

## Precision balances KERN PLS · PLJ



User-friendly concept of operation,  
also with automatic internal adjustment



**GLP/ISO record keeping** of weighing data, balance adjustment, etc. with date, time and identification no... Ideal for monitoring and documenting your processes in accordance with your quality management system



**Piece counting**  
Thanks to its high level of accuracy, it is ideal for counting the smallest parts



**Percentage determination:** parts taken out of a container which is on the weighplate can be displayed as a percentage. Convenient when carrying out drying processes, during which the evaporated moisture or the remaining weight can be displayed as a percentage

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## Features

- **1 Ergonomically optimised keypad** for left and righthanded users
- **Glass draught guard**, standard for models with weighing plate sizes **A**. Removable metal cover with pipette opening. weighing space ØxH 150x60 mm
- **2 KERN PLJ: Automatic internal adjustment**
- **3 KERN PLS: Adjusting program CAL** for quick setting of the balance accuracy, external test weights at an additional price, see page 143 ff.

## Technical data

- Backlit LCDdisplay, digit height 17 mm
- Dimensions of weighing plate (stainless steel)
  - A** Ø 110 mm
  - B** Ø 160 mm, see larger picture
  - C** WxD 200x175 mm
- Overall dimensions WxDxH without draft shield: 210x340x100 mm with draft shield: 210x340x160 mm
- **4** KERN PLS/PLJ-F: Strain gauge
- **5** KERN PLS/PLJ-A: Force compensation
- Permissible ambient temperature 5 °C / 35 °C

## Accessories

- **Protective working cover** standard, can be reordered, KERN PLJ-A01, **€ 30,-**
- **6 Hook for underfloor weighing** to weigh hanging loads, not included, KERN PLJ-A02, **€ 30,-**
- **Set for density determination** of liquids and solids with density  $\leq/\geq 1$  on all models with readout  $d = 0,001$  g, KERN ALT-A02, **€ 690,-** on all models with readout  $d = 0,01$  g, KERN PLT-A01, **€ 720,-**
- **RS-232/Ethernet adapter** to connect balances with an RS-232 interface to a network, using Ethernet, details see page 139, KERN YKI-01, **€ 390,-**
- **Suitable printers** see page 138

## STANDARD



## OPTION






































## FACTORY



Model	Weighing range [Max] g	Read-out [d] g	Verific. value [e] g	Reproducibility g	Linearity g	Min. piece weight [Counting] g/piece	Weighing plate	Net weight approx. kg	Options			
									Verification		DKD Calibr. Certificate	
									MID KERN		DKD KERN	€
PLS 420-3F	420	0,001	-	0,001	± 0,004	0,005	A	4	-	-	963-127	
PLS 720-3A	720	0,001	-	0,001	± 0,002	0,005	A	4,5	-	-	963-127	
PLS 1200-3A	1200	0,001	-	0,001	± 0,003	0,005	A	4,5	-	-	963-127	
PLS 4200-2F	4200	0,01	-	0,01	± 0,04	0,05	B	4	-	-	963-127	
PLS 6200-2A	6200	0,01	-	0,01	± 0,03	0,05	B	4,5	-	-	963-128	
PLS 8000-2A	8200	0,01	-	0,01	± 0,04	0,01	B	4,75	-	-	963-128	
PLS 20000-1F	20000	0,1	-	0,1	± 0,4	0,5	C	4	-	-	963-128	
PLJ 420-3F	420	0,001	-	0,001	± 0,003	0,005	A	4	-	-	963-127	
PLJ 720-3A	720	0,001	-	0,001	± 0,002	0,005	A	4,5	-	-	963-127	
PLJ 1200-3A	1200	0,001	-	0,001	± 0,003	0,005	A	4,5	-	-	963-127	
PLJ 4200-2F	4200	0,01	-	0,02	± 0,04	0,05	B	4	-	-	963-127	
PLJ 6200-2A	6200	0,01	-	0,01	± 0,03	0,05	B	4,5	-	-	963-128	
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.												
PLJ 720-3AM	720	0,001	0,01	0,001	± 0,002	0,001	A	4,9	965-216		963-127	
PLJ 6200-2AM	6200	0,01	0,1	0,01	± 0,03	0,01	B	5,2	965-217		963-128	

