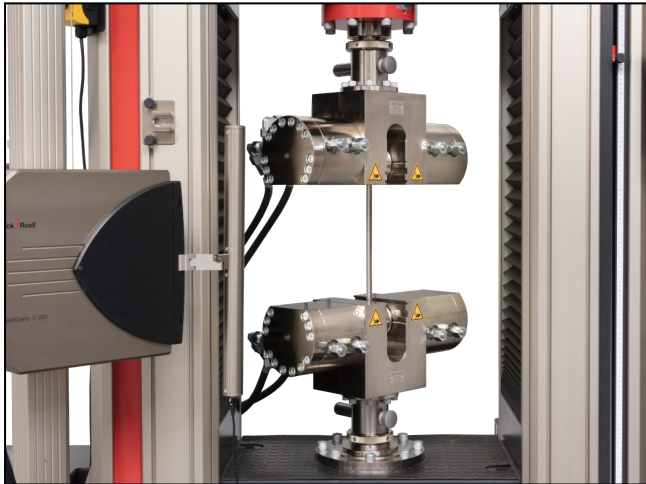


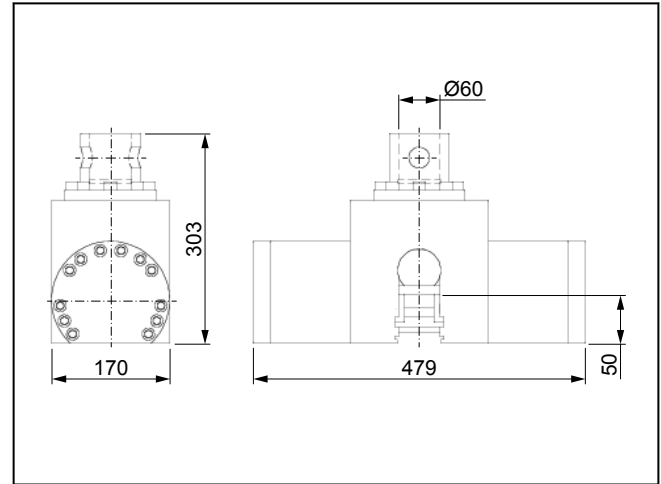
## Product Information

Hydraulic grips Type 8592, Fmax 100 kN, and Type 8594, Fmax 250 kN

CTA: 204338 39717



Type 8594 hydraulic grips, Fmax 250 kN



General view of Type 8594 hydraulic grips, Fmax 250 kN

- Specimen material:  
Metals, composites, wood
- Specimen shape:  
Round and flat specimens
- Type of loading:  
Tensile, compression, alternating load

### Function description

The hydraulic grip closes symmetrically.

Two horizontal T-slot pairs are found in the specimen grip. The larger slot is for insertion of the T-slotted system to accommodate smaller load cells and specimen grips. The smaller slot is for inserting/guiding additional accessories.

You can insert the specimen vertically and in the center using the specimen gripper. The slot of the specimen grips is used as a guide. Using a specimen gripper helps minimize the risk of injury when inserting and removing specimens from the specimen grips. Such risks are the pinching of body parts between the jaws or the burning of body parts on hot specimens.

### Advantages and features

- 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.
- Time is saved due to quick and easy adaptation of small specimen grips and test fixtures to large specimen grips via the T-slotted system. Precise alignment ensures reliable test results.
- The symmetrically closing jaws save time required for adjusting to varying specimen thicknesses and ensure that the specimen is held exactly in the test axis.
- Short specimens can also be gripped due to the special design of the specimen grip.
- Fast and easy insertion of specimen due to the ergonomic and open design.
- An adjustable centering stop ensures precise test results, even with high specimen throughput rates.

