

# STAINLESS STEEL/PROTECTION AGAINST DUST AND WATER SPLASHES IP65...68



2020

### KERN Pictograms



#### Internal adjusting:

Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)



#### Adjusting program CAL:

For quick setting up of the balance's accuracy. External adjusting weight required



#### Easy Touch:

Suitable for the connection, data transmission and control through PC, tablet or smartphone



#### Memory:

Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.



#### Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard. For details see page 223



#### Data interface RS-232:

To connect the balance to a printer, PC or network



#### 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



#### **USB** data interface:

To connect the balance to a printer, PC or other peripherals



#### Bluetooth\* data interface:

To transfer data from the balance to a printer, PC or other peripherals



#### WLAN data interface:

To transfer data from the balance to a printer, PC or other peripherals



#### **Control outputs**

(optocoupler, digital I/O):

To connect relays, signal lamps, valves, etc.



#### Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements



#### Interface for second balance:

For direct connection of a second balance



#### Network interface:

For connecting the scale to an Ethernet network



evaluation unit using an integrated radio module



#### **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

The balance displays serial number,

regardless of a printer connection

With weight, date and time. Only with

KERN printers, see page 171-173

Reference quantities selectable.

Display can be switched from piece

The weights of the recipe ingredients

can be added together and the total

weight of the recipe can be printed out

Internal memory for complete recipes

Internal memory for complete recipes

ingredients. User guidance through display, multiplier function, adjustment

of recipe when dosages are exceeded

The weights of similar items can be

added together and the total can be

Determining the deviation in % from

Can be switched to e.g. nonmetric

units at the touch of a key. See balance

model. Please refer to KERN's website

Percentage determination:

the target value (100 %)

Weighing units:

with name and target value of the recipe

with name and target value of the

recipe ingredients. User guidance

user ID, weight, date and time,

GLP/ISO log:

GLP/ISO log:

Piece counting:

Recipe level A:

Recipe level B:

through display

Recipe level C:

or barcode recognition

Totalising level A:

printed out

to weight



#### Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram. For details see page 62



#### Stainless steel:

The balance is protected against corrosion



#### Suspended weighing:

Load support with hook on the underside of the balance



### **Battery operation:**

Ready for battery operation. The battery type is specified for each device



#### Rechargeable battery pack:

Rechargeable set





#### Universal mains adapter:

with universal input and optional input socket adapters for A) EU, CH, GB B) EU, CH, GB, USA C) EU, CH, GB, USA, AUS



#### Mains adapter:

230 V/50 Hz in standard version for EU, CH. On request GB, USA or AUS version available



#### Power supply:

Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request



#### Weighing principle: Strain gauges

Electrical resistor on an elastic deforming body



#### Weighing principle: Tuning fork

A resonating body is electromagnetically



excited, causing it to oscillate



#### Weighing principle: Electromagnetic force compensation

Coil inside a permanent magnet. For the most accurate weighings



### Weighing principle: Single cell technology:

Advanced version of the force compensation principle with the highest level of precision



#### Verification possible:

The time required for verification is specified in the pictogram



#### DAkkS calibration possible (DKD):

The time required for DAkkS calibration is shown in days in the pictogram



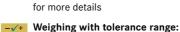
# Package shipment:

The time required for internal shipping preparations is shown in days in the pictogram

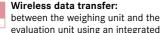


#### Pallet shipment:

The time required for internal shipping preparations is shown in days in the pictogram



(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





#### Hold function:

(Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value

### KERN - measuring technology and testing services from a single source











# **Balances & Test service** catalogue

Provides a complete overview of the KERN line of balances, test weights, and services such as verification, calibration, etc.

### Medical scales catalogue

Complete line of medical scales, from infant scales to patient scales, chair scales and adiposity scales, as well as hand grip dynamometers, chemist's balances and veterinary scales.

# Microscopes & refractometers catalogue

Extensive range in the area of optical instruments, such as, for example, biological microscopes, stereo microscopes, metallurgical microscopes, polarisation microscopes as well as analogue and digital refractometers.

# SAUTER measuring equipment catalogue

Test instruments for industry and commerce, such as force, coating thickness, material thickness and calibration service.

#### DAkkS calibration service brochure

Detailed information on topics pertaining to the calibration and verification of balances, test weights, and force measuring devices.

## Your advantages

#### fast

- 24 hours delivery service for products in stock – ordered today, on its way tomorrow
- Sales & service hotline available from 8:00 am to 6:00 pm

#### reliable

- · Up to 3 years warranty
- Precision in weighing technology for more than 175 years

#### competent

- DAkkS accreditation DIN EN ISO/IEC 17025
- Certified QM system DIN EN ISO 9001
- Authorisation for initial verification by the manufacturer 2014/31/EU
- Medical certifications DIN EN ISO 13485 and 93/42/EWG

#### versatile

- One-stop shopping: from pocket balances through to 15 t crane balance – everything from one supplier
- Find the product you want at lightning speed with the "Balance Quick-Finder" at www.kern-sohn.com



#### Order hotline +49 7433 9933-0



**Service hotline** +49 7433 9933-199



**Calibration hotline** +49 7433 9933-196



Our team of consultants will assist you

from Monday to Friday from 8:00 am to 6:00 pm



Online Shop

www.kern-sohn.com



E-mail order info@kern-sohn.com



Fax order +49 7433 9933-146



### www.kern-sohn.com

Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary, images and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a clever test weight and balance search engine.

