

sauter OFL3.0 User Manual



Dear sautershop customer,

Thank you for purchasing the sauter OFL3.0 router lift, which can be used in an individual, CE-compliant router table or in combination with sauter FT router tables.

If you use your own, router table, please ensure that it is safe to operate and complies with CE and MRL guidelines. In case of doubt, contact us in order to have compatibility, function, installation and safety guaranteed by us.

To ensure that you will enjoy your router lift for as long and as possible, we ask you to read these operating instructions carefully before putting it into operation. Before using the router lift for the first time, the safety instructions and the operating conditions should be read and understood.

If you have any questions about the router lift or one of the router tables, please contact us directly:

sauter GmbH
www.sautershop.com
info@sautershop.com
Tel. 08143 / 99129 - 0

We hope you enjoy many happy hours realising your projects with the sauter OFL router lift.

With kind regards
Your sautershop-Team

EC Declaration of Conformity

As per EC Machine Directive 2006/42/EC, Appendix II A



We hereby declare that the equipment specified here in as well as its concept and design plus the variant we provide on the market comply with the fundamental health and safety requirements.

This declaration is rendered void in the event of any modifications to the equipment that have not been coordinated with us.

Applied, harmonised standards, in particular:

- DIN EN 60745-1 Hand-held motor-operated electric tools – Safety – Part 1: General requirements, Appendix M
- DIN EN 60745-2-17 Hand-held motor-operated electric tools – Safety – Part 2-17: Particular requirements for routers and trimmers, Appendix M

The CE label exclusively applies in conjunction with the Trend CRT/MK3, sauter FT router tables and adapters plus sauter OFL1.0 and OFL2.0. All other safety precautions and operating notices always apply.

A handwritten signature in black ink, appearing to read 'M. Sauter'.

Managing Director
Martin Sauter

Legend of symbols

NOTE

Notice

⚠ WARNING

Warning of
General Hazard

Intended use

The OFL router lifts are to be operated exclusively in conjunction with a CE-compliant router table - provided by the operator - or a third-party supplier, or with the sauter FT routing tables described here.

The router lift is designed to accommodate defined, mains-operated routers with 43 mm standard neck and up to 1 Nm torque. Please refer to the „Permitted routing motors“ chapter. The lift must be firmly connected to the routing table. The OFL3.0 is used exclusively for mounting defined routing motors. Not for drilling machines.

Vertical and axial adjustment/adjustment of the lift during operation is not permitted under any circumstances. Always ensure that all clamping levers are firmly and securely locked.

Unplug the power plug from the socket and/or the battery pack from the power tool before adjusting the unit or changing accessories.

Routing only in up-cutting direction, i.e. the direction of the routing feed must always be opposite to the direction of rotation of the routing bit. The workpiece must never be positioned or guided between the fence and the routing bit.

Always use only the appropriate reduction plates provided for this purpose, depending on the bit diameter. For safe working, the smallest possible diameter must be used on the reduction plate.

To the general mode of operation:

The routing lift enables the height/routing depths and angle adjustment of the router bit. A routing table basically allows the stationary use of commercially available manual routers motors, but, in the special case of the OFL3.0, a vertical and/or angleadjustable spindle can be used.

To complete the routing table further components are required, such as fences, guide rails and safety components. These are either delivered as a set with the routing table or must be purchased separately.

Working with the OFL3.0 requires, the motor being very securely clamped this must not be disregarded under any circumstances.

The cleaning and lubrication by means of thin oil or silicone lubricant spray of all moving parts is strongly recommended.

The user is liable for damage and accidents caused by improper use.

Possible misuse

The routing machine must not be operated hand-guided in connection with an OFL, must be mounted horizontally and screwed down tightly.

No router bits other than those approved may be installed in the OFL router lifts. The use of a drilling machine is categorically prohibited.

In the case of router motors, a 43 mm Euro-neck must be provided for clamping to ensure safe installation on the OFL3.0 during proper use.

Vertical and axial adjustment/adjustment of the lift during operation is generally prohibited. Always ensure that all clamping levers are firmly and securely locked.

Always work with both hands when opening and closing the locking levers for adjusting the lift in order to minimize the risk of trapping fingers and to prevent the routing motor from unexpectedly tilting away.

Routing only in up-cutting direction, i.e. the direction of the routing feed must always be opposite to the direction of rotation of the routing bit. The workpiece must never be positioned or guided between the fence and the routing bit.

Take care to allow sufficient space in the routing table to ensure that the lift underneath the routing table top can be operated cleanly. Two-hand operation must be possible at all times.

Furthermore, make sure that the router bit, if mounted, is exposed during adjustment of the lift and does not touch the fence, table top or reduction plate.

The components mentioned here are only designed for routing wood, plastics and similar materials. The machining of metals and steel is prohibited.

It is absolutely necessary to install the protective device to ensure sufficient protection against accidental contact with active parts.

In addition, all safety instructions and operating conditions of the respective router must be complied with according to its operating instructions.

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1. Included in Delivery

1x	Router Lift <i>sauter OFL3.0</i>
1x	Reduction Plate Ø 68 mm
2x	Oblong Reducing Plates Ø 16 and 32 mm Fi M6x50
4x	Mounting Screws & Nuts
8x	Leveling Screws M5 x 8
1x	Allen Key 5 x 150 mm
1x	User Guide

2. Technical Data

Dimensions <i>sauter</i> (SA-OFL3.0):	306 x 229 x 243 mm
Dimensions Kreg/Incra/Jessem (SA-OFL3.0K):	298 x 235 x 243 mm
Plate Corner Radius <i>sauter</i> :	6 mm
Plate Corner Radius Kreg/Incra/Jessem:	19 mm (3/4")
Plate Thickness:	9 mm
Height Adjustment per Turn:	+/- 4 mm
Max. Height Adjustment:	75 mm
Max. Pivot Range:	-5° bis 50°
Max. Bit Ø:	55 mm
Weight:	5,0 kg
Clamping Collar Ø / Router Motor Tolerances:	43 mm / -0,135 +0,015
Required Clamping Height of the Motor:	20 mm
Max. Router Motor Torque:	1 Nm
Max. Router Motor Speed:	30.000 U/Min.
Max. Router Motor Weight:	5 kg

