

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

Technical data

- 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***
- Cable length up to 1500 kg: 3 m
Cable length from 2000 kg: 6 m
- 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

Technical data

- 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
- Cable length approx. 5 m

CS P2 “S” load cells/load cells made of stainless steel

Technical data

- 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
- Cable length approx. 6 m



Model Nominal load

SAUTER	
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

SAUTER	
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

SAUTER	
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

ONLY WHILE STOCKS LAST!

*** 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

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

CAL BLOCK
Calibration block
 Standard for adjusting or correcting the measuring device

PEAK
Peak hold function
 Capturing a peak value within a measuring process

SCAN
Scan mode
 Continuous capture and display of measurements

PUSH/PULL
Push and Pull
 The measuring device can capture tension and compression forces

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

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

MEMORY
Internal memory
 To save measurements in the device memory

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

PROFIBUS
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
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

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

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

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

IR
Data interface infrared
 To transfer data from the measuring instrument to a printer, PC or other peripheral devices

SWITCH
Control outputs (optocoupler, digital I/O)
 To connect relays, signal lamps, valves, etc.

ANALOG
Analogue interface
 To connect a suitable peripheral device for analogue processing of the measurements

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

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

SOFTWARE
PC Software
 To transfer the measurement data from the device to a PC

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

LAN
Network interface
 For connecting the scale/measuring instrument to an Ethernet network

KCP PROTOCOL
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 PRINTER
GLP/ISO record keeping
 of measurement data with date, time and serial number. Only with SAUTER printers

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

TOL
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

IP
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
ZERO
 Resets the display to "0"

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

ACCU
Rechargeable battery pack
 Rechargeable set

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

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

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

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

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

M
Conformity assessment
 Models with type approval for construction of verifiable systems

DAkkS +3 DAYS
DAkkS calibration possible
 The time required for DAkkS calibration is shown in days in the pictogram

ISO +4 DAYS
Factory calibration (ISO)
 The time required for factory calibration is specified in the pictogram

1 DAY
Package shipment
 The time required for internal shipping preparations is shown in days in the pictogram

2 DAYS
Pallet shipment
 The time required for internal shipping preparations is shown in days in the pictogram

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