

PRODUCT BROCHURE

SAUTER FS 2-50KSP1

Date: 29.04.2025

ENGLISH



Ready-assembled set consisting of premium force gauge FS 2 and external "S" measuring cell CS 5000-3P1 for tensile and compressive force measurements

CONTACT

KERN & SOHN GmbH
Ziegelei 1
72336 Balingen
Germany

Phone : +49 7433 9933-0
Fax : +49 7433 9933-149
Email : info@kern-sohn.com
Web : www.kern-sohn.com



Scan here for more
information

DESCRIPTION

Premium force-measuring device FS 2

- Measurement of forces in different tensile or compression directions possible with only one measuring device
- 3,5" touchscreen with touch pen
- Standard version with 2 measuring channels for external force sensors (subsequently expandable from 2 to 4)
- The specific data of an external sensor are stored directly in the connector
- Adjustable SI units: kg, N, kN, mN, MN, Nm, kNm, mNm
- Track function for continuous measurement display
- Peak value measurement
- Tolerance function
- Internal device memory (16 GB)
- USB interface for data transfer and power supply as standard
- Two-point adjustment with weights or numerical adjustment possible
- Supplied in a high-quality and robust system case (systainer® T-LOC) including plug-in power supply and USB cable type C

4-wire "S" measuring cell made of nickel-plated steel for force and mass measurement CS 5000-3P1

- Accuracy class in accordance with OIML C3
- Nominal sensitivity: 2 mV/V
- Protection against dust and water splashes IP67 (in accordance with EN 60529), hermetically encapsulated
- Area of application: for tensile and compressive force measurement

SPECIFICATIONS

Article codes, product groups & Status information

Model article-code	FS 2-50KSP1
Model-Serie	FS SP1
Assortment	Sauter
Product Type	Force measurement
Product group	Digital force-measuring devices (external sensor)
Product usage type	Main article

EAN code (Model)	4045761358508
------------------	---------------

Customs tariff number	90248000
-----------------------	----------

CE Label	yes
----------	-----

Technical data - Primary

Max. Force	50 kN
------------	-------

Readability	10 N
-------------	------

Technical data - Construction

Material housing	plastic
Mounting thread	Threaded hole M20 × 1,5
IP protection load cell	IP67

Technical data - Power supply

Power supply	Battery & Power supply
Battery type	Li-Ion
Operating time (Display off)	8 h
Operating time (Display on)	5 h
Mains adapter/adapter included	EURO
Protection Class	no protection class

Technical data - Measuring system

Units	N
Force direction	compression;tension

Technical data - Functions

Statistic-Function	yes
Peak-Function	yes
Interface	USB-Device

Technical data - Packing & Shipping

Gross weight	2.8 kg
Net weight	1.8 kg
Shipping method	Parcel service

UN number	Li-Ion, packed with device (UN 3481, Packing Instruction #7, Lithium ion batteries in compliance with Section II of PI 967)
-----------	---

Packaging component - by weight - cardboard	265 g
---	-------

Delivery time	3 d
---------------	-----

Technical data - Counting data

Memory	yes
--------	-----

FUNCTIONS

Standard



Option



ACCESSORIES

Model	Description
YKA-01	Power supply KERN YKA-01
AC 14	Screw Tension Clamp SAUTER AC 14
AC 14R	Screw Tension Clamp SAUTER AC 14R
YKV-01	IoT-Line Digital Weighing Transmitter KERN YKV-01
CS 25-3P1	Measuring Cell SAUTER CS 25-3P1
CS 50-3P1	Measuring Cell SAUTER CS 50-3P1
CS 50-3Q1	Measuring Cell SAUTER CS 50-3Q1
CS 100-3P1	Measuring Cell SAUTER CS 100-3P1
CS 150-3P1	Measuring Cell SAUTER CS 150-3P1
CS 250-3P1	Measuring Cell SAUTER CS 250-3P1
CS 500-3P1	Measuring Cell SAUTER CS 500-3P1
CS 600-3P1	Measuring Cell SAUTER CS 600-3P1
CS 750-3P1	Measuring Cell SAUTER CS 750-3P1
CS 1000-3P1	Measuring Cell SAUTER CS 1000-3P1
CS 1500-3P1	Measuring Cell SAUTER CS 1500-3P1
CS 2000-3P1	Measuring Cell SAUTER CS 2000-3P1
CS 2500-3P1	Measuring Cell SAUTER CS 2500-3P1
CS 5000-3P1	Measuring Cell SAUTER CS 5000-3P1
CS 7500-3P1	Measuring Cell SAUTER CS 7500-3P1
CS 10000-3P1	Measuring Cell SAUTER CS 10000-3P1
CS 15000-3P1	Measuring Cell SAUTER CS 15000-3P1
CS 20000-3P1	Measuring Cell SAUTER CS 20000-3P1
CS 30000-3P1	Measuring Cell SAUTER CS 30000-3P1
CJ P2	Junction Box SAUTER CJ P2
CS 100-3Q1	Measuring Cell SAUTER CS 100-3Q1
CS 150-3Q1	Measuring Cell SAUTER CS 150-3Q1
CS 200-3Q1	Measuring Cell SAUTER CS 200-3Q1
CS 300-3Q1	Measuring Cell SAUTER CS 300-3Q1
CS 500-3Q1	Measuring Cell SAUTER CS 500-3Q1