3. Overview OFL3.0

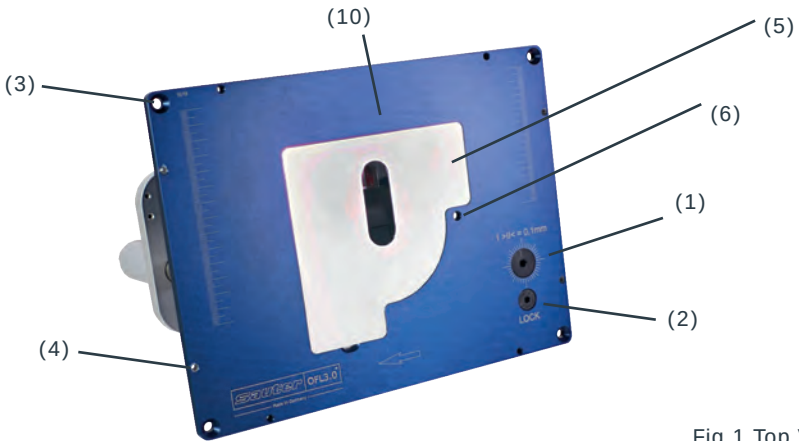


Fig.1 Top View

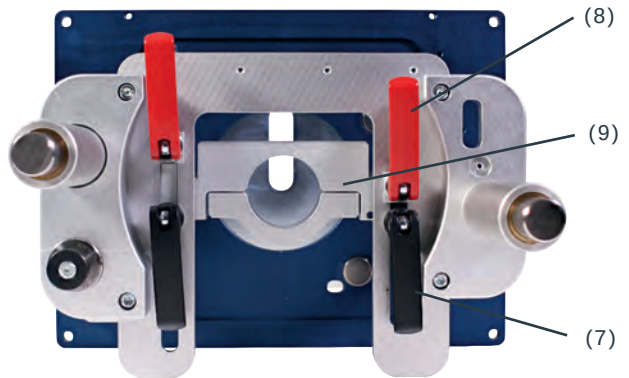


Fig. 2 Bottom View

- (1) Fine height adjustment
- (2) Locking device Fine height adjustment
- (3) Drill hole for mounting screws of the router lift
- (4) Tapped holes for leveling screws
- (5) Reducing plate
- (6) Thread for fitting of free routing pin
- (7) Locking lever for angle adjustment
- (8) Locking lever for axial displacement
- (9) Mounting unit
- (10) Insert plate
- (11) Vernier scale



When you see this Book symbol in the installation text the corresponding numbers refer to the part numbers here

4. Operating Conditions for OFL3.0 and FT Router Tables

Work with components listed here in must be carried out exclusively in dry environments to exclude putting users at risk.

Parts have also not been designed for outdoor use. For this reason, work in an adequately protected workshop.

Make sure not to work in a corrosive environment to guarantee a long service life and associated functionality as well as safety.

Compliance with additional requirements may be necessary for use in tropical climates. For this purpose, observe the operating manual of the router or router motor or contact us for advice.

Always work on an even, clean surface to guarantee maximum stability when routing. Consequently, the insert plate of the router lift must always be horizontal.

Additionally make sure all conditions for the used router tables, routers, and router motors made by third-party suppliers have been complied with. For this purpose, read the corresponding manufacturer's user manual.

Due to the increased risk of kick-back, free routing without rip fence on the table is only possible if the free routing kit (optional accessory, part no. SA-RTS-KIT) is mounted. Free routing should only be attempted with the spindle in the vertical position.

The mounting unit must be firmly mounted by means of a screw connection including the locking washers included. The screws for fastening to the mounting unit should be tightened to a torque of 13 Nm. This must be checked again before each use. This is the only way to ensure that the screws are safely secured.

5. Compatible Router Motors

Operation of the *OFL* is permitted in conjunction with the following models:

Manufacturer	Model	Collar (Euronorm) / Tolerance
AMB (KRESS)	530 FM	43 mm / +0,015 -0,135
	800 FME	43 mm / +0,015 -0,135
	1050 FME	43 mm / +0,015 -0,135
MAFELL	FM800	43 mm / -0,01 -0,04
	FM1000	43 mm / -0,01 -0,04
SUHNER	UAC 30 RF	43 mm / -0,03 -0,01
	UAD 25 RF	43 mm / -0,03 -0,01
	UAK 30 RF	43 mm / -0,03 -0,01
	UAL 23 RF	43 mm / -0,03 -0,01

NOTE

Please contact *sauter GmbH* if you use any other models.

Unauthorised use of other routers or router motors will render the declaration of conformity and warranty void.

WARNING

Risk of injury when using non-conforming routers!

Please note the information of your router's manufacturer regarding stationary operation when using your router or router motor in the *sauter OFL*.

6. Safety Instructions

General safety notices for mounting equipment

WARNING

Read the safety notices and instructions provided with the mounting equipment and the electrical tool. Failure to comply with safety notices and instructions may cause electric shock, fire and/or severe injuries.

Keep all safety notices and instructions safe for future reference.

1. Disconnect the plug from the mains socket and/or remove the battery before configuring device settings or replacing accessories.
2. Correctly install the router table including router lift prior to installing the router motor. Correct assembly is important to prevent the risk of the assembly collapsing.
3. Securely attach the router motor on the router lift prior to using it. If the electrical tool is dislocated in the mounting equipment, users may lose control.
4. Position the router table on a secure, even, and horizontal surface. If the router table and/or router lift are dislocated or are allowed to shake this may cause severe injuries during operation.

WARNING

Safety at the workplace

1. Install the electrical tool and accessories as specified only. Use accessories specified in the user manual only. The tool or accessories must not be modified or used for any other purpose than that intended. Do not overload the electrically powered tool.

Consider the working environment. Do not use the product in environments subject to precipitation or steam. Make sure the environment is adequately lit. Do not use electrically powered tools in the vicinity of gas pipes or flammable liquids. Maintain a pleasant temperature in the workshop so your hands are not cold. Connect your electrically powered tools to a leakage current protection unit when working outdoors. Exclusively use cables that have been approved for outdoor use.

3. Keep your working environment clean. An untidy workshop or worktop may cause injuries. Make sure there is enough space to work safely.
4. Remove any potentially available nails, clamps or other metal parts from the workpiece.
5. Check damaged parts. Carefully check attachments, device, cables, extension, plug and accessories for signs of damage. Check the alignment of moving parts, connections, and other circumstances that may influence commissioning. Have damage repaired by an authorised specialist workshop before commissioning the device or accessories. Protect tools from impact or falling down.
6. Use extraction equipment. If there are extraction ports provided, make sure that they have been installed and connected correctly.
7. Check all attachment and lock screws, bolts, nuts, and buttons on the electrically powered tool, attachments and router bits prior to commissioning and make sure that they have been securely closed and tightened. Regularly repeat the inspection if you rout for prolonged periods of time.

WARNING

Electrical safety

1. Disconnect electrically powered tools from the mains as soon as you have stopped using them, prior to all maintenance, before each calibration, and prior to replacing accessories, for instance bit replacements. Make sure the switch is set to "OFF". Make sure the bit is no longer rotating.
2. Do not use the device if it is not possible to switch it on or off. Have faulty switches repaired by a specialist workshop.
3. Only use for purpose. Do not carry the electrically powered tool by the cable, do not pull towards you using the cable, and do not pull on the cable the tool from keep the cable away from heat, oil or sharp edges. Route the cable outside the working area.

WARNING

Personal safety

1. Keep children and visitors away. Do not allow children or visitors to touch the tool, accessories or attachments. Keep children and visitors away from the working area. Child-proof your workshop and lock it.
2. Wear suitable work clothing. Do not wear widely cut clothing or loosely hanging jewellery as this may get caught in moving parts. We recommend work gloves and anti-slip shoes to work outdoors. Make sure long hair is protected or covered.
3. Keep any tools you are not using in a dry and locked place outside the reach of children.

4. Always work with both hands and keep them away from the cutting area to guarantee the best possible levels of control. Always wait until the spindle and bit have stopped before you make changes.

5. Make sure the equipment has been positioned securely. Do not work in an uncomfortable or insecure posture.

6. Stay alert. Always be careful. Use common sense. Do not use electrically powered tools if you are tired or under the influence of medication or alcohol.

7. We recommend personal protective equipment for eyes, ears, hands, and respiratory protection when working. Every item of personal protective equipment must comply with valid EU regulations.

8. Noise. Take suitable measures to protect your hearing as soon as a noise level of 85 dB(A) is exceeded. The noise level generated by routing may exceed 85 dB(A). Consequently wear hearing protection.

9. Eye protection. Always wear protective goggles or a visor to protect your eyes from dust and parts that may fly around.

10. Respiratory protection. Wear a dust protection or respiratory protection mask. Chips flying around may injure your eyes and the developing wood dust may be harmful to your respiratory organs. Dust filters must be replaced regularly.

11. Wear protective gloves to prevent potential injuries caused by sharp edges when handling the router and coarse materials.

12. Install the shield included in the delivery as specified in this user manual to prevent hands and fingers from accidentally coming into contact with the router motor.

13. Do not leave running tools unattended. Do not leave the tool until it has completely stopped.

14. Correctly and securely fasten your workpiece.

15. Exclusively use routers that comply with EU safety standard EN 847-1/2 and its appendices.

16. Vibrations. Handheld power tools generate different levels of vibrations. Always apply the specifications of relevant health and safety guidelines.

WARNING

Using and handling the router lift and electrically powered tool

Specifications when handling router motors on the router lift

1. Make sure the router motor is securely fastened and positively connected during installation. In this process solely attachment of devices featuring a so-called 43 mm clamping collar (European standard).

2. Using the mounting unit of the router motor (part of OFL3.0) without sauter OFL3.0 is not permitted at any time. Commissioning is only permitted using a corresponding CE-compliant router table.

3. The mounting unit of the router motor (part of OFL3.0) must be firmly mounted with positive locking and this must be checked again before each use. This is the only way to ensure that the motor is secured against unscrewing.

Safely handling the router lift:

1. Check the correct function of the router lift prior to installing the router motor. A faulty router lift may cause damage or injuries.

2. Securely attach the router motor on the router lift prior to using it. Users may lose control if the router motor has not been correctly fastened.

3. Attach the lift on your router table and check it has been securely fastened prior to each use.

4. A loose lift may move or vibrate. This may cause uncontrolled loads on the tool during machining. This may lead to damage or fracture of the tool. Risk of injury caused by ejected parts.

5. Disconnect the router motor prior starting all work and after having finished work. Unintended starting of the router motor may cause severe injuries.

6. Make sure that there are no loose parts, such as tools on your router table each time before you switch on the router motor. Parts coming into contact with the rotating tool may damage it and be ejected. Risk of serious injuries.

7. Carefully handle the router lift. Check whether moving device parts operate correctly and are not jammed, check whether parts have fractured or damaged to an extent that they might impair the function of the router lift. Have damaged parts repaired prior to using the router lift. Many accidents are caused by poorly maintained devices.

8. Have the router lift repaired by qualified, specialist personnel and use original spare parts only. This guarantees that the safety of the device is maintained.

⚠ WARNING

Special features of the router lift due to the pivoting mechanism

1. Free routing, without using a rip fence on the table, is, due to the increased risk of kick-back, not recommended. If free routing is necessary the free routing kit (optional accessory) should be installed. Free routing should only be carried out with the spindle in the vertical position.

2. The router lift should, under no circumstances, be adjusted when the router is in operation. Always ensure that all clamping levers are firmly and securely locked before operating the motor.

3. The OFL3.0 is designed for use with router motors. It is not designed to be used with drills.

4. When using the OFL3.0 the workpiece should always be secured from above, with feather boards for example.

5. Use both hands when opening and closing the locking levers for adjusting the lift, in order to minimize the risk of trapping fingers and to avoid an unexpected tilting of the router motor.

6. For safety reasons the workpiece feed should always be against the rotation of the bit.

7. Make sure to allow sufficient space in the router table to ensure that the lift can easily be adjusted underneath the table top. Two-hand operation should be possible at all times.

⚠ WARNING

Routing safely

1. Read the instructions enclosed with the electrically powered tool, accessories, and bits.

2. Keep your hands, hair or clothing away from the router bit.

3. Remove keys or other tools used to service the device prior to commissioning. Make sure the bit can rotate freely.

4. Exclusively process workpieces made of materials suitable for machining with hand-held routers (usually solid wood, wooden materials). Make sure they are free from metal inclusions (e.g. nails).

5. Do not switch on the router if the bit is in contact with the workpiece.

6. The routing process must always advance in contrary to the bit's direction of rotation.

7. Do not rout without a suitable fence (longitudinal fence, transverse fence or starting pin) to prevent rebounding. For this purpose, also observe all data in the operating manuals of the fences intended for use.

8. Particularly make sure to work at the front and rear during recess milling using suitable fences and/or pressing devices to minimize the risk of rebounding.

Router bit safety

1. Router bits are sharp objects. Handle bits with care. Do not drop bits and do not hit them against hard objects. Handle small bits with particular care. Put router bits back into the packaging after having used them.

2. Do not exceed the maximum speed (n.max), highlighted on the shaft, packaging or manual. If stated, accurately keep to the speed range. Usually manufacturers state recommended speeds.

3. Use the router bit in routers or router motors only.

Do not use drills and drill bits in a router. Exclusively use router bits with the material they have been developed for. Do not use router bits in metal or stone.

4. Always keep to the maximum permitted bit diameters for the router motor used. Your router manual contains corresponding data. The router table has been designed for maximum bit diameters of 86 mm.

5. Exclusively use sharp, intact, and high-quality router bits designed and approved for high-speed, hand-held routers and for manual feed. Unsuitable, inadequate or blunt bits pose a very high safety risk.

6. Make sure that the collet used matches the shaft diameter of the router bit. Clamp the bit as far into the collet as possible, at minimum $\frac{3}{4}$ of the shaft length. Always make sure the bit is positioned securely.

7. Keep router bits clean. Regularly remove adhesive or resin residue using a suitable cleaning agent. Using PTFE spray reduces a build up of adhesive and resin. Do not use PTFE on plastic.

8. When using assembled router bits on a spindle make sure that the cutting edges have been installed with an off set to absorb cutting impact.

9. Note the instructions on bit changes in the user manual of your router motor.

10. The router bit must have been clamped so that it cannot come loose during operation. Carefully install the router bit and make sure that the clamping force grips the bit shaft effectively as well as that cutting edges cannot come into contact with each other or with clamping elements.

11. We recommend regularly checking the collet and nut. A damaged, bent, or worn collet and nut may cause vibrations and/or damage the shaft. Do not excessively tighten the nut and collet.

12. Do not cut too deeply in a single step. Divide the process into several steps, keep the volume removed by cutting low and consequently reduce the forces applicable from the side. Excessively deep routing may stall the router.

13. Immediately switch off the router in the event of unwanted vibrations and check whether the router has been correctly clamped in the centre.

14. All attachment elements must be tightened using the dedicated key and to the tightening torque specified by the manufacturer.

15. Extensions on keys or tightening by using a hammer are not permitted.

16. Clamping screws must be tightened as specified by the manufacturer. If there are no instructions, the clamping screws must be tightened in sequence from the centre towards the outside.

WARNING

Stationary use of router motors

1. Please note the regulations about safely handling machines featuring vertical routing spindles.

2. Always use a pushing stick or pushing block if the routing workpiece is shorter than 300 mm or if you are machining the last 300 mm of a longer routing process.

3. Make sure that the router bit does not collide with the reducing ring. Always select the smallest possible reducing ring.

4. When routing free-hand using the starting pin exclusively use router bits with ball bearing pilots. Use the starting pin like a guide ramp towards the router bit. It is paramount to secure small workpieces on a larger retaining plate.

5. Whenever possible use a retaining device for the workpiece. Make sure that the device has been securely fastened on the workbench. The table surface must be around hip height. This is the only way to prevent potential rebounding and sudden reactions in contrary to the feed direction.

6. If necessary, extend the contact surface for the workpiece to counteract uncontrolled tilting of the workpiece.

7. Use a protective switch. Make sure that it has been securely fastened, it is easily accessible and has been connected correctly.

8. Stand on the right-hand side in front of the router table (router hanging downward). Viewed from above the router bit rotates counter-clockwise. Consequently advance must be from right to left, i.e. in contrary to the direction of rotation of the bit.

9. Do not reach under the table or move your hands or fingers into the routing path as long as the router is switched on.

10. Do not guide wood between the bit and the fence.

NOTE

Useful information about routing

1. Base your feed rate on motor noise. Push at a constant speed. If the workpiece is advanced too slowly, this may cause burns or traces of burns on the wood.

2. We recommend trial cuts on off-cuts.

NOTE

Service, maintenance, repairs

1. Always keep the accessories clean and in good condition.

2. Keep protective equipment in operation and keep it in good condition.

3. Carefully service your equipment and router bits. Keep bits clean and sharp to improve results. Do not use blunt bits. Comply with the specifications on lubrication and bit change. Keep handles dry, clean, and free from oil and lubricant.

4. Service accessories. Do not use damaged accessories. Use accessories recommended by the manufacturer only.

NOTE

Router bit repairs / maintenance

1. Exclusively repair the router bit as specified by the manufacturer.

2. The shape of a carbide-tipped router bit must not be changed during repairs. Assembled tools must be repaired by corresponding specialist personnel.

3. Tolerances that guarantee secure clamping must be adhered to.

4. Repairs must be carried out using spare parts specified by the manufacturer.

5. Make sure that re-sharpening the cutting edges does not weaken the body of the router bit.

7. Installing the Router Motor on the OFL3.0

- 1) Turn the height adjuster  (1) on the lift anti-clockwise until the mounting unit  (9) has the maximum distance from the insertion plate. This way you get easiest access to mount the motor.
- 2) Place the router lift with the operating side down on a firm surface so that the mounting unit  (9) is facing upwards. The mounting unit  (9) itself should not be removed by itself.
- 3) Then insert the router motor into the mounting unit  (9). Ensure that the collet points in the direction of the insert plate  (10), that the collar of the motor is inserted by at least 20 mm and that there is a tight fit. Now tighten the mounting unit to the recommended torque of 13 Nm. Check the correct fit and tightness regularly.
- 4) Finally, check the full function and usability of the angle adjustment and pivot in order to detect possible problems before using.

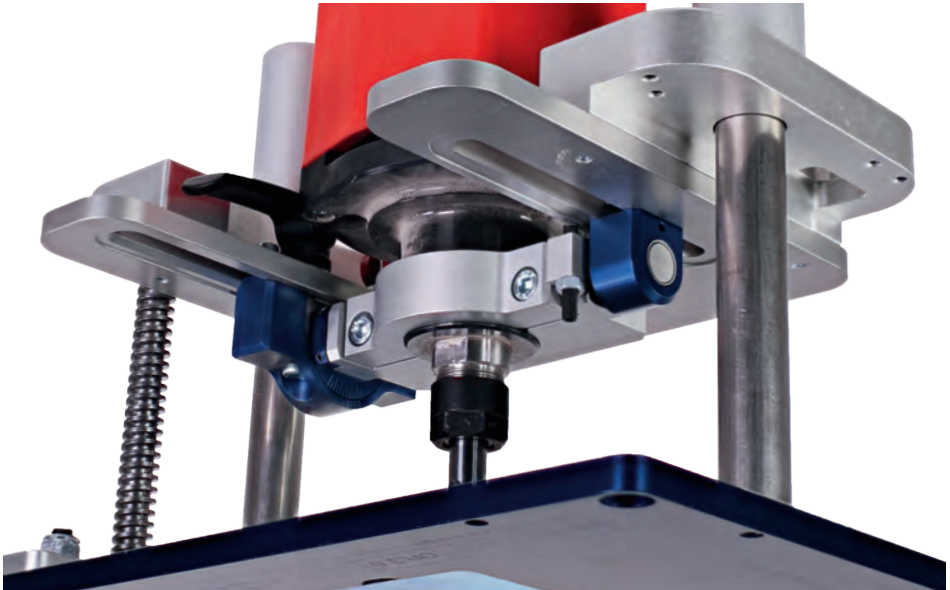


Fig. 3 Mounting the Router Motor

8. Installing the OFL3.0 to the Router Table

8.1 Preparing individual Router Tables

(Skip this step if fixing to sauter routing tables FT)

Make the cut-out in your routing table according to the plan on page 28. **Make sure there is at least 15 mm rebate to rest the lift on.** Make sure that the lift plate is aligned flush with your table. Step-by-step instructions are given below. Optional accessories are also available (see „Accessories“).

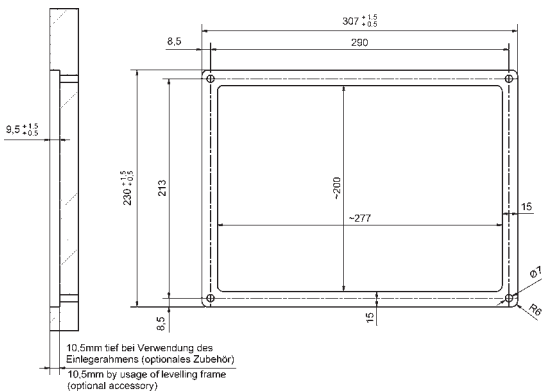


Fig. 4 Required installation dimensions on the routing table (enlarged view page 28)

8.1.1 Method 1 - Routing of a support rebate with the sauter routing template (Art.Nr. SA-ELP-FS) and rebate cutter (Art.Nr. E-11651) (optional accessory)

- 1) Position the template at the desired location on the routing table top.
- 2) Mark a rectangle inside the template, which is 15 mm smaller on each side. (for the rebate = supporting surface for the insert plate).
- 3) Rout out completely the area marked on the router table top. For thicker panels, perform the routing in several steps.
- 4) Firmly attach the template to the routing table, set the depth of the router cutter to 9,3 mm, add the template thickness, and rout with the ball bearing on the template along the cutout.
- 5) Check that the rebate is deep enough. The insertion plate must be slightly below the table top level.
- 6) Place the OFL with the mounted router motor into the cut-out and fasten it through the provided mounting holes with the supplied threaded screws.

8.1.2 Method 2 - Cutting out without template

- 1) Mark a rectangle for the insert plate 307 x 230 mm (SA-OFL3.0K: 299 x 236 mm). The cut-out is thus 1 mm larger, allowing a better fit of the insert plate.
- 2) Mark a second rectangle 15 mm smaller inside the first rectangle to allow for the supporting rebate.
- 3) Rout out the smaller the rectangle completely from the router table top. For thicker panels, perform the routing in several steps.
- 4) Set the depth of the router to 9,3 mm and rout the rebate for the insert plate.
- 5) Check that the rebate is deep enough. The insertion plate must be slightly below the table top level.
- 6) Place the *OFL* with the mounted router motor into the cut-out and fasten it through the provided mounting holes with the supplied threaded screws.

WARNING

When constructing the router table, make sure that it is stable and that the necessary safety measures have been ensured . It is recommended that DIN EN 60745-2 be applied.

8.2 Inserting the *OFL3.0* into the Router Table

Now insert the router lift and motor into the recess of the router table, unplug the power cord first and then carefully lower the lift into the recess. fix the lift to the table using the 4 screws provided.

WARNING

Make sure that the power cable of your routing motor is free before the lift is fixed.

8.3 Leveling the OFL3.0 in the Router Table

When the router lift is located in the recess of the table, tighten the fastening screws in the corners. If there is minimal gap, loosen the screws a little and then use the leveling screws  (4) to get a flush fit. If necessary, check with a straightedge to make sure. Tighten the fixing screws again and check. Repeat the procedure until a perfectly flush fit is achieved.

8.4 Leveling the Reducing Plates in the OFL3.0

The flatness of the magnetic reduction plates can be corrected by means of the integrated levelling screws (grub screws) inside the insert plate to prevent jamming, especially of smaller workpieces.

9. Installing the Safety Guard

In order to prevent the operator from unintentionally interfering with the router lift during operation, the enclosed safety guard must be attached underneath the front of the table. It must be screwed into the table plate from below.



Fig. 5 Safety Guard

10. Operating the Router Motor in the OFL3.0

Please observe the safety instructions in this manual before operation.

10.1 Installing and Changing Router Bits

- 1) Disconnect from the power.
- 2) Remove the magnetic reduction plates  (5) using the small recess and raise the lift up as far as possible.
- 3) The space is now sufficient to change the router bit according to the instructions of the router motor manufacturer.

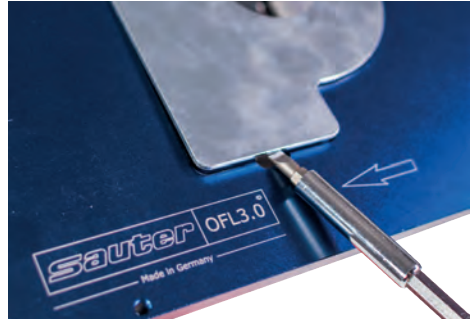
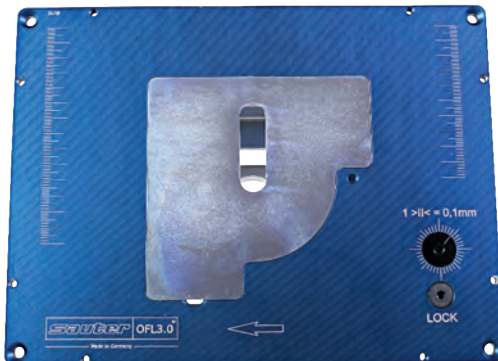


Fig 6. Lifting the magnetic plate

- 4) Select the smallest possible reducing plate that suits the router bit diameter  (5) and insert it again. Always plan some space between reducing plate  (5) and milling cutter to ensure chip removal.



Ø max. 55 mm

Fig. 7 Router Bit Max Size

NOTE

The tool change is made easier if you place the routing motor at a 45° inclination and lock it. This gives you optimum access to the union nut and the collet.

5) Make sure the router bit is firmly in the collet and does not collide with the reducing plate (5).

6) Make sure that the reducing plate (5) sits flat and there is no chips or dust underneath.

⚠ WARNING

When selecting the router bit, observe the maximum bit diameter permitted for the articular router motor.

Important: In addition, the maximum size bit that can be used with the OFL3.0 is $\varnothing 55 \text{ mm}$.

10.2 Adjusting the Height of the Motor in the OFL3.0

1) To adjust the height of the cutter, first release the lock (2) by turning it a quarter to half turn anticlockwise.

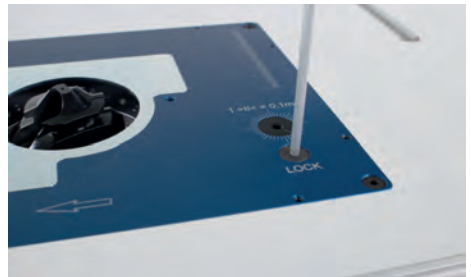


Fig. 8 The lock

2) By turning the fine height adjustment (1) clockwise, the router bit is raised. Anti-clockwise, the router bit is lowered. One complete rotation corresponds to 4 mm, one graduation mark on the scale indicates the adjustment by 0.1 mm. Thus a fine adjustment to 1/10mm accuracy is possible.

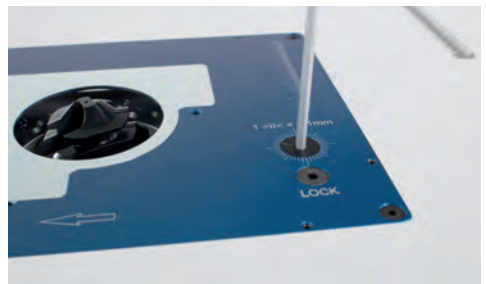


Fig. 9 Height adjustment

3) When you have set the desired height, Close the lock (2) by turning it clockwise to close it hand-tight. Check, the height after locking and make sure the router bit goes not collide with the reduction plate (5). If necessary, carry out a test operation on a waste piece of wood.

10.3 Adjusting the Angle in the OFL3.0

Every angle between -5° to $+50^{\circ}$ can be set on the OFL3.0. For the most commonly used angles there are fixed points built into the lift allowing for quick setting. All other angles can be set using the Vernier scale on the lift.

10.3.1 Setting via the Fixed Points

When setting the routing angle: One hand secures the routing motor, the other hand releases or locks the clamping levers. The lift is equipped with a total of five clamping levers for setting the desired angle.

Fixed Points: 0° , 15° , 22.5° , 30° and 45°

Step 1: By loosening and tightening the two black clamping levers  (7) at the front the router motor moves to the desired grid.

When setting larger angles, take into account the diameter of the router bit. If necessary, open the red locking levers  (8) as well allowing the entire routing motor to be shifted to avoid contact with the reducing plate.

Step 2: Set the desired angle:

- $0,0^{\circ}$ Starting point, zero position** (spindle is vertical)
- $15,0^{\circ}$ Move the spindle **one point** towards the fence**
- $22,5^{\circ}$ Move the spindle **two points** in the direction of the fence**
- $30,0^{\circ}$ Move the spindle **three points** in the direction of the fence**
- $45,0^{\circ}$ Move the spindle **four points** in the direction of the fence**



Points

Fig. 10 Fixed Points

Step 3: When the router motor is in the desired grid position, re-tighten all clamping levers and check that they are firmly seated. The clamping levers are completely closed when they are in contact with their stop and cannot be pushed down any further.

10.3.2 Setting via vernier scale

Here, too, one hand secures the routing motor, while the other hand releases the clamping levers.

Step 1: Open the black locking levers (7). When setting larger angles, depending on the router bit diameter, make sure that the red locking levers (8) are also opened if necessary and that the entire router motor is moved in order to avoid hitting the reduction plate.

Step 2:

The movable upper scale has markings in 5° steps. The fixed lower scale works in the same way as the 0.1 mm increments on a caliper gauge. The long mark stands for $+0^\circ$. The other markings increase the angle by 1° each time. In order to be able to set the angle accurately to the degree, it is recommended to set the next smaller grid point first. Setting the fixed point is described in 10.3.1. Next, set the grid point starting from the required angle, in 5° steps, adjust the vernier scale so that the long mark on the lower scale is flush with the corresponding 5° mark on the upper scale. As a last step, adjust the angle so that the corresponding short mark on the lower scale is flush with the mark on the upper scale.

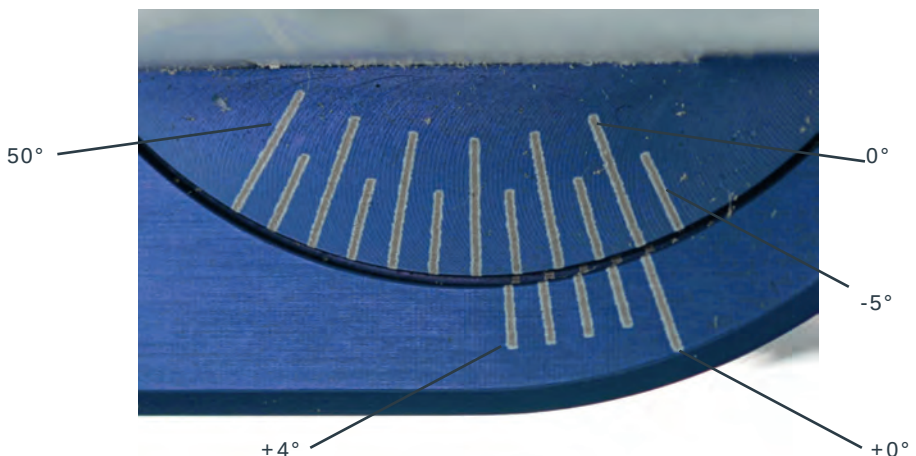
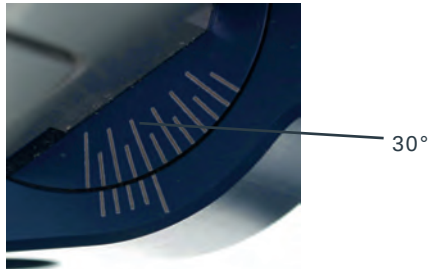


Fig. 11 Vernier Scale

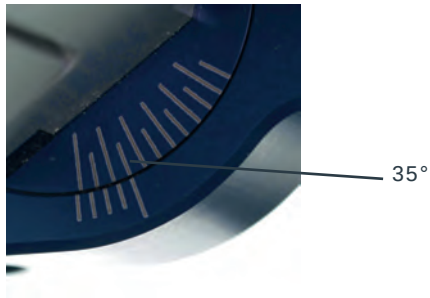
Step 3: Lock all clamping levers and check their tightness. The clamping levers are completely closed when they are in contact with their stop and cannot be pushed down any further.

Example: Setting the angle to 36°

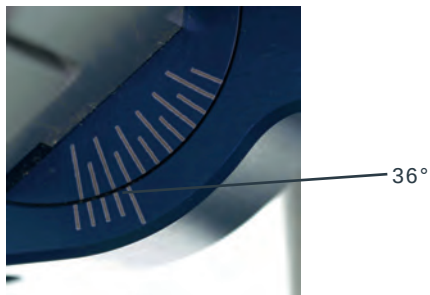
First set the angle to 30° using the fixed points:



The next step is to set the angle using the vernier scale to the next smaller 5° step, i.e. 35° :



In the last step, set the angle to 36° using the vernier scale by setting the first short mark is flush with the corresponding line above.



11. General Routing Information

11.1 Routing using a Parallel or Traverse Fence (Not Included)

- 1) Remove the mains plug of the router.
- 2) Insert the desired bit (see user manual of the router).
- 3) Adjust the desired routing depth.

NOTE **Route in several stages in steps of a few millimetres.**

- 4) Place the workpiece tight against the fence.
- 5) Connect the mains connector of the router and switch on the router.
- 6) Slide the workpiece against the router bit's direction of rotation (note the arrow indicating the direction of rotation on the router table, *OFL* router lift) past the router bit. Keep to an even, medium feed rate. If the feed rate is too slow, this will cause traces of burning and overheat the bit. If you feed too quickly, the cutting pattern will be poor.
- 7) Switch off the router.

11.2 Routing freehand with a pin (separate accessory, Art.Nr. SA-RTS-KIT)

⚠ WARNING

Exercise extreme caution during this process, there is an increased risk of kick-back! Equip your router table with a hood to provide an dust extraction and a guard for the router bit.

As a rule this method is intended for milling with a template. Make sure that the workpiece and template are securely attached to each other and there is a workpiece overhang (the outline to be removed) of less than 3 mm. Small or short workpieces must be safely guided by a larger template.

Please read the corresponding professional literature if you are not familiar with this method.

- 1) Remove the mains plug of the router.
- 2) Insert the desired bit. Exclusively router bits with ball bearing pilots are suitable.
- 3) Adjust the desired cutting depth.
- 4) Install the starting pin for freehand routing.
- 5) Connect the mains connector of the router and switch on the router.
- 6) Position the workpiece at the pin and use it like a ramp towards the router bit. Always move the workpiece in contrary to the direction of rotation of the bit at an even feed rate. If the feed rate is too slow, this will cause traces of burning and over heat the bit. If you feed too quickly, the cutting pattern will be poor.
- 7) Switch off the router.

12. Accessories for the OFL3.0

Optional extras for the router lift.

	Article	Description	For OFL	Article Number
	Installation Set 20-Pcs.	4x Corner Plates, 4x Countersunk Screws M6x50, 12x Screw DIN7997 4,5x40	all	SA-99600005
	Leveling Frame sauter	Frame made of sheet steel to level out plates	all	SA-99600006
	Leveling Frame Kreg	Frame made of sheet steel to level out plates	Kreg	SA-99600024
	Set of Screws	Installation screws for OFL	all	SA-FIX-KIT
	Reducing Plates	Blank	2.0, 2.0-MINI, 2.0-AD43	SA-RP2.0-0
		Ø 10 mm		SA-RP2.0-10
		Ø 16 mm		SA-RP2.0-16
		Ø 22 mm		SA-RP2.0-22
		Ø 32 mm		SA-RP2.0-32
		Ø 42 mm		SA-RP2.0-42
		Ø 54 mm		SA-RP2.0-54
		Ø 68 mm		SA-RP2.0-68
		Ø 86 mm		SA-RP2.0-86
		Ø 98 mm		SA-RP2.0-98
	Oblong Reducing Plates	Ø 12 mm	3.0	SA-RP3.0-12
		Ø 16 mm		SA-RP3.0-16
		Ø 22 mm		SA-RP3.0-22
		Ø 32 mm		SA-RP3.0-32
		Ø 42 mm		SA-RP3.0-42
		Ø 54 mm		SA-RP3.0-54
		Ø 68 mm		SA-RP3.0-68
	Freehand Kit	Guide pin with thread and protective equipment for freehand routing without fence	all	SA-RTS-KIT
	Digital Height Measurement	Digital height measuring tool for adjusting the milling depth with accuracy up to 1/1000 mm	all	WX-WR525

13. Cleaning & Maintenance

Keep the router lift and the overall router table clean to correctly and safely work. If necessary, clean the guides and spindle using a dry cloth and lightly spray the spindle using a low-viscosity oil. If the router lift fails despite careful manufacturing and testing methods, have it repaired by a specialist retailer.

14. Customer Service

If you have any questions about *router lift OFL3.0* and need advice on the products, repairs, and spare parts, please contact:

*sauter GmbH
Neubrich 4, Gewerbepark Inning-Wörthsee
82266 Inning a. Ammersee
Tel. 08143/99129-0
Fax. 08143/99129-29
info@sautershop.com
www.sautershop.com*

15. Disposal & Environmental Protection

Correctly recycle the router lift, accessories and packaging as per environmental regulations.

16. Warranty

Statutory warranty periods apply to the sauter *router lift OFL3.0* delivery for all design, material, and production faults. Normal wear and tear as well as damage caused by improper handling, non-observance of servicing instructions, or excessive force shall be excluded from warranty.

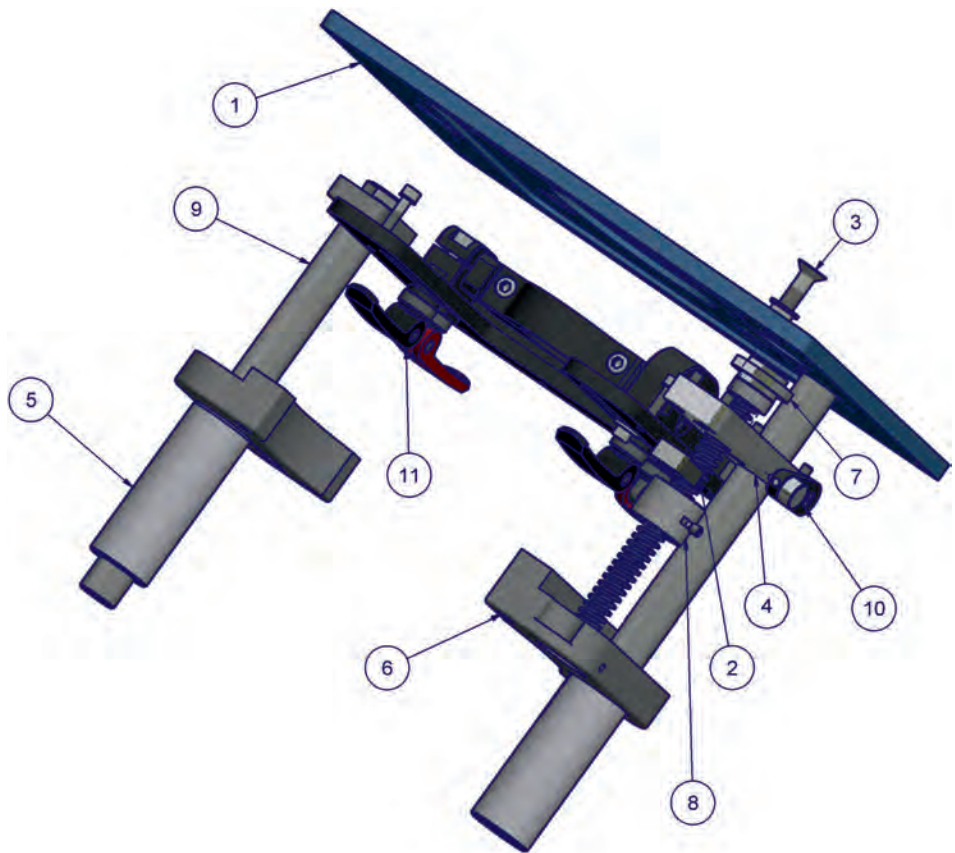
17. Exploded View Drawing & Spare Parts List

Fig. 12
Exploded view drawing OFL3.0

Spare parts list for OFL3.0

Pos.	Pcs.	Article Number	Description
1	1	SA-112012	Base Plate 3.0
2	1	SA-112014	Pressure Piece Complete
3	1	SA-112015	Clamping Screw Complete
4	1	SA-112016	Bearing Plate Complete
5	1	SA-112017	Auxiliary Arm Complete
6	1	SA-112018	Sliding Arm Complete
7	1	SA-112019	Scale Complete
8	2	SA-112020	Trapezoidal Spindle Complete
9	1	SA-112021	Shaft With Bearing
10	1	SA-112022	Snap-in Arm Complete
11	1	SA-112023	OFL3.0 Pivoting Unit

18. Router Tables Cutout Sizes

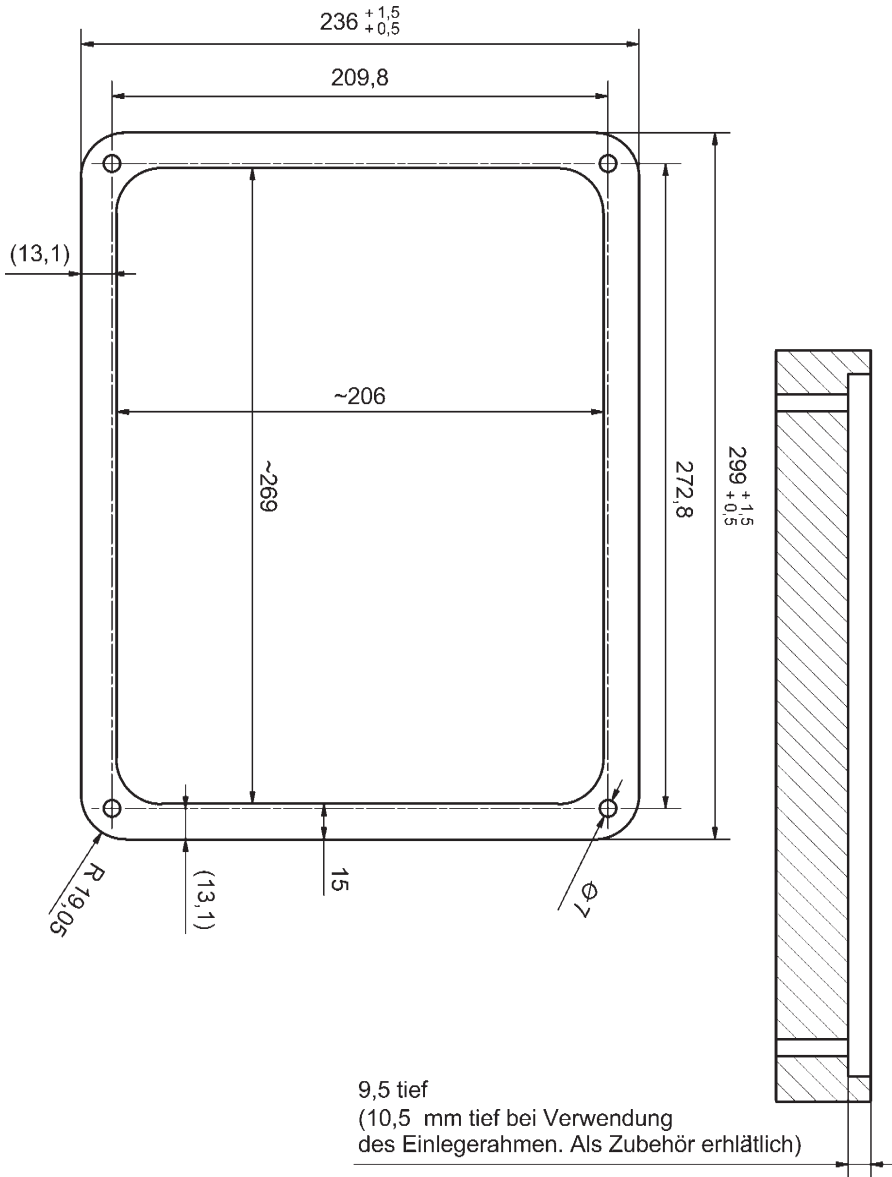


Abb. / Fig. 14
Erforderliche Einbaumaße am Kreg-Frästisch
Required installation dimensions on the router table of Kreg