

Product Information

Wedge grips type 8502, Fmax 100 kN



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CTA: 43129 3991

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

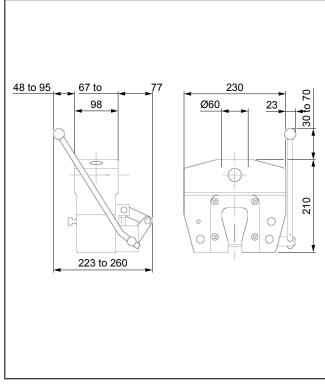
Function description

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.



Wedge grips type 8502 Fmax 100 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.



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Technical data

Туре	8502		
Item No.	320129		
Test load F _{max}	100	kN	
Dimensions			
Height	210	mm	
Width	253	mm	
Depth	88	mm	
Depth with actuation lever	291	mm	
Specimen gripping	The specimen must be gripped over at least 2/3 of the jaw height.		
Weight per grip unit, approx.	27	kg	
Connection, stud	Ø 60	mm	
Ambient temperature	-40 to +250	°C	
Scope of delivery	2	pieces	

Accessories required

Jaws and jaw mountings 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, reinforced plastics	steel, fsc ¹⁾ 0.4 mm	0 to 21	80 x 60	-40 to +250	61 HRC	320131
Soft non-ferrous metals and steels, metal and plastic pipes with plugs, reinforced plastics	steel, fsc ¹⁾ 0.75 mm	0 to 21	80 x 60	-40 to +250	61 HRC	320133
Soft non-ferrous metals and steels, metal and plastic pipes with plugs, reinforced plastics	steel, fsc ¹⁾ 1.25 mm	0 to 21	80 x 60	-40 to +250	61 HRC	320135
Soft non-ferrous metals and steels, metal and plastic pipes with plugs, reinforced plastics	steel, fsc ¹⁾ 0.4 mm	11 to 30	60 x 60	-40 to +250	61 HRC	318797
Soft non-ferrous metals and steels, metal and plastic pipes with plugs, reinforced plastics	steel, fsc ¹⁾ 0.75 mm	11 to 30	60 x 60	-40 to +250	61 HRC	318799
Soft non-ferrous metals and steels, metal and plastic pipes with plugs, reinforced plastics	steel, fsc ¹⁾ 1.25 mm	11 to 30	60 x 60	-40 to +250	61 HRC	318801
Round specimens (prism jaws)	steel, st ²⁾ 1.5 mm	Ø 4 to 10	80 ³⁾	-40 to +250	61 HRC	320137
Round specimens (prism jaws)	steel, st ²⁾ 1.5 mm	Ø 10 to 21	80 ³⁾	-40 to +250	61 HRC	320139



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Range of application	Version	Specimen thickness [mm]	Gripping area (H x W) [mm]	Ambient tempera- ture [°C]	Hardness	Item No.
Round specimens (prism jaws)	steel, st ²⁾ 1.5 mm	Ø 21 to 30	60 ³⁾	-40 to +250	61 HRC	318805
High-tensile wire, glassfiber-rein- forced plastics, carbon fiber mate- rials	carbide, dp ⁴⁾ 0.7 mm	0 to 21	45 x 30	-40 to +250	1250 HV	317392 ⁵⁾
High-tensile wire, glassfiber-rein- forced plastics, carbon fiber mate- rials	carbide, dp ⁴⁾ 0.7 mm	0 to 6	70 x 34	-40 to +250	1250 HV	318643 ⁶⁾⁷⁾

¹⁾ Fsc = fish scale

- 2) St= saw-tooth
- 3) Prism jaws (with V-groove), hence clamping length specified here
- 4) Dp = diamond pattern
- 5) Required: jaw mountings, dp, 0.7 mm, gripping area 45 x 30 mm
- 6) Requires: jaw mountings, dp, 0.7 mm, gripping area 70 x 34 mm
- 7) The jaws must only be changed using a tool.

Jaw mountings

Description	Item number
Jaw mounting for carbide jaws, dp ¹⁾ 0.7 mm, gripping area 45 x 30 mm, incl. centering stop Caution: restricted Fmax = 50kN!	320143
Jaw mounting for carbide jaws, dp ¹⁾ 0.7 mm, gripping area 70 x 34 mm, incl. centering stop	320145

¹⁾ Dp = diamond pattern

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	320141
T-slotted shoe connector (mounting kit required)	314054