



KERN HFD/HFD-IP



KERN HFD-M

Robust, high-resolution crane scale up to 12 t, also with optional verification or protection type IP67



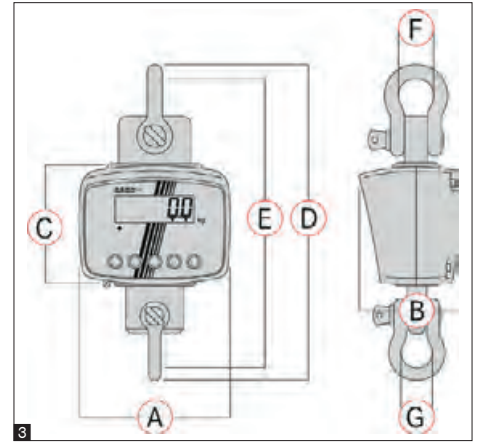
High mobility: thanks to rechargeable battery operation, compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department, etc.)



Solid shackles, non-revolving



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



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

KERN HFD/HFD-IP

- Hold function: the weight display is "frozen" when the Hold button is pressed

KERN HFD-IP

- 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 can be verified optionally 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]
- Weighing units: kg
- Permissible ambient temperature -10 °C/40 °C

Accessories

- Charging station for external battery charging, scope of delivery: charging station, exchangeable battery, mains adapter, KERN HFD-A07
- Hook with safety catch, cast steel, galvanized and lacquered, non-revolving, suitable for models
 [Max] ≤ 1t: KERN HFD-A01
 [Max] = 3t: KERN HFD-A02
 [Max] ≥ 6t: KERN HFD-A03

STANDARD: CAL EXT, SUM, IP 67, ACCU, MULTI, DMS, 1 DAY

OPTION: DAKKS +3 DAYS

FACTORY: M +3 DAYS HFD-M

Model	Weighing capacity [Max] kg	Readability [d] g	Net weight approx. kg	Dimensions						Verification	Options DAKKS Calibr. Certificate
				A mm	B mm	C mm	D mm	E mm	F=G mm		

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	22	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	22	194	129	160	584	521	82,5	-	963-133H

Note: For devices that require verification (conformity assessment according to NAWI 2014/31/EU), please include the verification when placing your order. The initial verification is not possible after delivery. Please inform the full address of the location of use for the initial verification.

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
HFD 10T-3M	12000	5000	20	194	129	160	584	521	82,5	965-133H	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



EasyTouch
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, WIFI, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort



RS-232 Data interface
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 and other digital systems



GLP/ISO log intern
The balance displays weight, date and time, independent of a printer connection



GLP/ISO log Printer
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, US
C) EU, CH, GB, US, 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



Conformity Assessment
The time required for conformity assessment 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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