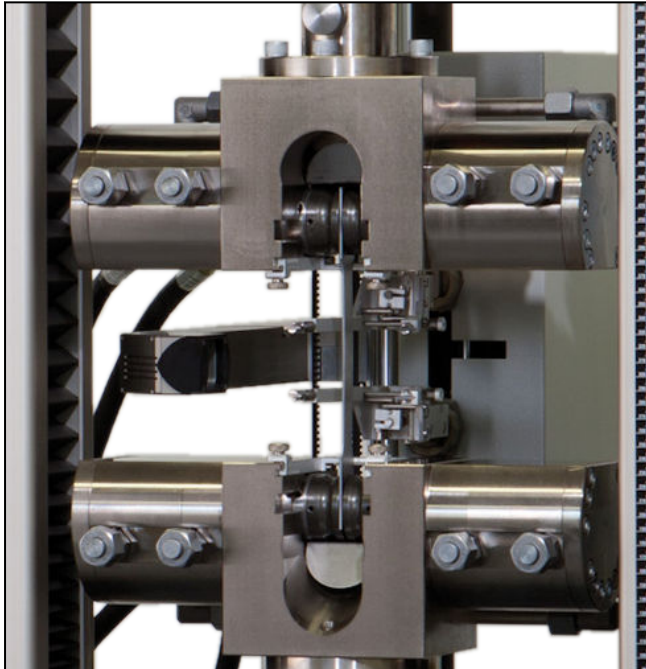


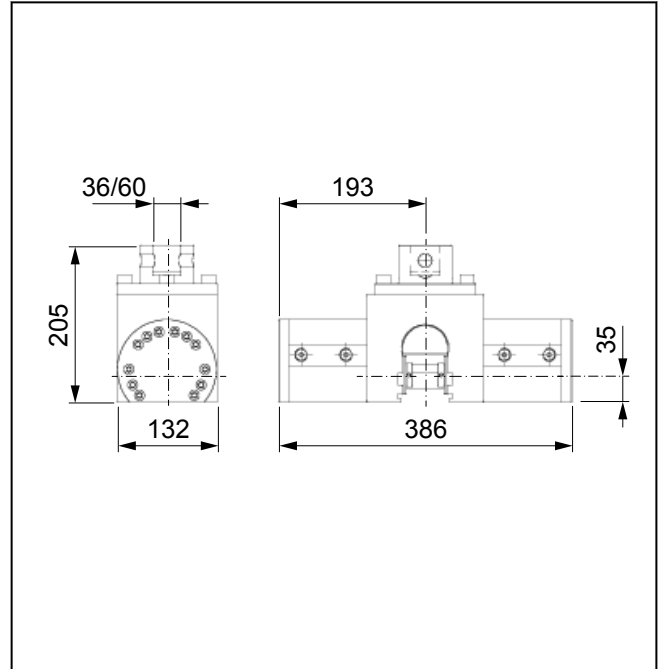
Product Information

Type 8494 hydraulic grips, Fmax 50 kN

CTA: 43031 39705



Hydraulic grips Type 8494, Fmax 50 kN



Hydraulic grips Type 8494, Fmax 50 kN, overview

- 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.

- 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
- An adjustable centering stop ensures precise test results, even with high specimen throughput rates.
- 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.
- Fast and easy insertion of specimen due to the ergonomic and open design.

Product Information

Type 8494 hydraulic grips, F_{max} 50 kN

Technical data

Item No.	313646 ¹⁾	
Type	8494	
Test load F _{max}	50	kN
Operating principle/identification	Double-sided closing	
Gripping force, max. at 300 bar	100	kN
Operating pressure	12 ... 300	bar
Dimensions		
Height	205	mm
Width	386	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.	
Weight per specimen grip, approx.	37	kg
Connection	Ø 36/60 ²⁾	mm
Ambient temperature	+10 ... +35	°C
Scope of delivery	2	pieces

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

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

Accessories required

Hydraulic power pack

Flat jaws

Scope of delivery: 2 piece

Application	Version	Specimen dimensions Type 8494, F _{max} 50 kN Flat specimen, thickness [mm]	Clamping surface Diameter [mm]	Hardness	Ambient temperature [°C]	Item No.
Thin metal strips, CFRP/ GFRP strip specimens	Steel, smooth	0 ... 59	50	56 HRC	+0 ... +100	314128
Metal, reinforced plastics	Steel, concentric grooves ¹⁾	0 ... 59	50	56 HRC	0 ... +100	313638

1) Concentric grooves = circular grooves in ripple pattern at 1 mm spacing

Product Information

Type 8494 hydraulic grips, Fmax 50 kN

Prism jaws

Scope of delivery: 2 piece

Application	Version	Specimen dimensions Type 8801, F _{max} 50 kN Round specimen, Ø [mm]	Clamping surface Diameter [mm]	Ambient temperature [°C]	Hardness	Item No.
Round specimens made of metal/plastic	Steel, concentric grooves ¹⁾ with two V-notches ²⁾	3 ... 15	50	+0 ... +100	56 HRC	313640

1) Concentric grooves = circular grooves in ripple pattern at 1 mm spacing

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

Optional accessories

Description	ArticleNumber
Specimen gripper	325118
T-slotted shoe-connector with <ul style="list-style-type: none"> M28 x 1.5 thread for connecting Ø8, 20, 36 mm mounting studs or load cells centering spigot, Ø 30 H7, for connecting mounting unit, mounting flange or Ø 60 mm mounting stud Scope of delivery: 2 pieces	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
Mounting unit for attaching compression test kits (Fmax 250 kN ¹⁾), rigid upper anvil holder (Fmax 250 kN ¹⁾), rocking upper anvil holder (Fmax 20 kN ¹⁾), Type A/B flexure table (20 kN ¹⁾) Scope of delivery: 1 piece	314058
Mounting flange for attaching flexure tables, Fmax 250 kN ¹⁾ , preferably for installation in lower grip Scope of delivery: 1 piece	314060

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