

Counting scale CS 60000



Operating manual - Translation of the original - (keep for future use)

**Bosche GmbH & Co. KG**

Reselager Rieden 3
D-49401 Damme

Phone +49 5491 999 689 0
Fax +49 5491 999 689 9
Email info@bosche.eu
Web www.bosche.eu

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Foreword

These operating instructions provide you with detailed information about the counting scale CS 60000.

These instructions contain safety instructions to guarantee safe use of the volume and weight measurement system.

The manufacturer strives to improve their products on an ongoing basis. They reserve the right to carry out any and all modifications and improvements that they consider to be necessary. However, this means that there is no obligation to carry out retrospective modifications in this connection.



Danger

Before using the counting scale CS 60000, you must have read and understood the operating instructions and the safety regulations that they contain.



Note

Errors and omissions in the documentation reserved. If necessary, please inform Bosche GmbH & Co. KG of any errors in the documentation. We would also be grateful for any suggestions for improvements that you may have.

The manufacturer's contact data is listed on the reverse of the title page. If you have any queries or problems, please contact the manufacturer without delay.



Note

Have your serial number to hand when contacting Bosche GmbH & Co. KG.

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1 Safety

This chapter warns against possible risks when handling the device. The information for detection of risks contained in this chapter is intended to allow the safe and correct operation.



It is important to read and adhere to this operating manual and particularly this chapter prior to operating this device.

1.1 For your safety

1.1.1 General

In addition to safety information, the operating manual includes:

- A general product description
- Information about installation and connection of the device
- Instructions to operate the device
- Maintenance and care instructions
- Troubleshooting and remedy instructions
- Technical data

Always keep this operating manual and additional documents for your personnel at hand in the direct vicinity of the device.

1.1.2 Safety symbols in this manual

The following symbols are used on all important positions in this manual. Particularly observe these notes and treat very careful.



Danger

This note indicates danger of injuries and/or danger to life, if specific behaviour rules are not observed.

When this symbol appears in the operating manual, please take all required safety measures.



Attention

This note warns against damage to assets as well as financial disadvantages and responsibility under criminal law (e.g. loss of the warranty, cases of third party risks, etc.).



Note

Important notes and information about an efficient, economic and environmental friendly handling are specified here.

1.2 Intended use

The counting scale CS 60000 is used to determine the weight of loads. It is intended to be used as a "non-automatic" scale.

Any further use is considered as not in accordance with the intended use. The manufacturer does not assume any liability for resulting damage.

The intended use also includes:

- Observance of all notes, information, instructions contained in the documentation as well as in all supplied manuals issued by the manufacturer.
- Adherence of the maintenance and service conditions and intervals prescribed by the manufacturer and
- Observance of the technical data.

Adhere to the attendant accident prevention regulations as well as other generally approved technical safety rules.



Note

Always specify the serial number of your device for all questions, orders or jobs. This will facilitate the communication with the manufacturer and prevents error during editing your request.

1.3 Inappropriate use

- Use in explosive environments (ATEX zones).
- Modification or opening of the device.
- Use under continuous loads, this can damage the measuring unit..

1.4 Obligations of the owner/user

The owner/user obligates himself to only instruct persons to work on the device, who:

- Are familiar with the basic rules concerning safety and accident prevention and are trained in the operation of this device and
- have read and understood the operating manual, the safety chapter as well as the warning notes.

1.5 Obligations of the operator

All persons instructed to operate the device obligate themselves:

- to always ensure the safety of other persons,
- to read the operating manual, the safety chapter and the warning notes and
- to only operate the device when they are familiarised with its functions.

1.6 Description of the dangers**1.6.1 Danger of injury**

- Always switch off the device for care and maintenance work.
- Never insert any pointed objects into the electric contacts.
- Do not change the contacts.
- Stop device operation, if the device or the connection line is damaged or have a malfunction.

1.6.2 Danger of damages

- Never use pointed objects to actuate the device keys.

1.7 Liability and warranty

The BOSCHE company offers a restricted warranty for components, which became faulty due to strain or material faults. The warranty starts with the date of delivery. The BOSCHE company retains the right to repair or replace components. Repair work executed during the warranty period will not extend the period of warranty. The warranty becomes null and void:

- In the event of incorrect use / use other than the intended use or incorrect installation
- Incorrect electric connection
- Non-observance of the specifications in the operating manual
- Conversion, modification or opening of the device
- Unintentional or mechanical damage and damage caused by media, liquids, natural wear.

1.8 Testing equipment monitoring

Quality assurance requires regular inspections of the technical measuring features of the counting scale in connection with the scales and a possible available test weight.

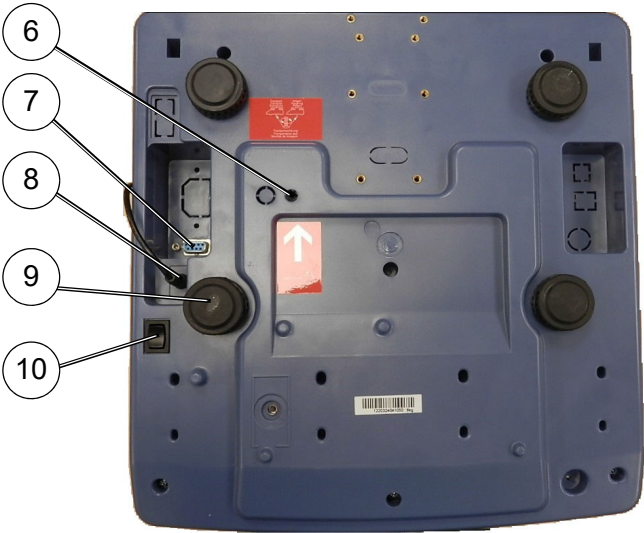
The owner/user can define a suitable interval as well as the scope of these inspections. In this connection, you must take into consideration the frequency of use and the sensitivity of the application. In most cases, a two-year test frequency is appropriate.

2 Description

2.1 ConstructionLegend for the weighing value display



View from below



Item	Designation
1	LCD display
2	Stainless steel weighing platform
3	Voltage indicator (lights up when an external power supply is connected)
4	Control panels for the various functions of the unit.
5	Level
6	Transport lock (if available)
7/8	RS 232 interface / connection for power cable
9	Control panels for the various functions of the unit.
7	Control panels for the various functions of the unit.

2.2 Display

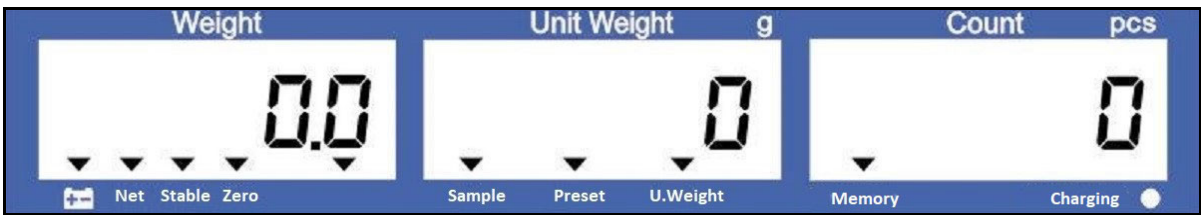
The three LCD displays are equipped with a backlight.

- Weight: Weight display
- Unit Weight: Unit weight display
- Count: Count display

2.2.1 Display overview



Note
The arrows ▼ indicate the current status.



Weight display

	Battery must be charged.
Net	Net weighing
Stable	Stability indicator, weight is stable.
Zero	Zero message

Unit Weight display: The value can be entered by the operator or calculated by the scale.

Sample	
Preset	Warning: Number of samples too large/ small Unit weight too large/small
U.Weight	Anzeige Stückgewicht

Count display: All placed parts are displayed as a part count.

Memory	Number of parts is stored
Charging	Loading status red: Battery is charging green: Battery is full

2.2.2 Legend for the weighing value display

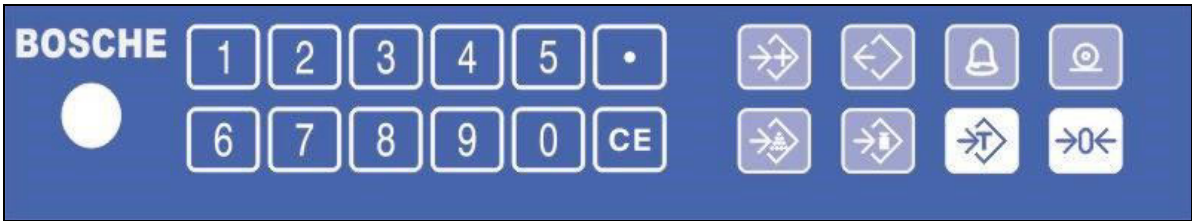
A	B	C	D	E	F	G	H	I	J	K	L	M
A	b	C	d	E	F	G		I	J	H	L	M
		c				g	h	i				

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
n	O	P	q	r	S	t	U	v	W	X	Y	Z
	o											







0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

2.3 Keyboard overview

The keyboard, consisting of pressure point keys with acoustic signal, is water-protected.



Key	User level
0 - 9	Numeric keypad, for manual entry of values.
	Delete an incorrect entry.
	Adds the number of parts to the sum memory, a maximum of 99 values can be stored.
	Recall the sum memory.

Key	User level
	If the upper limit value for the number of parts is exceeded, an acoustic signal sounds.
	Results are sent to a printer or PC if an RS 232 interface (optional) is available.
	Enter the number of parts
	Enter the weight.
	Tares the scale and stores the weight as a tare value, which is subtracted from the total weight at net display.
	Zeroing. Sets the zero point for all subsequent weighing operations. Zero is displayed.

3 Transport, commissioning/start-up and tests/inspections

3.1 Control

When the device is delivered, check the packaging, the device and possible accessories for visible damages.

3.2 Packaging and disposal

Keep all parts of the original packaging for a possible return.



Note

Only use the original packaging, if the display is returned.

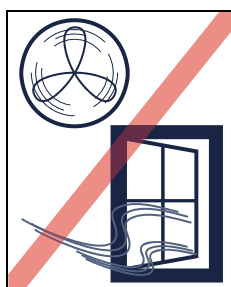
Prior to the transport, disconnect/fasten all loose/moving parts of the device. Secure the parts against slipping/damage.

Dispose of the packaging and the display according to the national and/or local regulations by law valid on the installation site. Separately dispose of a defective battery according to the national and local regulations on environmental protection and recycling.

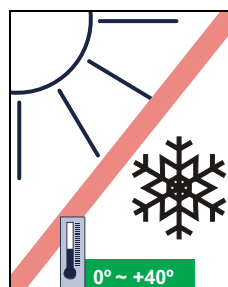
Do not treat a battery as standard waste. Please dispose of via a waste management company.

3.3 Instruction for installation

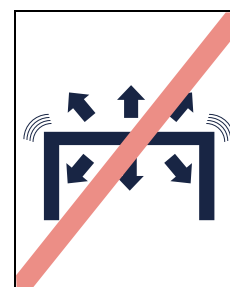
Keep the device clean and do not expose to an environment influencing the display accuracy.



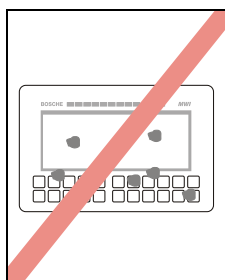
Protect against draught!



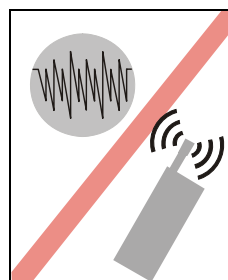
Protect against heat,
sun and frost!



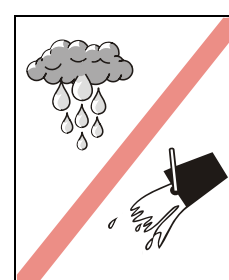
Protect against tilting :
and vibration!



Keep the unit clean



Avoid unstable
voltage sources!



Avoid humidity!



Note

Ensure that a 240 V AC voltage supply is available on the installation site (unless operation with rechargeable batteries is intended).

3.4 Installation works

- Transport the counting scale carefully, load cells are sensitive electromechanical sensors.
- Remove the transport lock below the scale (if available).
- Place the counting scale on a level and stable surface.
- Level the counting scale.
- Turn the height-adjustable levelling feet to the correct height until the bubble of the level is in a circle.
- Plug the mains cable into the socket at the back of the scale and the mains adapter into the socket.

3.5 Battery operation (optional)



Note

The internal battery is charged using the mains adapter supplied!

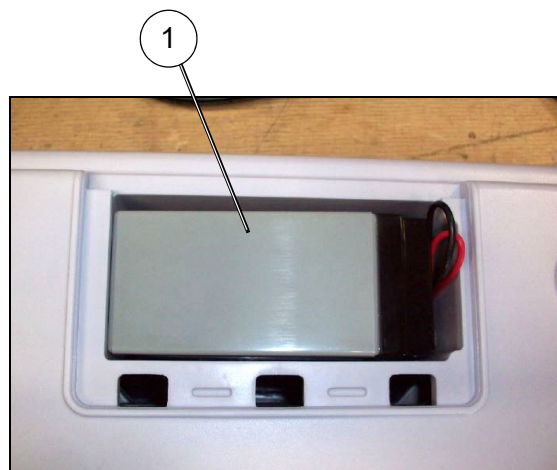
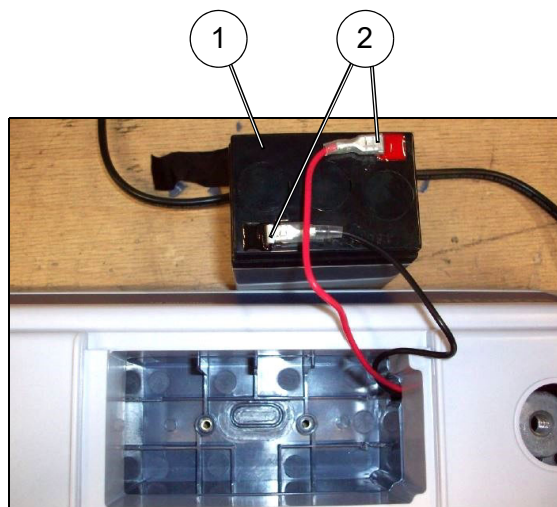
The battery should be charged via the mains adapter for at least 15 hours before first use.

The operating time of the battery is approx. 70 hours (with backlight).

The charging time until fully recharged is approx. 12 hours.

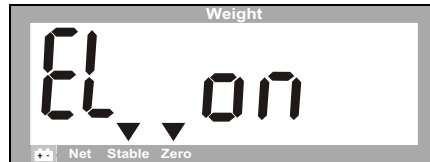
3.5.1 Installation of the battery

- Switch off the scale and disconnect the main plug.
- Remove the weighing platform.
- Remove the protective cover (if available).
- Open the battery case.
- Connect the +/- contacts coming from the scale to the matching coloured contacts (2) on the battery (1).
- Insert the battery (1) with a little pressure.
Important! First press in the side with the contacts.
- Plug the power supply unit into the socket.
 - The battery is loaded.
 - The scale is approx. 10 hours ready for operation. It then switches off automatically.



3.6 Setting the display backlight

- Press the key  for 4 seconds.
 - The message appears on the display:




- Press the key .
 - The message appears on the display:

EL AU Automatic backlight when the weighing platform is loaded or when a key is pressed.

EL oFF Backlight switched off

EL on Backlight switched on

- After selection, press the key .
 - The selection is stored.
 - The scale changes to the weighing mode.

3.7 RS 232 interface

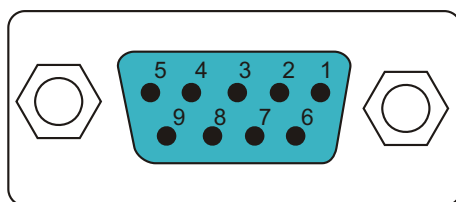
The counting scale can optional be equipped with an RS 232 interface. When connected to a printer, the weighing result is printed out with the selected weighing unit.

3.8 RS 232 interface specification

- ASCII code
- 8 data bits
- no parity bit
- Baud rate selectable to 600, 1200, 2400, 4800, 9600

3.8.1 Pin assignment of the scale output socket

DB9 plug connection for RS 232 serial interface



Pin 2: RXD (data input)

Pin 3: TXD (data output)

Pin 5: GND (ground)

3.8.2 Print output

There are different data formats for normal weighing operation, parts counting or when calling up stored totals:

Normal print out  or 

GS	1.234 kg	GS for gross weight (NT for net weight)
U.Weight	123 g	kg/g
PCS 10		Piece
<lf> <lf>		2 line feeds

Print out sum memory  and 

<lf>	1 line feed
TOTAL	Number of weighings
Wgt 1.234 kg	
PCS 10	Piece
<lf>	1 line feed

4 Operation



Attention

A warm-up time of 15 minutes stabilises the measured values after switching on.



Attention

If the load on the scale exceeds the weighing range, the following message "- - - -" appears on the display.

Remove the load from the weighing platform immediately to avoid damage.

4.1 Switching on

- Switch on the scale using the ON/OFF toggle switch and hold it down briefly (2 seconds).
 - The scale starts a self-test.
 - As soon the weight display (Weight) shows "0", the scale is ready for use.

4.2 Switching off

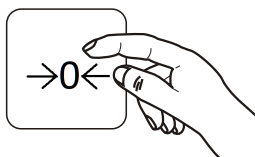
- Switch off the scale using the ON/OFF toggle switch.
 - If you are in the menu, the scale is turned off without that any changes made are stored.

4.3 Auto off

The indicator has an automatic shut off. The automatic shut-off is active if no change in weight on the platform by the indicator during the specified period. By default, the auto power is off (OFF). For battery operation, it is advisable to activate the automatic switch-off function, e.g. after 15 minutes, to save the batteries.

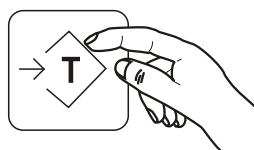
4.4 Resetting the scale to zero

Press the Zeroing key to correct small deviations from the zero point, e.g. due to contamination of the scale.