# Stainless steel/Protection against dust and water splashes IP65...68

#### KERN scales - not scared of water at all!

Scales used in industrial situations or the food industry are often exposed to extreme stresses and strains. Water, oils, fats, varnish, dust, dirt, flour, small parts etc. are all natural enemies of a scale. In industries such as the chemical, pharmaceutical, food, manufacturing industries, etc. scales must be able to cope with these stresses without this affecting their performance.

For use in such harsh environmental conditions, levels of protection are defined, which specify which environmental stresses a system can be exposed to with respect to the level of contact, foreign object and moisture protection, without damage being caused to the unit. These levels of protection are described in the following standard: "DIN EN 60529: protection types through housing" The IP code usually consists of a two-digit combination, which gives the relevant level of protection, e.g. IP68.

The first digit specifies the protection level for contact protection and protection against foreign bodies (dust protection), the second digit is for the water and moisture protection (protection against splashes of water).

All stainless steel components of the IP65...68 protected KERN stainless steel scales are made of corrosion-resistant steel of quality class 1.4301 (DIN X5CrNi18-10). The material properties support you in your \*\* HACCP\*-compliant quality system.

▶ See the glossary on page 223-225

#### Extract from the standard: "DIN EN 60529: protection types through housing":

KERN-Pictogram	1. digit	Specification	2. digit	Specification
<b>♦ ♦ ♦</b> IP 65	6	Dustproof	5	Protection against jets of water (nozzle) from any angle (cleaning with a damp cloth)
<b>♦ ♦ ♦</b> IP 66	6	Dustproof	6	Protection against powerful jets of water
<b>♦ ♦ ♦</b> IP 67	6	Dustproof	7	Protection against temporary immersion
♦♦♦ IP68	6	Dustproof	8	Protection against continuous immersion (designed for continuous use in wet areas, submersion is possible depending on the pressure (water depth))



**Lisa Haiß**Product specialist Stainless steel scales

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- Now with innovative checkweighing display
- With EC-Type Approval [M]
- Large stainless steel-weighing plate
- High mobility: thanks to compact, flat construction and low weight, it is suitable for use in several locations (kitchen, cafeteria, warehouse etc.)

