







For tension tests ≤ 500 N

	Long clamp for tension and rupture tests up to 50 N, clamping width: 3 mm, thread: M6	AC 17R 1 piece 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 01R 1 piece AC 01 2 pieces
	Rope and thread clamp for tension and rupture tests up to 500 N thread: M6	AC 10S* 1 piece
	Fine point clamp for tension and rupture tests up to 500 N, width 15 mm, clamping width: 4 mm, thread: M6	AC 14R 1 piece AC 14 2 pieces
	Fine point clamp for tension and rupture tests up to 500 N, width 22 mm, clamping width: 4 mm, thread: M6	AC 22R 1 piece AC 22 2 pieces
	Screw tension clamp for 100 N for laboratory tensile force measurements, incl. jaws with pyramid grip, thread: M6	AD 9001 1 piece 
	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 clamping width: 8 mm, M6 thread	AD 9005 1 piece 
	Screw tension clamp for 100 N for laboratory tensile force measurements with collar joint and jaws with pyramid grip	AD 9010 1 piece 

For tension tests ≤ 5000 N

	Flat jaw attachment for tension tests up to 5 kN (e.g. textile, paper etc.), clamping width: 4 mm, thread: M6	AC 03R 1 piece AC 03 2 pieces
	Parallel jaw grip for tension and rupture tests up to 5 kN, clamping width: 5 mm, thread: M10	AC 12R 1 piece AC 12 2 pieces
	High capacity small clamp for tension and rupture tests up to 5 kN, clamping width: 5 mm, thread: M10	AC 16R* 1 piece AC 16* 2 pieces
	2 wide jaw grip attachment for tension and extraction tests up to 5 kN, jaw width 60 mm, clamping width: 33 mm, thread: M10	AC 18R 1 piece AC 18 2 pieces
	Rolling-clamp attachment for tension and rupture tests up to 5 kN, thread: M10	AC 11R 1 piece
	1-jaw-clamp attachment for tension and rupture tests up to 5 kN, clamping width: 3 mm, thread: M6	AC 13R* 1 piece AC 13* 2 pieces
	Eccentric roll clamp in particular for cable tests up to 5 kN, 10×30 mm slotted hole, clamping width: 9 mm	AC 41* 1 piece
	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* 1 piece
	Screw-in tension clamp for 1 kN, for tensile force tests, jaws with pyramid grip	AD 9021 1 piece 
	Wedge tension clamp up to 5 kN, for tensile force tests, due to the wedge shape of the clamp the specimen is clamped automatically with increasing load, clamping width up to 10 mm, jaws with pyramid grip	AD 9080 1 piece 
	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 1 piece 

1 *ONLY WHILE STOCKS LAST

For tension tests ≤ 5000 N

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

1 piece



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.

AD 9205

1 piece



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

1 piece



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.

AD 9207

1 piece



Suitable for test objects up to 50 mm width

For tension tests > 5000 N

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

1 piece



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

1 piece



Tip

Have you not found the right fastener? We are happy to manufacture individual fastening options according to your specifications, for all details see page 43

For compression tests > 500 N



Concave force sensor AC 45
with optimised radius for the measurement particularly of arms and legs up to 1 kN, thread: M6
1 piece



Flat square-shaped sensor AC 46
for lateral power sensing of back, chest or arm up to 1 kN, thread: M6
1 piece



Round sensor AC 47
to measure particular muscle groups, such as, for example, the shoulder up to 1 kN, inner thread: M6
1 piece



Pressure disc AFH 06
out of aluminium, thickness 10 mm, for compression tests up to 5 kN, diam. 110 mm, outer thread: M12
1 piece



Pressure disc AC 08R
for compression tests up to 5 kN (e. g. plastics), \varnothing 49 mm, inner thread: M10
AC 08
2 pieces



Stainless steel ball-shaped head AC 02
for compression and fracture tests up to 5 kN, (e.g. foam, glass), thread: M6/M10
Ball radius: 5mm/8mm
1 piece each



Small 3-point bending device (steel) AD 9300
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
1 piece

For tension and compression tests



Threaded adapters AFM 14
made of steel for SAUTER force measuring devices, clamps and test stands, external thread 1: M6, external thread 2: M12.
1 piece



Reducing sleeve AFM 05
made of steel, for SAUTER force gauges, clamps and test stands, external thread: M10, internal thread: M6
1 piece



Threaded adapters AFM 16
made of steel, for SAUTER force gauges, clamps and test stands, external thread: M12, internal thread: M10
1 piece



Threaded pin AFM 22
made of steel for SAUTER force gauges and clamps, external thread: M6, internal thread: M8
1 piece



Numerous more adapters can be found at the Internet

For tension tests ≤ 500 N

**Standard small clamp**

Opening width (inside the jaws): 0-7 mm, for tensile tests up to 500 N, thread M6. Overload protection: 150 % of [Max]. Easy handling without tools, the opening and closing of the jaws can be made with the rotary knob on the upper side. Presetting of the jaw opening via attached screws. Pretension due to built-in springs

AE 01

1 piece



For tension tests ≤ 500 N

**Cable removal clamp**

Opening width (inside the jaws): 1,5-6 mm, for tensile tests up to 500 N, thread M6. Overload protection: 150 % of [Max]. Easy handling without tools, test item can simply be inserted into the appropriate recess and be tested

AE 06

1 piece

**Wide jaw clamp**

Opening width (inside the jaws): 0-6 mm, for tensile tests up to 500 N, thread M6. Overload protection: 150 % of [Max]. Easy handling without tools, the opening and closing of the jaws can be made with the rotary knobs on the upper side

AE 02

1 piece

**Wedge tension clamp**

Opening width (inside the jaws): 0-6 mm, for tensile tests up to 500 N, thread M6. Overload protection: 150 % of [Max]. Easy handling without tools, test item can simply be inserted into the open clamp. It closes automatically during a tensile test

AE 07

1 piece

**Belt tension clamps**

Opening width (inside the jaws): 0-4 mm, for tensile tests up to 500 N, thread M6. Overload protection: 150 % of [Max]. Easy handling without tools, the opening and closing of the jaws can be made with the lever on the upper side

AE 03

1 piece

**Belt tension clamps**

Opening width (inside the jaws): 0-6 mm, for tensile tests up to 500 N, thread M6. Overload protection: 150 % of [Max]. Easy handling without tools, the opening and closing of the jaws can be made with the lever on the upper side

AE 04

1 piece

**Rope and thread tension clamps**

Opening width (inside the jaws): 0-5 mm, for tensile tests up to 500 N, thread M6. Overload protection: 150 % of [Max]. Easy handling without tools, test item can simply be wrapped around the screw and fastened via the clamping screw

AE 05

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
10-1000 N 6 items



Tensiometer attachment **FK-A01**
optional for all FK models from
FK 10 up to FK 250 1 piece



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

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, FC and FS 1 piece



Stainless steel handle bar **AFH 05**
with rubber grip for FH, FL with
external sensor, thread: M12 1 piece



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 1 piece



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: Factory calibration
961-261 1 piece



Tombstone tester **FL 500G**
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 1000 N: FL 1KG
Option: DAkkS calibration for
FL 500G: 963-261
FL 1KG: 963-262 1 piece

Interface cables



RS-232/PC connection cable **FH-A01**
to connect models from the SAUTER FH
range to a PC 1 piece



RS-232/PC connection cable **FL-A04**
to connect models from the SAUTER FL,
DA and DB range to a PC 1 piece



USB/PC connection cable **FL-A01**
to connect models from the SAUTER FL,
DA and DB range to a PC 1 piece



RS-232/PC connection cable **LB-A01**
to connect models from the SAUTER LB
range to a PC 1 piece



































RS-232/USB adapter **AFH 12**
to connect peripheral devices with
USB interface, suitable for all balances
and measuring instruments with RS 232
output, scope of supply: adapter, CD
with driver 1 piece



RS-232 connection cable **FC-A01**
to connect models from the SAUTER FC 1 piece

Pictograms

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

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