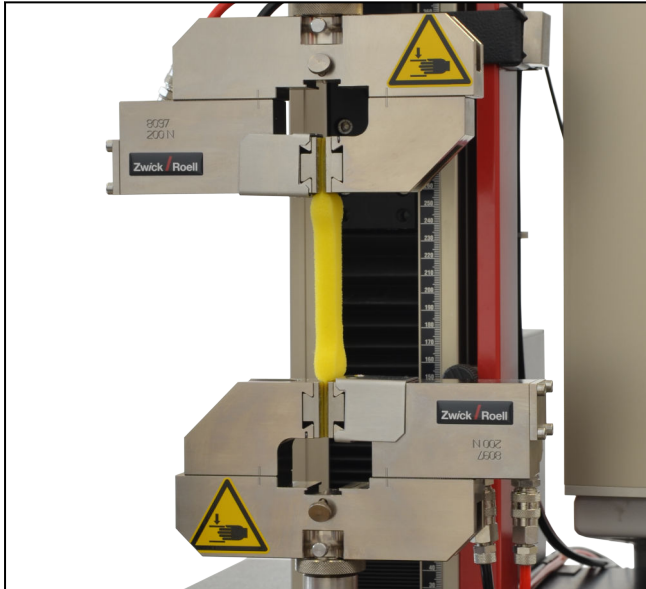


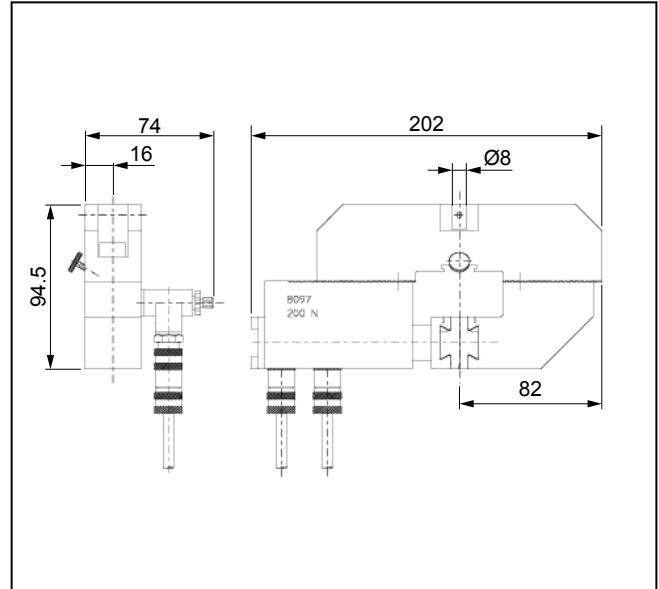
## Product Information

### Pneumatic grips type 8097, Fmax 200 N

CTA: 73167 33335



Pneumatic grips type 8097 Fmax 200 N, opposing jaw with stepped adjustment



Pneumatic grips type 8097 Fmax 200 N, general view

#### Applications

- Specimen material:  
metals, plastics, textiles, paper
- Specimen shape:  
round and flat specimens, asymmetrical specimens
- Type of loading:  
tensile, compression, alternating load

#### Function description

Pneumatic grips are single-sided closing and can be used for symmetrical and asymmetrical gripping.

The grips are opened and closed pneumatically and also the gripping force before the test is applied pneumatically.

The gripping pressure of the specimen grip can be set steplessly and reproducibly via a pneumatic control unit. The specimen is held securely and jaw breaks are prevented during the test.

The opening and closing of the specimen grips can be controlled by foot switches or the remote control of the materials testing machine, providing great operating comfort.

The opposing jaw varies according to type:

- stepped adjustment: fixed mounting, can be adjusted in 1 mm steps (tool required)
- stepped and stepless adjustment: adjustment via screw drive, additionally adjustable in 1 mm steps by means of a tool.

