For tension	on tests ≤ 500 N		1 min	Parallel jaw grip for tension and rupture tests up to 5 kN,	AC 12 € 75,-
2	Long clamp  for tension and rupture tests up to 50 N, clamping width: 21 mm, Thread: M6			clamping width: 5 mm, Thread: M10	2 pieces
B	Angle bracket for tension and rupture tests up to 500 N (e.g. for cable tests),	2 pieces  AC 01 € 105,- 2 pieces	A STATE OF THE STA	<b>High capacity small clamp</b> for tension and rupture tests up to 5 kN, clamping width: 5 mm, Thread: M10	AC 16 € 125,- 2 pieces
3	clamping width: 22 mm, Thread: M6  Cable fixture for tension and rupture tests up to 500 N	AC 10S* € 65,-	1	2 wide jaw grip attachment for tension and extraction tests up to 5 kN, clamping width: 33 mm, Thread: M10	AC 18 € 125,- 2 pieces
	Fine point clamp for tension and rupture tests up to 500 N, width 15 mm, clamping width: 4 mm, Thread: M6	AC 14 € 55,- 2 pieces		Rolling-clamp attachment for tension and rupture tests up to 5 kN, Thread: M10	AC 11 € 69,- 2 pieces
	Fine point clamp for tension and rupture tests up to 500 N, width 22 mm, clamping width: 3 mm, Thread: M6	AC 22 € 120,- 2 pieces	4	1-jaw-clamp attachment for tension and rupture tests up to 5 kN, clamping width: 3 mm, Thread: M6	AC 13 € 75,- 2 pieces
8	Ring fixture for tension and rupture tests up to 500 N, diameter: 23 mm, Thread: M6	AC 15* € 65,- 2 pieces		Eccentric roll clamp in particular for cable tests up to 5 kN, clamping width: 9 mm	AC 41 € 195,- 1 piece
	Screw tension clamp for 100 N for laboratory tensile force measurements, incl. Jaws with pyramid grip, Thread: M6	AD 9001 € 997,- 2 pieces		Drum clamp typically for cable connector extraction tests up to 5 kN, for test objects with	AC 42 € 195,- 1 piece
	Screw tension clamp for 100 N for laboratory tensile force measurements, incl. Jaws with pyramid grip with adapter structure for AD-system, with M6 thread	AD 9005 € 576,- 2 pieces	4	Ø from 1,5 mm up to 8 mm, Thread: M10  Flat clamp with undulated jaws clamping width: 6 mm, Thread: M10 up to 10 kN	AC 31* € 125,- 1 piece
S C	Screw tension clamp for 100 N for laboratory tensile force measurements with collar joint and Jaws with pyramid grip	AD 9016 € 1008,- 2 pieces	×	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 € 195,- 1 piece
	Universal screw tension clamp for tension and compression testing up to 500 N, clamping width: up to 10 mm, jaws with pyramid grips, for further details, see page 33	AE 500 € 350,- 1 piece NEW	X	Screw-in tension clamp for 1 kN, for tensile force tests, Jaws with pyramid grip	AD 9021 € 828,- 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 € 115,-** 2 pieces



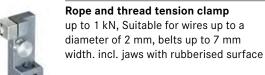
**Grip clamp attachment** for insertion and pull tests up to 5 kN, clamping width: 6 mm, Thread: M6

**AC 09 € 85,-** 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 € 2574,-** 2 pieces



AD 9120 € 900,-2 pieces



### For tension tests ≤ 5000 N



### Universal screw tension clamp

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 34

AE 2K € 610,- 0 1 piece





### Rope and thread tension clamp

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

AD 9121 € 1440,-2 pieces



### Roller tension clamp

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.





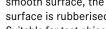


### Roller tension clamp

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.

AD 9206 € 1080,-2 pieces





Suitable for test objects up to 50 mm width.



### Roller tension clamp

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

AD 9200 € 2556,-

2 pieces





### Roller tension clamp

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.

### AD 9207 € 1080,-

2 pieces



### For tension tests > 5000 N



### Quick clamp

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

AC 38 € 990.-

1 piece

AD 9085

€ 2880,-



### Wedge tension clamp

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







### Wedge tension clamp

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 € 3024,-2 pieces





### Universal screw tension clamp

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 35 **AE 10K** € 790,-

1 piece



### Wedge tension clamp

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 € 4320,-2 pieces



### Wedge tension clamp

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

€ 3420,-2 pieces

AD 9095





### Wedge tension clamp

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 € 5040,-2 pieces





### Belt tension clamp

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 € 1350,-2 pieces



### 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





### 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 € 3060,-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 € 55.-2 pieces

AD 9300

€ 1530,-

1 piece



### 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

All premium clamps can be customised and, as an option, are available with the following types of jaw finish: 11 undulating, 22 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











### 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

Small 3-point bending device (steel)

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

Gap between the two support brackets 4-150 mm. Width of the brackets 30 mm

5 + 10 mm, other radii on request.

central scale 80-0-80 mm.

up to 10 kN,

AD 9305 € 1350,-1 piece



AD 9310

€ 1530,-

1 piece





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

AC 45 € 135,-1 piece



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

AC 46 € 90,-1 piece



### 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 € 1350,-1 piece



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

AC 47 € 95.-1 piece



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

AFH 06 € 110,-2 pieces



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

AC 08 € 55,-2 pieces



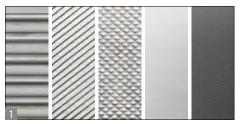












# Quickly fittable universal screw tension clamp for tension and compression testing for a force range up to 500 $\ensuremath{\text{N}}$