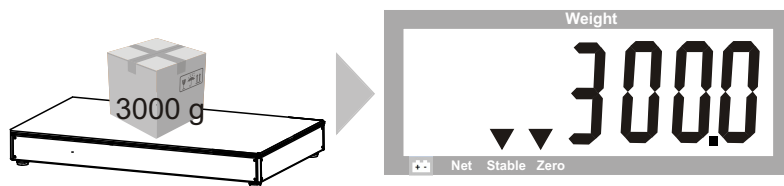
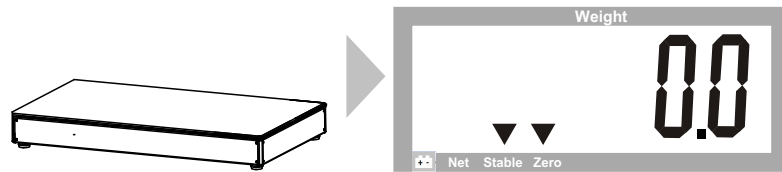
Zeroing with the weight applied is only possible within a specific, type-dependent range (-4 % ... +4 % of the weighing range). If the scale cannot be reset to "zero" when a weight is placed on it, this range has been exceeded or the scale is unstable.

The scale can be set to "zero" by pressing the "Tare" key and will then operate in the net mode.

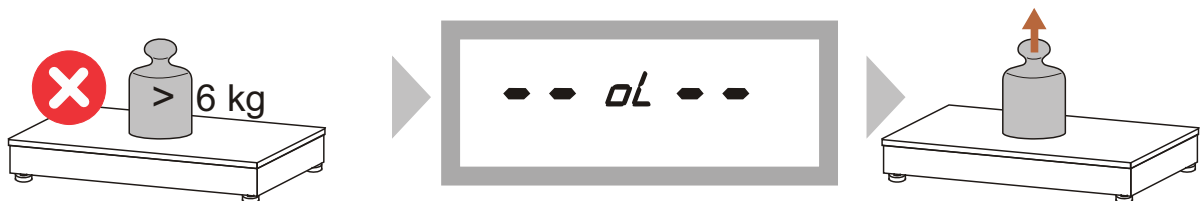


4.5 Weighing

4.5.1 Simple weighing



If the weight of the weighing sample will exceed the set weighing range the following message is displayed:



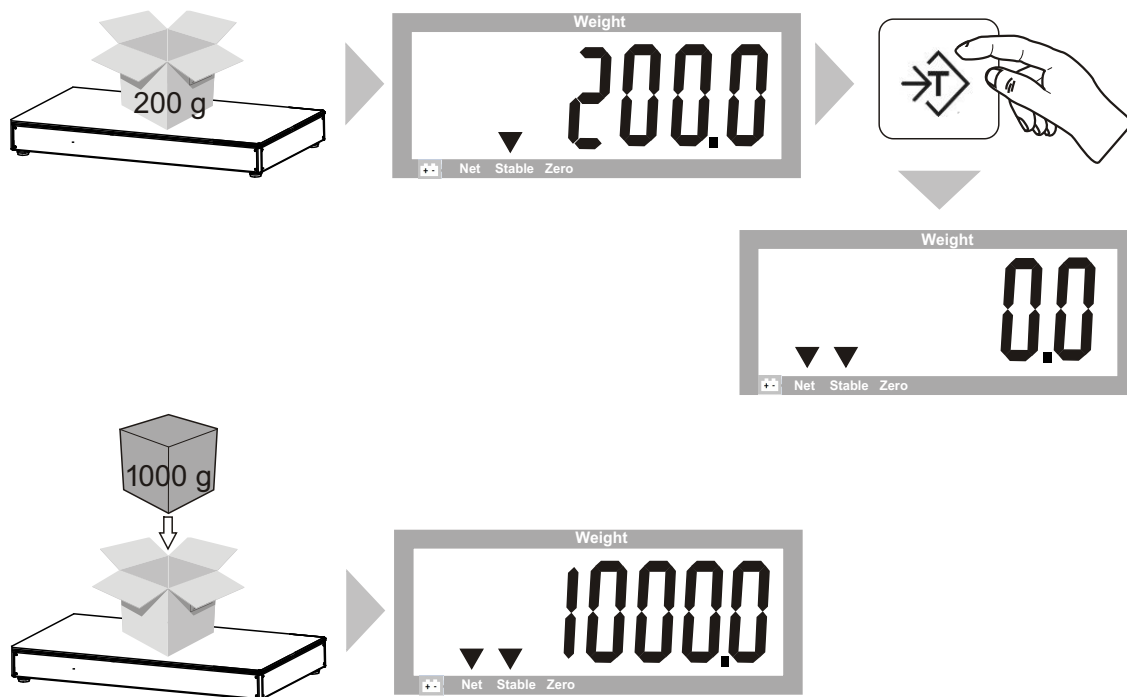
Please remove the load from the platform, immediately to avoid damage.

4.6 Tare weighing

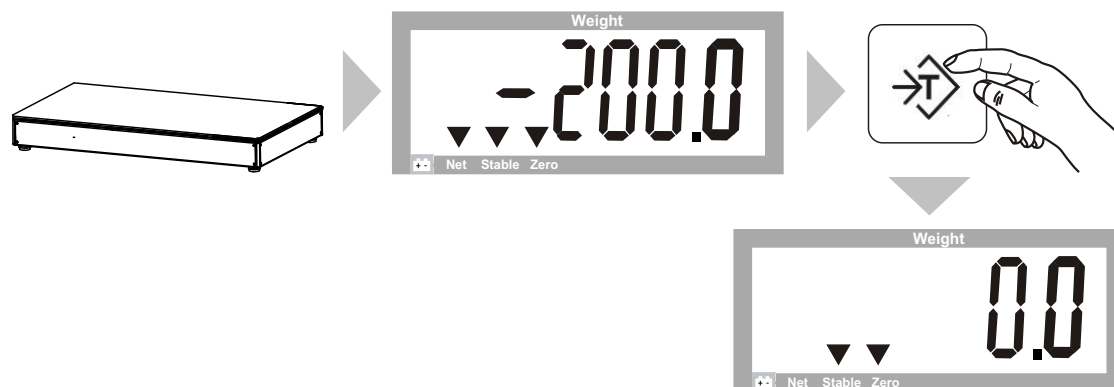
4.6.1 Determination of tare by weighing

The weight of each weighing container can be removed by pressing the “Tare” key, so that the net weight is displayed..

