Zwick Roell

Product Information

Screw grips, Type 8133, Fmax 1 kN





Screw grips type 8133 with stepless and stepped adjustment for opposing jaw, Fmax 1 $\ensuremath{\mathsf{kN}}$

Applications

- Specimen material: Metal, plastics, textile, paper, wood
- Specimen shape: Round and flat specimens, asymmetrical specimens, sealed and glued specimens
- Type of loading: Tensile, compression, alternating load

Function description

This screw grip is a one-sided closing specimen grip. A lead screw is used to open and close the grips, as well as apply gripping force before the test.

The clamping unit can be adjusted in 1 mm increments using a tool to change the gripping range.

The opposing jaw is different depending on type:

- Step-by-step adjustable: securely mounted, can be adjusted in 1 mm increments with a tool
- Stepless and step-by-step adjustable: adjustable via lead screw, additionally adjustable in 1 mm increments with a tool



Screw grips type 8133 with stepped adjustment for opposing jaw, Fmax 1 $\rm kN$

Advantages and features

- Adjustable opposing jaw for fast, easy testing, including joined (asymmetrical) specimens
- If the test configuration changes the jaws can be changed quickly and easily no tools required. The jaws are centered automatically.
- The use of ball bearings enables secure gripping of the specimen even at low operating forces.
- Large opening width enables flexibility in use.
- Reliable specimen gripping guaranteed even with varying applications. Large range of jaws allows optimum matching of the grips to your application.
- Even specimens prone to shrinkage are securely held via automatic re-tightening by means of a laminated plate spring
- The grips are easy to operate in a temperature chamber and reach the test temperature quickly thanks to their very low mass.
- Precise test results combined with high number of cycles achieved through centric insertion of specimen using easily adjustable centering stop.
- Ergonomic, open design for fast, easy specimen insertion and clamping



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Technical data

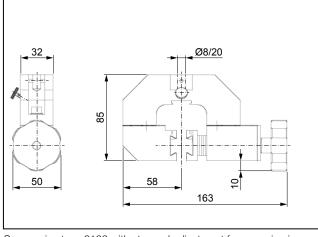
Item No.	316264	316526	014764	014766	317660	014768	
Туре	8133	8133	8133	8133	8133	8133	
Opposing jaw adjustment	stepped	stepped	stepped	stepped	stepped and stepl- ess	stepped and stepl- ess	
Test load F _{max}	1	1	1	1	1	1	kΝ
Dimensions							
Height							
Without overhang	85	85	85	85	85	85	mm
With overhang	95	95	95	95	95	95	mm
Width	163	163	163	163	195	195	mm
Depth							
Without hand wheel	32	32	32	32	32	32	mm
With hand wheel	50	50	50	50	50	50	mm
Opening width, max.	18 ¹⁾	18 ¹⁾	18 ¹⁾	18 ¹⁾	18 ²⁾	18 ²⁾	mm
Specimen gripping	The specimen must be gripped over at least 2/3 of the jaw height.						
Weight per specimen grip, approx.	0.55	0.55	0.67	0.67	0.63	0.81	kg
Connection, pin	Ø 8	Ø 8	Ø 20	Ø 20	Ø 8	Ø 20	mm
Ambient temperature	-70 to +250 ³⁾	-70 to +250 ³⁾	-70 to +250 ³⁾	-70 to +250 ³⁾	-70 to +250 ³⁾	-70 to +250 ³⁾	°C
Scope of delivery	2	1	2	1	2	2	piec es

1) This standard opening width is the product of using grip inserts 5mm thick and opposing jaw with 9mm outward adjustment. In the case of symmetrically clamped specimens it is also the maximum specimen thickness.

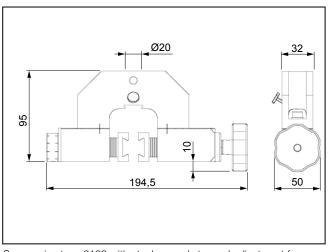
2) This standard opening width is the product of using grip inserts 5mm thick and opposing jaw in home position (= markings coincide).

³⁾ The temperature range may be limited due to grip inserts with a smaller temperature range.





Screw grips type 8133 with stepped adjustment for opposing jaw, Fmax 1 $\rm kN$



Screw grips type 8133 with stepless and stepped adjustment for opposing jaw, Fmax 1 $\ensuremath{\mathsf{kN}}$



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Screw grips, Type 8133, Fmax 1 kN

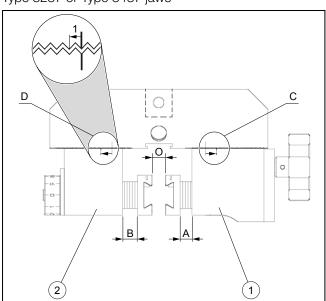
Optional accessories

Description	Item number
Spacers, height 20 mm, for increasing the free space between grip insert and grip body. Scope of delivery 1 pair 1 pair required per grip unit	316561
Centering stops for centric clamping of flat and round specimens (0 - 60 mm). Scope of delivery: 1 pair, sufficient for 1 pair of grips	316355
Clamping aid for centric clamping of ropes/wire.	316443

Accessories required

Jaws required for Type 8133:

Type 8287 or Type 8487 jaws



Adjustment ranges of screw grips and opening width

- 1 Clamping unit
- 2 Opposing jaw
- A Clamping unit travel
- B Stepless adjustment range, only for opposing jaws with stepless adjustment
- C Stepped adjustment range of clamping unit: the clamping unit can be released via screws and moved away from the initial position in 1mm increments.
- D Stepped adjustment range of opposing jaw: same adjustment capability as the clamping unit (C)
- Opening width without jaws