

Product Information

Wedge grips type 8402 Fmax 30 kN and type 8402 Fmax 50 kN



Wedge grips type 8402, Fmax 50 kN



CTA: 39890 2896

- 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.

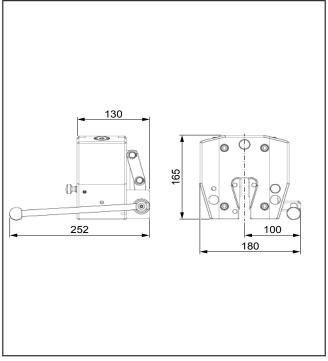
To generate the closing force the wedge grips are equipped with a pre-loaded spring. The gripping force is generated via wedge action and is proportional to the tensile force. The ratio is determined by the wedge angle.

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.



Wedge grips type 8402 Fmax 50 kN, general view

- 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.
- Reliable specimen gripping guaranteed even with varying applications. Large range of jaws allows optimum matching of the grips to your application.
- Special jaws are available for small specimens with short clamping lengths.
- Large opening width accommodates a wide range of applications.

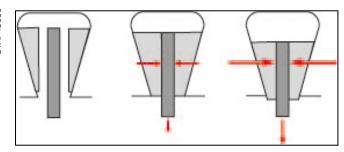


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Technical data

Туре	8402	8402			
Item No.	325312	353416			
Test load F _{max}	30	50	kN		
Dimensions					
Height	165	165	mm		
Width	160	160	mm		
Width with actuation lever	180	180	mm		
Depth	130	130	mm		
Depth with actuation lever	252	252	mm		
Specimen gripping	The specimen must be gripped over at least 2/3 of the jaw height.				
Opening width, max.	18	18	mm		
Weight per grip unit, approx.	13.5	13.5	kg		
Connection, stud	Ø 36	Ø 36	mm		
Ambient temperature	-40 to +250	-40 to +250	°C		
Scope of delivery	2	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	Item No.
Soft non-ferrous metals and steels, metal and plastic pipes with plugs	steel, fsc ¹⁾ 0.4 mm	0 to 17	60 x 60	-40 to +250	61 HRC	318797
Soft non-ferrous metals and steels, metal and plastic pipes with plugs	steel, fsc ¹⁾ 0.75 mm	0 to 17	60 x 60	-40 to +250	61 HRC	318799
Soft non-ferrous metals and steels, metal and plastic pipes with plugs	steel, fsc ¹⁾ 1.25 mm	0 to 17	60 x 60	-40 to +250	61 HRC	318801
Harder metals, pipes with plugs, components	steel, fsc ¹⁾ 0.4 mm	3 to 17	40 x 60	-40 to +250	61 HRC	318810



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Range of application	Version	Specimen thickness [mm]	Gripping area (H x W) [mm]	Ambient tempera- ture [°C]	Hardness	Item No.
Harder metals, pipes with plugs, components	steel, fsc ¹⁾ 0.75 mm	3 to 17	40 x 60	-40 to +250	61 HRC	318812
Harder metals, pipes with plugs, components	steel, fsc ¹⁾ 1.25 mm	3 to 17	40 x 60	-40 to +250	61 HRC	318814

¹⁾ Fsc = fish scale

Range of application	Version	Specimen thickness [mm]	Gripping area [mm]	Ambient tempera- ture [°C]	Hardness	Item No.
Reinforced plastics, dumbbell specimens	steel, st ¹⁾ 1.5 mm	Ø 4 to 12	60 x 60	-40 to +250	61 HRC	318990
Reinforced plastics, dumbbell specimens	steel, st ¹⁾ 1.5 mm	Ø 10 to 17	60 x 60	-40 to +250	61 HRC	318805

¹⁾ St= saw tooth

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	318793
Mounting kit for T-slotted shoe connector	318795
T-slotted shoe connector (mounting kit required)	314054