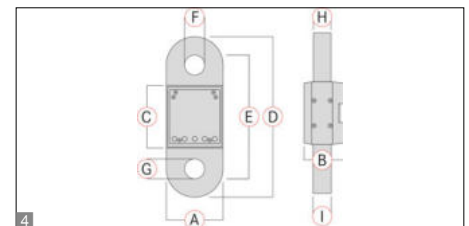
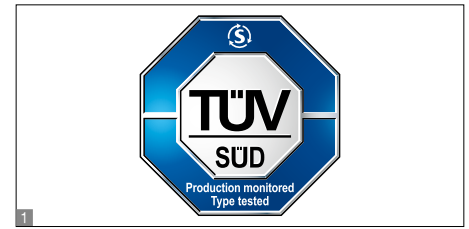


## Crane scale KERN HFA



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

### Features

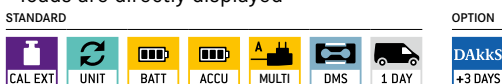
- **1** With the TÜV certification mark, the scale meets the requirements of the standard EN 13155 (Non-fixed load lifting attachments/ Breakage resistance) and EN 61010-1 (Electrical safety)
- With its high-quality finish, low weight and compact dimensions, this crane scale (tensile force gauge) is 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] ≤ 3 t: aluminium/stainless steel bearing [Max] > 3 t: steel/steel
- Internal rechargeable battery pack, operating time up to 30 h without backlight, charging time approx. 12 h
- Optional battery operation, 3×1.5 V AA not included in scope of delivery, operating time up to 40 h
- Precision: 0,2 % of [Max]
- Measuring frequency 60 Hz
- Further weighing units: kg, lb, N
- Permissible ambient temperature 5 °C/35 °C


























### Accessories

- **2** 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
- **3** 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] ≤ 1 t: KERN YHA-01 [Max] = 3 t: KERN YHA-02 [Max] = 5 t: KERN YHA-03 [Max] > 5 t: KERN YHA-04



Model	Weighing capacity [Max] kg	Readability [d] g	Net weight approx. kg	4 Dimensions					Option		
				A mm	B mm	C mm	D mm	F mm	DAkkS KERN	Calibr. Certificate	
<b>KERN</b>											
<b>HFA 600K-1</b>	600	200	1,8	90	55	100	255	27		963-130H	
<b>HFA 1T-4</b>	1000	500	1,8	90	55	100	255	27		963-130H	
<b>HFA 3T-3</b>	3000	1000	2,0	90	61	100	255	27		963-132H	
<b>HFA 5T-3</b>	5000	2000	4,0	90	61	100	255	30		963-132H	
<b>HFA 10T-3</b>	10000	5000	6	90	71	100	275	40		963-133H	

## Pictograms

 <b>Internal adjusting:</b> Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)	 <b>KERN Communication Protocol (KCP):</b> 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	 <b>Suspended weighing:</b> Load support with hook on the underside of the balance
 <b>Adjusting program CAL:</b> For quick setting up of the balance's accuracy. External adjusting weight required	 <b>GLP/ISO log:</b> The balance displays serial number, user ID, weight, date and time, regardless of a printer connection	 <b>Battery operation:</b> Ready for battery operation. The battery type is specified for each device
 <b>Easy Touch:</b> Suitable for the connection, data transmission and control through PC, tablet or smartphone.	 <b>GLP/ISO log:</b> With weight, date and time. Only with KERN printers	 <b>Rechargeable battery pack:</b> Rechargeable set
 <b>Memory:</b> Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	 <b>Piece counting:</b> Reference quantities selectable. Display can be switched from piece to weight	 <b>Universal mains adapter:</b> with universal input and optional input socket adapters for A) EU, CH, GB; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS
 <b>Alibi memory:</b> Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard	 <b>Recipe level A:</b> The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out	 <b>Mains adapter:</b> 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available
 <b>Data interface RS-232:</b> To connect the balance to a printer, PC or network	 <b>Recipe level B:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display	 <b>Power supply:</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
 <b>RS-485 data interface:</b> To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible	 <b>Totalising level A:</b> The weights of similar items can be added together and the total can be printed out	 <b>Weighing principle: Strain gauges:</b> Electrical resistor on an elastic deforming body
 <b>USB data interface:</b> To connect the balance to a printer, PC or other peripherals	 <b>Percentage determination:</b> Determining the deviation in % from the target value (100 %)	 <b>Weighing principle: Tuning fork:</b> A resonating body is electromagnetically excited, causing it to oscillate
 <b>Bluetooth* data interface:</b> To transfer data from the balance to a printer, PC or other peripherals	 <b>Weighing units:</b> 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	 <b>Weighing principle: Electromagnetic force compensation:</b> Coil inside a permanent magnet. For the most accurate weighings
 <b>WiFi data interface:</b> To transfer data from the balance to a printer, PC or other peripherals	 <b>Weighing with tolerance range:</b> (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	 <b>Weighing principle: Single cell technology:</b> Advanced version of the force compensation principle with the highest level of precision
 <b>Control outputs (optocoupler, digital I/O):</b> To connect relays, signal lamps, valves, etc.	 <b>Hold function:</b> (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value	 <b>Verification possible:</b> The time required for verification is specified in the pictogram
 <b>Analogue interface:</b> to connect a suitable peripheral device for analogue processing of the measurements	 <b>Protection against dust and water splashes IPxx:</b> The type of protection is shown in the pictogram	 <b>DAKkS calibration possible (DKD):</b> The time required for DAKkS calibration is shown in days in the pictogram
 <b>Interface for second balance:</b> For direct connection of a second balance		 <b>Factory calibration (ISO):</b> The time required for Factory calibration is shown in days in the pictogram
 <b>Network interface:</b> For connecting the scale to an Ethernet network		 <b>Package shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram
		 <b>Pallet shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram

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## 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 balance calibration.

The KERN DAKkS calibration laboratory today is one of the most modern and best-equipped DAKkS calibration laboratories for balances, test weights and force-measurement in Europe.

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.

### Range of services:

- 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, EN, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

## Your KERN specialist dealer:

ICS Schneider Messtechnik GmbH  
Briesestraße 59  
D-16562 Hohen Neuendorf / OT Bergfelde

Tel.: 03303 / 50 40 66  
Fax: 03303 / 50 40 68

info@ics-schneider.de  
www.ics-schneider.de