

Load cells SAUTER CB Q1 · CB Q2 · CB P1



Fig. shows accessories, base plate 1 SAUTER CE Q30903 and bearings 2 SAUTER CE Q30904, for further accessories please visit our online shop



Fig. shows optional accessory load corner 3 SAUTER CE P4022

**CB Q1 · CB Q2**

Bending beam measuring cells made from stainless steel

STANDARD

IP 68 IP 69K 1 DAY

OPTION

DAkkS ISO +3 DAYS +4 DAYS

- Accuracy in accordance with OIML R60 C3
- CE and RoHS compliant
- Dust and spray protection to IP68/IP69K (in accordance with EN 60529), welded to create a hermetic seal
- Stainless steel
- Area of application: Measuring mass as well as compressive force in harsh environments
- Suitable for platform scales, weigh hoppers, floor scales and other weighing devices
- 4-wire connection
- Nominal sensitivity: 2 mV/V
- Note: Accuracy class OIML R60 C6 or EX version on request

Model	Nominal load	
<b>KERN</b>	kg	
CB 5-3Q1	5	
CB 10-3Q1	10	
CB 20-3Q1	20	
CB 30-3Q1	30	
CB 50-3Q1	50	
CB 75-3Q1	75	
CB 100-3Q1	100	
CB 150-3Q1	150	
CB 200-3Q1	200	
CB 250-3Q1	250	
CB 300-3Q1	300	
CB 500-3Q1	500	
CB 750-3Q2	750	
CB 1000-3Q2	1000	
CB 1500-3Q2	1500	

\* up to max. 500 kg

**CB P1**

Bending beam made from stainless steel

STANDARD

IP 67 M 1 DAY

OPTION

DAkkS ISO +3 DAYS +4 DAYS

- Accuracy in accordance with OIML R60 C3
- CE and RoHS compliant
- Dust and spray protection to IP67 (in accordance with EN 60529), hermetically encapsulated
- Nickel-plated steel
- Area of application: Measuring mass as well as compressive force in harsh environments
- Suitable for platform scales, silo scales, bed scales and other diverse scales
- 4-wire connection
- Nominal sensitivity: 3 mV/V

Model	Nominal load	
<b>KERN</b>	kg	
CB 100-3P1	100	
CB 250-3P1	250	

**Accessories CB Q1 · CB Q2:**

- Traction device, steel, galvanised, suitable for CB Q1, SAUTER CE Q30901
- Traction device, steel, rustproof, suitable for CB Q2, SAUTER CE Q34905
- 1 Base plate, steel, galvanised, suitable for CB Q1, SAUTER CE Q30903
- Base plate, steel, rustproof, suitable for CB Q1, SAUTER CE RQ30903
- Base plate, steel, rustproof, suitable for CB Q2, SAUTER CE Q34903
- 2 Bearing, steel, rustproof, suitable for CB Q1 (nominal load 5 kg–50 kg), SAUTER CE Q30904
- Bearing, steel, rustproof, suitable for CB Q1 (nominal load 75 kg–300 kg), SAUTER CE Q30905
- Bearing, steel, rustproof, suitable for CB 500-3Q1, SAUTER CE Q30906
- Bearing, steel, rustproof, suitable for CB 750-3Q2, CB 1000-3Q2, CB 1500-3Q2, SAUTER CE Q34906
- Load corner, steel, galvanised, suitable for CB Q1, SAUTER CE Q30907
- Load corner, steel, rustproof, suitable for CB Q1, SAUTER CE RQ30907
- Adjustable foot, steel, rustproof, suitable for SAUTER CE Q34901

**Accessories CB P1:**

- Adjustable foot, steel, nickel-plated, load base M12 for CT 500-3P1, CT 1000-3P1 and CT 1500-3P1, SAUTER CE P2012
- 3 Load corner, steel, nickel-plated for CT 500-3P1, CT 1000-3P1 and CT 1500-3P1, SAUTER CE P4022
- Spacer plates for bending beam CB P1 made from steel, SAUTER CE P3012

**! Tip** Further details and technical data sheet as well as extensive accessories see internet

**Pictograms**

<p> <b>Internal adjusting:</b> Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)</p> <p> <b>Adjusting program CAL:</b> For quick setting up of the balance's accuracy. External adjusting weight required</p> <p> <b>Easy Touch:</b> Suitable for the connection, data transmission and control through PC, tablet or smartphone.</p> <p> <b>Memory:</b> Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.</p> <p> <b>Alibi memory:</b> Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard</p> <p> <b>Data interface RS-232:</b> To connect the balance to a printer, PC or network</p> <p> <b>RS-485 data interface:</b> To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible</p> <p> <b>USB data interface:</b> To connect the balance to a printer, PC or other peripherals</p> <p> <b>Bluetooth* data interface:</b> To transfer data from the balance to a printer, PC or other peripherals</p> <p> <b>WiFi data interface:</b> To transfer data from the balance to a printer, PC or other peripherals</p> <p> <b>Control outputs (optocoupler, digital I/O):</b> To connect relays, signal lamps, valves, etc.</p> <p> <b>Analogue interface:</b> to connect a suitable peripheral device for analogue processing of the measurements</p> <p> <b>Interface for second balance:</b> For direct connection of a second balance</p> <p> <b>Network interface:</b> For connecting the scale to an Ethernet network</p>	<p> <b>KERN Communication Protocol (KCP):</b> 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</p> <p> <b>GLP/ISO log:</b> The balance displays serial number, user ID, weight, date and time, regardless of a printer connection</p> <p> <b>GLP/ISO log:</b> With weight, date and time. Only with KERN printers</p> <p> <b>Piece counting:</b> Reference quantities selectable. Display can be switched from piece to weight</p> <p> <b>Recipe level A:</b> The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out</p> <p> <b>Recipe level B:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display</p> <p> <b>Totalising level A:</b> The weights of similar items can be added together and the total can be printed out</p> <p> <b>Percentage determination:</b> Determining the deviation in % from the target value (100 %)</p> <p> <b>Weighing units:</b> 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</p> <p> <b>Weighing with tolerance range:</b> (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</p> <p> <b>Hold function:</b> (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value</p> <p> <b>Protection against dust and water splashes IPxx:</b> The type of protection is shown in the pictogram</p>	<p> <b>Suspended weighing:</b> Load support with hook on the underside of the balance</p> <p> <b>Battery operation:</b> Ready for battery operation. The battery type is specified for each device</p> <p> <b>Rechargeable battery pack:</b> Rechargeable set</p> <p> <b>Universal mains adapter:</b> with universal input and optional input socket adapters for A) EU, CH, GB; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS</p> <p> <b>Mains adapter:</b> 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available</p> <p> <b>Power supply:</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request</p> <p> <b>Weighing principle: Strain gauges:</b> Electrical resistor on an elastic deforming body</p> <p> <b>Weighing principle: Tuning fork:</b> A resonating body is electromagnetically excited, causing it to oscillate</p> <p> <b>Weighing principle: Electromagnetic force compensation:</b> Coil inside a permanent magnet. For the most accurate weighings</p> <p> <b>Weighing principle: Single cell technology:</b> Advanced version of the force compensation principle with the highest level of precision</p> <p> <b>Verification possible:</b> The time required for verification is specified in the pictogram</p> <p> <b>DAKkS calibration possible (DKD):</b> The time required for DAKkS calibration is shown in days in the pictogram</p> <p> <b>Factory calibration (ISO):</b> The time required for Factory calibration is shown in days in the pictogram</p> <p> <b>Package shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram</p> <p> <b>Pallet shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
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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, EN, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

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