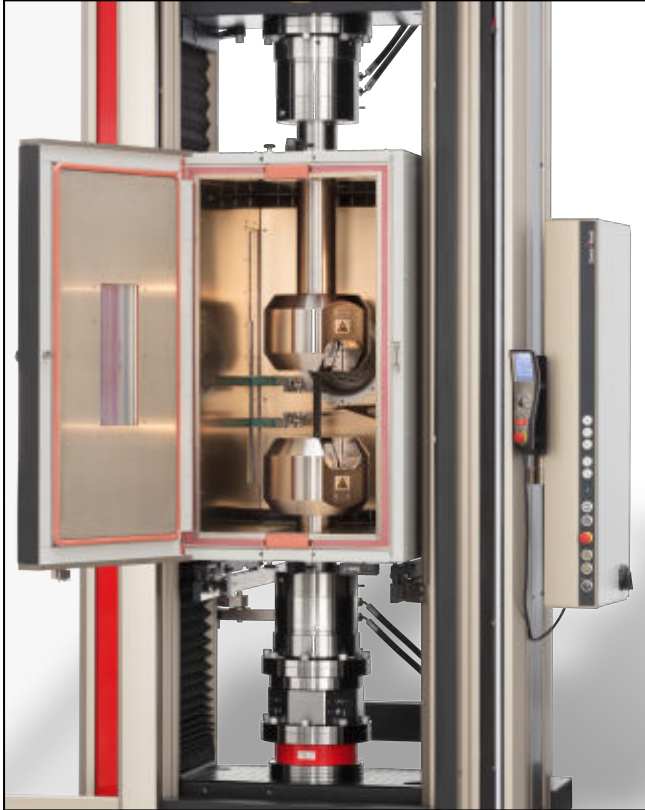


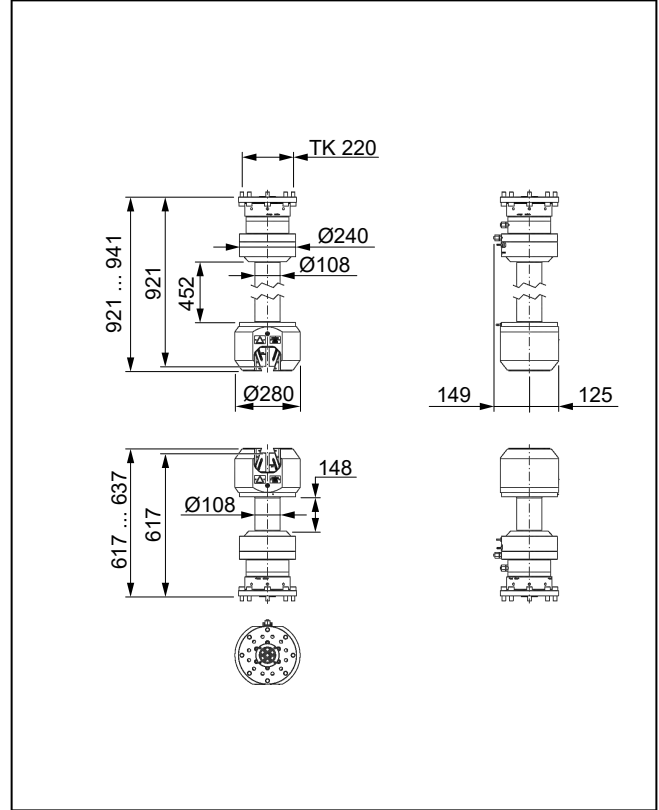
## Product Information

Type 8594 hydraulic grips, Fmax 250 kN, "body over wedge"

CTA: 197131 235765



Hydraulic grip 250 kN for temperature chambers



Hydraulic grip 250 kN for temperature chambers, dimensions

### Applications

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

### Function description

The hydraulic grip closes symmetrically.

The guided jaws enable reproducible gripping of the specimen. The symmetrical design and high degree of stiffness of the main body of the grips make them ideal for tests in which strict requirements are placed on the alignment of the specimen to the test axis.

