

















For tension tests ≤ 500 N





	Long clamp for tension and rupture tests up to 50 N, clamping width: 21 mm, Thread: M6	AC 17 2 pieces
	Angle bracket for tension and rupture tests up to 500 N (e.g. for cable tests), clamping width: 22 mm, Thread: M6	AC 01 2 pieces
	Cable fixture for tension and rupture tests up to 500 N	AC 10S*
	Fine point clamp for tension and rupture tests up to 500 N, width 15 mm, clamping width: 4 mm, Thread: M6	AC 14 2 pieces
	Fine point clamp for tension and rupture tests up to 500 N, width 22 mm, Thread: M6	AC 22 2 pieces
	Ring fixture for tension and rupture tests up to 500 N, diameter: 23 mm, Thread: M6	AC 15*
	Screw tension clamp for 100 N for laboratory tensile force measurements, incl. Jaws with pyramid grip, Thread: M6	AD 9001 2 pieces 
	Screw tension clamp for 100 N for laboratory tensile force measurements, incl. Jaws with pyramid grip 1 with adapter structure for AD-system, 2 with M6 thread	AD 9005 2 pieces 
	Screw tension clamp for 100 N for laboratory tensile force measurements with collar joint and Jaws with pyramid grip	AD 9016 2 pieces 

	2 wide jaw grip attachment for tension and extraction tests up to 5 kN, clamping width: 33 mm, Thread: M10	AC 18 2 pieces
	Rolling-clamp attachment for tension and rupture tests up to 5 kN, Thread: M10	AC 11 2 pieces 
	1-jaw-clamp attachment for tension and rupture tests up to 5 kN, clamping width: 3 mm, Thread: M6	AC 13 2 pieces
	Eccentric roll clamp in particular for cable tests up to 5 kN, clamping width: 9 mm	AC 41
	Drum clamp typically for cable connector extraction tests up to 5 kN, for test objects with ∅ from 1,5 mm up to 8 mm, Thread: M10	AC 42
	Flat clamp with ripple jaws clamping width: 6 mm, Thread: M10 up to 10 kN	AC 31 
	Wide jaw clamp with fixed jaws with high-performance inner jaws out of steel, jaws with pyramid grip clamping width: 7 mm, Thread: M10 up to 10 kN	AC 04 
	Screw-in tension clamp for 1 kN, for tensile force tests, Jaws with pyramid grip	AD 9021 2 pieces 


For tension tests ≤ 5000 N

	Flat jaw attachment for tension tests up to 5 kN (e.g. textile, paper etc.), clamping width: 8 mm, Thread: M6	AC 03 2 pieces
	Grip clamp attachment for insertion and pull tests up to 5 kN, clamping width: 6 mm, Thread: M6	AC 09 2 pieces
	Parallel jaw grip for tension and rupture tests up to 5 kN, clamping width: 5 mm, Thread: M10	AC 12 2 pieces
	High capacity small clamp for tension and rupture tests up to 5 kN, clamping width: 5 mm, Thread: M10	AC 16 2 pieces

For tension tests ≤ 5000 N

	Wedge tension clamp up to 5 kN, for tensile force tests, builds up tensile force automatically by its wedge shape, clamping width up to 10 mm, Jaws with pyramid grip	AD 9080 2 pieces 
	Rope and thread tension clamp up to 1 kN, Suitable for wires up to a diameter of 2 mm, belts up to 7 mm width. incl. jaws with rubberised surface	AD 9120 2 pieces 

 *ONLY WHILE STOCKS LAST

 Price reduction

For tension tests ≤ 5000 N

For tension tests > 5000 N



Universal force measurement clamp AE 2K
 for tension and compression testing up to 2 kN, clamping width: up to 15 mm, jaws with pyramid grips, rapid adjustment to a variety of test objects thanks to the flexible clamping width, for further details, see page 28

NEW



Rope and thread tension clamp AD 9121
 up to 5 kN, for clamping belts, ropes, wires, etc. Suitable for wires up to a diameter of 5 mm, belts up to 8 mm. Jaws with pyramid grip

PREMIUM
★★★



Roller tension clamp AD 9205
 up to 1 kN, can clamp on one side and eccentrically. Suitable for tensile force tests with belts or any other soft, flexible, flat material with a maximum sample thickness of 7 mm, incl. rollers with pyramid grip, the opposite clamping surface is smooth. Suitable for test objects up to 50 mm width.

