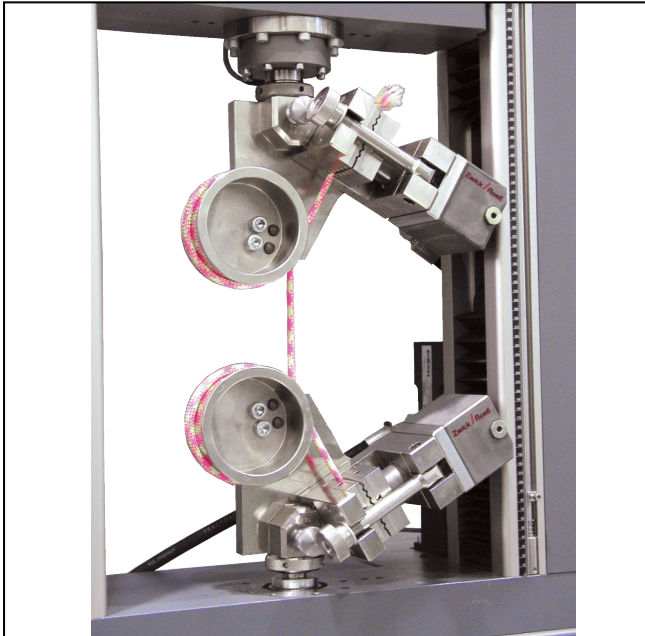


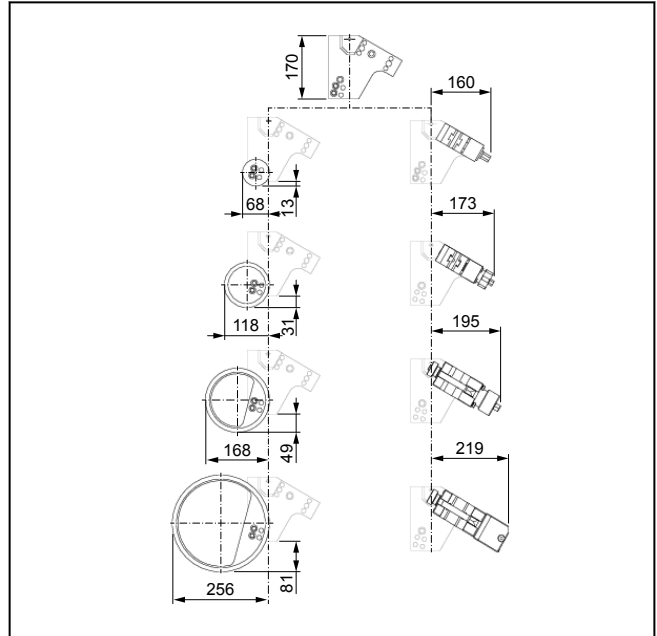
## Product Information

Grips for Ropes Types 8370 Fmax 10 kN and 8470 Fmax 50 kN

CTA: 40603 32386



Type 8470 grips for ropes, Fmax 50 kN



Type 8470 grips for ropes, Fmax 50 kN: dimensions

### Applications

- Specimen material:  
plastics, textiles, metals
- Specimen shape:  
ropes, high-strength yarns, cables, wire
- Type of loading:  
tensile

### Function description

The rope grips can be used for testing dimensionally unstable tensile specimens.

The specimen is passed around the load reduction roller one or more times. The resulting frictional force reduces the tensile stress before the clamp at the end of the rope sufficiently to avoid jaw breaks.

Clamping can be mechanical or hydraulic.

These rope grips feature modular design to enable optimum adaptation to accommodate the specimen material. They comprise a carrier plate, a clamping system, jaws and load-reduction rollers:

- large-diameter roller for rigid ropes (wire, wire ropes)
- small-diameter roller for flexible ropes (natural fiber, man-made ropes).

The specimen is automatically centered on insertion by the predetermined groove in the load reduction roller.

