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KERN
— eco —

Operating instructions Kitchen scales

KERN FGE

Typ FGE_A

Version 1.2
2021-04
GB



FGE-BA-e-2112



KERN FGE

Type FGE_A
Version 1.2 2021-04

Operating manual Kitchen scales

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1 Technical data

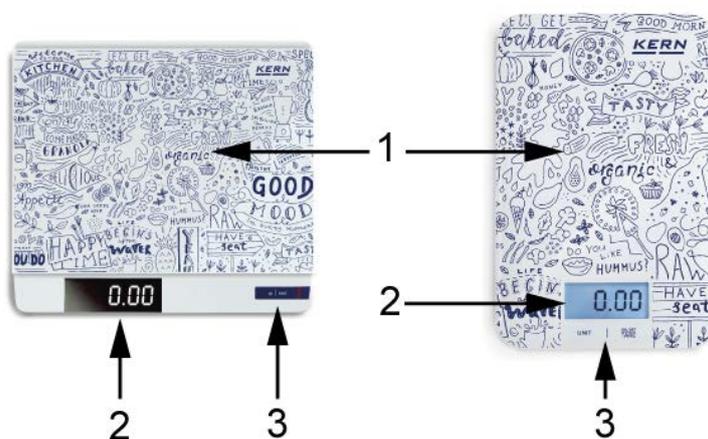
KERN	FGE 5K-3	FGE 10K-3
Item no./ Type	TFGE 5K-3-A	TFGE 15K-3-A
Readability (d)	1 g	1 g
Weighing range (max)	5 kg	15 kg
Reproducibility	15 g	20 g
Linearity	15 g	75 g
Warm-up time	1 s	
Weighing Units	g, fl.oz, lb:oz, ml	g, oz, lb:oz, ml
Stabilization time (typical)	2 s	
Smallest weight	5 g	
Operating temperature	0° C + 40° C	
Humidity of air	max. 80 % (not condensing)	
Weighing plate mm	152 x 230	272 x 205
Battery	2x CR2032	3x1.5V AAA
Auto-off	approx. 2 minutes	
Weight kg (net)	0.35	0.5

2 Declaration of conformity

The current EC/EU Conformity declaration can be found online in:

www.kern-sohn.com/ce

3 Appliance overview



Pos.	Designation
1	Weighing pan
2	Display
3	Keyboard

4 Basic Information (General)

4.1 Proper use

The balance you purchased is intended to determine the weighing value of material to be weighed. It is intended to be used as a “non-automatic balance”, i.e. the material to be weighed is manually and carefully placed in the centre of the weighing pan. As soon as a stable weighing value is reached, the weighing value can be read.

4.2 Improper Use

Do not use balance for dynamic weighing. In the event that small quantities are removed or added to the material to be weighed, incorrect weighing results can be displayed due to the “stability compensation“. (Example: Slowly draining fluids from a container on the balance.)

Do not leave permanent load on the weighing pan. This may damage the measuring system.

Impacts and overloading exceeding the stated maximum load (max) of the balance, minus a possibly existing tare load, must be strictly avoided. Balance may be damaged by this.

Never operate balance in explosive environment. The serial version is not explosion protected.

The structure of the balance may not be modified. This may lead to incorrect weighing results, safety-related faults and destruction of the balance.

The balance may only be used according to the described conditions. Other areas of use must be released by KERN in writing.

4.3 Warranty

Warranty claims shall be voided in case

- Our conditions in the operation manual are ignored
- The appliance is used outside the described uses
- The appliance is modified or opened
- Mechanical damage and damage caused by media, liquids, natural wear and tear
- The appliance is improperly set up or incorrectly electrically connected
- The measuring system is overloaded

4.4 Monitoring of Test Resources

In the framework of quality assurance the measuring-related properties of the balance and, if applicable, the testing weight, must be checked regularly. The responsible user must define a suitable interval as well as type and scope of this test. Information is available on KERN's home page (www.kern-sohn.com) with regard to the monitoring of balance test substances and the test weights required for this. In KERN's accredited DKD calibration laboratory test weights and balances may be calibrated (return to the national standard) fast and at moderate cost.

5 Basic Safety Precautions

5.1 Pay attention to the instructions in the Operation Manual



⇒ Carefully read this operation manual before setup and commissioning, even if you are already familiar with KERN balances.

5.2 Personnel training

The appliance may only be operated and maintained by trained personnel.

6 Transport and storage

6.1 Check upon acceptance

When receiving the appliance, please check packaging immediately, and the appliance itself when unpacking for possible visible damage.

6.2 Packaging / return transport



- ⇒ Keep all parts of the original packaging for a possibly required return.
- ⇒ Only use original packaging for returning.
- ⇒ Prior to dispatch disconnect all cables and remove loose/mobile parts.
- ⇒ Reattach possibly supplied transport securing devices.
- ⇒ Secure all parts such as the glass wind screen, the weighing platform, power unit etc. against shifting and damage.

7 Unpacking, Setup and Commissioning

7.1 Installation Site, Location of Use

The balances are designed in a way that reliable weighing results are achieved in common conditions of use.

You will work accurately and fast, if you select the right location for your balance.

Therefore, observe the following for the installation site:

- Place the balance on a firm, level surface;
- Avoid extreme heat as well as temperature fluctuation caused by installing next to a radiator or in the direct sunlight;
- Protect the balance against direct draughts due to open windows and doors;
- Avoid jarring during weighing;
- Protect the balance against high humidity, vapours and dust;
- Do not expose the device to extreme dampness for longer periods of time. Non-permitted condensation (condensation of air humidity on the appliance) may occur if a cold appliance is taken to a considerably warmer environment. In this case, acclimatize the disconnected appliance for ca. 2 hours at room temperature.
- Avoid static charging of the material to be weighed, weighing container and windshield.

