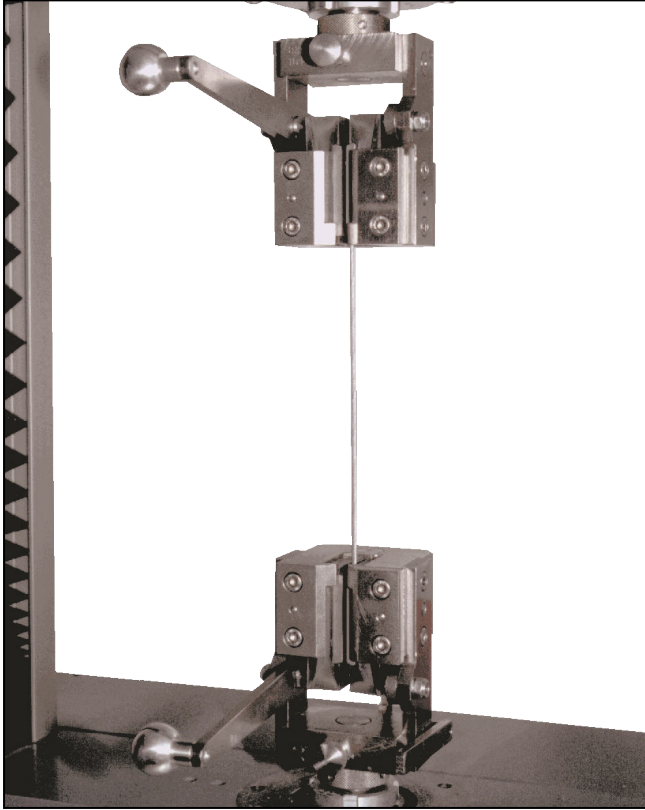


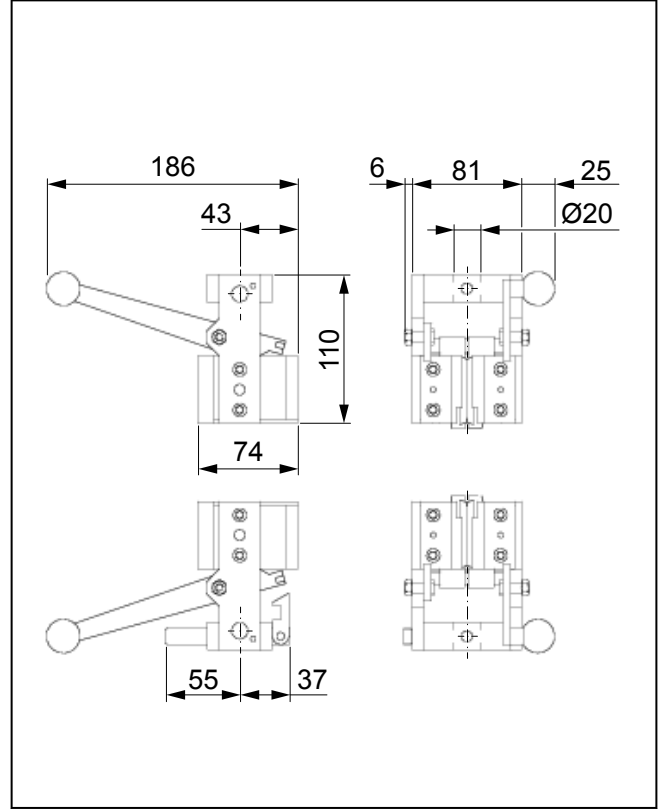
Product Information

Wedge grips type 8303 Fmax 10 kN and type 8403 50 kN

CTA: 39882 39885



Wedge grips type 8303 Fmax 10 kN



Wedge grips type 8303 Fmax 10 kN, general view

Applications

- Specimen material:
metals, plastics, wood
- Specimen shape:
round and flat specimens
- 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 extensometers are used for accurate strain measurement.

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.
- The lever is locked when the grips are open, enabling rapid specimen changes.
- Markings on the jaws and centering stops allow for accurate and fast specimen centering.
- Fast and easy insertion of the specimen is achieved through the ergonomic and open design.
- Extremely high gripping force (approx. 4x tensile force) guarantees secure specimen clamping.
- Large clamping length plus the resulting low surface pressure on the specimen make the grips ideal for tests on wire.

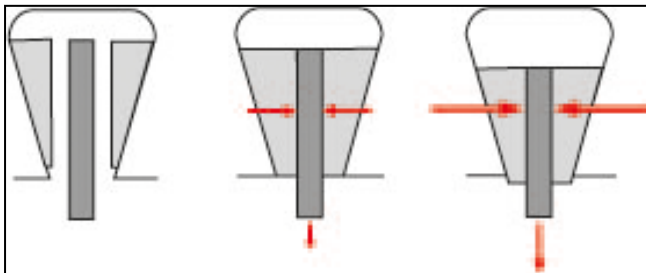
Product Information

Wedge grips type 8303 F_{max} 10 kN and type 8403 50 kN

Technical data

Type Item No.	8303 313492	8403 313610	
Test load F _{max}	10	50	kN
Dimensions			
Height	110	196	mm
Height with closed jaws	114	206	mm
Width	81	144	mm
Width with actuation lever	111	215	mm
Depth	74	88	mm
Depth with actuation lever	186	215	mm
Gripping area			
Height		77	
Width		30	
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.		
Opening width, max. with jaws	4.5	10	mm
Connection, stud	Ø 20	Ø 36	mm
Ambient temperature	-40 ... +250	-40 ... +250	°C
Weight per specimen grip, approx.	3	10	kg
Scope of delivery	2	2	pieces

CTA: 43050



Gripping process with self-tightening wedge grips

Product Information

Wedge grips type 8303 Fmax 10 kN and type 8403 50 kN

Accessories required

Flat jaws for type 8303

Scope of delivery: 1 set (= 4 pieces)

Application	Version	Specimen dimensions Flat specimen, thickness [mm]	Gripping area		Ambient temperature [°C]	Hardness	Item No.
			Height [mm]	Width [mm]			
Plastics, veneers, wire, thin metal sheet	Steel, fsc ¹⁾ 0.4 mm	0 ... 4.5	45	30	-40 ... +250	61 HRC	313494
Plastics, plywood, laminated paper, metal sheet	Steel, fsc ¹⁾ 0.75 mm	0 ... 4.5	45	30	-40 ... +250	61 HRC	313496
Plastics, wood laminated materials, plywood, sheet metal	Steel, fsc ¹⁾ 1.25 mm	0 ... 4.5	45	30	-40 ... +250	61 HRC	315649

1) Fsc = fish scale

Flat jaws for type 8403

Scope of delivery: 1 set (= 4 pieces)

Application	Version	Specimen dimensions Flat specimen, thickness [mm]	Gripping area		Ambient temperature [°C]	Hardness	Item No.
			Height [mm]	Width [mm]			
Plastics, veneers, thin metal sheet, wire	Steel, fsc ¹⁾ 0.4 mm	0 ... 10	77	30	-40 ... +250	61 HRC	313612
Plastics, plywood, laminated paper, metal sheet	Steel, fsc ¹⁾ 0.75 mm	0 ... 10	77	30	-40 ... +250	61 HRC	313614
Plastics, wood laminated materials, plywood, sheet metal	Steel, fsc ¹⁾ 1.25 mm	0 ... 10	77	30	-40 ... +250	61 HRC	315410

1) Fsc = fish scale