HIGHLIGHT

#### Quick-Finder Stainless steel/Protection against dust and water splashes IP65...68 Readability Weighing Model Price Page ååå IP M ï - 6550 excl. of VAT capacity TOL ACCU [d] [Max] ex works **KERN** For an explanation on the pictos, see front flap kg € g FOB 500-1S 0,1 0,5 79, 64 1 **FOB 0.5K-4NS** 105,-• 0.1 1 WTB 1K-4N 69 0,2 1,5 215,-1 FFN 1K-4N 70 0,2 260, • FOB 3K-4NL • 0.2 3 265, 67 1 • 0,5 1,5 FOB 1.5K0.5 180,-66 0,5 1,5 FOB 1K-4LM 265,-66 1 0 0,5 WTB 1K-4NM 240,-69 0 1,5 0,5 1,5 FFN 1K-4NM 285,-70 0 • • 215,-WTB 3K-4N 69 • 0.5 3 1 3 | 0,5 FFN 3K0.5IPN 255,-70 1 305, 71 0 • 0,5 3 FXN 3K-4N 1 • 0,5 | 1 5 | 7,5 FOB 7K-4NL 230, 67 1 • • FOB 3K1 • 3 | 180. 66 1 1 1 3 FOB 3K-3LM 265, o • • 66 3 WTB 3K-3NM 240, 69 1 0 • 1 • 1 FFN 3K1IPM 285, 70 0 71 0 1 3 FXN 3K-3M 370, 1 • • 1 FOB 5K1S 79,-64 • 1 5 FOB 5K-3NS 105,-65 1 • • WTB 6K-3N 215,-69 1 6 1 1 6 FFN 6K1IPN 255, 70 1 FXN 6K-3N 305,-71 0 1 10 | SFB 10K1HIP 670,-72 1 0 • 1 | 2 SXS 6K-3M 73 0 • 3 | 6 670. • 1 0 1 | 2 8 | 15 FOB 10K-3NL 230,-67 • • 2 180,-FOB 6K2 66 1 2 FOB 6K-3LM 265,-66 1 o • • 2 240, 69 0 6 WTB 6K-3NM 1 • • FFN 6K2IPM 285, 70 0 • 2 2 6 FXN 6K-3M 370, 71 1 0 • • 2 WTB 10K-3N • • 215,-69 2 70 15 FFN 15K2IPN 255,-1 • . • 2 15 **FXN 10K-3N** 305,-71 1 0 2 20 SFB 20K2HIP 670,-72 1 2 | 5 6 | 15 **SXS 10K-3M** 670,-73 0 2 | 5 6 | 15 SXS 10K-3LM 830,-73 1 0 0 • • 2 | 5 FOB 30K-3NL 230,-67 • • 16 | 30 5 15 FOB 10K-3LM 265, 66 0 • 5 WTB 10K-3NM 0 • 15 240. 69 5 15 FFN 15K5IPM 285,-70 1 0 • • • 370, 71 5 15 **FXN 10K-3M** 0 • • • 1 5 15 SFB 15K5HIPM 680, 72 0 0 • FFN 25K5IPN 70 • 5 25 255, 1 5 **WTB 30K-3N** 69 • • 215,-5 30 **FXN 30K-3N** 305,-71 1 0 . 72 50 SFB 50K5HIP 670, 5 72 50 SFB 50K5LHIP 740, 1 • • 5 50 SFB 50K-3XL 870,-72 5 | 10 15 | 30 **SXS 30K-2M** 820,-73 1 0 • 0 • • • 10 15 I 30 SXS 30K-2LM 1110,-73 0 0 10 25 FFN 25K10IPM 285,-70 0 • • WTB 30K-2NM 240,-69 0 • 10 30 10 30 **FXN 30K-2M** 370,-71 1 0 72 0 • 10 30 SFB 30K10HIPM 690, • 1 0 10 100 SFB 100K10HIP 730, 72 1 • 72 0 10 100 SFB 100K-2XL 1130, 1 • • 10 | 20 30 | 60 SXS 60K-2M 820, 73 O • 0 • 10 | 20 60 SXS 60K-2LM 1110, 73 0 • • 1 0 SFB 60K-2XLM 930, 72 0 20 60 72 20 200 SFB 200K-2XL 850,· 1 d • • 20 | 50 60 | 150 SXS 100K-2M 1110,-73 o 73 20 | 50 60 | 150 **SXS 100K-2LM** 1370,-2 0 0 • • • 0 SFB 100K-2HM 760,-72 0 0 50 150 1 50 150 SFB 100K-2XLM 1150, 72 0 50 | 100 150 | 300 SXS 300K-2M 1370,-73 0 0

■ News 2020 ■ standard O = option





Super compact stainless steel scale for weighing, checking and portioning in the smallest of spaces

#### **Features**

- Stainless steel design of the housing and weighing plate. Its smooth surfaces make it simple to clean
- · High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)
- · Secure and non-slip positioning with rubber feet
- · Your support in a HACCP-compliant quality
- · Particularly flat design
- Protective working cover included with delivery

#### **Technical data**

- · Large LCD display, digit height 20 mm
- · Dimensions weighing surface, stainless steel, W×D 125×155 mm
- Overall dimensions W×D×H 175×155×40 mm
- Ready for use: Battery included, 9 V-Block, operating time up to 20 h
- Net weight approx. 0,7 kg
- Permissible ambient temperature 10 °C/40 °C

#### **Accessories**

- II Protective working cover, scope of delivery: 5 items, KERN FOB-A11S05, € 40,-
- Mains adapter external, KERN FOB-A09, € 35,-

















Model	Weighing capacity	Readability	Weighing plate	Price	Options	
		•	W×D	excl. of VAT	DAkkS Calibr. Co	ertificate
	[Max]	[d]		ex works	DAkkS	
KERN	kg	g	mm	€	KERN	€
FOB 500-1S	0,5	0,1	155×125	79,-	963-127	72,-
FOB 5K1S	5	1	155×125	79,-	963-127	72,-







Super compact stainless steel balance with protection type IP65 against dust and water splashes

#### **Features**

- Stainless steel design of the housing and weighing plate. Its smooth surfaces make it simple to clean
- High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)
- Secure and non-slip positioning with rubber feet
- Particularly flat design
- Your support in a HACCP-compliant quality system
- Protection against dust and water splashes IP65 (only when using battery)
- Protective working cover included with delivery

#### **Technical data**

- · Large LCD display, digit height 20 mm
- Dimensions weighing surface, stainless steel, W×D 150×120 mm
- Overall dimensions W×D×H 170×150×40 mm
- Ready for use: Batteries included, 9 V-Block, operating time up to 24 hours
- Net weight approx. 0,8 kg
- Permissible ambient temperature 10 °C/35 °C

#### **Accessories**

- Protective working cover, scope of delivery: 5 items, KERN FOB-A12S05, € 40,-
- Mains adapter external, KERN FOB-A09, € 35,-

