



Operating instructions

Bench scale

KERN FPS

Type TFPS-A

Version 2.0

2026-03

en



TFPS-A-BA-e-2620



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Version 2.0 2026-03

Operating instructions Bench scale

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1 Technical data

KERN	FPS 3K-4	FPS 6K-3	FPS 15K-3	FPS 30K-3
Item number / Type	TFPS 3K-4-A	TFPS 6K-3-A	TFPS 15K-3-A	TFPS 30K-3-A
Readability (d)	0.0002 kg	0.0005 kg	0.001 kg	0.002 kg
Weighing range (max)	3 kg	6 kg	15 kg	30 kg
Reproducibility	0.0002 kg	0.0005 kg	0.001 kg	0.002 kg
Linearity	± 0.0006 kg	± 0.0015 kg	± 0.003 kg	± 0.006 kg
Stabilization time (typical)	2 s			
Smallest part weight when counting pieces under laboratory conditions*	200 mg	500 mg	1 g	2 g
Smallest piece weight when counting pieces under normal conditions**	2 g	5 g	10 g	20 g
Adjustment points	3 kg	3 / 6 kg	15 kg	15 kg
Recommended adjustment weight, not included, (class)	3 kg (M1)	6 kg (M1)	15 kg (M1)	30 kg (M1)
Warm-up time	30 min			
Weighing units	kg, g, PCS			
Humidity	max. 85% rel. (non-condensing)			
Permissible ambient temperature	-10 °C to + 40 °C			
Input voltage device	5 V, 1 A			
Input voltage power supply	100 V - 240 V; 50/60 Hz			
Battery operation (optional)	Operating time 500 hours (backlight off) Operating time 400 hours (backlight on) Charging time approx. 4 hours			
Auto off (battery)	Selectable off, 3, 10, 15, 30 min			
Housing dimensions	288 x 233 x 102 (W x D x H) [mm]			
Weighing plate, stainless steel	190 x 230 (W x D) [mm]			
Net weight (kg)	2.4 kg			
IP protection class	IP 68, IP 69K			

KERN	FPS 3K-3M	FPS 6K-3M	FPS 15K-3M	FPS 30K-2M
Item number / Type	TFPS 3K-3M-A	TFPS 6K-3M-A	TFPS 15K-3M-A	TFPS 30K-2M-A
Readability (d)	0.001 kg	0.002 kg	0.005 kg	0.01 kg
Weighing range (max)	3 kg	6 kg	15 kg	30 kg
Reproducibility	0.001 kg	0.002 g	0.005 kg	0.01 kg
Linearity	± 0.002 kg	± 0.006 kg	± 0.015 kg	± 0.03 kg
Stabilization time (typical)	2 s			
Calibration value (e)	0.001 kg	0.002 kg	0.005 kg	0.01 kg
Verification class	III	III	III	III
Minimum weight (min)	0.02 kg	0.04 kg	0.1 kg	0.2 kg
Smallest part weight when counting pieces under laboratory conditions*	1 g	2 g	5 g	10 g
Smallest part weight when counting pieces under normal conditions**	10 g	20 mg	50 g	100 g
Adjustment points	3 kg	3 / 6 kg	15 kg	15 kg
Recommended adjustment weight, not included, (class)	3 kg (M1)	6 kg (M1)	15 kg (M1)	30 kg (M1)
Warm-up time	10 min			
Weighing units	kg, g, PCS			
Humidity	max. 85% rel. (non-condensing)			
Permissible ambient temperature	-10 °C to + 40 °C			
Input voltage device	5 V, 1 A			
Input voltage power supply	100 V - 240 V; 50/60 Hz			
Battery operation (optional)	Operating time 500 hours (backlight off) Operating time 400 hours (backlight on) Charging time approx. 4 hours			
Auto off (battery)	Selectable off, 3, 10, 15, 30 min			
Housing dimensions	288 x 233 x 102 (W x D x H) [mm]			
Weighing plate, stainless steel	190 x 230 (W x D) [mm]			
Net weight (kg)	2.4 kg			
IP protection class	IP 68, IP 69K			

*** Smallest part weight for piece counting – under laboratory conditions:**

- Ideal environmental conditions for high-resolution counting
- No deviation among piece weights of the parts to be counted

**** Smallest part weight for piece counting – under normal conditions:**

- Unstable environmental conditions (draughts, vibrations)
- There are deviations among piece weights of the parts to be counted

2 Declaration of conformity

The current EC/EU declaration of conformity can be found online.

3 Device overview

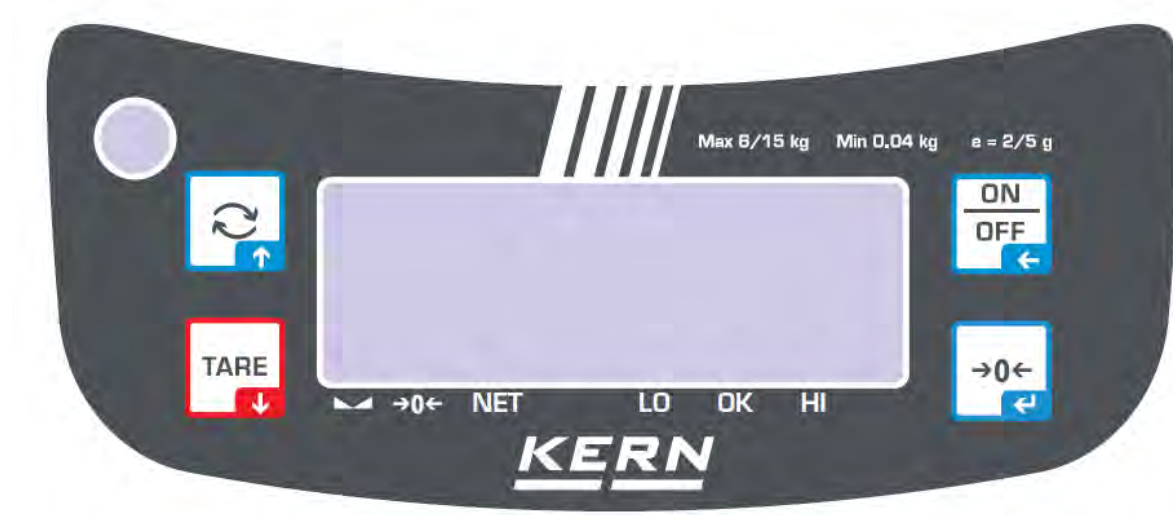
3.1 Components



Item	Description
1	Weighing plate
2	Display

Item	Description
3	Keyboard
4	Level indicator

3.2 Controls



3.2.1 Keyboard overview

Key	Designation	Function in operating mode	Function in menu
	[ON/OFF]	Switch on / Switch off	- Navigation button ← - Back menu level
	[ZERO]	Zero setting	Confirm menu item
	[TARE]	Taring	Navigation button ↓
	[CHANGE]	Switch displayed weighing unit	Navigation button ↑

3.2.2 Numeric input

Key	Designation	Description
	[ZERO]	Select digit
	[TARE]	Increase flashing digit (0-9)
	[CHANGE]	Confirm entry (press button repeatedly for each digit)

3.2.3 Display overview

Display	Description
	Battery charge indicator
→0←	Zero display
	Stability indicator
NET	Net weight value display
LO	Below tolerance limit
OK	Value within tolerance limits
HI	Tolerance limit exceeded
kg / g	Weighing unit

4 Basic information (general)

4.1 Intended use

The scale you have purchased is designed to determine the weight of items being weighed. It is intended for use as a "non-automatic scale", i.e. the items to be weighed are placed manually, carefully and centrally on the weighing plate. Once a stable weight value has been reached, the weight value can be read off.

4.2 Improper use

- Our scales are non-automatic scales and are not intended for use in dynamic weighing processes. However, the scales can also be used for dosing applications after checking the individual area of application and the accuracy requirements.
- Avoid impacts and overloading the scale beyond the specified maximum load (Max) at all costs. This could damage the scale.
- Do not operate the scale in potentially explosive atmospheres.
- The scale must not be modified in any way. This can lead to incorrect weighing results, safety defects and destruction of the scale.
- The scale may only be used in accordance with the specifications described.

4.3 Warranty

The warranty shall be void in the event of

- Failure to observe our specifications in the operating instructions
- Use outside the described applications
- Modification or opening of the device
- Mechanical damage and damage caused by media, liquids, natural wear and tear
- Improper installation or electrical installation
- Overloading of the measuring mechanism

4.4 Test equipment monitoring

As part of quality assurance, the metrological properties of the scale and any test weights must be checked at regular intervals. The responsible user must define a suitable interval for this as well as the type and scope of this test. Information regarding the test equipment monitoring of scales and the test weights required for this purpose is available on the KERN website. [Test weights and scales](#) can be calibrated quickly and cost-effectively at KERN's accredited calibration laboratory (traceable to the national standard).

5 Basic safety instructions

5.1 Observe the instructions in the operating manual



⇒ Read the operating instructions carefully before installation and commissioning, even if you already have experience with KERN scales.

5.2 Training of personnel

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

6 Transport and storage

6.1 Inspection upon receipt

Please check the packaging immediately upon receipt and the device upon unpacking for any visible external damage.

6.2 Packaging/return transport



- ⇒ Keep all parts of the original packaging for any necessary return transport.
- ⇒ Only use the original packaging for return transport.
- ⇒ Before shipping, disconnect all connected cables and loose/movable parts.
- ⇒ Reattach any transport safety locks that may have been provided.
- ⇒ Secure all parts, e.g. windshield, weighing plate, power supply unit, etc., against slipping and damage.

7 Unpacking, installation and commissioning

7.1 Installation location, place of use

The scales are designed to achieve reliable weighing results under normal conditions of use.

You can work accurately and quickly if you choose the right location for your scale.

Please note the following at the installation site:

- Place the scale on a stable, level surface.
- Avoid extreme heat and temperature fluctuations, e.g. by placing the scale next to a heater or in direct sunlight.
- Protect the scales from direct draughts from open windows and doors.
- Avoid vibrations during weighing.
- Protect the scales from high humidity, vapours and dust.
- Do not expose the device to high humidity for long periods of time. Unauthorised condensation (condensation of air humidity on the device) may occur if a cold device is brought into a significantly warmer environment. In this case, allow the device to acclimatise at room temperature for approx. 2 hours after disconnecting it from the mains.
- Avoid static charging of the weighing goods and weighing container.
- Do not operate in areas where there is a risk of explosion or in areas where gases, vapours, mists or dusts may cause an explosion!
- Keep away from chemicals (e.g. liquids or gases) that could attack and damage the inside or outside of the scale.
- In the presence of electromagnetic fields, static charges (e.g. when weighing/counting plastic parts) and unstable power supplies, significant display deviations (incorrect weighing results and damage to the scale) are possible. The location must then be changed or the source of interference eliminated.
- Observe the IP protection class of the device

7.2 Unpacking and checking

Remove the device and accessories from the packaging, remove the packaging material and set up the device at the intended workplace. Check that all parts included in the scope of delivery are present and undamaged.

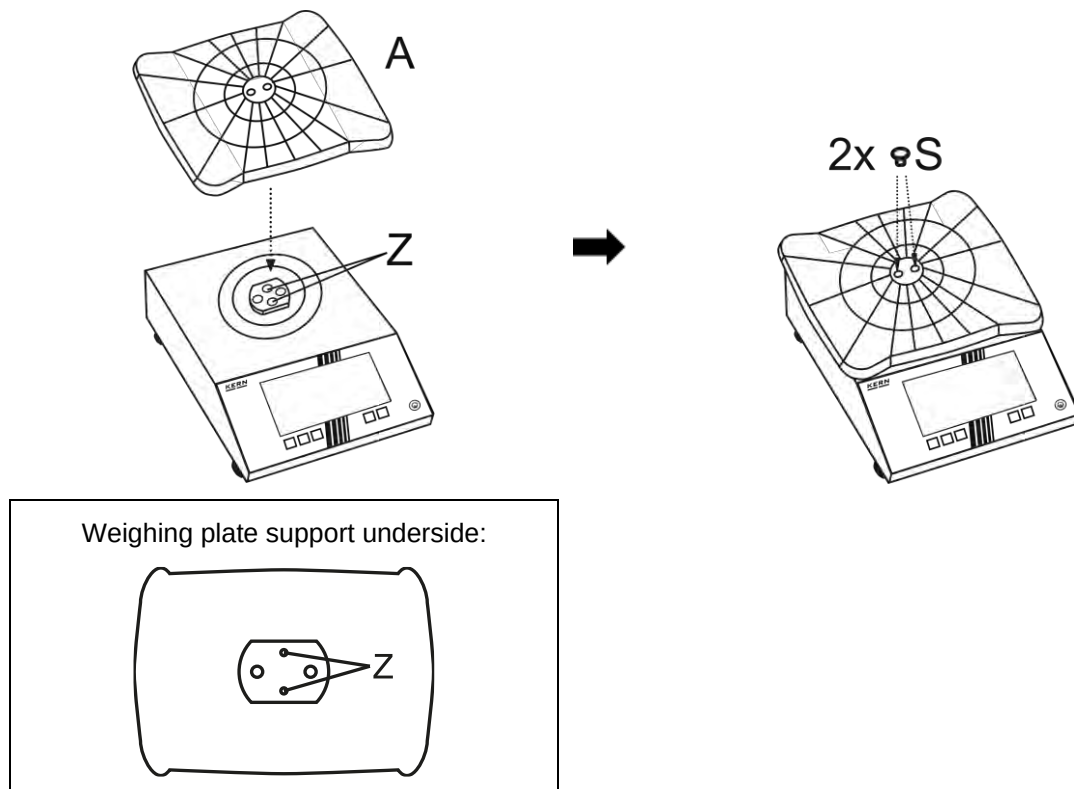
Scope of delivery / Standard accessories:

