Crane scales KERN HFM · HFO

KERN HFM

KERN HFO

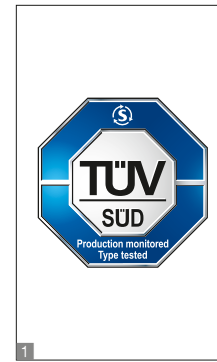## Industrial crane scale up to 10 t – now also with EC type approval [M]

Features

- 1 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)
- Professional device for robust applications in production, quality control, logistics etc. Because of its stable construction and robust design, it is ideal for continuous use in industrial environment
- **High mobility:** thanks to rechargeable battery operation, compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)

- **Adaptation to unstable environmental conditions** by changing the readability
- **High resolution readout:** Readout [d] for 5 sec increased by one decimal place at the touch of a key, only for models with EC type approval
- **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
- **Hook with safety catch**, revolving
- 2 **Radio remote control** standard. Range up to 20 m. All functions can be selected (excl. ON/OFF). W×D×H 48×10×95 mm. Batteries included, 2 × 1,5 V AAA
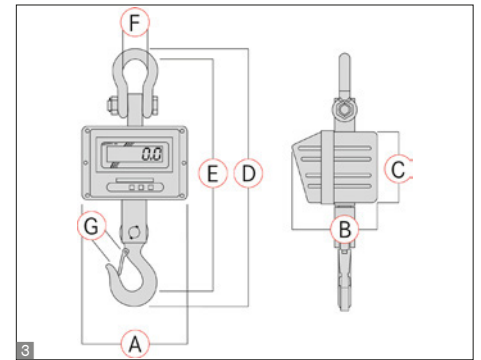
Technical data

- Superior display size: digit height 30 mm, bright backlight for easy reading of weighing results, even in poor lighting conditions
- Rechargeable battery pack internal, operating time up to 50 h without backlight, charging time approx. 14 h
- Precision: 0,2 % of [Max]
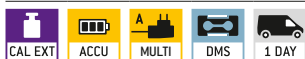- Permissible ambient temperature 0 °C/40 °C

STANDARD

CAL EXT | ACCU | MULTI | DMS | 1 DAY

OPTION

DAkkS +3 DAYS

FACTORY

M +3 DAYS HFO

Model	Weighing range [Max]	Readout [d]	Net weight approx.	3 Dimensions								Option	
				A	B	C	D	E	F	G		Verification	DAkkS Calibr. Certificate
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	mm		M KERN	DKD KERN
HFM 1T0.1	1000	100	14	270	175	200	610	540	68	40		–	963-130H
HFM 3T0.5	3000	500	16	270	175	200	610	540	74	40		–	963-132H
HFM 5T0.5	5000	500	24	300	190	230	730	650	74	55		–	963-132H
HFM 10T1	10000	1000	34	300	190	230	840	750	92	60		–	963-133H
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.													
HFO 1.5T0.5M	1500	500	16	270	175	200	610	540	60	35		965-130H	963-130H
HFO 3T1M	3000	1000	17	270	175	200	610	540	80	47		965-132H	963-132H
HFO 6T2M	6000	2000	30	300	190	230	730	650	80	54		965-132H	963-132H

KERN Pictograms

Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)
`CAL INT`

Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required
`CAL EXT`

Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.
`MEMORY`

Alibi memory: Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.
`ALIBI`

Data interface RS-232: To connect the balance to a printer, PC or network
`RS 232`

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
`RS 485`

USB data interface: To connect the balance to a printer, PC or other peripherals
`USB`

Bluetooth* data interface: To transfer data from the balance to a printer, PC or other peripherals
`BT`

WLAN data interface: To transfer data from the balance to a printer, PC or other peripherals
`WLAN`

Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.
`SWITCH`

Interface for second balance: For direct connection of a second balance
`DUAL`

Network interface: For connecting the scale to an Ethernet network
`LAN`

Wireless data transfer: between the weighing unit and the evaluation unit using an integrated radio module
`RC`

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
`KCP PROTOCOL`

GLP/ISO log: The balance displays serial number, user ID, weight, date and time, regardless of a printer connection
`GLP INTERN`

GLP/ISO log: With weight, date and time. Only with KERN printers
`GLP PRINTER`

Piece counting: Reference quantities selectable. Display can be switched from piece to weight
`PCS`

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 A`

Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display
`RECIPE B`

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
`RECIPE C`

Totalising level A: The weights of similar items can be added together and the total can be printed out
`SUM A`

Percentage determination: Determining the deviation in % from the target value (100 %)
`PERCENT`

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
`UNIT`

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
`TOL`

Hold function: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value
`MOVE`

Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram.
`IP`

Stainless steel: The balance is protected against corrosion
`INOX`

Suspended weighing: Load support with hook on the underside of the balance
`UNDER`

Battery operation: Ready for battery operation. The battery type is specified for each device
`BATT`

Rechargeable battery pack: Rechargeable set
`ACCU`

Universal mains adapter: with universal input and optional input socket adapters for
A) EU, GB
B) EU, GB, CH, USA
C) EU, GB, CH, USA, AUS
`A MULTI`

Mains adapter: 230V/50Hz in standard version for EU. On request GB, USA or AUS version available
`230 V`

Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
`230 V`

Weighing principle: Strain gauges Electrical resistor on an elastic deforming body
`DMS`

Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate
`T-FORK`

Weighing principle: Electromagnetic force compensation Coil inside a permanent magnet. For the most accurate weighings
`FORCE`

Weighing principle: Single cell technology Advanced version of the force compensation principle with the highest level of precision
`SC TECH`

Verification possible: The time required for verification is specified in the pictogram
`M +3 DAYS`

DAkkS calibration possible (DKD): The time required for DAkkS calibration is shown in days in the pictogram
`DAkkS +3 DAYS`

Package shipment: The time required for internal shipping preparations is shown in days in the pictogram
`1 DAY`

Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram
`2 DAYS`

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, GB, FR, IT, ES, NL, PL
• Conformity evaluation and reverification of balances and test weights

Your KERN specialist dealer: