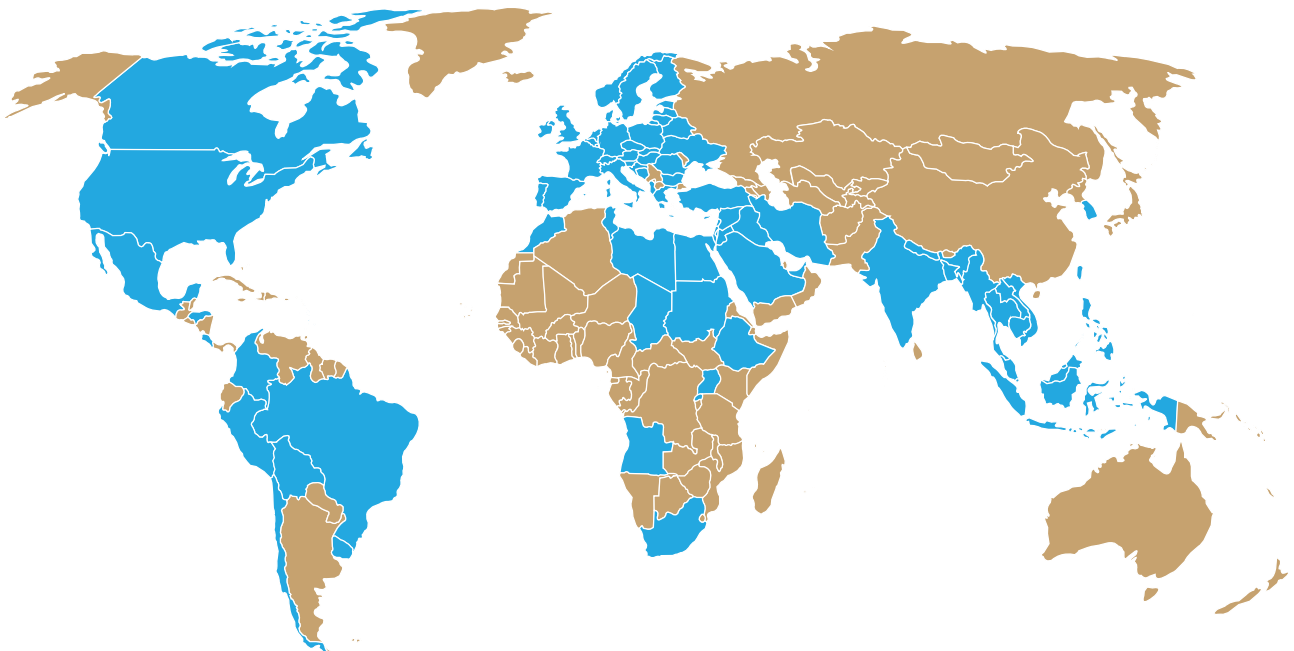
**WE SUPPLY RELIABLE AND HIGH
QUALITY WEIGHTS WORLDWIDE.**

OUR PRODUCTS

Our weights range from milligrams to tons, all made under one roof. In addition to meeting everyday customer needs, HÄFNER sets great store in accommodating special wishes:



- + very small weights (down to to 0.1 mg)
- + very large weights (up to 5000 kg)
- + Special forms such as load weights or bent-wire milligram weights
- + Accessories such as bell jars or forks
- + Special markings (e.g. barcodes and signs)
- + Boxes and cases according to customer demands
- + the new Si-kg mass standard
- + SimplyCal software (Balance Calibration)





HÄFNER – SPECIALIST FOR WEIGHTS AND WEIGHT SETS

EVER SINCE OUR COMPANY WAS FOUNDED IN 1933 IN OBERROT, A SMALL TOWN IN THE SWABIAN REGION OF GERMANY, WE HAVE BEEN MANUFACTURING WEIGHTS FOR A WIDE RANGE OF APPLICATIONS.

These weights range from milligrams to tons, all made under one roof. We are certified to EN ISO 9001:2015 and are known worldwide for our high reliability and quality.

With the advent of electronic weighing devices, the role of weights has changed. Originally used as weighing instruments in conjunction with scales, weights are now used as adjusting, calibration and test equipment for balances and force measuring devices. The demands on weights are constantly rising with the continuously increasing accuracy and resolution of electronic load cells.

We recognised this trend early on and responded to the challenge. Rationalisation and the utilisation of advanced technology form

the basis for our leading position in modern weights manufacturing.

Furthermore, our calibration laboratory MASSCAL is accredited by the German Accreditation Body (DAKKS) and is a member of the German Calibration Service (DKD).



Since 1933



THE NEW SI-KG MASS STANDARD

Worldwide only available by Häfner

[page 12](#)



SIMPLYCAL

Software for calibrating balances for practitioners

[page 82](#)



WHEN PERFORMANCE COUNTS

OUR QUALITY EXPECTATIONS

Over many decades and in the history of our family-owned business, perfection and the name HÄFNER have become inseparable.

Worldwide trust and recognition by national metrology institutes (NMIs) such as PTB, NPL etc., as well as accredited calibration laboratories, state offices for verification, scale and balance manufacturers, companies for repair and maintenance, distributors for laboratory equipment, companies in all industrial sectors and not least our competitors, testify to our exceptional performance and our success.

Customer wishes and requirements for perfect weights can only be fulfilled by an ongoing development process that creates the necessary conditions and means for improvement.

We strive to repay your trust in HÄFNER with our quality and performance.

Challenge us!



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DIN EN ISO 9001:2015



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QUALITY MANAGEMENT

HÄFNER has had a quality management system in place for over 20 years and is certified according to DIN EN ISO 9001:2015 (Reg. No. 059 993 QM15).

We are always up-to-date in science and technology thanks to our active participation in the technical committee of the German Calibration Service (DKD) and close cooperation with the German National Metrology Institute PTB.

„OUR WEIGHTS ARE SO GOOD THAT OUR STAFF ARE PROUD OF EVERY ONE OF THEM.”

PERFECT WEIGHTS

At HÄFNER every blank is formed from special materials. Advanced casting technology and extremely precise CNC machine tools are key parts of the production process.

Consistently high precision of all HÄFNER blanks is ensured by our exceptional expertise and advanced surface processing technology. What happens afterward is pure craftsmanship.

With considerable experience and sensitivity, our employees machine each weight to the specified value. Every step in the process is checked using extremely accurate scales with calibrated standard weights, and ambient conditions are monitored continuously. HÄFNER marks the weights using special corrosion-proof laser technology to ensure that the weights retain their values. This allows weight standards in classes E2, E1 and E0 to be identified reliably without confusion.

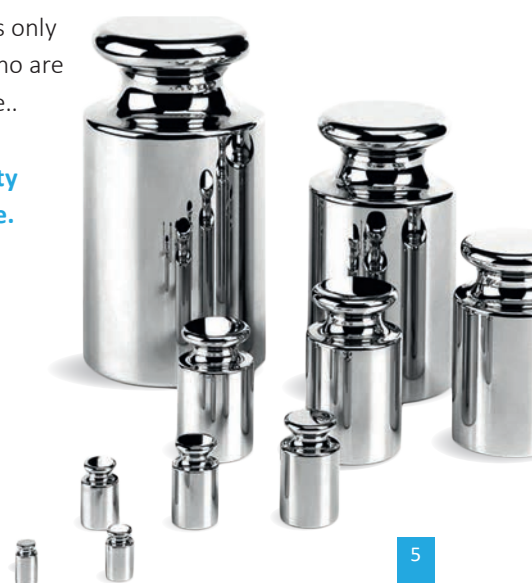
Another key factor for manufacturing perfect weights is our special HE210 steel, which was developed to meet

the requirements of class E0. As a result, for many years national metrology institutes have been able to rely on their primary weight standards (class E0) and secondary mass standards (class E1) from HÄFNER.

Before delivery, each HÄFNER weight is again cleaned and checked, and if requested by the customer a calibration certificate (e.g. a DAkkS calibration certificate) is prepared to document quality and traceability to the national kilogram prototype.

HÄFNER perfection is only possible with staff who are experts at their trade..

Service and reliability at an attractive price.





MORE RELIABILITY AND SAFETY WHEN WEIGHING

An important part of your business success is the assurance of the quality of your products. A recognised quality management system is therefore an absolute prerequisite in the world of measuring and weighing.

QM standards and QM guidelines – such as ISO 9001, VDA 6.1, ISO 10012, IATF 16949, ISO 17025 and the GLP/GMP regulations – require that reproducible measurement results be ensured by means of reliable, operational measuring and test equipment, including balances and standards (calibration and test weights).

Documented inspection equipment monitoring is therefore an important obligation and relieves you of the burden of product liability and due diligence as necessary evidence.

HÄFNER, as one of the world's leading manufacturers of weights, offers you the following services for test sequence and test equipment planning expertise and experience;

- / Know-how and experience,
- / Advice and competence,
- / highest precision and quality,
- / Flexibility and special requests,
- / Service and reliability

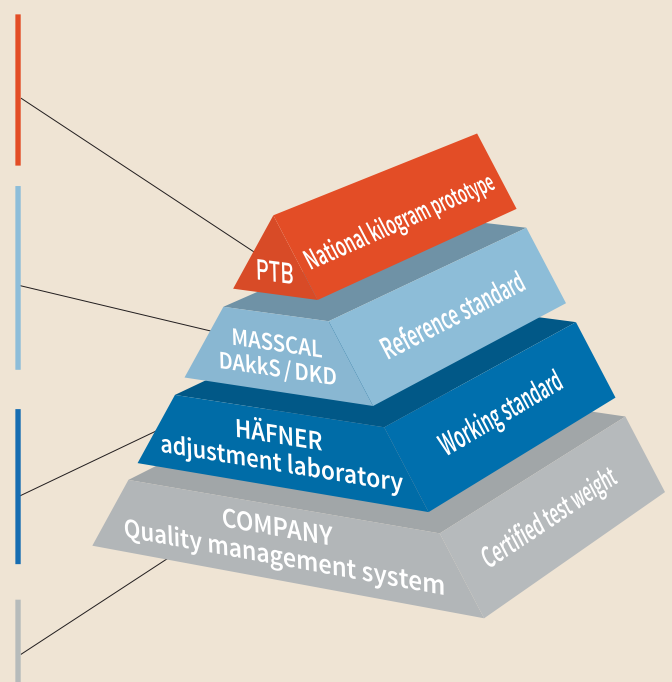
TRACEABILITY TO THE NATIONAL WEIGHT STANDARD

The Physikalisch Technische Bundesanstalt (PTB) is the metrological state institute in Germany and provides access to the physical SI mass standards. It has the mandate and the task to keep available and to forward the national weight standards (e.g. for mass).

Our calibration laboratory MASSCAL is accredited as a calibration laboratory by the DAkks (Reg. No. D-K-15192-01-00). The internationally valid DAkks calibration certificates meet the requirements for test equipment monitoring and serve as evidence for metrological traceability to the national weight standard.

HÄFNER works with a quality management system and is certified to EN ISO 9001:2015 by DQS (Reg. No. 059 993 QM15). Working and utility standards are traceable to national standards through accredited calibrations.

In the world of measuring and weighing, a certified quality management system is essential as a basis for ensuring the quality of your products.



MASSCAL CALIBRATION AND ADJUSTMENT LABORATORY

HÄFNER has the spacious adjustment and calibration laboratory "MASSCAL", which meets the highest metrological demands. With high investments, we keep our measuring equipment at the cutting edge of technology.

Our calibration laboratory "MASSCAL" (D-K-15192-01-00) complies with the international standard DIN EN ISO/IEC 17025:2018 and is accredited by the Deutsche Akkreditierungsstelle GmbH (DAkkS) up to and including the highest tolerance class E1 according to OIML R111-1 : 2004. This gives our calibration certificates international recognition.

The DAkkS-accredited calibration certificate documents the metrological traceability to national standards for the representation of units in accordance with the International System of Units (SI).

MASSCAL

Calibration laboratory for mass
Kalibrierlaboratorium für Masse

accredited according to DIN EN ISO/IEC 17025:2018
German translation of ISO/IEC 17025:2017

Member of the / *Mitglied im*
Deutschen Kalibrierdienst

Calibration certificate
Kalibrierschein



134039
D-K-15192-01-00
2021-11

Calibration mark
Kalibrierzeichen

Object <i>Gegenstand</i>	weight of 10 kg <i>Gewichtstück von 10 kg</i>
Manufacturer <i>Hersteller</i>	Häfner Gewichte GmbH Hohenhardtsweiler Str. 4 74420 Oberrot
Type <i>Typ</i>	Class F1, see page 2 <i>Klasse F1, siehe Seite 2</i>
Serial number <i>Fabr./Ser.-Nr.</i>	1161121
Ident number <i>Ident Nr.</i>	CP123345
Customer <i>Auftraggeber</i>	Sample Company
Order No. <i>Auftragsnummer</i>	177120
Number of Pages of the certificate <i>Anzahl der Seiten des Kalibrierscheines</i>	4
Date of calibration <i>Datum der Kalibrierung</i>	02.11.2021

This calibration certificate documents the metrological traceability to national standards, which realize the units of measurement according to the International System of Units (SI).

The DAkkS is signatory to the multilateral agreements of the European co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates.

The user is obliged to have the object recalibrated at appropriate intervals.

Dieser Kalibrierschein dokumentiert die metrologische Rückführbarkeit auf nationale Normale zur Darstellung der Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI).

Der DAkkS ist Unterzeichner der multilateralen Übereinkommen der European co-operation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine.

Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.

This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates are not valid without the full name and signature of the approval responsible person.

Dieser Kalibrierschein darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung des ausstellenden Kalibrierlaboratoriums. Kalibrierscheine sind ohne Nennung und Unterschrift des für die Freigabe Verantwortlichen nicht gültig.

Date <i>Datum</i>	Approval of the calibration certificate by <i>Freigabe des Kalibrierscheines durch</i>	Person in charge <i>Bearbeiter</i>
03.11.2022	U. Rost	T. Al-Bulushi



MASSCAL
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e-mail info@haefner.de

Sample: Page 1 of a DAkkS-accredited calibration certificate

HOW TO DETERMINE THE NECESSARY TEST WEIGHTS

MAXIMUM TOLERANCE FOR WEIGHTS ACCORDING TO OIML R111:2004

ASTM E617

Nominal value	E1	E2	F1	F2	M1	M1-2	M2	M2-3	M3	Class 0	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7
	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg	± mg
1 mg	0,003	0,006	0,020	0,06	0,20						0,010	0,014	0,025		0,050	0,10	
2 mg	0,003	0,006	0,020	0,06	0,20						0,010	0,014	0,025		0,060	0,20	
5 mg	0,003	0,006	0,020	0,06	0,20						0,010	0,014	0,028	0,055	0,080	0,20	
10 mg	0,003	0,008	0,025	0,08	0,25						0,010	0,014			0,10	0,50	0,4
20 mg	0,003	0,010	0,03	0,10	0,3						0,010	0,014	0,035	0,070	0,12	0,50	0,56
50 mg	0,004	0,012	0,04	0,12	0,4						0,010	0,014	0,042		0,16	0,50	0,88
100 mg	0,005	0,016	0,05	0,16	0,5		1,6				0,010	0,025		0,10	0,20	1	1,2
200 mg	0,006	0,020	0,06	0,20	0,6		2,0				0,010	0,025		0,12	0,26	1	1,8
500 mg	0,008	0,025	0,08	0,25	0,8		2,5				0,010	0,025		0,16	0,38	1	3,0
1 g	0,010	0,030	0,10	0,3	1,0		3,0		10	0,017			0,10	0,20	0,50	2	4,5
2 g	0,012	0,040	0,12	0,4	1,2		4,0		12	0,017			0,13	0,26	0,75	2	7,0
5 g	0,016	0,050	0,16	0,5	1,6		5,0		16	0,017			0,18	0,36	1,3	2	13
10 g	0,020	0,060	0,20	0,6	2,0		6,0		20	0,025		0,074	0,25	0,50	2,0	2	21
20 g	0,025	0,080	0,25	0,8	2,5		8,0		25	0,037	0,074	0,10	0,35	0,70	3,0	3	33
50 g	0,030	0,10	0,3	1,0	3,0		10		30		0,12	0,25	0,60	1,2	5,6	7	
100 g	0,05	0,16	0,5	1,6	5		16		50	0,13	0,25	0,50	1,0	2,0	9	10	100
200 g	0,10	0,30	1,0	3,0	10		30		100	0,25	0,5	1,0	2,0	4,0	15	20	160
500 g	0,25	0,80	2,5	8,0	25		80		250	0,60	1,2	2,5	5,0	10	30	50	300
1 kg	0,5	1,6	5	16	50		160		500	1,3	2,5	5,0	10	20	50	100	470
2 kg	1,0	3,0	10	30	100		300			2,5	5	10	20	40	100	200	750
5 kg	2,5	8,0	25	80	250		800			6	12	25	50	100	250	500	1,4g
10 kg	5	16	50	160	500					13	25	50	100	200	500	1g	2,2g
20 kg	10	30	100	300	1.000					25	50	100	200	400	1,0g	2g	3,8g
50 kg	25	80	250	800	2.500	5.000				63	125	250	500	1,0g	2,5g	5g	7,5g
		± g	± g	± g	± g	± g	± g	± g	± g	± g	± g	± g	± g	± g	± g	± g	± g
100 kg		0,16	0,5	1,6	5	10	16	30	50					2,0	5	10	15
200 kg		0,30	1,0	3,0	10	20	30	60	100					4,0	10	20	30
500 kg		0,80	2,5	8,0	25	50	80	160	250					10	25	50	75
1.000 kg		1,6	5	16	50	100	160	300	500					20	50	100	150
2.000 kg			10	30	100	200	300	600						40	100	200	300
5.000 kg			25	80	250	500	800							100	250	500	750

All weights are also available in ASTM classes. Prices correspond to the parallel OIML class.

DEFAULT DENSITIES FOR WEIGHT MATERIALS

Ident.	Material	Density at 68°F kg/m ³	Density uncertainty U(k=2) kg/m ³
GG	Cast iron	7200	400
ST	Steel	7800	200
AL	Aluminium	2700	120
NS	German silver nickel	8600	170
MS	Brass finely turned	8400	100
MSN	Brass nickel plated	8400	100
MSM	Brass miralloy	8400	100
VA	Stainless steel	7900	140
HF12	austenit stainless steel	7950	80
HE210	Special stainless steel	8000	30

LIMITS OF MAGNETIC CHARACTERISTICS

Class	Magnetization μM (μT)	Magnetic susceptibility X		
		m ≤ 1 g	2 g ≤ m ≤ 10 g	m ≤ 20 g
E1	< 2,5	< 0,25	< 0,06	< 0,02
E2	< 8	< 0,9	< 0,18	< 0,07
F1	< 25	< 10	< 0,7	< 0,2
F2	< 80	-	< 4	< 0,8
M1	< 250	-	-	-
M1-2	< 500	-	-	-
M2	< 800	-	-	-
M2-3	< 1600	-	-	-
M3	< 2500	-	-	-

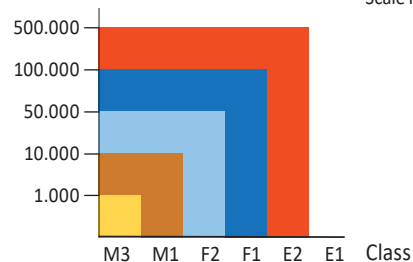
EXAMPLE

A balance has a maximum rated capacity of 1,000 g and a scale division d of 10 mg. The user manual specifies an external calibration weight with a nominal value of 1 kg. According to step A.1, the number of scale intervals that the balance can measure is 100,000.

According to step A.2, the required tolerance with a nominal weight of 1 kg is between 5 and 10 mg. Tolerance class F1 meets this requirement (± 5 mg).

The following test loads are determined in step B.2: 250 g, 500 g, 750 g and 1 kg. According to OIML R111 the following four test weights in the class F1 are determined: 50 g, 200 g, 500 g and 1 kg.

weight intervals n Number of scale intervals $n = \frac{\text{Max. load capacity}}{\text{Scale interval } d}$



Accuracy of the balance (scale)	Resolution of the balance: quotient of max. range / readability	Required tolerance class of the weights
IV Ordinary accuracy scale	$\leq 1.000 d$	Class M3
III Medium accuracy scale	$\leq 10.000 d$	Class M1
II Precision balance	$\leq 50.000 d$	Class F2
	$\leq 100.000 d$	Class F1
I Analytical balance	$> 100.000 d$	Class E2

A.

DETERMINE THE RIGHT TOLERANCE CLASS FOR THE TEST WEIGHTS

1. Determine the number of intervals n by dividing the maximum weight by the scale division d (smallest reading digit) of the weighing range (measuring range).

$$\text{Number of steps } n = \frac{\text{Max. load capacity}}{\text{Scale interval } d}$$

2. Determine the tolerance class of the test weights from the required tolerance.

Weighing range (measuring range)	Tolerance of the test weight, depending on the safety requirement
$n = 100.000$	0,5 d and 1 d
$100.000 < n < 500.000$	Between 1 d and 2 d
$n > 500.000$	less than 3 d

For this, choose a nominal value equal or close to the maximum value of the weighing range (measuring range). This nominal value should always be greater than 80% of the maximum rated capacity.

You can round up or down by a small amount. In case of doubt you should always choose the next smaller tolerance.

B.

DETERMINE THE REQUIRED NOMINAL VALUES (WEIGHTS)

1. Cursory testing

You can make most of the test measurements for the weighing range with just one test weight (nominal value). The nominal value of the external calibration weight is often used for this purpose (consult the user guide or operating software of your balance). This nominal value should always be greater than 80% of the maximum rated capacity.

2. Complete testing

Use this method to check the weighing range (measuring range) against the maximum potential requirements. The following four test loads are required: 25%, 50%, 75% and 100% (or at least 80%) of the maximum rated capacity.

The test weight for 100% (or at least 80%) of the maximum rated capacity should consist of just one weight, rather than a combination of several test weights.

If you have any questions, we would be pleased to advise you on choosing suitable test weights for your measuring or test task. We support you in the specification of test plans and give you recommendations about appropriate documentation and interpretation of your test results.

Composition of the standard weight sets

	mg														g										kg					
Weight set	1	2	2	5	10	20	20	50	100	200	200	500	1	2	2	5	10	20	20	50	100	200	200	500	1	2	2	5	10	Content:
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
1 g-50 g													■	■	■	■	■	■	■	■	■	■	■	■						110 g
1 g-100 g													■	■	■	■	■	■	■	■	■	■	■	■						210 g
1 g-200 g													■	■	■	■	■	■	■	■	■	■	■	■	■					610 g
1 g-500 g													■	■	■	■	■	■	■	■	■	■	■	■	■					1.110 g
1 g-1 kg													■	■	■	■	■	■	■	■	■	■	■	■	■	■				2.110 g
1 g-2 kg													■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			6.110 g
1 g-5 kg													■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		11.110 g
1 g-10 kg													■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		21.110 g

ADVICES FOR RELIABLE MEASURING RESULTS

Reliable, constant weighing and measuring results require compliance with the following rules:

1. Balances and measuring systems must be monitored and maintained competently. The metrological properties must be familiar.
2. Balances and measuring systems must be adjusted regularly – depending on frequency of use – with adjustment and test weights and must also be calibrated according to an acknowledged test method.
3. The adjustment and test weights you use must be traceable back to national normal weights, this is, they must be calibrated regularly.
4. The test and calibration results must be documented together with their uncertainty of measurement (e.g. by a protocol of the test for scales and a DAkkS calibration certificate for weights.)
5. Test and calibration results must be evaluated. The test and calibration periods for scales and weights must be determined and be controlled with a test plan.
6. Test protocols or calibration certificates must be kept for a sufficient long time.

Increase your competitiveness. The confidence of your customers is important.

Index

	SILICON-KG THE NEW KILOGRAM Based on fundamental constants.	12-16
	PRIMARY / SECONDARY MASS STANDARDS For calibration (traceability) of mass standards of class E1 and national mass standards.	17-21
	REFERENCE MASS STANDARDS For calibration of weights of class E2 according OIML R111 and E08.	22-28
	HIGH PRECISION WEIGHTS For calibration of weights of classes F1 and F2 according OIML R111 and E08.	29-34
	ANALYTICAL WEIGHTS Weights for the calibration of weights of lower classes (M3 to F2) according OIML R111.	35-43
	ANALYTICAL WEIGHTS Usage within meaningful transactions (e.g. precious metals and gemstones) on scales of the class II.	44-49
	PRECISION WEIGHTS Weights for calibration of weights of classes M2 and M3.	50-59
	WEIGHTS OF MEDIUM ACCURACY Used for general commercial transactions and together with commercial scales (class III).	60-65
	COMMERCIAL WEIGHTS Load tests for lifts, cranes and vehicle construction. Learning aids for schools and training.	66-71
	ACCESSORIES HÄFNER's accessories include everything you need for the storage, handling, quality assurance and management of you test weights.	72-81
	SIMPLYCAL Software for calibration balances for practitioners	82-83

SILICON-KG

WORLDWIDE ONLY AVAILABLE BY HÄFNER

THE NEW KILOGRAM

MADE BY NATURAL SILICON SPHERES

The redefinition of the SI unit kilogram is closely linked to the necessity of an appropriate dissemination of this unit by means of mass standards.

