

### Load cells SAUTER CS P1 · CS Q1 · CS P2



Fig. shows optional accessories SAUTER CE R20, for further accessories please visit our online shop



Fig. shows optional accessories traction device SAUTER CE Q12, for further accessories please visit our online shop

CS P2 0,5–7,5 t

CS P2 50–250 kg

#### CS P1

4-wire “S” load cells made of nickel-plated steel for force and mass measurement

STANDARD	OPTION
IP 67                  1 DAY	DAkkS +3 DAYS                  ISO +4 DAYS

- Accuracy in accordance with OIML R60 C3
- RoHS compliant
- Dust and spray protection to IP67 (in accordance with EN 60529), welded to create a hermetic seal
- Nickel-plated steel
- Scope of application: for tensile and compressive force measurement
- Suitable for handling scales, funnel scales and other weighing devices as well as force measurement devices and test stands
- 4-wire connection\*\*\*
- Note: EX version and accuracy class C4 on request
- Nominal sensitivity: 2 mV/V

#### CS Q1

6-wire “S” load cells made of nickel-plated steel for force and mass measurement

STANDARD	OPTION
IP 67                  1 DAY	DAkkS +3 DAYS                  ISO +4 DAYS

- Accuracy in accordance with OIML R60 C3
- RoHS compliant
- Dust and spray protection to IP67 (in accordance with EN 60529), hermetically encapsulated
- Nickel-plated steel
- Scope of application: for tensile and compressive force measurement
- Suitable for handling scales, funnel scales and other weighing devices as well as force measurement devices and test stands
- 6-wire connection\*\*\*
- Nominal sensitivity: 2 mV/V

#### CS P2

“S” load cells/load cells made of stainless steel

STANDARD	OPTION
IP 68                  1 DAY	DAkkS +3 DAYS                  ISO +4 DAYS

- Accuracy in accordance with OIML C3
- RoHS compliant
- Dust and spray protection to IP68
- Stainless steel
- Scope of application: Weight measurement as well as force
- Suitable for handling scales, silo scales, force test stands and other diverse scales
- 4-wire connection\*\*\*
- Nominal sensitivity: 2 mV/V

Model	Nominal load
<b>SAUTER</b>	
CS 25-3P1	25 kg/250 N
CS 50-3P1	50 kg/500 N
CS 100-3P1	100 kg/1 kN
CS 150-3P1	150 kg/1,5 kN
CS 250-3P1	250 kg/2,5 kN
CS 500-3P1	500 kg/5 kN
CS 600-3P1	600 kg/6 kN
CS 750-3P1	750 kg/7,5 kN
CS 1000-3P1	1 t/10 kN
CS 1500-3P1	1.5 t/15 kN
CS 2000-3P1	2 t/20 kN
CS 2500-3P1	2.5 t/25 kN
CS 5000-3P1	5 t/50 kN
CS 7500-3P1	7.5 t/75 kN
CS 10000-3P1	10 t/100 kN
CS 15000-3P1	15 t/150 kN
CS 20000-3P1	20 t/200 kN
CS 30000-3P1	30 t/300 kN

\* up to max. 500 kg/5 kN,

\*\* up to max. 25 t/250 kN

Model	Nominal load
<b>SAUTER</b>	
CS 50-3Q1	50 kg/500 N
CS 100-3Q1	100 kg/1 kN
CS 150-3Q1	150 kg/1,5 kN
CS 200-3Q1	200 kg/2 kN
CS 300-3Q1	300 kg/3 kN
CS 500-3Q1	500 kg/5 kN
CS 750-3Q1	750 kg/7,5 kN
CS 1000-3Q1	1 t/10 kN
CS 1500-3Q1	1.5 t/15 kN
CS 2000-3Q1	2 t/20 kN
CS 3000-3Q1	3 t/30 kN
CS 5000-3Q1	5 t/50 kN
CS 6000-3Q1	6 t/60 kN

\* up to max. 500 kg/5 kN,

\*\* up to max. 12 t/120 kN

Model	Nominal load
<b>SAUTER</b>	
CS 50-3P2	50 kg/500 N
CS 100-3P2	100 kg/1 kN
CS 250-3P2	250 kg/2,5 kN
CS 500-3P2	500 kg/5 kN
CS 1000-3P2	1 t /10 kN
CS 2000-3P2	2 t/20 kN
CS 5000-3P2	5 t/50 kN
CS 7500-3P2	7.5 t/75 kN

\* up to max. 500 kg/5 kN

\*\*\* With 6-wire measuring circuits, the cable can be shortened without affecting the temperature compensation and the actual characteristic value. For 4-wire measuring circuits the cable length should not be changed

### Tip

- Further details and technical data sheet as well as extensive accessories see internet



**Adjusting program (CAL):**  
For quick setting of the instrument's accuracy. External adjusting weight required



**Calibration block:**  
Standard for adjusting or correcting the measuring device



**Peak hold function:**  
Capturing a peak value within a measuring process



**Scan mode:**  
Continuous capture and display of measurements



**Push and Pull:**  
The measuring device can capture tension and compression forces



**Length measurement:**  
Captures the geometric dimensions of a test object or the movement during a test process



**Focus function:**  
Increases the measuring accuracy of a device within a defined measuring range



**Internal memory:**  
To save measurements in the device memory



**Data interface RS-232:**  
Bidirectional, for connection of printer and PC



**Profibus:**  
For transmitting data, e.g. between scales, measuring cells, controllers and peripheral devices over long distances. Suitable for safe, fast, fault-tolerant data transmission. Less susceptible to magnetic interference.



**Profinet:**  
Enables efficient data exchange between decentralised peripheral devices (balances, measuring cells, measuring instruments etc.) and a control unit (controller). Especially advantageous when exchanging complex measured values, device, diagnostic and process information. Savings potential through shorter commissioning times and device integration possible



**Data interface USB:**  
To connect the measuring instrument to a printer, PC or other peripheral devices



**Bluetooth\* data interface:**  
To transfer data from the balance/measuring instrument to a printer, PC or other peripherals



**WLAN data interface:**  
To transfer data from the balance/measuring instrument to a printer, PC or other peripherals



**Data interface Infrared:**  
To transfer data from the measuring instrument to a printer, PC or other peripheral devices



**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



**Analog output:**  
For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)



**Statistics:**  
Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.



**PC Software:**  
To transfer the measurement data from the device to a PC



**Printer:**  
A printer can be connected to the device to print out the measurement data



**Network interface:**  
For connecting the scale/measuring instrument 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 record keeping:**  
Of measurement data with date, time and serial number. Only with SAUTER printers



**Measuring units:**  
Weighing units can be switched to e.g. non-metric. Please refer to website for more details



**Measuring with tolerance range (limit-setting function):**  
Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model



**Protection against dust and water splashes IPxx:**  
The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013



**ZERO:**  
Resets the display to "0"



**Battery operation:**  
Ready for battery operation. The battery type is specified for each device



**Rechargeable battery pack:**  
Rechargeable set



**Plug-in power supply:**  
230V/50Hz in standard version for EU. On request GB, AUS or USA version available



**Integrated power supply unit:**  
Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request



**Motorised drive:**  
The mechanical movement is carried out by an electric motor



**Motorised drive:**  
The mechanical movement is carried out by a synchronous motor (stepper)



**Fast-Move:**  
The total length of travel can be covered by a single lever movement



**Verification possible:**  
Models with type approval for construction of verifiable systems



**DAkKS calibration possible:**  
The time required for DAkKS calibration is shown in days in the pictogram



**Factory calibration:**  
The time required for factory calibration is specified 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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