PREMIUM
★★★



Roller tension clamp AD 9206
 up to 1 kN, can clamp on one side and eccentrically. Suitable for tensile force tests with belts or any other soft, flexible, flat material with a maximum sample thickness of 7 mm, incl. rollers with smooth surface, the opposite clamping surface is rubberised. Suitable for test objects up to 50 mm width.

PREMIUM
★★★



Roller tension clamp AD 9200
 up to 5 kN, symmetrisch und exzentrisch spannend. Suitable for tensile force tests with belts or any other soft, flexible, flat material with a maximum sample thickness of 7 mm, incl. rollers with pyramid grip

PREMIUM
★★★



Roller tension clamp AD 9207
 up to 5 kN, can clamp on one side and eccentrically. Suitable for tensile force tests with belts or any other soft, flexible, flat material with a maximum sample thickness of 7 mm, incl. rollers with pyramid grip, the opposite clamping surface is smooth. Suitable for test objects up to 50 mm width.

PREMIUM
★★★



Quick clamp AC 38
 for high capacity tensile tests up to 30 kN, clamping width up to: 8 mm, Thread: M10

AC 38



Wedge tension clamp AD 9085
 up to 10 kN, for tensile force tests, builds up tensile force automatically by its wedge shape, clamping width 10 mm, Jaws with pyramid grip

AD 9085

2 pieces
PREMIUM
★★★



Wedge tension clamp AD 9090
 up to 10 kN, for tensile force tests, builds up tensile force automatically by its wedge shape, clamping width 10 mm, Jaws with pyramid grip

AD 9090

2 pieces
PREMIUM
★★★



Universal force measurement clamp AE 10K
 for tension and compression testing up to 10 kN, clamping width: up to 75 mm, jaws with pyramid grips, rapid adjustment to a variety of test objects thanks to the flexible clamping with ball locking pin, for further details, see page 29

AE 10K



Wedge tension clamp AD 9100
 up to 20 kN, for tensile force tests, builds up tensile force automatically by its wedge shape, clamping width 10 mm, Jaws with pyramid grip

AD 9100

2 pieces
PREMIUM
★★★



Wedge tension clamp AD 9095
 up to 20 kN, for tensile force tests, builds up tensile force automatically by its wedge shape, clamping width 13 mm, Jaws with pyramid grip

AD 9095

2 pieces
PREMIUM
★★★



Wedge tension clamp AD 9096
 up to 50 kN, for tensile force tests, builds up tensile force automatically by its wedge shape, clamping width 13 mm, Jaws with pyramid grip

AD 9096

2 pieces
PREMIUM
★★★



Belt tension clamp AD 9250
 up to 20 kN, open at one end, suitable for tensile force tests with belts or any other soft, flexible, flat materials with a maximum sample thickness of 2,5 mm a test object width up to 22 mm

AD 9250

2 pieces
PREMIUM
★★★

↓ Price reduction

For tension tests > 5000 N



Belt tension clamp
up to 20 kN,
suitable for tensile force tests with
belts or any other soft, flexible, flat
materials with a maximum sample
thickness of 2,5 mm a test object
width up to 80 mm

AD 9255

2 pieces



Belt tension clamp
up to 50 kN,
suitable for tensile force tests with
belts or any other soft, flexible, flat
materials with a maximum sample
thickness of 2,5 mm a test object
width up to 80 mm

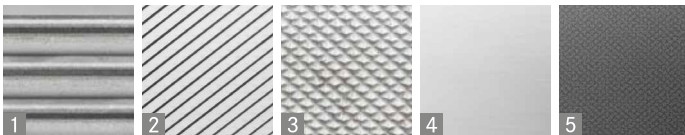
AD 9256

2 pieces



All premium clamps can be customised and, as an option, are available with the following types of jaw finish: **1** undulating, **2** wedge-shaped, **3** pyramid-shaped, **4** smooth or **5** rubberised.

