

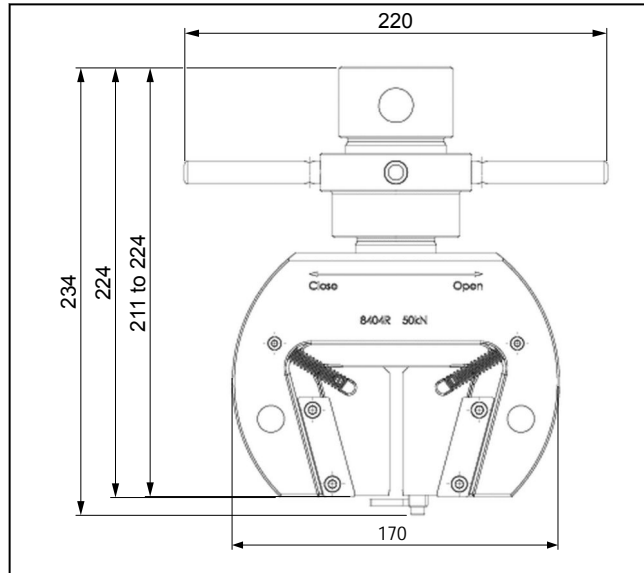
## Product Information

### Wedge grips type 8404, Fmax 50 kN body over wedge

CTA: 64508 64509



Wedge grips type 8404, Fmax 50 kN



Wedge grips type 8404 Fmax 50 kN, general view

#### Applications

- Specimen material:  
metals, plastics, wood
- Specimen shape:  
round and flat specimens
- Type of loading:  
tensile

#### Function description

'Body over wedge' grips are symmetrically closing specimen grips. Opening and closing plus application of closing force prior to the test is via a cross handle.

The gripping force is generated via wedge action and is proportional to the tensile force. The ratio is determined by the wedge angle.

With 'body over wedge' grips the position of the jaws remains constant in the test direction as the specimen is gripped.

#### Advantages and features

- The grips always close symmetrically to the tensile axis regardless of specimen thickness.

- Markings on the jaws allow easy specimen centering.
- Ergonomic, open design for fast, easy specimen insertion and clamping
- For determination of exact nominal strain the grip-to-grip separation is independent of the specimen diameter. This minimizes set-up time.
- Low weight plus compact design simplify handling, ensure short heating and cooling times in the temperature chamber and enable long travel.
- Absolutely secure gripping right from the start of the test for specimens prone to light slippage.
- The grips are suitable for alignment-critical applications (including with Nadcap accreditation) and for specimens sensitive to transverse tensile forces.
- LH/RH thread on cross-handle allows the same rotary motion above and below, avoiding twisting of the specimen.
- Jaws can be changed quickly without the use of a tool to accommodate different specimens.
- Whether you are testing sensitive specimens or specimens with short clamping-lengths, these grips guarantee optimum clamping.

## Product Information

Wedge grips type 8404, F<sub>max</sub> 50 kN body over wedge

### Technical data

Type	8404	
Item No.	1006757 <sup>1)2)</sup>	
Test load F <sub>max</sub>	50	kN
Dimensions		
Height (without centering stop)	224	mm
Width	170	mm
Width with actuation lever	220	mm
Depth	97	mm
Depth with actuation lever	220	mm
Opening width, max.	22	mm
Gripping of the specimen	The specimen must be gripped above at least 2/3 of the jaw height.	
Weight		
Weight per specimen grip, approx.	6.6	kg
Weight jaws (pair of jaws with stop)	750	g
Connection, stud	Ø 36	mm
Ambient temperature	-70 to +250	°C
Scope of delivery	2	pieces

1) Recommended and approved for strain rate control in accordance with standards DIN EN ISO 6892-1:2009 and ASTM E8 – 09.

2) A load cell with a limit torque of at least 200 Nm is required.

### Accessories required

#### Jaws for flat specimens (1x required)

Scope of delivery: 1 set (= 4 pieces)

Range of application	Version	Specimen thickness [mm]	Gripping area (H x W) [mm]	Ambient temperature [°C]	Hardness	Item No.
Ferrous and non-ferrous metals, steel, metal pipes, plastics, toughened plastics, composites	Steel, fsc <sup>1)</sup> 0.75 mm	0 to 6.5	60 x 35	-70 to +250	61 HRC	086971
Ferrous and non-ferrous metals, steel, metal pipes, plastics, toughened plastics, composites	Steel, fsc <sup>1)</sup> 0.75 mm	0 to 6.5	60 x 60	-70 to +250	61 HRC	088568
Ferrous and non-ferrous metals, steel, metal pipes, plastics, toughened plastics, composites	Steel, fsc <sup>1)</sup> 0.75 mm	6.5 to 12	60 x 35	-70 to +250	61 HRC	086975
Ferrous and non-ferrous metals, steel, metal pipes, plastics, toughened plastics, composites	Steel, fsc <sup>1)</sup> 0.75 mm	6.5 to 12	60 x 60	-70 to +250	61 HRC	088570

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Range of application	Version	Specimen thickness [mm]	Gripping area (H x W) [mm]	Ambient temperature [°C]	Hardness	Item No.
Ferrous/non-ferrous metals, steel, metal pipes, reinforced plastics, composites	steel, fsc <sup>1)</sup> 0.75 mm	12 to 17.5	60 x 35	-70 to +250	61 HRC	086976
Ferrous/non-ferrous metals, steel, metal pipes, reinforced plastics, composites	steel, fsc <sup>1)</sup> 0.75 mm	12 to 17.5	60 x 60	-70 to +250	61 HRC	088571
Ferrous/non-ferrous metals, steel, metal pipes, reinforced plastics, composites	steel, fsc <sup>1)</sup> 0.75 mm	17.5 to 22	60 x 35	-70 to +250	61 HRC	086977
Ferrous/non-ferrous metals, steel, metal pipes, reinforced plastics, composites	steel, fsc <sup>1)</sup> 0.75 mm	17.5 to 22	60 x 60	-70 to +250	61 HRC	088573

1) Fsc = fish scale

### Jaws for round specimens

Scope of delivery. 1 set (= 4 pieces)

Range of application	Version	Specimen thickness [mm]	Gripping area (height) [mm]	Ambient temperature [°C]	Hardness	Item No.
Dumbbell head specimens, more round specimens	Steel, St <sup>1)</sup> 1.5 mm	Ø 4 to 7.5	60	-70 to +250	61 HRC	086980
Dumbbell head specimens, more round specimens	Steel, St <sup>1)</sup> 1.5 mm	Ø 7.5 to 11.5	60	-70 to +250	61 HRC	086981
Dumbbell specimens, other round specimens	steel, st <sup>1)</sup> 1.5 mm	Ø 11.5 to 14	60	-70 to +250	61 HRC	086982
Dumbbell specimens, other round specimens	steel, st <sup>1)</sup> 1.5 mm	Ø 14 to 16.5	60	-70 to +250	61 HRC	086983
Dumbbell head specimens, more round specimens	Steel, St <sup>1)</sup> 1.5 mm	Ø 16.5 to 19	60	-70 to +250	61 HRC	086984

1) St= saw tooth

### Optional accessories

Description	Item number
Centering stops for centered clamping of specimen with variable height adjustment Scope of delivery: 1 pair, sufficient for 1 pair of grips	<b>087285</b>