

### Crane scale KERN HFD



# **TAAKATALO**

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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



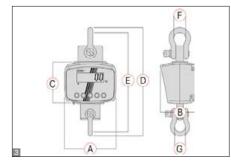
Radio remote control standard. Range up to 20 m. All functions can be selected. W $\times$ D $\times$ H 65 $\times$ 24 $\times$ 100 mm. Batteries included, 1 $\times$  12 V 23A



#### Crane scale KERN HFD







#### **Features**

- 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)
- Because of its stable construction and robust design, it is ideal for continuous use in industrial environment
- Hold function: the weight display is "frozen" when the Hold button is pressed (Not usuable with HFD-M)
- Tare: Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed

#### KERN HFD-IP

HFD 10T-3M

 The models with IP add-on have special spray and dust protection to IP67 and because of this they are ideal for use in harsh environments

#### 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

965-133H

963-133H

| STANDARD      |      |          |     |       | OPTION  | FACTORY |       |
|---------------|------|----------|-----|-------|---------|---------|-------|
| 666           | •••  | <u> </u> |     |       | DAkkS   | *       | N     |
| CAL EXT IP 67 | ACCU | MULTI    | DMS | 1 DAY | +3 DAYS | BT 4.0  | +3 DA |
| HFD-IP        |      |          |     |       |         |         | HFD-N |

12000

| Model   | Weighing capacity  | Net<br>weight      |         | 3 Dimensions |     |     |     |     | Verification | Option  Verification DAkkS Calibr. Certificate |             |
|---|--|--------------------|---------|--------------|-----|-----|-----|-----|--------------|--|-------------|
|   | [Max]  | [d]                | approx. | Α            | В   | С   | D   | F   | F = G        | MIII   | 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. |  |                    |         |              |     |     |     |     |              |  | t 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    |
| HFD 3T-3M   | 3000   | 1000               | 10      | 194          | 129 | 160 | 457 | 413 | 58           | 965-132H                                       | 963-132H    |
| HFD 6T-3M   | 6000   | 2000               | 15      | 194          | 129 | 160 | 518 | 467 | 68,3         | 965-132H                                       | 963-132H    |

194 129 160 584 521 82.5

20

5000





#### 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.



#### **KERN Universal Port (KUP):**

allows the connection of external KUP 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



#### 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



## WiFi 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



## 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



#### GLP/ISO log:

The balance displays weight, date and time, independent of a printer connection

and other digital systems



#### 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



#### 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. 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.



#### 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 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. 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:

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



## Factory calibration (ISO):

The time required for Factory 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

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