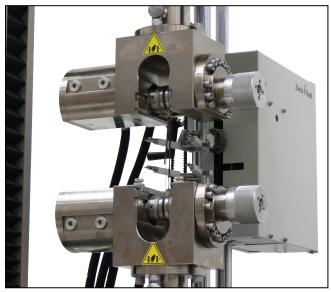


Hydraulic grips type 8801, Fmax 50 kN



Hydraulic grips Type 8801, Fmax 50 kN



CTA: 39739 39704

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

#### **Function description**

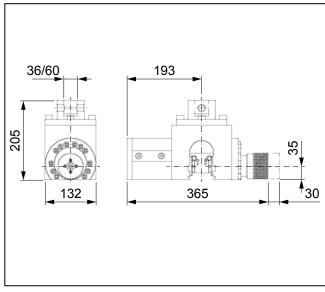
Hydraulic grips are single-sided closing and can be used for symmetrical and asymmetrical gripping.

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.

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



Hydraulic grips Type 8801, Fmax 50 kN, overview

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**

- If the application changes, the jaws can be easily switched.
- An adjustable centering stop ensures precise test results, even with high specimen throughput rates.
- The constant gripping force allows for repeatable test results.
- Short specimens can also be gripped due to the special design of the specimen grip.
- 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 prism jaws ensure flexibility. They can be rotated and have two-fold use:
- Round and flat specimens
- Round specimens with varying diameters



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#### **Technical data**

Item No.	317176 <sup>1)</sup>		
Туре	8801		
Test load F <sub>max</sub>	50	kN	
Adjustability of the opposing jaw	Stepless		
Operating principle/identification	Single-sided closing		
Operating pressure	12 300	bar	
Gripping force at max. pressure	100	kN	
Dimensions			
Height	205	mm	
Width	365	mm	
Width with screw unit, open completely	395	mm	
Depth	132	mm	
Gripping travel	35	mm	
Opening width with jaws	See table of jaws (specimen thickness)		
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height		
Connection, stud	Ø 36/60 <sup>2)</sup>	mm	
Ambient temperature	+10 +35	°C	
Weight per specimen grip, approx.	37	kg	
Scope of delivery	2	pieces	

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

### **Accessories required**

## Hydraulic power pack

<sup>2)</sup> These specimen grips can be offered with a 36 mm or 60 mm connection (selection made using parts list alternatives).



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### Flat jaws

Scope of delivery: 2 piece

Application	Version	Specimen dimensions Type 8801, F <sub>max</sub> 50 kN Flat speci- men, thick- ness [mm]	Clamping s [mm] Height [mm]	surface Width [mm]	Diameter [mm]	Ambient tempera- ture [°C]	Hardness
Fabric strips, wood, fabric-elastomer composite	Steel, concentric grooves	0 40	80	110	-	+0 +100	56 HRC
Thin metal strips, CFRP/GFRP strip specimens	Steel, smooth	0 59	-	-	50	+0 +100	56 HRC
Metal, reinforced plas- tics	Steel, concentric grooves <sup>1)</sup>	0 59	-	-	50	0 +100	56 HRC

<sup>1)</sup> Concentric grooves = circular grooves in ripple pattern at 1 mm spacing

### Prism jaws

Scope of delivery: 2 piece

Application	Version	Specimen dimensions Type 8801, F <sub>max</sub> 50 kN Round speci- men, Ø [mm]	Clamping surface Diameter [mm]	Ambient tempera- ture [°C]	Hardness	Item No.
Round specimens made of metal/plastic	Steel, concentric grooves <sup>1)</sup> with two V-notches <sup>2)</sup>	3 15	50	+0 +100	56 HRC	313640

<sup>1)</sup> Concentric grooves = circular grooves in ripple pattern at 1 mm spacing

## **Optional accessories**

Description	ArticleNumber
Specimen gripper	325118
<ul> <li>T-slotted shoe-connector with</li> <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> <li>Scope of delivery: 2 pieces</li> </ul>	314054
T-slotted shoe connector for load cell calibration, Fmax 250 kN, with hole Ø 64/48 mm, Scope of delivery: 2 pieces	314056
Mounting stud, Ø 60 mm, Fmax 250 kN Scope of delivery: 1 piece	314062

<sup>2)</sup> These prism jaws have V-notches that are arranged crosswise for various specimen diameters



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Description	ArticleNumber
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	314058
Mounting flange for attaching flexure tables, Fmax 250 kN <sup>1)</sup> , preferably for installation in lower grip Scope of delivery: 1 piece	314060

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