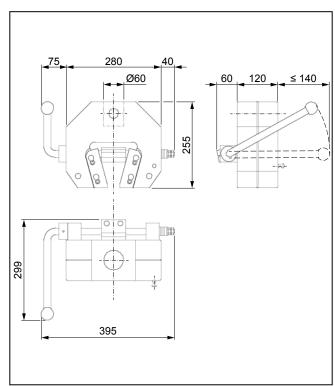
Zwick Roell

Product Information

Wedge grips type 8509, Fmax 150 kN







Wedge grips type 8509, Fmax 150 kN

Applications

- Specimen material: metals, plastics, wood
- Specimen shape:
- round and flat specimens • Type of loading:
- Type of loading tensile

Function description

Wedge grips are symmetrically closing specimen grips. Opening and closing plus application of closing force prior to the test is via a lever.

To generate the closing force the wedge grips are equipped with a pre-loaded spring. The gripping force is generated via wedge action and is proportional to the tensile force. The ratio is determined by the wedge angle.

Both upper and lower grips are equipped with a locking device which holds the grips in an open position to allow insertion of the specimen.

In tests with these grips extensioneters are used for accurate strain measurement.

Wedge grips type 8509 Fmax 150 kN, general view

Small load cells, specimen grips and test fixtures can be attached via a mounting unit.

Advantages and features

- These wedge grips represent a quick, cost-effective solution, for example for quality assurance.
- The grips always close symmetrically to the tensile axis regardless of specimen thickness.
- Large clamping length allows sensitive specimens to be gripped gently at all times, thereby avoiding jaw breaks.
- The lever is locked when the grips are open, enabling rapid specimen changes.
- Markings on the jaws allow easy specimen centering.
- Centering stops enable fast, accurate specimen centering.
- Ergonomic, open design for fast, easy specimen insertion and clamping
- Time-saving small load cells, specimen grips and test fixtures can be attached via optional mounting unit/T-slot system without removing the grips.
- Large opening width accommodates a wide range of applications.

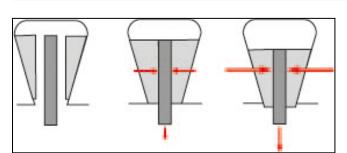


Product Information

Wedge grips type 8509, Fmax 150 kN

Technical data

Туре	8509			
Item No.	324550			
Test load F _{max}	150	kN		
Dimensions				
Height	255	mm		
Width with actuation lever	395	mm		
Depth with actuation lever	291	mm		
Specimen gripping	The specimen must be grip height.	The specimen must be gripped over at least 2/3 of the jaw height.		
Opening width, max.	32	mm		
Weight per grip unit, approx.	47	kg		
Weight per jaw, approx.	2.0 to 2.5	kg		
Connection, stud	Ø 60	mm		
Ambient temperature	-40 to +250	C°		
Scope of delivery	2	pieces		



Gripping process with self-tightening wedge grips

Accessories required

Jaws (1x required)

Scope of delivery: 1 set (= 4 pieces)

Range of application	Version	Specimen thickness [mm]	Gripping area (H x W) [mm]	Ambient tempera- ture [°C]	Hardness	ltem No.
Flat specimens (flat jaws)	steel, fsc ¹⁾ 1.25 mm	0 to 16	90 x 80	-40 to +250	56 HRC	324552
Flat specimens (flat jaws)	steel, fsc ¹⁾ 1.25 mm	16 to 32	90 x 80	-40 to +250	56 HRC	324554
Round specimens (prism jaws)	steel, st ²⁾ 1.5 mm	Ø 7 to 16	90 ³⁾	-40 to +250	56 HRC	324558
Round specimens (prism jaws)	steel, st ²⁾ 1.5 mm	Ø 16 to 24	90 ³⁾	-40 to +250	56 HRC	324560
Round specimens (prism jaws)	steel, st ²⁾ 1.5 mm	Ø 24 to 30	90 ³⁾	-40 to +250	56 HRC	324562

1) Fsc = fish scale

All data at ambient temperature.



Product Information Wedge grips type 8509, Fmax 150 kN

2) St= saw tooth

3) Prism jaws (with V-groove), hence clamping length specified here

Optional accessories

Description	Item number
Centering stops for centered clamping of specimen with variable height adjustment Scope of delivery: 2 pieces, sufficient for 2 grip units	324584
Connectors for compression and flexure test kits, mounting studs, load cells; Fmax 250 kN. Scope of delivery: 2 pieces	601014