STANDARD							
CAL EXT	UNIT	<b>665</b>	INOX	BATT	DMS	1 DAY	

		OFTION	
$\bowtie$		_#	DAkkS
DMS	1 DAY	230 V	+3 DAYS

Model	Weighing capacity	Readability	Weighing plate	Price	Options	
			W×D	excl. of VAT	DAkkS Calibr. Certificate	
	[Max]	[d]		ex works	DAkkS	
KERN	kg	g	mm	€	KERN	€
FOB 0.5K-4NS	0,5	0,1	150×120	105,-	963-127	72,-
FOB 5K-3NS	5	1	150×120	105,-	963-127	72,-









Compact stainless steel bench scale with EC type approval [M] and special checkweighing display for even more efficient working

#### **Features**

- Innovative weighing with tolerance range (Checkweighing): The colour of the display changes depending on the weight (too light/ ok/too heavy) and is an aid to help with portioning, dosing and grading
- Stainless steel design of the housing and weighing plate. Its smooth surfaces make it simple to clean
- High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)
- Your support in a HACCP-compliant quality system
- Secure and non-slip positioning with rubber feet
- Increased protection against humidity through waterproof silicone sealing of the load cell, electronics and soldering joints
- Check the weighing capacity which is in use at the press of a button (net/gross weight)
- Protective working cover included with delivery

#### **Technical data**

- · Large backlit LCD display, digit height 20 mm
- Overall dimensions W×D×H 240×180×60 mm
- Net weight approx. 2,0 kg
- Permissible ambient temperature 5 °C/35 °C

#### **Accessories**

- **Protective working cover**, scope of delivery: 5 items, KERN FOB-A05S05, **€ 40,**-
- Rechargeable battery pack internal, operating time up to 24 h without backlight, charging time approx. 8 h,
   KERN FOB-A07, € 45,-
- In Tare pan made of stainless steel, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, € 55,-

STANDARD

















Model	Weighing capacity	Readability	Weighing plate	Price Option		
				excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]		ex works	DAkkS	
KERN	kg	g	mm	€	KERN	€
FOB 1.5K0.5	1,5	0,5	175×165	180,-	963-127	72,-
FOB 3K1	3	1	175×165	180,-	963-127	72,-
FOB 6K2	6	2	175×165	180,-	963-128	88,-









Stainless steel bench scale with large weighing ranges and IP67 protection against dust and splash water

#### **Features**

- Stainless steel design of the housing and weighing plate. Its smooth surfaces make it simple to clean
- 11 Suitable for the ever-increasing hygienic requirements in the food industry
- Your support in a HACCP-compliant quality system
- Protection against dust and water splashes IP67 (only when using battery)
- · High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)
- · Protective working cover included with delivery

#### **Technical data**

- · Large backlit LCD display, digit height 25 mm, stainless steel
- Overall dimensions W×D×H 285×255×90 mm
- Ready for use: Batteries included, 4×1.5 V AA, operating time up to 48 h
- Net weight approx. 3,8 kg
- Permissible ambient temperature 5 °C/35 °C

#### **Accessories**

- 2 Mains adapter external, not included, not suitable for model FOB 3K-4NL, KERN FOB-A01, € 35,-
- Protective working cover, scope of delivery: 5 items, KERN FOB-A13S05, € 40,-
- I Tare pan made of stainless steel, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, € 55,-

















OPTION	
_#	DAkkS
230 V	+3 DAYS

Model	Weighing capacity	Readability	Weighing plate	Price	Option	
			W×D	excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]		ex works	DAkkS	
KERN	kg	g	mm	€	KERN	€
FOB 3K-4NL	3	0,2	252×200	265,-	963-127	72,-
	Dual-range balance swit	ches automatically to the next la	rgest weighing capacity [Max] and read	ibility [d]		
FOB 7K-4NL	5   7,5	0,5   1	252×200	230,-	963-128	88,-
FOB 10K-3NL	8   15	1   2	252×200	230,-	963-128	88,-
FOB 30K-3NL	16   30	2   5	252×200	230,-	963-128	88,-











Compact stainless steel bench scale with EC type approval [M] and special checkweighing display for even more efficient working

#### **Features**

- Innovative weighing with tolerance range (Checkweighing): The colour of the display changes depending on the weight (too light/ ok/too heavy) and is an aid to help with portioning, dosing and grading
- Stainless steel design of the housing and weighing plate. Its smooth surfaces make it simple to clean
- Suitable for the ever-increasing hygienic requirements in the food industry
- · High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)
- · Your support in a HACCP-compliant quality system
- · Protection against dust and water splashes IP67 (only when using battery)
- · Secure and non-slip positioning with rubber feet

- · Increased protection against humidity through waterproof silicone sealing of the load cell, electronics and soldering joints
- Check the weighing capacity which is in use at the press of a button (net/gross
- · Mains adapter included with delivery
- Protective working cover included with delivery

#### **Technical data**

- · Large backlit LCD display, digit height 25 mm
- Overall dimensions W×D×H 256×285×100 mm
- · KERN FOB-LM: Optional battery operation, 4×1.5 V AA, standard, operating time up to 48 h, AUTO-OFF function to preserve the
- · Net weight approx. 3,8 kg
- · Permissible ambient temperature 5 °C/35 °C

#### **Accessories**

- 3 Protective working cover, scope of delivery: 5 items, KERN FOB-A13S05, € 40,-
- Mains adapter external, KERN FOB-A01, € 35,-
- Tare pan made of stainless steel, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, € 55,-





















Model	Weighing	Readability	Verification	Minimal load	Weighing plate	Price		(	Option	
	capacity		value			excl. of VAT	Verifica	tion	DAkkS Calibr. Ce	rtificate
	[Max]	[d]	[e]	[Min]		ex works	MIII		DAkkS	
KERN	kg	g	g	g	mm	€	KERN	€	KERN	€
FOB 1K-4LM	1,5	0,5	0,5	10	248×198	265,-	965-227	55,-	963-127	72,-
FOB 3K-3LM	3	1	1	20	248×198	265,-	965-227	55,-	963-127	72,-
FOB 6K-3LM	6	2	2	40	248×198	265,-	965-228	70,-	963-128	88,-
FOB 10K-3LM	15	5	5	100	248×198	265,-	965-228	70,-	963-128	88,-









Ideal for food industry, thanks to its IP65 protection and special checkweighing display, also with EC type approval [M]

#### **Features**

- · Suitable for the ever-increasing hygienic requirements in the food industry
- · Your support in a HACCP-compliant quality system
- II Protection against dust and water splashes IP65 (only when using rechargeable battery pack)
- Very fast display: steady weight values within 2 s
- 2 Second display on the rear of the balance
- Compact size, practical for small spaces
- Innovative weighing with tolerance range (Checkweighing): The colour of the display changes depending on the weight (too light/ok/too heavy) and is an aid to help with portioning, dosing and grading

- High mobility: thanks to rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations
- · Recessed grips on the underside of the scale for easy transportation
- Protective working cover included with delivery

#### **Technical data**

- · Large backlit LCD display, digit height 25 mm
- · Weighing plate dimensions, stainless steel, W×D 260×200 mm
- Overall dimensions W×D×H 285×315×128 mm
- · Net weight approx. 3,2 kg
- Permissible ambient temperature -10 °C/40 °C

#### **Accessories**

- · Protective working cover, scope of delivery: 5 items, KERN RFB-A01S05, € 40,-
- · Rechargeable battery pack internal, operating time up to 50 h without backlight, charging time approx. 12 h, KERN WTB-A01N, € 35,-
- I Tare pan made of stainless steel, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, € 55,-

STANDARD

















Model	Weighing capacity	Readability	Verification value	Minimal load	Price		(	Option	
					excl. of VAT	Verifica	tion	DAkkS Calibr. Ce	rtificate
	[Max]	[d]	[e]	[Min]	ex works	MIII		DAkkS	
KERN	kg	g	g	g	€	KERN	€	KERN	€
WTB 1K-4N	1,5	0,2	-	-	215,-	-	-	963-127	72,-
WTB 3K-4N	3	0,5	-	-	215,-	-	-	963-127	72,-
WTB 6K-3N	6	1	-	-	215,-	-	-	963-128	88,-
WTB 10K-3N	15	2	-	-	215,-	-	-	963-128	88,-
WTB 30K-3N	30	5	-	-	215,-	-	-	963-128	88,-

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WTB 1K-4NM	1,5	0,5	0,5	10	240,- 🕛	965-227	55,-	963-127	72,-
WTB 3K-3NM	3	1	1	20	240,- 🕛	965-227	55,-	963-127	72,-
WTB 6K-3NM	6	2	2	40	240,- 🕛	965-228	70,-	963-128	88,-
WTB 10K-3NM	15	5	5	100	240,- 🕛	965-228	70,-	963-128	88,-
WTB 30K-2NM	30	10	10	200	240,- 🕛	965-228	70,-	963-128	88,-









# All-round bench scale, protected by stainless steel and protection type IP65 also with EC type approval [M]

#### **Features**

- 11 Ideal for the increased hygienic requirements in the food, pharmaceutical and chemical industries
- · Your support in a HACCP-compliant quality system
- 2 Ideal for the robust industrial applications
- I Protection against dust and water splashes IP65 (only when using rechargeable battery pack)
- · High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)
- Stainless steel design of the housing and weighing plate. Its smooth surfaces make it simple to clean

· Recessed grips on the underside of the scale for easy transportation

### **Technical data**

- · Large backlit LCD display, digit height 25 mm
- Dimensions weighing surface, stainless steel, W×D 230×190 mm
- Overall dimensions W×D×H 230×300×130 mm
- · Rechargeable battery pack internal, operating time up to 50 h without backlight, charging time approx. 12 h
- · Net weight approx. 4,0 kg
- · Permissible ambient temperature KERN FFN-N: 0 °C/40 °C KERN FFN-NM: -10 °C/40 °C

#### **Accessories**

· Tare pan made of stainless steel, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, € 55,-

#### STANDARD

























PTION	FACTORY
AkkS	M
-3 DAYS	+3 DAYS

Model	Weighing capacity	Readability	Verification value	Minimal load	Price	Option			
					excl. of VAT	Verifica	tion	DAkkS Calibr. Certific	
	[Max]	[d]	[e]	[Min]	ex works	MIII		DAkkS	
KERN	kg	g	g	g	€	KERN	€	KERN	€
FFN 1K-4N	1,5	0,2	-	-	260,-	-	-	963-127	72,-
FFN 3K0.5IPN	3	0,5	-	-	255,-	-	-	963-127	72,-
FFN 6K1IPN	6	1	-	-	255,-	-	-	963-128	88,-
FFN 15K2IPN	15	2	-	-	255,-	-	-	963-128	88,-
FFN 25K5IPN	25	5	-	-	255,-	-	-	963-128	88,-

	to into data in a data in the real to know the rain address of the readain of deep											
FFN 1K-4NM	1,5	0,5	0,5	10	285,-	965-227	55,-	963-127	72,-			
FFN 3K1IPM	3	1	1	20	285,-	965-227	55,-	963-127	72,-			
FFN 6K2IPM	6	2	2	40	285,-	965-228	70,-	963-128	88,-			
FFN 15K5IPM	15	5	5	100	285,-	965-228	70,-	963-128	88,-			
FFN 25K10IPM	25	10	10	200	285,-	965-228	70,-	963-128	88,-			







Robust, space-saving bench scale, protected by stainless steel and IP68 rating - with EC type approval [M]

#### **Features**

- · Suitable for the ever-increasing hygienic requirements in the food industry
- · Your support in a HACCP-compliant quality system
- · Ideal for the robust industrial applications protection against dust and water splashes IP68, ideal for harsh ambient conditions. Submersion in water actually possible
- Stainless steel design of the housing and weighing plate. Its smooth surfaces make it simple to clean
- Very fast display: steady weight values within 2 s
- · High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)

- II Recessed grips on the underside of the scale for easy transportation
- Weighing with tolerance range (checkweighing): a visual and audible signal helps with portioning, dispensing or grading

#### **Technical data**

- · Large backlit LCD display (FXN-M: green), digit height 25 mm
- · Dimensions weighing surface, stainless steel, W×D 236×195 mm
- · Overall dimensions W×D×H 240×280×120 mm
- Ready for use: Batteries included, 4×1.5 V Size D, operating time without backlight FXN-N up to 250 h, FXN-M up to 625 h, AUTO-OFF function to preserve the battery
- · Net weight approx. 3,2 kg
- Permissible ambient temperature -10 °C/40 °C

#### **Accessories**

 Tare pan made of stainless steel, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, € 55,-

Note: Official verification duty for commercial trade

#### STANDARD

























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Model	Weighing	Readability	Verification	Minimal load	Smallest part	Price	Option						
	capacity		value		weight	excl. of VAT	Verification		DAkkS Calibr. Certificat				
	[Max]	[d]	[e]	[Min]	[Normal]	ex works	MIII		DAkkS				
KERN	kg	g	g	g	g/piece	€	KERN	€	KERN	€			
FXN 3K-4N	3	0,5	_	_	5	305,-	-	-	963-127	72,-			
FXN 6K-3N	6	1	-	_	10	305,-	-	-	963-128	88,-			
FXN 10K-3N	15	2	_	_	20	305,-	-	-	963-128	88,-			
FXN 30K-3N	30	5	_	_	50	305,-	-	-	963-128	88,-			
Note: F	or applications th	nat require verific	ation, please ord	ler verification at	the same time, i	nitial verificat	ion at a later	date is n	ot possible.				
		Verification a	t the factory, we	need to know th	e full address of	the location o	f use.						
FXN 3K-3M	3	1	1	20	5	370,-	965-227	55,-	963-127	72,-			
FXN 6K-3M	6	2	2	40	10	370 -	965-228	70 -	963-128	88 -			

	To model of the factory, we mode to know the factor of the footston of acci-											
FXN 3K-3M	3	1	1	20	5	370,-	965-227	55,-	963-127	72,-		
FXN 6K-3M	6	2	2	40	10	370,-	965-228	70,-	963-128	88,-		
FXN 10K-3M	15	5	5	100	20	370,-	965-228	70,-	963-128	88,-		
FXN 30K-2M	30	10	10	200	50	370,-	965-228	70,-	963-128	88,-		







Stainless steel platform scales with IP65/67 protection, also with XL platform or EC type approval [M]

