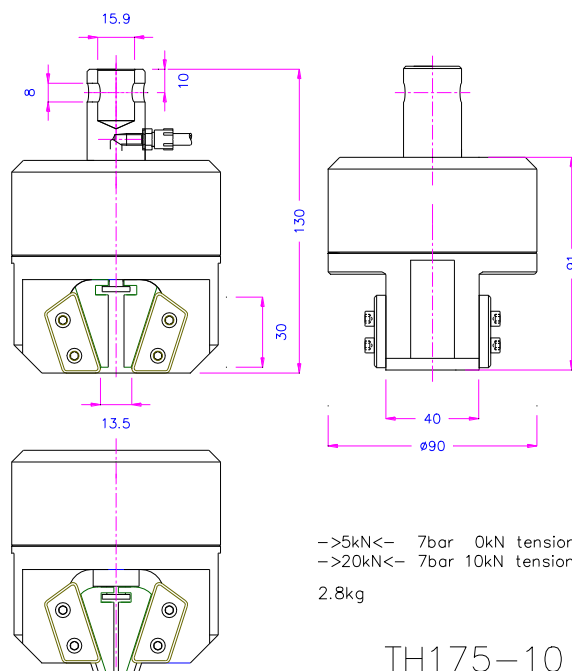


## Pneumatic Wedge Grips 10, 20, 50, 100 and 300 kN

- Self-aligning centric jaw movement
- Self-intensifying clamping system to hold a sample securely in place, very high clamping load
- Ideal for complicated samples with low coefficient of friction such as hard steel foils, Plastic or rubber with fibers etc.
- Can be supplied with pull rods of different length for use in temperature chambers\*

<b>Item no.:</b>	<b>TH175-10</b>
Load:	10 kN
Clamping force:	20 kN at 7 bar and 10 kN tension 26 kN at 16 bar and 10 kN tension
Jaw clamping surface:	33x40 mm (height x width)
Standard temperature range:	-70° ... 280°C
Standard coupling:	Af159 or Af20 Further couplings on request
Body:	Stainless steel
Jaws:	Hardened steel 58 HRC
Weight per grip without jaws:	Ca. 2.8 kg
Scope of delivery:	1 pair of grips without jaws

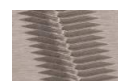
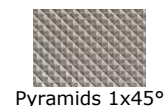


TH175-10

\*Pull rods of different lengths are available on request (not included in price). Item no.: THS521.

### Jaws for TH175-10

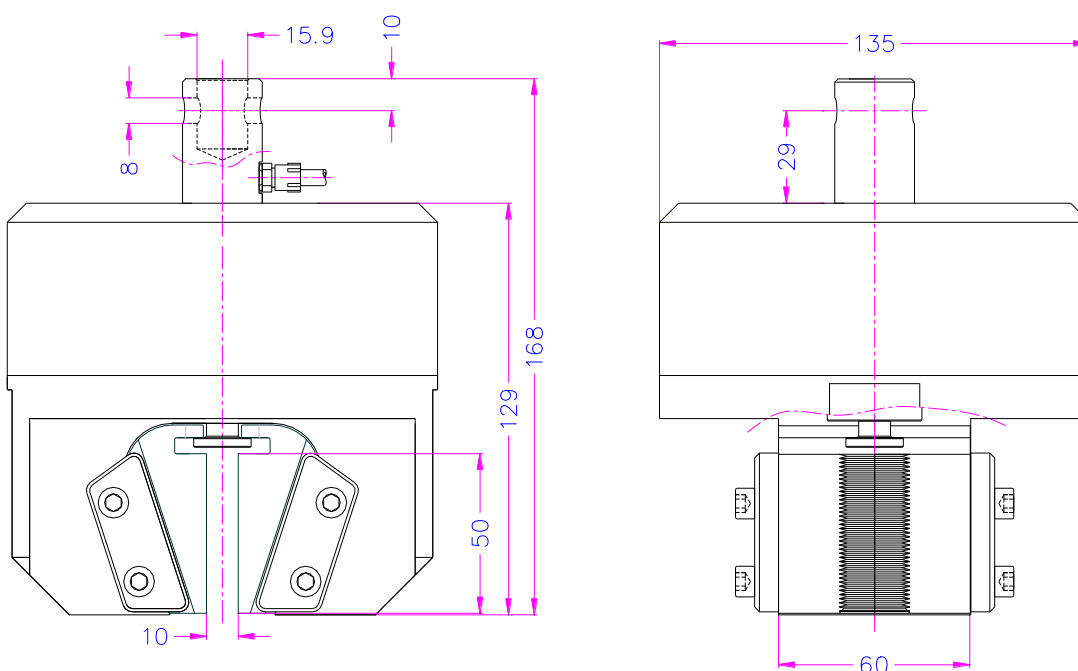
Item-No.	Surface	Opening	Clamping surface (h x w)	Weight per pair
<b>Pyramid (serrated) jaws for flat samples:</b>				
TH175-10-BP6	Pyramid (serrated)	0-6 mm	33x40 mm	0.3 kg
TH175-10-BP12	Pyramid (serrated)	6-12 mm	33x40 mm	0.2 kg
TH175-10-BP16	Pyramid (serrated)	10-16 mm	33x40 mm	0.2 kg
<b>V jaws for round samples:</b>				
TH175-10-BV6	V jaws	2-6 mm	Clamping height 33 mm	0.3 kg
TH175-10-BV12	V jaws	6-12 mm	Clamping height 33 mm	0.2 kg




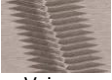
Scope of delivery: 1 set = 4 jaws.  
Jaws with other surface coatings and openings are possible on request

**Item no.:** TH175-20

Load:	20 kN
Clamping force:	43 kN at 7 bar and 20 kN load
Jaw clamping surface:	50x60 mm (height x width)
Standard temperature range:	0° ... +180°C Further ranges on request
Standard coupling:	Af159 or Af20 Further couplings on request
Body:	Steel, nickel-plated
Jaws:	Hardened steel 58HRC
Weight per grip without jaws:	Ca. 8.9 kg
Scope of delivery:	1 pair of grips without jaws

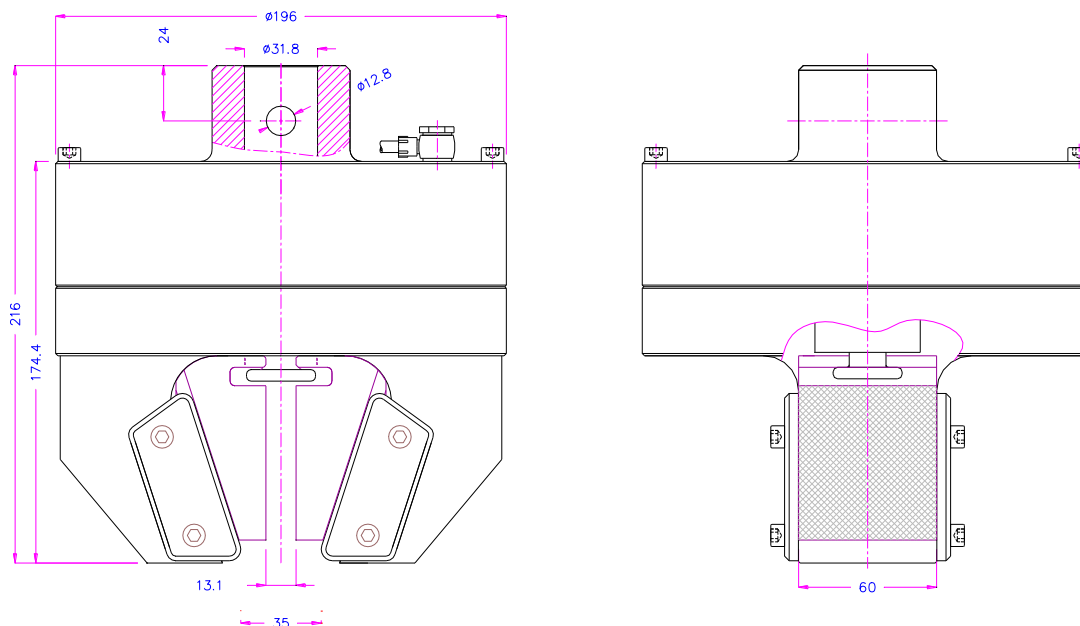


**Jaws for TH175-20**


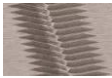
Item-No.	Surface	Clamping surface (h x w)	Opening	Weight per pair	
TH175-20-BP8	Pyramid (serrated)	50x60 mm	0-8 mm	1 kg	 Pyramids 1x45°
TH175-20-BP14	Pyramid (serrated)	50x60 mm	5-14 mm	0.9 kg	
TH175-20-BP20	Pyramid (serrated)	50x60 mm	12-20 mm	0.8 kg	
TH175-20-BV8	V-jaws for round samples	Clamping height 50 mm	3-8 mm	1 kg	 V-jaws
TH175-20-BV14	V-jaws for round samples	Clamping height 50 mm	8-14 mm	0.9 kg	
TH175-20-BV20	V-jaws for round samples	Clamping height 50 mm	13-20 mm	0.8 kg	

Scope of delivery: 1 set = 4 jaws  
 Jaws with other surface coatings and openings are possible on request

<b>Item no.:</b>	<b>TH175-50</b>
Load:	50 kN
Clamping force:	103 kN at 7 bar and 50 kN load
Jaw clamping surface:	67x60 mm (height x width)
Standard temperature range:	-30° ... +180°C Further ranges on request
Standard coupling:	Af318 Further couplings on request
Body:	Steel, nickel-plated
Jaws:	Hardened steel 58 HRC
Weight per grip without jaws:	Ca. 20.5 kg
Scope of delivery:	1 pair of grips without jaws



### Jaws for TH175-50

Item-No.	Surface	Clamping surface (h x w)	Opening	Weight per pair	
TH175-50-BP12	Pyramid (serrated)	67x60 mm	0-12 mm	2.2 kg	 Pyramids 1x45°
TH175-50-BP22	Pyramid (serrated)	67x60 mm	10-22 mm	1.9 kg	
TH175-50-BP32	Pyramid (serrated)	67x60 mm	20-32 mm	1.5 kg	
TH175-50-BP42+SG+RN48*	Pyramid (serrated)	67x60 mm	30-42 mm	1.4 kg	
TH175-50-BV12	V-jaws for round samples	Clamping height 67 mm	5-12 mm	2.2 kg	 V-jaws
TH175-50-BV22	V-jaws for round samples	Clamping height 67 mm	12-22 mm	1.9 kg	
TH175-50-BV32	V-jaws for round samples	Clamping height 67 mm	22-32 mm	1.5 kg	
TH175-50-BV42+SG+RN48*	V-jaws for round samples	Clamping height 67 mm	32-42 mm	1.4 kg	

\*supplied with special guides and retracting nose (included in the price)

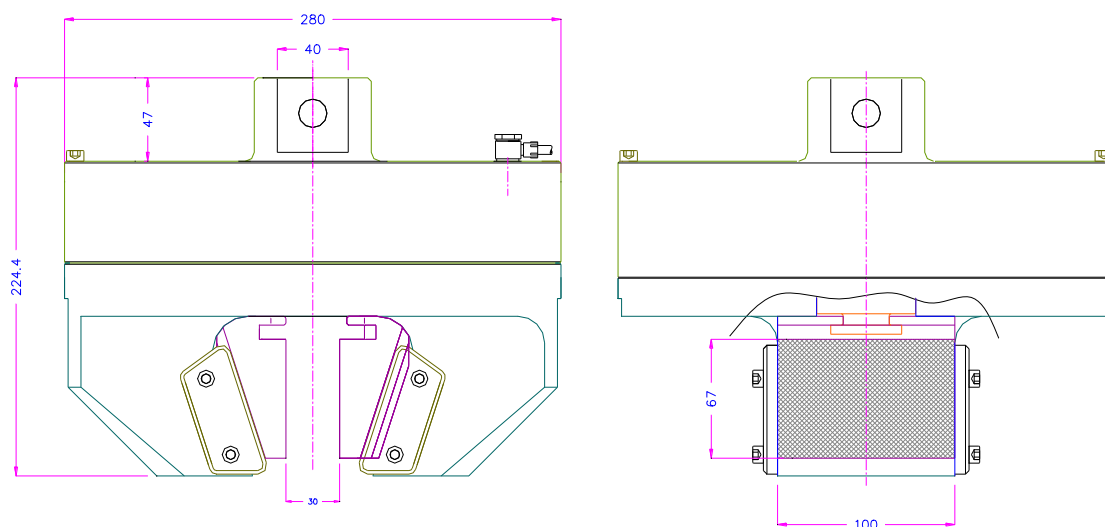
Scope of delivery: 1 set = 4 jaws  
Jaws with other surface coatings and openings are possible on request