Due to its material properties, robustness and easy handling, silicon is very well suited in comparison to other considered materials. At PTB, a procedure for the manufacture, handling, storage, transportation, cleaning and metrological assessment was developed and tested.

PTB together with two industrial cooperation partners are participating in this "Si-kg" project with the aim to make silicon spheres and procedures available for a broader use.



HAUSER OPTIK
precision in silicon





AVOGADRO CONSTANT N_A

PLANCK CONSTANT h

BASED ON FUNDAMENTAL CONSTANTS

MASS-PRIMARY-NORMAL – SILICON SPHERES

Material	High-purity, monocrystalline, natural silicon, consisting of 3 isotopes: ^{28}Si (approx. 92%), ^{29}Si (approx. 5%), ^{30}Si (approx. 3%)
Nominal value*	1 kg
Diameter	approx. 93,6 mm
Density	approx. 2329 kg/mm ³

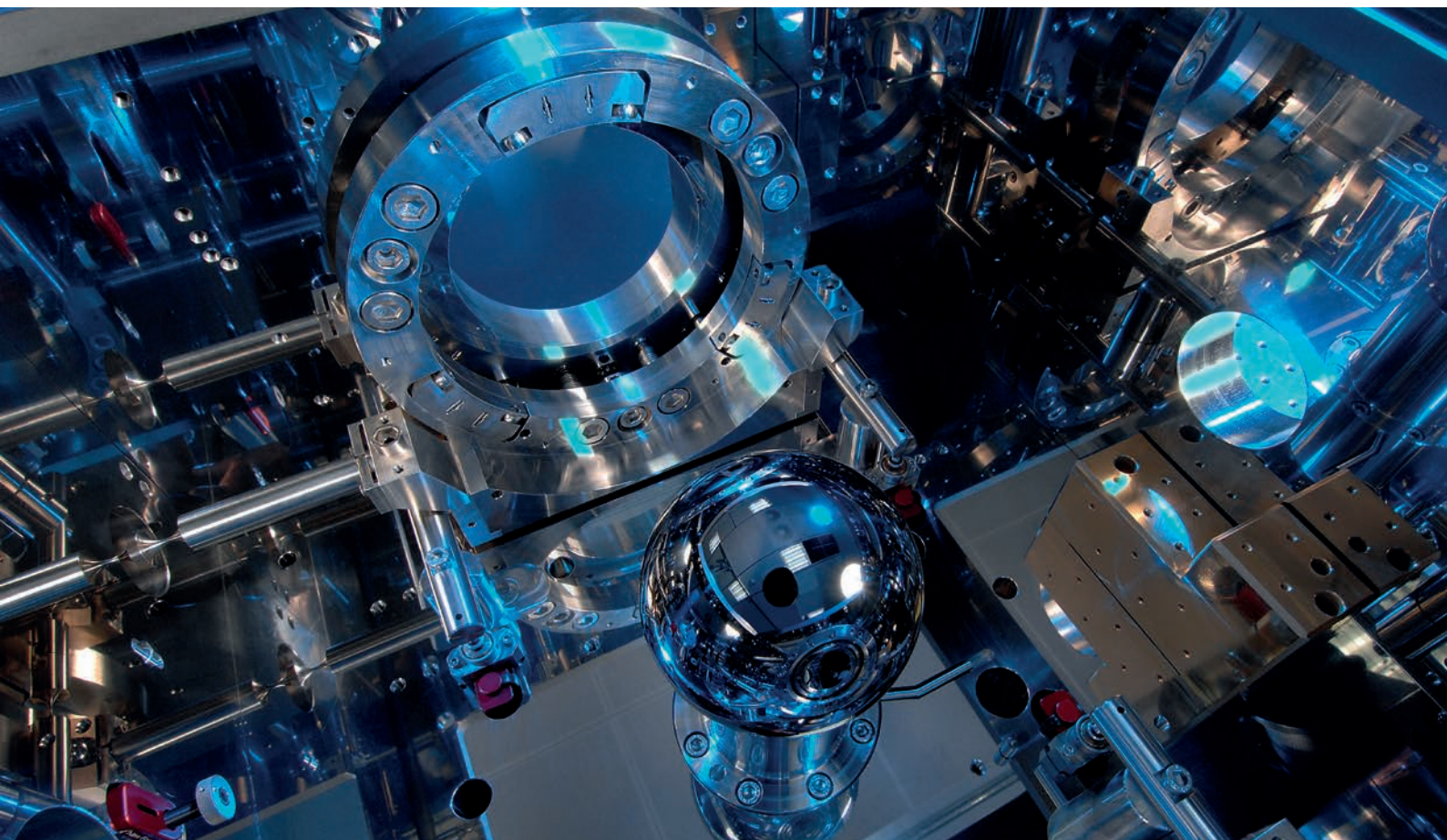
SPECIFICATIONS

	Special secondary sphere (sc++)	Secondary sphere (sc)
Mass tolerance Δm	0 / +200 mg	0 / +200 mg
Form deviation RONT	< 20 nm	< 80 nm
Surface roughness Ra	< 0,3 nm	< 1 nm

CALIBRATION CERTIFICATE (PTB)

Measurement uncertainties U(k=2)	Special secondary sphere (sc++)	Secondary sphere (sc)
Mass in vacuum	25 μg	45 μg
Mass in air	50 μg	55 μg
Roundness	2,5 nm	50 nm, optional
Diameter	0,3 nm	-
Volume in vacuum	0,010 mm ³	-
Volume in air	0,014 mm ³	0,8 mm ³
Density	0,004 kg/m ³	0,004 kg/m ³
Surface roughness	0,15 nm	0,15, optional
Layer thickness	0,4 nm, optional	-

*Other nominal values possible on request



VOLUME AND DENSITY PRIMARY NORMALS – SILICON SPHERES

SPECIFICATIONS

Nominal values*	1 kg	500 g	200 g	100 g	50 g	20 g
Diameter in mm	approx. 93,6	approx. 74,3	approx. 54,7	approx. 43,4	approx. 34,5	approx. 25,4
Material	High-purity, monocrystalline, natural silicon, consisting of 3 isotopes: ²⁸ Si (approx. 92%), ²⁹ Si (approx. 5%), ³⁰ Si (approx. 3%)					
Density	approx. 2329 kg/mm ³					
Mass tolerance Δm	0 / +200 mg					
Form deviation RONT	< 1 μm					
Surface roughness Ra	< 10 nm					

CALIBRATION CERTIFICATE (PTB)

Measurement uncertainties U(k=2)	1 kg	500 g	200 g	100 g	50 g	20 g
Mass in air	0,10 mg	0,50 mg	0,020 mg	0,010 mg	0,006 mg	0,005 mg
Volume in air	0,0020 cm ³	0,0010 cm ³	0,0009 cm ³	0,0008 cm ³	0,0007 cm ³	0,0006 cm ³
Density	0,13 kg/m ³	0,13 kg/m ³	0,30 kg/m ³	0,50 kg/m ³	0,90 kg/m ³	1,9 kg/m ³

*Other nominal values possible on request



ACCESSORIES FOR SILICON SPHERES



SPECIAL TRANSPORT CONTAINER

for 1 kg silicon sphere, consisting of 2 parts: base part made of special aluminum with special plastic for centering, upper part made of special aluminium with a polycarbonate tube; special center screw made of plastic



TRANSPORT CASE

for housing the transport container of 1 kg silicon sphere, special aluminium frame case with hardfoam inserts, with hinged handle on the top and with lockable closure



BELL JAR

with base for 1 kg silicon sphere, consisting of special aluminum base, special glass bell (plane grinded) and sphere seat (made of PEEK), for storage in the laboratory



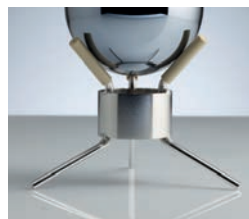
SPECIAL TRANSPORT CONTAINER

inspection plate made of anodized special aluminum, with polished sphere holder made of PEEK and with bell jar for 1 kg silicon sphere, with built-in rotatable plate for surface inspection



SPEZIELLE LED-TASCHENLAMPE

for inspection of silicon spheres, special air bulb with built-in air filter, for safe cleaning of dust particles



SPHERE HOLDER

tripod as cleaning aid, made of special stainless steel, electrolytically polished, with polished PEEK caps



HI-TECH PADS D 60 MM

for silicon spheres, used as underlay in various sphere accessories, knitted cloth, ultrasonic, poured and washed, package (10 pieces)



HI-TECH PADS D 100 MM

for silicon spheres, used for cleaning and as underlay in various sphere accessories, knitted cloth, laser-cut, poured and washed, package (10 pieces)



SPECIAL FORK

for handling 1 kg silicon sphere, handle made of anodized aluminum, support plate made of polished PEEK



SPECIAL TONG

for handling 1 kg silicon sphere, with spherical, self-centering jaws, which are covered with special microfiber caps, with smooth or bow handles



HI-TECH CLEANING WIPES

for silicon spheres, 40 x 40 cm, knitted cloth, laser-cut, poured and washed, package (10 pieces)



SPECIAL NITRILE GLOVES

for use in the cleaning of silicon sphere, 100% nitrile, powder- and silicone free, recommended by PTB, sizes S, M, and XL available, package (100 pieces)



SPECIAL MICROFIBER GLOVES

high-purity model, in pairs, sizes S and L available



CLEANING CONCENTRATE

deconex, pH neutral, salt-free cleaning concentrate, used for the very gentle cleaning of silicon spheres, 2 % dosage in distilled water is recommended, available container sizes: 1 l and 10 l

E0

Primary and Secondary Mass Standards of Class E0

As a national mass standard and /or for representing the national mass scale up to 50 kg. For the calibration of mass standards of the classes E1.

Weights in the exclusive assortment case.

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAN ROOM
PLASTIC CASES



MAHOGANY
WOODEN BOX



SERVICE
CASE



CLEAN ROOM CASE
removeable inserts



PLASTIC BOXES
WITH SCREWED TOP



DOUBLE-GLAZED
BELL JAR



Primary standard weight

Cylinder shape

highly polished

SINGLE WEIGHT

Nominal value Tol.			with double-glazed bell jar and a special transport box	PTB Calibration certificate U=1/5 E1 *	PTB Calibration certificate U=50 µg	
+/- mg			Art.no.	€	Art.no.	€
1 kg	0,15	Special stainless steel HE210	11.ZBHS-210	10.0000-216	11.0000-216	
1 kg	0,15	Platin iridium	11.ZBYS-210			

Milligramm weights

SPECIAL STAINLESS STEEL HE210

Wire shape

highly polished

SINGLE WEIGHT



Nominal value	Tol.	without box	 Clean room plastic cases	 Mahogany wooden box	PTB Calibration certificate U=1/5 E1 *		
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,0015	10.DBHO-010		10.DBHP-010		10.DBHM-010	10.0000-016
2 mg	0,0015	10.DBHO-020		10.DBHP-020		10.DBHM-020	10.0000-026
5 mg	0,0015	10.DBHO-030		10.DBHP-030		10.DBHM-030	10.0000-036
10 mg	0,0015	10.DBHO-040		10.DBHP-040		10.DBHM-040	10.0000-046
20 mg	0,0015	10.DBHO-050		10.DBHP-050		10.DBHM-050	10.0000-056
50 mg	0,0020	10.DBHO-060		10.DBHP-060		10.DBHM-060	10.0000-066
100 mg	0,0025	10.DBHO-070		10.DBHP-070		10.DBHM-070	10.0000-076
200 mg	0,0030	10.DBHO-080		10.DBHP-080		10.DBHM-080	10.0000-086
500 mg	0,0040	10.DBHO-090		10.DBHP-090		10.DBHM-090	10.0000-096

Mahogany wooden box, inside plastic case with antistatic stainless steel coating, tweezer and brush

SET

Nominal value	Quantity	without box	 Clean room plastic cases	 Mahogany wooden box	PTB Calibration certificate U=1/5 E1 *		
		Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	10.XDHO-710		10.XDHP-710		10.XDHM-710	10.0000-716

Mahogany wooden box, inside plastic case with antistatic stainless steel coating, tweezer and brush

Milligramm weights

ALUMINIUM / SPECIAL STAINLESS STEEL HE210

Flat polygonal sheets

highly polished



SINGLE WEIGHT

Nominal value	Tol.	without box		 Clean room plastic cases		 Mahogany wooden box		PTB Calibration certificate U=1/5 E1 *	
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,0015	10.PAHO-010		10.PAHP-010		10.PAHM-010		10.0000-016	
2 mg	0,0015	10.PAHO-020		10.PAHP-020		10.PAHM-020		10.0000-026	
5 mg	0,0015	10.PAHO-030		10.PAHP-030		10.PAHM-030		10.0000-036	
10 mg	0,0015	10.PBHO-040		10.PBHP-040		10.PBHM-040		10.0000-046	
20 mg	0,0015	10.PBHO-050		10.PBHP-050		10.PBHM-050		10.0000-056	
50 mg	0,0020	10.PBHO-060		10.PBHP-060		10.PBHM-060		10.0000-066	
100 mg	0,0025	10.PBHO-070		10.PBHP-070		10.PBHM-070		10.0000-076	
200 mg	0,0030	10.PBHO-080		10.PBHP-080		10.PBHM-080		10.0000-086	
500 mg	0,0040	10.PBHO-090		10.PBHP-090		10.PBHM-090		10.0000-096	

SET

Nominal value	Quantity	without box		 Clean room plastic cases		 Mahogany wooden box		PTB Calibration certificate U=1/5 E1 *	
		Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	10.XPHO-710		10.XPHP-710		10.XPHM-710		10.0000-716	

Mahogany wooden box, inside plastic case with antistatic stainless steel coating, tweezer and brush



Knob weights



SPECIAL STAINLESS STEEL HE210

highly polished

SINGLE WEIGHT

No- minal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case remove- ble inserts	PTB Calibration certificate U=1/5 E1 *	
10.0000-								
+/- mg	Art.-Nr.	€	Art.-Nr.	€	Art.-Nr.	€	Art.-Nr.	
1g	0,005	10.MBHO-110		10.MBHD-110	10.MBHP-110	10.MBHM-110		...116
2g	0,006	10.MBHO-120		10.MBHD-120	10.MBHP-120	10.MBHM-120		...126
5g	0,008	10.MBHO-130		10.MBHD-130	10.MBHP-130	10.MBHM-130		...136
10g	0,010	10.MBHO-140		10.MBHD-140	10.MBHP-140	10.MBHM-140		...146
20g	0,012	10.MBHO-150		10.MBHD-150	10.MBHP-150	10.MBHM-150		...156
50g	0,015	10.MBHO-160		10.MBHD-160	10.MBHP-160	10.MBHM-160		...166
100g	0,025	10.MBHO-170		10.MBHD-170	10.MBHP-170	10.MBHM-170	10.MBHR-170	...176
200g	0,050	10.MBHO-180		10.MBHD-180	10.MBHP-180	10.MBHM-180	10.MBHR-180	...186
500g	0,125	10.MBHO-190		10.MBHD-190	10.MBHP-190	10.MBHM-190	10.MBHR-190	...196
1 kg	0,250	10.MBHO-210		10.MBHD-210	10.MBHP-210	10.MBHM-210	10.MBHR-210	...216
2 kg	0,500	10.MBHO-220		10.MBHD-220	10.MBHP-220	10.MBHM-220	10.MBHR-220	...226
5 kg	1,2	10.MBHO-230		10.MBHD-230	10.MBHP-230	10.MBHM-230	10.MBHR-230	...236
10 kg	2,5	10.MBHO-240		10.MBHD-240	10.MBHP-240	10.MBHM-240	10.MBHR-240	...246
20 kg	5	10.MBHO-250				10.MBHM-250	10.MBHR-250	...256
50 kg	12	10.MBHO-260				10.MBHM-260	10.MBHR-260	...266

Clean room plastic box up from 100 g in a plastic case with foam insert.

Nominal value	Tol.		Service case	PTB Calibration certificate U=1/5 E1 *
+/- mg	Art.no.	€	Art.no.	€
5 kg	1,2		10.MBHS-230	...236
10 kg	2,5		10.MBHS-240	...246
20 kg	5		10.MBHS-250	...256
50 kg	12		10.MBHS-260	...266

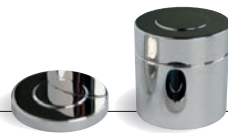
SETS

Nominal value	Qty.	Splitting up	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case removable inserts	PTB Calibration certificate U=1/5 E1 *			
									10.0000-		
				Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1–5 g	3	1, 2, 5 g	8 g	10.XTHP-530		10.XTHM-530		10.XTHS-530		10.XTHR-530	...536
10–50 g	3	10, 20, 50 g	80 g	10.XTHP-650		10.XTHM-650		10.XTHS-650		10.XTHR-650	...656
100–500 g	3	100, 200, 500 g	800 g	10.XTHP-660		10.XTHM-660		10.XTHS-660		10.XTHR-660	...666
100–1 kg	4	100, 200, 500, ... g	1.800 g	10.XTHP-670		10.XTHM-670		10.XTHS-670		10.XTHR-670	...676
1–1 kg	10	1, 2, 5, ...	1.888 g	10.XTHP-610		10.XTHM-610		10.XTHS-610		10.XTHR-610	...616
1–5 kg	3	1, 2, 5 kg	8.000 g	10.XTHP-680		10.XTHM-680		10.XTHS-680		10.XTHR-680	...686
2–10 kg	3	2, 5, 10 kg	17.000 g	10.XTHP-690		10.XTHM-690		10.XTHS-690		10.XTHR-690	...696
1 g–10 kg	13	1, 2, 5, ...	18.888 g	10.XTHP-640		10.XTHM-640		10.XTHS-640		10.XTHR-640	...646

*U = 1/5 E1 uncertainty of measurement

Note: Subject to short-term price changes

Disc weights

**SPECIAL STAINLESS STEEL HE210**

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case removeable inserts	PTB Calibration certificate U=1/5 E1 *				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	10.0000- Art.no.	€
1 g	0,0050	10.SBHO-110		10.SBHD-110		10.SBHP-110		10.SBHM-110		...116	
2 g	0,0060	10.SBHO-120		10.SBHD-120		10.SBHP-120		10.SBHM-120		...126	
5 g	0,0080	10.SBHO-130		10.SBHD-130		10.SBHP-130		10.SBHM-130		...136	
10 g	0,0100	10.SBHO-140		10.SBHD-140		10.SBHP-140		10.SBHM-140		...146	
20 g	0,0120	10.SBHO-150		10.SBHD-150		10.SBHP-150		10.SBHM-150		...156	
50 g	0,0150	10.SBHO-160		10.SBHD-160		10.SBHP-160		10.SBHM-160		...166	
100 g	0,0250	10.SBHO-170		10.SBHD-170		10.SBHP-170		10.SBHM-170	10.SBHR-170	...176	
200 g	0,0500	10.SBHO-180		10.SBHD-180		10.SBHP-180		10.SBHM-180	10.SBHR-180	...186	
500 g	0,1250	10.SBHO-190		10.SBHD-190		10.SBHP-190		10.SBHM-190	10.SBHR-190	...196	
1 kg	0,25	10.SBHO-210		10.SBHD-210		10.SBHP-210		10.SBHM-210	10.SBHR-210	...216	
2 kg	0,50	10.SBHO-220		10.SBHD-220		10.SBHP-220		10.SBHM-220	10.SBHR-220	...226	
5 kg	1,2	10.SBHO-230		10.SBHD-230		10.SBHP-230		10.SBHM-230	10.SBHR-230	...236	
10 kg	2,5	10.SBHO-240		10.SBHD-240		10.SBHP-240		10.SBHM-240	10.SBHR-240	...246	
20 kg	5	10.SBHO-250						10.SBHM-250	10.SBHR-250	...256	
50 kg	12	10.SBHO-260						10.SBHM-260	10.SBHR-260	...266	

Clean room plastic box up from 100 g in a plastic case with foam insert.

Nominal value Tol.		 Service case	PTB Calibration certificate U=1/5 E1 *	
	+/- mg	Art.no.	10.0000- Art.no.	€
5 kg	1,2	10.SBHS-230	...236	
10 kg	2,5	10.SBHS-240	...246	
20 kg	5	10.SBHS-250	...256	
50 kg	12	10.SBHS-260	...266	

SETS

Nominal value	Qty.	Splitting up	Con- tent	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case removeable inserts	PTB Calibration cer- tificateU=1/5 E1 *			
				Art.no.	€	Art.no.	€	Art.no.	€	10.0000- Art.no.	€
1g–5g	3	1, 2, 5g	8g	10.XSHP-530		10.XSHM-530		10.XSHS-530		10.XSHR-530	...536
10g–50g	3	10, 20, 50g	80g	10.XSHP-650		10.XSHM-650		10.XSHS-650		10.XSHR-650	...656
100g–500g	3	100, 200, 500g	800g	10.XSHP-660		10.XSHM-660		10.XSHS-660		10.XSHR-660	...666
100g–1kg	4	100, 200, 500, ...	1.800g	10.XSHP-670		10.XSHM-670		10.XSHS-670		10.XSHR-670	...676
1g–1kg	10	1, 2, 5 ...	1.888g	10.XSHP-610		10.XSHM-610		10.XSHS-610		10.XSHR-610	...616
1kg–5kg	3	1, 2, 5kg	8.000g	10.XSHP-680		10.XSHM-680		10.XSHS-680		10.XSHR-680	...686
2kg–10kg	3	2, 5, 10kg	17.000g	10.XSHP-690		10.XSHM-690		10.XSHS-690		10.XSHR-690	...696
1g–10kg	13	1, 2, 5, ...	18.888g	10.XSHP-640		10.XSHM-640		10.XSHS-640		10.XSHR-640	...646

*U = 1/5 E1 uncertainty of measurement

Note: Subject to short-term price changes

E1

Reference Mass Standards and Weights of Class E1

Adjustment, testing and calibration instrument within the quality assurance of balances with steps $> 1\,000\,000$ according to DIN EN ISO 9001ff etc.
For calibration of weights of the class E2 according to OIML R111. Within high-precision weighing or comparisons weight on mass comparators.



Weights in the exclusive assortment case.

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAN ROOM
PLASTIC CASES



MAHOGANY
WOODEN BOX



SERVICE
CASE



CLEAN ROOM CASE
removeable inserts



PLASTIC BOXES
WITH SCREWED TOP

Milligramm weights

SPECIAL STAINLESS STEEL HE210

Wire shape



highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	PTB Calibration certificate	Dakks Calibration certificate						
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€		
1 mg	0,003	9.DBHO-010		9.DBHD-010		9.DBHP-010		9.DBHM-010		9.0000-...016		9.0000-...011	
2 mg	0,003	9.DBHO-020		9.DBHD-020		9.DBHP-020		9.DBHM-020		9.0000-...026		9.0000-...021	
5 mg	0,003	9.DBHO-030		9.DBHD-030		9.DBHP-030		9.DBHM-030		9.0000-...036		9.0000-...031	
10 mg	0,003	9.DBHO-040		9.DBHD-040		9.DBHP-040		9.DBHM-040		9.0000-...046		9.0000-...041	
20 mg	0,003	9.DBHO-050		9.DBHD-050		9.DBHP-050		9.DBHM-050		9.0000-...056		9.0000-...051	
50 mg	0,004	9.DBHO-060		9.DBHD-060		9.DBHP-060		9.DBHM-060		9.0000-...066		9.0000-...061	
100 mg	0,005	9.DBHO-070		9.DBHD-070		9.DBHP-070		9.DBHM-070		9.0000-...076		9.0000-...071	
200 mg	0,006	9.DBHO-080		9.DBHD-080		9.DBHP-080		9.DBHM-080		9.0000-...086		9.0000-...081	
500 mg	0,008	9.DBHO-090		9.DBHD-090		9.DBHP-090		9.DBHM-090		9.0000-...096		9.0000-...091	

SET

Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	PTB Calibration certificate	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	
1 mg–500mg	12	1,11 g	9.XEHP-710		9.XEHM-710		9.0000-716		9.0000-711

Mahogany wooden box, inside plastic case with antistatic stainless steel coating, tweezer and brush

Milligramm weights

ALUMINIUM / SPECIAL STAINLESS STEEL HE210

Flat polygonal sheets



highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	PTB Calibration certificate	DAkks Calibration certificate					
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	9.0000- Art.no.	9.0000- Art.no.	€
1 mg	0,003	9.PAHO-010		9.PAHD-010		9.PAHP-010		9.PAHM-010		...016	...011	
2 mg	0,003	9.PAHO-020		9.PAHD-020		9.PAHP-020		9.PAHM-020		...026	...021	
5 mg	0,003	9.PAHO-030		9.PAHD-030		9.PAHP-030		9.PAHM-030		...036	...031	
10 mg	0,003	9.PBHO-040		9.PBHD-040		9.PBHP-040		9.PBHM-040		...046	...041	
20 mg	0,003	9.PBHO-050		9.PBHD-050		9.PBHP-050		9.PBHM-050		...056	...051	
50 mg	0,004	9.PBHO-060		9.PBHD-060		9.PBHP-060		9.PBHM-060		...066	...061	
100 mg	0,005	9.PBHO-070		9.PBHD-070		9.PBHP-070		9.PBHM-070		...076	...071	
200 mg	0,006	9.PBHO-080		9.PBHD-080		9.PBHP-080		9.PBHM-080		...086	...081	
500 mg	0,008	9.PBHO-090		9.PBHD-090		9.PBHP-090		9.PBHM-090		...096	...091	

1–5 mg made of aluminium

SET

Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	PTB Calibration certificate	DAkks Calibration certificate				
			Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	9.XNHP-710		9.XNHM-710		9.0000-716		9.0000-711	

Knob weights



SPECIAL STAINLESS STEEL HE210

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	PTB Calibration certificate	DAkkS Calibration certificate			
						9.0000-	9.0000-			
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	
1 g	0,01	9.MBHO-110		9.MBHD-110		9.MBHP-110		9.MBHM-110	...116	...111
2 g	0,012	9.MBHO-120		9.MBHD-120		9.MBHP-120		9.MBHM-120	...126	...121
5 g	0,016	9.MBHO-130		9.MBHD-130		9.MBHP-130		9.MBHM-130	...136	...131
10 g	0,02	9.MBHO-140		9.MBHD-140		9.MBHP-140		9.MBHM-140	...146	...141
20 g	0,025	9.MBHO-150		9.MBHD-150		9.MBHP-150		9.MBHM-150	...156	...151
50 g	0,03	9.MBHO-160		9.MBHD-160		9.MBHP-160		9.MBHM-160	...166	...161
100 g	0,05	9.MBHO-170		9.MBHD-170		9.MBHP-170		9.MBHM-170	...176	...171
200 g	0,1	9.MBHO-180		9.MBHD-180		9.MBHP-180		9.MBHM-180	...186	...181
500 g	0,25	9.MBHO-190		9.MBHD-190		9.MBHP-190		9.MBHM-190	...196	...191
1 kg	0,5	9.MBHO-210		9.MBHD-210		9.MBHP-210		9.MBHM-210	...216	...211
2 kg	1	9.MBHO-220		9.MBHD-220		9.MBHP-220		9.MBHM-220	...226	...221
5 kg	2,5	9.MBHO-230		9.MBHD-230		9.MBHP-230		9.MBHM-230	...236	...231
10 kg	5	9.MBHO-240		9.MBHD-240		9.MBHP-240		9.MBHM-240	...246	...241
20 kg	10	9.MBHO-250						9.MBHM-250	...256	...251
50 kg	25	9.MBHO-260						9.MBHM-260	...266	...261

Clean room plastic box up from 100 g in a plastic case with foam insert.

Nominal value	Tol.	 Clean room case removeable inserts	 Service case	PTB Calibration certificate	DAkks Calibra- tion certificate					
		+/- mg	Art.no.	€	Art.no.	€	9.0000- Art.no.	€	9.0000- Art.no.	€
100 g		0,05	9.MBHR-170				...176		...171	
200 g		0,1	9.MBHR-180				...186		...181	
500 g		0,25	9.MBHR-190				...196		...191	
1 kg		0,5	9.MBHR-210				...216		...211	
2 kg		1	9.MBHR-220				...226		...221	
5 kg		2,5	9.MBHR-230		9.MBHS-230		...236		...231	
10 kg		5	9.MBHR-240		9.MBHS-240		...246		...241	
20 kg		10	9.MBHR-250		9.MBHS-250		...256		...251	
50 kg		25	9.MBHR-260		9.MBHS-260		...266		...261	



Knob weights



SPECIAL STAINLESS STEEL HE210

highly polished

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	PTB Calibration certificate	DAkKS Calibration certificate				
			Art.no.	€	Art.no.	€	9.0000- Art.no.	€	9.0000- Art.no.	€
1 g–50 g	8	110 g	9.XTHP-560		9.XTHM-560		...566		...561	
1 g–100 g	9	210 g	9.XTHP-570		9.XTHM-570		...576		...571	
1 g–200 g	11	610 g	9.XTHP-580		9.XTHM-580		...586		...581	
1 g–500 g	12	1.110 g	9.XTHP-590		9.XTHM-590		...596		...591	
1 g–1 kg	13	2.110 g	9.XTHP-610		9.XTHM-610		...616		...611	
1 g–2 kg	15	6.110 g	9.XTHP-620		9.XTHM-620		...626		...621	
1 g–5 kg	16	11.110 g	9.XTHP-630		9.XTHM-630		...636		...631	
1 g–10 kg	17	21.110 g	9.XTHP-640		9.XTHM-640		...646		...641	
10 g–50 g	3	80 g	9.XTHP-650		9.XTHM-650		...656		...651	
100 g–500 g	3	800 g	9.XTHP-660		9.XTHM-660		...666		...661	
100 g–1 kg	4	1.800 g	9.XTHP-670		9.XTHM-670		...676		...671	
1 kg–5 kg	4	10.000 g	9.XTHP-680		9.XTHM-680		...686		...681	
2 kg–10 kg	3	17.000 g	9.XTHP-690		9.XTHM-690		...696		...691	

Nominal value	Qty.	Con- tent	 Service case	 Clean room case removeable inserts	PTB Calibration certificate	DAkks Calibration certificate				
			Art.no.	€	Art.no.	€	9.0000- Art.no.	€	9.0000- Art.no.	€
1 g–50 g	8	110 g			9.XTHR-560		...566		...561	
1 g–100 g	9	210 g	9.XTHS-570		9.XTHR-570		...576		...571	
1 g–200 g	11	610 g	9.XTHS-580		9.XTHR-580		...586		...581	
1 g–500 g	12	1.110 g	9.XTHS-590		9.XTHR-590		...596		...591	
1 g–1 kg	13	2.110 g	9.XTHS-610		9.XTHR-610		...616		...611	
1 g–2 kg	15	6.110 g	9.XTHS-620		9.XTHR-620		...626		...621	
1 g–5 kg	16	11.110 g	9.XTHS-630		9.XTHR-630		...636		...631	
1 g–10 kg	17	21.110 g	9.XTHS-640		9.XTHR-640		...646		...641	
10 g–50 g	3	80 g	9.XTHS-650		9.XTHR-650		...656		...651	
100 g–500 g	3	800 g	9.XTHS-660		9.XTHR-660		...666		...661	
100 g–1 kg	4	1.800 g	9.XTHS-670		9.XTHR-670		...676		...671	
1 kg–5 kg	4	10.000 g	9.XTHS-680		9.XTHR-680		...686		...681	
2 kg–10 kg	3	17.000 g	9.XTHS-690		9.XTHR-690		...696		...691	



Knob weights



SPECIAL STAINLESS STEEL HE210

highly polished

SETS with mg-weights (flat polygonal sheets)

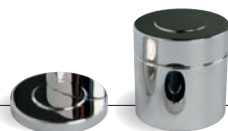
Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	 Service case	 Clean room case removeable inserts	PTB Calibration certificate	DAkkS Calibration certificate				
			Art.-Nr.	€	Art.-Nr.	€	Art.-Nr.	€	Art.-Nr.	€		
1 mg–5 g	16	6,11 g	9.XNHP-730		9.XNHM-730		9.XNHS-730		9.XNHR-730		9.0000-...736	9.0000-...731
1 mg–50 g	20	111,11 g	9.XNHP-760		9.XNHM-760		9.XNHS-760		9.XNHR-760		...766	...761
1 mg–100 g	21	211,11 g	9.XNHP-770		9.XNHM-770		9.XNHS-770		9.XNHR-770		...776	...771
1 mg–200 g	23	611,11 g	9.XNHP-780		9.XNHM-780		9.XNHS-780		9.XNHR-780		...786	...781
1 mg–500 g	24	1.111,11 g	9.XNHP-790		9.XNHM-790		9.XNHS-790		9.XNHR-790		...796	...791
1 mg–1 kg	25	2.111,11 g	9.XNHP-810		9.XNHM-810		9.XNHS-810		9.XNHR-810		...816	...811
1 mg–2 kg	27	6.111,11 g	9.XNHP-820		9.XNHM-820		9.XNHS-820		9.XNHR-820		...826	...821
1 mg–5 kg	28	11.111,11 g	9.XNHP-830		9.XNHM-830		9.XNHS-830		9.XNHR-830		...836	...831
1 mg–10 kg	29	21.111,11 g	9.XNHP-840		9.XNHM-840		9.XNHS-840		9.XNHR-840		...846	...841
1 mg–1 kg (2x)	38	3.778,22 g	9.XNHP-850		9.XNHM-850		9.XNHS-850		9.XNHR-850		...856	...851

SETS with mg-weights (wire shape)

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case removeable inserts	PTB Calibration certificate	DAkkS Calibration certificate				
			Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg–5 g	16	6,11 g	9.XEHP-730		9.XEHM-730		9.XEHS-730		9.XEHR-730		...736	...731
1 mg–50 g	20	111,11 g	9.XEHP-760		9.XEHM-760		9.XEHS-760		9.XEHR-760		...766	...761
1 mg–100 g	21	211,11 g	9.XEHP-770		9.XEHM-770		9.XEHS-770		9.XEHR-770		...776	...771
1 mg–200 g	23	611,11 g	9.XEHP-780		9.XEHM-780		9.XEHS-780		9.XEHR-780		...786	...781
1 mg–500 g	24	1.111,11 g	9.XEHP-790		9.XEHM-790		9.XEHS-790		9.XEHR-790		...796	...791
1 mg–1 kg	25	2.111,11 g	9.XEHP-810		9.XEHM-810		9.XEHS-810		9.XEHR-810		...816	...811
1 mg–2 kg	27	6.111,11 g	9.XEHP-820		9.XEHM-820		9.XEHS-820		9.XEHR-820		...826	...821
1 mg–5 kg	28	11.111,11 g	9.XEHP-830		9.XEHM-830		9.XEHS-830		9.XEHR-830		...836	...831
1 mg–10 kg	29	21.111,11 g	9.XEHP-840		9.XEHM-840		9.XEHS-840		9.XEHR-840		...846	...841
1 mg–1 kg	38	3.778,22 g	9.XEHP-850		9.XEHM-850		9.XEHS-850		9.XEHR-850		...856	...851
(2x)												



Disc weights

**SPECIAL STAINLESS STEEL HE210**

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case removeable inserts	PTB Calibration certificate	DAkks Calibration certificate					
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€		
1 g	0,01	9.SBHO-110		9.SBHD-110		9.SBHP-110		9.SBHM-110		9.0000-...116		9.0000-...111	
2 g	0,012	9.SBHO-120		9.SBHD-120		9.SBHP-120		9.SBHM-120		9.0000-...126		9.0000-...121	
5 g	0,016	9.SBHO-130		9.SBHD-130		9.SBHP-130		9.SBHM-130		9.0000-...136		9.0000-...131	
10 g	0,02	9.SBHO-140		9.SBHD-140		9.SBHP-140		9.SBHM-140		9.0000-...146		9.0000-...141	
20 g	0,025	9.SBHO-150		9.SBHD-150		9.SBHP-150		9.SBHM-150		9.0000-...156		9.0000-...151	
50 g	0,03	9.SBHO-160		9.SBHD-160		9.SBHP-160		9.SBHM-160		9.0000-...166		9.0000-...161	
100 g	0,05	9.SBHO-170		9.SBHD-170		9.SBHP-170		9.SBHM-170	9.SBHR-170	9.0000-...176		9.0000-...171	
200 g	0,1	9.SBHO-180		9.SBHD-180		9.SBHP-180		9.SBHM-180	9.SBHR-180	9.0000-...186		9.0000-...181	
500 g	0,25	9.SBHO-190		9.SBHD-190		9.SBHP-190		9.SBHM-190	9.SBHR-190	9.0000-...196		9.0000-...191	
1 kg	0,5	9.SBHO-210		9.SBHD-210		9.SBHP-210		9.SBHM-210	9.SBHR-210	9.0000-...216		9.0000-...211	
2 kg	1	9.SBHO-220		9.SBHD-220		9.SBHP-220		9.SBHM-220	9.SBHR-220	9.0000-...226		9.0000-...221	
5 kg	2,5	9.SBHO-230		9.SBHD-230		9.SBHP-230		9.SBHM-230	9.SBHR-230	9.0000-...236		9.0000-...231	
10 kg	5	9.SBHO-240		9.SBHD-240		9.SBHP-240		9.SBHM-240	9.SBHR-240	9.0000-...246		9.0000-...241	
20 kg	10	9.SBHO-250						9.SBHM-250	9.SBHR-250	9.0000-...256		9.0000-...251	
50 kg	25	9.SBHO-260						9.SBHM-260	9.SBHR-260	9.0000-...266		9.0000-...261	

Clean room plastic box up from 100 g in a plastic case with foam insert.

Nominal value	Tol.		 Service case	PTB Calibration certificate	DAkks Calibration certificate
	+/- mg	Art.no.	€	Art.no.	€
5 kg	2,5	9.SBHS-230		9.0000-...236	9.0000-...231
10 kg	5	9.SBHS-240		9.0000-...246	9.0000-...241
20 kg	10	9.SBHS-250		9.0000-...256	9.0000-...251
50 kg	25	9.SBHS-260		9.0000-...266	9.0000-...261



Disc weights

SPECIAL STAINLESS STEEL HE210

highly polished

SETS

Nominal value	Qty.	Con- tent	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case removeable inserts	PTB Calibration certificate	DAkkS Calibrati- on certificate				
			Art.no.	€	Art.no.	€	Art.no.	€	9.0000- Art.no.	€	9.0000- Art.no.	€
1 g–5 g	4	9 g	9.XSHP-530		9.XSHM-530		9.XSHS-530		9.XSHR-530	...536	...531	
1 g–50 g	8	110 g	9.XSHP-560		9.XSHM-560		9.XSHS-560		9.XSHR-560	...566	...561	
1 g–100 g	9	210 g	9.XSHP-570		9.XSHM-570		9.XSHS-570		9.XSHR-570	...576	...571	
1 g–200 g	11	610 g	9.XSHP-580		9.XSHM-580		9.XSHS-580		9.XSHR-580	...586	...581	
1 g–500 g	12	1.110 g	9.XSHP-590		9.XSHM-590		9.XSHS-590		9.XSHR-590	...596	...591	
1 g–1 kg	13	2.110 g	9.XSHP-610		9.XSHM-610		9.XSHS-610		9.XSHR-610	...616	...611	
1 g–2 kg	15	6.110 g	9.XSHP-620		9.XSHM-620		9.XSHS-620		9.XSHR-620	...626	...621	
1 g–5 kg	16	11.110 g	9.XSHP-630		9.XSHM-630		9.XSHS-630		9.XSHR-630	...636	...631	
1 g–10 kg	17	21.110 g	9.XSHP-640		9.XSHM-640		9.XSHS-640		9.XSHR-640	...646	...641	
10 g–50 g	3	80 g	9.XSHP-650		9.XSHM-650		9.XSHS-650		9.XSHR-650	...656	...651	
100 g–500 g	3	800 g	9.XSHP-660		9.XSHM-660		9.XSHS-660		9.XSHR-660	...666	...661	
100 g–1 kg	4	1.800 g	9.XSHP-670		9.XSHM-670		9.XSHS-670		9.XSHR-670	...676	...671	
1 kg–5 kg	4	10.000 g	9.XSHP-680		9.XSHM-680		9.XSHS-680		9.XSHR-680	...686	...681	
2 kg–10 kg	3	17.000 g	9.XSHP-690		9.XSHM-690		9.XSHS-690		9.XSHR-690	...696	...691	

3-Part service case

Available for all classes of weights

1 mg–5 kg



Price on request

Trolley

Available for all classes of weights

1 mg–10 kg

1 mg–20 kg



Price on request

E2

Weight Standards of Class E2

Adjustment, testing and calibration weights for high-resolution scales of class I. Within the quality assurance of scales with steps

> 100 000 according to DIN EN ISO 9001ff etc. For weighing or mass comparisons on balances of class I or on mass comparators.

For calibration of weights of classes F1 and F2 according to OIML R111 and DIN 8127.

Solid masses in highest quality

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAN ROOM
PLASTIC CASES

MAHOGANY
WOODEN BOX

SERVICE
CASE

CLEAN ROOM CASE
removeable inserts

PLASTIC BOXES
WITH SCREWED TOP

Milligramm weights

SPECIAL STAINLESS STEEL HE210

Wire shape



highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,006	8.DBHO-010		8.DBHD-010		8.DBHP-010		8.DBHM-010	8.0000-011
2 mg	0,006	8.DBHO-020		8.DBHD-020		8.DBHP-020		8.DBHM-020	8.0000-021
5 mg	0,006	8.DBHO-030		8.DBHD-030		8.DBHP-030		8.DBHM-030	8.0000-031
10 mg	0,008	8.DBHO-040		8.DBHD-040		8.DBHP-040		8.DBHM-040	8.0000-041
20 mg	0,01	8.DBHO-050		8.DBHD-050		8.DBHP-050		8.DBHM-050	8.0000-051
50 mg	0,012	8.DBHO-060		8.DBHD-060		8.DBHP-060		8.DBHM-060	8.0000-061
100 mg	0,016	8.DBHO-070		8.DBHD-070		8.DBHP-070		8.DBHM-070	8.0000-071
200 mg	0,02	8.DBHO-080		8.DBHD-080		8.DBHP-080		8.DBHM-080	8.0000-081
500 mg	0,025	8.DBHO-090		8.DBHD-090		8.DBHP-090		8.DBHM-090	8.0000-091

SET

Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	8.XEHP-710		8.XEHM-710		8.0000-711	

Mahogany wooden box, inside plastic case with antistatic stainless steel coating, tweezer and brush

Milligramm weights

ALUMINIUM / GERMAN SILVER NICKEL

Flat polygonal sheets



SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,006	8.PAHO-010		8.PAHD-010		8.PAHP-010		8.PAHM-010	8.0000-011
2 mg	0,006	8.PAHO-020		8.PAHD-020		8.PAHP-020		8.PAHM-020	8.0000-021
5 mg	0,006	8.PAHO-030		8.PAHD-030		8.PAHP-030		8.PAHM-030	8.0000-031
10 mg	0,008	8.PNHO-040		8.PNHD-040		8.PNHP-040		8.PNHM-040	8.0000-041
20 mg	0,01	8.PNHO-050		8.PNHD-050		8.PNHP-050		8.PNHM-050	8.0000-051
50 mg	0,012	8.PNHO-060		8.PNHD-060		8.PNHP-060		8.PNHM-060	8.0000-061
100 mg	0,016	8.PNHO-070		8.PNHD-070		8.PNHP-070		8.PNHM-070	8.0000-071
200 mg	0,02	8.PNHO-080		8.PNHD-080		8.PNHP-080		8.PNHM-080	8.0000-081
500 mg	0,025	8.PNHO-090		8.PNHD-090		8.PNHP-090		8.PNHM-090	8.0000-091

1–5 mg made of aluminium

SET

Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	8.XFHP-710		8.XFHM-710		8.0000-711	

Mahogany wooden box, inside plastic case with antistatic stainless steel coating, tweezer and brush

Knob weights

**STAINLESS STEEL HF12**

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case with insert	DAKKS Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	8.0000-€	Art.no.	€
1 g	0,03	8.MEHO-110		8.MEHD-110		8.MEHP-110		8.MEHM-110		...111	
2 g	0,04	8.MEHO-120		8.MEHD-120		8.MEHP-120		8.MEHM-120		...121	
5 g	0,05	8.MEHO-130		8.MEHD-130		8.MEHP-130		8.MEHM-130		...131	
10 g	0,06	8.MEHO-140		8.MEHD-140		8.MEHP-140		8.MEHM-140		...141	
20 g	0,08	8.MEHO-150		8.MEHD-150		8.MEHP-150		8.MEHM-150		...151	
50 g	0,1	8.MEHO-160		8.MEHD-160		8.MEHP-160		8.MEHM-160		...161	
100 g	0,16	8.MEHO-170		8.MEHD-170		8.MEHP-170		8.MEHM-170	8.MEHR-170	...171	
200 g	0,3	8.MEHO-180		8.MEHD-180		8.MEHP-180		8.MEHM-180	8.MEHR-180	...181	
500 g	0,8	8.MEHO-190		8.MEHD-190		8.MEHP-190		8.MEHM-190	8.MEHR-190	...191	
1 kg	1,6	8.MEHO-210		8.MEHD-210		8.MEHP-210		8.MEHM-210	8.MEHR-210	...211	
2 kg	3	8.MEHO-220		8.MEHD-220		8.MEHP-220		8.MEHM-220	8.MEHR-220	...221	
5 kg	8	8.MEHO-230		8.MEHD-230		8.MEHP-230		8.MEHM-230	8.MEHR-230	...231	
10 kg	16	8.MEHO-240		8.MEHD-240		8.MEHP-240		8.MEHM-240	8.MEHR-240	...241	
20 kg	30	8.MEHO-250						8.MEHM-250	8.MEHR-250	...251	
50 kg	80	8.MEHO-260						8.MEHM-260	8.MEHR-260	...261	

Clean room plastic box up from 100 g in a plastic case with foam insert.

Nominal value	Tol.		 Service case	DAKKS Calibration certificate
+/- mg		Art.no.		8.0000- Art.no.
5 kg	8		8.MEHS-230	...231
10 kg	16		8.MEHS-240	...241
20 kg	30		8.MEHS-250	...251
50 kg	80		8.MEHS-260	...261

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	DAKKS Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	8.0000- Art.no.	€
1g–50 g	8	110 g	8.XTHP-560		8.XTHM-560		8.XTHR-560		...561	
1g–100 g	9	210 g	8.XTHP-570		8.XTHM-570		8.XTHR-570		...571	
1g–200 g	11	610 g	8.XTHP-580		8.XTHM-580		8.XTHR-580		...581	
1g–500 g	12	1.110 g	8.XTHP-590		8.XTHM-590		8.XTHR-590		...591	
1g–1 kg	13	2.110 g	8.XTHP-610		8.XTHM-610		8.XTHR-610		...611	
1g–2 kg	15	6.110 g	8.XTHP-620		8.XTHM-620		8.XTHR-620		...621	
1g–5 kg	16	11.110 g	8.XTHP-630		8.XTHM-630		8.XTHR-630		...631	
1g–10 kg	17	21.110 g	8.XTHP-640		8.XTHM-640		8.XTHR-640		...641	
1kg–5 kg	4	10.000 g	8.XTHP-680		8.XTHM-680		8.XTHR-680		...681	

Knob weights


STAINLESS STEEL HF12

highly polished

SETS with mg-weights (flat polygonal sheets)

Disc		 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	DAkkS Calibrati-				
Nominal value	Qty.	weights				on certificate				
			Art.no.	€	Art.no.	€	Art.no.	€	8.0000- Art.no.	€
1 mg–5 g	16	6,11 g	8.XFHP-730		8.XFHM-730		8.XFHR-730		...731	
1 mg–50 g	20	111,11 g	8.XFHP-760		8.XFHM-760		8.XFHR-760		...761	
1 mg–100 g	21	211,11 g	8.XFHP-770		8.XFHM-770	8.XFHS-770	8.XFHR-770		...771	
1 mg–200 g	23	611,11 g	8.XFHP-780		8.XFHM-780	8.XFHS-780	8.XFHR-780		...781	
1 mg–500 g	24	1.111,11 g	8.XFHP-790		8.XFHM-790	8.XFHS-790	8.XFHR-790		...791	
1 mg–1 kg	25	2.111,11 g	8.XFHP-810		8.XFHM-810	8.XFHS-810	8.XFHR-810		...811	
1 mg–2 kg	27	6.111,11 g	8.XFHP-820		8.XFHM-820	8.XFHS-820	8.XFHR-820		...821	
1 mg–5 kg	28	11.111,11 g	8.XFHP-830		8.XFHM-830	8.XFHS-830	8.XFHR-830		...831	
1 mg–10 kg	29	21.111,11 g	8.XFHP-840		8.XFHM-840	8.XFHS-840	8.XFHR-840		...841	
1 mg–1 kg (2x)	38	3.778,22 g	8.XFHP-850		8.XFHM-850	8.XFHS-850	8.XFHR-850		...851	

SETS with mg-weights (wire shape)

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	 Dakks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	8.0000- Art.no.	€
1 mg–5 g	16	6,11 g	8.XEHP-730		8.XEHM-730		8.XEHR-730		...731	
1 mg–50 g	20	111,11 g	8.XEHP-760		8.XEHM-760		8.XEHR-760		...761	
1 mg–100 g	21	211,11 g	8.XEHP-770		8.XEHM-770	8.XEHS-770	8.XEHR-770		...771	
1 mg–200 g	23	611,11 g	8.XEHP-780		8.XEHM-780	8.XEHS-780	8.XEHR-780		...781	
1 mg–500 g	24	1.111,11 g	8.XEHP-790		8.XEHM-790	8.XEHS-790	8.XEHR-790		...791	
1 mg–1 kg	25	2.111,11 g	8.XEHP-810		8.XEHM-810	8.XEHS-810	8.XEHR-810		...811	
1 mg–2 kg	27	6.111,11 g	8.XEHP-820		8.XEHM-820	8.XEHS-820	8.XEHR-820		...821	
1 mg–5 kg	28	11.111,11 g	8.XEHP-830		8.XEHM-830	8.XEHS-830	8.XEHR-830		...831	
1 mg–10 kg	29	21.111,11 g	8.XEHP-840		8.XEHM-840	8.XEHS-840	8.XEHR-840		...841	
1 mg–1 kg (2x)	38	3.778,22 g	8.XEHP-850		8.XEHM-850	8.XEHS-850	8.XEHR-850		...851	

3-Part service case

Available for all classes of weights

1mg–5kg


Price on request

Trolley

Available for all classes of weights

**1mg–10kg
1mg–20kg**


Price on request

Disc weights

**STAINLESS STEEL HF12**

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases*	 Mahogany wooden box	 Clean room case with insert	DAkks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	8.0000- Art.no.	€
1 g	0,03	8.SEHO-110		8.SEHD-110		8.SEHP-110		8.SEHM-110		...111	
2 g	0,04	8.SEHO-120		8.SEHD-120		8.SEHP-120		8.SEHM-120		...121	
5 g	0,05	8.SEHO-130		8.SEHD-130		8.SEHP-130		8.SEHM-130		...131	
10 g	0,06	8.SEHO-140		8.SEHD-140		8.SEHP-140		8.SEHM-140		...141	
20 g	0,08	8.SEHO-150		8.SEHD-150		8.SEHP-150		8.SEHM-150		...151	
50 g	0,1	8.SEHO-160		8.SEHD-160		8.SEHP-160		8.SEHM-160		...161	
100 g	0,16	8.SEHO-170		8.SEHD-170		8.SEHP-170		8.SEHM-170	8.SEHR-170	...171	
200 g	0,3	8.SEHO-180		8.SEHD-180		8.SEHP-180		8.SEHM-180	8.SEHR-180	...181	
500 g	0,8	8.SEHO-190		8.SEHD-190		8.SEHP-190		8.SEHM-190	8.SEHR-190	...191	
1 kg	1,6	8.SEHO-210		8.SEHD-210		8.SEHP-210		8.SEHM-210	8.SEHR-210	...211	
2 kg	3	8.SEHO-220		8.SEHD-220		8.SEHP-220		8.SEHM-220	8.SEHR-220	...221	
5 kg	8	8.SEHO-230		8.SEHD-230		8.SEHP-230		8.SEHM-230	8.SEHR-230	...231	
10 kg	16	8.SEHO-240		8.SEHD-240		8.SEHP-240		8.SEHM-240	8.SEHR-240	...241	
20 kg	30	8.SEHO-250						8.SEHM-250	8.SEHR-250	...251	
50 kg	80	8.SEHO-260						8.SEHM-260	8.SEHR-260	...261	

Clean room plastic box up from 100 g in a plastic case with foam insert.

