Load cells SAUTER CS P1 · CS Q1

Fig. shows optional accessory 1 SAUTER CE R20, for further accessories please visit our online shop

Fig. shows optional accessory traction device 2 SAUTER CE Q12, for further accessories please visit our online shop

*** 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

CS P1

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

STANDARD: IP 67, 1 DAY

OPTION: 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 handing scales, weigh hoppers and other weighing devices as well as force measurement devices and test benches
- 4-wire connection***
- Note: EX version and accuracy class C4 on request
- Nominal sensitivity: 2 mV/V

Model SAUTER	Nominal load	
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. 12 t/120 kN

CS Q1

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

STANDARD: IP 67, 1 DAY

OPTION: 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 handing scales, weigh hoppers and other weighing devices as well as force measurement devices and test benches
- 6-wire connection***
- Nominal sensitivity: 2 mV/V

Model SAUTER	Nominal load	
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

Accessories CT P1:

- Traction device, steel, galvanised, suitable for CS P1, SAUTER CE Q12
- Rod end, steel, galvanised, suitable for CS 25-3P1, CS 50-3P1, SAUTER CE R8
- Rod end, steel, rustproof, suitable for CS 25-3P1, CS 50-3P1, SAUTER CE RR8
- Rod end, steel, rustproof, suitable for CS 100-3P1, CS 150-3P1, SAUTER CE RR10
- Rod end, steel, galvanised, suitable for CS 100-3P1, CS 150-3P1, SAUTER CE R10
- Rod end, steel, galvanised, suitable for CS P1, CS P2 with 50 kg ≥ nominal load ≤ 1 t, SAUTER CE R12
- Rod end, steel, rustproof, suitable for CS P1, CS P2 with 50 kg ≥ nominal load ≤ 1 t, SAUTER CE RR12
- 1 Rod end, steel, galvanised, suitable for CS 2000-3P1, CS 2500-3P1, CS 5000-3P1, SAUTER CE R20
- Rod end, steel, rustproof, suitable for CS 2000-3P1, CS 2500-3P1, CS 5000-3P1, SAUTER CE RR20

Accessories CT Q1:

- 2 Traction device, steel, galvanised, suitable for CS P1, SAUTER CE Q12
- Traction device, steel, galvanised, suitable for CS 1500-3Q1, CS 2000-3Q1, SAUTER CE Q16
- Traction device, steel, galvanised, suitable for CS 3000-3Q1, CS 5000-3Q1, CS 6000-3Q1, SAUTER CE Q24
- Rod end, steel, galvanised, suitable for CS P1, CS P2 with 50 kg ≥ nominal load ≤ 1 t, SAUTER CE R12
- Rod end, steel, rustproof, suitable for CS P1, CS P2 with 50 kg ≥ nominal load ≤ 1 t, SAUTER CE RR12
- Rod end, steel, galvanised, suitable for CS 1500-3Q1, CS 2000-3Q1, SAUTER CE R16
- Rod end, steel, rustproof, suitable for CS 1500-3Q1, CS 2000-3Q1, SAUTER CE RR16
- Rod end, steel, galvanised, suitable for CS 3000-3Q1, CS 5000-3Q1, CS 6000-3Q1, SAUTER CE R24
- Rod end, steel, rustproof, suitable for CS 3000-3Q1, CS 5000-3Q1, CS 6000-3Q1, SAUTER CE RR24

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

Pictograms

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 at the touch of a key. 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.

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

Mains adapter:
230V/50Hz in standard version for EU. On request GB, AUS or USA version available

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

Motorised drive:
The mechanical movement is carried out by a 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:
The time required for verification is specified in the pictogram

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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