Tare (with stable weight)



Clear tare




4.6.2 Numerical input of the tare weight

**Note**

If the tare value of the container is known, it can also be entered using the keypad. This is helpful if all containers are identical or if the container is already full but the net weight is required.

- Enter the tare value using the keypad..

- Press the key .

- The message appears on the display:



- Place the tare container and the weight (e.g. 200 g) on the weighing platform.

- The net weight appears on the display.



4.7 Parts counting

**Note**

If parts counting is activated, parts can be counted into or out of a container. The reference weight can be calculated by the scale or entered using the keypad.


**Note**

The higher the reference quantity, the greater the counting accuracy.

**Note**

The reference quantity can also be changed during the counting process.


4.7.1 Parts counting by weighing the reference weight

- Tare the container (if available) and leave it on the weighing platform.
- Place a known number of parts (e.g. 100) on the weighing platform.
- Enter the known quantity using the keypad.
- Press the key .
 - The calculated reference part weight appears on the display..




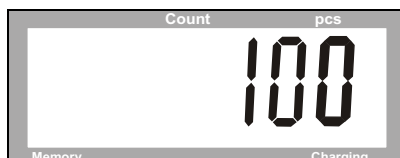
- Add or remove parts.
 - The reference quantity appears on the display.




- Press the key  to exit the function.
- Remove the weights from the weighing platform.

4.7.2 Parts counting by entering the reference weight

- Tare the container (if available) and leave it on the weighing platform.
- Enter the reference part weight(in g) using the keypad.
- Press the key .
- Add or remove parts.
 - The reference quantity appears on the display.



- Press the key  to exit the function.
- Remove the weights from the weighing platform.

4.8 Automatic reference optimisation

The scales will automatically update the unit weight when a sample less than the sample already on the platform is added. A beep will be heard when the value is updated.

It is wise to check the quantity is correct when the unit weight has been updated automatically.

This feature is turned off as soon as the number of items added exceeds the count used as a sample.

4.9 Check weighing

**Note**

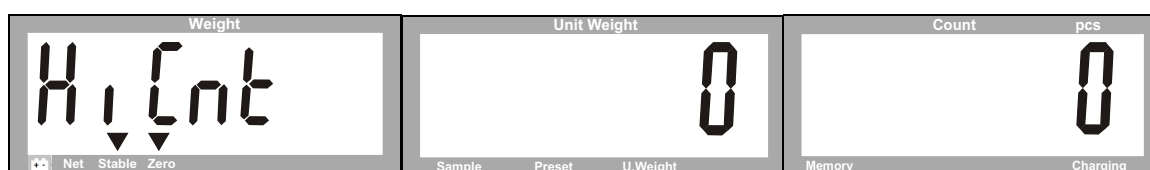
With the check weighing you can specifically check weights/parts count. At the check-weighing a beep (*F IÜbEP*) sounds when the weight on the scale reaches or exceeds a stored limit.

4.9.1 Setting the limit values (max./min.) for parts counting

**Note**

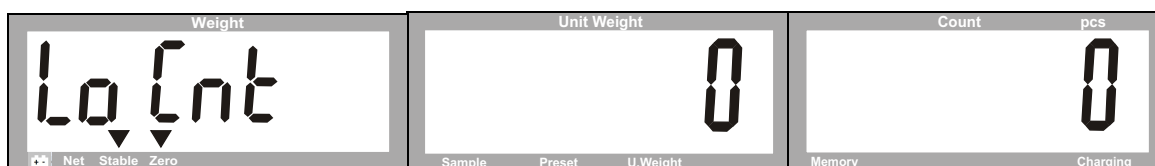
The set limits (max. / min.) are stored permanently and are also available after a power failure.

- Press the key .
- The message appears on the display:





- Enter the High number limit from the keyboard.
- Press the key .

- The message appears on the display:



- Enter the Low number limit from the keyboard.
- Press the key .
- Enter "0" for the high and low limits of the weights (*Hi nEt* und *Lo nEt*) from the keyboard.
- Press the key .
- The scale changes to the weighing mode.

Activate checkweighing for parts counting


- Press and hold the key  for 3 seconds.
 - "CHECK nET" appears on the display.
 - The scale checks the specified reference weights.
- Press and hold the key  once again for 3 seconds.
 - "CHECK PLS" appears on the display.
 - The scale checks the specified reference quantities.

**Note**




The scale is now in active mode for checkweighing the parts counting.

- Proceed as described in chapter 4.7. "Parts counting".



Exit the function

- Press and hold the key  a third time for 3 seconds.
 - "CHECK OFF" appears on the display.
 - The checkweighing is switched off.

Delete the limit values

- Press the key  to access the "H, Lnt" menu.
- Press the key  to set the value to "0".
- Press the key  to go to the next menu and proceed in the same way.

Query the limit values

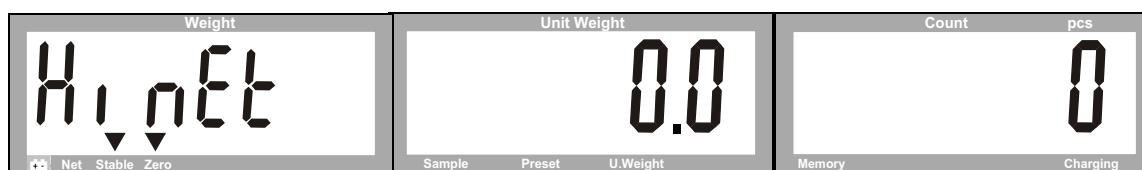
- Press the key  to access the "H, Lnt" menu.
- Press the key  several times.
 - The values are displayed.
 - The scale changes to the weighing mode.

4.9.2 Setting the limit values (max./min.) for the weights

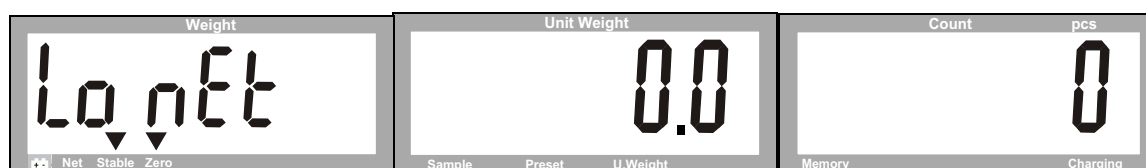
**Note**

The set limits (max. / min.) are stored permanently and are also available after a power failure.