- Scale
- Weighing plate holder with hexagonal key
- Weighing plate
- Power cable
- Battery
- Operating instructions

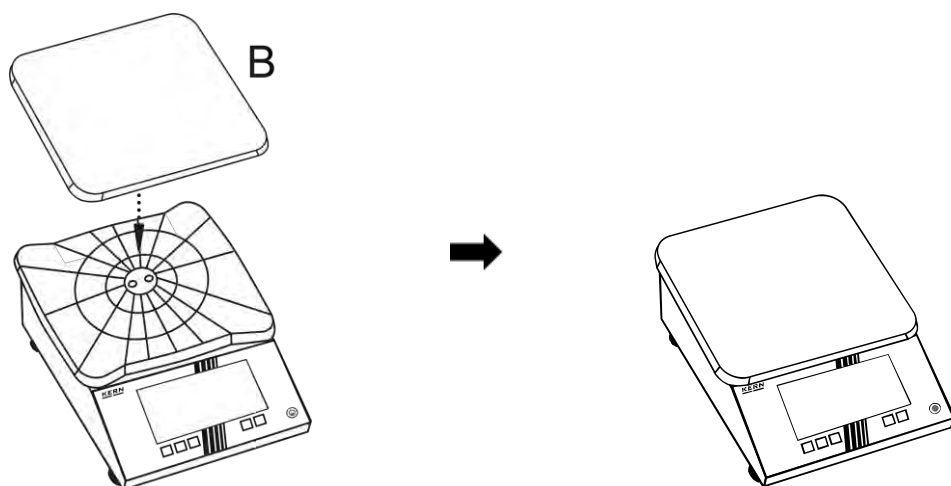
7.3 Assembly, installation, levelling and aligning the weighing plate

Installing the weighing plate:

1. Insert the weighing plate support (A) with the pins (Z) into the designated holes (Z).
2. Secure the weighing plate support with the 2 screws (S). You will find a suitable hex key on the top of the weighing plate support.

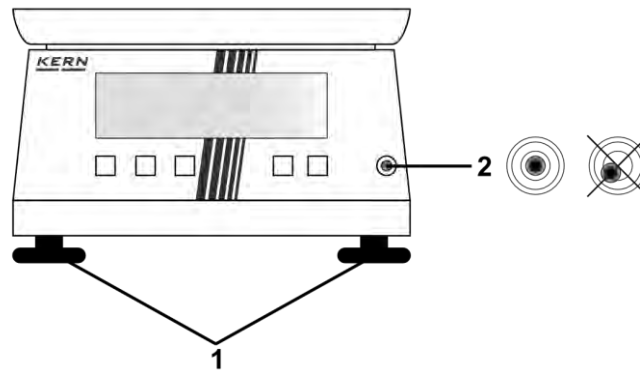


3. Place the weighing plate (B) on the weighing plate support.



Levelling:

1. Set up the scale at the place of use and make sure that it is level.
2. Level the scale using the foot screws (1) until the air bubble of the level indicator is in the specified circle (2).
3. Check the levelling regularly.



7.4 Mains connection



Select the country-specific mains plug and plug it into the power supply unit.



Check that the voltage consumption of the scale is set correctly. The scale may only be connected to the mains if the information on the scale (sticker) and the local mains voltage is identical.

Only use original KERN power supply units. The use of other brands requires the approval of KERN.



Important:

- Check the power cable for damage before use.
- Ensure that the power supply unit does not come into contact with liquids.
- The mains plug must be accessible at all times.

Connect the scale to the power supply:

1. Plug the USB cable into a mains plug with a USB-A connection (note the power specifications in the technical data) and plug the barrel connector into the scale.
2. Plug the mains plug into the socket.

7.5 Battery operation (optional)

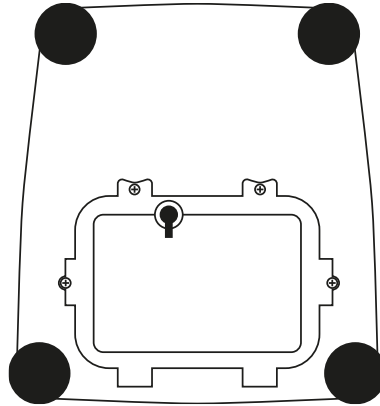
CAUTION



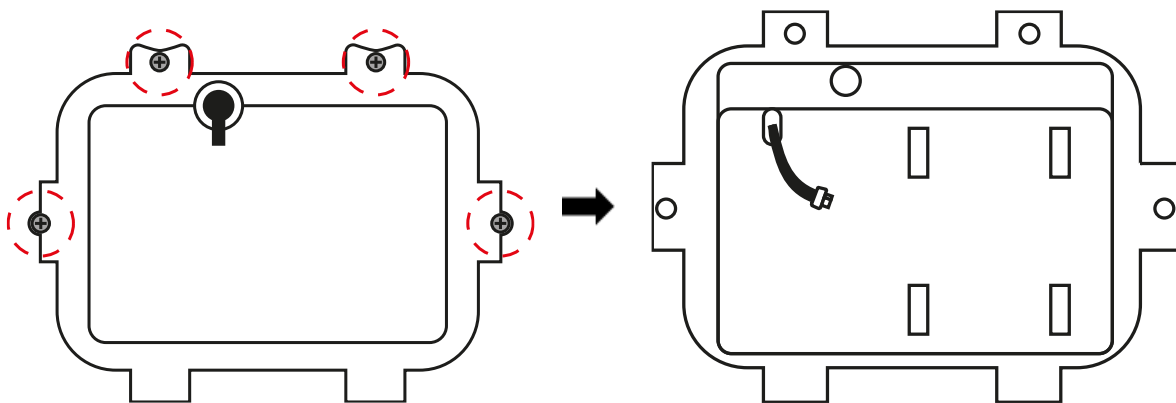
- ⇒ The battery and charger are designed to work together. Only use the mains adapter supplied.
- ⇒ The battery can only be replaced with the same type or a type recommended by the manufacturer.
- ⇒ The battery is not protected against all environmental influences. If the battery is exposed to certain environmental influences, it may catch fire or explode. This could result in serious injury or property damage.
- ⇒ Protect the battery from fire and heat.
- ⇒ Do not allow the battery to come into contact with liquids, chemicals or salts.
- ⇒ Do not expose the battery to high pressure or microwaves.
- ⇒ Batteries and chargers must not be modified or tampered with under any circumstances.
- ⇒ Do not use a defective, damaged or deformed battery.
- ⇒ Do not connect the battery's electrical contacts to metal objects or short-circuit them.
- ⇒ Liquid may leak from a damaged battery. If the liquid comes into contact with the skin or eyes, it may cause irritation.
- ⇒ When inserting or replacing the batteries, ensure that the polarity is correct (see information in the battery compartment).
- ⇒ Battery operation is overridden when the mains adapter is connected. When weighing with mains operation > 48 hours, the batteries must be removed! (Risk of overheating).
- ⇒ If the battery develops odours, becomes hot, discolours or deforms, it must be disconnected from the power supply and, if possible, from the scale immediately.