Nominal value	Tol.	 Service case	DAkks Calibration certificate		
	+/- mg	Art.no.	€	Art.no.	€
5 kg	8	8.SEHS-230		...231	
10 kg	16	8.SEHS-240		...241	
20 kg	30	8.SEHS-250		...251	
50 kg	80	8.SEHS-260		...261	

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	8.0000- Art.no.	€
1g–5g	4	9g	8.XSHP-530		8.XSHM-530		8.XSHR-530		...531	
1g–50g	8	110g	8.XSHP-560		8.XSHM-560		8.XSHR-560		...561	
1g–100g	9	210g	8.XSHP-570		8.XSHM-570	8.XSHS-570	8.XSHR-570		...571	
1g–200g	11	610g	8.XSHP-580		8.XSHM-580	8.XSHS-580	8.XSHR-580		...581	
1g–500g	12	1.110g	8.XSHP-590		8.XSHM-590	8.XSHS-590	8.XSHR-590		...591	
1g–1kg	13	2.110g	8.XSHP-610		8.XSHM-610	8.XSHS-610	8.XSHR-610		...611	
1g–2kg	15	6.110g	8.XSHP-620		8.XSHM-620	8.XSHS-620	8.XSHR-620		...621	
1g–5kg	16	11.110g	8.XSHP-630		8.XSHM-630	8.XSHS-630	8.XSHR-630		...631	
1g–10kg	17	21.110g	8.XSHP-640		8.XSHM-640	8.XSHS-640	8.XSHR-640		...641	
1kg–5kg	4	10.000g	8.XSHP-680		8.XSHM-680	8.XSHS-680	8.XSHR-680		...681	

Cylinder weights



STAINLESS STEEL HF12

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case with insert	 Dakks Calibration certificate					
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	
1 g	0,03	8.ZEHO-110		8.ZEHD-110		8.ZEHP-110		8.ZEHM-110		...	111	
2 g	0,04	8.ZEHO-120		8.ZEHD-120		8.ZEHP-120		8.ZEHM-120		...	121	
5 g	0,05	8.ZEHO-130		8.ZEHD-130		8.ZEHP-130		8.ZEHM-130		...	131	
10 g	0,06	8.ZEHO-140		8.ZEHD-140		8.ZEHP-140		8.ZEHM-140		...	141	
20 g	0,08	8.ZEHO-150		8.ZEHD-150		8.ZEHP-150		8.ZEHM-150		...	151	
50 g	0,1	8.ZEHO-160		8.ZEHD-160		8.ZEHP-160		8.ZEHM-160		...	161	
100 g	0,16	8.ZEHO-170		8.ZEHD-170		8.ZEHP-170		8.ZEHM-170		8.ZEHR-170	...	171
200 g	0,3	8.ZEHO-180		8.ZEHD-180		8.ZEHP-180		8.ZEHM-180		8.ZEHR-180	...	181
500 g	0,8	8.ZEHO-190		8.ZEHD-190		8.ZEHP-190		8.ZEHM-190		8.ZEHR-190	...	191
1 kg	1,6	8.ZEHO-210		8.ZEHD-210		8.ZEHP-210		8.ZEHM-210		8.ZEHR-210	...	211
2 kg	3	8.ZEHO-220		8.ZEHD-220		8.ZEHP-220		8.ZEHM-220		8.ZEHR-220	...	221
5 kg	8	8.ZEHO-230		8.ZEHD-230		8.ZEHP-230		8.ZEHM-230		8.ZEHR-230	...	231
10 kg	16	8.ZEHO-240		8.ZEHD-240		8.ZEHP-240		8.ZEHM-240		8.ZEHR-240	...	241

Clean room plastic box up from 100 g in a plastic case with foam insert.

Nominal value		Tol.	 Service case	 DAKKS Calibra- tion certificate
	+/- mg		Art.no.	€ Art.no. €
5 kg	8		8.ZEHS-230	...231
10 kg	16		8.ZEHS-240	...241



SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	 DAKKS Calibration certificate					
			Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	8.0000-€	Art.no.	€
1g–50g	8	110g	8.XZHP-560		8.XZHM-560		8.XZHS-560		8.XZHR-560		...561	
1g–100g	9	210g	8.XZHP-570		8.XZHM-570		8.XZHS-570		8.XZHR-570		...571	
1g–200g	11	610g	8.XZHP-580		8.XZHM-580		8.XZHS-580		8.XZHR-580		...581	
1g–500g	12	1.110g	8.XZHP-590		8.XZHM-590		8.XZHS-590		8.XZHR-590		...591	
1g–1kg	13	2.110g	8.XZHP-610		8.XZHM-610		8.XZHS-610		8.XZHR-610		...611	
1g–2kg	15	6.110g	8.XZHP-620		8.XZHM-620		8.XZHS-620		8.XZHR-620		...621	
1g–5kg	16	11.110g	8.XZHP-630		8.XZHM-630		8.XZHS-630		8.XZHR-630		...631	
1g–10kg	17	21.110g	8.XZHP-640		8.XZHM-640		8.XZHS-640		8.XZHR-640		...641	
1kg–5kg	4	10.000g	8.XZHP-680		8.XZHM-680		8.XZHS-680		8.XZHR-680		...681	

F1

Analytical weights – class F1

Adjustment, testing and calibration weights for balances of class II and for quality assurance of scales with steps $\leq 100\,000$ according to ISO 9001ff. Weights for calibration of weights of lower classes (M3-F2) according to OIML R111.



Weights in the exclusive assortment case.

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAN ROOM
PLASTIC CASES



MAHOGANY
WOODEN BOX



SERVICE
CASE



CLEAN ROOM CASE
removeable inserts



PLASTIC BOXES
WITH SCREWED TOP

Milligramm weights


SPECIAL STAINLESS STEEL HE210

Wire shape

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,02	7.DBHO-010		7.DBHD-010		7.DBHP-010		7.DBHM-010	
2 mg	0,02	7.DBHO-020		7.DBHD-020		7.DBHP-020		7.DBHM-020	
5 mg	0,02	7.DBHO-030		7.DBHD-030		7.DBHP-030		7.DBHM-030	
10 mg	0,025	7.DBHO-040		7.DBHD-040		7.DBHP-040		7.DBHM-040	
20 mg	0,03	7.DBHO-050		7.DBHD-050		7.DBHP-050		7.DBHM-050	
50 mg	0,04	7.DBHO-060		7.DBHD-060		7.DBHP-060		7.DBHM-060	
100 mg	0,05	7.DBHO-070		7.DBHD-070		7.DBHP-070		7.DBHM-070	
200 mg	0,06	7.DBHO-080		7.DBHD-080		7.DBHP-080		7.DBHM-080	
500 mg	0,08	7.DBHO-090		7.DBHD-090		7.DBHP-090		7.DBHM-090	

SET

Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	7.XEHP-710		7.XEHM-710		7.0000-711	

Milligramm weights

ALUMINIUM / GERMAN SILVER NICKEL

Flat polygonal sheets



SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,02	7.PAHO-010		7.PAHD-010		7.PAHP-010		7.PAHM-010	7.0000-011
2 mg	0,02	7.PAHO-020		7.PAHD-020		7.PAHP-020		7.PAHM-020	7.0000-021
5 mg	0,02	7.PAHO-030		7.PAHD-030		7.PAHP-030		7.PAHM-030	7.0000-031
10 mg	0,025	7.PNHO-040		7.PNHD-040		7.PNHP-040		7.PNHM-040	7.0000-041
20 mg	0,03	7.PNHO-050		7.PNHD-050		7.PNHP-050		7.PNHM-050	7.0000-051
50 mg	0,04	7.PNHO-060		7.PNHD-060		7.PNHP-060		7.PNHM-060	7.0000-061
100 mg	0,05	7.PNHO-070		7.PNHD-070		7.PNHP-070		7.PNHM-070	7.0000-071
200 mg	0,06	7.PNHO-080		7.PNHD-080		7.PNHP-080		7.PNHM-080	7.0000-081
500 mg	0,08	7.PNHO-090		7.PNHD-090		7.PNHP-090		7.PNHM-090	7.0000-091

1–5 mg made of aluminium

SET

Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	7.XFHP-710		7.XFHM-710		7.0000-711	

Knob weights

with adjustment chamber



STAINLESS STEEL HF12

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case with insert	DAkkS Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	7.0000- Art.no.	€
1 g	0,1	7.KEHO-110		7.KEHD-110		7.KEHP-110		7.KEHM-110			...111
2 g	0,12	7.KEHO-120		7.KEHD-120		7.KEHP-120		7.KEHM-120			...121
5 g	0,16	7.KEHO-130		7.KEHD-130		7.KEHP-130		7.KEHM-130			...131
10 g	0,2	7.KEHO-140		7.KEHD-140		7.KEHP-140		7.KEHM-140			...141
20 g	0,25	7.KEHO-150		7.KEHD-150		7.KEHP-150		7.KEHM-150			...151
50 g	0,3	7.KEHO-160		7.KEHD-160		7.KEHP-160		7.KEHM-160			...161
100 g	0,5	7.KEHO-170		7.KEHD-170		7.KEHP-170		7.KEHM-170	7.KEHR-170		...171
200 g	1	7.KEHO-180		7.KEHD-180		7.KEHP-180		7.KEHM-180	7.KEHR-180		...181
500 g	2,5	7.KEHO-190		7.KEHD-190		7.KEHP-190		7.KEHM-190	7.KEHR-190		...191
1 kg	5	7.KEHO-210		7.KEHD-210		7.KEHP-210		7.KEHM-210	7.KEHR-210		...211
2 kg	10	7.KEHO-220		7.KEHD-220		7.KEHP-220		7.KEHM-220	7.KEHR-220		...221
5 kg	25	7.KEHO-230		7.KEHD-230		7.KEHP-230		7.KEHM-230	7.KEHR-230		...231
10 kg	50	7.KEHO-240		7.KEHD-240		7.KEHP-240		7.KEHM-240	7.KEHR-240		...241
20 kg	100	7.KEHO-250						7.KEHM-250	7.KEHR-250		...251
50 kg	250	7.KEHO-260						7.KEHM-260	7.KEHR-260		...261

Clean room plastic box up from 100 g in a plastic case with foam insert

Nominal value	Tol.		 Service case	DAkkS Calibration certificate		
	+/- mg		Art.no.	€	Art.no.	€
5 kg	25		7.KEHS-230		...231	
10 kg	50		7.KEHS-240		...241	
20 kg	100		7.KEHS-250		...251	
50 kg	250		7.KEHS-260		...261	

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	DAkkS Calibration certificate				
			Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	7.0000- Art.no.	€
1 g–50 g	8	110 g	7.XKHP-560		7.XKHM-560		7.XKHR-560			...561	
1 g–100 g	9	210 g	7.XKHP-570		7.XKHM-570		7.XKHS-570		7.XKHR-570		...571
1 g–200 g	11	610 g	7.XKHP-580		7.XKHM-580		7.XKHS-580		7.XKHR-580		...581
1 g–500 g	12	1.110 g	7.XKHP-590		7.XKHM-590		7.XKHS-590		7.XKHR-590		...591
1 g–1 kg	13	2.110 g	7.XKHP-610		7.XKHM-610		7.XKHS-610		7.XKHR-610		...611
1 g–2 kg	15	6.110 g	7.XKHP-620		7.XKHM-620		7.XKHS-620		7.XKHR-620		...621
1 g–5 kg	16	11.110 g	7.XKHP-630		7.XKHM-630		7.XKHS-630		7.XKHR-630		...631
1 g–10 kg	17	21.110 g	7.XKHP-640		7.XKHM-640		7.XKHS-640		7.XKHR-640		...641
1 kg–5 kg	4	10.000 g	7.XKHP-680		7.XKHM-680		7.XKHS-680		7.XKHR-680		...681

Knob weights

with adjustment chamber



STAINLESS STEEL HF12

highly polished

SETS with mg-weights (flat polygonal sheets)

Nominal value	Qty.	Content	 Clean room plastic cases	 Mahogany wooden box	 Service case	 Clean room case with insert	DAkkS Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg–5 g	16	6,11 g	7.XOHP-730		7.XOHM-730		7.XOHR-730		...731	
1 mg–50 g	20	111,11 g	7.XOHP-760		7.XOHM-760		7.XOHR-760		...761	
1 mg–100 g	21	211,11 g	7.XOHP-770		7.XOHM-770	7.XOHS-770	7.XOHR-770		...771	
1 mg–200 g	23	611,11 g	7.XOHP-780		7.XOHM-780	7.XOHS-780	7.XOHR-780		...781	
1 mg–500 g	24	1.111,11 g	7.XOHP-790		7.XOHM-790	7.XOHS-790	7.XOHR-790		...791	
1 mg–1 kg	25	2.111,11 g	7.XOHP-810		7.XOHM-810	7.XOHS-810	7.XOHR-810		...811	
1 mg–2 kg	27	6.111,11 g	7.XOHP-820		7.XOHM-820	7.XOHS-820	7.XOHR-820		...821	
1 mg–5 kg	28	11.111,11 g	7.XOHP-830		7.XOHM-830	7.XOHS-830	7.XOHR-830		...831	
1 mg–10 kg	29	21.111,11 g	7.XOHP-840		7.XOHM-840	7.XOHS-840	7.XOHR-840		...841	

SETS with mg-weights (wire shape)

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	DAkkS Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 mg–5 g	16	6,11 g	7.XQHP-730		7.XQHM-730		7.XQHR-730		...731	
1 mg–50 g	20	111,11 g	7.XQHP-760		7.XQHM-760		7.XQHR-760		...761	
1 mg–100 g	21	211,11 g	7.XQHP-770		7.XQHM-770		7.XQHS-770		7.XQHR-770	...771
1 mg–200 g	23	611,11 g	7.XQHP-780		7.XQHM-780		7.XQHS-780		7.XQHR-780	...781
1 mg–500 g	24	1.111,11 g	7.XQHP-790		7.XQHM-790		7.XQHS-790		7.XQHR-790	...791
1 mg–1 kg	25	2.111,11 g	7.XQHP-810		7.XQHM-810		7.XQHS-810		7.XQHR-810	...811
1 mg–2 kg	27	6.111,11 g	7.XQHP-820		7.XQHM-820		7.XQHS-820		7.XQHR-820	...821
1 mg–5 kg	28	11.111,11 g	7.XQHP-830		7.XQHM-830		7.XQHS-830		7.XQHR-830	...831
1 mg–10 kg	29	21.111,11 g	7.XQHP-840		7.XQHM-840		7.XQHS-840		7.XQHR-840	...841



Knob weights

solid masses without adjustment chamber



STAINLESS STEEL HF12

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case with insert	 DAkkS Calibration certificate					
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	7.0000- € Art.no.	€
1 g	0,1	7.MEHO-110		7.MEHD-110		7.MEHP-110		7.MEHM-110			...111	
2 g	0,12	7.MEHO-120		7.MEHD-120		7.MEHP-120		7.MEHM-120			...121	
5 g	0,16	7.MEHO-130		7.MEHD-130		7.MEHP-130		7.MEHM-130			...131	
10 g	0,2	7.MEHO-140		7.MEHD-140		7.MEHP-140		7.MEHM-140			...141	
20 g	0,25	7.MEHO-150		7.MEHD-150		7.MEHP-150		7.MEHM-150			...151	
50 g	0,3	7.MEHO-160		7.MEHD-160		7.MEHP-160		7.MEHM-160			...161	
100 g	0,5	7.MEHO-170		7.MEHD-170		7.MEHP-170		7.MEHM-170		7.MEHR-170	...171	
200 g	1	7.MEHO-180		7.MEHD-180		7.MEHP-180		7.MEHM-180		7.MEHR-180	...181	
500 g	2,5	7.MEHO-190		7.MEHD-190		7.MEHP-190		7.MEHM-190		7.MEHR-190	...191	
1 kg	5	7.MEHO-210		7.MEHD-210		7.MEHP-210		7.MEHM-210		7.MEHR-210	...211	
2 kg	10	7.MEHO-220		7.MEHD-220		7.MEHP-220		7.MEHM-220		7.MEHR-220	...221	
5 kg	25	7.MEHO-230		7.MEHD-230		7.MEHP-230		7.MEHM-230		7.MEHR-230	...231	
10 kg	50	7.MEHO-240		7.MEHD-240		7.MEHP-240		7.MEHM-240		7.MEHR-240	...241	
20 kg	100	7.MEHO-250						7.MEHM-250		7.MEHR-250	...251	
50 kg	250	7.MEHO-260						7.MEHM-260		7.MEHR-260	...261	

Clean room plastic box up from 100 g in a plastic case with foam insert

Nominal value	Tol.	 Service case	DAkkS Calibration certificate
	+/- mg	Art.no.	7.0000- € Art.no. €
5 kg	25	7.MEHS-230	...231
10 kg	50	7.MEHS-240	...241
20 kg	100	7.MEHS-250	...251
50 kg	250	7.MEHS-260	...261

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	 DAkkS Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	7.0000- Art.no.	€
1g–50 g	8	110 g	7.XTHP-560		7.XTHM-560		7.XTHR-560		...561	
1g–100 g	9	210 g	7.XTHP-570		7.XTHM-570	7.XTHS-570	7.XTHR-570		...571	
1g–200 g	11	610 g	7.XTHP-580		7.XTHM-580	7.XTHS-580	7.XTHR-580		...581	
1g–500 g	12	1.110 g	7.XTHP-590		7.XTHM-590	7.XTHS-590	7.XTHR-590		...591	
1g–1 kg	13	2.110 g	7.XTHP-610		7.XTHM-610	7.XTHS-610	7.XTHR-610		...611	
1g–2 kg	15	6.110 g	7.XTHP-620		7.XTHM-620	7.XTHS-620	7.XTHR-620		...621	
1g–5 kg	16	11.110 g	7.XTHP-630		7.XTHM-630	7.XTHS-630	7.XTHR-630		...631	
1g–10 kg	17	21.110 g	7.XTHP-640		7.XTHM-640	7.XTHS-640	7.XTHR-640		...641	
1 kg–5 kg	4	10.000 g	7.XTHP-680		7.XTHM-680	7.XTHS-680	7.XTHR-680		...681	

Knob weights

solid masses without adjustment chamber

STAINLESS STEEL HF12

highly polished



SETS with mg- weights (flat polygonal sheets)

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	7.0000- Art.no.	€
1 mg–5 g	16	6,11 g	7XFHP-730		7XFHM-730		7XFHR-730		...731	
1 mg–50 g	20	111,11 g	7XFHP-760		7XFHM-760		7XFHR-760		...761	
1 mg–100 g	21	211,11 g	7XFHP-770		7XFHM-770	7XFHS-770	7XFHR-770		...771	
1 mg–200 g	23	611,11 g	7XFHP-780		7XFHM-780	7XFHS-780	7XFHR-780		...781	
1 mg–500 g	24	1.111,11 g	7XFHP-790		7XFHM-790	7XFHS-790	7XFHR-790		...791	
1 mg–1 kg	25	2.111,11 g	7XFHP-810		7XFHM-810	7XFHS-810	7XFHR-810		...811	
1 mg–2 kg	27	6.111,11 g	7XFHP-820		7XFHM-820	7XFHS-820	7XFHR-820		...821	
1 mg–5 kg	28	11.111,11 g	7XFHP-830		7XFHM-830	7XFHS-830	7XFHR-830		...831	
1 mg–10 kg	29	21.111,11 g	7XFHP-840		7XFHM-840	7XFHS-840	7XFHR-840		...841	

SETS with mg- weights (wire shape)

Nominal value	Qty.	Content	 Clean room plastic box	 Mahogany wooden box	 Service case	 Clean room case with insert	 Dakks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€	7.0000- Art.no.	€
1 mg–5 g	16	6,11 g	7XEHP-730		7XEHM-730		7XEHR-730		...731	
1 mg–50 g	20	111,11 g	7XEHP-760		7XEHM-760		7XEHR-760		...761	
1 mg–100 g	21	211,11 g	7XEHP-770		7XEHM-770	7XEHS-770	7XEHR-770		...771	
1 mg–200 g	23	611,11 g	7XEHP-780		7XEHM-780	7XEHS-780	7XEHR-780		...781	
1 mg–500 g	24	1.111,11 g	7XEHP-790		7XEHM-790	7XEHS-790	7XEHR-790		...791	
1 mg–1 kg	25	2.111,11 g	7XEHP-810		7XEHM-810	7XEHS-810	7XEHR-810		...811	
1 mg–2 kg	27	6.111,11 g	7XEHP-820		7XEHM-820	7XEHS-820	7XEHR-820		...821	
1 mg–5 kg	28	11.111,11 g	7XEHP-830		7XEHM-830	7XEHS-830	7XEHR-830		...831	
1 mg–10 kg	29	21.111,11 g	7XEHP-840		7XEHM-840	7XEHS-840	7XEHR-840		...841	

3-Part service case

Available for all classes of weights

1 mg–5 kg



Price on request

Trolley

Available for all classes of weights

1 mg–10 kg

1 mg–20 kg



Price on request

Cylinder weights

solid masses, stackable, without adjustment chamber



STAINLESS STEEL HF12

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Mahogany wooden box	 Clean room case with insert	DAkkS Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	7.0000- Art.no.	€
1 g	0,1	7.ZEHO-110		7.ZEHD-110		7.ZEHP-110		7.ZEHM-110			...111
2 g	0,12	7.ZEHO-120		7.ZEHD-120		7.ZEHP-120		7.ZEHM-120			...121
5 g	0,16	7.ZEHO-130		7.ZEHD-130		7.ZEHP-130		7.ZEHM-130			...131
10 g	0,2	7.ZEHO-140		7.ZEHD-140		7.ZEHP-140		7.ZEHM-140			...141
20 g	0,25	7.ZEHO-150		7.ZEHD-150		7.ZEHP-150		7.ZEHM-150			...151
50 g	0,3	7.ZEHO-160		7.ZEHD-160		7.ZEHP-160		7.ZEHM-160			...161
100 g	0,5	7.ZEHO-170		7.ZEHD-170		7.ZEHP-170		7.ZEHM-170	7.ZEHR-170		...171
200 g	1	7.ZEHO-180		7.ZEHD-180		7.ZEHP-180		7.ZEHM-180	7.ZEHR-180		...181
500 g	2,5	7.ZEHO-190		7.ZEHD-190		7.ZEHP-190		7.ZEHM-190	7.ZEHR-190		...191
1 kg	5	7.ZEHO-210		7.ZEHD-210		7.ZEHP-210		7.ZEHM-210	7.ZEHR-210		...211
2 kg	10	7.ZEHO-220		7.ZEHD-220		7.ZEHP-220		7.ZEHM-220	7.ZEHR-220		...221
5 kg	25	7.ZEHO-230		7.ZEHD-230		7.ZEHP-230		7.ZEHM-230	7.ZEHR-230		...231
10 kg	50	7.ZEHO-240		7.ZEHD-240		7.ZEHP-240		7.ZEHM-240	7.ZEHR-240		...241

