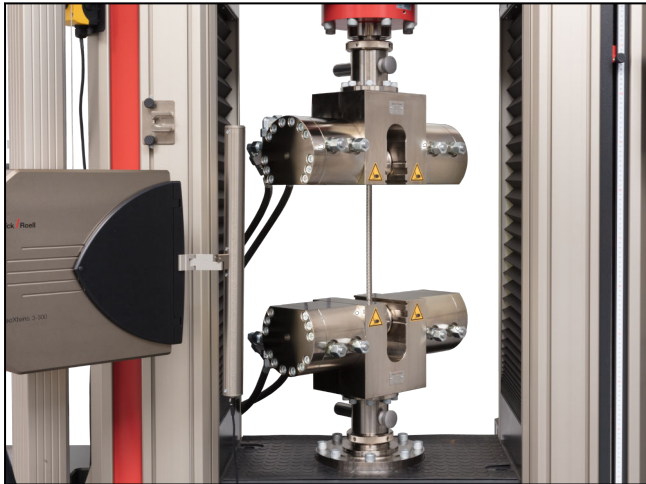


Product Information

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

CTA: 204338 39717



Type 8594 hydraulic grips, Fmax 250 kN

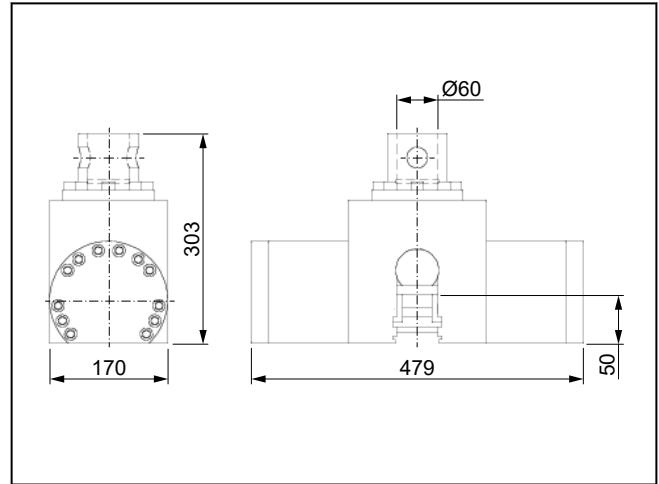
- Specimen material:
Metals, composites, wood
- Specimen shape:
Round and flat specimens
- Type of loading:
Tensile, compression, alternating load

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.



General view of Type 8594 hydraulic grips, Fmax 250 kN

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_{max} 100 kN, and Type 8594, F_{max} 250 kN

Technical data

Item No. Type	313760 ¹⁾ 8592	313782 ²⁾ 8594	
Operating principle/identification	Double-sided closing	Double actuator	
Test load F _{max}	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
Connector	Ø 60	Ø 60	mm
Ambient temperature	+10 ... +35	+10 ... +35	°C
Scope of delivery	2	2	piece(s)
Opening width with jaws		59	

1) Recommended and approved for strain rate control compliant to standards DIN EN ISO 6892-1:2009 and ASTM E8-09.

2) Recommended and approved for strain rate control to standards DIN EN ISO 6892-1:2009 and ASTM E8-09.

Accessories required

Hydraulic power pack

Product Information

Hydraulic grips Type 8592, F_{max} 100 kN, and Type 8594, F_{max} 250 kN

Flat jaws for type 8592

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8592, F _{max} 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 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 8592, F_{max} 100 kN, and Type 8594, F_{max} 250 kN

Prism jaws for type 8592

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8592, 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	6 ... 15	74	-70 ... +250	58 HRC	314050 ¹⁾
Round specimens with and without shoulders, tubes with stoppers	Steel, V-notch, corrugated, distance 1 mm	16 ... 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 8592, F_{max} 100 kN, and Type 8594, F_{max} 250 kN

Flat jaws for type 8594

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8594, 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		74 ¹⁾	-70 ... +250	58 HRC	317246

1) With shatter protection shield

2) Pr = pyramid grid

Product Information

Hydraulic grips Type 8592, F_{max} 100 kN, and Type 8594, F_{max} 250 kN

Prism jaws type 8594

Scope of delivery: 2 pieces each

Application	Version	Specimen dimensions Type 8594, F _{max} 250 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 ¹⁾
Round specimens with and without shoulders, tubes with stoppers	Steel, V-notch, corrugated, distance 1 mm	16 ... 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

Optional accessories

Description	ArticleNumber
Specimen gripper	325118
T-slotted shoe-connector with - 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, F _{max} 250 kN, with hole Ø 64/48 mm, Scope of delivery: 2 pieces	314056
Mounting stud, Ø 60 mm, F _{max} 250 kN Scope of delivery: 1 piece	314062
Mounting unit for attaching compression test kits (F _{max} 250 kN ¹⁾), rigid upper anvil holder (F _{max} 250 kN ¹⁾), rocking upper anvil holder (F _{max} 20 kN ¹⁾), Type A/B flexure table (20 kN ¹⁾) Scope of delivery: 1 piece	314058
Mounting flange for attaching flexure tables, F _{max} 250 kN ¹⁾ , preferably for installation in lower grip Scope of delivery: 1 piece	314060

¹⁾ F_{max} may be restricted due to a lower test kit/device F_{max}