7.5.1 Inserting the battery

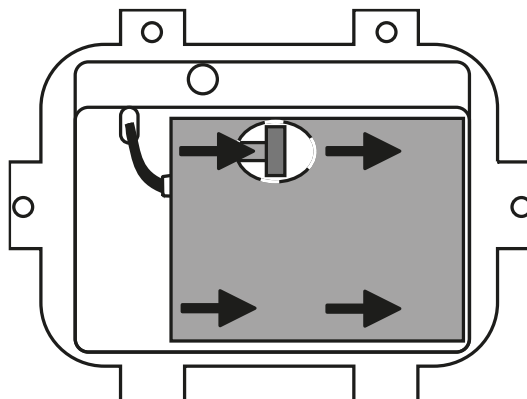
1. Remove the weighing plate and take the hexagonal key from the weighing plate holder.
2. Carefully turn the scale over



3. Open and remove the cover on the underside using the tool provided



4. Insert the battery connector into the battery
5. Insert the battery into the compartment and slide it to the side until it clicks into place



6. Replace the cover

7.5.2 Charge the battery

The battery pack is charged using the supplied power cable.

The battery pack should be charged for at least 7.5 hours using the power cable before first use.

To conserve battery power, the automatic shut-off function can be activated in the menu (see chapter 10.2).

The battery capacity is shown on the display. Plug in the power cable as soon as possible to charge the battery.



The battery symbol informs you about the battery capacity.

Symbol	Meaning
	Battery empty → Battery needs to be charged
	Battery almost empty
	Battery fully charged

7.6 Initial start-up

In order to obtain accurate weighing results with electronic scales, the scales must have reached their operating temperature (see warm-up time in chapter 1). The scales must be connected to the power supply (mains connection, rechargeable battery or battery) for this warm-up time.

The accuracy of the scales depends on the local gravitational acceleration.

It is essential to observe the instructions in the chapter on adjustment.

7.7 Adjustment

Since the value of gravitational acceleration is not the same everywhere on earth, each scale must be adjusted to the gravitational acceleration at its location in accordance with the underlying physical weighing principle (only if the scale has not already been adjusted at the factory for its location). This adjustment process must be carried out during initial commissioning, after each change of location and in the event of fluctuations in the ambient temperature. In order to obtain accurate measurements, it is also advisable to adjust the scale periodically during weighing operation.

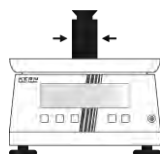
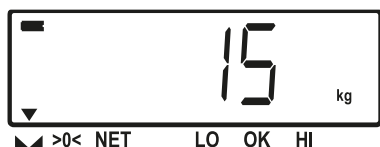
- i** • If the value of the adjustment weight is fixed in your scale's menu, you must use such a weight for adjustment.
- The accuracy of the adjustment weight must correspond approximately to the readability [**d**] of the scale, or rather slightly better.
Information on test weights can be found on the Internet
- Ensure stable environmental conditions. A warm-up time (see chapter 1) is required for stabilisation.
- Ensure that there are no objects on the weighing plate.
- Avoid vibrations and air currents.
- Only perform adjustment with the standard weighing plate in place.
- Ensure that the correct gravitational constant for your region is set in the menu under **<F7GrA>** (see chapter 10.2).

Adjustment is locked on scales with type approval.

To remove the access lock, the seal must be destroyed and the adjustment switch activated. For the position of the adjustment switch, see chapter 10.2.

- **Caution:**
After destroying the seal, the scale must be recalibrated by an authorised body and a new seal must be affixed before it can be used again in applications requiring calibration.

7.7.1 External adjustment



⇒ Unload the scale

⇒ Open the menu (see chapter 10.1).

⇒ Select **<F0CAL>** → **<CAL>**

⇒ Display changes to **<UNLAD>** and shows the required adjustment weight

⇒ Place the adjustment weight in the centre of the weighing plate

⇒ Wait until the "Stability indicator" is displayed

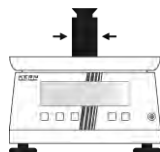
⇒ Adjustment is complete

⇒ Display returns to the menu



If an error message appears or the adjustment is faulty, the adjustment must be carried out again.

7.7.2 Linearisation



...



⇒ Remove the load from the scale

⇒ Open the menu (see chapter 10.1)

⇒ Select <L-in2> / <L-in3> / <L-in6>

⇒ Display changes to <UNLAD> and shows the required adjustment weight

⇒ Place the adjustment weight in the centre of the weighing plate

⇒ Wait until the "Stability indicator" is displayed

⇒ Display changes to show the next adjustment weight

⇒ Repeat the above procedure for all other adjustment points (either 2, 3 or 6 adjustment points)

⇒ The display changes to <UNLAD>

⇒ Unload the scale



⇒ The highest adjustment weight is displayed

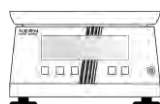


...

⇒ Place the adjustment weights as described above (in descending order of weight)



⇒ Display changes to **<UNLAD>** after the last adjustment weight



⇒ Unload the scale



⇒ Linearisation is complete



⇒ The display will return to the menu

8 Calibration

General

According to EU Directive 2014/31EU, scales must be calibrated if they are used as follows (legally regulated area):

- In commercial transactions, if the price of a product is determined by weighing.
- In the manufacture of medicines in pharmacies and in analyses in medical and pharmaceutical laboratories.
- For official purposes
- In the manufacture of prepackaged goods

If in doubt, please contact your local verification authority.

Scales in the legally regulated area (-> calibrated scales) must comply with the traffic error limits during the calibration validity period – these are usually twice the calibration error limits.

Once this calibration validity period expires, recalibration must be carried out. If the scales need to be adjusted to comply with the calibration error limits in order to pass this recalibration, this does not constitute a warranty claim.