#### **Features**

- · Ideal for the robust industrial applications
- Il Platform: made entirely of stainless steel, silicone-coated stainless steel load cell, protection against dust and water splashes IP67
- 2 Display device: stainless steel, protection against dust and water splashes IP65 (only when using rechargeable battery pack)
- SFB-H: Column, standard, for models with weighing plate size 300×240 mm: Column height approx. 200 mm 400×300 mm: Column height approx. 400 mm

#### **Technical data**

- Large backlit LCD display, digit height 52 mm
- Dimensions of display device W×D×H 266×165×96 mm
- Cable length of display device approx. 3  $\ensuremath{\text{m}}$
- · Rechargeable battery pack internal, operating time up to 35 h without backlight, charging time approx. 12 h
- Permissible ambient temperature -10 °C/40 °C

#### Accessories

- Data interface RS-232, interface cable included, approx. 1,5 m, must be ordered at purchase, KERN KFN-A01, € 95,-
- · Stand to be screwed onto the platform, height of stand approx. 600 mm, KERN SFB-A01, € 80,-
- I Stand to elevate display device, height of stand approx. 800 mm, KERN BFS-A07, € 120,-
- · Further details, plenty of further accessories and suitable printers see Accessories

#### STANDARD





























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Model	Weighing	Readability	Verification	Minimal load	Net weight	Weighing	Price			Option		
	capacity		value			plate	excl. of VAT	Verification		DAkkS Calibr. Certificat		
	[Max]	[d]	[e]	[Min]	approx.	W×D	ex works	MIII		DAkkS		
KERN	kg	g	g	g	kg		€	KERN	€	KERN	€	
SFB 50K-3XL	50	5	-	-	14	500×400	870,-	-	-	963-128	88,-	
SFB 100K-2L	100	10	-	-	14	500×400	910,-	-	-	963-129	105,-	
SFB 100K-2XL	100	10	-	-	26	650×500	1130,-	-	-	963-129	105,-	
SFB 200K-2XL	200	20	-	-	26	650×500	850,-	_	-	963-129	105,-	
with elevated display												
SFB 10K1HIP	10	1	-	-	8	300×240	670,-	-	-	963-128	88,-	
SFB 20K2HIP	20	2	2	-	8	300×240	670,-	-	-	963-128	88,-	
SFB 50K5HIP	50	5	5	-	8	300×240	670,-	-	-	963-128	88,-	
SFB 50K5LHIP	50	5	5	-	8	400×300	740,-	-	-	963-128	88,-	
SFB 100K10HIP	100	10	-	-	14	400×300	730,-	-	-	963-129	105,-	
Note: F	or application	s that require	verification, pl	ease order ver	rification at the	e same time, i	nitial verificat	ion at a later	date is n	ot possible.		
		Verifica	tion at the fac	tory, we need	to know the fu	all address of	the location o	f use.				
SFB 60K-2XLM	60	20	20	400	16	500×400	930,- 🕛	965-229	93,-	963-129	105,-	
SFB 100K-2XLM	150	50	50	1000	24	650×500	1150,-	965-229	93,-	963-129	105,-	
SFB 300K-1LM *	300	100	100	2000	26	650×500	860,-	965-229	93,-	963-129	105,-	
				with	elevated displ	ay						
SFB 15K5HIPM	15	5	5	100	8	300×240	680,-	965-228	70,-	963-128	88,-	
SFB 30K10HIPM	30	10	10	200	8	300×240	690,-	965-228	70,-	963-128	88,-	
SFB 60K20LHIPM	60	20	20	400	14	400×300	740,-	965-229	93,-	963-129	105,-	
SFB 100K-2HM	150	50	50	1000	13	400×300	760	965-229	93	963-129	105	

**■** \*ONLY WHILE STOCKS LAST

Price reduction





# Stainless steel platform scale with high type of protection IP68 and EC type approval [M]

#### **Features**

- · Ideal for the robust industrial applications
- Il Platform: made entirely of stainless steel, silicone-coated stainless steel load cell, protection against dust and water splashes IP68. Substruction in wing design, extremely resistant to bending. Earthed weighing plate, to reduce static charge
- Display device: stainless steel, protection against dust and water splashes IP68, integrated power supply
- Suitable for the ever-increasing hygienic requirements in the food industry
- Wall mount for display device, standard
- Superior display size: digit height 55 mm, bright backlight for easy reading of weighing results, even in poor lighting conditions
- Easy-to use KERN menu structure with printout of weighing results which can be intuitively adapted

 Thanks to interfaces such as RS-232, RS-485 and Bluetooth (optional) the scale can easily be connected to existing networks and facilitates the data exchange between the scale and printer

#### Technical data

- · Large backlit LCD display, digit height 55 mm
- Weighing plate dimensions, stainless steel  $\ensuremath{\mathsf{W}}\xspace{\mathsf{X}}\xspace{\mathsf{D}}\xspace{\mathsf{X}}\xspace{\mathsf{H}}$ 
  - 300×240×86 mm
- **B** 400×300×89 mm
- © 500×400×123 mm
- □ 650×500×133,5 mm
- Dimensions of display device W×D×H 232×170×80 mm
- Cable length of display device approx. 2,5 m
- Permissible ambient temperature -10 °C/40 °C