### Advantages and features

- Looping the specimen around the load reduction roller ensures gentle clamping without jaw breaks.
- Fast, easy insertion and centering of the specimen is made possible by a guide groove in the load reduction roller.
- Interchangeable load reduction rollers enable optimum adaptation of the specimen grips to accommodate different specimen materials.
- If the application changes the jaws can be changed over quickly and easily - no tools required. The jaws are centered automatically.
- The hydraulic clamping ensures precisely defined, reproducible gripping pressure.
- High gripping forces ensure secure clamping of the specimen. The need for specimen pre-treatment such as coating the ends is eliminated.

## Product Information

Grips for Ropes Types 8370 F<sub>max</sub> 10 kN and 8470 F<sub>max</sub> 50 kN

### Accessories required

#### Carrier Plate (1 Required)

Item No.	324566 <sup>1)</sup>	324568 <sup>1)</sup>	
Type	8370	8470	
Test load F <sub>max</sub>	10	50	kN
Connection, pin	Ø 20	Ø 36	mm
Weight per carrier plate, approx.	3.6	3.6	kg
Ambient temperature	-70 to +250	-70 to +250	°C
Scope of delivery	2	2	pieces

1) Only in connection with load cell Xforce K

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

Item No.	318682	318684	318686	353415 <sup>1)</sup>	
Test load F <sub>max</sub>	50	50	50	50	kN
Loop diameter	60	110	160	250	mm
Outside diameter	72	122	172	260	mm
Depth	59	59	59	59	mm
Weight, approx.	1.2	1.7	2	3.5	kg
Ambient temperature	-70 to +250	-70 to +250	-70 to +250	-70 to +250	°C
Range of application	Flexible man-made and natural-fiber ropes	Rigid man-made and natural-fiber ropes, flexible wire-ropes	Rigid wire ropes	High-strength and rigid ropes and yarns, assemblages	
Scope of delivery	2	2	2	2	pieces

1) Note: this load-reduction roller has no guide groove in the tensile axis. The use of non-contact extensometers is therefore only possible to a limited extent.

#### Screw end-clamping/hydraulic clamping element (1 x required)

Item No.	324570	324572	324574	324576 <sup>1)2)</sup>	
Description	Screw end-clamping	Screw end-clamping unit with force amplification (40 kN)	Screw end-clamping unit with force amplification (80 kN)	Hydraulic clamping element (closing force 80 kN)	
Test load F <sub>max</sub>	10	50	50	50	kN
Test load F <sub>max</sub> with multi-filaments	-	-	30 kN	-	
Closing force	16.5 N at 40 Nm tightening torque	42 kN at 40 Nm tightening torque	80 kN at 90 Nm tightening torque	80 kN at 240 bar, 50 kN at 150 bar	
Opening width, max.	23	23	23	40	mm
Specimen thickness up to Ø160 mm (depending on load-reduction roller)	12	12	12	29	mm
Specimen thickness up to Ø250 mm (depending on load-reduction roller)	9	9	9	9	mm
Gripping area	50 x 60	50 x 60	70 x 60	70 x 60	mm <sup>3)</sup>

All data at ambient temperature.

We reserve the right to make technical changes in the course of ongoing development.

## Product Information

Grips for Ropes Types 8370 Fmax 10 kN and 8470 Fmax 50 kN

Item No.	324570	324572	324574	324576 <sup>1)2)</sup>	
Description	Screw end-clamping	Screw end-clamping unit with force amplification (40 kN)	Screw end-clamping unit with force amplification (80 kN)	Hydraulic clamping element (closing force 80 kN)	
Overall depth with carrier plate and load reduction roller	112	112	141	141	mm
Weight per clamping unit, approx.	4.1	4.4	4.9	8.5	kg
Ambient temperature	-70 to +250	-40 to +250	-40 to +250	+10 to +35	°C
Scope of delivery	2	2	2	2	pieces

1) Includes connecting hoses

2) Requires: pneumatically powered hydraulic pump with hand control unit (Item No. 320841) or GripControl Stand-Alone (Item No. 087281)

3) This gripping area to be selected when selecting jaws.

### Jaws (1x required)

Type 8487 with clamping area as above (see Product Information for jaws)