Precision balances KERN PES · PEJ

PREMIUM ★

EasyTouch

- Net weight Ⓐ approx. 3,6 kg,
  Ⓑ approx. 4,4 kg, Ⓒ approx. 10 kg
- Permissible ambient temperature
  10 °C/30 °C

Robust laboratory and industrial precision scale for heavy items, also with EC type approval [M]

Accessories

- Ⓐ, Ⓑ: Protective working cover, scope of delivery: 5 items, KERN PES-A04S05
- KERN PES: Internal rechargable battery pack, operating time up to 32 h without backlight, charging time approx. 15 h, KERN PES-A01
- Loop for underfloor weighing, for models with weighing plate size Ⓑ, 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
- RS-232/Ethernet adapter for connection to an IP-based Ethernet network, KERN YKI-01
- 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*
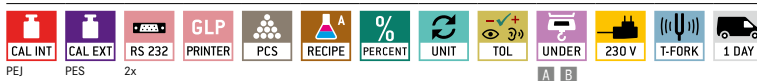
Features

- KERN PES: Adjusting program CAL for quick setting of the balance accuracy using an external test weight at an additional price, see *test weights*
- KERN PEJ: Automatic internal adjustment, guarantees high degree of accuracy and makes the balance independent of its location of use
- 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 portioing, dispensing or grading
- ① Draught shield standard for models with [d] = 0,001 g, weighing space W×D×H 170×150×100 mm
- Underfloor weighing: load support with hook on the underside of the balance for models with [d] = 0,001 g, [d] = 0,01 g

[d] = 0,001 g hook included with the delivery, [d] = 0,01 g/0,01 g hook not included with the delivery
- Ⓐ, Ⓑ: Protective working cover included with delivery

Technical data

- Fluorescent display, bright with high contrast, digit height 14 mm
- Dimensions weighing surface
  Ⓐ W×D 140×120 mm, stainless steel
  Ⓑ W×D 200×200 mm, stainless steel, see larger picture
  Ⓒ W×D 250×220 mm, stainless steel
- Overall dimensions (without draught shield) W×D×H
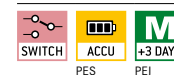 Ⓐ 220×330×90 mm
  Ⓑ 220×339×80 mm
  Ⓒ 260×330×113 mm

STANDARD | OPTION | FACTORY

CAL INT	CAL EXT	RS 232	GLP PRINTER	PCS	RECIPE	PERCENT	UNIT	TOL	UNDER	230 V	T-FORK	1 DAY	ET	MULTI	DAkkS +3 DAYS	SWITCH	ACCU	M +3 DAYS
PEJ	PES	2x							ⒶⒷ								PES	PEJ

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

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.

PEJ 620-3M	620	0,001	0,01	0,1	± 0,003	Ⓐ	965-201 Ⓘ	963-103
PEJ 2200-2M	2200	0,01	0,1	0,5	± 0,02	Ⓑ	965-216 Ⓘ	963-127
PEJ 4200-2M	4200	0,01	0,1	0,5	± 0,02	Ⓑ	965-216 Ⓘ	963-127

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