- Press the key .
- Enter "0" for the high and low limits of the weights ($H_i \text{ net}$ and $L_o \text{ net}$) from the keyboard.
 - The message appears on the display:



- Enter the High number limit from the keyboard.
- Press the key .
 - The message appears on the display:



- Enter the Low number limit from the keyboard
- Press the key .
 - The scale changes to the weighing mode.

Activate checkweighing for weights



- Press and hold the key for 3 seconds.
 - "CHECK net" appears on the display.
 - The scale checks the specified weights.

**Note**




The scale is now in active mode for checkweighing the weights.

- Proceed as described in chapter 4.7. "Parts counting".



Exit the function

- Press and hold the key  once again for 3 seconds.
 - "CHECK PLS" appears on the display.
 - The scale checks the specified parts counting.
- Press and hold the key  a third time for 3 seconds.
 - "CHECK OFF" appears on the display.
 - The message appears on the display.

Delete the limit values


- Press the key  to access the "H, L" menu.
- Press the key  to set the value to "0".
- Press the key  to go to the next menu and proceed in the same way.

Query the limit values

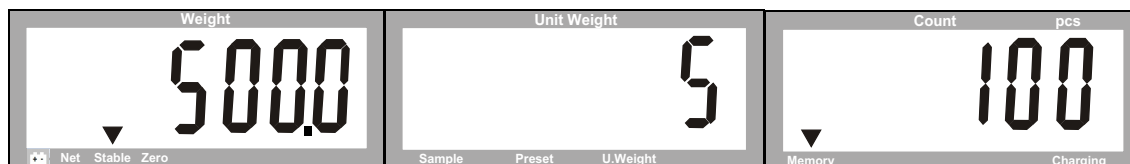
- Press the key  to access the "H, L" menu.
- Press the key  several times.
 - The values are displayed.
 - The scale changes to the weighing mode.



4.10 Manual summation

**Note**

Weight and parts count can be added to the values in the memory by pressing the key .

Example:



- Press the key .
 - The total weight, number of storages (*REC*) and the total quantity will be displayed for 2 seconds.
- Press the key , if a printer is connected.
 - The data are printed.

**Note**

A maximum of 99 values can be summed. The scale must be unloaded between the different weighings.

- Press the key .
 - The total sum is displayed for two seconds.

Delete the memory

- Press the key  and the key **CE**.
 - The memory is deleted.

5 Parameter





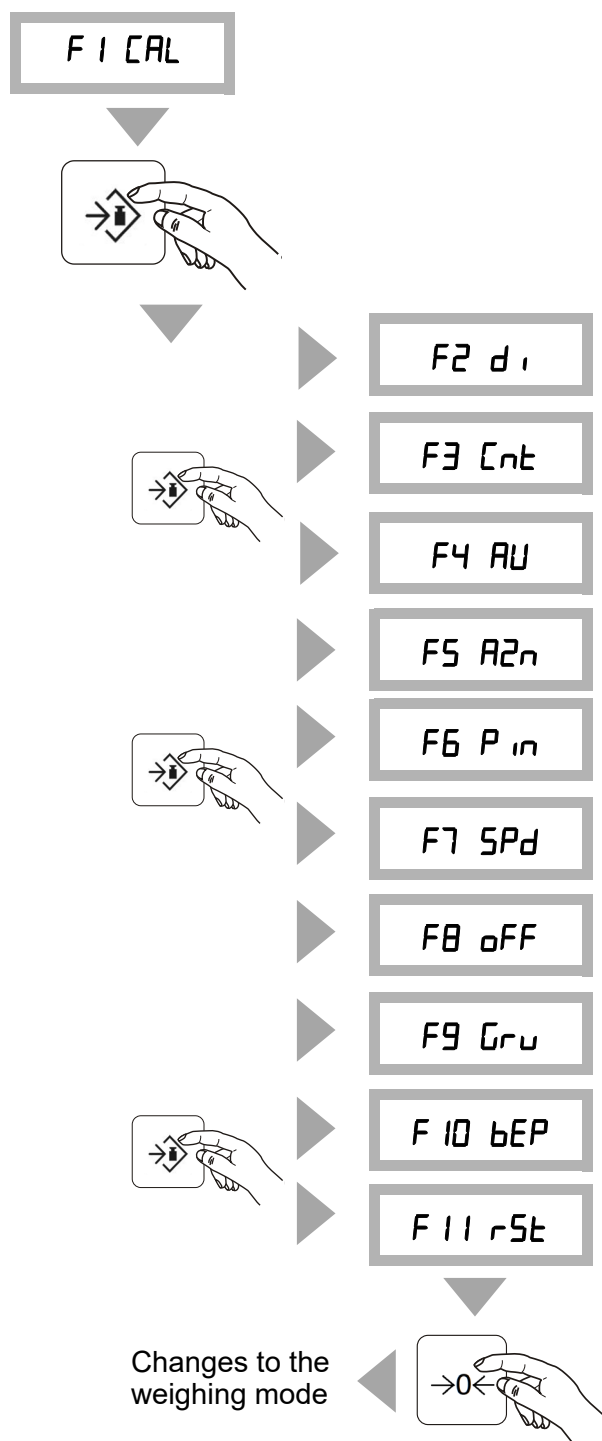
Note

Stored parameters can be changed in the according menu.

5.1 Menu overview


To access the menu, proceed as follows:

- Switch on the scale.
 - A self-test follows, the scale counts down.
- Press the key , while the scale counts down.
 - "P in" appears on the display.
- Enter the password "0000" using the keyboard.
- Press the key .





5.1.1 Function menu - short description

**Note**

To access the submenu, press the key .

**Note**

To scroll through the submenu, press the key .





To store the desired value, press the key .

