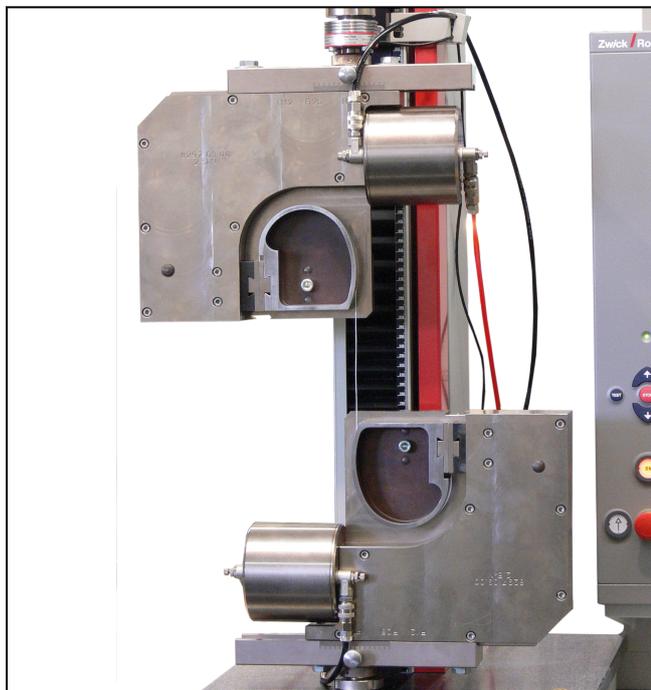


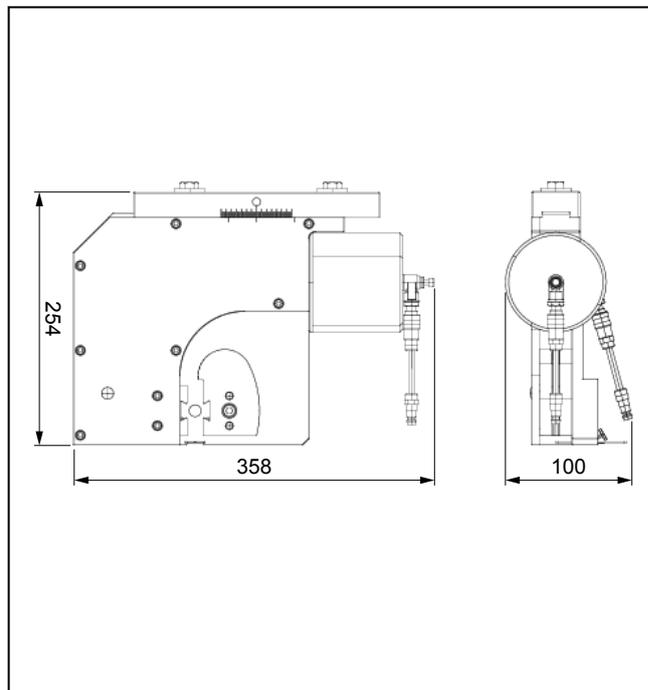
## Product Information

### Capstan grips type 8297 Fmax 2.5 kN, pneumatic

CTA: 40120 40173



Capstan grips type 8297, Fmax 2.5 kN



Capstan grips type 8297 Fmax 2.5 kN, general view

#### Applications

- Specimen material:  
textiles, plastics, metals, glass fiber
- Specimen shape:  
high-strength yarns, multifilaments, cord, metal strand, wire
- Type of loading:  
tensile

#### Function description

These pneumatic grips for yarn and tire cord are single-actuator grips for clamping fibrous or filamentary tensile specimens.

The load-reduction curve with 180° deflection gently reduces the tensile force before the clamping point. Pneumatic clamping ensures constant gripping force with easy, reproducible adjustment. The specimen is held securely and jaw breaks during the test are avoided.

The force reduction curve with 180° deflection allows a defined grip-to-grip separation to be assumed, eliminating the need for an extensometer.

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. This ensures safe clamping of a variety of materials. 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 grips are designed for tests to ISO/DIS 3341 (< 500 tex) and ISO 3341-2000.

#### Advantages and features

- Secure holding of the specimen ensures reliable test results, even with specimens prone to shrinkage.
- High specimen throughput thanks to quick specimen insertion and centering via guide groove.
- Fast, easy two-handed specimen change - grips operated via foot control unit.
- The load-reduction curve ensures gentle gripping with no jaw breaks.
- Interchangeable load reduction curves enable optimum adaptation of the specimen grips to accommodate different specimen materials.
- The jaws can be changed quickly and easily for different applications - no tools required. The jaws are centered automatically.

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## Product Information

Capstan grips type 8297 F<sub>max</sub> 2.5 kN, pneumatic

### Technical data

Item No.	1106816	
Type	8297	
Operating principle/identification	Pneumatic, single action	
Test load F <sub>max</sub>	2.5	kN
Operating pressure	1.5 ... 10	bar
The operating pressure depends on the upstream components.		
Gripping force at 6 bar	16	kN
Gripping force at 10 bar	27	kN
Opening width	5	mm
Dimensions		
Height	254	mm
Width	350	mm
Depth	100	mm
Depth with connection unit	123	mm
Connection, hole	Ø 20	mm
Weight per specimen grip, approx.	7.5	kg
Ambient temperature	+10 ... +35	°C
Scope of delivery	2	piece(s)

### 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

#### Flat jaws

Scope of delivery: 1 set (= 4 pieces)

Application	Version	Clamping surface		Ambient temperature [°C]	Hardness	Item No.
		Height [mm]	Width [mm]			
Plastic yarn, high-strength yarn	Steel, smooth	50	32	-70 ... +250	61 HRC	318696
Glass fiber, steel cable	Steel, fsc <sup>1)</sup> 0.4 mm	50	32	-70 ... +250	61 HRC	318698
Yarns	Vulkollan, smooth	50	32	-15 ... +80	88 ± 3 Shore (A)	318700

1) Fsc = fish scale

## Product Information

Capstan grips type 8297 Fmax 2.5 kN, pneumatic

### Load-reduction curves (1 x required)

All load-reduction curves are made of polished tempered steel.

Description	ArticleNumber
Radius 12.5 mm, for yarns	<b>320851</b>
Radius 25 mm, for plastic yarns	<b>320853</b>
Radius 45 mm, for high-strength yarns, stranded (litz) wire, glass fiber	<b>320855</b>