## Product Information

Hydraulic grips Type 8592, F<sub>max</sub> 100 kN, and Type 8594, F<sub>max</sub> 250 kN

### Technical data

Item No.	313760 <sup>1)</sup>	313782 <sup>1)</sup>	
Type	8592	8594	
Operating principle/identification	Double-actuator	Double actuator	
Test load F <sub>max</sub>	100	250	kN
Gripping force, max. at 300 bar	250	-	kN
Gripping force, max. at 480 bar	-	410	
Dimensions			
Height	303	303	mm
Width	479	479	mm
Depth	170	170	mm
Width with screw unit, open completely	461	-	mm
Gripping travel	70	35	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height		
Weight per specimen grip, approx.	70	70	kg
Connection	Ø 60	Ø 60	mm
Ambient temperature	+10 ... +35	+10 ... +35	°C
Scope of delivery	2	2	pieces
Opening width with jaws		59	

1) Recommended and approved for strain rate control to standards DIN EN ISO6892-1:2009 and ASTM E8-09.

### Accessories required

#### Hydraulic power pack

#### Flat jaws for type 8592

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8592, F <sub>max</sub> 100 kN Flat specimen, thickness [mm]	Clamping surface Diameter [mm]	Ambient temperature [°C]	Hardness	Item No.
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, concentric Grooves, distance 1mm	0 ... 59	74 <sup>1)</sup>	-70 ... +250	58 HRC	314046
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr <sup>2)</sup> 0.35 mm	0 ... 59	74 <sup>1)</sup>	-70 ... +250	58 HRC	316139

All data at ambient temperature.

Subject to change in the course of further development.

## Product Information

Hydraulic grips Type 8592, F<sub>max</sub> 100 kN, and Type 8594, F<sub>max</sub> 250 kN

Application	Version	Specimen dimensions Type 8592, F <sub>max</sub> 100 kN Flat specimen, thickness [mm]	Clamping surface		Ambient temperature [°C]	Hardness	Item No.
			Diameter [mm]				
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr <sup>2)</sup> 0.75 mm	0 ... 59	74 <sup>1)</sup>		-70 ... +250	58 HRC	320618
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr <sup>2)</sup> 1.5 mm	0 ... 59	74 <sup>1)</sup>		-70 ... +250	58 HRC	320620
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, concentric Grooves, distance 2 mm	0 ... 59	74 <sup>1)</sup>		-70 ... +250	58 HRC	317244
Thin metal strips, CFRP/GFRP strip specimens	Steel, smooth, ground	0 ... 59	74 <sup>1)</sup>		-70 ... +250	58 HRC	317246

1) With shatter protection shield

2) Pr = pyramid grid

### Flat jaws for type 8592

Scope of delivery: 1 set (= 4 pieces)

Application	Version	Specimen dimensions Type 8592, F <sub>max</sub> 100 kN Flat specimen, thickness [mm]	Clamping surface		Ambient temperature [°C]	Hardness	Item No.
			Height [mm]	Width [mm]			
Textile tapes (flat specimens)	Steel, smooth	0 ... 20	110	110	-70 ... +250	55 HRC	320350 <sup>1)</sup>
Textile tapes (flat specimens)	Steel, corrugated	0 ... 20	110	110	-70 ... +250	55 HRC	320352 <sup>1)</sup>

1) Can only be used with single-actuator hydraulic grips 8802 and 8803

## Product Information

Hydraulic grips Type 8592, F<sub>max</sub> 100 kN, and Type 8594, F<sub>max</sub> 250 kN

### Prism jaws for type 8592

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8592, F <sub>max</sub> 100 kN Round specimen, Ø [mm]	Clamping height [mm]	Ambient temperature [°C]	Hardness	Item No.
Round specimens with and without shoulders, pipes with plugs	Steel, V-notch, corrugated, distance 1 mm	6 ... 15	74	-70 ... +250	58 HRC	314050 <sup>1)</sup>
Round specimens with and without shoulders, pipes with plugs	Steel, V-notch, corrugated, distance 1 mm	16 ... 59	74	-70 ... +250	58 HRC	314052 <sup>1)</sup>

1) Suitable jaw mountings for the prism jaws (required for prism jaws): Item No. 314048

### Flat jaws for type 8594

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8594, F <sub>max</sub> 250 kN Flat specimen, thickness [mm]	Clamping surface Diameter [mm]	Ambient temperature [°C]	Hardness	Item No.
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, concentric Grooves, distance 1mm	0 ... 59	74 <sup>1)</sup>	-70 ... +250	58 HRC	314046
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr <sup>2)</sup> 0.35 mm	0 ... 59	74 <sup>1)</sup>	-70 ... +250	58 HRC	316139
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr <sup>2)</sup> 0.75 mm	0 ... 59	74 <sup>1)</sup>	-70 ... +250	58 HRC	320618
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr <sup>2)</sup> 1.5 mm	0 ... 59	74 <sup>1)</sup>	-70 ... +250	58 HRC	320620
Flat jaws for metal strip and shoulder-end specimens	Steel, concentric	0 ... 59	74 <sup>1)</sup>	-70 ... +250	58 HRC	317244

All data at ambient temperature.