Clean room plastic case from 100g in a plastic case with hard foam insert

Nominal value	Tol.		Service case	DAkkS Calibration certificate	
	+/- mg		Art.no.	7.0000- € Art.no.	€
5 kg	25		7.ZEHS-230	...231	
10 kg	50		7.ZEHS-240	...241	

Block weights

round



STAINLESS STEEL HF12

highly polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Clean room plastic cases	 Mahogany wooden box	 Service case	 Clean room case with insert	 DAkkS Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	7.0000- Art.no.	€
5 kg	25	7.REPO-230		7.REPP-230		7.REPM-230		7.REPS-230		7.REPR-230	...231
10 kg	50	7.REPO-240		7.REPP-240		7.REPM-240		7.REPS-240		7.REPR-240	...241
20 kg	100	7.REPO-250				7.REPM-250		7.REPS-250		7.REPR-250	...251
25 kg	125	7.REPO-450				7.REPM-450		7.REPS-450			...451
50 kg	250	7.REPO-260				7.REPM-260		7.REPS-260		7.REPR-260	...261

Clean room plastic case from 100g in a plastic case with hard foam insert

rectangular



SINGLE WEIGHT

Nominal value	Tol.	without box	 Clean room plastic cases	 Mahogany wooden box	 Service case	 Clean room case with insert	 DAkkS Calibration certificate					
	+/- mg	Art.no.	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	7.0000- €	Art.no.	€
5 kg	25	7.BEHO-230	7.BEHP-230		7.BEHM-230		7.BEHS-230		7.BEHR-230		...231	
10 kg	50	7.BEHO-240	7.BEHP-240		7.BEHM-240		7.BEHS-240		7.BEHR-240		...241	
20 kg	100	7.BEHO-250			7.BEHM-250		7.BEHS-250		7.BEHR-250		...251	
25 kg	125	7.BEHO-450			7.BEHM-450		7.BEHS-450				...451	
50 kg	250	7.BEHO-260			7.BEHM-260		7.BEHS-260		7.BEHR-260		...261	



Cylinder weights

**STAINLESS STEEL HF12**

highly polished

SINGLE WEIGHT with 4 stood bolts

Nominal value	Tol.	 Wooden box	 Service case	PTB Calibration certificate		
		+/- mg	Art.no.	€	Art.no.	€
100 kg		500	7.ZEHM-270		7.ZEHS-270	7.0000-276
200 kg		1000	7.ZEHM-280		7.ZEHS-280	7.0000-286
250 kg		1250	7.ZEHM-460		7.ZEHS-460	7.0000-466
500 kg		2500	7.ZEHM-290		7.ZEHS-290	7.0000-296
1000 kg		5000	7.ZEHM-310		7.ZEHS-310	7.0000-316
2000 kg		10000	7.ZEHM-320		7.ZEHS-320	7.0000-326



SINGLE WEIGHT with eyebolt

Nominal value	Tol.	 Wooden box	 Service case	PTB Calibration certificate		
		+/- mg	Art.no.	€	Art.no.	€
100 kg		500	7.UEHM-270		7.UEHS-270	7.0000-276
200 kg		1000	7.UEHM-280		7.UEHS-280	7.0000-286
250 kg		1250	7.UEHM-460		7.UEHS-460	7.0000-466
500 kg		2500	7.UEHM-290		7.UEHS-290	7.0000-296
1000 kg		5000	7.UEHM-310		7.UEHS-310	7.0000-316
2000 kg		10000	7.UEHM-320		7.UEHS-320	7.0000-326



F2

Precision weights – class F2

Adjustment, testing and calibration weights for balances of class II and for quality assurance of scales with steps $\leq 50\,000$ according to ISO 9001ff. Weights for calibration of weights of lower classes (M3-M1) according to OIML R111. Usage for meaningful transactions (e.g. precious metals and gemstones) on scales of class II. Load application bodies for the representation of the most accurate determination of tension, pressure or torsion.

Quality is our demand

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAN ROOM
PLASTIC CASES



BEECH WOODEN
BOX



SERVICE
CASE



CLEAN ROOM CASE
with inserts



LEATHER
CASES



PLASTIC BOXES
WITH SCREWED TOP

Milligramm weights

ALUMINIUM / GERMAN SILVER NICKEL

Flat polygonal sheets



SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	Dakks Calibration certificate		
+/- mg		Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,06	6.PAHO-010		6.PAHD-010		6.PAHP-010	6.0000-011
2 mg	0,06	6.PAHO-020		6.PAHD-020		6.PAHP-020	6.0000-021
5 mg	0,06	6.PAHO-030		6.PAHD-030		6.PAHP-030	6.0000-031
10 mg	0,08	6.PNHO-040		6.PNHD-040		6.PNHP-040	6.0000-041
20 mg	0,1	6.PNHO-050		6.PNHD-050		6.PNHP-050	6.0000-051
50 mg	0,12	6.PNHO-060		6.PNHD-060		6.PNHP-060	6.0000-061
100 mg	0,16	6.PNHO-070		6.PNHD-070		6.PNHP-070	6.0000-071
200 mg	0,2	6.PNHO-080		6.PNHD-080		6.PNHP-080	6.0000-081
500 mg	0,25	6.PNHO-090		6.PNHD-090		6.PNHP-090	6.0000-091

1–5 mg aus Aluminium

SETS

Nominal value	Qty.	Content	 Clean room plastic cases	 Beech wood box	DakS Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	6.XFGP-710		6.XFGB-710		6.0000-711	

Milligramm weights

SPECIAL STAINLESS STEEL HE210

Wire shape

highly polished



SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	DAkkS Calibration certificate		
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€
1 mg	0,06	6.DBHO-010		6.DBHD-010		6.DBHP-010	6.0000-011
2 mg	0,06	6.DBHO-020		6.DBHD-020		6.DBHP-020	6.0000-021
5 mg	0,06	6.DBHO-030		6.DBHD-030		6.DBHP-030	6.0000-031
10 mg	0,08	6.DBHO-040		6.DBHD-040		6.DBHP-040	6.0000-041
20 mg	0,1	6.DBHO-050		6.DBHD-050		6.DBHP-050	6.0000-051
50 mg	0,12	6.DBHO-060		6.DBHD-060		6.DBHP-060	6.0000-061
100 mg	0,16	6.DBHO-070		6.DBHD-070		6.DBHP-070	6.0000-071
200 mg	0,2	6.DBHO-080		6.DBHD-080		6.DBHP-080	6.0000-081
500 mg	0,25	6.DBHO-090		6.DBHD-090		6.DBHP-090	6.0000-091

SETS

Nominal value	Qty.	Content	 Clean room plastic cases	 Beech wood box	DAkks Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	6.XEGP-710		6.XEGB-710		6.0000-711	

Knob weights

with adjustment chamber



STAINLESS STEEL HF12

polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Beech wood box	 Service case	DAkks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	6.0000-€	Art.no.	€
1 g	0,3	6.KEGO-110		6.KEGD-110		6.KEGP-110		6.KEGB-110		...111	
2 g	0,4	6.KEGO-120		6.KEGD-120		6.KEGP-120		6.KEGB-120		...121	
5 g	0,5	6.KEGO-130		6.KEGD-130		6.KEGP-130		6.KEGB-130		...131	
10 g	0,6	6.KEGO-140		6.KEGD-140		6.KEGP-140		6.KEGB-140		...141	
20 g	0,8	6.KEGO-150		6.KEGD-150		6.KEGP-150		6.KEGB-150		...151	
50 g	1	6.KEGO-160		6.KEGD-160		6.KEGP-160		6.KEGB-160		...161	
100 g	1,6	6.KEGO-170		6.KEGD-170		6.KEGP-170		6.KEGB-170		...171	
200 g	3	6.KEGO-180		6.KEGD-180		6.KEGP-180		6.KEGB-180		...181	
500 g	8	6.KEGO-190		6.KEGD-190		6.KEGP-190		6.KEGB-190		...191	
1 kg	16	6.KEGO-210		6.KEGD-210		6.KEGP-210		6.KEGB-210		...211	
2 kg	30	6.KEGO-220		6.KEGD-220		6.KEGP-220		6.KEGB-220		...221	
5 kg	80	6.KEGO-230		6.KEGD-230		6.KEGP-230		6.KEGB-230	6.KEGS-230	...231	
10 kg	160	6.KEGO-240		6.KEGD-240		6.KEGP-240		6.KEGB-240	6.KEGS-240	...241	
20 kg	300	6.KEGO-250						6.KEGB-250	6.KEGS-250	...251	
50 kg	800	6.KEGO-260						6.KEGB-260	6.KEGS-260	...261	

SETS

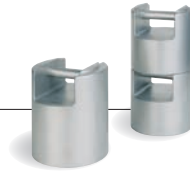
Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	DAkks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1g–50 g	8	110 g	6.XKGP-560		6.XKGB-560		6.XKGS-560	6.0000-561
1g–100 g	9	210 g	6.XKGP-570		6.XKGB-570		6.XKGS-570	6.0000-571
1g–200 g	11	610 g	6.XKGP-580		6.XKGB-580		6.XKGS-580	6.0000-581
1g–500 g	12	1.110 g	6.XKGP-590		6.XKGB-590		6.XKGS-590	6.0000-591
1g–1 kg	13	2.110 g	6.XKGP-610		6.XKGB-610		6.XKGS-610	6.0000-611
1g–2 kg	15	6.110 g	6.XKGP-620		6.XKGB-620		6.XKGS-620	6.0000-621
1g–5 kg	16	11.110 g	6.XKGP-630		6.XKGB-630		6.XKGS-630	6.0000-631
1g–10 kg	17	21.110 g	6.XKGP-640		6.XKGB-640		6.XKGS-640	6.0000-641
1 kg–5 kg	4	10.000 g	6.XKGP-680		6.XKGB-680		6.XKGS-680	6.0000-681

SETS with mg- weights (flat polygonal sheets)

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	Dakks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–5 g	16	6,11 g	6.XFGP-730		6.XFGB-730		6.XFGS-730	6.0000-731
1 mg–50 g	20	111,11 g	6.XFGP-760		6.XFGB-760		6.XFGS-760	6.0000-761
1 mg–100 g	21	211,11 g	6.XFGP-770		6.XFGB-770		6.XFGS-770	6.0000-771
1 mg–200 g	23	611,11 g	6.XFGP-780		6.XFGB-780		6.XFGS-780	6.0000-781
1 mg–500 g	24	1.111,11 g	6.XFGP-790		6.XFGB-790		6.XFGS-790	6.0000-791
1 mg–1 kg	25	2.111,11 g	6.XFGP-810		6.XFGB-810		6.XFGS-810	6.0000-811
1 mg–2 kg	27	6.111,11 g	6.XFGP-820		6.XFGB-820		6.XFGS-820	6.0000-821
1 mg–5 kg	28	11.111,11 g	6.XFGP-830		6.XFGB-830		6.XFGS-830	6.0000-831
1 mg–10 kg	29	21.111,11 g	6.XFGP-840		6.XFGB-840		6.XFGS-840	6.0000-841

Block weights

round



STAINLESS STEEL HF12

polished

SINGLE WEIGHT

Nominal value	Tol.	without box	 Clean room plastic cases	 Beech wood box	 Service case	 Clean room case with insert	DAkks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	6.0000- Art.no.	€
5 kg	80	6.REGO-230		6.REGP-230		6.REGB-230		6.REGS-230		6.REGR-230	...231
10 kg	160	6.REGO-240		6.REGP-240		6.REGB-240		6.REGS-240		6.REGR-240	...241
20 kg	300	6.REGO-250				6.REGB-250		6.REGS-250		6.REGR-250	...251
25 kg	400	6.REGO-450				6.REGB-450		6.REGS-450			...451
50 kg	800	6.REGO-260				6.REGB-260		6.REGS-260		6.REGR-260	...261

rectangular

SINGLE WEIGHT

Nominal value	Tol.	without box	 Clean room plastic cases	 Leather cases	 Service case	 Clean room case with insert	Dakks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	6.0000- €	Art.no.	€
5 kg	80	6.BEPO-230		6.BEPP-230		6.BEPL-230		6.BEPS-230		6.BEPR-230	...231
10 kg	160	6.BEPO-240		6.BEPP-240		6.BEPL-240		6.BEPS-240		6.BEPR-240	...241
20 kg	300	6.BEPO-250				6.BEPL-250		6.BEPS-250		6.BEPR-250	...251
25 kg	400	6.BEPO-450						6.BEPS-450			...451
50 kg	800	6.BEPO-260						6.BEPS-260		6.BEPR-260	...261

Basket weights

for round block weights



STAINLESS STEEL HF12

polished

Nominal value	max. weight	Tol.	without box	DAkks Calibration certificate
			+/- mg Art.no.	€ Art.no. €
20 kg	120 kg		300 6.NEGO-250	6.0000-251
40 kg	250 kg		600 6.NEGO-410	6.0000-411
50 kg	500 kg		800 6.NEGO-260	6.0000-261
60 kg	500 kg		960 6.NEGO-420	6.0000-421

for rectangular block weights



Nominal value	max. weight	Tol.	without box	DAkks Calibration certificate
			+/- mg Art.no.	€ Art.no. €
20 kg	120 kg		300 6.LEGO-250	6.0000-251
40 kg	250 kg		600 6.LEGO-410	6.0000-411
50 kg	500 kg		800 6.LEGO-260	6.0000-261
60 kg	500 kg		960 6.LEGO-420	6.0000-421

Custom-made products according to customer specification.

Note: Subject to short-term price changes

Cylinder weights



STAINLESS STEEL HF12

polished

SINGLE WEIGHT with 4 stood bolts

Nominal value	Tol.	 Wooden box	 Service case	PTB Calibration certificate	DAkkS Calibration certificate
	+/- g	Art.no.	Art.no.	Art.no.	Art.no.
100 kg	1,6	6.ZEGB-270	6.ZEGS-270		6.0000-271
200 kg	3	6.ZEGB-280	6.ZEGS-280		6.0000-281
250 kg	4	6.ZEGB-460	6.ZEGS-460		6.0000-461
500 kg	8	6.ZEGB-290	6.ZEGS-290		6.0000-291
1000 kg	16	6.ZEGB-310	6.ZEGS-310	6.0000-316	
2000 kg	30	6.ZEGB-320	6.ZEGS-320	6.0000-326	



SINGLE WEIGHT with eyebolt

Nominal value	Tol.	 Wooden box	 Service case	PTB Calibration certificate	DAkkS Calibration certificate
	+/- g	Art.no.	Art.no.	Art.no.	Art.no.
100 kg	1,6	6.UEGB-270	6.UEGS-270		6.0000-271
200 kg	3	6.UEGB-280	6.UEGS-280		6.0000-281
250 kg	4	6.UEGB-460	6.UEGS-460		6.0000-461
500 kg	8	6.UEGB-290	6.UEGS-290		6.0000-291
1000 kg	16	6.UEGB-310	6.UEGS-310	6.0000-316	
2000 kg	30	6.UEGB-320	6.UEGS-320	6.0000-326	



3-Part service case

Available for all classes of weights

1 mg–5 kg



Trolley

Available for all classes of weights

1 mg–10 kg

1 mg–20 kg

Price on request

Carrier weights

STAINLESS STEEL HF12

polished



SINGLE WEIGHT

Nominal value	Tol.		without box		Dakks Calibration certificate	
		+/- mg	Art.no.	€	Art.no.	€
1 g		0,3	6.TEGO-110		6.0000-111	
2 g		0,4	6.TEGO-120		6.0000-121	
5 g		0,5	6.TEGO-130		6.0000-131	
10 g		0,6	6.TEGO-140		6.0000-141	
20 g		0,8	6.TEGO-150		6.0000-151	
50 g		1	6.TEGO-160		6.0000-161	
100 g		1,6	6.TEGO-170		6.0000-171	
200 g		3	6.TEGO-180		6.0000-181	
500 g		8	6.TEGO-190		6.0000-191	
1 kg		16	6.TEGO-210		6.0000-211	
2 kg		30	6.TEGO-220		6.0000-221	
5 kg		80	6.TEGO-230		6.0000-231	
10 kg		160	6.TEGO-240		6.0000-241	
20 kg		300	6.TEGO-250		6.0000-251	

Slotted weights

STAINLESS STEEL HF12

polished



SINGLE WEIGHT

Nominal value	Tol.		without box		Dakks Calibration certificate	
		+/- mg	Art.no.	€	Art.no.	€
1 g		0,3	6.IEGO-110		6.0000-111	
2 g		0,4	6.IEGO-120		6.0000-121	
5 g		0,5	6.IEGO-130		6.0000-131	
10 g		0,6	6.IEGO-140		6.0000-141	
20 g		0,8	6.IEGO-150		6.0000-151	
50 g		1	6.IEGO-160		6.0000-161	
100 g		1,6	6.IEGO-170		6.0000-171	
200 g		3	6.IEGO-180		6.0000-181	
500 g		8	6.IEGO-190		6.0000-191	
1 kg		16	6.IEGO-210		6.0000-211	
2 kg		30	6.IEGO-220		6.0000-221	
5 kg		80	6.IEGO-230		6.0000-231	
10 kg		160	6.IEGO-240		6.0000-241	
20 kg		300	6.IEGO-250		6.0000-251	

M1

Precision weights – class M1

Adjustment, testing and calibration weights for commercial balances (class III) and for quality assurance of scales with steps $\leq 10\,000$ according to ISO 9001ff.

Weights for calibration of weights of classes M2 and M3.

Weights in the exclusive assortment case.

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAN ROOM
PLASTIC CASES



BEECH WOODEN
BOX



SERVICE
CASE



PLASTIC BOXES WITH
SCREWED TOP



LEATHER CASES

Milligramm weights

ALUMINIUM / GERMAN SILVER NICKEL

Flat polygonal sheets



SINGLE WEIGHT

Nominal value	Tol.	without box			 Plastic boxes with screwed top	 Clean room plastic cases	DAkkS Calibration certificate	
		+/- mg	Art.no.	€	Art.no.	€	Art.no.	€
1 mg		0,2	5.PAHO-010		5.PAHD-010		5.PAHP-010	5.0000-011
2 mg		0,2	5.PAHO-020		5.PAHD-020		5.PAHP-020	5.0000-021
5 mg		0,2	5.PAHO-030		5.PAHD-030		5.PAHP-030	5.0000-031
10 mg		0,25	5.PNHO-040		5.PNHD-040		5.PNHP-040	5.0000-041
20 mg		0,3	5.PNHO-050		5.PNHD-050		5.PNHP-050	5.0000-051
50 mg		0,4	5.PNHO-060		5.PNHD-060		5.PNHP-060	5.0000-061
100 mg		0,5	5.PNHO-070		5.PNHD-070		5.PNHP-070	5.0000-071
200 mg		0,6	5.PNHO-080		5.PNHD-080		5.PNHP-080	5.0000-081
500 mg		0,8	5.PNHO-090		5.PNHD-090		5.PNHP-090	5.0000-091

1–5 mg aus Aluminium

SETS

Nominal value	Qty.	Content	 Clean room plastic cases	 Beech wood box	DAkkS Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–500 mg	12	1,11 g	5.XMFP-710		5.XMFB-710		5.0000-711	

3-Part service case

Available for all classes of weights

1 mg–5 kg



Price on request

Trolley

Available for all classes of weights

1 mg–10 kg

1 mg–20 kg



Price on request

Knob weights


BRASS finely turned

as long as supplies last

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Beech wood box	 Service case	DAkkS Calibration certificate						
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	5.0000-€	Art.no.	€
1 g	1	5.KMFO-110		5.KMFD-110		5.KMFP-110		5.KMFB-110				...111	
2 g	1,2	5.KMFO-120		5.KMFD-120		5.KMFP-120		5.KMFB-120				...121	
5 g	1,6	5.KMFO-130		5.KMFD-130		5.KMFP-130		5.KMFB-130				...131	
10 g	2	5.KMFO-140		5.KMFD-140		5.KMFP-140		5.KMFB-140				...141	
20 g	2,5	5.KMFO-150		5.KMFD-150		5.KMFP-150		5.KMFB-150				...151	
50 g	3	5.KMFO-160		5.KMFD-160		5.KMFP-160		5.KMFB-160				...161	
100 g	5	5.KMFO-170		5.KMFD-170				5.KMFB-170				...171	
200 g	10	5.KMFO-180		5.KMFD-180				5.KMFB-180				...181	
500 g	25	5.KMFO-190		5.KMFD-190				5.KMFB-190				...191	
1 kg	50	5.KMFO-210		5.KMFD-210				5.KMFB-210				...211	
2 kg	100	5.KMFO-220		5.KMFD-220				5.KMFB-220				...221	
5 kg	250	5.KMFO-230		5.KMFD-230				5.KMFB-230		5.KMFS-230		...231	
10 kg	500	5.KMFO-240		5.KMFD-240				5.KMFB-240		5.KMFS-240		...241	
20 kg	1.000	5.KMFO-250						5.KMFB-250		5.KMFS-250		...251	

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	Dakks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 g–50 g	8	110 g	5.XAFP-560		5.XAFB-560		5.XAFS-560	5.0000-561
1 g–100 g	9	210 g	5.XAFP-570		5.XAFB-570		5.XAFS-570	5.0000-571
1 g–200 g	11	610 g	5.XAFP-580		5.XAFB-580		5.XAFS-580	5.0000-581
1 g–500 g	12	1.110 g	5.XAFP-590		5.XAFB-590		5.XAFS-590	5.0000-591
1 g–1 kg	13	2.110 g	5.XAFP-610		5.XAFB-610		5.XAFS-610	5.0000-611
1 g–2 kg	15	6.110 g	5.XAFP-620		5.XAFB-620		5.XAFS-620	5.0000-621
1 g–5 kg	16	11.110 g	5.XAFP-630		5.XAFB-630		5.XAFS-630	5.0000-631
1 g–10 kg	17	21.110 g	5.XAFP-640		5.XAFB-640		5.XAFS-640	5.0000-641

SETS with mg-weights (flat polygonal sheets)

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	 Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–50 g	20	111,11 g	5.XMFP-760		5.XMFB-760		5.XMFS-760	5.0000-761
1 mg–100 g	21	211,11 g	5.XMFP-770		5.XMFB-770		5.XMFS-770	5.0000-771
1 mg–200 g	23	611,11 g	5.XMFP-780		5.XMFB-780		5.XMFS-780	5.0000-781
1 mg–500 g	24	1.111,11 g	5.XMFP-790		5.XMFB-790		5.XMFS-790	5.0000-791
1 mg–1 kg	25	2.111,11 g	5.XMFP-810		5.XMFB-810		5.XMFS-810	5.0000-811
1 mg–2 kg	27	6.111,11 g	5.XMFP-820		5.XMFB-820		5.XMFS-820	5.0000-821
1 mg–5 kg	28	11.111,11 g	5.XMFP-830		5.XMFB-830		5.XMFS-830	5.0000-831
1 mg–10 kg	29	21.111,11 g	5.XMFP-840		5.XMFB-840		5.XMFS-840	5.0000-841

Knob weights


STAINLESS STEEL HF12 finely turned

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Beech wood box	 Service case certificate	DAkkS Calibration				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	5.0000- Art.no.	€
1 g	1	5.KEFO-110		5.KEFD-110		5.KEFP-110		5.KEFB-110			...111
2 g	1,2	5.KEFO-120		5.KEFD-120		5.KEFP-120		5.KEFB-120			...121
5 g	1,6	5.KEFO-130		5.KEFD-130		5.KEFP-130		5.KEFB-130			...131
10 g	2	5.KEFO-140		5.KEFD-140		5.KEFP-140		5.KEFB-140			...141
20 g	2,5	5.KEFO-150		5.KEFD-150		5.KEFP-150		5.KEFB-150			...151
50 g	3	5.KEFO-160		5.KEFD-160		5.KEFP-160		5.KEFB-160			...161
100 g	5	5.KEFO-170		5.KEFD-170		5.KEFP-170		5.KEFB-170			...171
200 g	10	5.KEFO-180		5.KEFD-180		5.KEFP-180		5.KEFB-180			...181
500 g	25	5.KEFO-190		5.KEFD-190		5.KEFP-190		5.KEFB-190			...191
1 kg	50	5.KEFO-210		5.KEFD-210		5.KEFP-210		5.KEFB-210			...211
2 kg	100	5.KEFO-220		5.KEFD-220		5.KEFP-220		5.KEFB-220			...221
5 kg	250	5.KEFO-230		5.KEFD-230		5.KEFP-230		5.KEFB-230		5.KEFS-230	...231
10 kg	500	5.KEFO-240		5.KEFD-240		5.KEFP-240		5.KEFB-240		5.KEFS-240	...241
20 kg	1.000	5.KEFO-250				5.KEFP-250		5.KEFB-250		5.KEFS-250	...251

