

Scissor grips 2, 5, 20 and 50 kN

Self-tightening and self-aligning grips

The initial grip is provided by spring tension. The ratio of clamping force to tensile force changes according to the opening width. The larger the opening width the stronger the grips tightens the specimen. The jaws tighten themselves during force application.

Ordering information

TH11 grips are supplied as a pair, but can also be ordered separately (0.5 pair). Grips and jaws need to be ordered separately.

TH11-5 Scissor grips

Item no.:	TH11-5
Tensile force:	5 kN
Coupling:	Af159 or Af20
Opening:	0 – 19 mm
Sample width:	50 mm
Body:	Steel, nickel-plated
Temperature range:	-70...+130°C Other temperature ranges on request
Weight:	980 gram each grip (without jaws)

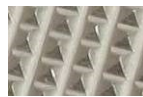
Jaws for TH11-5:

Item no.:	Surface:	Clamping surface H x W:	Weight per pair:
TH11-5-B	Blank (smooth) jaws	20x50 mm	0.24 kg
TH11-5-BP	Pyramid (serrated) jaws	20x50 mm	0.24 kg

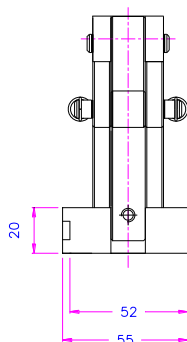
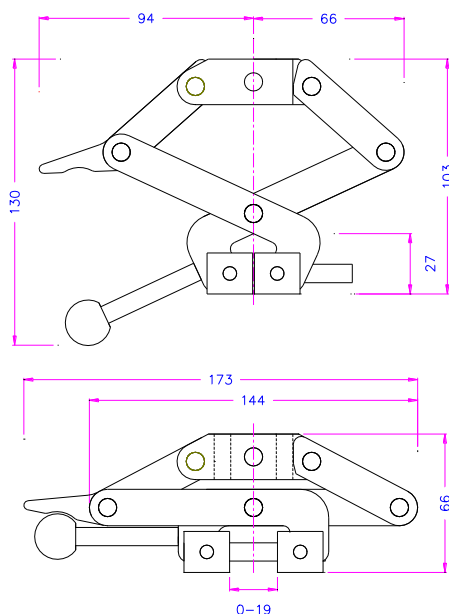
Other surfaces on request



Blank jaws (smooth)
- Suitable for own further treatments
- Steel blanks without coating



BP - multi-purpose application range
- Pyramid (serrated) jaws 1.2x45°
- Hardened steel 58HRC, nickel plated



TH11-5



TH11-5 grips have a locking function to facilitate insertion or removal of the specimen:

<https://youtu.be/N5FMG9BC8sQ>

<https://youtu.be/Ya2ajWsq-0o>

TH11-20 Scissor grips

With locking function (snap in): the grip locks in the opened position.
(Not by use of round jaws)

Item no.:	TH11-20
Tensile force:	20 kN
Coupling:	Af159 or Af20
Opening:	Flat jaws 0 – 25 mm Round jaws 0 – 20 mm V-jaws for round specimen: 4 – 16 mm Ø
Sample width:	50 mm and 100 mm
Body:	Steel, nickel-plated
Temperature range:	-70 ... +130°C Other temperature ranges on request
Weight:	2 kg each grip (without jaws)



TH11-20 with TH11-20-BW100 jaws

Jaws for TH11-20:

Item no.:	Surface:	Clamping surface H x W:	Weight per pair:
TH11-20-B	Blank (smooth) jaws	25x50 mm	0.34 kg
TH11-20-BP	Pyramid (serrated) flat jaws	25x50 mm	0.33 kg
TH11-20-BR*	Pyramid (serrated) round jaws	Ø 25 mm x 50 mm	0.31 kg
TH11-20-BV	V-jaws for round specimen	Samples 4-15 mm Ø	0.45 kg
TH11-20-BW	Wave jaws	25x50 mm	0.32 kg
TH11-20-B100**	Blank (smooth) jaws	25x 100 mm	0.74 kg
TH11-20-BP100**	Pyramid (serrated) flat jaws	25x100 mm	0.72 kg
TH11-20-BW100**	Wave jaws	25x100 mm	0.69 kg

Other surfaces on request

*Round jaws are applicable for dumbbell-shaped specimen (bone-shaped samples).

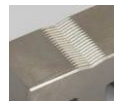
**By use of 100 mm width jaws tensile force is reduced to 10kN.