### **Features**

- High-quality screw tension clamp in the lower 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 0-10 mm
- You can choose between many different types of jaws
  - Jaws with pyramid grip as standard,  $W\times H$  32×20 mm
  - 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
- The modular construction enables a quick adaptation and cleaning of the clamp

- By means of the threaded rods with a hexagon socket, the clamp can quickly be adapted to someone's own requirements, test objects, operation environment, e.g. test stand or force gauge
- Can be used with all SAUTER force measuring devices or test stand systems
- To fix the clamp on a force gauge, there is a M6 thread on the upper side of the clamp
- For tension and compression testing up to 500 N  $\,$
- Overload protection: 150 % of [Max]
- Scope of supply: 1 clamp with 2 jaws with pyramid-shaped grip
- For dimensional drawing, see www.sauter.eu



Model	Maximum load	Range	Scope of supplies	Price excl. of VAT ex works
SAUTER	N	mm		€
AE 500	500	10	1 piece	350,-





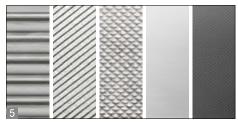












### Quickly fittable universal screw tension clamp for tension and compression testing for a force range up to 2 kN

### **Features**

- High-quality screw tension 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 

   15-30mm (standard) and from
   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
  - 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
- II 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**

- ■ Adapter, connection pin between clamp and laod cell/measuring device as standard, M12 thread, max. load up to 10 kN, can be reordered at any time, SAUTER AE-A01, € 30,-
- Safety pin, stainless steel, with spring
- Safety pin, stainless steel, with spring system to fix adjustable components, as standard, can be reordered at any time, SAUTER AE-A03, € 45,-
- Wide central section for widths from 15-30 mm, SAUTER AE 2K-A01, € 75,-



Model	Maximum load	Range mm		Scope of supplies	<b>Price</b> excl. of VAT
SAUTER	N	A	B (Option)		ex works €
AE 2K	2000	0-15	15-30	1 piece	610,- 🕛





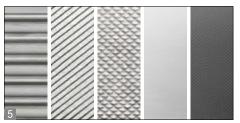












### Quickly fittable universal screw tension clamp for tension and compression testing for a force range up to 10 kN

### **Features**

- · High-quality screw tension 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 you 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.

- II 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 laod cell/measuring device as standard, M12 thread, max. load up to 10 kN, can be reordered, SAUTER AE-A01, € 30,-
- · I Safety pin, stainless steel, with spring system to fix adjustable components, as standard, can be reordered, SAUTER AE-A03, € 45,-
- Long jaws, stainless steel, pyramid grip 2 pcs. W×H 100×30 mm, SAUTER AE-A02, € 70,-



Model	Maximum load	Range mm			Scope of supplies	Price excl. of VAT
SAUTER	N	A	В	C		ex works €
AE 10K	10000	43-75	10-43	0-10	1 piece	790,-

### **Attachments**



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





Standard attachments kit for force gauge FK, Thread: M8 10-1000 N

AC 430 € 45,-6 intems



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

AC 50\* € 390,-2 pieces



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

FK-A01 € 210,-1 piece



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

FK-A02 € 295,-1 piece

### Special solutions



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

€ 95,-1 piece AFK 02 € 95,-

1 piece

AFH 04



### Stainless steel handle bar with rubber grip for FH, FL with external sensor

AFH 05 € 55,-1 piece

1 piece



### Door tester

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

AFH 03 € 295,-



### Tombstone tester

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, **€ 135,-**

FA 500G € 350,-1 piece

FL 500G

€ 670,-

1 piece

FL 1KG

€ 750,-

1 piece



### Tombstone tester

for testing the stability of tombstones according to VSG 4.7 on the basis of FL (included), up to 500 N: FL 500G up to 1.000 N: FL 1KG Option: DAkkS calibration for FL 500G: 963-261, € 135,-FL 1KG: 963-262, € 165,-

Price reduction

### Special solutions



### Tombstone tester

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, € 135,-

€ 620.-1 piece

### Interface cables



### RS-232/PC connection cable

to connect models from the SAUTER FH range to a PC or a printer

FH-A01 € 46,-1 piece

FH 500G\*



### RS-232/PC connection cable

to connect models from the SAUTER FL, DA range to a PC or a printer

FL-A04

€ 46,- 0 1 piece



### **USB/PC** connection cable

to connect models from the SAUTER FL, DA range to a PC or a printer

FL-A01 € 46,- 0

1 piece



### RS-232/PC connection cable

to connect models from the SAUTER LB range to a PC

LB-A01 € 360,-

RS-232/USB adapter

AFH 12 € 85,-1 piece



to connect peripherical 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

to connect models from the SAUTER FC range to a PC or a printer

FC-A01 € 46,-1 piece

### Other



### Carrying strap

for easy and safe transportation of the tombstone tester during the testings

AC 35\* € 9,- 🕛

1 piece



Relais module

serves to transmit output signals of an FH force measuring device to control actions directly

AFH-A02 € 340,-1 piece