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	DAkkS Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 g–50 g	8	110 g	5.XKFP-560		5.XKFB-560		5.XKFS-560	5.0000-561
1 g–100 g	9	210 g	5.XKFP-570		5.XKFB-570		5.XKFS-570	5.0000-571
1 g–200 g	11	610 g	5.XKFP-580		5.XKFB-580		5.XKFS-580	5.0000-581
1 g–500 g	12	1.110 g	5.XKFP-590		5.XKFB-590		5.XKFS-590	5.0000-591
1 g–1 kg	13	2.110 g	5.XKFP-610		5.XKFB-610		5.XKFS-610	5.0000-611
1 g–2 kg	15	6.110 g	5.XKFP-620		5.XKFB-620		5.XKFS-620	5.0000-621
1 g–5 kg	16	11.110 g	5.XKFP-630		5.XKFB-630		5.XKFS-630	5.0000-631
1 g–10 kg	17	21.110 g	5.XKFP-640		5.XKFB-640		5.XKFS-640	5.0000-641

SETS with mg- weights (flat polygonal sheets)

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	DAkkS Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 mg–50 g	20	111,11 g	5.XFFP-760		5.XFFB-760		5.XFFS-760	5.0000-761
1 mg–100 g	21	211,11 g	5.XFFP-770		5.XFFB-770		5.XFFS-770	5.0000-771
1 mg–200 g	23	611,11 g	5.XFFP-780		5.XFFB-780		5.XFFS-780	5.0000-781
1 mg–500 g	24	1.111,11 g	5.XFFP-790		5.XFFB-790		5.XFFS-790	5.0000-791
1 mg–1 kg	25	2.111,11 g	5.XFFP-810		5.XFFB-810		5.XFFS-810	5.0000-811
1 mg–2 kg	27	6.111,11 g	5.XFFP-820		5.XFFB-820		5.XFFS-820	5.0000-821
1 mg–5 kg	28	11.111,11 g	5.XFFP-830		5.XFFB-830		5.XFFS-830	5.0000-831
1 mg–10 kg	29	21.111,11 g	5.XFFP-840		5.XFFB-840		5.XFFS-840	5.0000-841

Hook weight


BRASS finely turned

as long as supplies last

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Beech wood box	 Service case	DAkks Calibration certificate			
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	5.0000- Art.no.	€
1 g	1	5.HMFO-110		5.HMFD-110		5.HMFP-110		5.HMFB-110		...111
2 g	1,2	5.HMFO-120		5.HMFD-120		5.HMFP-120		5.HMFB-120		...121
5 g	1,6	5.HMFO-130		5.HMFD-130		5.HMFP-130		5.HMFB-130		...131
10 g	2	5.HMFO-140		5.HMFD-140		5.HMFP-140		5.HMFB-140		...141
20 g	2,5	5.HMFO-150		5.HMFD-150		5.HMFP-150		5.HMFB-150		...151
50 g	3	5.HMFO-160		5.HMFD-160		5.HMFP-160		5.HMFB-160		...161
100 g	5	5.HMFO-170		5.HMFD-170		5.HMFP-170		5.HMFB-170		...171
200 g	10	5.HMFO-180		5.HMFD-180		5.HMFP-180		5.HMFB-180		...181
500 g	25	5.HMFO-190		5.HMFD-190		5.HMFP-190		5.HMFB-190		...191
1 kg	50	5.HMFO-210		5.HMFD-210		5.HMFP-210		5.HMFB-210		...211
2 kg	100	5.HMFO-220		5.HMFD-220		5.HMFP-220		5.HMFB-220		...221
5 kg	250	5.HMFO-230		5.HMFD-230		5.HMFP-230		5.HMFB-230	5.HMFS-230	...231
10 kg	500	5.HMFO-240		5.HMFD-240		5.HMFP-240		5.HMFB-240	5.HMFS-240	...241
20 kg	1.000	5.HMFO-250				5.HMFP-250		5.HMFB-250	5.HMFS-250	...251
50 kg	2.500	5.HMFO-260						5.HMFB-260	5.HMFS-260	...261

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	DAkks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 g–50 g	8	110 g	5.XHFP-560		5.XHFB-560		5.XHFS-560	5.0000-561
1 g–100 g	9	210 g	5.XHFP-570		5.XHFB-570		5.XHFS-570	5.0000-571
1 g–200 g	11	610 g	5.XHFP-580		5.XHFB-580		5.XHFS-580	5.0000-581
1 g–500 g	12	1.110 g	5.XHFP-590		5.XHFB-590		5.XHFS-590	5.0000-591
1 g–1 kg	13	2.110 g	5.XHFP-610		5.XHFB-610		5.XHFS-610	5.0000-611
1 g–2 kg	15	6.110 g	5.XHFP-620		5.XHFB-620		5.XHFS-620	5.0000-621
1 g–5 kg	16	11.110 g	5.XHFP-630		5.XHFB-630		5.XHFS-630	5.0000-631
1 g–10 kg	17	21.110 g	5.XHFP-640		5.XHFB-640		5.XHFS-640	5.0000-641



Hook weight



STAINLESS STEEL HF12 finely turned

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Beech wood box	 Service case	DAkks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	5.0000- Art.no.	€
1 g	1	5.HEFO-110		5.HEFD-110		5.HEFP-110		5.HEFB-110		...	111
2 g	1,2	5.HEFO-120		5.HEFD-120		5.HEFP-120		5.HEFB-120		...	121
5 g	1,6	5.HEFO-130		5.HEFD-130		5.HEFP-130		5.HEFB-130		...	131
10 g	2	5.HEFO-140		5.HEFD-140		5.HEFP-140		5.HEFB-140		...	141
20 g	2,5	5.HEFO-150		5.HEFD-150		5.HEFP-150		5.HEFB-150		...	151
50 g	3	5.HEFO-160		5.HEFD-160		5.HEFP-160		5.HEFB-160		...	161
100 g	5	5.HEFO-170		5.HEFD-170		5.HEFP-170		5.HEFB-170		...	171
200 g	10	5.HEFO-180		5.HEFD-180		5.HEFP-180		5.HEFB-180		...	181
500 g	25	5.HEFO-190		5.HEFD-190		5.HEFP-190		5.HEFB-190		...	191
1 kg	50	5.HEFO-210		5.HEFD-210		5.HEFP-210		5.HEFB-210		...	211
2 kg	100	5.HEFO-220		5.HEFD-220		5.HEFP-220		5.HEFB-220		...	221
5 kg	250	5.HEFO-230		5.HEFD-230		5.HEFP-230		5.HEFB-230	5.HEFS-230	...	231
10 kg	500	5.HEFO-240		5.HEFD-240		5.HEFP-240		5.HEFB-240	5.HEFS-240	...	241
20 kg	1.000	5.HEFO-250				5.HEFP-250		5.HEFB-250	5.HEFS-250	...	251
50 kg	2.500	5.HEFO-260						5.HEFB-260	5.HEFS-260	...	261

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	DAkks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 g–50 g	8	110 g	5.XUFP-560		5.XUFB-560		5.XUFS-560	5.0000-561
1 g–100 g	9	210 g	5.XUFP-570		5.XUFB-570		5.XUFS-570	5.0000-571
1 g–200 g	11	610 g	5.XUFP-580		5.XUFB-580		5.XUFS-580	5.0000-581
1 g–500 g	12	1.110 g	5.XUFP-590		5.XUFB-590		5.XUFS-590	5.0000-591
1 g–1 kg	13	2.110 g	5.XUFP-610		5.XUFB-610		5.XUFS-610	5.0000-611
1 g–2 kg	15	6.110 g	5.XUFP-620		5.XUFB-620		5.XUFS-620	5.0000-621
1 g–5 kg	16	11.110 g	5.XUFP-630		5.XUFB-630		5.XUFS-630	5.0000-631
1 g–10 kg	17	21.110 g	5.XUFP-640		5.XUFB-640		5.XUFS-640	5.0000-641



Block weights

rectangular



SINGLE WEIGHT

CAST IRON black painted

Nominal value	Tol.	without box	 Leather cases	 Service case	DAkkS Calibration certificate
	+/- mg	Art.no.	Art.no.	Art.no.	Art.no.
5 kg	250	5.BGSO-230	5.BGSL-230	5.BGSS-230	5.0000-231
10 kg	500	5.BGSO-240	5.BGSL-240	5.BGSS-240	5.0000-241
20 kg	1.000	5.BGSO-250	5.BGSL-250	5.BGSS-250	5.0000-251
25 kg	1.250	5.BGSO-450		5.BGSS-450	5.0000-451
50 kg	2.500	5.BGSO-260		5.BGSS-260	5.0000-261

SINGLE WEIGHTE



CAST IRON zinc sprayed

Nominal value	Tol.	without box	 Leather cases	 Service case	DAkkS Calibration certificate
	+/- mg	Art.no.	Art.no.	Art.no.	Art.no.
5 kg	250	5.BGZO-230	5.BGZL-230	5.BGZS-230	5.0000-231
10 kg	500	5.BGZO-240	5.BGZL-240	5.BGZS-240	5.0000-241
20 kg	1.000	5.BGZO-250	5.BGZL-250	5.BGZS-250	5.0000-251
25 kg	1.250	5.BGZO-450		5.BGZS-450	5.0000-451
50 kg	2.500	5.BGZO-260		5.BGZS-260	5.0000-261

SINGLE WEIGHT



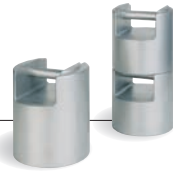
STAINLESS STEEL HF12 polished / glass pearl blasted

Nominal value	Tol.	without box	 Leather cases	 Service case	DAkkS Calibration certificate
	+/- mg	Art.no.	Art.no.	Art.no.	Art.no.
5 kg	250	5.BETO-230	5.BETL-230	5.BEGS-230	5.0000-231
10 kg	500	5.BETO-240	5.BETL-240	5.BEGS-240	5.0000-241
20 kg	1.000	5.BETO-250	5.BETL-250	5.BEGS-250	5.0000-251
25 kg	1.250	5.BETO-450		5.BEGS-450	5.0000-451
50 kg	2.500	5.BETO-260		5.BEGS-260	5.0000-261



Block weights

round



STAINLESS STEEL HF12

polished / glass pearl blasted

SINGLE WEIGHT

Nominal value	Tol.	without box			 Service case	DAkkS Calibration certificate	
		+/- mg	Art.no.	€	Art.no.	€	Art.no. €
5 kg		250	5.RETO-230		5.RETS-230		5.0000-231
10 kg		500	5.RETO-240		5.RETS-240		5.0000-241
20 kg		1.000	5.RETO-250		5.RETS-250		5.0000-251
25 kg		1.250	5.RETO-450		5.RETS-450		5.0000-451
50 kg		2.500	5.RETO-260		5.RETS-260		5.0000-261

Basket weights

for round block weights

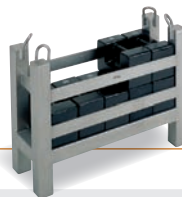


STAINLESS STEEL HF12

polished / glass pearl blasted

Nominal value	max. weight	Tol.	without box			DAkkS Calibration certificate	
			+/- mg	Art.no.	€	Art.no.	€
20 kg	120 kg		1.000	5.NETO-250		5.0000-251	
40 kg	250 kg		2.000	5.NETO-410		5.0000-411	
50 kg	500 kg		2.500	5.NETO-260		5.0000-261	
60 kg	500 kg		3.000	5.NETO-420		5.0000-421	

for rectangular block weights

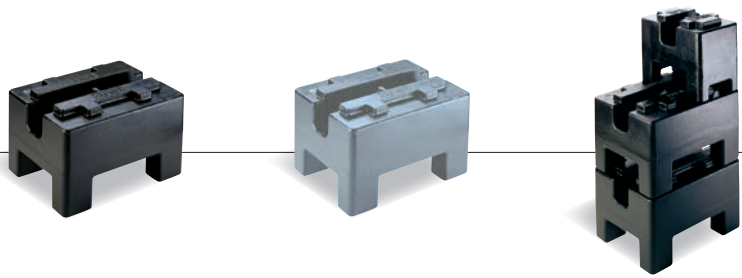


Nominal value	max. weight	Tol.	without box			DAkkS Calibration certificate	
			+/- mg	Art.no.	€	Art.no.	€
20 kg	120 kg		1.000	5.LETO-250		5.0000-251	
40 kg	250 kg		2.000	5.LETO-410		5.0000-411	
50 kg	500 kg		2.500	5.LETO-260		5.0000-261	
60 kg	500 kg		3.000	5.LETO-420		5.0000-421	

Custom-made products according to customer specification.

Block weights

rectangular



SINGLE WEIGHT

CAST IRON
black painted

CAST IRON
zinc sprayed

DAKKS Calibration certificate

Nominal value	Tol.	without box			without box			DAKKS Calibration certificate	
		+/- g	Art.no.	€	Art.no.	€	Art.no.	€	
100 kg		5	5.BGSO-270		5.BGZO-270		5.0000-271		
200 kg		10	5.BGSO-280		5.BGZO-280		5.0000-281		
250 kg		12,5	5.BGSO-460		5.BGZO-460		5.0000-461		
500 kg		25	5.BGSO-290		5.BGZO-290		5.0000-291		
1000 kg		50	5.BGSO-310		5.BGZO-310		5.0000-311		
2000 kg		100	5.BGSO-320		5.BGZO-320		5.0000-321		

round with eyebolt

SINGLE WEIGHT



STAINLESS STEEL HF12 polished / glass pearl blasted

Nominal value	Tol.	without box			without box			DAKKS Calibration certificate	
		+/- g	Art.no.	€	Art.no.	€	Art.no.	€	
100 kg		5	5.BETO-270		5.0000-271		5.0000-271		
200 kg		10	5.BETO-280		5.0000-281		5.0000-281		
250 kg		12,5	5.BETO-460		5.0000-461		5.0000-461		
500 kg		25	5.BETO-290		5.0000-291		5.0000-291		
1000 kg		50	5.BETO-310		5.0000-311		5.0000-311		
2000 kg		100	5.BETO-320		5.0000-321		5.0000-321		

Rolling weights

CAST IRON black painted



SINGLE WEIGHT

Nominal value	Tol.	without box			without box			DAKKS Calibration certificate	
		+/- g	Art.no.	€	Art.no.	€	Art.no.	€	
100 kg		5	5.RGSO-270		5.0000-271		5.0000-271		
200 kg		10	5.RGSO-280		5.0000-281		5.0000-281		
500 kg		25	5.RGSO-290		5.0000-291		5.0000-291		

Carrier weights



SINGLE WEIGHT

BRASS
finely turned
as long as supplies last

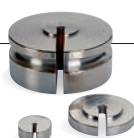
STAINLESS STEEL
HF12 finely turned

STEEL
black finished

Nominal value	Tol.	without box		without box		without box		DAkkS Calibration certificate	
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 g	1	5.TMFO-110						5.0000-111	
2 g	1,2	5.TMFO-120						5.0000-121	
5 g	1,6	5.TMFO-130						5.0000-131	
10 g	2	5.TMFO-140		5.TEFO-140				5.0000-141	
20 g	2,5	5.TMFO-150		5.TEFO-150				5.0000-151	
50 g	3	5.TMFO-160		5.TEFO-160				5.0000-161	
100 g	5	5.TMFO-170		5.TEFO-170				5.0000-171	
200 g	10	5.TMFO-180		5.TEFO-180				5.0000-181	
500 g	25	5.TMFO-190		5.TEFO-190		5.TSBO-190		5.0000-191	
1 kg	50	5.TMFO-210		5.TEFO-210		5.TSBO-210		5.0000-211	
2 kg	100	5.TMFO-220		5.TEFO-220		5.TSBO-220		5.0000-221	
5 kg	250	5.TMFO-230		5.TEFO-230		5.TSBO-230		5.0000-231	
10 kg	500	5.TMFO-240		5.TEFO-240		5.TSBO-240		5.0000-241	
20 kg	1.000	5.TMFO-250		5.TEFO-250		5.TSBO-250		5.0000-251	
50 kg	2.500	5.TMFO-260		5.TEFO-260		5.TSBO-260		5.0000-261	

DAkkS calibration: Case necessary for weights ≤ 500 g. Price for storage case on demand.

Slotted weights



SINGLE WEIGHT

BRASS
finely turned
as long as supplies last

STAINLESS STEEL
HF12 finely turned

CAST IRON
black painted

Nominal value	Tol.	without box		without box		without box		DAkkS Calibration certificate	
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€
1 g	1	5.IMFO-110		5.IEFO-110				5.0000-111	
2 g	1,2	5.IMFO-120		5.IEFO-120				5.0000-121	
5 g	1,6	5.IMFO-130		5.IEFO-130				5.0000-131	
10 g	2	5.IMFO-140		5.IEFO-140				5.0000-141	
20 g	2,5	5.IMFO-150		5.IEFO-150				5.0000-151	
50 g	3	5.IMFO-160		5.IEFO-160				5.0000-161	
100 g	5	5.IMFO-170		5.IEFO-170				5.0000-171	
200 g	10	5.IMFO-180		5.IEFO-180				5.0000-181	
500 g	25	5.IMFO-190		5.IEFO-190		5.IGSO-190		5.0000-191	
1 kg	50	5.IMFO-210		5.IEFO-210		5.IGSO-210		5.0000-211	
2 kg	100	5.IMFO-220		5.IEFO-220		5.IGSO-220		5.0000-221	
5 kg	250	5.IMFO-230		5.IEFO-230		5.IGSO-230		5.0000-231	
10 kg	500	5.IMFO-240		5.IEFO-240		5.IGSO-240		5.0000-241	
20 kg	1.000	5.IMFO-250		5.IEFO-250		5.IGSO-250		5.0000-251	
50 kg	2.500					5.IGSO-260		5.0000-261	

DAkkS calibration: Case necessary for weights ≤ 500 g. Price for storage case on demand.

M2

Weights of medium accuracy M2

Adjustment, testing and calibration weights for commercial balances (class III) and for quality assurance of scales with steps $\leq 30\,000$ according to ISO 9001ff. Weights for calibration of weights of class M3.

Weights in the exclusive assortment case.

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAN ROOM
PLASTIC CASES



BEECH WOODEN
BOX



SERVICE
CASE

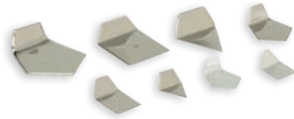


PLASTIC BOXES WITH
SCREWED TOP



LEATHER CASES

Milligramm weights


ALUMINIUM / GERMAN SILVER NICKEL

Flat polygonal sheets

SINGLE WEIGHT

Nominal value	Tol.	without box			 Plastic boxes with screwed top	DAkkS Calibration certificate	
		+/- mg	Art.no.	€	Art.no.	€	Art.no. €
100 mg		1,6	4.PNHO-070		4.PNHD-070		4.0000-071
200 mg		2	4.PNHO-080		4.PNHD-080		4.0000-081
500 mg		2,5	4.PNHO-090		4.PNHD-090		4.0000-091

SETS

Nominal value	Qty.	Content	 Clean room plastic cases	 Beech wood box	DAkkS Calibration certificate			
			Art.no.	€	Art.no.	€	Art.no.	€
100 mg–500 mg	12	1,11 g	4.XMFP-710		4.XMFB-710		4.0000-711	

3-Part service case

Available for all classes of weights

1 mg–5 kg



Price on request

Trolley

Available for all classes of weights

1 mg–10 kg

1 mg–20 kg



Price on request

Knob weights


BRASS finely turned

as long as supplies last

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Beech wood box	 Service case	Dakks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	4.0000-Art.no.	€
1 g	3	4.KMFO-110		4.KMFD-110		4.KMFP-110		4.KMFB-110			...111
2 g	4	4.KMFO-120		4.KMFD-120		4.KMFP-120		4.KMFB-120			...121
5 g	5	4.KMFO-130		4.KMFD-130		4.KMFP-130		4.KMFB-130			...131
10 g	6	4.KMFO-140		4.KMFD-140		4.KMFP-140		4.KMFB-140			...141
20 g	8	4.KMFO-150		4.KMFD-150		4.KMFP-150		4.KMFB-150			...151
50 g	10	4.KMFO-160		4.KMFD-160		4.KMFP-160		4.KMFB-160			...161
100 g	16	4.KMFO-170		4.KMFD-170				4.KMFB-170			...171
200 g	30	4.KMFO-180		4.KMFD-180				4.KMFB-180			...181
500 g	80	4.KMFO-190		4.KMFD-190				4.KMFB-190			...191
1 kg	160	4.KMFO-210		4.KMFD-210				4.KMFB-210			...211
2 kg	300	4.KMFO-220		4.KMFD-220				4.KMFB-220			...221
5 kg	800	4.KMFO-230		4.KMFD-230				4.KMFB-230			...231
10 kg	1600	4.KMFO-240		4.KMFD-240				4.KMFB-240	4.KMFS-240		...241
20 kg	3000	4.KMFO-250						4.KMFB-250	4.KMFS-250		...251

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	DAkks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 g–50 g	8	110 g	4.XAFP-560		4.XAFB-560		4.XAFS-560	4.0000-561
1 g–100 g	9	210 g	4.XAFP-570		4.XAFB-570		4.XAFS-570	4.0000-571
1 g–200 g	11	610 g	4.XAFP-580		4.XAFB-580		4.XAFS-580	4.0000-581
1 g–500 g	12	1.110 g	4.XAFP-590		4.XAFB-590		4.XAFS-590	4.0000-591
1 g–1 kg	13	2.110 g	4.XAFP-610		4.XAFB-610		4.XAFS-610	4.0000-611
1 g–2 kg	15	6.110 g	4.XAFP-620		4.XAFB-620		4.XAFS-620	4.0000-621
1 g–5 kg	16	11.110 g	4.XAFP-630		4.XAFB-630		4.XAFS-630	4.0000-631
1 g–10 kg	17	21.110 g	4.XAFP-640		4.XAFB-640		4.XAFS-640	4.0000-641

SETS with mg- weights (flat polygonal sheets)

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	Dakks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
100 mg–50 g	20	111,11 g	4.XMFP-760		4.XMFB-760		4.XMFS-760	4.0000-761
100 mg–100 g	21	211,11 g	4.XMFP-770		4.XMFB-770		4.XMFS-770	4.0000-771
100 mg–200 g	23	611,11 g	4.XMFP-780		4.XMFB-780		4.XMFS-780	4.0000-781
100 mg–500 g	24	1.111,11 g	4.XMFP-790		4.XMFB-790		4.XMFS-790	4.0000-791
100 mg–1 kg	25	2.111,11 g	4.XMFP-810		4.XMFB-810		4.XMFS-810	4.0000-811
100 mg–2 kg	27	6.111,11 g	4.XMFP-820		4.XMFB-820		4.XMFS-820	4.0000-821
100 mg–5 kg	28	11.111,11 g	4.XMFP-830		4.XMFB-830		4.XMFS-830	4.0000-831
100 mg–10 kg	29	21.111,11 g	4.XMFP-840		4.XMFB-840		4.XMFS-840	4.0000-841

Hook weight


BRASS finely turned

as long as supplies last

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clean room plastic cases	 Beech wood box	 Service case	DAkks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	4.0000- Art.no.	€
1 g	3	4.HMFO-110		4.HMFD-110		4.HMFP-110		4.HMFB-110		...	111
2 g	4	4.HMFO-120		4.HMFD-120		4.HMFP-120		4.HMFB-120		...	121
5 g	5	4.HMFO-130		4.HMFD-130		4.HMFP-130		4.HMFB-130		...	131
10 g	6	4.HMFO-140		4.HMFD-140		4.HMFP-140		4.HMFB-140		...	141
20 g	8	4.HMFO-150		4.HMFD-150		4.HMFP-150		4.HMFB-150		...	151
50 g	10	4.HMFO-160		4.HMFD-160		4.HMFP-160		4.HMFB-160		...	161
100 g	16	4.HMFO-170		4.HMFD-170				4.HMFB-170		...	171
200 g	30	4.HMFO-180		4.HMFD-180				4.HMFB-180		...	181
500 g	80	4.HMFO-190		4.HMFD-190				4.HMFB-190		...	191
1 kg	160	4.HMFO-210		4.HMFD-210				4.HMFB-210		...	211
2 kg	300	4.HMFO-220		4.HMFD-220				4.HMFB-220		...	221
5 kg	800	4.HMFO-230		4.HMFD-230				4.HMFB-230	4.HMFS-230	...	231
10 kg	1600	4.HMFO-240		4.HMFD-240				4.HMFB-240	4.HMFS-240	...	241
20 kg	3000	4.HMFO-250						4.HMFB-250	4.HMFS-250	...	251
50 kg	8000	4.HMFO-260						4.HMFB-260	4.HMFS-260	...	261

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	DAkks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 g–50 g	8	110 g	4.XHFP-560		4.XHFB-560		4.XHFS-560	4.0000-561
1 g–100 g	9	210 g	4.XHFP-570		4.XHFB-570		4.XHFS-570	4.0000-571
1 g–200 g	11	610 g	4.XHFP-580		4.XHFB-580		4.XHFS-580	4.0000-581
1 g–500 g	12	1.110 g	4.XHFP-590		4.XHFB-590		4.XHFS-590	4.0000-591
1 g–1 kg	13	2.110 g	4.XHFP-610		4.XHFB-610		4.XHFS-610	4.0000-611
1 g–2 kg	15	6.110 g	4.XHFP-620		4.XHFB-620		4.XHFS-620	4.0000-621
1 g–5 kg	16	11.110 g	4.XHFP-630		4.XHFB-630		4.XHFS-630	4.0000-631
1 g–10 kg	17	21.110 g	4.XHFP-640		4.XHFB-640		4.XHFS-640	4.0000-641



Block weights

rectangular



CAST IRON black painted

SINGLE WEIGHT

Nominal value	Tol.	without box			 Leather cases	DAkks Calibration certificate	
		+/- mg	Art.no.	€	Art.no.	€	Art.no.
5 kg		800	4.BGSO-230		4.BGSL-230		4.0000-231
10 kg		1600	4.BGSO-240		4.BGSL-240		4.0000-241
20 kg		3000	4.BGSO-250		4.BGSL-250		4.0000-251
25 kg		4000	4.BGSO-450				4.0000-451
50 kg		8000	4.BGSO-260				4.0000-261

SINGLE WEIGHT

Nominal value	Tol.	without box			DAkks Calibration certificate
		+/- g	Art.no.	€	Art.no.
100 kg		16	4.BGSO-270		4.0000-271
200 kg		30	4.BGSO-280		4.0000-281
250 kg		40	4.BGSO-460		4.0000-461
500 kg		80	4.BGSO-290		4.0000-291
1000 kg		160	4.BGSO-310		4.0000-311
2000 kg		300	4.BGSO-320		4.0000-321



Rolling weights

CAST IRON black painted

SINGLE WEIGHT

Nominal value	Tol.	without box			DAkks Calibration certificate
		+/- g	Art.no.	€	Art.no.
100 kg		16	4.RGSO-270		4.0000-271
200 kg		30	4.RGSO-280		4.0000-281
500 kg		40	4.RGSO-290		4.0000-291



Carrier weights



BRASS
finely turned
as long as supplies last
without box



STEEL
black finished
without box



DAKKS Calibration
certificate

SINGLE WEIGHT

Nominal value	Tol.		+/- mg	Art.no.	€	Art.no.	€	Art.no.	€
10 g			6	4.TMFO-140				4.0000-141	
20 g			8	4.TMFO-150				4.0000-151	
50 g			10	4.TMFO-160				4.0000-161	
100 g			16	4.TMFO-170				4.0000-171	
200 g			30	4.TMFO-180				4.0000-181	
500 g			80	4.TMFO-190		4.TSBO-190		4.0000-191	
1 kg			160	4.TMFO-210		4.TSBO-210		4.0000-211	
2 kg			300	4.TMFO-220		4.TSBO-220		4.0000-221	
5 kg			800	4.TMFO-230		4.TSBO-230		4.0000-231	
10 kg			1600	4.TMFO-240		4.TSBO-240		4.0000-241	
20 kg			3000	4.TMFO-250		4.TSBO-250		4.0000-251	
50 kg			8000	4.TMFO-260		4.TSBO-260		4.0000-261	

DAKKS calibration: Case necessary for weights ≤ 500 g. Price for storage case on demand.