B - Blank (smooth) jaws
- Suitable for own further treatments
- Steel blanks without coating



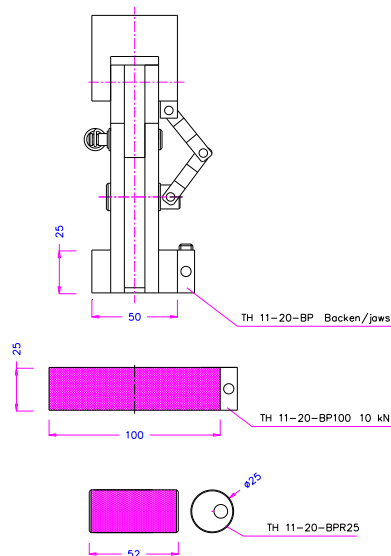
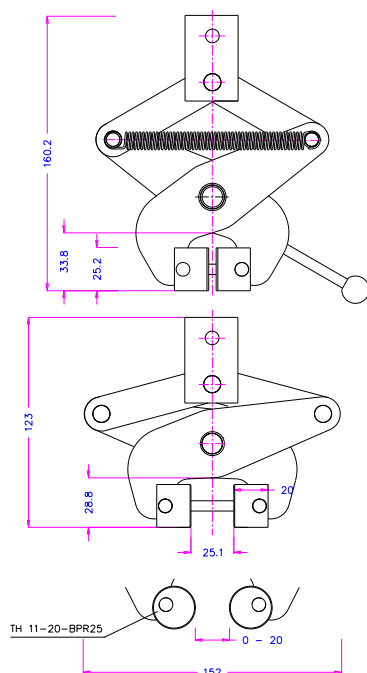
BP - Multi purpose application range
- Pyramid (serrated) jaws 1.2x45°
- Hardened steel 58HRC, nickel plated



BV-jaws- for all kinds of round samples
- Tooth pitch 1.2 mm
- Hardened steel 58 HRC, nickel plated



BW Wave jaws - For textile specimen
- Wave 5 mm
- Hardened steel 58 HRC, nickel plated



TH11-20



TH11-20 with TH11-20-BR jaws

TH11-50 Scissor grips

With locking function (snap-in): the grip locks in the opened position.

Item no.:	TH11-50
Tensile force:	50 kN
Coupling:	Af318
Opening:	Flat jaws: 0 – 48 mm V-jaws for round specimen: 10 – 48 mm Ø
Sample width:	100 mm
Body:	Steel, nickel-plated
Temperature range:	0...+130°C Other temperature ranges on request
Weight:	9.1 kg each grip (without jaws)

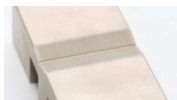
Jaws for TH11-50

Item no.:	Surface:	Clamping surface H x B:	Weight per pair:
TH11-50-BP	Pyramid (serrated) jaws	50x100 mm	1.9 kg
TH11-50-BV	V-jaws	Samples 10-48 mm Ø	2.0 kg

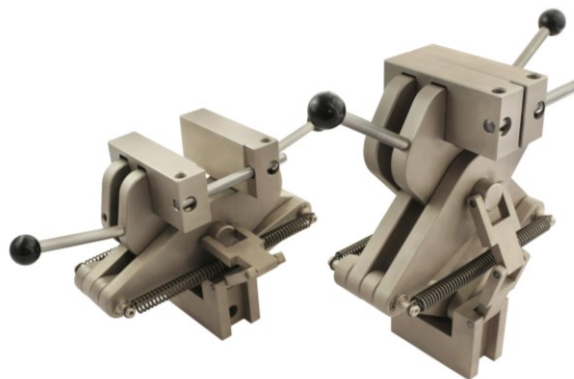
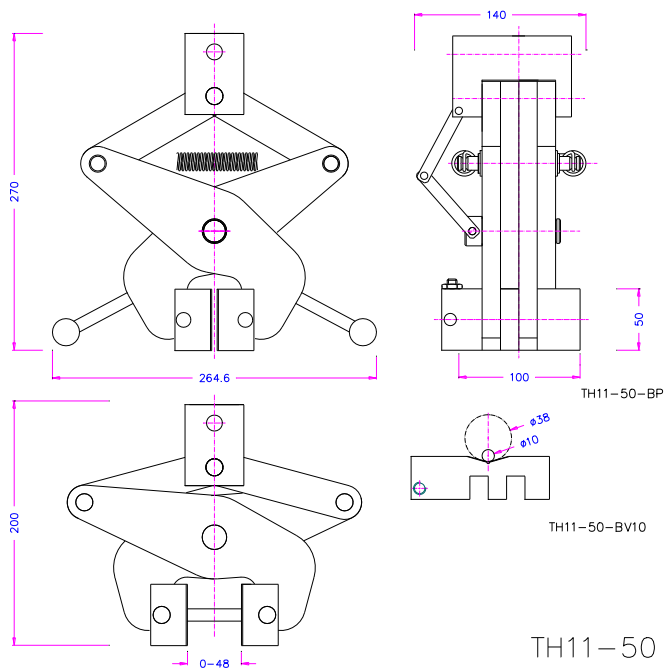
Other surfaces on request



