

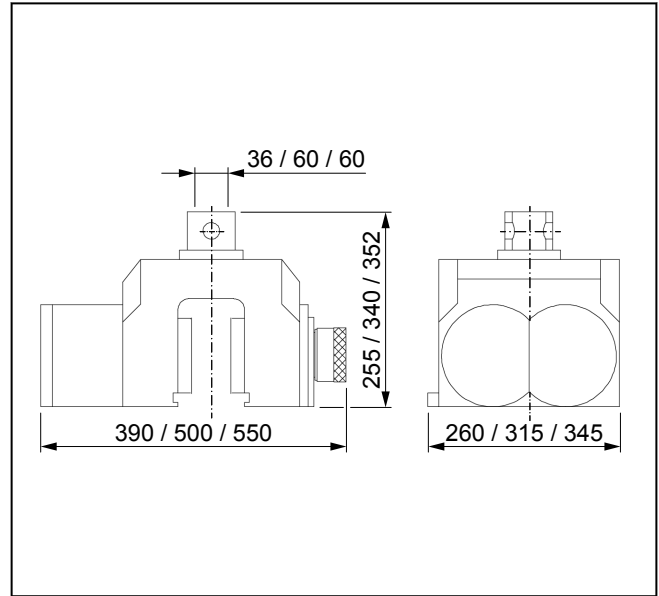
## Product Information

Hydraulic grips Type 8393, Fmax 50 kN, Type 8493, Fmax 100 kN, and Type 8593, Fmax 250 kN

CTA: 43011 39703



Type 8593 hydraulic grips, Fmax 250 kN



Hydraulic grips Type 8393, Fmax 50 kN, Type 8493, Fmax 100 kN, and Type 8593, Fmax 250 kN, overview

### Applications

- Specimen material:  
Geotextile, geogrids, geocomposites, fleece, felt, knitted fabrics, technical textiles
- Specimen shape:  
Flat specimens
- Type of loading:  
Tensile

### Function description

Hydraulic grips are single-sided closing and can be used for symmetrical and asymmetrical gripping.

The opposing jaw can be steplessly adjusted.

The closing and gripping pressure of the specimen grip can be set steplessly and reproducibly via a hydraulic power pack. The specimen is held securely and jaw breaks are prevented during the test.

Using a specimen work panel, textile specimens can be gripped in a slot easily and without deformation. The slot with the specimen is guided into the specimen grip via a telescopic rail. This allows specimens to be inserted perpendicularly and centrally so the operator does not need to reach into the gripping area.

A T-slot is integrated in the specimen grip. This is used for mounting of the T-slotted system to accommodate smaller load cells and specimen grips.

### Advantages and features

- The jaws can be changed quickly and easily without tools if the application changes.
- The constant gripping force allows for repeatable test results.
- Reliable test results are guaranteed with the optimal interaction between the hydraulic power pack, the electronics, and the testing software. The force-zero control prevents unwanted forces on the specimen during the gripping process.
- Sensitive textile specimens (for example, glass fabrics and coated fabrics) can also be securely and gently held. The special tandem cylinder allows for very high gripping forces.
- The optimized workflow guarantees optimum operator safety during rapid and accurate positioning of technical textiles and geotextiles.

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Hydraulic grips Type 8393, F<sub>max</sub> 50 kN, Type 8493, F<sub>max</sub> 100 kN, and Type 8593, F<sub>max</sub> 250 kN

### Technical data

Item No.	317677	317669	316734	
Type	8393	8493	8593	
Test load F <sub>max</sub>	50	100	250	kN
Operating pressure	50 ... 450	50 ... 350	50 ... 480	bar
Gripping force at max pressure.	300	600	1200	kN
Dimensions				
Height	255	340	352	mm
Width	390	500	550	mm
Depth	260	315	345	mm
Opening width with jaws	35	35	35	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height			
Connection, stud	Ø 36	Ø 60	Ø 60	mm
Ambient temperature	+15 ... +35	+15 ... +35	+15 ... +35	°C
Weight per specimen grip, approx.	65	160	235	kg
Scope of delivery	2	2	2	piece(s)

### Accessories required

#### Hydraulic power pack

#### Flat jaws

Scope of delivery: 1 set (= 4 pieces)

