

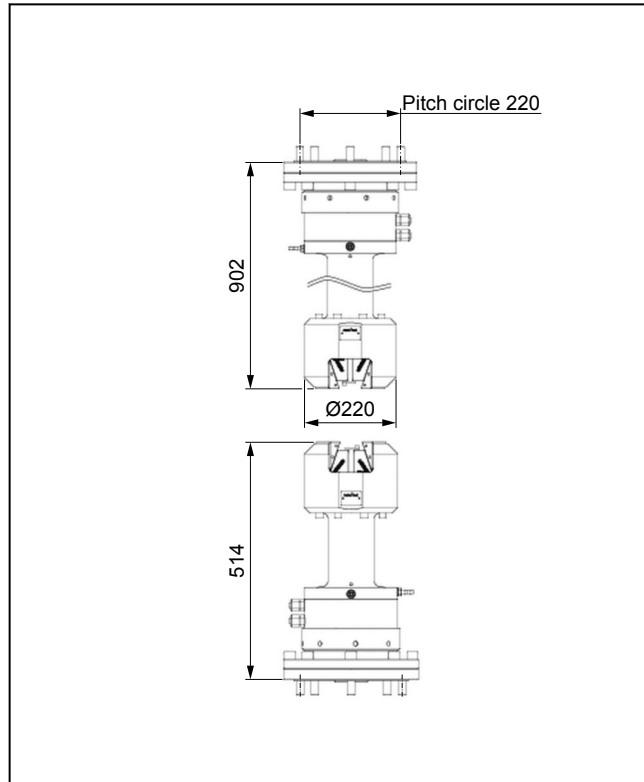
## Product Information

Type 8594 hydraulic grips, Fmax 100 kN, "body over wedge"

CTA: 39752 51588



Hydraulic grips Type 8594, Fmax 100 kN, body over wedge



Hydraulic grips for temperature chambers with flange connection

### Applications

- Specimen material:  
Metals, composites
- Specimen shape:  
Round and flat specimens
- Type of loading:  
Tensile, compression, alternating load

### Function description

The hydraulic grips are double acting and are used for symmetrical gripping.

Positively driven jaws enable reproducible gripping of the specimen. The symmetrical design and high degree of stiffness of the main body of the grips make them ideal for tests in which strict requirements are placed on the alignment of the specimen to the test axis.

### Advantages and Features

- The constant gripping force allows for repeatable test results.

- Reliable testing results are guaranteed with the optimal interaction between the hydraulic power pack, the electronics, and the testing software. The force-zero control prevents unwanted forces on the specimen during the gripping process.
- 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.
- Excellent reproducible grip position and specimen alignment to the test axis. Ideal for tests on specimens which are sensitive to transverse forces.
- No differential movement of jaws with increased test load (parallel-clamping)
- Fast and easy insertion of specimen due to the ergonomic and open design.
- Accurate test results along with a high cycle rate that is made possible by central insertion of the sample with the aid of an easily adjustable centering stop.

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### Technical data

Item No. Type	072865 8594	072868 8594	072869 8594	
Test load F <sub>max</sub>	100	100	100	kN
Operating principle	Wedge action	Wedge action	Wedge action	
Closing force, max. (at 210 bar)	168	168	206	kN
Pressure, max.	210	210	210	bar
Dimensions				
Height (when open)	266	345	514 (upper), 902 (lower)	mm
Outer diameter (at the head)	200	200	200	mm
Gripping travel	Depending upon the jaw	Depending upon the jaw	Depending upon the jaw	
Opening width, max. with jaws (for flat specimens)	39	39	39	mm
Opening width, max. with jaws (for round specimens)	24	24	24	mm
Gripping of the specimen	The specimen must be gripped above at least 2/3 of the jaw height.			
Weight per specimen grip, approx.	62.5	56.6	93 (upper), 113.6 (lower)	kg
Connection port	Flange	Mounting stud	Flange	
Connection	Pitch circle Ø 220	Ø 60	Pitch circle Ø 220	mm
Coolant connection	-	-	Hose connector 1/8	
Condensed water connection	-	-	Hose connector 1/8	
Ambient temperature	+4 ... +35	+4 ... +35	-70 ... +250	°C
Scope of delivery	2	2	2	pieces

### Accessories required

#### Flat jaws

Scope of delivery: 1 set (= 4 pieces)

Specimen shape	Version	Specimen thickness [mm]	Hardness	Item No.
Flat	Pr <sup>1)</sup> 0.75	0 to 9.5	56-58 HRC	075486
Flat	Pr <sup>1)</sup> 0.35	0 to 9.5	56-58 HRC	075488
Flat	Pr <sup>1)</sup> 0.75	9.5 ... 18	56-58 HRC	075490
flat	Pr <sup>1)</sup> 0.35	9.5 to 18	56-58 HRC	075491
Flat	Pr <sup>1)</sup> 0.75	18 ... 26.5	56-58 HRC	075492
Flat	Pr <sup>1)</sup> 0.35	18 ... 26.5	56-58 HRC	075493
Flat	2 mm parallel serrations	28 to 39	56-58 HRC	075494

