

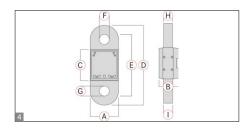
Crane scale KERN HFA











Compact crane scale with integrated display can also be used for tensile force measurement

Features

- With the TÜV certification mark, the scale meets 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.
- Ideally suited for determining weight quickly while loading and unloading
- Peak load display (peak hold)
- Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key

• Tare: Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed

Technical data

- · Large backlit LCD display, digit height 23 mm
- Material and design of housing/load support, models with

 $[Max] \le 3$ t: aluminium/stainless steel bearing [Max] > 3 t: steel/steel

- Rechargeable battery pack internal, operating time up to 30 h without backlight, charging time approx. 12 h
- Optional battery operation, 3×1.5 V AA not included, operating time up to 40 h
- Precision: 0,2 % of [Max]
- · Measuring frequency 60 Hz
- Further weighing units: kg, lb, $\ensuremath{\mathsf{N}}$
- Permissible ambient temperature 5 °C/35 °C

Accessories

- 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] ≤ 5 t: KERN YSC-01
- [Max] > 5 t: KERN YSC-02
- In 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
 - $[Max] \le 1 t$: KERN YHA-01
 - [Max] = 3 t: KERN YHA-02
- [Max] = 5 t: KERN YHA-03
- [Max] > 5 t: KERN YHA-04

STANDARD						
	\mathcal{Z}			A		
CAL EXT	UNIT	BATT	ACCU	MULTI	DMS	1 DAY

_	OPTION
	DAkkS
	+3 DAYS

Model	Weighing capacity	Readability	Net weight	4 Dimensions				Option DAkkS Calibr. Certificate		
	[Max]	[d]	approx.	Α	В	С	D	F	DAkkS	
KERN	kg	g	kg	mm	mm	mm	mm	mm	KERN	
HFA 600K-1	600	200	1,8	90	30	55	255	27	963-130H	
HFA 1T-4	1000	500	1,8	90	30	55	255	27	963-130H	
HFA 3T-3	3000	1000	2,0	90	30	61	255	27	963-132H	
HFA 5T-3	5000	2000	4,0	90	30	61	255	30	963-132H	
HFA 10T-3	10000	5000	6	90	40	71	275	40	963-133H	

KERN BALANCES & TEST SERVICES CATALOGUE 2019



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.



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



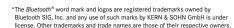
Network interface:

For connecting the scale to an Ethernet network



Wireless data transfer:

between the weighing unit and the 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



GLP/ISO log:

The balance displays serial number, user ID, weight, date and time, regardless of a printer connection



GLP/ISO log:

With weight, date and time. Only with KERN printers



Piece counting:

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



Recipe level B:

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



Recipe level C:

Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, multiplier function, adjustment of recipe when dosages are exceeded or barcode recognition



Totalising level A:

The weights of similar items can be added together and the total can be printed out



Percentage determination:

Determining the deviation in % from the target value (100 %)



Weighing units:

Can be switched to e.g. nonmetric units at the touch of a key. 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



Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram.



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



Mains adapter:

230V/50Hz in standard version for EU. 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:

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

KERN - Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight in the international OIML error limit classes E1-M3 from 1 mg - 2500 kg. In combination with a DAkkS calibration certificate the best pre-requisite for proper

The KERN DAkkS calibration laboratory today is one of the most modern and best-equipped DAkkS calibration laboratories for balances, test weights and force-measure-

Thanks to the high level of automation, we can carry out DAkkS calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

. . .

- DAkkS calibration of balances with a maximum load of up to 50 t
- DAkkS calibration of weights in the range of 1 mg 2500 kg
- Volume determination and measuring of magnetic susceptibility (magnetic characteristics) for test weights
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DAkkS calibration certificates in the following languages DE, GB, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

Your KERN specialist dealer: