Precision Balances KERN PES · PEJ

PREMIUM


A


C

Robust laboratory and industrial precision scale for heavy items, verification optional

Features

- KERN PEJ: Automatic internal adjustment, guarantees high degree of accuracy and makes the balance independent of its location of use
- KERN PES: Adjusting program CAL for quick setting of the balance accuracy using an external test weight at an additional price, see *Test Weights*
- Metal housing: robust and sturdy
- Weighing with tolerance range (checkweighing): Input of two upper and two lower limit values through four arrow keys. An audible and visual signal assists with the portioning, dispensing or grading
- Draught shield standard for models with weighing plate size A, weighing space W×D×H 170×150×100 mm
- A, B Underfloor weighing: load support with hook on the underside of the balance for models
  - A Hook included with the delivery
  - B Hook not included with the delivery
- A, B: Protective working cover included with delivery

Technical data

- Fluorescent display, bright with high contrast, digit height 14 mm
- Dimensions weighing surface, stainless steel
  - A W×D 140×120 mm
  - B W×D 200×200 mm, see larger picture
  - C W×D 250×220 mm
- Overall dimensions (without draught shield) W×D×H
  - A, B 220×333×93 mm
  - C 260×330×113 mm
- Permissible ambient temperature 10 °C/30 °C

Accessories

- A, B: Protective working cover, scope of delivery: 5 items, KERN PES-A04S05
- KERN PES: Internal rechargeable battery pack, operating time up to 6 h with backlight, charging time approx. 15 h, KERN PES-A01
- Loop for underfloor weighing, for models with weighing plate size B, KERN PES-A03
- Relay output to connect relays, signal lamps, valves etc., 5 outputs for weighing in 3 tolerance ranges, must be ordered at purchase, KERN PES-A02
- Minimum weight of sample, smallest weight to be weighed, depending on the required process accuracy, only in combination with a DAkkS calibration certificate, KERN 969-103
- Equipment qualification: compliant qualification concept which includes the following validation services, Installation Qualification (IQ), Operating Qualification (OQ)
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD: CAL INT (PEJ), CAL EXT (PES), RS 232 (2x), GLP, PRINTER, PCS, RECIPE, PERCENT, UNIT, TOL, UNDER (A B), 230 V, T-FORK, 1 DAY

OPTION: MULTI, DAkkS +3 DAYS

FACTORY: SWITCH, ACCU (PES), M +3 DAYS (PEJ)

Model KERN	Weighing capacity [Max] g	Readability [d] g	Verification value [e] g	Minimal load [Min] g	Linearity g	Weighing plate	Net weight kg	Options Verification KERN	Options DAkkS Calibr. Certificate KERN
PES 620-3M	620	0,001	-	-	± 0,003	A	3,6	-	963-103
PES 2200-2M	2200	0,01	-	-	± 0,02	B	4,4	-	963-127
PES 4200-2M	4200	0,01	-	-	± 0,02	B	4,0	-	963-127
PES 6200-2M	6200	0,01	-	-	± 0,03	B	4,4	-	963-104
PES 15000-1M	15000	0,1	-	-	± 0,2	B	4,4	-	963-128
PES 31000-1M	31000	0,1	-	-	± 0,4	C	10,0	-	963-128
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.									
PEJ 620-3M	620	0,001	0,01	0,1	± 0,003	A	4,4	965-201	963-103
PEJ 4200-2M	4200	0,01	0,1	0,5	± 0,02	B	6,0	965-216	963-127
PEJ 2200-2M	2200	0,01	0,1	0,5	± 0,02	B	6,0	965-216	963-127

BALANCES & TEST SERVICE 2024

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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