Calibration information:

Scales marked as calibratable in the technical data have EU type approval. If the scale is used in the calibration-required range as described above, it must be calibrated and regularly recalibrated.

The recalibration of a scale is carried out in accordance with the respective legal regulations of the countries. In Germany, for example, the calibration validity period for scales is usually 2 years.

The legal regulations of the country of use must be observed!

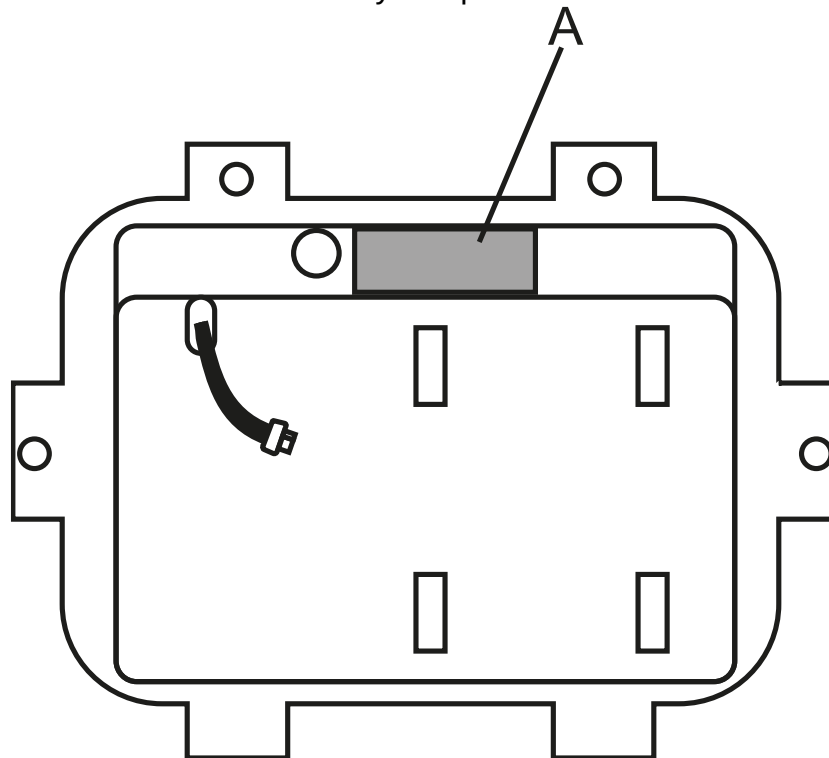


The calibration of the scale is invalid without the seal marks.

For scales with type approval, the seals indicate that the scales may only be opened and serviced by trained and authorised personnel. If the seals are broken, the calibration is no longer valid. National laws and regulations must be observed. In Germany, recalibration is required.

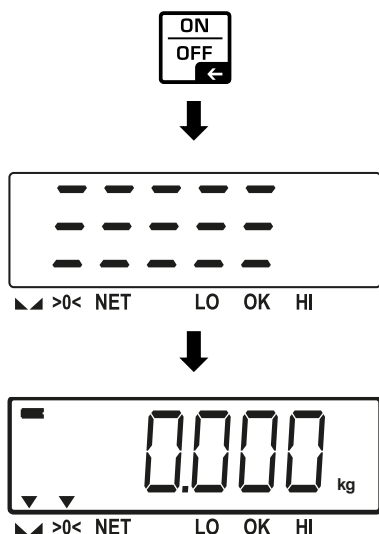
Position of seal marks:

The seal **(A)** is located under the battery compartment cover.



9 Operation

9.1 Switching on



⇒ Press **[ON/OFF]**

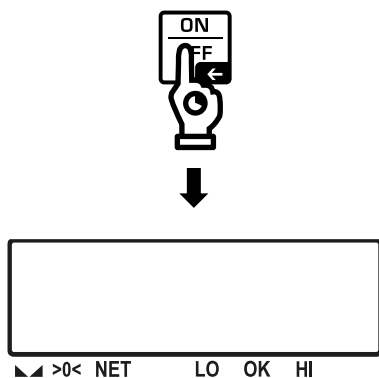
⇒ Display lights up

⇒ Scale is ready for operation



For calibrated scales, the calibration software version can be displayed by pressing **[TARE]** when the system starts up.