Model	Description
CS 750-3Q1	Measuring Cell SAUTER CS 750-3Q1
CS 1000-3Q1	Measuring Cell SAUTER CS 1000-3Q1
CS 1500-3Q1	Measuring Cell SAUTER CS 1500-3Q1
CS 2000-3Q1	Measuring Cell SAUTER CS 2000-3Q1
CS 3000-3Q1	Measuring Cell SAUTER CS 3000-3Q1
CS 5000-3Q1	Measuring Cell SAUTER CS 5000-3Q1
CS 6000-3Q1	Measuring Cell SAUTER CS 6000-3Q1
CR 2500-1Q1	Measuring Cell SAUTER CR 2500-1Q1
CR 5000-1Q1	Measuring Cell SAUTER CR 5000-1Q1
CR 10000-1Q1	Measuring Cell SAUTER CR 10000-1Q1
CR 20000-1Q1	Measuring Cell SAUTER CR 20000-1Q1
CR 30000-1Q1	Measuring Cell SAUTER CR 30000-1Q1
CJ P4PG	Junction Box SAUTER CJ P4PG
CR 60-3P1	Measuring Cell SAUTER CR 60-3P1
CR 130-3P1	Measuring Cell SAUTER CR 130-3P1
CR 500-3P1	Measuring Cell SAUTER CR 500-3P1
CR 250-3P1	Measuring Cell SAUTER CR 250-3P1
CR 2000-3P1	Measuring Cell SAUTER CR 2000-3P1
CO 10-Y1	Measuring Cell SAUTER CO 10-Y1
CO 100-Y1	Measuring Cell SAUTER CO 100-Y1
CO 500-Y1	Measuring Cell SAUTER CO 500-Y1
CO 10-Y2	Measuring Cell SAUTER CO 10-Y2
CO 100-Y2	Measuring Cell SAUTER CO 100-Y2
CS 5000-3P2	Measuring Cell SAUTER CS 5000-3P2
CO 20-Y1	Measuring Cell SAUTER CO 20-Y1
CO 50-Y1	Measuring Cell SAUTER CO 50-Y1
CO 200-Y1	Measuring Cell SAUTER CO 200-Y1
CO 1000-Y1	Measuring Cell SAUTER CO 1000-Y1
CO 2000-Y1	Measuring Cell SAUTER CO 2000-Y1
CO 20-Y2	Measuring Cell SAUTER CO 20-Y2
CO 50-Y2	Measuring Cell SAUTER CO 50-Y2