Menu	Submenu	Function
<i>F1 CAL</i>		Calibration menu
<i>F2 d i</i> Division	<i>d60000</i> <i>d30000</i> <i>d15000</i> <i>d6000</i> <i>d3000</i>	Setting the division
<i>F3 Cnt</i>		The division of the scale is displayed
<i>F4 AU</i>	<i>AU off</i>	Manual sum memory *
	<i>AU on</i>	Automatic sum memory*
	<i>P ASL</i>	Printout on query*
	<i>P Cont</i>	Continuous print without summation*
		* Data transfer speed (Baud rate) confirm with the Tare key, then select: <i>b 96000</i> <i>b 4800</i> <i>b 2400</i> <i>b 1200</i> <i>b 600</i> Confirm with the Tare key, then printer select: <i>tP</i> <i>LP-50</i>
<i>F5 AZn</i>	<i>2d</i> <i>4d</i> <i>0.5d</i> <i>1d</i>	Auto-zero range setting (automatic zero tracking) Einstellung Auto-Zero- Bereich (automatische Nullpunktnachführung)

Menu	Submenu	Function
F6 P in	P in 1 P in 2 PASS	Set a new password The display shows "P in 1", enter a new password and press the Tare-key to confirm your entry. The display now shows "P in 2", Now enter the changed password again and press the Tare-key to confirm your entry. "PASS" appears on the display and the scale has stored the new password. Make a note of the new password and keep it safe!
F7 SPd	7.5 15 30 60	Display speed Insensitive, but slow Sensitive, but fast
F8 oFF	oF 0 oF 3 oF 5 oF 15 oF 30	Automatic switch-off of the scale in minutes.
F9 Grv	last value flashes	Adaptation of the gravity factor to correct the weight value on the site of scales use. (Default: 9.8130)Anpassung des Gravitationsfaktors zur Korrektur des Gewichtswertes am Ort der Waagenbenutzung. Should only be set by the scale manufacturer.
F10 bEP	H iGH	Accoustic signal, if the value is greater than the higher limit.
	oH	Acoustic signal if the value is inside the limit range.
	LoU	Accoustic signal, if the value is less than the lower limit.
	nG	Acoustic signal if the value is outside the limit range.
F11 rSt		Reset to factory-settings.





6 Calibration

Example: CS 60000-06

- Switch on the unloaded scale.
- While the scale counts down, press the key .
- "P in" appears on the display.
- Enter the password "0000" using the keyboard.
- Press the key .
- "F1 CAL" appears on the display.
- Press the key .
- "g. 00000" appears on the display.
- If necessary, change the value using the number keys
- Press the key .
- Wait a moment.
- "UnL oAd" appears on the display.
- Wait a moment.
- "LoAd" appears on the display.
- Then place the calibration weight (max. load of the scale, in this case 6 kg) in the centre of the weighing platform.
- "LoAd" appears on the display.
- Wait a moment.
- "PASS" appears briefly on the display.
- The scale performs a self-test.
- **While** the self-test, remove the calibration weight from the weighing platform.
- The scale changes to the weighing mode.

6.1 Linear calibration

Example: CS 60000-06

- Switch on the unloaded scale.
- While the scale counts down, press the key .
 - "P in" appears on the display.
- Enter the password "9999" using the keyboard.
- Press the key .
 - "FI CAL" appears on the display.
- Press the key .
 - "9. 03200" appears on the display.
- If necessary, change the value using the number keys
- Press the key .
- Wait a moment.
 - "UnLoAd" appears on the display.
- Wait a moment.
 - "LoAd 2" appears on the display.
- Place the calibration weight 2 kg in the centre of the weighing platform.
 - "LoAd 4" appears on the display.
- Place a further calibration weight 2 kg in the centre of the weighing platform.
 - "LoAd 6" appears on the display.
- Place a further calibration weight 2 kg in the centre of the weighing platform.
- Wait a moment.
 - The scale performs a self-test.
- **While** the self-test, remove the calibration weights from the weighing platform.
 - The scale changes to the weighing mode.

7 Maintenance and care

7.1 Cleaning

- Before starting cleaning, switch off the device and disconnect it from the mains.
- Do not use any aggressive cleaning agents.
- Remove dust and other dirt from the weighing platform using a damp cloth.
- Rub all the surfaces with a dry cloth.

**Attention**

No moisture must enter the counting scale.

**Attention**

Immediately remove any spilt weighing material!

7.2 Regular inspections

This must be checked by the user for obvious defects before each use.

**Attention**

Replace defective or damaged cables or cable glands as a unit.

7.3 Maintenance, servicing

Only trained service engineers who have been authorised by Bosche are allowed to open the counting scale.

**Danger**

Before opening the counting scale, you must ensure that it has been safely deenergised and disconnected from the mains.

8 Troubleshooting

8.1 In the event of a malfunction

We recommend switching off the scales briefly and after a short while on again. Then restart the weighing process.

8.2 Error messages of the scales

Fehlermeldung	Störung	Mögliche Ursache	Lösung
	Nothing is displayed.	Power supply disconnected.	Check the power source.
-----	Overload	Scale overloaded	Remove the weight from the scale. If the problem still remains, please contact your dealer or Bosche customer service.
--Err4--	The initial zero value is higher than permitted (typically 4% of the maximum weighing range) when switching on or pressing the zero key.	<ul style="list-style-type: none"> - When you switch on the scale, there is already weight on the scale. - Excess weight on the weighing platform when setting the zero. - Incorrect calibration of the scale. - Damaged load cell - Damaged electronics 	
--Err5--	Keyboard error	Incorrect operation of the scale.	
--Err6--	A/D count not correct when switching on the scale.	<ul style="list-style-type: none"> - Weighing platform not mounted. - Damaged load cell - Damaged electronics 	
--Err5--	Error in % weighing.	No weight on the scale.	
--FAI LH --	Calibration error	Incorrect calibration	
--FAI L L--			
-- Err9 --	Scale is unstable	<ul style="list-style-type: none"> - Vibrations or draughts - Damaged electronics 	

If any other malfunctions or error messages occur, please switch off the scales and after a short while on again.

If error messages occur again, please contact the Bosche customer service.

8.3 Customer service contact data

Bosche GmbH & Co. KG
 Reselager Rieden 3
 D-49401 Damme

Phone +49 5491 999 689 0

Fax +49 5491 999 689 9

Email info@bosche.eu

8.4 Information for the contact to the customer service

Owner/user	Specifications
Name of your company	
Name of a contact person	
Contact data	
Telephone	
Fax	
Email	

Product	Specifications
Model name	
Serial number	
Type key	
Date of purchase	
Name and location of the supplier	

**Note**

Fill in the table shown above when the display is delivered to be able to use all information without any problems at any time.