9.2 Switching off



⇒ Press and hold **[ON/OFF]**

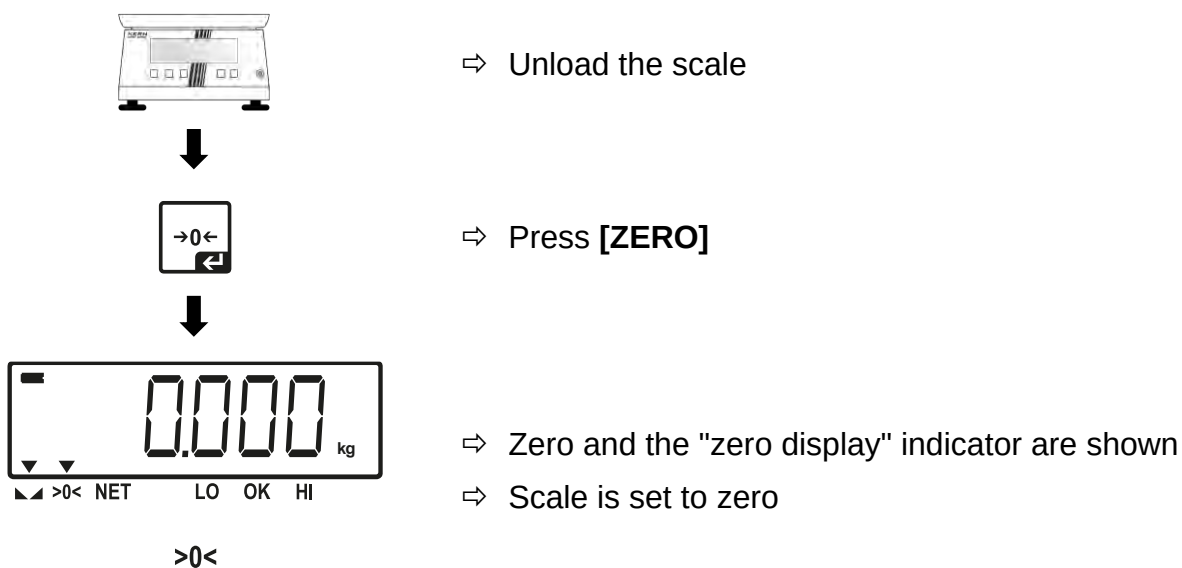
⇒ Display switches off

⇒ Scale is switched off

9.3 Setting to zero

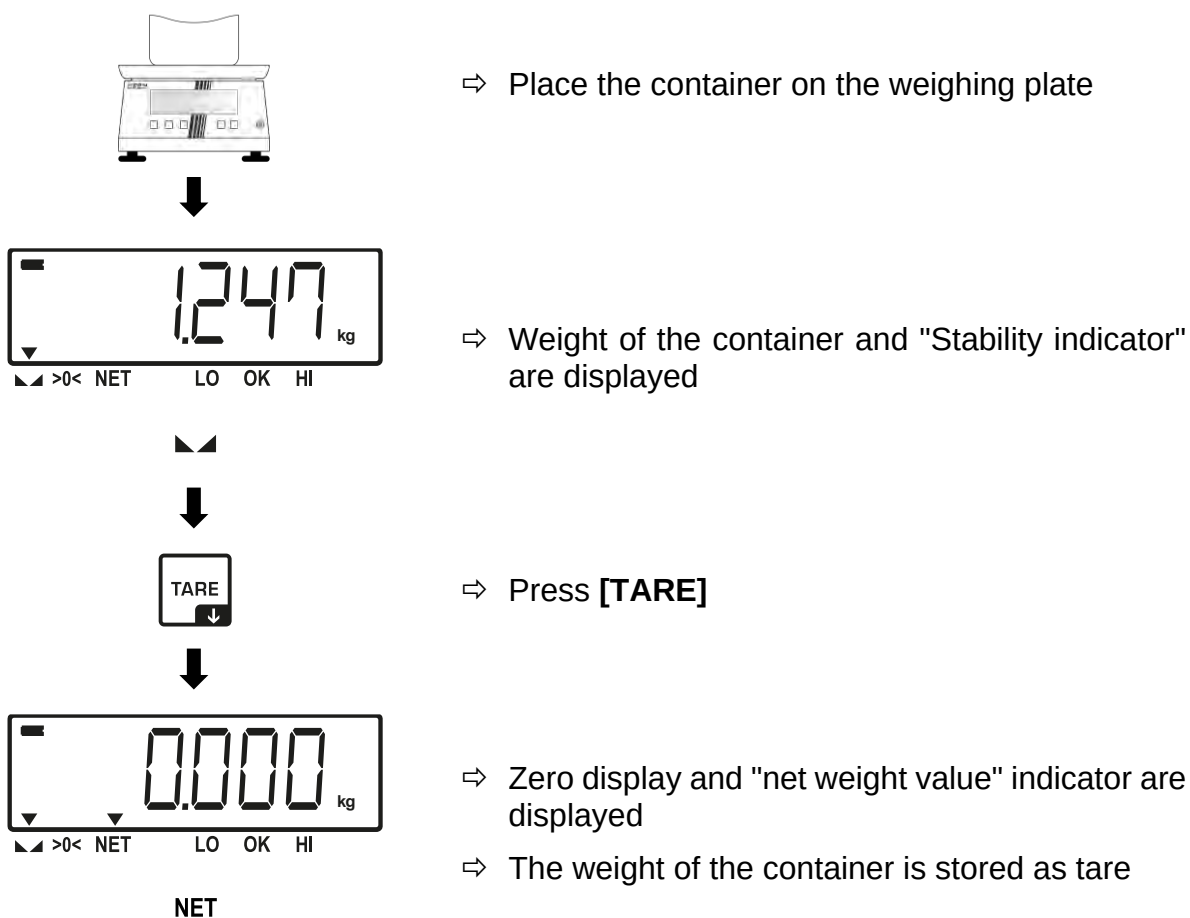
To achieve optimum weighing results, set the scale to zero before weighing.

Zero setting is only possible within a range of $\pm 2\%$ max.

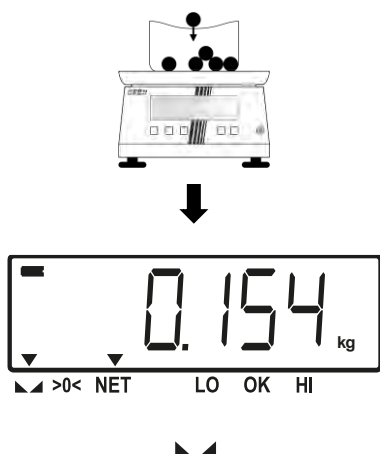


9.4 Taring

Tare:



Weighing with tare:



⇒ Place the item to be weighed in the container

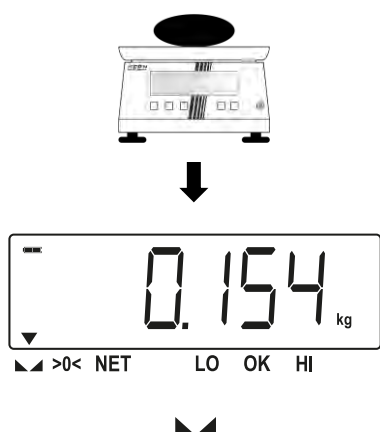
⇒ Weight value and "Stability indicator" are displayed

⇒ The weighing result can be read



- When the scale is unloaded, the stored tare value is displayed with a negative sign.
- To delete the stored tare value, unload the weighing plate and press **[TARE]**.
- The taring process can be repeated any number of times, for example when weighing several components to form a mixture (additional weighing). The limit is reached when the taring range is fully utilised. For scales without type approval, this function can be activated or deactivated (see multi-tare **<FC tArE>** in chapter 10.2).

9.5 Simple weighing



⇒ Check the zero display and reset to zero with **[ZERO]** if necessary

⇒ Place the goods to be weighed on the weighing plate

⇒ The weight value and "Stability indicator" are displayed

⇒ The weighing result can be read

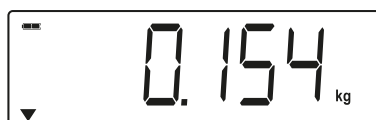


Overload warning

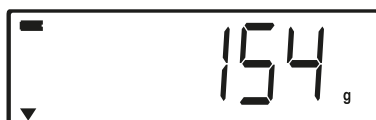
It is essential to avoid overloading the device beyond the specified maximum load (Max), minus any tare load that may already be present. This could damage the device.

Exceeding the maximum load is indicated by the display **<--oL-->**. Unload the scale or reduce the preload.