Slotted weights



BRASS
finely turned
as long as supplies last
without box



CAST IRON
black painted
without box

DAKKS Calibration
certificate

SINGLE WEIGHT

Nominal value	Tol.		+/- mg	Art.no.	€	Art.no.	€	Art.no.	€
1 g			3	4.IMFO-110				4.0000-111	
2 g			4	4.IMFO-120				4.0000-121	
5 g			5	4.IMFO-130				4.0000-131	
10 g			6	4.IMFO-140				4.0000-141	
20 g			8	4.IMFO-150				4.0000-151	
50 g			10	4.IMFO-160				4.0000-161	
100 g			16	4.IMFO-170				4.0000-171	
200 g			30	4.IMFO-180				4.0000-181	
500 g			80	4.IMFO-190		4.IGSO-190		4.0000-191	
1 kg			160	4.IMFO-210		4.IGSO-210		4.0000-211	
2 kg			300	4.IMFO-220		4.IGSO-220		4.0000-221	
5 kg			800	4.IMFO-230		4.IGSO-230		4.0000-231	
10 kg			1600	4.IMFO-240		4.IGSO-240		4.0000-241	
20 kg			3000	4.IMFO-250		4.IGSO-250		4.0000-251	
50 kg			8000	4.IMFO-260		4.IGSO-260		4.0000-261	

DAKKS calibration: Case necessary for weights ≤ 500 g. Price for storage case on demand.

M3

Commercial weights – class M3

Adjustment, testing and calibration weights for ordinary scales (class IV) and for quality assurance of scales with steps ≤ 1000 according to ISO 9001ff. Weights for the usage combined with commercial balances (class III) and ordinary scales (class IV). Learning aids for schools and apprenticeship. Load tests for lifting, crane and vehicle systems.

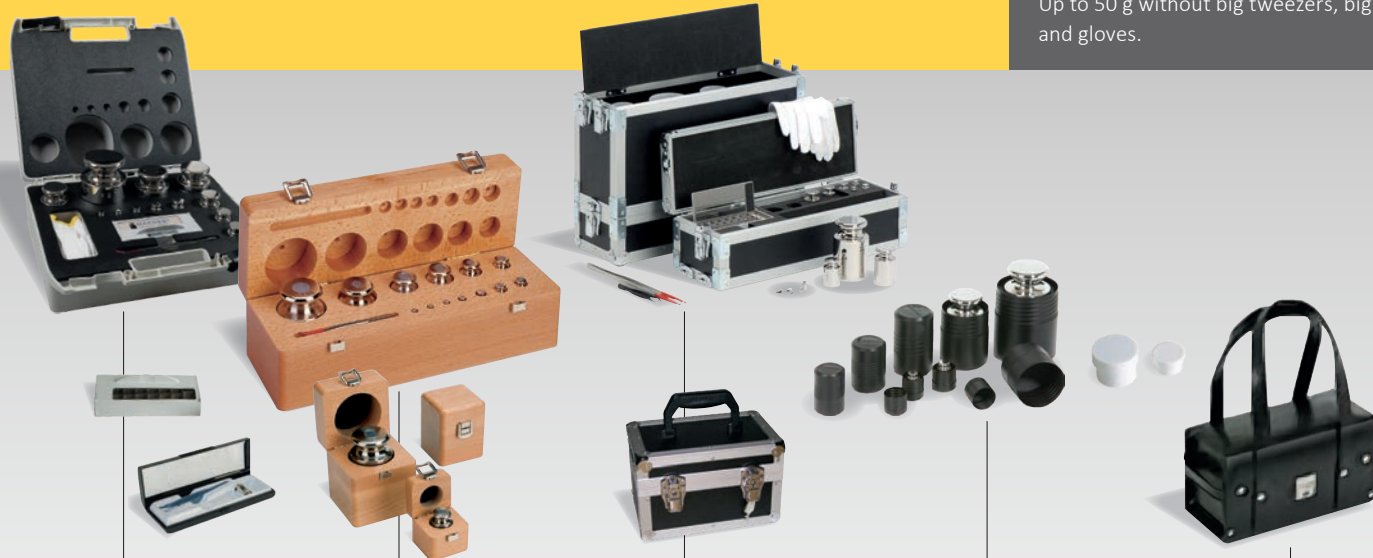
Weights in the exclusive assortment case.

ACCESSORIES



All weight sets include gloves, two brushes and two tweezers.

Up to 50 g without big tweezers, big brush and gloves.



CLEAR ROOM
PLASTIC CASES



BEECH WOOD
BOX



SERVICE
CASE



PLASTIC BOXES WITH
SCREWED TOP



LEATHER CASES

Knob weights


BRASS finely turned

as long as supplies last

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clear room plastic cases	 Beech wood box	 Service case	DAkkS Calibration certificate						
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	3.0000-Art.no.	€
1 g	10	3.CMFO-110		3.CMFD-110		3.CMFP-110		3.CMFB-110				...111	
2 g	12	3.CMFO-120		3.CMFD-120		3.CMFP-120		3.CMFB-120				...121	
5 g	16	3.CMFO-130		3.CMFD-130		3.CMFP-130		3.CMFB-130				...131	
10 g	20	3.CMFO-140		3.CMFD-140		3.CMFP-140		3.CMFB-140				...141	
20 g	25	3.CMFO-150		3.CMFD-150		3.CMFP-150		3.CMFB-150				...151	
50 g	30	3.CMFO-160		3.CMFD-160		3.CMFP-160		3.CMFB-160				...161	
100 g	50	3.CMFO-170		3.CMFD-170				3.CMFB-170				...171	
200 g	100	3.CMFO-180		3.CMFD-180				3.CMFB-180				...181	
500 g	250	3.CMFO-190		3.CMFD-190				3.CMFB-190				...191	
1 kg	500	3.CMFO-210		3.CMFD-210				3.CMFB-210				...211	
2 kg	1000	3.CMFO-220		3.CMFD-220				3.CMFB-220				...221	
5 kg	2500	3.CMFO-230		3.CMFD-230				3.CMFB-230		3.CMFS-230		...231	
10 kg	5000	3.CMFO-240		3.CMFD-240				3.CMFB-240		3.CMFS-240		...241	

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	Dakks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1 g–50 g	8	110 g	3.XCFP-560		3.XCFB-560		3.XCFS-560	3.0000-561
1 g–100 g	9	210 g	3.XCFP-570		3.XCFB-570		3.XCFS-570	3.0000-571
1 g–200 g	11	610 g	3.XCFP-580		3.XCFB-580		3.XCFS-580	3.0000-581
1 g–500 g	12	1.110 g	3.XCFP-590		3.XCFB-590		3.XCFS-590	3.0000-591
1 g–1 kg	13	2.110 g	3.XCFP-610		3.XCFB-610		3.XCFS-610	3.0000-611
1 g–2 kg	15	6.110 g	3.XCFP-620		3.XCFB-620		3.XCFS-620	3.0000-621
1 g–5 kg	16	11.110 g	3.XCFP-630		3.XCFB-630		3.XCFS-630	3.0000-631
1 g–10 kg	17	21.110 g	3.XCFP-640		3.XCFB-640		3.XCFS-640	3.0000-641

3-Part service case

Available for all classes of weights

1 mg–5 kg


Price on request

Trolley

Available for all classes of weights

1 mg–10 kg
1 mg–20 kg


Price on request

Knob weights

OIML R111



BRASS finely turned

as long as supplies last

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clear room plastic cases	 Beech wood box	 Service case	Dakks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	3.0000-Art.no.	€
1 g	10	3.KMFO-110		3.KMFD-110		3.KMFP-110		3.KMFB-110			...111
2 g	12	3.KMFO-120		3.KMFD-120		3.KMFP-120		3.KMFB-120			...121
5 g	16	3.KMFO-130		3.KMFD-130		3.KMFP-130		3.KMFB-130			...131
10 g	20	3.KMFO-140		3.KMFD-140		3.KMFP-140		3.KMFB-140			...141
20 g	25	3.KMFO-150		3.KMFD-150		3.KMFP-150		3.KMFB-150			...151
50 g	30	3.KMFO-160		3.KMFD-160		3.KMFP-160		3.KMFB-160			...161
100 g	50	3.KMFO-170		3.KMFD-170				3.KMFB-170			...171
200 g	100	3.KMFO-180		3.KMFD-180				3.KMFB-180			...181
500 g	250	3.KMFO-190		3.KMFD-190				3.KMFB-190			...191
1 kg	500	3.KMFO-210		3.KMFD-210				3.KMFB-210			...211
2 kg	1000	3.KMFO-220		3.KMFD-220				3.KMFB-220			...221
5 kg	2500	3.KMFO-230		3.KMFD-230				3.KMFB-230		3.KMFS-230	...231
10 kg	5000	3.KMFO-240		3.KMFD-240				3.KMFB-240		3.KMFS-240	...241
20 kg	10000	3.KMFO-250						3.KMFB-250		3.KMFS-250	...251

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	Dakks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1g-50g	8	110 g	3.XAFP-560		3.XAFB-560		3.XAFS-560	3.0000-561
1g-100g	9	210 g	3.XAFP-570		3.XAFB-570		3.XAFS-570	3.0000-571
1g-200g	11	610 g	3.XAFP-580		3.XAFB-580		3.XAFS-580	3.0000-581
1g-500g	12	1.110 g	3.XAFP-590		3.XAFB-590		3.XAFS-590	3.0000-591
1g-1 kg	13	2.110 g	3.XAFP-610		3.XAFB-610		3.XAFS-610	3.0000-611
1g-2 kg	15	6.110 g	3.XAFP-620		3.XAFB-620		3.XAFS-620	3.0000-621
1g-5 kg	16	11.110 g	3.XAFP-630		3.XAFB-630		3.XAFS-630	3.0000-631
1g-10 kg	17	21.110 g	3.XAFP-640		3.XAFB-640		3.XAFS-640	3.0000-641



Hook weight


BRASS finely turned

as long as supplies last

SINGLE WEIGHT

Nominal value	Tol.	without box	 Plastic boxes with screwed top	 Clear room plastic cases	 Beech wood box	 Service case	Dakks Calibration certificate				
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.	€	3.0000- Art.no.	€
1 g	10	3.HMFO-110		3.HMFD-110		3.HMFP-110		3.HMFB-110		...	111
2 g	12	3.HMFO-120		3.HMFD-120		3.HMFP-120		3.HMFB-120		...	121
5 g	16	3.HMFO-130		3.HMFD-130		3.HMFP-130		3.HMFB-130		...	131
10 g	20	3.HMFO-140		3.HMFD-140		3.HMFP-140		3.HMFB-140		...	141
20 g	25	3.HMFO-150		3.HMFD-150		3.HMFP-150		3.HMFB-150		...	151
50 g	30	3.HMFO-160		3.HMFD-160		3.HMFP-160		3.HMFB-160		...	161
100 g	50	3.HMFO-170		3.HMFD-170				3.HMFB-170		...	171
200 g	100	3.HMFO-180		3.HMFD-180				3.HMFB-180		...	181
500 g	250	3.HMFO-190		3.HMFD-190				3.HMFB-190		...	191
1 kg	500	3.HMFO-210		3.HMFD-210				3.HMFB-210		...	211
2 kg	1000	3.HMFO-220		3.HMFD-220				3.HMFB-220		...	221
5 kg	2500	3.HMFO-230		3.HMFD-230				3.HMFB-230	3.HMFS-230	...	231
10 kg	5000	3.HMFO-240		3.HMFD-240				3.HMFB-240	3.HMFS-240	...	241
20 kg	10000	3.HMFO-250						3.HMFB-250	3.HMFS-250	...	251
50 kg	25000	3.HMFO-260						3.HMFB-260	3.HMFS-260	...	261

SETS

Nominal value	Qty.	Content	 Clean room plastic box	 Beech wood box	 Service case	Dakks Calibration certificate		
			Art.no.	€	Art.no.	€	Art.no.	€
1g-50g	8	110g	3.XHFP-560		3.XHFB-560		3.XHFS-560	3.0000-561
1g-100g	9	210g	3.XHFP-570		3.XHFB-570		3.XHFS-570	3.0000-571
1g-200g	11	610g	3.XHFP-580		3.XHFB-580		3.XHFS-580	3.0000-581
1g-500g	12	1.110g	3.XHFP-590		3.XHFB-590		3.XHFS-590	3.0000-591
1g-1 kg	13	2.110g	3.XHFP-610		3.XHFB-610		3.XHFS-610	3.0000-611
1g-2 kg	15	6.110g	3.XHFP-620		3.XHFB-620		3.XHFS-620	3.0000-621
1g-5 kg	16	11.110g	3.XHFP-630		3.XHFB-630		3.XHFS-630	3.0000-631
1g-10 kg	17	21.110g	3.XHFP-640		3.XHFB-640		3.XHFS-640	3.0000-641



Cast Iron Weights



CAST IRON black painted

DIN 1924

Knob weights
– with hook

Nominal value	Tol.	without box		without box		DAkks Calibration certificate
	+/- mg	Art.no.	€	Art.no.	€	Art.no.
100 g	50	3.CGSO-170				3.0000-171
200 g	100	3.CGSO-180				3.0000-181
500 g	250	3.CGSO-190		3.VGSO-190		3.0000-191
1 kg	500	3.CGSO-210		3.VGSO-210		3.0000-211
2 kg	1000	3.CGSO-220		3.VGSO-220		3.0000-221
5 kg	2500	3.CGSO-230		3.VGSO-230		3.0000-231
10 kg	5000	3.CGSO-240		3.VGSO-240		3.0000-241
20 kg	10000	3.CGSO-250				3.0000-251
50 kg	25000	3.CGSO-260				3.0000-261

Block weights



CAST IRON black painted

rectangular

SINGLE WEIGHT

Nominal value	Tol.	without box		 Leather case		 Service case		DAkks Calibration certificate
	+/- mg	Art.no.	€	Art.no.	€	Art.no.	€	Art.no.
5 kg	2500	3.BGSO-230		3.BGSL-230		3.BGSS-230		3.0000-231
10 kg	5000	3.BGSO-240		3.BGSL-240		3.BGSS-240		3.0000-241
20 kg	10000	3.BGSO-250		3.BGSL-250		3.BGSS-250		3.0000-251
25 kg	12500	3.BGSO-450				3.BGSS-450		3.0000-451
50 kg	25000	3.BGSO-260				3.BGSS-260		3.0000-261

Block weights



Rolling weights

CAST IRON black painted

Nominal value	Tol.	without box		without box		DAkks Calibration certificate
	+/- g	Art.no.	€	Art.no.	€	Art.no.
100 kg	50	3.BGSO-270		3.RGSO-270		3.0000-271
200 kg	100	3.BGSO-280		3.RGSO-280		3.0000-281
250 kg	125	3.BGSO-460				3.0000-461
500 kg	250	3.BGSO-290		3.RGSO-290		3.0000-291
1000 kg	500	3.BGSO-310				3.0000-311
2000 kg	1000	3.BGSO-320				3.0000-321

Carrier weights



BRASS
finely turned
as long as supplies last
without box



STEEL
black finished
without box



DAKKS Calibration
certificate

SINGLE WEIGHT

Nominal value	Tol.		+/- mg	Art.no.	€	Art.no.	€	Art.no.	€
500 g			250	3.TMFO-190		3.TSBO-190		3.0000-191	
1 kg			500	3.TMFO-210		3.TSBO-210		3.0000-211	
2 kg			1000	3.TMFO-220		3.TSBO-220		3.0000-221	
5 kg			2500	3.TMFO-230		3.TSBO-230		3.0000-231	
10 kg			5000	3.TMFO-240		3.TSBO-240		3.0000-241	
20 kg			10000	3.TMFO-250		3.TSBO-250		3.0000-251	
50 kg			20000	3.TMFO-260		3.TSBO-260		3.0000-261	

DAKKS calibration: Case necessary for weights ≤ 500 g. Price for storage case on demand.

Slotted weights



BRASS
finely turned
as long as supplies last
without box



CAST IRON
black painted
without box

DAKKS Calibration
certificate

SINGLE WEIGHT

Nominal value	Tol.		+/- mg	Art.no.	€	Art.no.	€	Art.no.	€
500 g			250	3.IMFO-190		3.IGSO-190		3.0000-191	
1 kg			500	3.IMFO-210		3.IGSO-210		3.0000-211	
2 kg			1000	3.IMFO-220		3.IGSO-220		3.0000-221	
5 kg			2500	3.IMFO-230		3.IGSO-230		3.0000-231	
10 kg			5000	3.IMFO-240		3.IGSO-240		3.0000-241	
20 kg			10000	3.IMFO-250		3.IGSO-250		3.0000-251	
50 kg			20000	3.IMFO-260		3.IGSO-260		3.0000-261	

DAKKS calibration: Case necessary for weights ≤ 500 g. Price for storage case on demand.



Accessories for weights

Accessories that ease your work. The accessories by HÄFNER include everything you need for storage, handling, quality assurance and management of your test weights, e.g. bell jars with base, tweezers, brushes, gloves, weight forks and weight handles, storage boxes for single weights, service cases, measurement devices.

Safe storage of your weights



Bell jars

with base

Size	Diameter x Height	Using for sets	Using for single weights	Art.no.	€
1	105 x 18 mm	1 mg–5 g		1.1YYY-010	
2	75 x 55 mm	bis 100 g	max. 200 g	1.1YYY-020	
3	125 x 90 mm	10 g–200 g	max. 1 kg	1.1YYY-030	
4	150 x 150 mm	1 mg–200 g	max. 2 kg	1.1YYY-040	
5	150 x 200 mm	100 g–1 kg	max. 5 kg	1.1YYY-050	
6	200 x 200 mm	bis 2 kg	2 kg + 5 kg	1.1YYY-060	
7	180 x 250 mm		10 kg	1.1YYY-070	
8	200 x 300 mm		20 kg	1.1YYY-080	
9	300 x 400 mm		50 kg	1.1YYY-090	



Plastic boxes with screwed top

Plastic



Size	suitable	Art.no.	€
on top and bottom with foam inserts			
1	mg	1.6YYD-200	
2	mg	1.6YYD-400	

Size	suitable	Art.no.	€
inside around with foam upholstert			
2	1 g–20 g	1.6YYD-150	
3	50 g	1.6YYD-160	
3	100 g	1.6YYD-170	
4	200 g	1.6YYD-180	
5	500 g	1.6YYD-190	
6	1 kg	1.6YYD-210	
7	2 kg	1.6YYD-220	
8	5 kg	1.6YYD-230	
9	10 kg	1.6YYD-240	

Clean room plastic cases



SINGLE WEIGHT

Size	suitable	Art.no.	€
with flaked recesses, including carbon tweezers 105 mm			
1	1 mg–5 g, 3 x mg, 1 x 1 g, 2 x 2 g, 1 x 5 g	1.6YYP-010	
2	10 g–50 g, 1 x 10 g, 1 x 20 g, 1 x 50 g	1.6YYP-020	

SETS for sets 1mg-500mg resp. 1mg-5g

Size	suitable	Configuration	Art.no.	€
without coating				
1	1 mg–500 mg	mg	1.6YYP-710	
2	1 mg–5 g	with insert 1g–5g	1.6YYP-720	
mg with antistatic stainless steel coating				
3	1 mg–500 mg	mg	1.6YYP-730	
4	1 mg–5 g		1.6YYP-740	

Clean room plastic box

Foam inserts with recesses

SETS up to 500 g resp. 5 kg

Size	suitable	Art.no.	€
hinged lid for keeping certificates			
1	1 g–max. 500 g		1.6YYS-810
1	1 mg–max. 500 g	mg-Insert	1.6YYS-820

Size	suitable	Art.no.	€
hinged lid for keeping certificates			
2	1 g–max. 5 kg		1.6YYS-830
2	1 mg–max. 5 kg	mg-Insert	1.6YYS-840



Mahogany wooden box

Class E0 / E1 / E2 / F1

SINGLE WEIGHT

Nominal value	Art.no.	€
1 mg–500 mg	9.KEOM-090	
1 g	9.KEOM-110	
2 g	9.KEOM-120	
5 g	9.KEOM-130	
10 g	9.KEOM-140	
20 g	9.KEOM-150	
50 g	9.KEOM-160	
100 g	9.KEOM-170	
200 g	9.KEOM-180	
500 g	9.KEOM-190	
1 kg	9.KEOM-210	
2 kg	9.KEOM-220	
5 kg	9.KEOM-230	
10 kg	9.KEOM-240	
20 kg	9.KEOM-250	
50 kg	9.KEOM-260	



SETS

Nominal value	Art.no.	€
1 g–50 g	9.XTOM-560	
1 g–100 g	9.XTOM-570	
1 g–200 g	9.XTOM-580	
1 g–500 g	9.XTOM-590	
1 g–1 kg	9.XTOM-610	
1 g–2 kg	9.XTOM-620	
1 g–5 kg	9.XTOM-630	
1 g–10 kg	9.XTOM-640	
1 mg–5 g	9.XEOM-730	
1 mg–50 g	9.XEOM-760	
1 mg–100 g	9.XEOM-770	
1 mg–200 g	9.XEOM-780	
1 mg–500 g	9.XEOM-790	
1 mg–1 kg	9.XEOM-810	
1 mg–2 kg	9.XEOM-820	
1 mg–5 kg	9.XEOM-830	
1 mg–10 kg	9.XEOM-840	