Major display deviations (incorrect weighing results) may be experienced, should electromagnetic fields (e.g. due to mobile phones or radio equipment), static electricity accumulations or instable power supply occur. Change location or remove source of interference.

7.2 Unpacking

Carefully remove the balance from the packaging, remove plastic cover and setup balance at the intended workstation.

7.2.1 Placing

The balance must be installed in a way that the weighing plate is exactly in horizontal position.

7.2.2 Scope of delivery

Serial accessories:

- Balance
- Operating manual
- Batteries

7.2.3 Basic structure

- Place the balance on a horizontal and solid base.

7.3 Battery operation

Lift-off the battery cover on the lower side of the balance. Insert batteries.

Reinsert the battery cover.

For battery operation, the scale is equipped with an automatic switch-off function after approx. 2 minutes.

7.4 Initial Commissioning

In order to obtain exact results with the electronic balances, your balance must have reached the operating temperature (see warming up time chap. 1). For this warm-up period the scale must be connected to the power supply (batteries).

The accuracy of the balance depends on the local acceleration of gravity.

7.5 Keyboard overview

FGE 10K-3		<ul style="list-style-type: none">• Switch on / off balance• Unit commutation• Tare balance
FGE 5K-3		<ul style="list-style-type: none">• Unit commutation
		<ul style="list-style-type: none">• Switch on / off balance• Tare balance

7.6 Adjustment



An adjustment must be carried out by a well acquainted specialist with the workings of weighing balances..

You can find detailed instructions on how to do this in our additional description "Adjustment", available on our KERN homepage (www.kern-sohn.com).

8 Operation

Switch on balance:

To turn on the balance

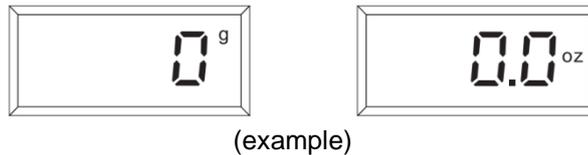
<ul style="list-style-type: none">in model FGE 5K-3 press the button 
<ul style="list-style-type: none">in model FGE 10K-3 press the button 

“0 g” is displayed. The balance is now ready for operation.

Unit commutation:

<ul style="list-style-type: none">for model FGE 5K-3 in zero display press button 
<ul style="list-style-type: none">for model FGE 10K-3: immediately after switching on press the key 

Now the desired unit can be selected.



Weighing:

When „0“ is displayed, place the weighing good on the weighing pan, the weight of the weighing good appears on the display, in the previously adjusted unit, e.g.:



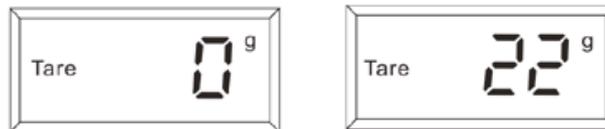
Taring:

Place the weighing container and

<ul style="list-style-type: none">in model FGE 5K-3 press the button	
<ul style="list-style-type: none">in model FGE 10K-3 press the button	

In the display appears

„Tare 0 “. Fill the weighing good into the container, the weight of the weighing good is displayed, e.g. „Tare 22 g“:



The taring process can be repeated any number of times.

Switch off the balance:

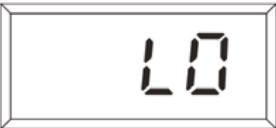
When zero displayed:

<ul style="list-style-type: none">in model FGE 5K-3 press the button	
<ul style="list-style-type: none">in model FGE 10K-3 press the button	

or:

The balance will automatically switch off after some seconds (see chap. 1) (via the auto-off function).

9 Error reports

	Battery capacity exhausted: Please change batteries
	Overload warning: The max load of the balance has been exceeded; please remove the load, otherwise the balance could be damaged

10 Servicing, maintenance, disposal

10.1 Cleaning

Before cleaning, disconnect the appliance from the operating voltage.

Please do not use aggressive cleaning agents (solvents or similar agents), but a cloth dampened with mild soap suds. Ensure that no liquid penetrates into the device and wipe with a dry soft cloth.

Loose residue sample/powder can be removed carefully with a brush or manual vacuum cleaner.

Spilled weighing goods must be removed immediately.

10.2 Servicing, maintenance

The appliance may only be opened by trained service technicians who are authorized by KERN.

Before opening, disconnect from power supply.

10.3 Disposal

Disposal of packaging and appliance must be carried out by operator according to valid national or regional law of the location where the appliance is used.

11 Instant help

In case of an error in the program process, briefly turn off the balance and disconnect from power supply. The weighing process must then be restarted from scratch.

Help:

Fault

Possible cause

- | | |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The displayed weight does not glow. | <ul style="list-style-type: none">• The balance is not switched on.• The mains supply connection has been interrupted (mains cable not plugged in/faulty).• Power supply interrupted.• Batteries are inserted incorrectly or empty• No batteries inserted. |
| The displayed weight is permanently changing | <ul style="list-style-type: none">• Draught/air movement• Table/floor vibrations• The weighing plate is in contact with foreign matter.• Electromagnetic fields / static charging (choose different location/switch off interfering device if possible) |
| The weighing value is obviously wrong | <ul style="list-style-type: none">• The display of the balance is not at zero• Adjustment is no longer correct.• Great fluctuations in temperature.• Electromagnetic fields / static charging (choose different location/switch off interfering device if possible) |

Should other error messages occur, switch balance off and then on again. If the error message remains inform manufacturer.