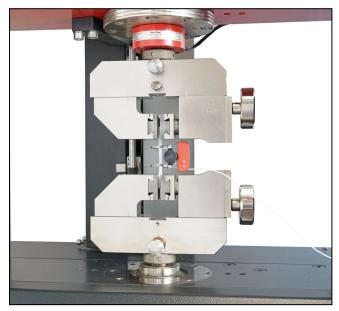


# **Product Information**

Screw grips, Type 8253, Fmax 2.5 kN



Screw grips type 8253 with opposing jaw adjustable in steps, Fmax 2.5 kN (Item No. 316322)



- 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

### **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





# **Product Information**

Screw grips, Type 8253, Fmax 2.5 kN

#### **Technical data**

Item No.	316322	316406	317656	
Туре	8253	8253	8253	
Operating principle/identification	In steps	In steps	Stepless and in steps	
Test load F <sub>max</sub>	2.5	2.5	2.5	kN
Dimensions				
Height				
Without overhang	95	95	95	mm
With overhang	100	100	100	mm
Width	196	196	201	mm
Depth				
Without hand wheel	32	32	32	mm
With hand wheel	50	50	50	mm
Gripping area				
Height	30	30	30	mm
Width	60	60	60	mm
Opening width, max. with jaws, thickness 5 mm	18 <sup>1)</sup>	18 <sup>1)</sup>	18 <sup>2)</sup>	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.			
Specimen dimensions				
Flat specimen, thickness	0 18	0 18	0 18	mm
Round specimen, Ø	0 18	0 18	0 18	mm
Weight per specimen grip, approx.	1.2	1.2	1.3	kg
Connection, stud	Ø 20	Ø 20	Ø 20	mm
Ambient temperature	-70 +250 <sup>3)</sup>	-70 +250 <sup>3)</sup>	-70 +250 <sup>3)</sup>	°C
Scope of delivery	2	1	2	pieces

<sup>1)</sup> This opening width is a result of using grip inserts with 5 mm jaw strength and an opposing jaw that is outwardly adjusted by 9 mm. This is also the maximum specimen thickness for symmetrically tensioned specimens.

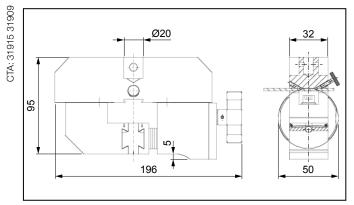
<sup>2)</sup> This standard opening width is a result of using jaws with 5 mm jaw thickness and an opposing jaw in its initial position (= adjustment marks coincide)

<sup>3)</sup> The ambient temperature may be limited by a smaller jaw temperature range.

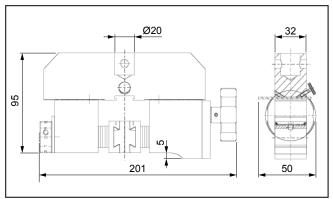


# **Product Information**

Screw grips, Type 8253, Fmax 2.5 kN



Screw grip type 8253 with opposing jaw adjustable in steps (Item No. 316322/316406)



Screw grip type 8253 with opposing jaw adjustable in steps and steplessly (Item No. 317656)

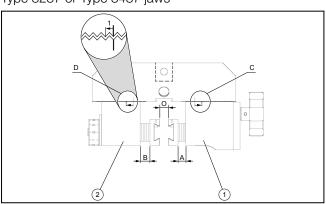
# **Optional accessories**

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	316559
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. Can be used with grip inserts up to 30 mm high.	316443

# **Accessories required**

## Jaws required for Type 8253:

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