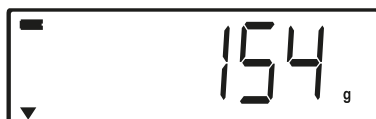
9.6 Switching between weighing units



⇒ Press **[CHANGE]** to switch between weighing units



9.7 Displaying increased resolution (x10)



⇒ In simple weighing mode, press **[CHANGE]** and **[TARE]** simultaneously



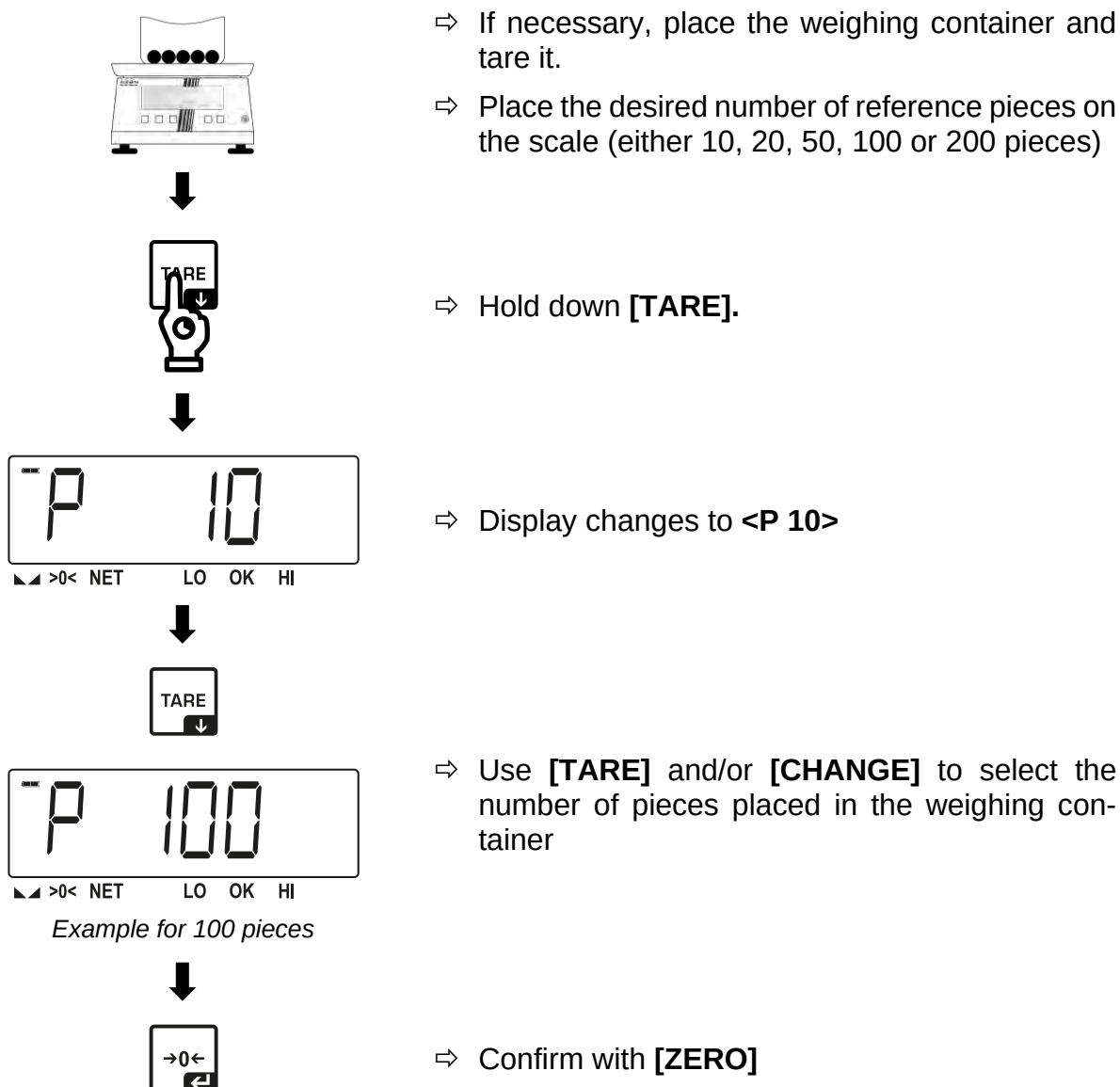
⇒ Display shows the weight with a resolution of $d = 0.1 \text{ e}$ for 5 seconds

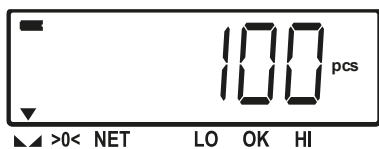
9.8 "Piece counting" function

Before the scale can count parts, it must know the average piece weight, known as the reference. To do this, a certain number of the parts to be counted must be placed on the scale. The scale determines the total weight and divides it by the number of parts, known as the reference number of pieces. The count is then performed based on the calculated average piece weight.

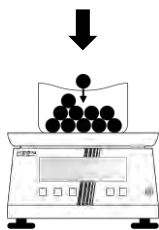
- i** • The higher the number of reference pieces, the greater the counting accuracy.
- For small or highly varied parts, the reference must be set particularly high.
- For the minimum counting weight, see the "Technical Data" table.

Performing piece counting:





⇒ Reference number of pieces is saved



⇒ Weigh further parts

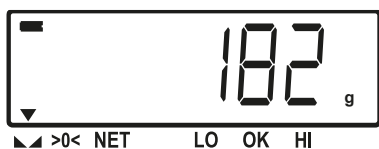


⇒ Number of pieces can be read

Exit piece counting mode:



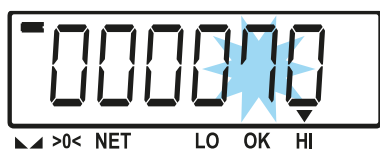
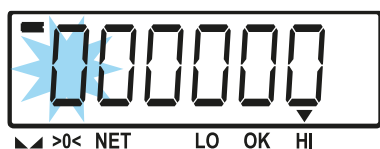
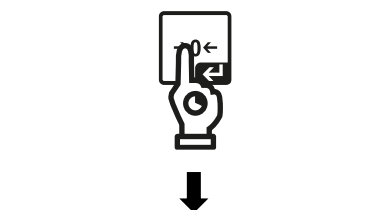
⇒ Hold down **[CHANGE]** (alternatively: briefly press **[ON/OFF]**)



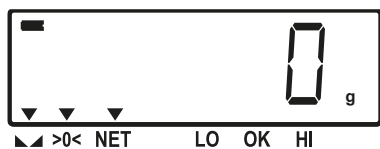
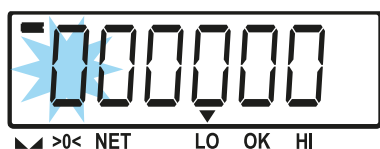
⇒ Scale returns to weighing mode

9.9 "Tolerance weighing" function

Set limit values:



Example for 70 parts



⇒ If necessary, place the weighing container and tare

⇒ Press and hold **[ZERO]**

⇒ Display changes to **<000000>** (upper limit)

⇒ Enter the upper limit with **[TARE]** and scroll through the flashing digits with **[CHANGE]**