Subject to change in the course of further development.

## Product Information

Hydraulic grips Type 8592, F<sub>max</sub> 100 kN, and Type 8594, F<sub>max</sub> 250 kN

Application	Version	Specimen dimensions	Clamping surface	Ambient temperature [°C]	Hardness	Item No.
		Type 8594, F <sub>max</sub> 250 kN Flat specimen, thickness [mm]	Diameter [mm]			
mens, reinforced plastics (flat specimens)	Grooves, distance 2 mm					
Thin metal strips, CFRP/GFRP strip specimens	Steel, smooth, ground		74 <sup>1)</sup>	-70 ... +250	58 HRC	317246

1) With shatter protection shield

2) Pr = pyramid grid

### Flat jaws for type 8594

Scope of delivery: 1 set (= 4 pieces)

Application	Version	Specimen dimensions	Clamping surface		Ambient temperature [°C]	Hardness	Item No.
		Type 8594, F <sub>max</sub> 250 kN Flat specimen, thickness [mm]	Height [mm]	Width [mm]			
Textile tapes (flat specimens)	Steel, smooth	0 ... 20	110	110	-70 ... +250	55 HRC	320350 <sup>1)</sup>
Textile tapes (flat specimens)	Steel, corrugated	0 ... 20	110	110	-70 ... +250	55 HRC	320352 <sup>1)</sup>

1) Can only be used with single-actuator hydraulic grips 8802 and 8803

### Prism jaws type 8594

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions	Clamping height [mm]	Ambient temperature [°C]	Hardness	Item No.
		Type 8594, F <sub>max</sub> 250 kN Round specimen, Ø [mm]				
Round specimens with and without shoulders, pipes with plugs	Steel, V-notch, corrugated	6 ... 15	74	-70 ... +250	58 HRC	314050 <sup>1)</sup>

## Product Information

Hydraulic grips Type 8592, F<sub>max</sub> 100 kN, and Type 8594, F<sub>max</sub> 250 kN

Application	Version	Specimen dimensions Type 8594, F <sub>max</sub> 250 kN Round specimen, Ø [mm]	Clamping height [mm]	Ambient temperature [°C]	Hardness	Item No.
	gated, distance 1 mm					
Round specimens with and without shoulders, pipes with plugs	Steel, V-notch, corrugated, distance 1 mm	16 ... 59	74	-70 ... +250	58 HRC	314052 <sup>1)</sup>

1) Suitable jaw mountings for the prism jaws (required for prism jaws): Item No. 314048

### Jaw mounting (required for prism jaws)

Description	ArticleNumber
Suitable jaw mounting for prism jaws Scope of delivery: 2 pieces	<b>314048</b>

### Optional accessories

Description	ArticleNumber
Specimen gripper	<b>325118</b>
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>314054</b>
T-slotted shoe connector for load cell calibration, F <sub>max</sub> 250 kN, with hole Ø 64/48 mm, Scope of delivery: 2 pieces	<b>314056</b>
Mounting stud, Ø 60 mm, F <sub>max</sub> 250 kN Scope of delivery: 1 piece	<b>314062</b>
Mounting unit for attaching compression test kits (F <sub>max</sub> 250 kN <sup>1)</sup> ), rigid upper anvil holder (F <sub>max</sub> 250 kN <sup>1)</sup> ), rocking upper anvil holder (F <sub>max</sub> 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, F <sub>max</sub> 250 kN <sup>1)</sup> , preferably for installation in lower grip Scope of delivery: 1 piece	<b>314060</b>

1) F<sub>max</sub> may be restricted due to a lower test kit/device F<sub>max</sub>