Model	Description
CO 200-Y2	Measuring Cell SAUTER CO 200-Y2
CO 500-Y2	Measuring Cell SAUTER CO 500-Y2
CO 1000-Y2	Measuring Cell SAUTER CO 1000-Y2
CO 2000-Y2	Measuring Cell SAUTER CO 2000-Y2
CS 50-3P2	Measuring Cell SAUTER CS 50-3P2
CS 100-3P2	Measuring Cell SAUTER CS 100-3P2
CS 250-3P2	Measuring Cell SAUTER CS 250-3P2
CS 500-3P2	Measuring Cell SAUTER CS 500-3P2
CS 1-Y1	Measuring Cell SAUTER CS 1-Y1
CS 2-Y1	Measuring Cell SAUTER CS 2-Y1
CS 5-Y1	Measuring Cell SAUTER CS 5-Y1
CS 10-Y1	Measuring Cell SAUTER CS 10-Y1
CS 20-Y1	Measuring Cell SAUTER CS 20-Y1
CO 5-Y3	Measuring Cell SAUTER CO 5-Y3
CO 10-Y3	Measuring Cell SAUTER CO 10-Y3
CO 10-Y4	Measuring Cell SAUTER CO 10-Y4
CO 5-Y4	Measuring Cell SAUTER CO 5-Y4
CS 2000-3P2	Measuring Cell SAUTER CS 2000-3P2
CS 7500-3P2	Measuring Cell SAUTER CS 7500-3P2
FS 34	Analogue/Digital converter SAUTER FS 34
CJ P4	Junction Box SAUTER CJ P4
CR 500-1Y1	Measuring Cell SAUTER CR 500-1Y1
CR 1000-1Y1	Measuring Cell SAUTER CR 1000-1Y1
CR 5000-1Y1	Measuring Cell SAUTER CR 5000-1Y1
CR 10000-1Y1	Measuring Cell SAUTER CR 10000-1Y1
CR 20000-1Y1	Measuring Cell SAUTER CR 20000-1Y1
AE 01	Standard Clamp AE 01
AE 02	Standard Clamp AE 02
AE 03	Clamp SAUTER AE 03
AE 04	Clamp SAUTER AE 04
AE 05	Rope and thread tension clamp SAUTER AE 05

Model	Description
AE 06	Clamp SAUTER AE 06
AE 07	Wedge Clamp with jaws AE 07
DC 10-Y1	Static torque sensor SAUTER DC 10-Y1
DC 5-Y1	Static torque sensor SAUTER DC 5-Y1
DC 20-Y1	Static torque sensor SAUTER DC 20-Y1
DC 50-Y1	Static torque sensor SAUTER DC 50-Y1
DC 100-Y1	Static torque sensor SAUTER DC 100-Y1
DC 200-Y1	Static torque sensor SAUTER DC 200-Y1
DC 500-Y1	Static torque sensor SAUTER DC 500-Y1
DC 50-Y2	Static torque sensor SAUTER DC 50-Y2
DC 20-Y2	Static torque sensor SAUTER DC 20-Y2
DC 10-Y2	Static torque sensor SAUTER DC 10-Y2
DC 1-Y2	Static torque sensor SAUTER DC 1-Y2
DC 200M-Y2	Static torque sensor SAUTER DC 200M-Y2
CE WT4-Y1	Analogue Weighing Transmitter SAUTER CE WT4-Y1
CE WT2-Y4	Analogue Weighing Transmitter SAUTER CE WT2-Y4
CO 1-Y5	Measuring Cell SAUTER CO 1-Y5
CO 0.5-Y5	Measuring Cell SAUTER CO 0.5-Y5
CO 5-Y5	Measuring Cell SAUTER CO 5-Y5
CO 10-Y5	Measuring Cell SAUTER CO 10-Y5

SERVICES

Model	Description
961-165	Factory calibration KERN 961-165
961-265	Factory calibration KERN 961-265
961-365	Factory calibration KERN 961-365
970-107	Warranty extension KERN (+2 years) 970-107

SPARE PARTS

Model	Description
FS-E11	Plug SAUTER FS-E11
FS-E12	Memory chip FS-E12

Model	Description
FS-M04	Distance socket FS-M04
FS-M05	Load introduction bolt FS-M05
FS-M07	Distance socket FS-M07
FS-M03	assembly and repair
FS-M08	Touch pen FS-M08
FS-M06	Adhesive pad FS-M06
FS-E05	Removable battery
OBB-A1569	UK power supply unit KERN OBB-A1569
FS-E09	Keyboard overlay FS-E09
FS-E06	Cable SAUTER FS-E06
FS-E07	Power supply KERN FS-E07
FS-M15	Transport case SAUTER FS-M15
FS-M01	Casing FS-M01
FS-M02	Casing FS-M02
FS-E04	Board SAUTER FS-E04
FS-E08	SD memory card FS-E08
FS-M17	Stopper FS-M17
FS-M15E	Foam SAUTER FS-M15E

SOFTWARES

Model	Description
AFH LD	Data Transfer Software SAUTER AFH LD

RELATED ARTICLES DATA

Model name	Max. Force	Readability
FS 2-1KSP1	1 kN	0.2 N
FS 2-5KSP1	5 kN	1 N
FS 2-2KSP1	2,5 kN	0.5 N
FS 2-20KSP1	20 kN	4 N
FS 2-50KSP1	50 kN	10 N
FS 2-10KSP1	10 kN	2 N
FS 2-100KSP1	100 kN	20 N