1) Pr = pyramid grid

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### Prism jaws

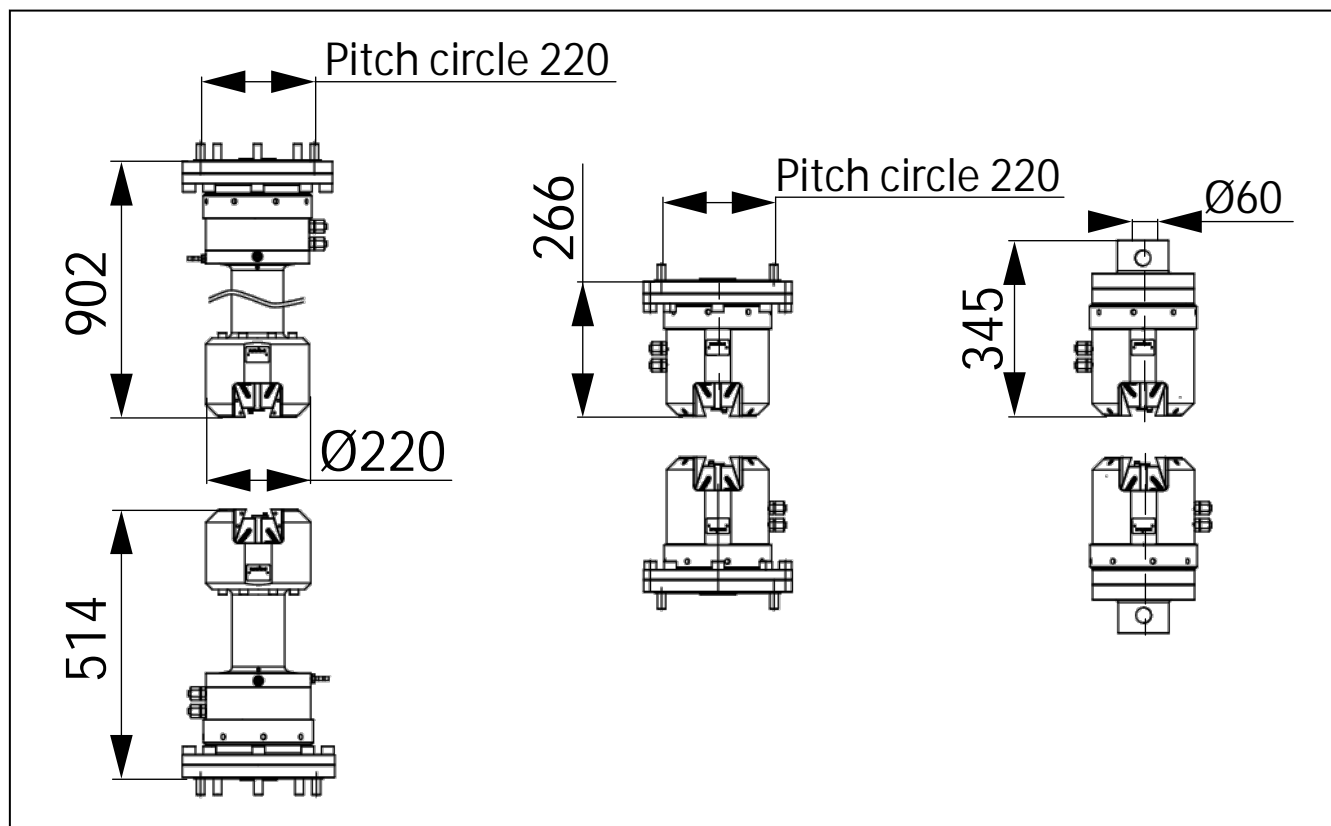
Scope of delivery: 1 set (= 4 pieces)

Specimen shape	Version	Specimen thickness [mm]	Gripping area (H x W) [mm]	Hardness	Item No.
round	1 mm parallel serrations	Ø 4 ... 10	65 x 52	56-58 HRC	075495
Round	1 mm parallel serrations	Ø 10 ... 17	65 x 52	56-58 HRC	075496
Round	1 mm parallel serrations	Ø 17 ... 24	65 x 52	56-58 HRC	075498

### Optional accessories

Description	Item number
Adapter flange for compression and flexure fixtures for attaching fixtures up to 250 kN (e.g. compression and flexure test kits), scope of delivery: 2 pieces	<b>072701</b>

CTA: 41 422



Left to right: Hydraulic grips for temperature chambers with flange connection, hydraulic grips for room temperature with flange connection, hydraulic grips for room temperature with mounting studs