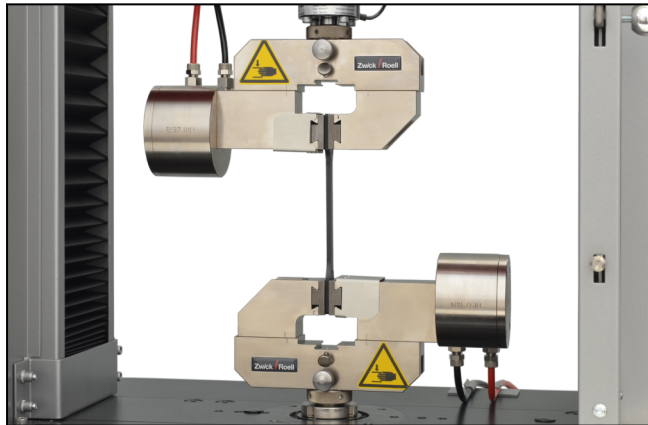


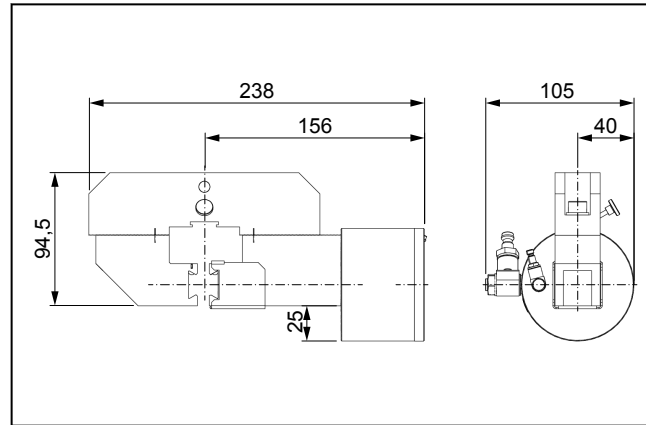
Product Information

Pneumatic grips type 8197 / F8197, Fmax 1 kN

CTA: 107217 279198



Pneumatic grips type 8197 Fmax 1 kN, opposing jaw with stepped adjustment



Pneumatic grips type 8197 Fmax 1 kN, opposing jaw with stepped adjustment, general view

Applications

- Specimen material:
Metal, plastics, textiles, paper, fleece, elastomers, wood, insulation
- Specimen shape:
Round and flat specimens, asymmetrical specimens
- Type of loading:
Tensile, compression, alternating load

Function description

The pneumatic grip is a single action grip and can be used for symmetrical and asymmetrical gripping.

The gripping pressure for the specimen grip can be set steplessly and reproducibly via a pneumatic control unit and optionally via the testXpert III testing software. The specimen is held securely and jaw breaks are prevented during the test.

The specimen grip is opened and closed via buttons on the testing machine. The optional foot pedal unit or machine remote control can be used for additional operating convenience.

The opposing jaw varies according to type:

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

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Differentiation in two versions

Pneumatic closing and gripping

- For specimen grips that close with pure pneumatic actuation, the closing motion only occurs as long as the closing button is activated. If the button is released during the closing process, the specimen grip automatically switches back to the safe, open position. The position is only held after the specimen grips are fully closed. The preset gripping pressure is only applied once the test starts. All pneumatic grips are available in this version.

Spring-closing and pneumatic gripping

- Spring-closing specimen grips feature a technological difference between closing and gripping. With a brief touch of the closing button, the built-in spring closes the specimen grips very quickly with a low force of < 150 N. The specimen is therefore quickly clamped and operating times are reduced. The preselected gripping pressure is applied when the test starts. Seven selected specimen grips in a force range ≤ 2.5 kN are available in this version.

Technical data

Item No. Type	1106783 8197	1106829 F8197	1106825 8197	1106784 8197	
Operating principle/identification	Opposing jaw with stepped adjustment	Opposing jaw with stepped adjustment	Opposing jaw with stepped and stepless adjustment	Opposing jaw with stepped and stepless adjustment	
Test load F _{max}	1	1	1	1	kN
Operating pressure The operating pressure depends on the upstream components.	0.5 ... 10	0.5 ... 10	0.5 ... 10	0.5 ... 10	bar
Piston area	28.3	28.3	28.3	28.3	cm ²
Gripping force at 6 bar	1.7	2.8	1.7	1.7	kN
Gripping force at 10 bar	2.8	2.8	2.8	2.8	kN
Opening width with jaws, 5 mm thickness ¹⁾	20	20	20	20	mm
Gripping travel of pneumatically operated side	10.5	10.5	10.5	10.5	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.				
Dimensions					
Height	95	95	95	95	mm
Installation height	120	120	120	120	mm
Width	238	238	244	244	mm
Depth	80	80	80	80	mm
Depth with connection unit	106	106	106	106	mm
Connection, hole	Ø 20	Ø 20	Ø 20	Ø 20	mm
Weight per specimen grip, approx.	1.67	1.68	1.68	1.76	kg
Ambient temperature	+10 ... +35	+10 ... +35	+10 ... +35	+10 ... +35	°C
Scope of delivery	2	2	1	2	piece(s)

¹⁾ The opening width is the result of using jaws with 5 mm jaw thickness.

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Accessories required

Pneumatic hoses (1x required)

Description	ArticleNumber
Set of pneumatic hoses for connecting a pair of pneumatic grips; including hose guiding for strain relief	1112640

Pneumatic control unit

See section 4.6 Accessories

Optional accessories

Jaws

Type 8287 or type 8487

Centering stop and Insertion aid

Description	ArticleNumber
Centering stops for centered clamping of flat and round specimens (0 - 60 mm), adjustable to scale. Scope of delivery: 2 pieces	316355
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	316443

Spacer

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

Pressure amplifier

Description	ArticleNumber
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