

For tension tests ≤ 500 N

A.	Long clamp for tension and rupture tests up to 50 N, clamping width: 3 mm, thread: M6	AC 17R 1 piece AC 17
	Angle bracket for tension and rupture tests up to 500 N (e.g. for cable tests), clamping width: 22 mm, thread: M6	2 pieces AC 01R 1 piece AC 01
1	Rope and thread clamp for tension and rupture tests up to 500 N thread: M6	2 pieces AC 10S*
	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
	Fine point clamp for tension and rupture tests up to 500 N, width 22 mm, clamping width: 4 mm, thread: M6	2 pieces AC 22R 1 piece AC 22
	Screw tension clamp for 100 N for laboratory tensile force measurements, incl. jaws with pyramid grip, thread: M6	2 pieces AD 9001 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 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 901

For tension tests ≤ 5000 N

46	Elet ious ettechment	AC 03R
	Flat jaw attachment for tension tests up to 5 kN	AC USK
1	(e.g. textile, paper etc.),	1 piece
	clamping width: 4 mm, thread: M6	AC 03
		2 mins
	Parallal iou grip	2 pieces AC 12R
1 1	Parallel jaw grip for tension and rupture tests up to 5 kN,	AC 12K
	clamping width: 5 mm, thread: M10	1 piece
2	,	AC 12
		0
	IP-de	2 pieces AC 16R*
	High capacity small clamp for tension and rupture tests up to 5 kN,	AC TOR
E Com	clamping width: 5 mm, thread: M10	1 piece
		AC 16*
		2 minana
. 1	2 wide iow guin ettechment	2 pieces AC 18R
	2 wide jaw grip attachment for tension and extraction tests up to	AO TOIL
	5 kN, jaw width 60 mm, clamping width:	1 piece
	33 mm, thread: M10	AC 18
		2 pieces
	Rolling-clamp attachment	AC 11R
	for tension and rupture tests up to 5 kN,	
3	thread: M10	1 piece
1	1-jaw-clamp attachment	AC 13R*
9 1	for tension and rupture tests up to 5 kN,	
211	clamping width: 3 mm, thread: M6	1 piece
٥		AC 13*
		2 pieces
	Eccentric roll clamp	AC 41*
	in particular for cable tests up to 5 kN,	
- ALE	10×30 mm slotted hole, clamping width:	1 piece
	9 mm	AC 42*
	Drum clamp typically for cable connector extraction	AU 42
	tests up to 5 kN, for test objects with	1 piece
-	Ø from 1,5 mm up to 8 mm, thread: M10	
	Screw-in tension clamp	AD 9021
of a	for 1 kN, for tensile force tests,	· • - ·
	jaws with pyramid grip	



jaws with pyramid grip

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

1 piece

AD 9080





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

1 piece

AD 9120





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

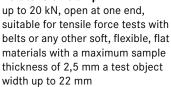


1 piece



Belt tension clamp

For tension tests > 5000 N



AD 9250

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.

Suitable for test objects up to 50 mm width

1 piece

AD 9205



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





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.

Suitable for test objects up to 50 mm width

1 piece



AD 9207

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

1 piece



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

1 piece



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

1 piece



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

1 piece AC 08

2 pieces

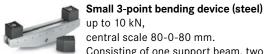


Stainless steel ball-shaped head for compression and fracture tests up to 5 kN, (e.g. foam, glass), thread: M6/M10

Ball radius: 5mm/8mm

AC 02

1 piece each



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

1 piece



For tension and compression tests



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

AFM 14
1 piece

PREMIUM ★★★



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

1 piece

AFM 05

PREMIUM ★★★



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

AFM 16







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







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 for all force gauges FA, FH, FL and FC, thread: M6 10-500 N AC 43

6 items



Standard attachments kit for force gauge FK, thread: M8 10-1000 N AC 430

6 items



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

FK-A01

1 piece



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

FK-A02

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, FC and FS AFH 04

1 piece AFK 02

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

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

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

FA 500G 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 1000 N: FL 1KG

Option: DAkkS calibration for

FL 500G: 963-261 FL 1KG: 963-262 FL 500G

1 piece FL 1KG

1 piece

Interface cables



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



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

1 piece

FL-A04



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 to connect models from the SAUTER LB range to a PC 1 piece



RS-232/USB adapter to connect peripherical devices with
USB interface, suitable for all balances and measuring instruments with RS 232

and measuring instruments with RS 232 output, scope of supply: adapter, CD

with driver

RS-232 connection cable to connect models from the SAUTER FC

FC-A01
1 piece

SAUTER

Pictograms



Adjusting program (CAL):

For quick setting of the instrument's accuracy. External adjusting weight required



Calibration block:

Standard for adjusting or correcting the measuring device



Peak hold function:

Capturing a peak value within a measuring process



Scan mode:

Continuous capture and display of measurements



Push and Pull:

The measuring device can capture tension and compression forces



Length measurement:

Captures the geometric dimensions of a test object or the movement during a test process



Focus function:

Increases the measuring accuracy of a device within a defined measuring range



Internal memory:

To save measurements in the device memory



Data interface RS-232:

Bidirectional, for connection of printer and PC



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.



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



Data interface USB:

To connect the measuring instrument to a printer, PC or other peripheral devices



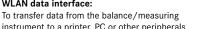
Bluetooth* data interface:

To transfer data from the balance/measuring instrument to a printer, PC or other peripherals



WLAN data interface:

instrument to a printer, PC or other peripherals





Data interface Infrared:

To transfer data from the measuring instrument to a printer, PC or other peripheral devices



Control outputs (optocoupler, digital I/O):

To connect relays, signal lamps, valves, etc.



Analogue interface:

To connect a suitable peripheral device for analogue processing of the measurements



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)



Statistics:

Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.



PC Software:

To transfer the measurement data from the device to a PC



Printer:

A printer can be connected to the device to print out the measurement data



Network interface:

For connecting the scale/measuring instrument to an Ethernet network



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



GLP/ISO record keeping:

Of measurement data with date, time and serial number. Only with SAUTER printers



Measuring units:

Weighing units can be switched to e.g. non-metric. Please refer to website for more details



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



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



ZERO:

Resets the display to "0"



Battery operation:

Ready for battery operation. The battery type is specified for each device



Rechargeable battery pack:

Rechargeable set



Plug-in power supply:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available



Integrated power supply unit:

Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request



Motorised drive:

The mechanical movement is carried out by a electric motor



Motorised drive:

The mechanical movement is carried out by a synchronous motor (stepper)



Fast-Move:

The total length of travel can be covered by a single lever movement



Verification possible:

The time required for verification is specified in the pictogram



DAkkS calibration possible:

The time required for DAkkS calibration is shown in days in the pictogram



Factory calibration:

The time required for factory calibration is specified in the pictogram



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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