#### Accessories

- Stand to elevate display device, for models with weighing plate size
- **A**-**D** Height of stand approx. 200 mm, KERN IXS-A02, € **70,**-
- **■-D** Height of stand approx. 400 mm, KERN IXS-A03, **€ 75,**-
- **©**-**D** Height of stand approx. 600 mm, KERN IXS-A04, € **85,**-
- Rechargeable battery pack internal, operating time up to 80 h without backlight, charging time approx. 12 h, must be ordered at purchase, Factory Option, KERN GAB-A04, € 40,-
- Data interface RS-232, interface cable included, approx. 1,5 m, must be ordered at purchase, KERN KXS-A04, € 100,-
- Data interface RS-485, must be ordered at purchase, KERN KXS-A01, € 145,-
- Foot switch, must be ordered at purchase, KERN KXS-A03, € 130,-
- Bluetooth data interface for wireless data transfer to PC or tablets, must be ordered at purchase, not in combination with verification, KERN KXS-A02, € 170,-
- Further details, plenty of further accessories and suitable printers see Accessories

STANDARI	D										OPTION	FACTORY				
ï	GLP	***	<b>-√+</b> <b>③</b> ③)		444	=	<b>-</b>				DAkkS	- 6000	• 6000. •	*		M
CAL EXT	PRINTER	PCS	TOL	MOVE	IP 68	INOX	230 V	DMS	1 DAY	2 DAYS	+3 DAYS	RS 232	RS 485	BT	ACCU	+3 DAYS

Model	Weighing	Readability	Verification	Minimal load	Linearity	Weighing	Price		Option			
	capacity		value			plate	excl. of VAT	Verification		DAkkS Calibr. Certificat		
	[Max]	[d]	[e]	[Min]			ex works	MIII		DAkkS		
KERN	kg	g	g	g	g		€	KERN	€	KERN	€	
SXS 6K-3M	3   6	1   2	1   2	20   40	± 1   2	Α	670,-	965-228	70,-	963-128	88,-	
SXS 10K-3M	6   15	2   5	2   5	40   100	± 2   5	Α	670,-	965-228	70,-	963-128	88,-	
SXS 10K-3LM	6   15	2   5	2   5	40   100	± 2   5	В	830,-	965-228	70,-	963-128	88,-	
SXS 30K-2M	15   30	5   10	5   10	100   200	± 5   10	В	820,-	965-228	70,-	963-128	88,-	
SXS 30K-2LM	15   30	5   10	5   10	100   200	± 5   10	С	1110,-	965-228	70,-	963-128	88,-	
SXS 60K-2M	30   60	10   20	10   20	200   400	± 10   20	В	820,-	965-229	93,-	963-129	105,-	
SXS 60K-2LM	30   60	10   20	10   20	200   400	± 10   20	С	1110,-	965-229	93,-	963-129	105,-	
SXS 100K-2M	60   150	20   50	20   50	400   1000	± 20   50	С	1110,-	965-229	93,-	963-129	105,-	
SXS 100K-2LM	60   150	20   50	20   50	400   1000	± 20   50	D	1370,-	965-229	93,-	963-129	105,-	
SXS 300K-2M	150   300	50   100	50   100	1000   2000	± 50   100	D	1370,-	965-229	93,-	963-129	105,-	

Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d]

 $<sup>^{\</sup>star}$  Either RS-232 or RS-485 can be installed and used

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Ancestor Johann Jakob Sauter built the Hahn inclination scale out of iron, a foundation stone for weighing for the balance industry in Southern Germany



1844

KERN is founded precision balances are produced



A proud Gottlieb Kern with his staff



Pharmaceutical balance with Aesculap

1880



1923

Inflation - KERN wages are paid with self printed currency



1980

The electronic balance ousts mechanical devices



1994

Accredited DKD laboratory (ISO 17025)



2000

New premises in Balingen



2002

Existing QM system certification in accordance with DIN EN ISO 9001:2000 standards



2007

Approval for the manufacture of medical products (DIN EN 13485 and 93/42/EEC)



Authorisation for initial verification by the manufacturer (2009/23/EC)



#### 2009

Approval for the manufacture and sale of height rods (DIN EN 13485 and 93/42/EEC)



Verification point for non-automatic balances and test weights.

New customer portal www.kern-sohn.com goes live



Expansion of the product range to include optical instruments (microscopes and refractometers)



Inauguration of Ziegelei 2.0 with computer-controlled high-bay warehouse



Come with KERN into the digital future: Expansion of the model ranges compatible with Industry 4.0, as well as the related services



#### 2019

Significant anniversary year! 25 years of accredited DKD laboratory 175 years of KERN & SOHN 250 years of balance manufacture in the Sauter

family-owned company



#### 2020

Construction of Ziegelei 3.0, extension of administration building