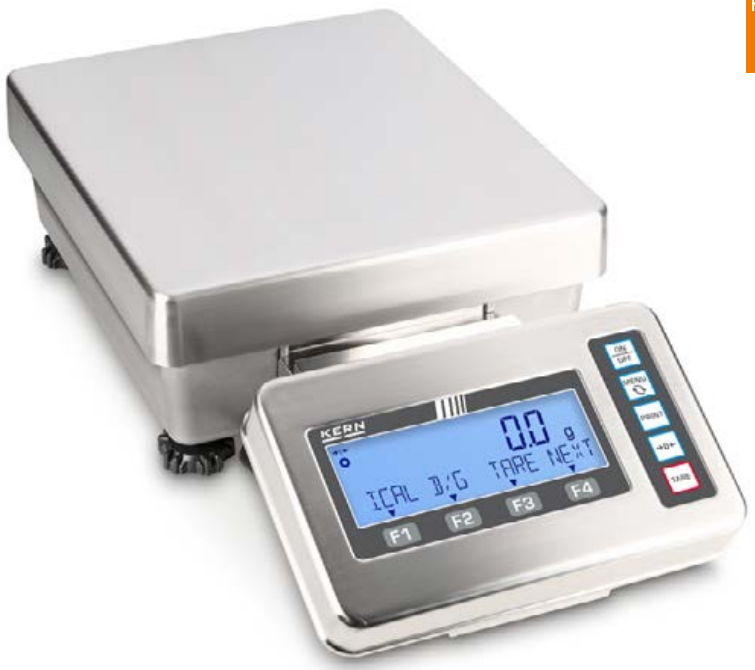
Precision balances KERN FES · FEJ

PREMIUM ★★



High-capacity precision balance with password-protected user administration, also with EC type approval [M]

Features

- KERN FEJ: Automatic internal adjustment, guarantees high degree of accuracy and makes the balance independent of its location of use
- KERN FES: Adjusting program CAL for quick setting of the balance accuracy using an external test weight at an additional price, see *test weights*
- Stainless steel display device with IP65 protection, hygienic and easy to clean
- Metal housing: robust and sturdy
- In order to meet requirements in the pharmaceutical industry, the balance is fitted with a user administration system, which enables unique assignment of users and protects against unauthorised access
- Intuitive concept of operation through info line on the display
- Freely-assignable function keys enable individual adjustment of the balance
- Dust and spray protection to IP65 (in accordance with EN 60529)
- U.S. FDA 21 Part 11: assists you in data integrity in accordance with U.S. FDA 21 Part 11 (for example weighing result, sample ID, user name, scales ID, ...)
- Protective working cover included with delivery

Technical data

- Large backlit LCD display, digit height 16,5 mm
- Dimensions weighing surface, stainless steel, W×D 350×400 mm
- Dimensions of display device W×D×H 290×180×60 mm
- Overall dimensions W×D×H 350×520×170 mm
- Net weight approx. 19 kg
- Permissible ambient temperature 5 °C/35 °C

Accessories

- Protective working cover, scope of delivery 5 items, KERN FEJ-A02S05
- Relay output with 5 outputs for weighing in 3 tolerance ranges, KERN FEJ-A07
- 1 Stand to elevate display device, height of stand approx. 700 mm, KERN FEJ-A05
- Interface cable RS-232 to connect an external device, dust and spray protection to IP65 (in accordance with EN 60529), KERN PWS-A02
- 2 Loop for underfloor weighing, KERN FEJ-A06
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD: CAL INT (FEJ), CAL EXT (FES), RS 232, GLP INTERN, PCS, RECIPE, PERCENT, UNIT, TOL, IP 65, MULTI, T-FORK, 1 DAY

OPTION: ET, UNDER, DAkkS +3 DAYS

FACTORY: SWITCH, M +3 DAYS (FEJ)

Model KERN	Weighing capacity [Max] kg	Readability [d] g	Verification value [e] g	Minimal load [Min] g	Repro-ducibility g	Linearity g	Option Verification KERN	Option DAkkS Calibr. Certificate DAkkS KERN
FES 17K-4	17	0,1	–	5	0,1	± 0,3	-	963-128
FES 33K-4	33	0,1	–	5	0,1	± 0,3	-	963-128
FES 62K-4D	6,2 | 62	0,1 | 1	–	5	0,1 | 1	± 0,3 | 3	-	963-129
Note: For applications that require verification, please order verificati on 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.								
FEJ 17K-4M	17	0,1	1	5	0,1	± 0,3	965-217	963-128
FEJ 33K-4M	33	0,1	1	5	0,1	± 0,3	965-217	963-128
FEJ 62K-4DM	6,2 | 62	0,1 | 1	1	5	0,1 | 1	± 0,3 | 3	965-218	963-129

BALANCES & TEST SERVICE 2023

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

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 and other digital systems

GLP/ISO log:
The balance displays weight, date and time, independent 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

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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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct.
If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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