For further information, please contact us or have a look on our website at www.sauter.eu



For compression tests > 500 N



Concave force sensor
with optimised radius for the
measurement particularly of
arms and legs up to 1 kN,
Thread: M6

AC 45



Flat square-shaped sensor
for lateral power sensing of back,
chest or arm up to 1 kN,
Thread: M6

AC 46



Round sensor
to measure particular muscle groups,
such as, for example,
the shoulder up to 1 kN,
inner thread: M6

AC 47



Pressure disc
out of aluminium, thickness 10 mm,
for compression tests up to 5 kN,
diam. 110 mm, outer thread: M10

AFH 06

2 pieces



Pressure disc
for compression tests up to 5 kN
(e. g. plastics), \varnothing 49 mm,
inner thread: M10

AC 08

2 pieces

For compression tests > 500 N



Stainless steel ball-shaped head
for compression and fracture tests
up to 5 kN, (e.g. foam, glass),
Thread: M6/M10

AC 02

2 pieces



Small 3-point bending device (steel)
up to 10 kN,
central scale 80-0-80 mm.
Consisting of one support beam, two
support brackets and a curved fin each
with permanently fixed radii, radius of
the fin 3,2 mm, radii of the support brackets
3,2 + 5 mm, other radii on request.
Gap between the two support brackets
4-150 mm. Width of the brackets 30 mm

AD 9300



**Small 3-point bending device
(anodised aluminium)**
up to 2,5 kN,
central scale 80-0-80 mm.
Consisting of one support beam, two
support brackets and a curved fin each
with permanently fixed radii, radius of
the fin 3,2 mm, radii of the support brackets
3,2 + 5 mm, other radii on request.
Gap between the two support brackets
4-150 mm. Width of the brackets 30 mm

AD 9305



Small 3-point bending device (steel)
up to 10 kN,
central scale 80-0-80 mm.
Consisting of one support beam, two
support brackets and a curved fin with
interchangeable radii rollers, radius of
the fin 5 mm, radii of the support brackets
5 + 10 mm, other radii on request.
Gap between the two support brackets
4-150 mm. Width of the brackets 30 mm

AD 9310



**Small 3-point bending device
(anodised aluminium)** up to 2,5 kN,
central scale 80-0-80 mm.
Consisting of one support beam, two
support brackets and a curved fin with
interchangeable radii rollers, radius of
the fin 5 mm, radii of the support brackets
5 + 10 mm, other radii on request.
Gap between the two support brackets
4-150 mm. Width of the brackets 30 mm

AD 9315



NEW



Quickly fittable universal force measurement clamp for tension and compression testing for a force range up to 2 kN

Features

- **High-quality force measurement clamp** in the middle force range with an enormous flexibility for a fast adaptation to a wide variety of test objects
- **Solid version** for high clamp forces
- Flexible clamping width (width between the jaws) from **A** 15-30mm (standard) and from **B** 15-30mm (in combination with the optional, wide central section: SAUTER AE 2K-A01)
- **You can choose between many different types of jaws**
 - Jaws with pyramid grip as standard, W×H 32×20 mm
 - **5** Jaws with undulating grip, knurled grip, V-grip for round samples up to 15 mm diameter, plain jaws for your own treatment and jaws with rubber coating (1 mm), and many more, all available as options, please ask for details
- **1** The modular construction enables a quick adaptation and cleaning of the clamp

