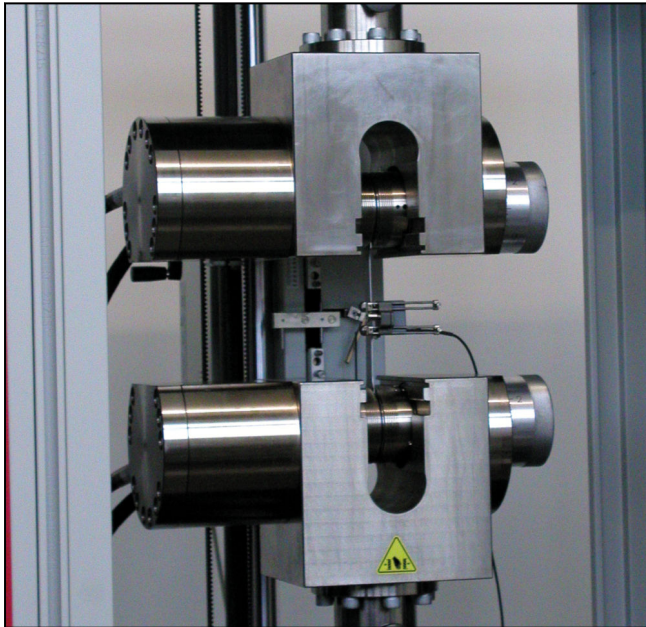


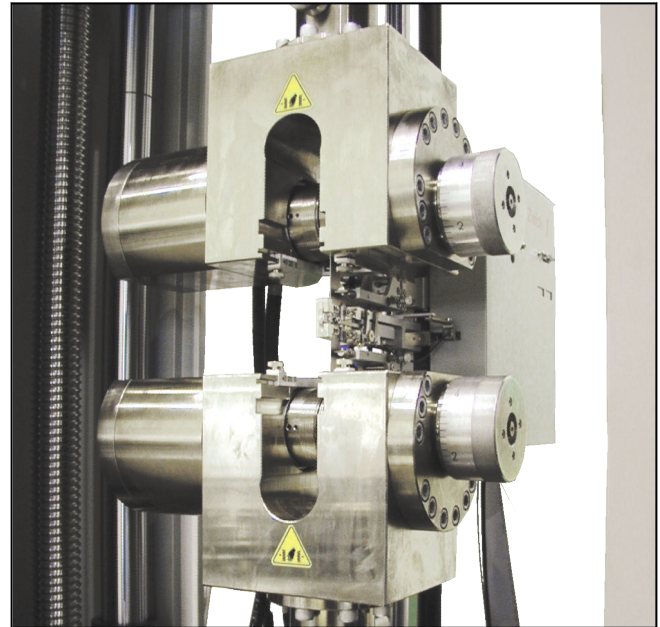
Product Information

Hydraulic grips Type 8802, Fmax 100 kN, and Type 8803, Fmax 250 kN

CTA: 39745 39755



Hydraulic grips Type 8802, Fmax 100 kN



Hydraulic grips Type 8803, Fmax 250 kN

Applications

- 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

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

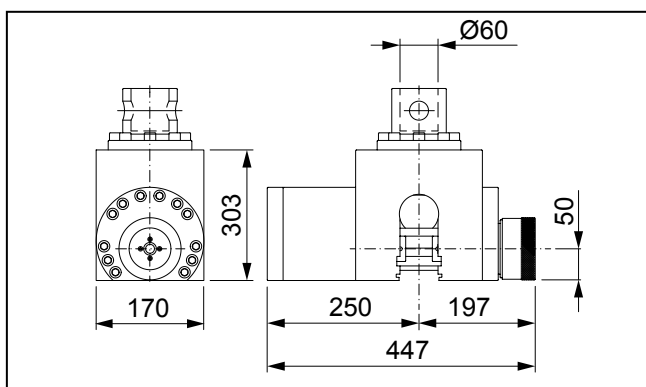
Product Information

Hydraulic grips Type 8802, F_{max} 100 kN, and Type 8803, F_{max} 250 kN

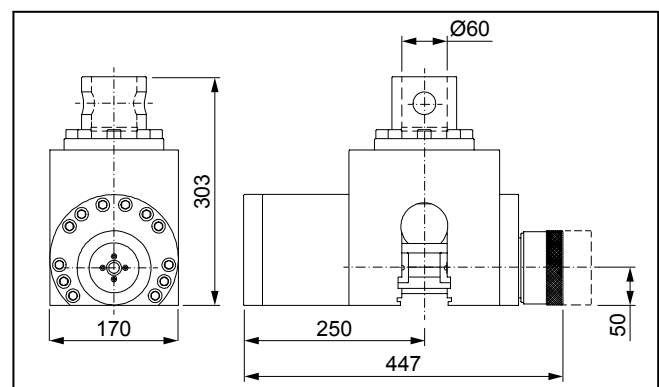
Technical data

Item No.	317178 ¹⁾	317180 ¹⁾	
Type	8802	8803	
Operating principle/identification	Single-sided closing	Single-sided closing	
Adjustability of the opposing jaw	Stepless	Stepless	
Test load F _{max}	100	250	kN
Operating pressure	12 ... 300	12 ... 480	bar
Gripping force at max. pressure	255	410	kN
Dimensions			
Height	303	303	mm
Width	423	423	mm
Width with screw unit, open completely	461	423 (461)	mm
Depth	170	170	mm
Gripping travel	35	70	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height		
Connection, stud	Ø 60	Ø 60	mm
Ambient temperature	+10 ... +35	+10 ... +35	°C
Weight per specimen grip, approx.	70	70	kg
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.



Hydraulic grips Type 8803, F_{max} 250 kN, overview



Hydraulic grips Type 8802, F_{max} 100 kN, overview

Accessories required

Hydraulic power pack

Product Information

Hydraulic grips Type 8802, F_{max} 100 kN, and Type 8803, F_{max} 250 kN

Flat jaws for type 8802

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8802, F _{max} 100 kN Flat speci- men, thick- ness [mm]	Clamping surface Diameter [mm]	Ambient tempera- ture [°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 ¹⁾	-70 ... +250	58 HRC	314046
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr ²⁾ 0.35 mm	0 ... 59	74 ¹⁾	-70 ... +250	58 HRC	316139
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr ²⁾ 0.75 mm	0 ... 59	74 ¹⁾	-70 ... +250	58 HRC	320618
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr ²⁾ 1.5 mm	0 ... 59	74 ¹⁾	-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 ¹⁾	-70 ... +250	58 HRC	317244
Thin metal strips, CFRP/ GFRP strip specimens	Steel, smooth, ground	0 ... 59	74 ¹⁾	-70 ... +250	58 HRC	317246

1) With shatter protection shield

2) Pr = pyramid grid

Product Information

Hydraulic grips Type 8802, F_{max} 100 kN, and Type 8803, F_{max} 250 kN

Flat jaws for type 8802

Scope of delivery: 1 set (= 4 pieces)

