

Product Information

Wedge Grips type 8302, Fmax 10 / 20 kN

CTA: 39887 28965



Wedge grips type 8302, Fmax 10 kN

Applications

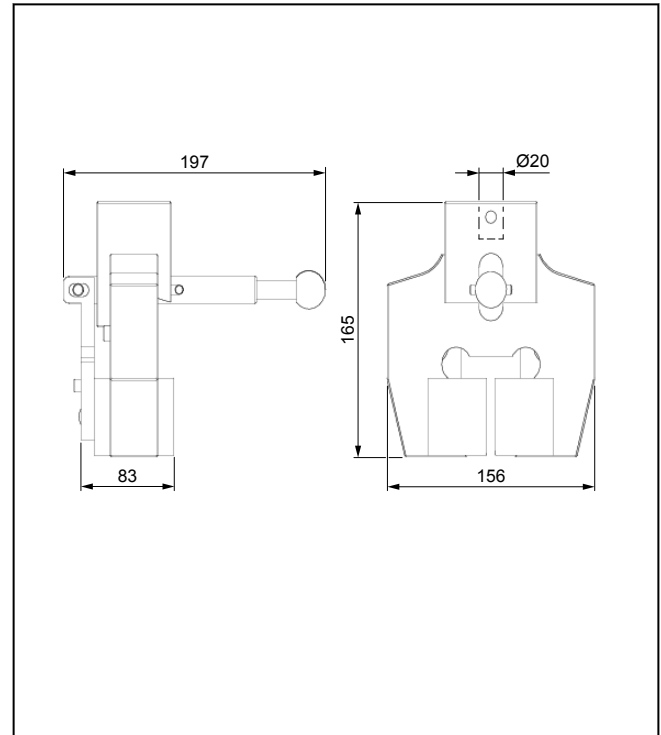
- Specimen material:
metals, plastics, wood
- Specimen shape:
round and flat specimens
- Type of loading:
tensile

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.



Wedge grips type 8302, with jaws Fmax 10 kN

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.
- 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 and centering stops allow for accurate and fast specimen centering.
- Centering stops in conjunction with jaw mountings enable fast, accurate specimen centering.
- Fast and easy insertion of the specimen is achieved through the ergonomic and open design.
- Reliable specimen gripping guaranteed even with varying applications. Large range of jaws allows optimum matching of the grips to your application.

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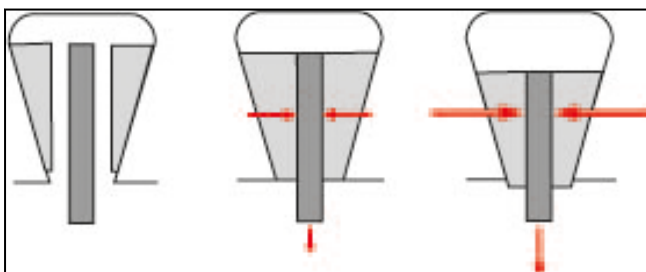
Technical data

Type	8302	8302	8302	8302	
Item No.	320458	318884	320460	318886	
Test load F _{max}	10	10	20	20	kN
Dimensions					
Height	165	165	177	177	mm
Width	156	156	156	156	mm
Depth	83	83	83	83	mm
Depth With actuation lever	197		197	197	mm
Depth with actuation lever		197			
Jaws supplied					
Gripping area					
Height	50	-	50	-	mm
Width	60	-	60	-	mm
Surface	F _{sc} ¹⁾ 0.75	-	F _{sc} ¹⁾ 0.75	-	mm
Hardness	61 HRC	-	61 HRC	-	
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.	The specimen must be gripped with at least 2/3 of the jaw height.	-	-	
Opening width, max. with jaws	12.5	-	12.5	-	mm
Opening width, max. with jaws, thickness 5 mm	-	0 ... 12.5/8 ... 20.5 ²⁾	-	12.5/20.5 ²⁾	mm
Weight per specimen grip, approx.	8	6.5	8	6.5	kg
Connection, stud	Ø 20	Ø 20	Ø 36	Ø 36	mm
Ambient temperature	-40 ... +250	-40 ... +250	-40 ... +250	-40 ... +250	°C
Scope of delivery	1	2	1	2	piece

1) F_{sc} = fish scale

2) Depending on the jaws used

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Gripping process with self-tightening wedge grips

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Accessories required

Flat jaws

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]			
Plastic, metal, wire, thin sheet metal, textiles, paper, wood...	Steel, fsc ¹⁾ 0.4 mm	0 ... 12	50	60	-40 ... +250	61 HRC	318888
Plastic, metal, wire, thin sheet metal, textiles, paper, wood...	Steel, fsc ¹⁾ 0.75 mm	0 ... 12	50	60	-40 ... +250	61 HRC	318890
Plastic, metal, wire, thin sheet metal, textiles, paper, wood...	Steel, fsc ¹⁾ 1.25 mm	0 ... 12	50	60	-40 ... +250	61 HRC	318892

1) Fsc = fish scale

Prism jaws

Application	Version	Specimen dimensions Round specimen, Ø [mm]	Gripping area [mm ²]	Ambient temperature [°C]	Hardness	Item No.
Round specimens made of metal, plastic, wood	Steel, St ¹⁾ 1.5 mm	12 ... 20	50	-40 ... +250	61 HRC	318992

1) St= saw tooth

Optional accessories

Jaw mountings

Scope of delivery: 1 set (= 4 pieces)

Description	Item number
Jaw mountings incl. centering stops for jaws type 8287, for 0 ... 12 mm specimen thickness ¹⁾	318894
Jaw mountings incl. centering stops for jaws type 8487, for 0 ... 12 mm specimen thickness ¹⁾	318896
Jaw mountings incl. centering stops for jaws type 8487, for 8 ... 20 mm specimen thickness ¹⁾	318898

1) When using jaws with 5 mm jaw thickness