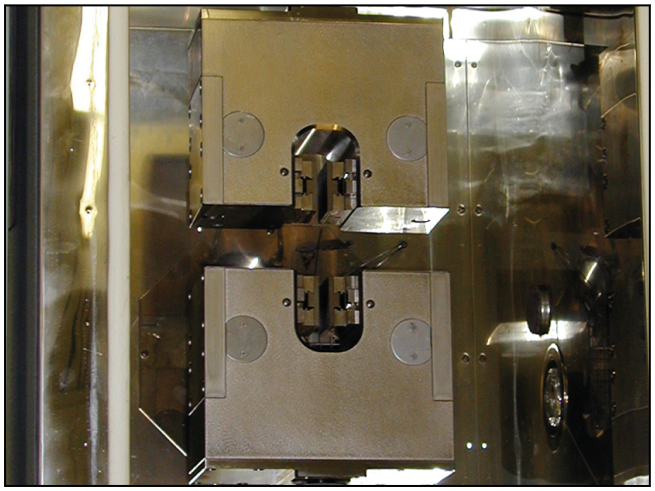
Zwick / Roell

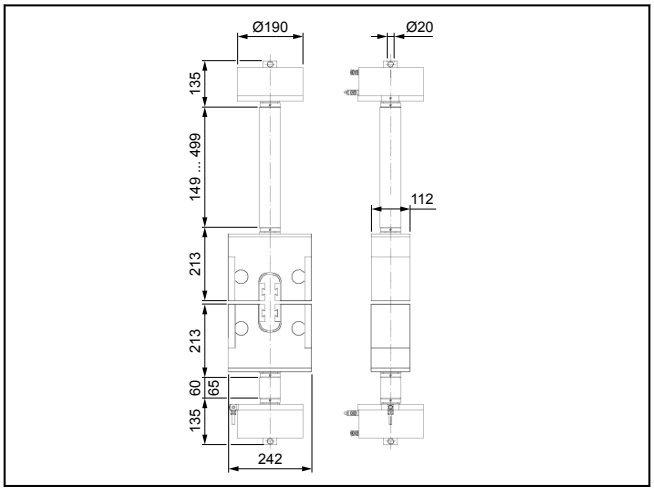
Product Information

Pneumatic grips, Type 8397 (Fmax 10 kN) and Type 8497 (Fmax 20 kN)

CTA: 39611 39620



Pneumatic grips type 8397, Fmax 10 kN, double-actuator



Overview of pneumatic grips type 8397, Fmax 10 kN, double-actuator

Applications

- Specimen material:
  Plastics, metal, foil/film, textiles, paper, elastomers, insulation, wood
- Specimen shape:
  Round and flat specimens
- Type of loading:
  Tensile, compression, alternating load

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 specimen grips is intended for use in temperature chambers and has connection units with integrated compressed air supply. A drip tray directs developing condensation water out of the test area.

The gripping pressure for the specimen grip can be set steplessly and reproducibly viaa pneumatic control unit and optionally via the testXpert III testing software. The specimenis 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 closing force is initialized via a centrally positioned pneumatic actuator. It transfers the closing movement via a steering lever to the symmetrical closing jaws.

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.
- Precise test results combined with high number of cycles achieved through centric insertion of specimen using easily adjustable centering stop.
- Constant gripping force enables repeatable test results to be achieved.
- Constant pneumatic pressure allows even specimens prone to shrinkage to be held securely.
- Save time by attaching small specimen grips and test fixtures to large specimen grips quickly and easily via T-slot systems. The precise alignment ensures reliable test results.
- Ergonomic, open design for fast, easy specimen insertion and clamping

Zwick / Roell

Product Information

Pneumatic grips, Type 8397 (Fmax 10 kN) and Type 8497 (Fmax 20 kN)

Technical data

Item No. Type	1106807 8397	1106808 8497	
Operating principle/identification	For temperature chamber	For temperature chamber	
Test load F_{max}	10	20	kN
Operating pressure The operating pressure depends on the upstream components.	1.5 ... 6	1.5 ... 6	bar
Gripping force at 6 bar	25	35	kN
Opening width with jaws, 5 mm thickness[1)]	25	25	mm
Gripping travel	10	10	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.		
Dimensions			
Height	213	213	mm
Width	242	242	mm
Depth	112	112	mm
Connection, hole	Ø 20	Ø 36	mm
Weight per specimen grip, approx.	14	14	kg
Ambient temperature	-70 ... +250	-70 ... +250	°C
Scope of delivery	2	2	piece(s)

1) The opening width is the result of using jaws 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**

Pneumatic control unit

See section 4.6 Accessories

Jaws

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**

Product Information

Pneumatic grips, Type 8397 (Fmax 10 kN) and Type 8497 (Fmax 20 kN)

Mounting unit

Description	ArticleNumber
Mounting unit for Types 8397 and 8497 pneumatic grips • Thread M28x1.5 • Bush, Ø 16 H7, for attaching smaller load cells (Fmax < 30 kN), specimen grips or test fixtures (mounting stud and adapter required) Scope of delivery: 2 pieces Jaw mounting required (Item No. 317615)	**317617**