KERN BALANCES & TEST SERVICES 2022



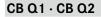
Load cells SAUTER CB Q1 · CB Q2 · CB P1







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



Bending beam and shear beam measuring cells made from stainless steelç



- 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: Weight measurement 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	
SAUTER	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

Fig. shows optional accessory load corner SAUTER CE P4022

CB P1

Measuring cells made from stainless steel



- 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: Weight measurement as well as compressive force in harsh environments
- Suitable for platform scales, silo scales, bed scales and other diverse scales

Nominal load

kg

100

250

• 4-wire connection

Model

SAUTER

CB 100-3P1

CB 250-3P1

Nominal sensitivity: 3 mV/V

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
- 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
- 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
- El 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

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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: 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.

Data interface RS-232:

• 6550.• To connect the balance to a printer, PC or RS 232 network



RS-485 data interface:

To connect the balance to a printer, PC or other peripherals. Suitable for datatransfer 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:

KERN – Precision is our business

For direct connection of a second balance



balance calibration.

ment in Europe

Range of services:

characteristics) for test weights

· Calibration of force-measuring devices

Network interface:

For connecting the scale to an Ethernet network

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

The KERN DAkkS calibration laboratory today is one of the most modern and bestequipped DAkkS calibration laboratories for balances, test weights and force-measure-

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.

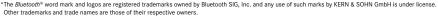
· Volume determination and measuring of magnetic susceptibility (magnetic

· Conformity evaluation and reverification of balances and test weights

· Database supported management of checking equipment and reminder service

· DAkkS calibration certificates in the following languages DE, EN, FR, IT, ES, NL, PL

· 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





KCP

PROTOCOL

GLP/ISO log: GI P With weight, date and time. Only with KERN PRINTER printers.

Piece counting:

connection

digital systems GLP/ISO log:

Reference quantities selectable. Display can PCS be switched from piece to weight

KERN Communication Protocol (KCP):

It is a standardized interface command set for

KERN balances and other instruments, which

devices featuring KCP are thus easily integrated

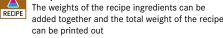
with computers, industrial controllers and other

The balance displays serial number, user ID,

weight, date and time, regardless of a printer

allows retrieving and controlling all relevant parameters and functions of the device. KERN

Recipe level A:



Recipe level B:

Internal memory for complete recipes with name RECIPE and target value of the recipe ingredients. User guidance through display

Totalising level A:

Η' The weights of similar items can be added SUM 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 UNIT 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 MOVE conditions are unstable, a stable weight is calculated as an average value



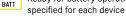
Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram.

Suspended weighing: ÷. Load support with hook on the underside of the UNDER balance

Battery operation:







Ready for battery operation. The battery type is

Rechargeable battery pack: Rechargeable set



Universal plug-in power supply:

with universal input and optional input socket MULTI 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

1	DMS

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:

DAkkS calibration possible (DKD):

is shown in days in the pictogram

Factory calibration (ISO):

Package shipment:

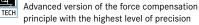
Pallet shipment:

The time required for DAkkS calibration

The time required for Factory calibration

The time required for internal shipping preparations

The time required for internal shipping preparations



Verification possible: The time required for verification is specified in the pictogram

М +3 DAYS

DAkkS

+3 DAYS

ISO

+4 DAYS

1 DAY

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2 DAYS

Your KERN specialist dealer: