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

<table>
<thead>
<tr>
<th>Item no.</th>
<th>TH11-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile force:</td>
<td>5 kN</td>
</tr>
<tr>
<td>Coupling:</td>
<td>AF159 or AF20</td>
</tr>
<tr>
<td>Opening:</td>
<td>0 – 19 mm</td>
</tr>
<tr>
<td>Sample width:</td>
<td>50 mm</td>
</tr>
<tr>
<td>Body:</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Temperature range:</td>
<td>-70 up to +130°C</td>
</tr>
<tr>
<td>Weight:</td>
<td>980 gram each grip (without jaws)</td>
</tr>
</tbody>
</table>

Jaws for TH11-5

<table>
<thead>
<tr>
<th>Item number</th>
<th>Surface</th>
<th>Clamping surface H x W</th>
<th>Weight per pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH11-5-B</td>
<td>Blank (smooth) jaws</td>
<td>20x50 mm</td>
<td>0.24 kg</td>
</tr>
<tr>
<td>TH11-5-BP</td>
<td>Pyramid (serrated) jaws</td>
<td>20x50 mm</td>
<td>0.24 kg</td>
</tr>
</tbody>
</table>

Other surfaces on request

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

- https://youtu.be/N5FMG9BC8sQ
- https://youtu.be/Ya2ajiWsg-0o

All specifications subject to change without prior notice
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: Stainless steel
Temperature range: -70 up to +130°C
Other temperature ranges on request
Weight: 2 kg each grip (without jaws)

**Jaws for TH11-20**

<table>
<thead>
<tr>
<th>Item number</th>
<th>Surface</th>
<th>Clamping surface H x W</th>
<th>Weight per pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH11-20-B</td>
<td>Blank (smooth) jaws</td>
<td>25x50 mm</td>
<td>0.34 kg</td>
</tr>
<tr>
<td>TH11-20-BP</td>
<td>Pyramid (serrated) flat jaws</td>
<td>25x50 mm</td>
<td>0.33 kg</td>
</tr>
<tr>
<td>TH11-20-BR*</td>
<td>Pyramid (serrated) round jaws</td>
<td>Ø 25 mm x 50 mm</td>
<td>0.31 kg</td>
</tr>
<tr>
<td>TH11-20-BV</td>
<td>V-jaws for round specimen</td>
<td>Samples 4-15 mm Ø</td>
<td>0.45 kg</td>
</tr>
<tr>
<td>TH11-20-BW</td>
<td>Wave jaws</td>
<td>25x50 mm</td>
<td>0.32 kg</td>
</tr>
<tr>
<td>TH11-20-B100**</td>
<td>Blank (smooth) jaws</td>
<td>25x100 mm</td>
<td>0.74 kg</td>
</tr>
<tr>
<td>TH11-20-BP100**</td>
<td>Pyramid (serrated) flat jaws</td>
<td>25x100 mm</td>
<td>0.72 kg</td>
</tr>
<tr>
<td>TH11-20-BW100**</td>
<td>Wave jaws</td>
<td>25x100 mm</td>
<td>0.69 kg</td>
</tr>
</tbody>
</table>

*Round jaws are applicable for dumbbell-shaped specimen (bone shaped samples).
**By use of 100 mm width jaws tensile force is reduced to 10kN.

All specifications subject to change without prior notice
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, manganese phosphate coating  
**Temperature range:** 0 up to +130°C  
**Other temperature ranges on request**  
**Weight:** 9.1 kg each grip (without jaws)

### Jaws for TH11-50

<table>
<thead>
<tr>
<th>Item number</th>
<th>Surface</th>
<th>Clamping surface</th>
<th>Weight per pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH11-50-BP</td>
<td>Pyramid (serrated) jaws</td>
<td>50x100 mm</td>
<td>1.9 kg</td>
</tr>
<tr>
<td>TH11-50-BV</td>
<td>V-jaws</td>
<td>Samples 10-48 mm Ø</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>Other surfaces on request</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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**Tensile force:** 50 kN  
**Opening:** Flat jaws 0 - 48 mm  
**V-jaws for round specimen:** 10 - 48 mm Ø  
**Sample width:** 100 mm  
**Body:** Steel, manganese phosphate coating  
**Temperature range:** 0 up to +130°C  
**Other temperature ranges on request**  
**Weight:** 9.1 kg each grip (without jaws)
Jaws for TH11-20

TH11-20+BP + BR + BV + BW

BR BV BW BP BD BW100 BP100 BD100
Special versions

TH11-30+BP

TH11-75-Am70 + BP

TH11-50-BN3x4

Special needle jaws

See also TH230 Datasheet.pdf small version

Tensile force 2 kN

www.grip.de/G05