#### Advantages and features

- Constant pneumatic pressure allows even specimens prone to shrinkage to be held securely.
- Constant gripping force enables repeatable test results to be achieved.
- The jaws can be changed quickly and easily for different applications - no tools required. The jaws are centered automatically.
- Precise test results combined with high number of cycles achieved through centric insertion of specimen using easily adjustable centering stop.
- Adjustable opposing jaw for fast, easy testing, including joined (asymmetrical) specimens
- Ergonomic, open design for fast, easy specimen insertion and clamping

## Product Information

### Pneumatic grips type 8097, Fmax 200 N

#### Technical data

Item No. Type	316690 8097	316692 8097	
Operating principle/feature	Opposing jaw can be adjusted step by step	opposing jaw with stepless and stepped adjustment	
Test load F <sub>max</sub>	0.2	0.2	kN
Gripping force, max. at 6 bar	340	340	N
Gripping force, max. at 10 bar	570	570	N
Pressure, min.	0.5	0.5	bar
Pressure, max.	10	10	bar
Dimensions			
Height	95	95	mm
Width	207	207	mm
Depth	32	32	mm
Depth with connection unit	74	74	mm
Clamping travel of pneumatically operated side	10.5	10.5	mm
Opening width, max. <sup>1)</sup>	20	20	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.		
Weight per grip unit, approx.	1.07	1.16	kg
Connection, stud	Ø 8	Ø 8	mm
Ambient temperature	+10 to +35	+10 to +35	°C
Scope of delivery	2	2	pieces
Specimen gripping	The specimen must be gripped over at least 2/3 of the jaw height.		

<sup>1)</sup> The opening width arises when using jaws with 5mm jaw thickness.

#### Accessories required

##### Jaws:

Type 8287 or Type 8487

##### Pneumatic control unit

##### Optional accessories

##### Centering stop and Insertion aid

Description	Item number
Centering stops for centered clamping of flat and round specimens (0 - 60 mm), adjustable to scale. Scope of delivery: 2 pieces	<b>316355</b>
Insertion aid for centered clamping of ropes/wire/threads. Can only be used with jaws with max. height 30 mm. Scope of delivery: 2 pieces	<b>316443</b>

Product Information

Pneumatic grips type 8097, Fmax 200 N

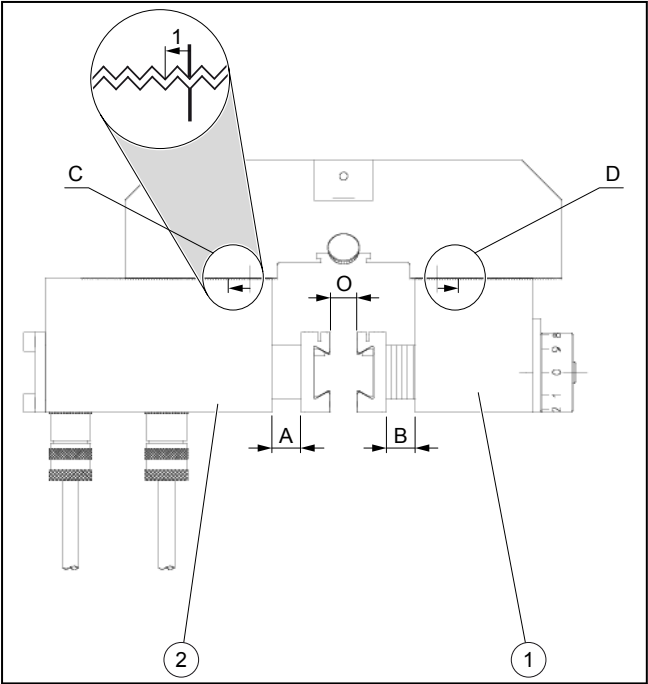
Spacer

Description	Item number
Spacers, 20 mm, for increasing the free space between clamping zone and grip body. Scope of delivery: 2 pieces	316559

Pressure amplifier

Description	Item number
Pressure amplifier for increasing operating pressure, max. input pressure 10 bar, pressure ratio 1:2, flow rate 900l/min, output pressure 2 - 10 bar. For installation in control unit line.	315016
Pressure amplifier for increasing operating pressure, max. input pressure 10 bar, pressure ratio 1:2, flow rate 400l/min, output pressure 2 - 20 bar. For installation in control unit line.	315018

CTA: 39539



Adjustment ranges and opening width of Types 8097, 8197 and 8297 pneumatic grips

- 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 unit can be released via screws and adjusted from the basic setting in 1mm increments.
- D Stepped adjustment range of opposing jaw. This has the same adjustment capability as the clamping unit (C).
- O Opening width without jaws