

Test weights and boxes

Class E1



Milligram weights, wire shape

Individual weights, knob shape

Wooden box, for milligram weights



Plastic box, lined,
for individual weights
 ≤ 50 g

Plastic box, lined,
for individual weights
 ≥ 100 g

Wooden box, lined,
for individual weights ≤ 500 g

Wooden box, lined,
for individual weights ≥ 1 kg



Milligram weight
set in plastic box
(308-42)

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




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

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

Wooden case, lined, for weight
sets, knob shape




Class E1 - Milligram weights, wire shape

Test weight material: stainless steel

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

Class E1 - Individual weights, knob shape




Test weight material: stainless steel polished

Weight	Tol +/- mg	Individual weight, knob shape	Plastic box	Aluminium protected box	Wooden box	DAkkS certificate Initial calibration*	DAkkS certificate Recalibration
		KERN	KERN 	KERN 	KERN 	KERN	KERN
1 g	0,010	307-01	317-020-400	317-010-600	317-010-100	963-231	962-231 R
2 g	0,012	307-02	317-020-400	317-020-600	317-020-100	963-232	962-232 R
5 g	0,016	307-03	317-030-400	317-030-600	317-030-100	963-233	962-233 R
10 g	0,020	307-04	317-040-400	317-040-600	317-040-100	963-234	962-234 R
20 g	0,025	307-05	317-050-400	317-050-600	317-050-100	963-335	962-235 R
50 g	0,030	307-06	317-060-400	317-060-600	317-060-100	963-236	962-236 R
100 g	0,050	307-07	317-070-400	317-070-600	317-070-100	963-237	962-237 R
200 g	0,100	307-08	317-080-400	317-080-600	317-080-100	963-238	962-238 R
500 g	0,250	307-09	317-090-400	317-090-600	317-090-100	963-239	962-239 R
1 kg	0,500	307-11	317-110-400	317-110-600	317-110-100	963-241	962-241 R
2 kg	1,000	307-12	317-120-400	317-120-600	317-120-100	963-242	962-242 R
5 kg	2,500	307-13	317-130-400	317-130-600	317-130-100	963-243	962-243 R
10 kg	5,000	307-14	317-140-400	317-140-600	317-140-100	963-244	962-244 R
20 kg	10,000	307-15	-	317-150-600	317-150-100	963-245	962-245 R
50 kg	25,000	307-16	-	317-160-600	317-160-100	963-246	962-246 R

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

Class E1 - Weight sets, knob shape

Test weight material: stainless steel polished

Weight set	Knob shape in plastic case	Knob shape in alu- minium protected case	Knob shape in wooden case	DAkkS certificate Initial calibration*	DAkkS certificate Recalibration
	KERN 	KERN 	KERN 	KERN	KERN
1 mg - 500 mg	308-42	308-426		962-250	962-250 R
1 mg - 50 g	303-024	303-026	303-02	963-201	962-201 R
1 mg - 100 g	303-034	303-036	303-03	963-202	962-202 R
1 mg - 200 g	303-044	303-046	303-04	963-203	962-203 R
1 mg - 500 g	303-054	303-056	303-05	963-204	962-204 R
1 mg - 1 kg	303-064	303-066	303-06	963-205	962-205 R
1 mg - 2 kg	303-074	303-076	303-07	963-206	962-206 R
1 mg - 5 kg	303-084	303-086	303-08	963-207	962-207 R
1 mg - 10 kg	-	303-096	303-09	963-208	962-208 R
1 g - 50 g	304-024	304-026	304-02	963-215	962-215 R
1 g - 100 g	304-034	304-036	304-03	963-216	962-216 R
1 g - 200 g	304-044	304-046	304-04	963-217	962-217 R
1 g - 500 g	304-054	304-056	304-05	963-218	962-218 R
1 g - 1 kg	304-064	304-066	304-06	963-219	962-219 R
1 g - 2 kg	304-074	304-076	304-07	963-220	962-220 R
1 g - 5 kg	304-084	304-086	304-08	963-221	962-221 R
1 g - 10 kg	-	304-096	304-09	963-222	962-222 R

KERN Pictograms

 Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)	 Network interface: For connecting the scale to an Ethernet network	 Suspended weighing: Load support with hook on the underside of the balance
 Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required	 KERN Communication Protocol (KCP): It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems	 Battery operation: Ready for battery operation. The battery type is specified for each device
 Easy Touch: Suitable for the connection, data transmission and control through PC or tablet.	 Rechargeable battery pack: Rechargeable set	
 Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	 GLP/ISO log: The balance displays weight, date and time, independent of a printer connection	 Universal plug-in power supply: with universal input and optional input socket adapters for A) EU, CH, GB B) EU, CH, GB, USA C) EU, CH, GB, USA, AUS
 Alibi memory: Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.	 GLP/ISO log: With weight, date and time. Only with KERN printers.	 Plug-in power supply: 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available
 KERN Universal Port (KUP): allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WLAN, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort	 Piece counting: Reference quantities selectable. Display can be switched from piece to weight	 Integrated power supply unit: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
 Data interface RS-232: To connect the balance to a printer, PC or network	 Recipe level A: The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out	 Weighing principle: Strain gauges Electrical resistor on an elastic deforming body
 RS-485 data interface: To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible	 Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display	 Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate
 USB data interface: To connect the balance to a printer, PC or other peripherals	 Totalising level A: The weights of similar items can be added together and the total can be printed out	 Weighing principle: Electromagnetic force compensation Coil inside a permanent magnet. For the most accurate weighings
 Bluetooth* data interface: To transfer data from the balance to a printer, PC or other peripherals	 Percentage determination: Determining the deviation in % from the target value (100 %)	 Weighing principle: Single cell technology: Advanced version of the force compensation principle with the highest level of precision
 WiFi data interface: To transfer data from the balance to a printer, PC or other peripherals	 Weighing units: Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details	 Verification possible: The time required for verification is specified in the pictogram
 Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.	 Weighing with tolerance range: (Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model	 DAkkS calibration possible (DKD): The time required for DAkkS calibration is shown in days in the pictogram
 Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements	 Hold function: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value	 Factory calibration (ISO): The time required for Factory calibration is shown in days in the pictogram
 Interface for second balance: For direct connection of a second balance	 Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram.	 Package shipment: The time required for internal shipping preparations is shown in days in the pictogram
		 Pallet shipment: The time required for internal shipping preparations is shown in days in the