BALANCES & TEST SERVICE 2023

HANGING SCALES/CRANE SCALES

Crane scale KERN HFC



Compact crane scale for use in harsh environmental conditions or where space is limited, with convenient hand-held terminal

Features

STANDARD

CAL EXT

 \mathcal{L}

UNIT

- 🛽 With the TÜV certification mark, the scales meet the requirements of the standard EN 13155 (Non-fixed load lifting attachments/ Breakage resistance) and EN 61010-1 (Electrical safety)
- With its high-quality finish, low weight and compact dimensions, this crane scale (tensile force gauge) is an essential device for industrial use, on building sites, in freight centres, ports etc.
- · Because of its compact design it is also ideally suited for installation in systems where space is limited, etc.
- Peak load display (peak hold)

BATT

4

- · Hold function: When the weighing value remains unchanged the weight indicated on the display is automatically "frozen" until the Hold key is pressed
- Tare: Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed

ACCU

2

MULTI

 Display device with integrated radio module, which the user can carry around with him, thanks to the convenient hand strap 3, standard. In this way the weighing data can always be read off the display device by the user, even when the user is a long way from the load receptor (force gauge) or under poor lighting conditions. Range up to 20 m. All functions can be selected (Can be ordered separately)

Technical data

- Material and design of housing/load support, models with
- [Max] ≤ 3 t: Aluminium/Stainless steel bushing
- [Max] > 3 t: Steel/Steel
- Precision: 0,2% of [Max]
- Internal measuring frequency: 10 Hz
- Further weighing units: kg, lb, N
- Permissible ambient temperature 5 °C/35 °C

Display device

DAkkS

+3 DAYS

OPTION

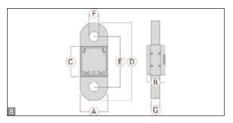
ACCU

5

- Large backlit LCD display, digit height 23 mm
- Rechargeable battery pack integrated, as standard, operating time up to 30 h without backlight, charging time approx. 12 h







- Dimensions of display device W×D×H 88×64×256 mm
- Net weight 0,5 kg

Load receptor

• • Optional battery operation, 3×1.5 V AA not included in scope of delivery, operating time up to 40 h

Accessories

- **5** Load receptor: Rechargeable battery pack internal, operating time up to 30 h, without backlight, charging time approx. 12 h, KERN HFA-A01
- Display device: Rechargeable battery pack internal, KERN HFC-A01
- High-strength shackle, hot-dipped galvanised cast steel bracket, bow shaped. Scope of delivery: 2 shackles with lacquered screw bolts, suitable for models with [Max] ≤ 5t: KERN YSC-01 [Max] > 5t: KERN YSC-02
- 🛛 Hook with safety catch, cast steel, galvanised and lacquered, non-revolving. Scope of delivery: 2 shackles, 1 lacquered screw bolt, 1 hook, suitable for models with $[Max] \le 1t$: KERN YHA-01 [Max] = 3t: KERN YHA-02 [Max] = 5t: KERN YHA-03
 - [Max] > 5t: KERN YHA-04

Model	Weighing capacity	Readability	Net weight	Dimensions						Option DAkkS Calibr. Certificate	
KERN	[Max] kg	[d] g	approx. kg	A	В	C	D	E	F	G	DAkkS
HFC 600K-1	600	200	1.8	 90	 62	 100	 255	 165	 32	 27	KERN 963-130H
HFC 1T-4	1000	500	1,8	90	62	100	255	165	32	32	963-130H
HFC 3T-3	3000	1000	2,2	90	62	100	255	165	32	32	963-132H
HFC 5T-3	5000	2000	4,0	90	62	100	255	165	30	30	963-132H
HFC 10T-3	10000	5000	6	90	72	100	275	185	40	40	963-133H

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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

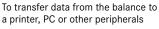
USB data interface:

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

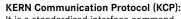
For direct connection of a second balance



KCP

Network interface: For connecting the scale to an

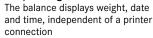
Ethernet network



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:

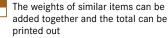
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



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 %)

%

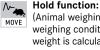
B

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

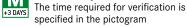


Weighing principle: Single cell technology:

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



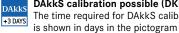
Verification possible:



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