

## PRODUCT BROCHURE

# SAUTER FS 2-100

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ENGLISH



Premium force gauge with integrated load cell and connection possibility for up to 4 external load cells

## CONTACT

KERN & SOHN GmbH  
Ziegelei 1  
72336 Balingen  
Germany

Phone : +49 7433 9933-0  
Fax : +49 7433 9933-149  
Email : [info@kern-sohn.com](mailto:info@kern-sohn.com)  
Web : [www.kern-sohn.com](http://www.kern-sohn.com)



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## PRODUCT SHOWCASE



## DESCRIPTION

- Use with integrated load cell  
The SAUTER FS premium force gauge has an load measuring cell for tensile and compressive force applications. Either mobile for rapid testing or stationary integrated into a test stand or production line, the multifunction display allows all the values recorded to be read off at a glance in real time. Via the integrated interface, the data can be sent to a PC or laptop for further processing.
- Use with external load cells  
The SAUTER FS premium force gauge is compatible with all SAUTER strain gauge measuring cells, see Measuring Cells. Up to 4 external measuring cells can be connected simultaneously. If an external measuring channel is used, the internal load cell is deactivated as long as an external load cell is connected.
- 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)
- An internal load cell is possible (is deactivated if an external load cell is connected)
- Suitable for 4-wire and 6-wire sensors with strain gauges
- Two-point adjustment with weights or numerical adjustment possible
- The specific data of an external sensor are stored directly in the connector
- USB interface for data transfer and power supply as standard
- Internal device memory (16 GB)
- Adjustable SI units: kg, N, kN, mN, MN, Nm, kNm, mNm
- Tolerance function
- Track function for continuous measurement display
- Peak value measurement

- Mountable on all SAUTER test stands
- Supplied in a high-quality and robust system case (systainer® T-LOC) including plug-in power supply and USB cable type C
- Tip: Order the practical system case (systainer® T-LOC) for storing and transporting of accessories, clamps, sensors, etc. at the same time, SAUTER FS TKZ, see accessories

## SPECIFICATIONS

### Article codes, product groups & Status information

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| Model article-code    | FS 2-100                                          |
| Model-Serie           | FS                                                |
| Assortment            | Sauter                                            |
| Product Type          | Force measurement                                 |
| Product group         | Digital force-measuring devices (external sensor) |
| Product usage type    | Main article                                      |
| EAN code (Model)      | 4045761236998                                     |
| Customs tariff number | 90248000                                          |

### Technical data - Primary

|             |        |
|-------------|--------|
| Max. Force  | 100 N  |
| Readability | 0.02 N |

### Technical data - Construction

|                           |                    |
|---------------------------|--------------------|
| Dimension housing (W×D×H) | 71×31×180 mm       |
| Material housing          | plastic            |
| Mounting thread           | External thread M6 |

### 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

Dimensions packaging (W×D×H) 280×185×90 mm

Gross weight 1.4 kg

Net weight 0.40 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 | 165 g                                                                                                                       |
| Packaging component - by weight - styrofoam | 425 g                                                                                                                       |
| Delivery time                               | 1 d                                                                                                                         |

## Technical data - Counting data

|        |     |
|--------|-----|
| Memory | yes |
|--------|-----|

## Optional Services

|                               |         |
|-------------------------------|---------|
| DAkkS calibration - push/pull | 963-361 |
| DAkkS calibration - push only | 963-261 |
| DAkkS calibration - pull only | 963-161 |

## FUNCTIONS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Option                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |

## ACCESSORIES

| Model  | Description                       |
|--------|-----------------------------------|
| AE 500 | Screw Tension Clamp SAUTER AE 500 |

| Model        | Description                        |
|--------------|------------------------------------|
| CS 50-3P1    | Measuring Cell SAUTER CS 50-3P1    |
| CS 100-3P1   | Measuring Cell SAUTER CS 100-3P1   |
| CS 250-3P1   | Measuring Cell SAUTER CS 250-3P1   |
| CS 500-3P1   | Measuring Cell SAUTER CS 500-3P1   |
| CS 1000-3P1  | Measuring Cell SAUTER CS 1000-3P1  |
| CS 2000-3P1  | Measuring Cell SAUTER CS 2000-3P1  |
| CS 10000-3P1 | Measuring Cell SAUTER CS 10000-3P1 |
| CS 20000-3P1 | Measuring Cell SAUTER CS 20000-3P1 |
| CS 100-3Q1   | Measuring Cell SAUTER CS 100-3Q1   |
| CS 750-3Q1   | Measuring Cell SAUTER CS 750-3Q1   |
| CS 1500-3Q1  | Measuring Cell SAUTER CS 1500-3Q1  |
| CS 3000-3Q1  | Measuring Cell SAUTER CS 3000-3Q1  |
| CR 10000-1Q1 | Measuring Cell SAUTER CR 10000-1Q1 |
| CO 500-Y1    | Measuring Cell SAUTER CO 500-Y1    |
| CS 5000-3P2  | Measuring Cell SAUTER CS 5000-3P2  |
| AFM 06       | Adapter KERN AFM 06                |
| AFM 12       | assembly and repair AFM 12         |
| AFM 15       | Sleeve SAUTER AFM 15               |
| CO 20-Y1     | Measuring Cell SAUTER CO 20-Y1     |
| CO 200-Y1    | Measuring Cell SAUTER CO 200-Y1    |
| CO 1000-Y1   | Measuring Cell SAUTER CO 1000-Y1   |
| CO 20-Y2     | Measuring Cell SAUTER CO 20-Y2     |
| CO 200-Y2    | Measuring Cell SAUTER CO 200-Y2    |
| CO 1000-Y2   | Measuring Cell SAUTER CO 1000-Y2   |
| CS 250-3P2   | Measuring Cell SAUTER CS 250-3P2   |
| CS 1-Y1      | Measuring Cell SAUTER CS 1-Y1      |
| CS 2-Y1      | Measuring Cell SAUTER CS 2-Y1      |
| CS 10-Y1     | Measuring Cell SAUTER CS 10-Y1     |
| CO 10-Y4     | Measuring Cell SAUTER CO 10-Y4     |
| CS 7500-3P2  | Measuring Cell SAUTER CS 7500-3P2  |
| CR 1000-1Y1  | Measuring Cell SAUTER CR 1000-1Y1  |

| Model        | Description                              |
|--------------|------------------------------------------|
| CR 10000-1Y1 | Measuring Cell SAUTER CR 10000-1Y1       |
| CR 20000-1Y1 | Measuring Cell SAUTER CR 20000-1Y1       |
| AE 02        | Standard Clamp AE 02                     |
| CO 1-Y5      | Measuring Cell SAUTER CO 1-Y5            |
| CO 0.5-Y5    | Measuring Cell SAUTER CO 0.5-Y5          |
| AFK 02       | Stainless steel handle bar SAUTER AFK 02 |
| AC 43        | Standard attachments SAUTER AC 43        |
| CS 5000-3P1  | Measuring Cell SAUTER CS 5000-3P1        |
| CS 15000-3P1 | Measuring Cell SAUTER CS 15000-3P1       |
| CS 30000-3P1 | Measuring Cell SAUTER CS 30000-3P1       |
| CS 150-3Q1   | Measuring Cell SAUTER CS 150-3Q1         |
| CS 300-3Q1   | Measuring Cell SAUTER CS 300-3Q1         |
| CS 500-3Q1   | Measuring Cell SAUTER CS 500-3Q1         |
| CR 2500-1Q1  | Measuring Cell SAUTER CR 2500-1Q1        |
| CR 5000-1Q1  | Measuring Cell SAUTER CR 5000-1Q1        |
| CR 20000-1Q1 | Measuring Cell SAUTER CR 20000-1Q1       |
| CR 130-3P1   | Measuring Cell SAUTER CR 130-3P1         |
| CR 2000-3P1  | Measuring Cell SAUTER CR 2000-3P1        |
| CO 100-Y1    | Measuring Cell SAUTER CO 100-Y1          |
| AFM 05       | Adapter KERN AFM 05                      |
| AFM 07       | Sleeve SAUTER AFM 07                     |
| CO 50-Y1     | Measuring Cell SAUTER CO 50-Y1           |
| CO 50-Y2     | Measuring Cell SAUTER CO 50-Y2           |
| CO 500-Y2    | Measuring Cell SAUTER CO 500-Y2          |
| CS 5-Y1      | Measuring Cell SAUTER CS 5-Y1            |
| CO 5-Y3      | Measuring Cell SAUTER CO 5-Y3            |
| AE 04        | Clamp SAUTER AE 04                       |
| AE 06        | Clamp SAUTER AE 06                       |
| AE 07        | Wedge Clamp with jaws AE 07              |
| CS 25-3P1    | Measuring Cell SAUTER CS 25-3P1          |
| CS 750-3P1   | Measuring Cell SAUTER CS 750-3P1         |

