

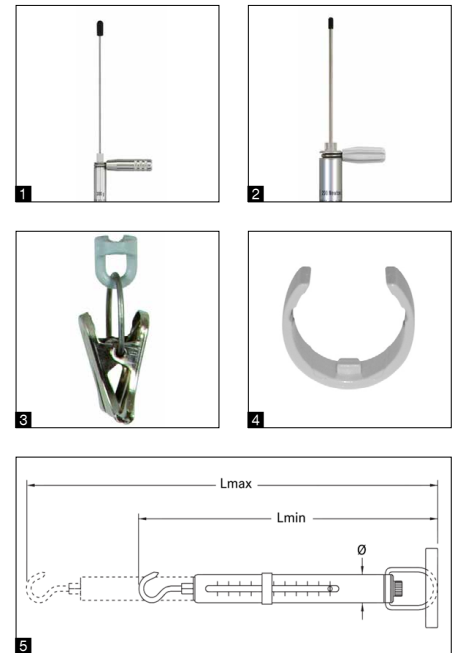
Spring Balances SAUTER 281 · 285



SAUTER 281



SAUTER 285



## Precise, mechanical spring balances in robust aluminium housing with g/kg readout

### Features

- Aluminium scale tube: robust, long service life, handy
- Gram/Kilogram scale: Measuring result display in grams/kilograms instead of N
- Double scale: For fast or precise recording of the measurement result
- Compressive force measurement: possible using an optional pressure set, see *Accessories*
- Drag pointer and carrying handle: as standard for all models of the SAUTER 285 range
- Suspension bow: thanks to the rotating suspension bow the scale can always be aligned to be at the very best line of sight

- High precision: Backlash-free spring bearing with integrated tare screw for highly-precise adjustment
- Non-fatigue stainless steel spring
- Clip loop which can be freely rotated of the lower suspension bracket by 360° for models with  $[Max] \leq 1 \text{ kg}$
- High-quality workmanship: Wear-resistant, colour-anodised precision scale with high resolution for accurate readability of the measuring result

### Technical data

- Measuring precision:  $\pm 0,3\%$  of  $[Max]$
- Tare range: 20 % of  $[Max]$

### Accessories

- **1** Pressure-Set, suitable for models with weighing range  $< 2,5 \text{ kg}/25 \text{ N}$ , SAUTER 281-890
- **2** Pressure-Set, suitable for models with weighing range  $\geq 5 \text{ kg}/50 \text{ N}$ , SAUTER 285-890
- **3** Clip, suitable for models with weighing range  $\leq 2,5 \text{ kg}/25 \text{ N}$ , SAUTER 281-151-002
- **4** Drag pointer for spring balances, suitable for models with weighing range  $< 2,5 \text{ kg}/25 \text{ N}$ , SAUTER 281-051-001
- Drag pointer for spring balances, suitable for models with weighing range  $\geq 5 \text{ kg}/50 \text{ N}$ , SAUTER 285-897

STANDARD



OPTION



Model	Weighing range [Max] N	Division [d] N	Load support	5 Dimensions			Option Factory calibration certificate
				Lmin	Lmax	Ø	
SAUTER				mm	mm	mm	KERN
281-101	10	0,1	Clip	220	300	12	961-100
281-151	30	0,25	Clip	220	300	12	961-100
281-201	60	0,5	Clip	220	300	12	961-100
281-301	100	1	Clip	220	300	12	961-100
281-401	300	2	Clip	225	325	12	961-100
281-451	600	5	Clip	225	325	12	961-100
281-601	1000	10	Clip	225	325	12	961-100
281-752	2500	20	Hook	225	325	12	961-100
285-052	5000	50	Hook	370	510	32	961-100
285-102	10000	100	Hook	370	510	32	961-101
285-202	20000	200	Hook	370	510	32	961-101
285-352	35000	500	Hook	370	460	32	961-101
285-502	50000	500	Hook	370	460	32	961-101

 <p><b>Adjusting program (CAL)</b> For quick setting of the instrument's accuracy. External adjusting weight required</p>	 <p><b>Bluetooth* data interface</b> To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p><b>Measuring units</b> Weighing units can be switched to e.g. non-metric. Please refer to website for more details</p>	 <p><b>Conformity assessment</b> Models with type approval for construction of verifiable systems</p>
 <p><b>Calibration block</b> Standard for adjusting or correcting the measuring device</p>	 <p><b>WIFI data interface</b> To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p><b>Measuring with tolerance range (limit-setting function)</b> Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model</p>	 <p><b>DAkkS calibration possible</b> The time required for DAkkS calibration is shown in days in the pictogram</p>
 <p><b>Peak hold function</b> Capturing a peak value within a measuring process</p>	 <p><b>Data interface infrared</b> To transfer data from the measuring instrument to a printer, PC or other peripheral devices</p>	 <p><b>Protection against dust and water splashes IPxx</b> The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989 +A1:1999+A2:2013</p>	 <p><b>Factory calibration (ISO)</b> The time required for factory calibration is specified in the pictogram</p>
 <p><b>Scan mode</b> Continuous capture and display of measurements</p>	 <p><b>Control outputs (optocoupler, digital I/O)</b> To connect relays, signal lamps, valves, etc.</p>	 <p><b>ZERO</b> Resets the display to "0"</p>	 <p><b>Package shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p><b>Push and Pull</b> The measuring device can capture tension and compression forces</p>	 <p><b>Analogue interface</b> To connect a suitable peripheral device for analogue processing of the measurements</p>	 <p><b>Battery operation</b> Ready for battery operation. The battery type is specified for each device</p>	 <p><b>Pallet shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p><b>Length measurement</b> Captures the geometric dimensions of a test object or the movement during a test process</p>	 <p><b>Analogue output</b> For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)</p>	 <p><b>Rechargeable battery pack</b> Rechargeable set</p>	
 <p><b>Focus function</b> Increases the measuring accuracy of a device within a defined measuring range</p>	 <p><b>Statistics</b> Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.</p>	 <p><b>Plug-in power supply</b> 230V/50Hz in standard version for EU. On request GB, AUS or US version available</p>	
 <p><b>Internal memory</b> To save measurements in the device memory</p>	 <p><b>PC Software</b> To transfer the measurement data from the device to a PC</p>	 <p><b>Integrated power supply unit</b> Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US on request</p>	
 <p><b>Data interface RS-232</b> Bidirectional, for connection of printer and PC</p>	 <p><b>Printer</b> A printer can be connected to the device to print out the measurement data</p>	 <p><b>Motorised drive</b> The mechanical movement is carried out by an electric motor</p>	
 <p><b>Profibus</b> 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</p>	 <p><b>Network interface</b> For connecting the scale/measuring instrument to an Ethernet network</p>	 <p><b>Motorised drive</b> The mechanical movement is carried out by a synchronous motor (stepper)</p>	
 <p><b>Profinet</b> 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</p>	 <p><b>KERN Communication Protocol (KCP)</b> 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</p>	 <p><b>Fast-Move</b> The total length of travel can be covered by a single lever movement</p>	
 <p><b>Data interface USB</b> To connect the measuring instrument to a printer, PC or other peripheral devices</p>	 <p><b>GLP/ISO record keeping</b> of measurement data with date, time and serial number. Only with SAUTER printers</p>		