Beech wood box

Class F2 / M1 / M2 / M3

Knob weights

SINGLE WEIGHT

Nominal value	Art.no.	€
1 g	6.KEOB-110	
2 g	6.KEOB-120	
5 g	6.KEOB-130	
10 g	6.KEOB-140	
20 g	6.KEOB-150	
50 g	6.KEOB-160	
100 g	6.KEOB-170	
200 g	6.KEOB-180	
500 g	6.KEOB-190	
1 kg	6.KEOB-210	
2 kg	6.KEOB-220	
5 kg	6.KEOB-230	
10 kg	6.KEOB-240	
20 kg	6.KEOB-250	
50 kg	6.KEOB-260	



SETS

Nominal value	Art.no.	€
1 g–50 g	5.XAOB-560	
1 g–100 g	5.XAOB-570	
1 g–200 g	5.XAOB-580	
1 g–500 g	5.XAOB-590	
1 g–1 kg	5.XAOB-610	
1 g–2 kg	5.XAOB-620	
1 g–5 kg	5.XAOB-630	
1 g–10 kg	5.XAOB-640	
1 mg–50 g	5.XMOB-760	
1 mg–100 g	5.XMOB-770	
1 mg–200 g	5.XMOB-780	
1 mg–500 g	5.XMOB-790	
1 mg–1 kg	5.XMOB-810	
1 mg–2 kg	5.XMOB-820	
1 mg–5 kg	5.XMOB-830	
1 mg–10 kg	5.XMOB-840	



Service case

Aluminium



SINGLE WEIGHT

Size	suitable	Art.no.	€
1	5 kg	1.6YY6-230	
2	10 kg	1.6YY6-240	
3	20 kg	1.6YY6-250	
4	25 kg	1.6YY6-450	
5	50 kg	1.6YY6-260	

SETS

Size	suitable	Art.no.	€
6	up to 5 g	1.6YY6-530	
7	up to 50 g	1.6YY6-560	
8	up to 100 g	1.6YY6-570	
9	up to 500 g	1.6YY6-590	
10	up to 1 kg	1.6YY6-610	
11	up to 2 kg	1.6YY6-620	
12	up to 5 kg	1.6YY6-630	
13	up to 10 kg	1.6YY6-640	

Clean room case



SETS

Size	suitable	Art.no.	€
removeable inserts			
1	1 g–1 kg	1.6YYR-110	
2	1 g–2 kg	1.6YYR-120	
3	1 g–5 kg	1.6YYR-130	
4	1 mg–1 kg	1.6YYR-140	
5	1 mg–2 kg	1.6YYR-150	
6	1 mg–5 kg	1.6YYR-160	

SINGLE WEIGHT

Size	suitable	Art.no.	€
removeable inserts			
7	5 kg	1.6YYR-170	
8	10 kg	1.6YYR-180	
9	20 kg	1.6YYR-190	

Leather cases

rectangular block weights



SETS

Size	suitable	Art.no.	€
1	5 kg	1.6YYL-330	
2	10 kg	1.6YYL-340	
3	20 kg	1.6YYL-350	

Tweezers



STANDARDS

Size	Length	Using for	Description	Art.no.	€
1	105 mm	up to 50 g	Stainless steel cranked	1.3YYY-010	
2	160 mm	up to 200 g	Stainless steel cranked	1.3YYY-020	
3	250 mm	up to 500 g	Stainless steel straight with seat pans	1.3YYY-030	
4	300 mm	up to 500 g	with seat pans	1.3YYY-040	

CARBON Stainless steel with bolted, removable carbon tips

Size	Length	Using for	Art.no.	€
Total carbon cranked, with seat pans				
5	105 mm	up to 50 g	1.3YYY-050	
	105 mm	up to 50 g	1.3YYY-060	
7	155 mm	up to 200 g	1.3YYY-070	
8	185 mm	up to 200 g	1.3YYY-080	
9	200 mm	up to 200 g	1.3YYY-090	

Gloves



Size	Description	Art.no.	€
Cotton gloves, thin			
S	Women's size	1.2YYY-010	
L	Men's size	1.2YYY-020	
Cotton gloves, strong			
S	Women's size	1.2YYY-030	
L	Men's size	1.2YYY-040	

Size	Description	Art.no.	€
Micro fiber gloves			
S	Women's size	1.2YYY-050	
L	Men's size	1.2YYY-060	
Leather gloves with cotton on the back of the hand			
S	Women's size	1.2YYY-070	
M	Intermediate size	1.2YYY-080	
L	Men's size	1.2YYY-090	

Forks



Size	Description	Art.no.	€
1	500 g-Fork	1.3YYY-190	
2	1 kg-Fork	1.3YYY-210	
3	2 kg-Fork	1.3YYY-220	
4	5 kg-Fork	1.3YYY-230	

Handles



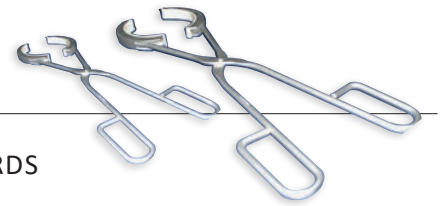
Size	Description	Art.no.	€
5	10 kg-Handle	1.3YYY-240	
6	20 kg-Handle	1.3YYY-250	
7	50 kg-Handle	1.3YYY-260	

Brush



Size	Diameter x Length	Art.no.	€
1	D10 x L100 mm	1.4YYY-010	
2	D20 x L110 mm	1.4YYY-020	
3	D30 x L150 mm	1.4YYY-030	
4	D30 x L250 mm	1.4YYY-040	

Tongs



NORMAL STANDARDS

Size	Description	Art.no.	€
1	Universal tongs with silicone inserts, up to 2 kg	1.3YYY-310	
2	Tong for 1 kg-E0	1.3YYY-320	
3	Tong for 2 kg	1.3YYY-330	

Ambient climate recording system

Size	Part of the system	Art.no.	€
1	Data logger 6 inputs	2.1YYY-010	
2	Data logger 9 inputs	2.1YYY-020	
3	Data logger 12 inputs	2.1YYY-030	
4	PT 100 temperature sensor	2.1YYY-040	
5	Humidity sensor	2.1YYY-050	
6	Air pressure sensor	2.1YYY-060	



Instruments for permeability determination

Size	suitable	Art.no.	€
1	Permeability checking	2.2YYY-010	
2	Permeability measuring Permmaster	2.2YYY-020	
3	Permeability measuring Magnetmaster	2.2YYY-030	



Permeability checking



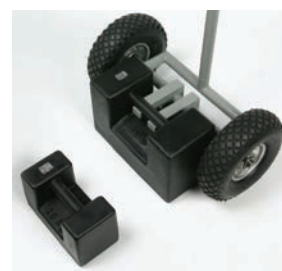
Permeability measuring
Magnetmaster



Permeability measuring
Permmaster

Transport tools for weights

Size	suitable	Art.no.	€
1	Transport cart	1.3YYY-410	
2	Lifting tool	1.3YYY-420	



Transport cart



Lifting tool

Materials to protect the adjustment chamber from external influences for weights of class M1-M3

Disc plugs and underlay plates must always be used together.

Disc plugs

Disc plugs made of tin are our standard, as tin has no magnetic properties and therefore does not influence the measurement results. Less expensive disc plugs made of lead are available upon customer request when magnetic properties are not a major concern.

Size	Ø	Thickness	Suitable for / additional information	Type of weight	Material	Art.no.	€
1	5 mm	1 mm	20 g		Knob weights	Lead	1.7ZVY-010
2	7 mm	1,5 mm	50 g / 100 g		Knob weights	Lead	1.7ZVY-020
3	10 mm	2 mm	200 g / 500 g		Knob weights	Lead	1.7ZVY-030
4	16 mm	2 mm	Special size		Knob weights	Lead	1.7ZVY-040
5	18 mm	3 mm	1 kg / 2 kg		Knob weights	Lead	1.7ZVY-050
6	20 mm	2 mm	Special size		Knob weights	Lead	1.7ZVY-060
7	22,5 mm	2 mm	Special size		Knob weights	Lead	1.7ZVY-070
8	24 mm	3 mm	5 kg / 10 kg		Knob weights	Lead	1.7ZVY-080
1	5 mm	1 mm	20 g		Knob weights	Blei	1.7PVY-010
2	7 mm	1,5 mm	50 g / 100 g		Knob weights	Blei	1.7PVY-020
3	10 mm	2 mm	200 g / 500 g		Knob weights	Blei	1.7PVY-030
4	16 mm	2 mm	Special size		Knob weights	Blei	1.7PVY-040
5	18 mm	3 mm	1 kg / 2 kg		Knob weights	Blei	1.7PVY-050
6	24 mm	3 mm	5 kg / 10 kg		Knob weights	Blei	1.7PVY-080
7	30 mm	4,5 mm	100 kg / 200 kg / 500 kg / 1.000 kg / 2.000 kg		Block weights made of cast iron	Blei	1.7PVY-090
8			5 kg / 10 kg / 20 kg / 50 kg		Block weights made of cast iron*	Blei	1.7PVY-100

*Length x width x thickness: 28 mm x 21 mm x 4 mm

Underlay plates

Underlay plates made of brass or steel are used as a backing for the disc plugs.

Size	Ø	Thickness	Suitable for / additional information	Type of weight	Material	Art.no.	€
1	5 mm	1 mm	20 g		Knob weights	Brass	1.7MUY-010
2	7 mm	2 mm	50 g / 100 g		Knob weights	Brass	1.7MUY-020
3	10 mm	2 mm	200 g / 500 g		Knob weights	Brass	1.7MUY-030
4	16 mm	2 mm	Special size		Knob weights	Brass	1.7MUY-040
5	18 mm	3,5 mm	1 kg / 2 kg		Knob weights	Brass	1.7MUY-050
6	20 mm	3 mm	Special size		Knob weights	Brass	1.7MUY-060
7	22,5 mm	2 mm	Special size		Knob weights	Brass	1.7MUY-070
8	24 mm	3 mm	5 kg / 10 kg		Knob weights	Brass	1.7MUY-080
9	30 mm	3 mm	Special size		Knob weights	Brass	1.7MUY-090
10			5 kg / 10 kg / 20 kg / 50 kg		Block weights made of cast iron*	Steel	1.7MUY-100

*Length x width x thickness: 28 mm x 21 mm x 5 mm

Sealing plugs DIN 1924

Sealing plugs made of lead are suitable for gray cast iron button and slot weights.

Size	Ø	Thickness	Suitable for / additional information	Type of weight	Material	Art.no.	€
1	24 mm	23 mm	Special size		Slotted weights	Lead	1.7PPY-010
2	23 mm	22 mm	20 kg / 50 kg		Slotted weights	Lead	1.7PPY-020
3	22 mm	21 mm	20 kg / 50 kg		Slotted weights	Lead	1.7PPY-030
4	21 mm	20 mm	10 kg		Slotted weights	Lead	1.7PPY-040
5	20 mm	19 mm	10 kg		Slotted weights	Lead	1.7PPY-050
6	19 mm	19 mm	10 kg		Slotted weights	Lead	1.7PPY-060
7	18 mm	18 mm	5 kg		Slotted weights	Lead	1.7PPY-070
8	17 mm	17 mm	20 kg (knob w.), 5 kg (slotted w.)		Knob weights / slotted weights	Lead	1.7PPY-080
9	16 mm	16 mm	5 kg (knob w.), 2 kg (slotted w.)		Knob weights / slotted weights	Lead	1.7PPY-090
10	15 mm	15 mm	10 kg		Knob weights	Lead	1.7PPY-100
11	14 mm	14 mm	10 kg		Knob weights	Lead	1.7PPY-110
12	13 mm	13 mm	10 kg		Knob weights	Lead	1.7PPY-120
13	12 mm	12,5 mm	500 g / 1 kg (knob w.), 500 g / 1 kg (slotted w.)		Knob weights / slotted weights	Lead	1.7PPY-130
14	11 mm	12 mm	500 g / 1 kg (knob w.), 500 g / 1 kg (slotted w.)		Knob weights / slotted weights	Lead	1.7PPY-140
15	10 mm	10,5 mm	Special size		Knob weights	Lead	1.7PPY-150
16	9 mm	10 mm	Special size		Knob weights	Lead	1.7PPY-160
17	8 mm	9 mm	Special size		Knob weights	Lead	1.7PPY-170

Adjustment granules

Adjustment granules are used as filling material when adjusting weights of classes F1, F2 and M1-M3.

Size	Ø	Material	Art.no.	€/kg
1	2 mm	Lead	1.7PGY-010	
2	3 mm	Lead	1.7PGY-020	
3	6 mm	Lead	1.7PGY-030	
1	1 mm	Stainless steel	1.7EGY-010	
2	2 mm	Stainless steel	1.7EGY-020	
1	1 mm	Tin	1.7ZGY-010	



Recalibration

Recalibration including checking of magnetism

E0 PTB-test or calibration*

*Certification of the conventional weighing value and the mass, if the values of the determination of the volume/density are available.

E1 PTB-test or calibration*

*Certification of the conventional weighing value and the mass, if the values of the determination of the volume/density are available.

E1 DAkkS-Calibration certificate

SINGLE WEIGHT

Nominal value	Art.no	€
1 mg–500 mg	1325	
1 g–1 kg	1326	
2 kg–10 kg	1327	
20 kg	1328	
50 kg	1329	

The examination of the magnetic properties according OMIL R 111-2004 is included in these prices.

SETS

Nominal value	Art.no	€
1 g–50 g	1384	
1 g–100 g	1385	
1 g–200 g	1386	
1 g–500 g	1387	
1 g–1 kg	1388	
1 g–2 kg	1389	
1 g–5 kg	1390	
1 g–10 kg	1391	

Nominal value	Art.no	€
1 mg–500 mg	1392	
1 mg–50 g	1393	
1 mg–100 g	1394	
1 mg–200 g	1395	
1 mg–500 g	1396	
1 mg–1 kg	1397	
1 mg–2 kg	1398	
1 mg–5 kg	1399	
1 mg–10 kg	1400	

E2 DAkkS-Calibration certificate

SINGLE WEIGHT

Nominal value	Art.no	€
1 mg–2 kg	1320	
5 kg–10 kg	1322	
20 kg	1323	
50 kg	1324	

SETS

Nominal value	Art.no	€
1 g–50 g	1367	
1 g–100 g	1368	
1 g–200 g	1369	
1 g–500 g	1370	
1 g–1 kg	1371	
1 g–2 kg	1372	
1 g–5 kg	1373	
1 g–10 kg	1374	

Nominal value	Art.no	€
1 mg–500 mg	1375	
1 mg–50 g	1376	
1 mg–100 g	1377	
1 mg–200 g	1378	
1 mg–500 g	1379	
1 mg–1 kg	1380	
1 mg–2 kg	1381	
1 mg–5 kg	1382	
1 mg–10 kg	1383	

F1 DAkkS-Calibration certificate**SINGLE WEIGHT**

Nominal value	Art.no.	€
1 mg–2 kg	1470-1	
5 kg–10 kg	1311-1	
20 kg	1312-1	
50 kg	1313-1	
100 kg, F1, PTB-Calibration	1461-1	
200 kg, F1, PTB- Calibration	1462-1	
500 kg, F1, PTB- Calibration	1463-1	
1000 kg, F1, PTB-Calibration	1464-1	
2000 kg, F1, PTB- Calibration	1465-1	

SETS

Nominal value	Art.no.	€	Nominal value	Art.no.	€
1 g–50 g	1350-1		1 mg–500 mg	1358-1	
1 g–100 g	1351-1		1 mg–50 g	1359-1	
1 g–200 g	1352-1		1 mg–100 g	1360-1	
1 g–500 g	1353-1		1 mg–200 g	1361-1	
1 g–1 kg	1354-1		1 mg–500 g	1362-1	
1 g–2 kg	1355-1		1 mg–1 kg	1363-1	
1 g–5 kg	1356-1		1 mg–2 kg	1364-1	
1 g–10 kg	1357-1		1 mg–5 kg	1365-1	
			1 mg–10 kg	1366-1	

Individual nominal values or intermediate values like newton weights or weights in other units are calculated with an extra charge of 10,00 EUR /piece. Necessary costs for reparation and adjustment are calculated after prior consultation in a cost estimation.

F2 DAkkS-Calibration certificate**SINGLE WEIGHT**

Nominal value	Art.no.	€
1 mg–2 kg	1470	
5 kg–10 kg	1311	
20 kg	1312	
50 kg	1313	
100 kg	1314	
200 kg	1315	
500 kg	1316	
1000 kg	1317	

SETS

Nominal value	Art.no.	€	Nominal value	Art.no.	€
1 g–50 g	1350		1 mg–500 mg	1358	
1 g–100 g	1351		1 mg–50 g	1359	
1 g–200 g	1352		1 mg–100 g	1360	
1 g–500 g	1353		1 mg–200 g	1361	
1 g–1 kg	1354		1 mg–500 g	1362	
1 g–2 kg	1355		1 mg–1 kg	1363	
1 g–5 kg	1356		1 mg–2 kg	1364	
1 g–10 kg	1357		1 mg–5 kg	1365	
			1 mg–10 kg	1366	

Individual nominal values or intermediate values like newton weights or weights in other units are calculated with an extra charge of 10,00 € /piece. Necessary costs for reparation and adjustment are calculated after prior consultation in a cost estimation.

M1**M2****M3**

DAkkS-Calibration certificate

SINGLE WEIGHT

Nominal value	Art.no.	€
1 mg–2 kg	1301	
5 kg–10 kg	1302	
20 kg	1304	
50 kg	1305	
100 kg	1306	
200 kg	1307	
500 kg	1308	
1000 kg	1309	
2000 kg	1310	

SETS

Nominal value	Art.no.	€	Nominal value	Art.no.	€
1 g–50 g	1333		1 mg–500 mg	1341	
1 g–100 g	1334		1 mg–50 g	1342	
1 g–200 g	1335		1 mg–100 g	1343	
1 g–500 g	1336		1 mg–200 g	1344	
1 g–1 kg	1337		1 mg–500 g	1345	
1 g–2 kg	1338		1 mg–1 kg	1346	
1 g–5 kg	1339		1 mg–2 kg	1347	
1 g–10 kg	1340		1 mg–5 kg	1348	
			1 mg–10 kg	1349	

Individual nominal values or intermediate values like newton weights or weights in other units are calculated with an extra charge of 10,00 EUR /piece. Necessary costs for reparation and adjustment are calculated after prior consultation in a cost estimation.

Lettering and engraving

Foil stamping, engraving and special labels

Style	Description	Using for	Art. no.	€
Type 1	3 or 5-digit character string, as an impression with engraving stamp	Alphanumeric characters, suitable for lead, brass and stainless steel	2001	
Type 2	3- or 5-digit character string, as a CNC engraving	Alphanumeric characters, suitable for grey cast iron, brass and stainless steel	2002	
Type 3	Special engravings	Logos and customised letting (e.g. barcodes)	2003	
Type 4	Special labels for containers (wooden boxes, synthetic case, service-case for weights)	Lettering with customised text, logos and barcodes on silver-coloured labels (Easy label software)	2004	

Engravings and impressions on weights. Therefore, they should be carried out before any adjustment or calibration

Special laser inscriptions (special occasion inscriptions that are easy on materials)

Style	Description	Using for	Art. no.	€
Type 1	1- or 2-digit	Alphanumeric character string for leaf weights 1 mg – 5 mg	2010	
Type 2	3- or 5-digit	Alphanumeric character string for all defined weights and units of weight 1 g – 500 kg (stainless steel, brass etc.)	2012	
Type 3	Special user characters	Customer-specific content, e.g. serial number, bar codes (line and data matrix) etc.	2013	
Type 4	Logos	Customer logos (prepared in jpeg, tiff, gif or pdf formats)	2014	

The material structure of the pieces of mass and defined weights is not magnetised. The ability to polish and corn size are maintained to the full extent. Material removal is virtually negligible depending on the font size and the number of characters.



SimplyCal®
BALANCE CALIBRATION

PERFECTLY
CALIBRATED

WHAT IS SimplyCal?

SimplyCal is software for Windows operating computers that assists users in testing and calibrating nonautomatic balances and guides through individually adjustable test methods. SimplyCal differentiates between single-range, multi-range and multi-interval scales. Based on master data SimplyCal analyses entered measurement results and calculates the measurement uncertainty of the balance according to EURAMET/cg-18.

Finally the user generates a calibration certificates or a DAkkS-certificate (in case the calibration laboratory is accredited by Deutsche Akkreditierungsstelle). The calibration validity of test mediums is constantly monitored. The software is optimally suitable for accredited calibration laboratories. SimplyCal can be used as single-user system (computer /notebook) or as multi-user system with a central database (SQL server database).

WHY SimplyCal?

- balance calibration compliant to EURAMET/cg-18
- user-friendly and practice-oriented developed from calibration specialists for calibration specialists
- individualization through adaptable program parameters
- interface to all common ERP systems
- programming, service and technical support through professional software house



Certified to
DIN EN ISO 9001:2015



Accredited to
DIN EN ISO/IEC 17025:2018



Member of
Deutscher
Kalibrierdienst



HOW DOES SimplyCal WORK?

- management of master data (incl. customers, balance producer, test weights, climate measurement tools and much more)
- six test methods for different types of balances (several minimum and maximum methods)
- testing of repeatability, eccentricity and accuracy
- calculation of minimum sample weight
- calculation of results (statistics and graphs)
- generation of calibration certificate and DAkkS certificate
- monitoring of measuring instruments (test weights and climate measurement instruments)
- quick access functions synchronization of Hafner calibration data for test weights

SOFTWARE FOR CALIBRATING BALANCES FOR PRACTITIONERS



- | | |
|--------------------------------|---|
| ■ single-user system | ■ multi-user system |
| ■ full function range | ■ central database in server version |
| ■ suitable for single auditors | ■ mobile data exchange through VPN connection |





Building
trust
together.

Certificate

DQS Holding has issued an IQNET recognized certificate that the organization:

Häfner Gewichte GmbH
Hohenhardtsweiler Straße 4
DE-74420 Oberrot Germany

has implemented and maintains a
Quality Management System

for the following scope:

Design; manufacturing; adjustment and sales of weights; mass standards; load bodies and set of weights of all accuracy classes and nominal values, including accessories; Organizational and operational aspects for providing calibration services; Production and first sampling of precision parts

which fulfils the requirements of the following Standard:

ISO 9001:2015

Issued on: **2025-04-14**
Expires on: **2028-04-13**

Registration Number: **DE-065399 QM15**



Alex Stoichitoiu
Alex Stoichitoiu
President of IQNET

Pedro Alves
Pedro Alves
Managing Director of IQNET

This annex is only valid in connection with the original certificate number mentioned above.

IQNET Members*:

AENOR Spain · AFNOR Certification France · APCER Portugal · CCC Cyprus · CISO Italy · CQC China · COM China · COS Czech Republic · Cro Cert Croatia · DQS Holding GmbH Germany · EAGLE Certification Group USA · FCAV Brazil · FONDONORMA Venezuela · ICONTEC Colombia · ICS Bosnia and Herzegovina · INTECO Costa Rica · IRAM Argentina · JOA Japan · KFO Korea · LSQA Uruguay · MIRTEC Greece · MSZT Hungary · Nemko AS Norway · NSAI Ireland · NYCE México · PCBC Poland · Quality Austria Austria · SII Israel · SIQ Slovenia · SIRIM QAS International Malaysia · SQS Switzerland · SRAC Romania · TSE Türkiye · YUQS Serbia

* The list of IQNET Members is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com



CERTIFICATE



This is to certify that



Häfner Gewichte GmbH

Hohenhardtsweiler Straße 4
74420 Oberrot
Germany

with the organizational units/sites as listed in the annex
has implemented and maintains a **Quality Management System**.

Scope:

Design; manufacturing; adjustment and sales of weights; mass standards; load bodies and set of weights of all accuracy classes and nominal values, including accessories;
Organizational and operational aspects for providing calibration services;
Production and first sampling of precision parts

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2015

Certificate registration no. 065399 QM15
Valid from 2025-04-14
Valid until 2028-04-13
Date of certification 2025-04-07



DQS IS A MEMBER OF



DQS GmbH

Christian Gerling
Managing Director

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main, Germany
The validity of the certification can only be verified by the QR-code.

1 / 2



Deutsche Akkreditierungsstelle GmbH

Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV
Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition

Accreditation



The Deutsche Akkreditierungsstelle GmbH attests that the calibration laboratory

Häfner Gewichte GmbH
MASSCAL - Kalibrierlaboratorium
Rottalstraße 95, 74420 Oberrot, Germany

is competent under the terms of DIN EN ISO/IEC 17025:2018 to carry out calibrations in the following fields:

Mechanical quantities
- Mass (mass standards) *)
- Volume of solids
- Density of solids

*) also on-site calibration

The accreditation certificate shall only apply in connection with the notice of accreditation of 25.05.2020 with the accreditation number D-K-15192-01. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 5 pages.

Registration number of the certificate: **D-K-15192-01-00**

Berlin,
25.05.2020

Dr. Heike Manke
Head of Division

Translation issued:
25.05.2020

By H. Manke
Head of Division

The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/content/accredited-bodies-dakks>

This document is a translation. The definitive version is the original German accreditation certificate.
See notes overleaf.



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The general delivery and payment conditions are available in the terms and conditions at

<http://www.haefner.de/haefner/agbs.html>

Or by scanning the QR code.