BALANCES & TEST SERVICE 2023

HANGING SCALES/CRANE SCALES



Crane scale KERN HFD



Robust, high-resolution crane scale up to 12 t, also with EC type approval [M] or protection type IP67



High mobility: thanks to rechargeable battery operation, compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)



Solid shackles, non-revolving



Radio remote control standard. Range up to 20 m. All functions can be selected. W×D×H 65×24×100 mm. Batteries included, 1× 12 V 23A

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HANGING SCALES/CRANE SCALES

Crane scale KERN HFD

Features

(Electrical safety)

with HFD-M)

KERN HFD-IP

HFD 3T-3M

HFD 6T-3M

HFD 10T-3M

harsh environments

in industrial environment

loads are directly displayed



• 11 With the TÜV certification mark, the scales

meet the requirements of the standard EN

13155 (Non-fixed load lifting attachments/

robust design, it is ideal for continuous use

· Hold function: the weight display is "frozen"

when the Hold button is pressed (Not usuable

• Tare: Resets the display to "0" when there is

a load on the scale. Now removed or added

· The models with IP add-on have special

spray and dust protection to IP67 and

because of this they are ideal for use in

Breakage resistance) and EN 61010-1

· Because of its stable construction and

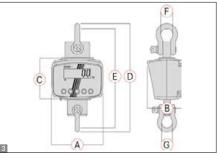


KERN HFD-M

- The models with M add-on have EC type approval and because of this they are ideal for use in verified applications such as, for example, calculation of a total price, based on weight
- Will support you when weighing freight in a SOLAS compliant manner
- · Sleep function: when the sleep button is pressed, the weight display is switched off, but the value remains stored. This can extend the battery life

Technical data

- · Superior display size: digit height 30 mm, bright backlight for easy reading of weighing results, even in poor lighting conditions
- · Rechargeable battery pack integrated, as standard, operating time up to 70 h without backlight, charging time approx. 12 h, Battery pack accessible from the outside, which means it is easy to replace
- Precision: 0,2% of [Max]
- Permissible ambient temperature -10 °C/40 °C



Accessories

- · Internal rechargeable battery pack for load receptor, operating time up to 70 h without backlight, charging time approx. 12 h, Internal rechargable battery pack, operating time up to 70 h without backlight, charging time approx. 12 h, KERN HFD-A04
- · Charging station for external battery charging, scope of delivery: charging station, exchangeable battery, mains adapter, KERN HFD-A07
- 2 Hook with safety catch, cast steel, galvanised and lacquered, non-revolving, suitable for models HFD 600, HFD 1T: KERN HFD-A01 HFD 3T: KERN HFD-A02 HFD 6T, HFD 10T: KERN HFD-A03
- · Bluetooth data interface for wireless data transfer to PC or tablets, must be ordered at purchase, KERN HFD-A06

965-132H

965-132H

965-133H

963-132H

963-132H

963-133H

STANDARD		OPTION	FACTORY				
i 666	IIII)				DAkkS		7
CAL EXT IP 67	ACCU	MULTI	DMS	1 DAY	+3 DAYS	BT 4.0 +3 D	AYS
HFD-IP						HFD-	M

3000

6000

12000

Model	Weighing capacity	Readability	Net		3 Dimensions					Option	
			weight							Verification	DAkkS Calibr. Certificate
	[Max]	[d]	approx.	Α	В	С	D	Е	F = G	MII	DAkkS
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	KERN	KERN
Multi-range balance, with increasing load it switches automatically to the next largest weighing range [Max] and readout [d]											
and when the load is fully removed, the balance switches back to the lower range											
HFD 600K-1	150 300 600	50 100 200	9	194	129	160	422	384	50,8	-	963-130H
HFD 1T-4	300 600 1500	100 200 500	9	194	129	160	422	384	50,8	-	963-130H
HFD 3T-3	600 1500 3000	200 500 1000	10	194	129	160	457	413	58	-	963-132H
HFD 6T-3	1500 3000 6000	500 1000 2000	15	194	129	160	518	467	68,3	-	963-132H
HFD 10T-3	3000 6000 12000	1000 2000 5000	20	194	129	160	584	521	82,5	-	963-133H
Protection against dust and water splashes IP67											
HFD 600K-1IP	150 300 600	50 100 200	9	194	129	160	422	384	50,8	-	963-130H
HFD 1T-4IP	300 600 1500	100 200 500	9	194	129	160	422	384	50,8	-	963-130H
HFD 3T-3IP	600 1500 3000	200 500 1000	10	194	129	160	457	413	58	-	963-132H
HFD 6T-3IP	1500 3000 6000	500 1000 2000	15	194	129	160	518	467	68,3	-	963-132H
HFD 10T-3IP	3000 6000 12000	1000 2000 5000	20	194	129	160	584	521	82,5	-	963-133H
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible.											
Verification at the factory, we need to know the full address of the location of use.											
HFD 600K-1M	600	200	9	194	129	160	422	384	50,8	965-130H	963-130H
HFD 1T-4M	1500	500	9	194	129	160	422	384	50,8	965-130H	963-130H

194 129 160 457 413 58

160 518 467 68,3

160 584 521 82.5





10

15

20

194 129

194 129

1000

2000

5000

BALANCES & TEST SERVICE 2023

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 or tablet.



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.



• 888. •

RS 232

• 1998. •

RS 485

KERN Universal Port (KUP):

allows the connection of external KUP PCS interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WLAN, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort

Data interface RS-232:

To connect the balance to a printer, PC or network



To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible

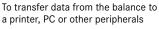
USB data interface:

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



USB

Bluetooth* data interface:





WiFi data interface:

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

Control outputs _0^0_ SWITCH

(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:

license. Other trademarks and trade names are those of their respective owner

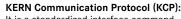
For direct connection of a second balance



KCP

Network interface: For connecting the scale to an

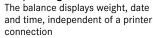
Ethernet network



It is a standardized interface command PROTOCOL 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







GLP/ISO log: GLP

With weight, date and time. Only with KERN printers.



PRINTER

Reference quantities selectable. Display can be switched from piece to weight

Recipe level A:

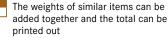
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



Internal memory for complete recipes RECIPE with name and target value of the recipe ingredients. User guidance through display



Totalising level A:



Determining the deviation in % from

Percentage determination:

the target value (100 %)

%

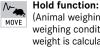
B

Weighing units: Can be switched to e.g. nonmetric UNIT units. See balance model. Please refer to KERN's website for more details



Weighing with tolerance range: (Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model

Hold function:



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



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Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram.

Suspended weighing: Load support with hook on the UNDER

Battery operation:

underside of the balance

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



Rechargeable battery pack: Rechargeable set



Universal plug-in power supply: with universal input and optional input socket adapters for A) EU, CH, GB

B) EU, CH, GB, USA C) EU, CH, GB, USA, AUS

Plug-in power supply:

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



Integrated power supply unit: 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

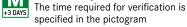


Weighing principle: Single cell technology:

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



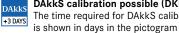
Verification possible:



Factory calibration (ISO):

Package shipment:

Pallet shipment:



ISO

1 DAY

2 DAYS

DAkkS calibration possible (DKD): The time required for DAkkS calibration

The time required for Factory calibration

The time required for internal shipping prepa-

The time required for internal shipping prepa-

rations is shown in days in the pictogram

rations is shown in days in the pictogram

is shown in days in the pictogram