The jaw strength is 12.5 mm

Application	Version	For type	Clamping surface		Ambient temperature [°C]	Hardness	Item No.
			Height [mm]	Width [mm]			
Geotextiles, geogrids, geocomposites	Steel, smooth	8393	105	240	+10 ... +35	Unhardened	317679
Geotextiles, geogrids, geocomposites	Steel, smooth	8493	117	285	+10 ... +35	Unhardened	317671
Geotextiles, geogrids, geocomposites	Steel, smooth	8593	142	310	+10 ... +35	Unhardened	890203
Knitted fabrics, felt, technical textiles	Vulkollan, smooth	8493	117	285	+10 ... +35	88 ± 3 Shore (A)	317675
Knitted fabrics, felt, technical textiles	Vulkollan, smooth	8593	142	310	+10 ... +35	88 ± 3 Shore (A)	317667

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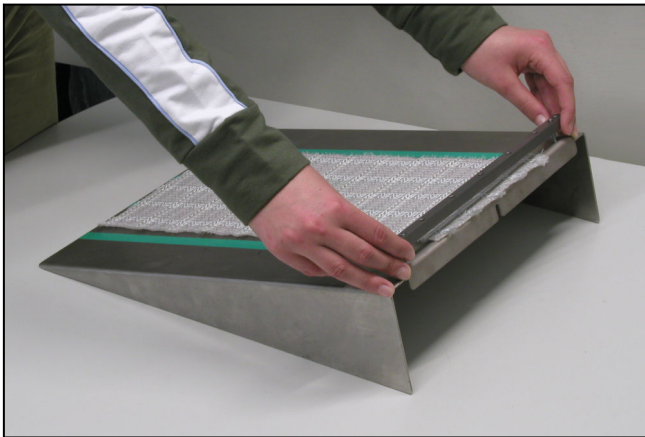
### Optional accessories

#### Support tray (recommended!)

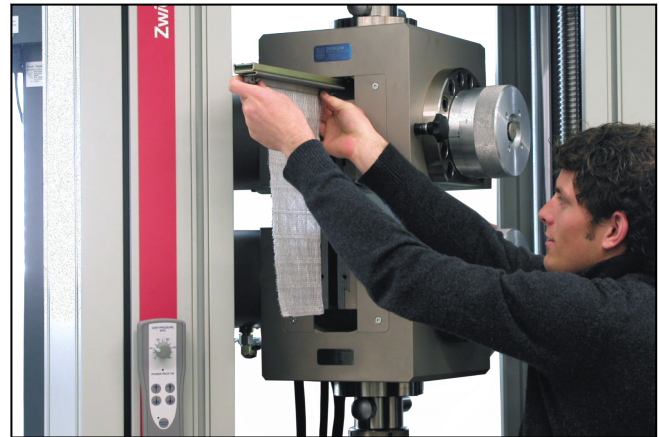
This support tray is required for dimensionally unstable specimens. We strongly recommend ordering this support tray for use with fabric specimens to enable trouble-free insertion of specimens.

Description	ArticleNumber
Stainless steel support-tray for preparation of textile specimens, marked for 190, 200 and 210 mm	<b>317685</b>

CTA: 43022 39737



Support tray



Inserting the specimen

#### Optional accessories for Types 8493 and 8593

These accessories cannot be used with Type 8393 grips.

Description	ArticleNumber
T-slotted shoe-connector with <ul style="list-style-type: none"> <li>• M28 x 1.5 thread for connecting Ø8, 20, 36 mm mounting studs or load cells</li> <li>• centering spigot, Ø 30 H7, for connecting mounting unit, mounting flange or Ø 60 mm mounting stud</li> </ul> Scope of delivery: 2 pieces	<b>1117876</b>
T-slotted shoe connector for load cell calibration, Fmax 250 kN, with hole Ø 64/48 mm, scope of delivery 2 pieces	<b>1117878</b>
Mounting stud, Ø 60 mm, Fmax 250 kN Scope of delivery: 1 piece	<b>314062</b>
Mounting unit for attaching compression test kits (Fmax 250 kN <sup>1)</sup> ), rigid upper anvil holder (Fmax 250 kN <sup>1)</sup> ), rocking upper anvil holder (Fmax 20 kN <sup>1)</sup> ), Type A/B flexure table (20 kN <sup>1)</sup> ) Scope of delivery: 1 piece	<b>314058</b>
Mounting flange for attaching flexure tables, Fmax 250 kN <sup>1)</sup> , preferably for installation in lower grip Scope of delivery: 1 piece	<b>314060</b>

1) Fmax may be restricted due to a lower test kit/device Fmax