■ New model

# KERN Pictograms

 <b>Internal adjusting (CAL):</b> Quick setting of the balance's accuracy with internal adjusting weight (motordriven).	 <b>Recipe level A:</b> Separate memory for the weight of the tare container and the recipe ingredients (net total).	 <b>Rechargeable battery pack:</b> rechargeable set.
 <b>Adjusting program (CAL):</b> For quick setting of the balance's accuracy. External adjusting weight required.	 <b>Recipe level B:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through displays.	 <b>Mains adapter:</b> 230V/50Hz in standard version for Germany. On request GB, AUS or USA version.
 <b>Memory:</b> Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU.	 <b>Recipe level C:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through displays. Additional convenient functions, such as barcode and back calculation functions.	 <b>Power supply:</b> integrated in balance. 230V/50Hz in Germany. More standards e. g. GB, AUS, USA on request.
 <b>Data interface RS-232:</b> To connect the balance to a printer, PC or network.		 <b>Strain gauges:</b> Electrical resistor on an elastic deforming body.
 <b>RS 485 data interface:</b> To connect the balance to a printer, PC or other peripheral devices. High tolerance against electromagnetic disturbance.	 <b>Percentage determination:</b> Determining the deviation in % from the target value (100%).	 <b>Tuning fork principle:</b> A resonating body is electromagnetically excited, causing it to oscillate.
 <b>USB data interface:</b> To connect the balance to a printer, PC or other peripheral devices.	 <b>Weighing units:</b> Can be switched to e. g. non-metric units at the touch of a key. See balance model. Please refer to KERN's website for more details.	 <b>Electromagnetic force compensation:</b> Coil in a permanent magnet. For the most accurate weighings.
 <b>Bluetooth data interface:</b> To transfer data from the balance to a printer, PC or other peripheral devices.	 <b>Weighing with tolerance range:</b> Upper and lower limiting can be programmed individually, e.g. dosing/sorting and portioning.	 <b>Single cell technology:</b> Advanced version of the force compensation principle with the highest level of precision.
 <b>Control outputs (optocoupler, digital I/O):</b> to connect relays, signal lamps, valves, etc.	 <b>Vibration-free weighing:</b> (Animal weighing program) Vibrations are filtered out so that a stable weight is obtained.	 <b>Verification possible:</b> The time required for verification is specified in the pictogram.
 <b>Interface for second balance:</b> for direct connection of a second balance.	 <b>Spray and dust protection IPxx:</b> The type of protection is shown by the pictogram. For details see the glossary.	 <b>DKD calibration possible:</b> The time required for DKD calibration is shown in days in the pictogram.
 <b>Network interface:</b> For connecting the scale to an Ethernet network. With KERN products you can also use a universal RS-232/LAN converter.	 <b>Stainless steel:</b> the balance is protected against corrosion.	 <b>Package shipment:</b> The time required to manufacture the product internally is shown in days in the pictogram.
 <b>GLP/ISO record keeping:</b> of weighing data with date, time and identification-no. Only with printers from KERN.	 <b>Suspended weighing:</b> load support with hook on the underside of the balance.	 <b>Pallet shipment:</b> The time required to manufacture the product internally is shown in days in the pictogram.
 <b>Piece counting:</b> Reference quantities selectable. Display can be switched from piece to weight.	 <b>Battery operation:</b> Ready for battery operation. The battery type is specified for each device.	 <b>Warranty:</b> The warranty period is shown in the pictogram.

## Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight package for your balance, consisting of the test weight, box and DKD certificate, as proof of ist accuracy ... the best pre-requisite for proper balance calibration.

In the extensive KERN test weight range, you will find test weights in the international OIML error limit classes: E1, E2, F1, F2, M1, M2, M3 with weights from 1 mg - 2000 kg.

The KERN DKD calibration laboratory for electronic balances and weights has been accredited by DKD since 1994 and today is one of the most modern and best-equipped DKD calibration laboratories for balances, test weights and force-measurement in Europe.

(DKD = German Calibration Service)

Thanks to the high level of automation, we can carry out DKD calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

### Range of services:

- DKD calibration of balances with a maximum load of up to 6 t
- DKD calibration of weights in the range of 1 mg – 500 kg
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DKD calibration certificates in the following languages  
D, GB, F, I, E, NL, PL

Do you have questions about your scale, the corresponding test weight or the calibration service? Your KERN specialist dealer will be pleased to assist you.

## Your KERN specialist dealer: