

Operating Instructions

Wedge Type Clamping Tool

RIBE Code.:

092561 for 10 kN max. operating load

092562 for 20 kN max. operating load

092563 for 30 kN max. operating load

Tractel Code	Description	RIBE reference	RIBE Code.
1269	KEILKLEMME GR.1 / 5-10MM ST IV	61.0000.4526	092561
1289	KEILKLEMME GR.2 / 11-14MM ST IV	61.0000.2695	092562
1309	KEILKLEMME GR.3 / 15-21MM ST IV	61.0000.6292	092563
5325	DRUCKSTÜCK F.KEILKLEMME GR.1 (EC 10)	61.0000.1422	--
5335	DRUCKSTÜCK F.KEILKLEMME GR.2 (EC 14)	61.0000.0713	--
5345	DRUCKSTÜCK F.KEILKLEMME GR.3 (EC 21)	61.0000.5150	--



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1. General information

1.1 Key data

Manufacturer: Richard Bergner Elektroarmaturen GmbH & Co. KG

Address of the manufacturer: Norisstraße 24 / Germany
D- 91154 Roth

Phone.: +49 9122 /87-0

Product name: **Wedge type clamping tool**

Series/type designation : **092561**
092562
092563

Application: **Wedge type clamping tools are used for tensioning or holding of cables**



These operating instructions must be read carefully and kept within reach!
These operating instructions are part of the delivery. Before first time operation, the user must be familiar with the contents of the operating instructions. In addition, during operation and during any change, maintenance or repair work of the tool, the working instructions of the operating manual shall be followed.

1.2 System definition

Scope of supply

The wedge type clamping tool consists of the three main components wedge chamber, wedge and thrust rail. In addition, there are also connecting elements. The dimensions of the wedge type clamping tool are shown in the drawing:

- a) Wedge made of steel C 35 DIN 17200, tempered
- b) Wedge chamber made of steel C 35 DIN 17200, tempered
- c) Thrust rail of alloyed case-hardened steel DIN 17210, surface-hardened
- d) Guide rail made of St 37 riveted to the wedge chamber

Surfaces

All parts are protected against corrosion by varnishing.

The contact surfaces of the wedge and thrust rail are coated with a grey lubricant (dry lubrication) at the factory.

Life span

Expected life span of the tool: **7 years**

For safety reasons the thrust rail has to be replaced **after 50 installations** at most.

Technical data

Wedge type clamping tool 092561:

weight: 1,2 kg

Dimensions approx. LxWxH 276x68x31mm

max. operating load: 10 kN (coefficient for static test = 3)

Wedge type clamping tool 092562:

weight: 2,2 kg

Dimensions approx. LxWxH 365x90x37 mm

max. operating load: 20 kN (coefficient for static test = 3)

Wedge type clamping tool 092563:

weight: 5,4 kg

Dimensions approx. LxWxH 498x125x50 mm

max. operating load: 30 kN (coefficient for static test = 3)

Specified environmental conditions

No use in chemically reactive environments allowed!

Temperature range -20 °C to + 50 °C

Interfaces

The wedge type clamping tool is hooked into a load carrier at the eye in the wedge. It must be ensured that the load carrier cannot lose the wedge type clamping tool.

A bare conductor is clamped between the wedge and the thrust rail. The cable diameter must be suitable for the tool. The suitable diameters can be found in the drawing.

1.3 Intended use

The **maximum operating load** is

- for wedge type clamping tool 092561: 10 kN
- for wedge type clamping tool 092562: 20 kN
- for wedge type clamping tool 092563: 30 kN

The wedge type clamping tool is only to be used for the following types of conductor diameter:

- Wedge type clamping tool 092561: 5 - 10 mm (see drawing no. 0592)
- Wedge type clamping tool 092562: 10.5 - 14 mm (see drawing no. 0593)
- Wedge type clamping tool 092563: 15 - 21 mm (see drawing no. 0594)

The conductor may only consist of the specified materials:

Al, Aldrey, Al/St-, Aldrey/St-, copper, bronze (Bz I to Bz III) and steel ropes (steel I to steel IV).

The wedge type clamping tool must only be loaded in tension and only in the direction of pull. Bending loads are not permitted.

The pulled conductor is held by clamping jaws that can be moved in parallel. In order to prevent the rope from kinking, the eyelet is arranged in such a way that the pulling force is applied tightly to the rope.

The thrust rail must be replaced by a new thrust rail after 50 installations at most.

1.4 Forseeable misuse

Only one conductor is allowed to be clamped at a time. The wedge type clamping tool is not suitable for using two or more conductor.

The wedge type clamping tool must not be loaded to transverse or bending loads. Only original parts from the manufacturer are allowed to be used.

The wedge type clamping tool must not be subjected to vibrations or bending loads during operation.

2. General Safety Instructions



These operating instructions, in particular the safety instructions, must be observed by all persons who commission and operate the load handling device.

Furthermore, the rules and regulations for accident prevention applicable to the place of use must be observed.

The load handling device is only to be used for the intended purpose and in a safe and technically perfect condition.

Unauthorized changes are not permitted.

During assembly and disassembly, the fitter may be injured on the rope or tool if sharp edges or wire tips protrude. Always wear protective gloves when working on the wedge type clamping tool.

In the event of a change not agreed with the manufacturer or non-compliance with the operating instructions, the EC declaration of conformity and no liability for personal injury or material damage is assumed!

3. Operation of the tool

3.1 Assembly instructions

The following points must be observed during installation:

- Tighten the wedge to fix it (several hammer blows)
- Tighten screws with 23 Nm
- Use only the correct rope (material and diameter)
- Use only one rope, not two or more ropes
- Always work with the correct thrust rail
- Only use thrust rails that are not subject to wear and tear or pollution.
- After assembly, check the wedge for tightness by hand

3.2 Authorized users

The operator of the system must meet the following requirements:

- Minimum age of 18 years
- Physical and health suitability
- Knowledge of the operating instructions
- Familiarity with the general regulations on work safety and with the handling of the tool



The operator is responsible to third parties in the work area!

The device has only to be operated by one person!

3.3 Personal protective equipment

The operator must provide the following protective equipment:

- Safety glasses
- Protective gloves



3.4 Functional description

Wedge-type clamping tools are self-clamping, i.e. the clamping pressure and the holding force of the tool increases with increasing tensile force.

If the tools are used for copper and aluminum or aluminum-steel conductors, the wedge type tensioning tool must be thoroughly cleaned when changing from one cable material to another in order to prevent copper flitter from penetrating the Al surface. The use of steel brushes is recommended for this purpose. Corrosion problems can be avoided if separate tools are used for the cable material. The clamping ranges of the individual tool sizes are shown in the table.

4. Service and maintenance ✂

Maintenance and repair which is not described in these operating instruction may only be done by trained specialists, after trained by RIBE using the service instructions.

Note: The manufacturer accepts no liability for damage caused by improper repair or the use of third-party spare parts. If maintenance is not carried out on time or by suitable personnel, all warranty and liability claims will expire.

Activity	Component	Activity / Measure	Interval/ period	Responsible	Other
Cleaning	thrust rail	Clean thoroughly / free from abrasion	before each use	operator	-
Maintenance	thrust rail	Check for wear, pay particular attention to breakouts or flattening; check for contamination	before each use	operator	-
	thrust rail	Exchange against a new pressure bar	after 50 installations or in case of wear	operator	-
	thrust rail	check for smooth running and clamping function	before each use	operator	-
	Wedge type clamping tool complete	Visual inspection for wear	before each use	operator	-

5. Images

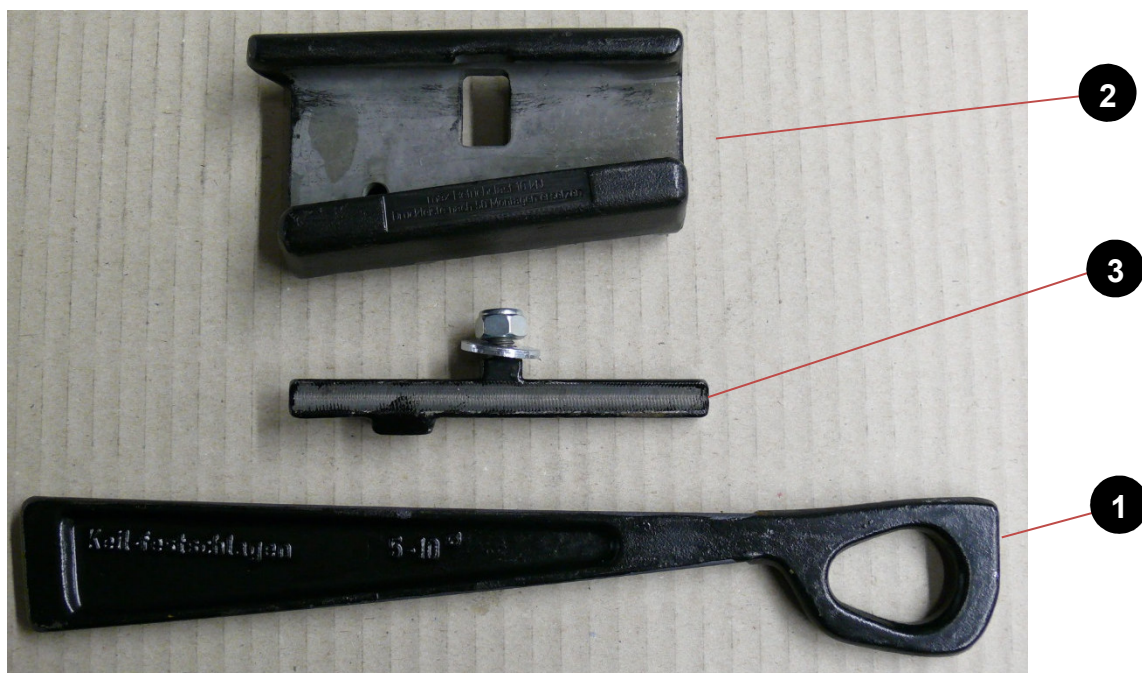


Figure 1 : General view of individual parts

- 1 Wedge
- 2 Wedge chamber
- 3 Thrust rail with fasteners

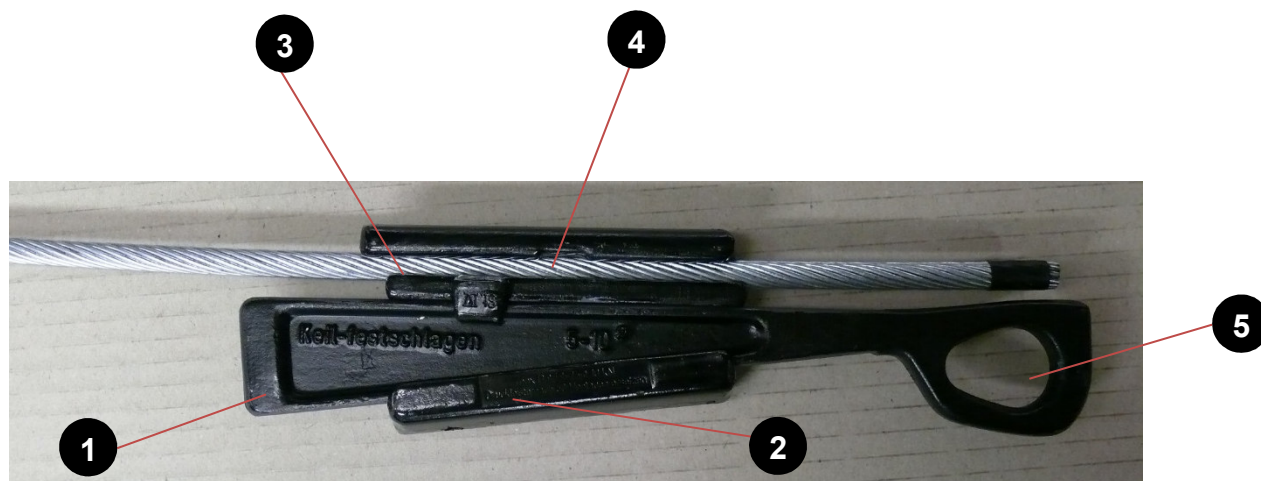


Figure 2 : General view in assembly

- 1 Wedge
- 2 Wedge chamber
- 3 Thrust rail
- 4 Tensioned rope
- 5 Eye

Disclaimer

We have checked the contents of this publication for conformity with the hardware and software described. Nevertheless, deviations cannot be excluded, so that we cannot guarantee the complete conformity do not assume any liability. The information in this publication is checked regularly and any necessary corrections will be included in subsequent editions.

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We are grateful for any suggestions for improvement.

We reserve the right to make technical changes.

Note: The manufacturer RIBE® accepts no liability for incorrect installation and use.

Note: In case of wrong assembly and use the manufacturer RIBE® accepts no liability.

If you have questions please contact:

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