Zwick Roell

Product Information

Capstan grips Type 8314 Fmax 10 kN and Type 8315 Fmax 20 kN, pneumatic





Capstan grips type 8314, Fmax 10 kN

Applications

- Specimen material: plastics, textiles
- Specimen shape:
- tape, yarnType of loading: tensile

Function description

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

Force reduction curve employing 360° deflection carefully reduces the tensile force on the clamping position. The pneumatic clamping ensures a constant gripping force and can be easily and reproducible set. The specimen is held securely, jaw breaks are avoided.

The gripping pressure for the specimen grip can be set steplessly and reproducibly via a pneumatic control



Capstan grips type 8314 Fmax 10 kN, general view

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.

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.
- The load-reduction curve ensures gentle gripping with no jaw breaks.
- The jaws can be changed quickly and easily for different applications no tools required. The jaws are centered automatically.



Product Information

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Technical data

Item No.	1106819	1106820	
Туре	8314	8315	
Operating principle/identification	Pneumatic,	single action	
Test load F _{max}	10	20	kN
Operating pressure	0.5 10	0.5 10	bar
The operating pressure depends on the upstream components.			
Gripping force at 6 bar	10.8	10.8	kN
Gripping force at 10 bar	40	40	kN
Opening width with jaws, 5 mm thick- ness ¹⁾	11	10	mm
Gripping travel	14	10	mm
Gripping range with central insertion	4	5	mm
Dimensions			
Height	241	224	mm
Height with overhang	292	-	mm
Width	226	310	mm
Depth	172	250	mm
Depthwith connection unit	198	209	mm
Connection, hole	Ø 20	Ø 36	mm
Weight per specimen grip, approx.	13	19.5	kg
Ambient temperature	+10 +35	+10 +35	°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

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 4001/min, output pressure 2 - 20 bar. For installation in control unit line.	315018		