| Model        | Description                        |
|--------------|------------------------------------|
| CS 2500-3P1  | Measuring Cell SAUTER CS 2500-3P1  |
| CS 2000-3Q1  | Measuring Cell SAUTER CS 2000-3Q1  |
| CS 6000-3Q1  | Measuring Cell SAUTER CS 6000-3Q1  |
| CO 10-Y1     | Measuring Cell SAUTER CO 10-Y1     |
| CO 100-Y2    | Measuring Cell SAUTER CO 100-Y2    |
| CO 2000-Y1   | Measuring Cell SAUTER CO 2000-Y1   |
| CO 2000-Y2   | Measuring Cell SAUTER CO 2000-Y2   |
| CS 100-3P2   | Measuring Cell SAUTER CS 100-3P2   |
| CS 20-Y1     | Measuring Cell SAUTER CS 20-Y1     |
| CO 10-Y3     | Measuring Cell SAUTER CO 10-Y3     |
| CO 5-Y4      | Measuring Cell SAUTER CO 5-Y4      |
| CR 5000-1Y1  | Measuring Cell SAUTER CR 5000-1Y1  |
| AE 03        | Clamp SAUTER AE 03                 |
| YKA-01       | Power supply KERN YKA-01           |
| AC 14        | Screw Tension Clamp SAUTER AC 14   |
| AC 14R       | Screw Tension Clamp SAUTER AC 14R  |
| CS 50-3Q1    | Measuring Cell SAUTER CS 50-3Q1    |
| CS 150-3P1   | Measuring Cell SAUTER CS 150-3P1   |
| CS 600-3P1   | Measuring Cell SAUTER CS 600-3P1   |
| CS 1500-3P1  | Measuring Cell SAUTER CS 1500-3P1  |
| CS 7500-3P1  | Measuring Cell SAUTER CS 7500-3P1  |
| CS 200-3Q1   | Measuring Cell SAUTER CS 200-3Q1   |
| CS 1000-3Q1  | Measuring Cell SAUTER CS 1000-3Q1  |
| CS 5000-3Q1  | Measuring Cell SAUTER CS 5000-3Q1  |
| CD 20-3P1    | Measuring Cell SAUTER CD 20-3P1    |
| CR 30000-1Q1 | Measuring Cell SAUTER CR 30000-1Q1 |
| CR 60-3P1    | Measuring Cell SAUTER CR 60-3P1    |
| CR 500-3P1   | Measuring Cell SAUTER CR 500-3P1   |
| CR 250-3P1   | Measuring Cell SAUTER CR 250-3P1   |
| CO 10-Y2     | Measuring Cell SAUTER CO 10-Y2     |
| CS 50-3P2    | Measuring Cell SAUTER CS 50-3P2    |

| Model       | Description                                |
|-------------|--------------------------------------------|
| CS 500-3P2  | Measuring Cell SAUTER CS 500-3P2           |
| CS 2000-3P2 | Measuring Cell SAUTER CS 2000-3P2          |
| FS 34       | Analogue/Digital converter SAUTER FS 34    |
| CR 500-1Y1  | Measuring Cell SAUTER CR 500-1Y1           |
| AE 01       | Standard Clamp AE 01                       |
| AE 05       | Rope and thread tension clamp SAUTER AE 05 |
| CO 5-Y5     | Measuring Cell SAUTER CO 5-Y5              |
| CO 10-Y5    | Measuring Cell SAUTER CO 10-Y5             |

## SERVICES

| Model   | Description                                                   |
|---------|---------------------------------------------------------------|
| 961-161 | Factory calibration KERN 961-161                              |
| 961-261 | Factory calibration KERN 961-261                              |
| 963-361 | DAkkS Calibration KERN 963-361                                |
| FS 404  | Plug SAUTER FS 404                                            |
| FS 406  | Plug SAUTER FS 406                                            |
| 970-106 | Warranty extension KERN (+2 years) 970-106                    |
| 963-161 | DAkkS Calibration KERN 963-161                                |
| FS 402  | Plug SAUTER FS 402                                            |
| FS 403  | Plug SAUTER FS 403                                            |
| 961-361 | Factory calibration KERN 961-361                              |
| 963-261 | DAkkS Calibration KERN 963-261                                |
| FS 405  | Plug SAUTER FS 405                                            |
| FS 407  | Plug SAUTER FS 407                                            |
| FS 401  | Numerical adjustment FS 401                                   |
| FS 408  | Plug SAUTER FS 408                                            |
| FS 421  | Plug for FS measuring cell, fitted and adjusted SAUTER FS 421 |

## 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                    |
| CS 10-Y2  | Measuring Cell SAUTER CS 10-Y2      |
| 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 2-20    | 20 N       | 0.004 N     |
| FS 4-20    | 20 N       | 0.004 N     |
| FS 2-50    | 50 N       | 0.01 N      |
| FS 4-50    | 50 N       | 0.01 N      |
| FS 2-100   | 100 N      | 0.02 N      |
| FS 4-100   | 100 N      | 0.02 N      |

| Model name | Max. Force | Readability |
|------------|------------|-------------|
| FS 2-200   | 200 N      | 0.04 N      |
| FS 4-200   | 200 N      | 0.04 N      |
| FS 2-500   | 500 N      | 0.1 N       |
| FS 4-500   | 500 N      | 0.1 N       |