⇒ Confirm with **[ZERO]**

⇒ Upper limit is saved

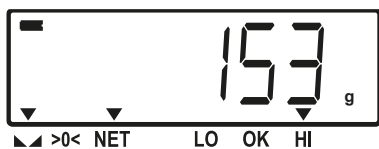
⇒ Display changes to lower limit entry

⇒ Enter the lower limit as above and confirm

⇒ Scale switches to weighing mode

⇒ Check zero display and reset to zero with **[ZERO]** if necessary

⇒ Place the items to be weighed on the weighing plate



Example for HI

⇒ Weighing result can be read

Example: Weighing value has exceeded the upper tolerance limit



The display of the scale changes colour depending on the tolerance check evaluation:

Colour on the display	Meaning
Green	Weight value within tolerance limits
Orange	Below lower limit
Red	Upper limit exceeded

10 Menu

10.1 Navigation in the menu

Open menu:

Option 1 – Open menu when system starts up:



⇒ Scale is switched off



⇒ Switch on the scale and press **[CHANGE]** immediately after the software version is displayed



⇒ Display changes to **<F0 CAL>**

Option 2 – Open menu in weighing mode:



⇒ Scale is in weighing mode



⇒ Hold down **[CHANGE]**



⇒ Display changes to **<F0 CAL>**

Select and set parameters:

Key	Function
	• Menu level back
	• Confirm selection
	• Navigate down menu
	• Navigate up menu • In the first menu level: Exit menu (long press)

10.2 Overview of the menu



- Default settings are marked with an *.
- Menu items marked with *!* are locked on calibratable models.

Level 1	Level 2	Description	Chapter	
<i>FD CAL</i>		Adjustment	7.7	
	<i>CAL</i>	External adjustment	7.7.1	*!
	<i>L-in6</i>	Linearisation (2 points, 3 points, 6 points)	7.7.2	
<i>F1 Unit</i>		Weighing units	-	
	<i>KG</i>	kg	-	
	<i>G</i>	g	-	
<i>F2 bL</i>		Backlighting	-	
	<i>bL on</i>	Backlight on	-	
	<i>bL oF</i>	Backlight off	-	
	<i>bL AU1</i>	Backlight brightness: low	-	
	<i>bL AU2</i>	Backlight brightness: medium	-	
	<i>bL AU3</i>	Backlight brightness: high	-	
<i>F3 AoF</i>		Automatic switch-off function	-	
	<i>oFF*</i>	Automatic switch-off function deactivated	-	
	<i>oF 3</i>	Switch off after 3 minutes	-	
	<i>oF 10</i>	Switch off after 10 minutes	-	
	<i>oF 15</i>	Switch off after 15 minutes	-	
	<i>oF 30</i>	Switch off after 30 minutes	-	
<i>F4 inP</i>		Internal value of the AD converter	-	
<i>F5 SPd</i>		Speed of the AD converter	-	
	<i>Lo</i>	Low	-	
	<i>Mid*</i>	Medium	-	
	<i>HiGH</i>	High	-	

Level 1	Level 2	Description	Chapter	
<i>FE RES</i>		Resolution	-	
	<i>3000</i>	3000	-	
	<i>6000</i>	6000	-	
	<i>dUAL - 1</i>	Dual	-	*!*
	<i>15000</i>	15000	-	
	<i>30000</i>	30000	-	
	<i>60000</i>	60,000	-	
<i>F7 GRA</i>	<i>9.79640</i>	Gravitational constant	-	*!*
<i>FB CAP</i>		Maximum weighing capacity	-	
	<i>3KG</i>	3 kg	-	
	<i>6KG</i>	6 kg	-	*!*
	<i>15KG</i>	15 kg	-	
	<i>30KG</i>	30 kg	-	
<i>FA tArE</i>		Switching the multi-tare function on/off	-	
	<i>oFF</i>	Deactivated	-	
	<i>on</i>	Activated	-	
<i>Fb S-UU</i>		Save or discard unit weight during unit counting	-	
	<i>oFF</i>	Discard / Do not save	-	
	<i>on</i>	Save	-	
<i>FC tArE</i>		Multi-tare	-	
	<i>oFF</i>	Multi-tare deactivated	-	*!*
	<i>on</i>	Multi-Tare activated	-	
<i>Fd R2n</i>				
	<i>oFF</i>			
	<i>0.5d</i>			
	<i>1d</i>	Range for zero tracking	-	*!*
	<i>2d</i>			
	<i>4d</i>			

11 Maintenance, servicing, disposal



Disconnect the device from the operating voltage before carrying out any maintenance, cleaning or repair work.

11.1 Cleaning

Remove any spilled material (e.g. loose sample residues or powder) immediately with a brush or hand vacuum cleaner.

Use a mild cleaning agent such as soapy water and a soft cloth to clean the device. Then wipe the device dry with a dry, soft, lint-free cloth.

Observe the following instructions to avoid damage:

- Do not use aggressive cleaning agents (e.g. solvents), as these will react with the materials and damage them.
- Do not use cleaning agents containing caustic soda, vinegar, salt, sulphuric acid or citric acid on stainless steel parts.
- Do not use metal brushes or steel wool cleaning sponges, as these will damage the surface.
- Observe the IP protection class of the device.

11.2 Maintenance

- ⇒ The device may only be opened by trained service technicians authorised by KERN.
- ⇒ Disconnect from the mains before opening.

11.3 Disposal

The disposal of packaging and the device must be carried out by the operator in accordance with the applicable national or regional laws of the user location.

12 Minor troubleshooting

In the event of a malfunction in the programme sequence, the scale should be switched off briefly and disconnected from the mains. The weighing process must then be restarted from the beginning.

Malfunction	Possible cause
The weight display is not illuminated.	• The scale is not switched on. • The connection to the mains is interrupted (power cable not plugged in/defective). • The mains voltage has failed. • The battery capacity is exhausted.
The weight display changes continuously.	• Draughts/air movements • Vibrations of the table/floor • The weighing plate is in contact with foreign objects. • Electromagnetic fields/static charge (choose a different location/switch off any interfering devices if possible)
The weighing result is obviously incorrect.	• The scale display is not at zero. • The adjustment is no longer correct. • The scale is not level. • There are significant temperature fluctuations. • The warm-up time was not observed. • Electromagnetic fields / static charge (choose a different location / switch off interfering devices if possible)

13 Error messages

Error message	Explanation
<i>Err 4</i>	Zero range exceeded
<i>Err 6</i>	A/D value exceeded or not reached
<i>Err 19</i>	Initialisation error zero
<i>--oL--</i>	Overload
<i>--UL--</i>	Underload
<i>FA , L</i>	Adjustment error
<i>bA Lo</i>	Battery/rechargeable battery capacity exhausted