### See [test video](#)

Testing of composite specimen

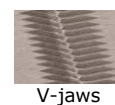
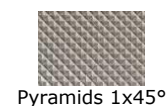


<b>Item no.:</b>	<b>TH175-100</b>
Load:	100 kN
Clamping force:	210 kN (7 bar 100 kN) 274 kN (15 bar 100 kN)
Jaw clamping surface:	67x100 mm (height x width)
Standard temperature range:	-30° ... +180°C Further ranges on request
Standard coupling:	Af40 Further couplings on request
Body:	Steel, nickel-plated
Jaws:	Hardened steel 58 HRC
Weight per grip without jaws:	42 kg
Scope of delivery:	1 pair of grips without jaws



### Jaws for TH175-100

Item-No.	Surface	Clamping surface (h x w)	Opening	Weight per pair
TH175-100-BP12	Pyramid (serrated)	67x100 mm	0-12 mm	3.8 kg
TH175-100-BP22	Pyramid (serrated)	67x100 mm	10-22 mm	3.3 kg
TH175-100-BP32	Pyramid (serrated)	67x100 mm	20-32 mm	2.7 kg
TH175-100-BV13	V-jaws for round samples	Clamping height 67 mm	4-13 mm	3.7 kg
TH175-100-BV22	V-jaws for round samples	Clamping height 67 mm	13-22 mm	3.2 kg
TH175-100-BV32	V-jaws for round samples	Clamping height 67 mm	22-32 mm	2.9 kg



Scope of delivery: 1 set = 4 jaws  
Jaws with other surface coatings and openings are possible on request

### Examples for customized solutions\*:



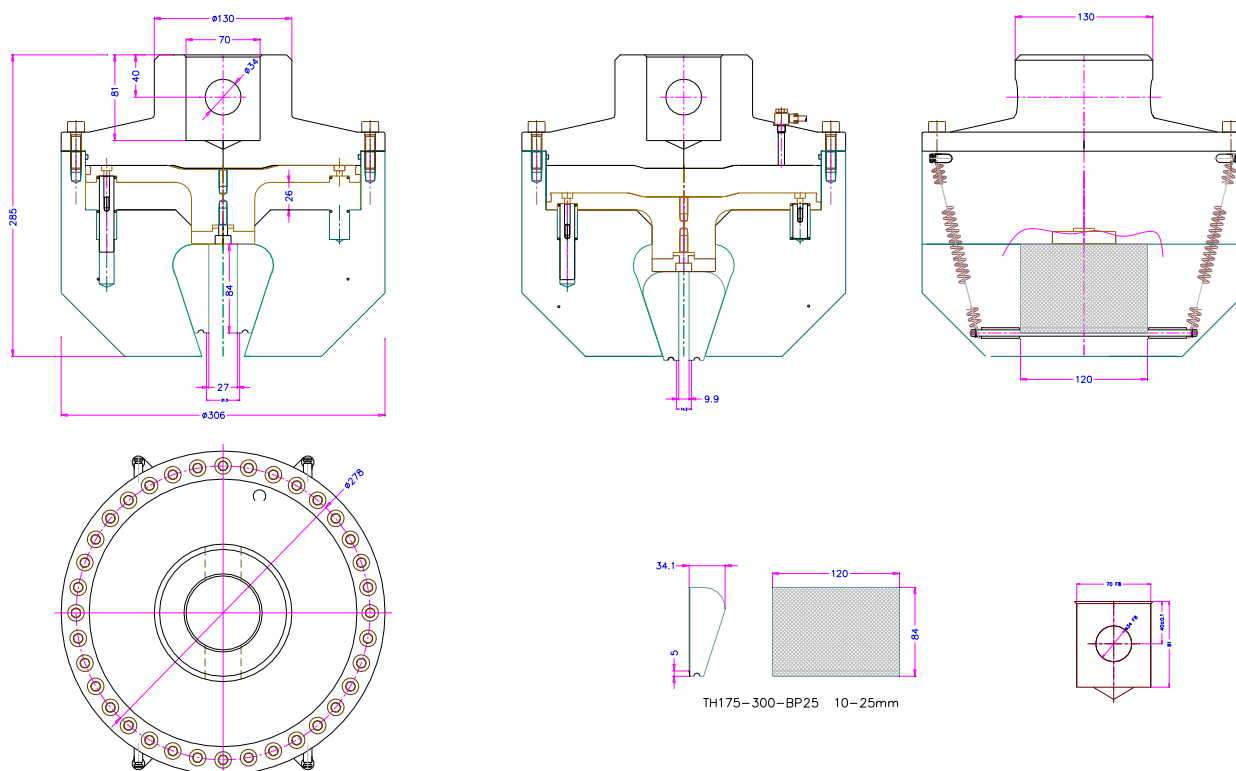
TH175-100-Af50-Ni-T250°C  
Temperature range up to 250°C