Application	Version	Specimen dimensions Type 8802, F _{max} 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 ¹⁾
Textile tapes (flat specimens)	Steel, corrugated	0 ... 20	110	110	-70 ... +250	55 HRC	320352 ¹⁾

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

Prism jaws for type 8802

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8802, F _{max} 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	10 ... 59	74	-70 ... +250	58 HRC	314052 ¹⁾

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

Product Information

Hydraulic grips Type 8802, F_{max} 100 kN, and Type 8803, F_{max} 250 kN

Flat jaws for type 8803

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8803, F _{max} 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 ¹⁾	-70 ... +250	58 HRC	314046
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr ²⁾ 0.35 mm	0 ... 59	74 ¹⁾	-70 ... +250	58 HRC	316139
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr ²⁾ 0.75 mm	0 ... 59	74 ¹⁾	-70 ... +250	58 HRC	320618
Flat jaws for metal strip and shoulder-end specimens, reinforced plastics (flat specimens)	Steel, pr ²⁾ 1.5 mm	0 ... 59	74 ¹⁾	-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 ¹⁾	-70 ... +250	58 HRC	317244
Thin metal strips, CFRP/ GFRP strip specimens	Steel, smooth, ground	0 ... 59	74 ¹⁾	-70 ... +250	58 HRC	317246

1) With shatter protection shield

2) Pr = pyramid grid

Product Information

Hydraulic grips Type 8802, F_{max} 100 kN, and Type 8803, F_{max} 250 kN

Flat jaws for type 8803

Scope of delivery: 1 set (= 4 pieces)

Application	Version	Specimen dimensions	Clamping surface		Ambient temperature [°C]	Hardness	Item No.
		Type 8803, F _{max} 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 ¹⁾
Textile tapes (flat specimens)	Steel, corrugated	0 ... 20	110	110	-70 ... +250	55 HRC	320352 ¹⁾

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

Prism jaws for type 8803

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions	Clamping height [mm]	Ambient temperature [°C]	Hardness	Item No.
		Type 8803, F _{max} 250 kN Round specimen, Ø [mm]				
Round specimens with and without shoulders, pipes with plugs	Steel, V-notch, corrugated, distance 1 mm	3 ... 15	74	-70 ... +250	58 HRC	314050 ¹⁾
Round specimens with and without shoulders, pipes with plugs	Steel, V-notch, corrugated, distance 1 mm	10 ... 59	74	-70 ... +250	58 HRC	314052 ¹⁾

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	314048

Product Information

Hydraulic grips Type 8802, Fmax 100 kN, and Type 8803, Fmax 250 kN

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