Information about the problem:

Examples for required specifications to support troubleshooting:

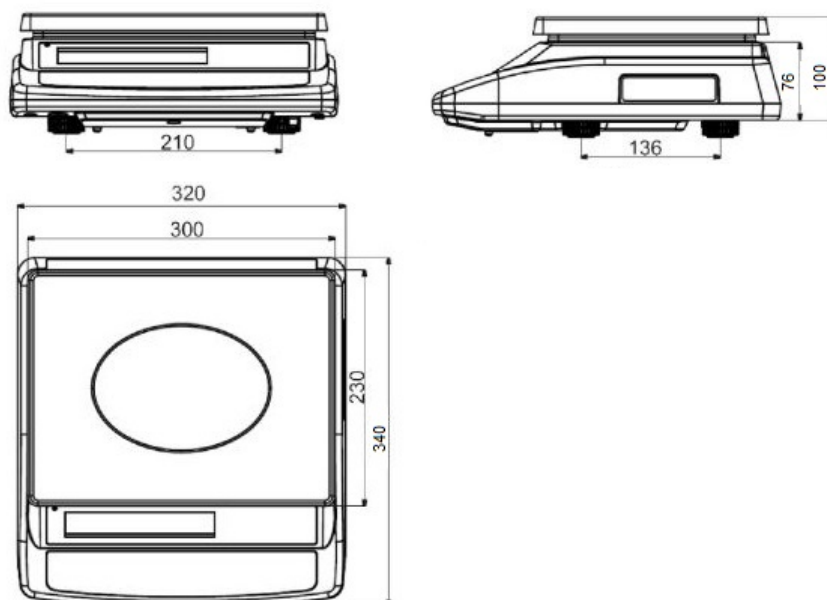
- Does the scale operate fault-free since its delivery?
- Has the scale any contact to water?
- Was there any damage due to a fire?
- Was there a thunderstorm before / during the malfunction?

**Note**

Please inform us about the entire history of the scale.

9 Technical data

9.1 Dimensions



9.2 Technical data

Feature	Value / Unit
Total dimensions (W x H x D)	320 x 125 x 340 mm
Dimensions weighing platform	300 x 225 mm
Weight without batteries	approx. 3.5 kg
Power supply (external)	12 VDC / 240 VAC, 500/1000 mA by external mains adapter.
Battery operating time / charging time	approx. 70 hours / 12 hours.
Calibration	automatic, external
Display	6 digits, LCD illuminated, Digit height 25 mm
Keyboard	20 pressure point keys with acoustic feedback.
Housing and weighing platform	ABS plastic and stainless steel, IP 54
Interface	RS 232 (optional)
Functions	Weighing value display, sum memory, check weighing with alarm.
Operating temperature	0°C to +40°C
Relative air humidity	max. 80 %, non-condensing

Type	Weighing range	Readability	Max. resolution
CS 60000-06	6 kg	0,1 g	1/60.000
CS 60000-15	15 kg	0,2 g	1/75.000
CS 60000-30	30 kg	0,5 g	1/60.000

9.3 Scope of delivery

Component	Note
Counting scale	
Wall mount for the display	
Mains adapter	
Operating manual	

10 Declaration of Conformity



Bosche GmbH & Co. KG
 Reselager Rieden 3
 D-49401 Damme
 Telefon: 0 54 91 / 999 689 - 0
 Telefax: 0 54 91 / 999 689 - 9
 E-Mail: info@bosche.eu
 Internet: www.bosche.eu

EU-Konformitätserklärung Declaration of conformity • Déclaration de conformité Conformiteitsverklaring • Declaración de conformidad	
Typ / Modell Type / Model • Modèle Model • Tipo / Modelo	Elektronische Zählwaage CS 60000 für nicht selbsttätige, ungeeichte Waagen for non-automatic, non-verified scales pour balances non automatiques et non étalonnées voor niet-automatische, niet-gekalibreerde weegschalen para básculas no automáticas y sin calibrar
Seriennummer siehe Typenschild. For the serial number, see the nameplate. • Pour le numéro de série, voir la plaque signalétique. Voor het serienummer, zie het typeplaatje. • Para el número de serie, consulte la placa de identificación.	
Hersteller Manufacturer • Fabricant Fabrikant • Fabrikante	Bosche GmbH & Co. KG

Die alleinige Verantwortung für die Ausstellung trägt der Hersteller.

The sole responsibility for the issue carries the manufacturer. • La seule responsabilité de l'exposition porte le fabricant. • De verantwoordelijkheid voor de uitgifte draagt de fabrikant. • El único responsable de la publicación lleva el fabricante.

Der oben genannte Gegenstand der Erklärung erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union:

The above-mentioned object of the declaration complies with the relevant harmonization legislation of the Union • L'objet de la déclaration susmentionné est conforme à la législation d'harmonisation pertinente de l'Union • Het bovengenoemde voorwerp van de verklaring voldoet aan de relevante harmonisatiewetgeving van de Unie • El objeto de la declaración mencionado anteriormente cumple con la legislación de armonización pertinente de la Unión

2014/35/EU Niederspannungsrichtlinie Low voltage Directive	EN 61010-1:2020 für / for / pour / voor / para 230/115 VAC
2014/30/EU EMV-Richtlinie EMC Directive	EN 55022:2011 EN 61000-6-2:2019 EN 61000-6-4:2019 EN 61000-4-2:2009 EN 61000-4-3:2011 EN 61000-4-4:2012 EN 61000-4-5:2014 EN 61000-4-6:2014
2011/65/EU RoHS	EN IEC 63000:2018

Unterzeichnet für und im Namen von Bosche:

Damme, 25.11.2021

Dipl. Ing. Jarmila Bosche, PhD.
Geschäftsführer • Managing Director
 Directeur général • Directeur • Director general



BOSCHE GmbH & Co. KG
Reselager Rieden 3
49401 Damme
Germany

Tel 05491 999 689 0
Fax 05491 999 689 9
www.bosche.eu
info@bosche.eu