### 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.
- The specimen grip is ideally suited for alignment-critical applications and specimens sensitive to transverse tensile forces.
- With the parallel gripping operation (no differential movement of the jaws) the test speed is transferred directly to the specimen.
- 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.
- When testing composite specimens for example, the specimen grip offers advantages due to easy cleaning.

## Product Information

Type 8594 hydraulic grips, F<sub>max</sub> 250 kN, "body over wedge"

### Technical data

Item No. Type	1036112 <sup>1)</sup> 8594	1036114 <sup>1)</sup> 8594	1036115 <sup>1)2)</sup> 8594	
Test load F <sub>max</sub>	250	250	250	kN
Operating principle/identification	Wedge action (sym- metrically closing)	Wedge action (sym- metrically closing)	Wedge action (sym- metrically closing)	
Operating pressure, max.	300	300	300	bar
Gripping force, max.	445	445	445	kN
Dimensions				
Height	381	476	637 (lower), 941 (upper)	mm
Width	Ø 280	Ø 280	Ø 280	mm
Depth	Ø 250	Ø 250	Ø 250	mm
Depthwith connection	289	289	289	mm
Opening width with jaws				
Flat jaws	40	40	40	mm
Prism jaws	30	30	30	mm
Gripping of the specimen, min.	The specimen must be gripped with at least 2/3 of the jaw height.			
Connection interface	Flange	Hole	Flange	
Connection	Ø TK 220	Ø 60	Ø TK 220	mm
Coolant connection	-	-	Hose connector 1/4	
Condensed water connection	-	-	Hose connector 1/8	
Ambient temperature	+10 ... +35	+10 ... +35	-80 ... +360	°C
Weight per specimen grip, approx.	102	110	143 (lower), 162 (upper)	kg
Scope of delivery	2	2	2	piece(s)

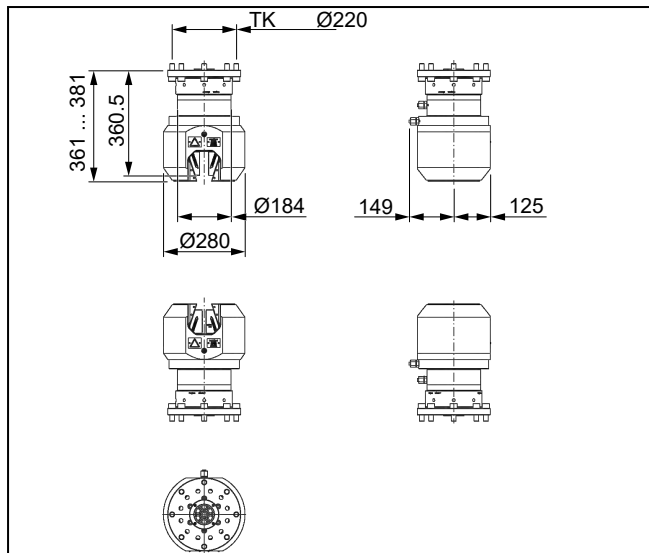
1) Recommended and approved for strain rate control to standards DIN EN ISO6892-1:2009 and ASTM E8-09.

2) For specimen grip up to 360°C a coolant connection and a condensed water connection are required.

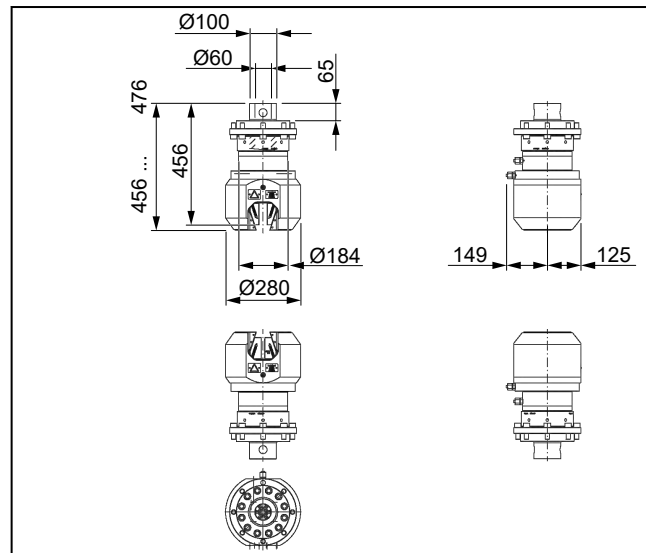
## Product Information

Type 8594 hydraulic grips, Fmax 250 kN, "body over wedge"

CTA: 235474 235627



Hydraulic grips 250 kN with flange connection, dimensions



Hydraulic grips 250 kN with mounting stud, dimensions

### Accessories required

#### Hydraulic power pack

#### Coolant and condensed water connections

For specimen grips up to 250 °C and 360 °C, a coolant supply (inlet and outlet) and a container for condensation water removal is required.

#### Jaws

To use the sample holder, **1 set of jaws is required.**

#### Flat jaws

Scope of delivery: 1 set (= 4 pieces)

Version	Specimen dimensions Flat specimen, thickness [mm]	Clamping surface		Ambient temperature [°C]	Hardness [HRC]	Item No.
		Height [mm]	Width [mm]			
Steel, pr <sup>1)</sup> 0.75	0 ... 12	82	60	-70 ... +250	56 ... 58	1091190
Steel, pr <sup>1)</sup> 0.75	0 ... 12	82	60	-80 ... +360	56 ... 58	1091833
Steel, pr <sup>1)</sup> 0.75	9 ... 21	82	60	-70 ... +250	56 ... 58	1091191
Steel, pr <sup>1)</sup> 0.75	9 ... 21	82	60	-80 ... +360	56 ... 58	1091834
Steel, pr <sup>1)</sup> 0.75	18 ... 30	82	60	-70 ... +250	56 ... 58	1091192
Steel, Roof grid 2 mm	30 ... 40	82	60	-70 ... +250	56 ... 58 HRC	1091193
Steel, fsc <sup>2)</sup> 1.25 mm	1 ... 13	82	60	-70 ... +250	56-58 HRC	1091194

1) Pr = pyramid grid

2) Fsc = fish scale 1.25 mm

## Product Information

Type 8594 hydraulic grips, Fmax 250 kN, "body over wedge"

### Prism jaws

Scope of delivery. 1 set (= 4 pieces)

Version	Specimen dimensions Round specimen, Ø [mm]	Clamping height [mm]	Ambient temperature [°C]	Hardness [HRC]	Item No.
Steel, Roof grid 1 mm	6 ... 14	82	-70 ... +250	56 ... 58	1091195
Steel, Roof grid 1 mm	6 ... 14	82	-80 ... +360	56 ... 58	1091835
Steel, Roof grid 1 mm	14 ... 22	82	-70 ... +250	56 ... 58	1091196
Steel, Roof grid 1 mm	14 ... 22	82	-80 ... +360	56 ... 58	1091836
Steel, Roof grid 1 mm	22 ... 30	82	-70 ... +250	56 ... 58 HRC	1091197
Steel, Roof grid 1 mm	22 ... 30	82	-80 ... +360	56 ... 58 HRC	1091837
Steel, Roof grid 2 mm	14 ... 22	82	-70 ... +250	56 ... 58 HRC	1091838

### Optional accessories

Description	ArticleNumber
Adapter flange for tensile, compression and flexure fixtures for attaching fixtures up to 250 kN (e.g. tensile, compression and flexure test kits), scope of delivery: 2 pieces	<b>072701</b>
Description	ArticleNumber
Replacement for gray cast iron sliding plates with emergency sliding function (wear part) for hydraulic grip "body over wedge" Fmax 250 kN, Scope of supply: 4 pieces	<b>1102533</b>