BP Pyramid jaws
- Pyramid (serrated) jaws 1.2x45°
- Hardened steel 58 HRC, nickel plated



BV-jaws- for all kinds of round samples
- Tooth pitch 1.2 mm
- Hardened steel 58 HRC, nickel plated



TH11-50 with TH11-50-BP jaws

Test videos:

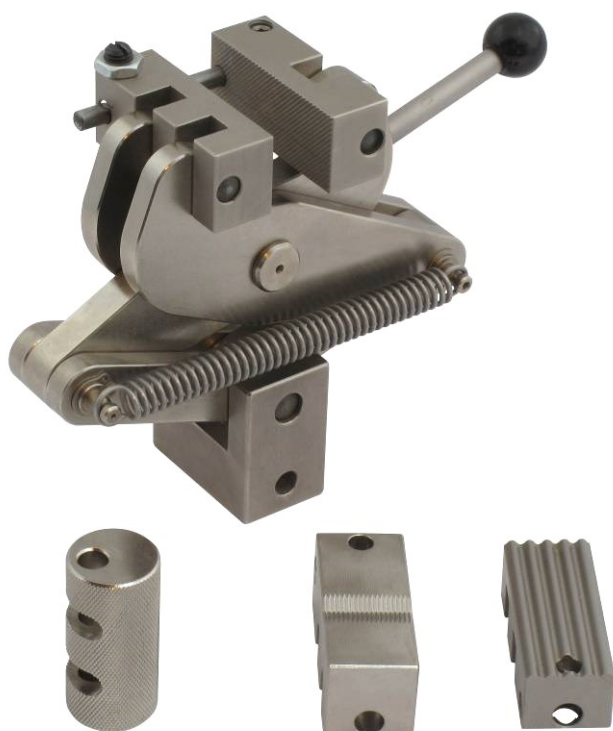
Felt sample:

<https://youtu.be/1hCdznCmzG8>

Felt sample, double layer:

<https://youtu.be/QvizCjGV-YI>

Jaws for TH11-20

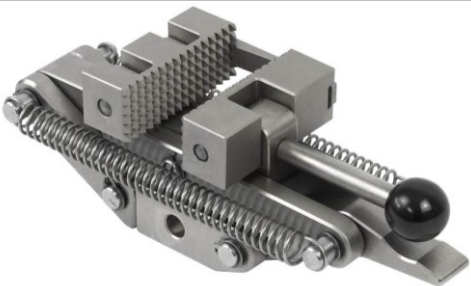
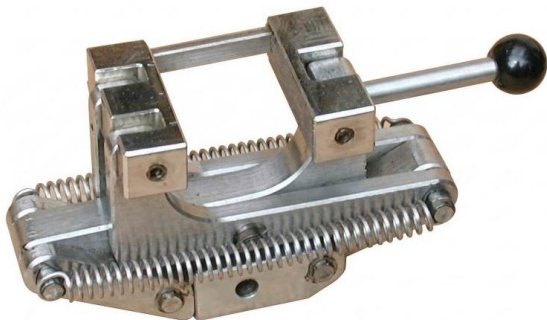


TH11-20+BP + BR + BV + BW



BR BV BW BP BD

BW100 BP100 BD100

Special versions	
	TH11-5+BP-S TH11-5 grip with deeply serrated jaws for increased holding force Animation
	TH11-50-BN3x4 Special needle jaws
	TH11-20-W200-Af60-BW30x200 Extra wide wave jaws suitable for testing of nonwovens Max. load 20 kN Jaw width 200 mm Clamping surface 30x200 mm
	TH11-5-S40 Extra wide jaw opening



See also [TH230 Datasheet.pdf](#) for a smaller version, tensile force 2 kN
www.grip.de/G05