TH175-100-D260-S46  
Extra wide jaw opening 46 mm

\*Further customized solutions on request

<b>Item no.:</b>	<b>TH175-300</b>
Load:	300 kN
Clamping force:	517 kN at 7 bar and 300 kN load
Jaw clamping surface:	84x120 mm (height x width)
Standard temperature range:	-30° ... +180°C Further ranges on request
Body:	Steel, nickel-plated
Jaws:	Hardened steel 58 HRC
Weight per grip without jaws:	Ca. 100 kg
Scope of delivery:	1 pair of grips without jaws



### Jaws for TH175-300

Item-No.	Surface	Clamping surface (h x w)	Opening	Weight per pair
TH175-300-B25	Blank jaws	84x120 mm	10-25 mm	Ca. 3.9 kg
TH175-300-BP25	Pyramid (serrated) jaws	84x120 mm	10-25 mm	Ca. 3.9 kg
TH175-300-BW25	Wave jaws	84x120 mm	10-25 mm	Ca. 3.8 kg
TH175-300-BD25	Diamond jaws	84x120 mm	10-25 mm	Ca. 3.9 kg
TH175-300-BV15	V-jaws for round samples	Clamping height 84 mm	5-15 mm	Ca. 4.4 kg

Scope of delivery: 1 set = 4 jaws  
Jaws with other surface coatings and openings are possible on request

### Jaw surfaces:



Blank jaws



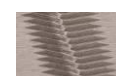
Pyramids 1x45°



Wave jaws



Diamond jaws



V-jaws

**Accessories:****TH205-1 Foot pedals**

None-locking: The grip jaws open by pressing the foot pedal and close after removing the foot from the pedal.

Scope of delivery: 1 pair of foot switches including tubes and fittings

**TH205-2 Foot pedals**

With locking function: The grip jaws open by pressing the foot pedal and remain opened after removing the foot from the pedal. The jaws close by pressing the pedal one more time.

Scope of delivery: 1 pair of foot switches including tubes and fittings

**TH205-PR16 Pressure regulator**

Optional for TH205-1 or TH205-2

To adjust air pressure: 1-16 bar

**TH205-3 Hand switches**

With locking function: The jaws of the grip close by pulling the handle and remain closed. The jaws open by pushing the handle back.

Scope of delivery: 1 unit of hand switches including tubes and fittings

**TH216 Silent compressor for laboratories, oil-lubricated, with pressure reducer**

Max pressure 16 bar; 230 V/50 HZ; noise level: 38 dB(A)

Motor: 0.13 kW; displacement: 17 l/min; tank size 3.5 l

Dimensions: 340x290x340 mm (L x W x H); weight 18 kg

**See also our homepage:**

[www.grip.de/G12/TH175/](http://www.grip.de/G12/TH175/)

[www.grip.de/G12](http://www.grip.de/G12) - further pneumatic grips