- **2** By means of the **practical ball locking pin system**, the clamp can be quickly adapted to ones' own demands, test objects, operational environment, e.g. test stand or force measuring device
- Can be used with all SAUTER force measuring devices or test stand systems
- For tension and compression testing up to 2 kN
- Overload protection: 150 % of [Max]
- Scope of supply: 1 clamp with middle section for widths from 0-15 mm, 1 adapter, 1 locking pin
- For dimensional drawing, see www.sauter.eu

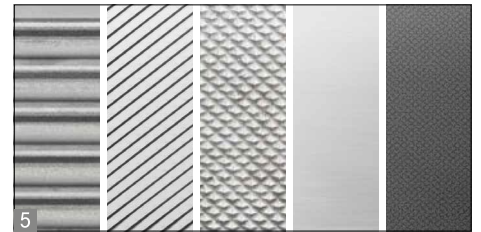
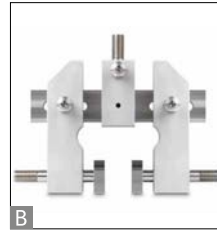
Accessories

- **3 Adapter**, connection pin between clamp and load cell/measuring device as standard, M12 thread, max. load up to 10 kN, can be reordered at any time, SAUTER AE-A01
- **Safety pin**, stainless steel, with spring system to fix adjustable components, as standard, can be reordered at any time, SAUTER AE-A03
- **4** Wide central section for widths from 15-30 mm, SAUTER AE 2K-A01

STANDARD



Model	Maximum load	Range mm		Scope of supplies
		A	B (Option)	
SAUTER AE 2K	N 2000	0-15	15-30	1 piece



Quickly fittable universal force measurement clamp for tension and compression testing for a force range up to 10 kN

Features

- **High-quality force measurement clamp** with enormous flexibility which can be adapted quickly to a wide variety of test objects
- **Solid version** for high clamp forces
- Maximum clamping width (width between the jaws): 75 mm, triple lockable **A**, **B**, **C**, can be finely adjusted using threaded rods
- **Many different types of jaws can be chosen**
 - Jaws with pyramid grip as standard, W×H 49×30 mm
 - **5** Jaws with undulating grip, knurled grip, V-grip for round samples up to 15 mm diameter, plain jaws for your own treatment and and jaws with rubber coating (1 mm), and many more versions all available as options, please ask for details
- The **modular design** enables a quick fitting, expansion and cleaning of the clamp.

- **1** By means of the **practical ball locking pin system**, the clamp can be quickly adapted to ones' own demands, test objects, operational environment, e.g. test stand or force measuring device.
- Can be used with all SAUTER force measuring devices or test stand systems
- For tension and compression testing up to 10 kN
- Overload protection: 150 % of [Max]
- Scope of supply: 1 clamp, 1 adapter, 2 safety pins
- For dimensional drawing, see www.sauter.eu

Accessories

- **2 Adapter**, connection pin between clamp and load cell/measuring device as standard, M12 thread, max. load up to 10 kN, can be reordered, SAUTER AE-A01
- **3 Safety pin**, stainless steel, with spring system to fix adjustable components, as standard, can be reordered, SAUTER AE-A03
- **4 Long jaws**, stainless steel, pyramid grip 2 pcs. W×H 100×30 mm, SAUTER AE-A02

STANDARD



Model	Maximum load	Range mm			Scope of supplies
		A	B	C	
SAUTER AE 10K	N 10.000	43-75	10-43	0-10	1 piece

Attachments



Standard attachments kit **AC 43**
for all force gauges FA, FH,
FL and FC, Thread: M6
10-500 N 6 items



Standard attachments kit **AC 430**
for force gauge FK,
Thread: M8
10-500 N 6 items



Box supports made of aluminium, **AC 50***
in particular for rectangular packaging
Suitable for all TVM-N test stands,
up to 5 kN 2 pieces



Tensiometer attachment **FK-A01**
optional for all FK models from
FK 10 up to FK 250



Tensiometer attachment **FK-A02**
for high-capacity tensile strength
tests up to FK 500 and FK 1K

Special solutions



Stainless steel handle bar **AFH 04**
with rubber grip for safe handling,
AFH 04 suitable for FA, FH, FL
AFK 02 suitable for FK



