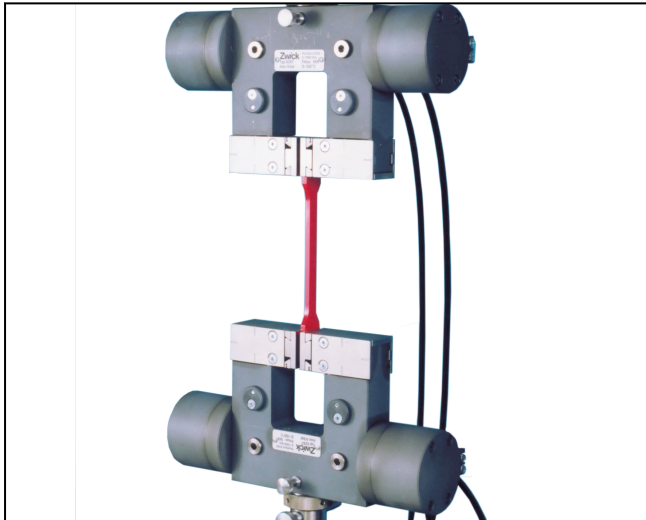


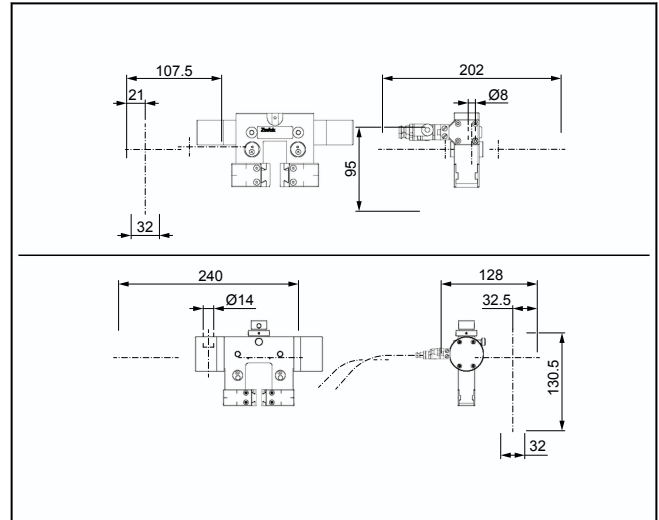
Product Information

Pneumatic grips, Type 8187 (Fmax 200 N) and Type 8287 (Fmax 1 kN)

CTA: 39562 39563 39564



Type 8287 pneumatic grips, Fmax 1 kN



Pneumatic grips, Type 8287, Fmax 200 N and Fmax 1 kN: general view

Applications

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

Function description

Pneumatic grips are double acting and can be used for symmetrical gripping.

Pneumatic specimen grips are ideal for clamping-sensitive materials or if a high specimen throughput is required. The gripping force always remains constant, regardless of test load.

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.

Double-actuator pneumatic grips always close symmetrically with respect to the tensile axis. This means the

specimen is clamped in a precise axial position. It is not necessary to set the specimen thickness.

The maximum opening width/gripping force can be changed by repositioning a pin:

- large opening width -> low gripping force
- small opening width -> high gripping force

The interchangeable jaws make it possible to adapt the specimen grip so it can grip a variety of materials.

The specimen grip has a large opening width that makes the testing of thicker specimens also possible.

Advantages and features

- The symmetrically closing jaws save time required for adjusting to varying specimen thicknesses and ensure that the specimen is held exactly in the test axis.
- The jaws can be changed quickly and easily for different applications - no tools required. The jaws are centered automatically.
- Constant gripping force enables repeatable test results to be achieved.
- Constant pneumatic pressure allows even specimens prone to shrinkage to be held securely.
- Ergonomic, open design for fast, easy specimen insertion and clamping

Product Information

Pneumatic grips, Type 8187 (F_{max} 200 N) and Type 8287 (F_{max} 1 kN)

Technical data

Item No.	1106792	1106793	
Type	8187	8287	
Operating principle/identification	Opening width adjustable via lever	Opening width adjustable via lever	
Test load F _{max}	0.2/0.1 ¹⁾	1/0.5 ¹⁾	kN
Operating pressure	0.5 ... 10	1 ... 10	bar
The operating pressure depends on the upstream components.			
Gripping force at 6 bar			
Opening width range 1, approx.	0.2		kN
Opening width range 2, approx.	0.1		kN
Gripping force at 10 bar			
Opening width range 1, approx.	0.33		kN
Opening width range 2, approx.	0.16		kN
Gripping forceAt 6 bar			
Opening width range 1, approx.		1.1	
Opening width range 2, approx.		0.6	
Gripping forceAt 10 bar			
Opening width range 1, approx.		1.8	
Opening width range 2, approx.		1.1	
Opening width with jaws, 5 mm thickness			
Range 1	0 ... 12 ²⁾	0 ... 12 ²⁾	mm
Range 2	0 ... 22 ²⁾	0 ... 22 ²⁾	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.		
Dimensions			
Height	95	160	mm
Width	202	240	mm
Depth	42	65	mm
Depthwith connection unit	88	108	mm
Connection, hole	Ø 8	Ø 20	mm
Weight per specimen grip, approx.	1	2.8	kg
Ambient temperature	+10 ... +35	+10 ... +35	°C
Scope of delivery	2	2	piece(s)

1) The gripping stroke is adjustable from 0 - 12 mm to 0 - 22 mm. This reduces the gripping force by 50 % to 100 N and 500 N.

2) The opening width is the result of using jaw inserts with 5 mm jaw thickness.

Accessories required

Pneumatic hoses (1x required)

Description	ArticleNumber
Set of pneumatic hoses for connecting a pair of pneumatic grips	1112640

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Pneumatic control unit

See section 4.6 Accessories

Jaws

Type 8287 or type 8487

Optional accessories

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