Stainless steel handle bar **AFH 05**
with rubber grip for FH, FL with
external sensor



Door tester **AFH 03**
Handle (length: 300 mm) and two round
force receptor plates (ø 85 mm) as an
option to FH 1K up to FH 5K for the safe
testing of clamping forces (not approved
to DIN 18650 or similar), up to 5 kN



Tombstone tester **FA 500G**
for testing the stability of tombstones
according to VSG 4.7 up to 500 N on
the basis of FA (included),
Option: ISO calibration
961-161



Tombstone tester **FL 500G**
for testing the stability of tombstones
according to VSG 4.7 on the basis of FL,
up to 500 N: FL 500G
up to 1.000 N: FL 1KG
Option: DAkkS calibration for
FL 500G: 963-261
FL 1KG: 963-262

Special solutions



Tombstone tester **FH 500G**
for testing the stability of tombstones
according to VSG 4.7
up to 500 N: FH 500G
Option: DAkkS calibration for
FH 500G: 963-261

Interface cables



RS-232/PC connection cable **FH-A01**
to connect models from the SAUTER FH
range to a PC or a printer



RS-232/PC connection cable **FL-A04**
to connect models from the SAUTER FL,
DA range to a PC or a printer



USB/PC connection cable **FL-A01**
to connect models from the SAUTER FL,
DA range to a PC or a printer



RS-232/PC connection cable **LB-A01**
to connect models from the SAUTER LB
range to a PC



RS-232/USB adapter **AFH 12**
to connect peripheral devices with
USB interface, suitable for all balances
and measuring instruments with RS 232
output, length 0,95m, scope of supply:
adapter, CD with driver



RS-232/PC connection cable **FC-A01**
to connect models from the SAUTER FC
range to a PC or a printer
































Other



Carrying strap **AC 35**
for easy and safe transportation
of the tombstone tester during
the testings



Relais module **AFH-A02**
serves to transmit output signals of an
FH force measuring device to control
actions directly

	Adjusting program (CAL): For quick setting of the balance's accuracy. External adjusting weight required.		Control outputs (optocoupler, digital I/O): to connect relays, signal lamps, valves, etc.		Rechargeable battery pack: rechargeable set.
	Calibration block: standard for adjusting or correcting the measuring device.		Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements.		Mains adapter: 230V/50Hz in standard version for EU. On request GB, AUS or USA version available.
	Peak hold function: capturing a peak value within a measuring process.		Statistics: using the saved values, the device calculates statistical data, such as average value, standard deviation etc.		Power supply: Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request.
	Scan mode: continuous capture and display of measurements.		PC Software: to transfer the measurements from the device to a PC.		Motorised drive: The mechanical movement is carried out by an electric motor.
	Push and Pull: the measuring device can capture tension and compression forces.		Printer: a printer can be connected to the device to print out the measurements.		Motorised drive: The mechanical movement is carried out by a synchronous motor (stepper).
	Length measurement: captures the geometric dimensions of a test object or the movement during a test process.		GLP/ISO record keeping: of measurements with date, time and serial number. Only with SAUTER printers.		Fast-Move: the total length of travel can be covered by a single lever movement.
	Focus function: increases the measuring accuracy of a device within a defined measuring range.		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.		DAkkS calibration possible: The time required for DAkkS calibration is shown in days in the pictogram.
	Internal memory: to save measurements in the device memory.		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		Factory calibration: The time required for factory calibration is specified in the pictogram.
	Data interface RS-232: bidirectional, for connection of printer and PC.		ZERO: Resets the display to "0".		Package shipment: The time required for internal shipping preparations is shown in days in the pictogram.
	Data interface USB: To connect the balance to a printer, PC or other peripheral devices.		Battery operation: Ready for battery operation. The battery type is specified for each device.		Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram.
	Data interface Infrared: To transfer data from the balance to a printer, PC or other peripheral devices.				

Your SAUTER specialist dealer: