

# metabo®

PROFESSIONAL POWER TOOL SOLUTIONS

**KS 216 M**

**KGS 216 M**

**KGS 254 M**

**KGS 305 M**

**KGS 18 LTX BL 216**

**KGS 18 LTX BL 254**

**KGS 18 LTX BL 305**



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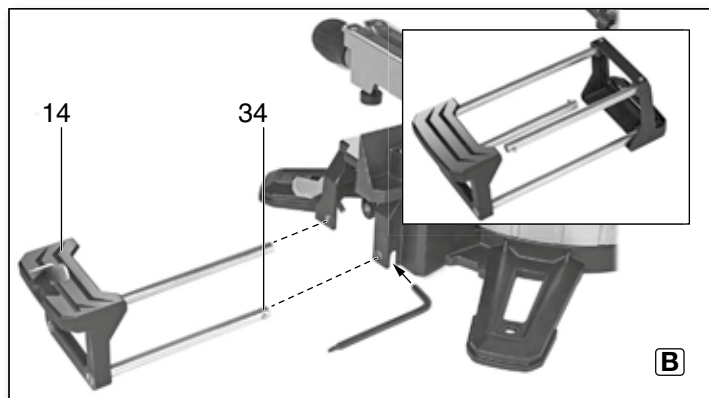
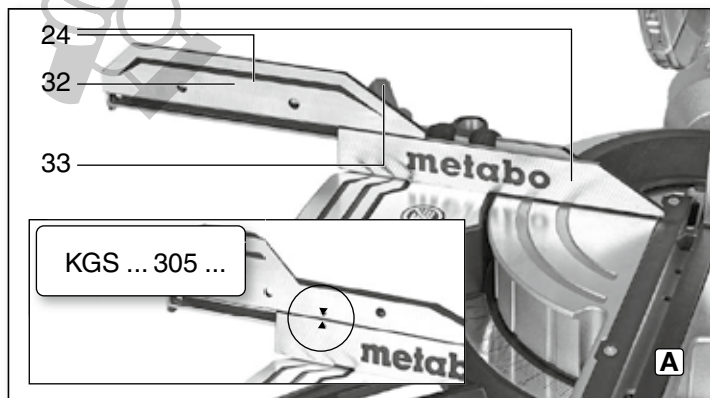
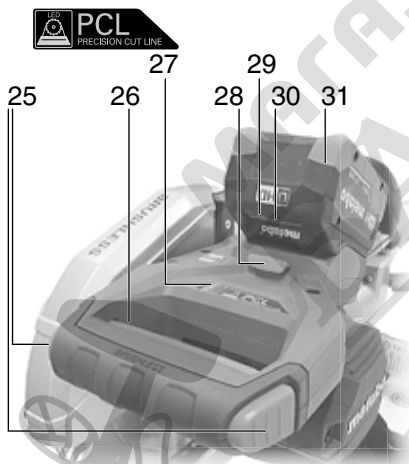
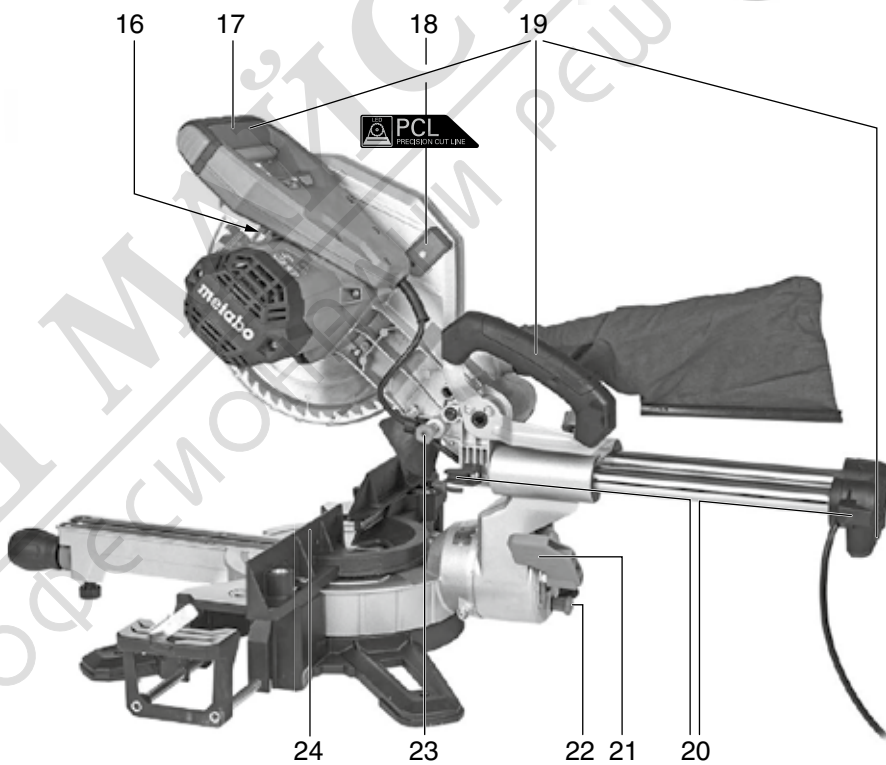
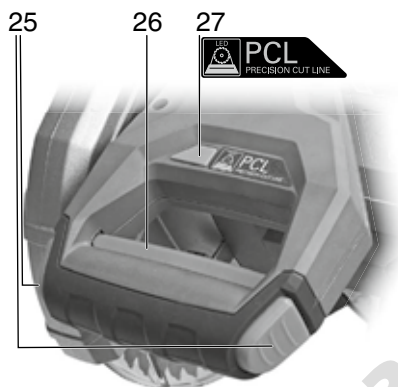
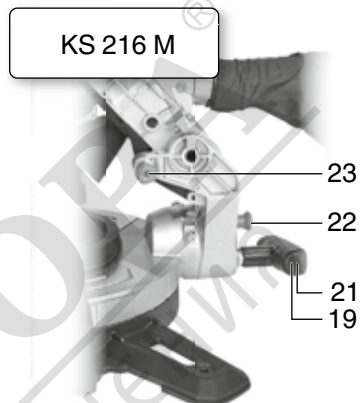
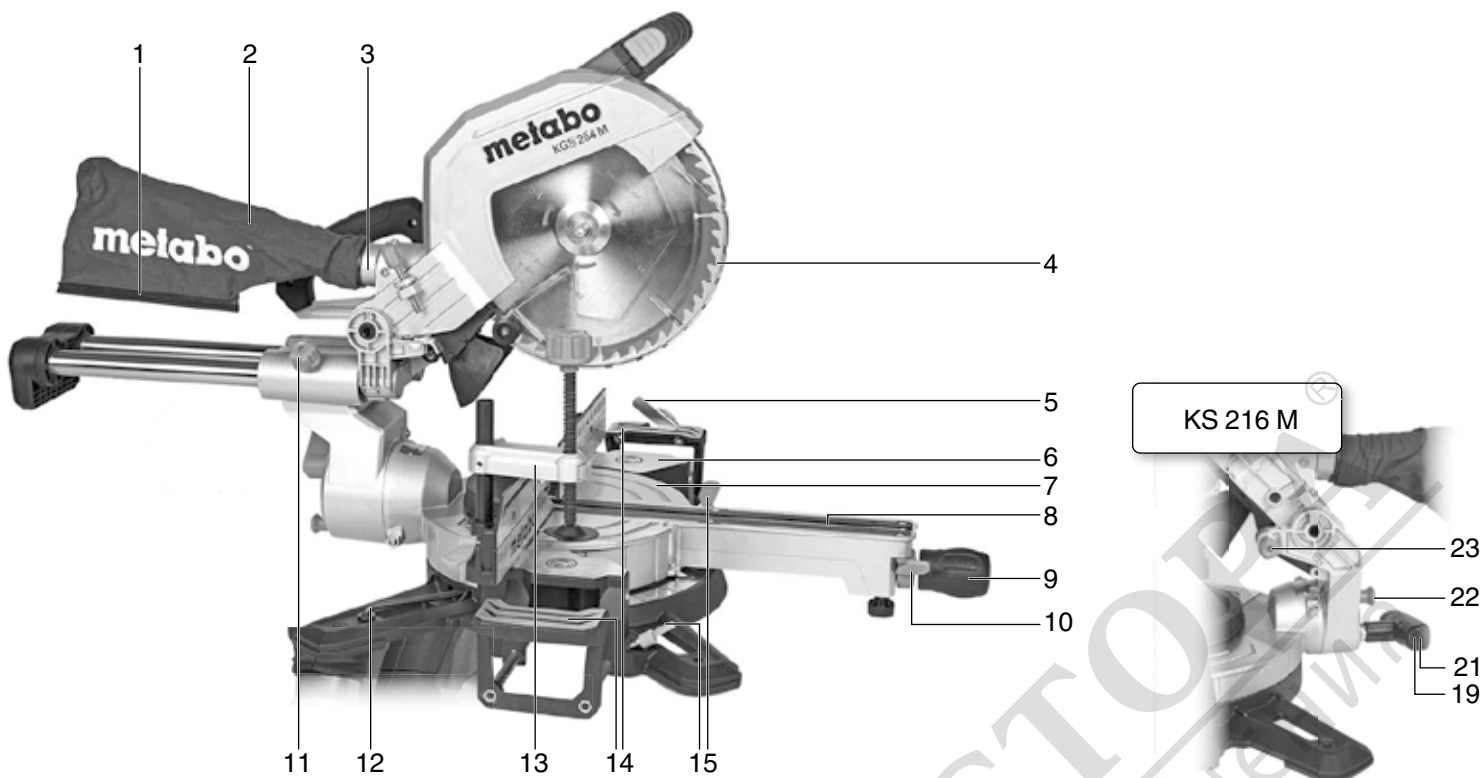
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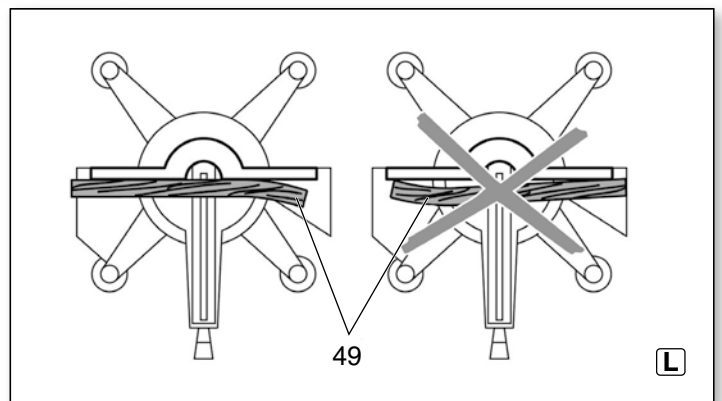
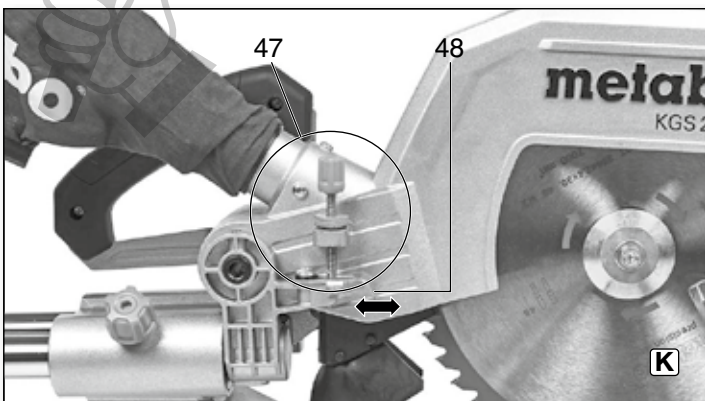
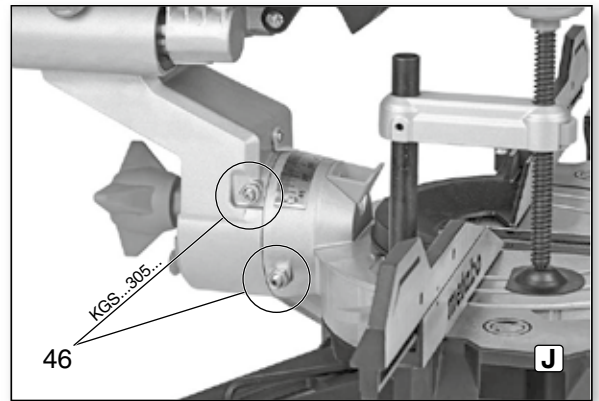
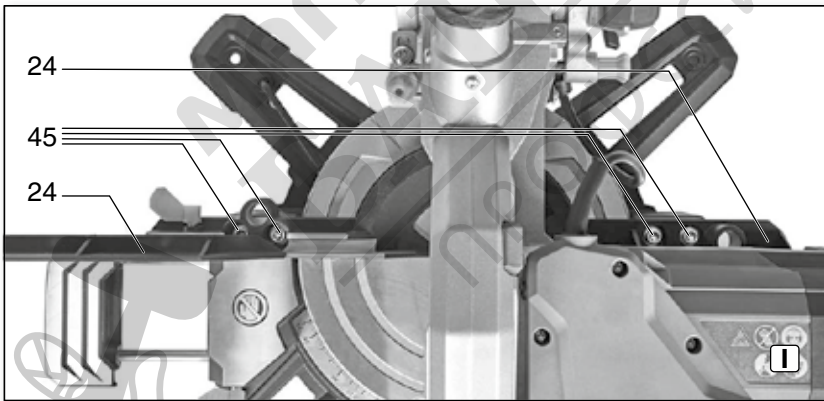
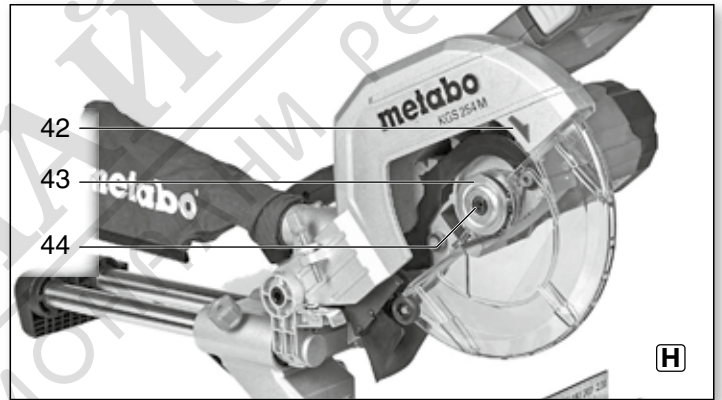
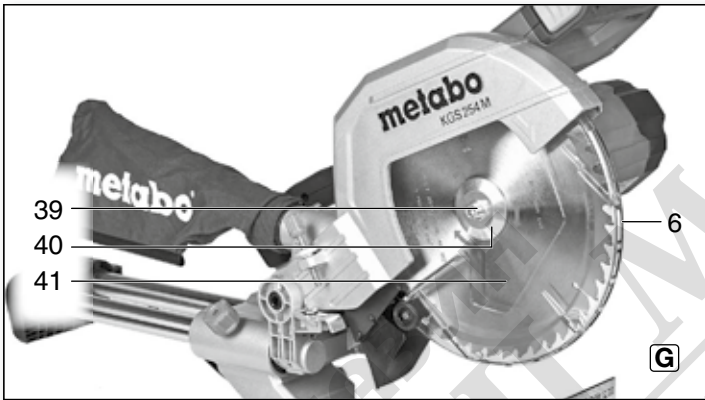
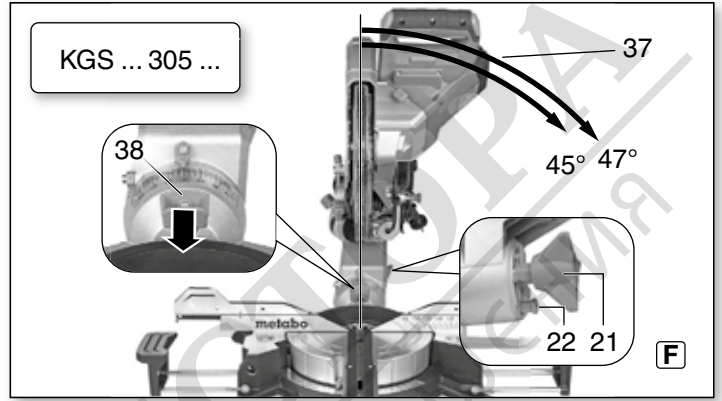
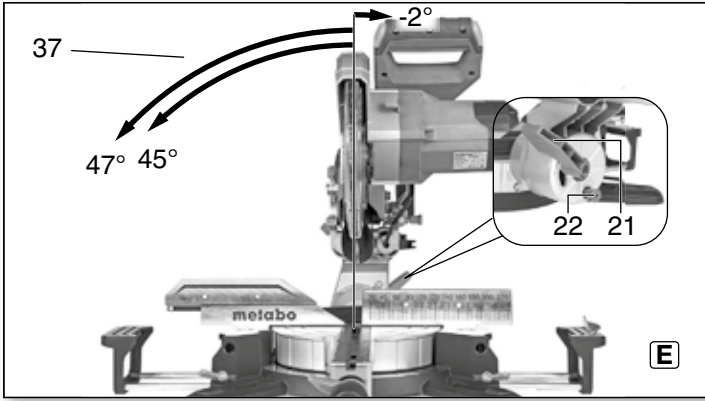
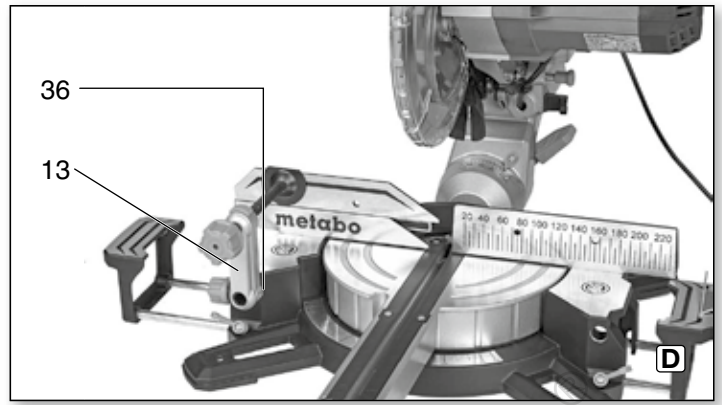
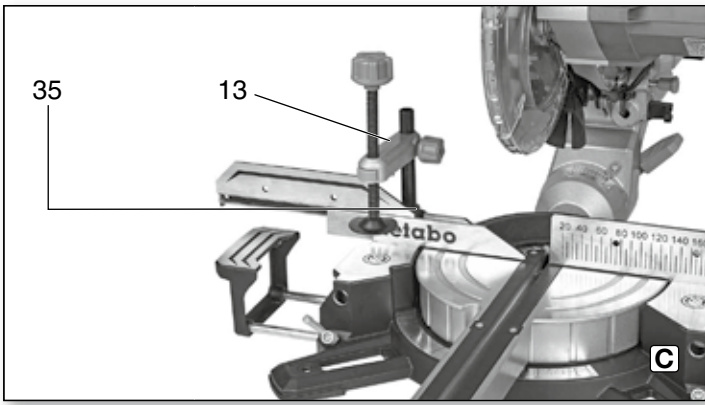
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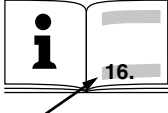
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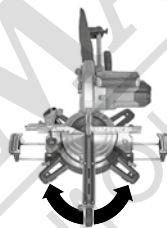
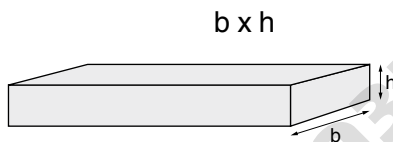
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<b>*1) Serial Number</b>		10216..	13216..	13254..	13305...	14216...	14254...	14305...
<b>U</b>	<b>V</b>	220-240 V ~ (50-60 Hz)	220-240 V ~ (50-60 Hz)	220-240 V ~ (50-60 Hz)	220-240 V ~ (50-60 Hz)	18 V	18 V	18 V
<b>I</b>	<b>A</b>	5,3	5,6	7,5	8,0	-	-	-
<b>F</b>	<b>A</b>	T 10 A	T 10 A	T 10 A	T 10 A	-	-	-
<b>P<sub>1</sub></b>	<b>kW</b>	1,1 kW (S1) 1,35 kW (S6 20%)	1,2 kW (S1) 1,5 kW (S6 20%)	1,45 kW (S1) 1,8 kW (S6 20%)	1,6 kW (S1) 2,0 kW (S6 20%)	-	-	-
<b>IP</b>	-	IP 20	IP 20	IP 20	IP 20	-	-	-
<b>n<sub>0</sub></b>	<b>/min, rpm</b>	5000	5000	4500	3700	5000	4000	3700
<b>v<sub>0</sub></b>	<b>m/s</b>	57	57	60	59	57	53	59
<b>D</b>	<b>mm</b>	216	216	254	305	216	254	305
<b>d</b>	<b>mm</b>	30	30	30	30	30	30	30
<b>b</b>	<b>mm</b>	2,4	2,4	2,6	3,0	2,4	2,6	3,0
<b>A</b>	<b>mm</b>	477 x 463 x 490	710 x 476 x 512	726 x 485 x 543	780 x 500 x 657	710 x 476 x 512	726 x 485 x 543	780 x 500 x 657
<b>m</b>	<b>kg</b>	8,4	13,4	16	18,6	12,8	14,8	17,4
<b>D<sub>1-i</sub></b>	<b>mm</b>	35	35	35	35	35	35	35
<b>D<sub>1-a</sub></b>	<b>mm</b>	41	41	41	41	41	41	41
<b>D<sub>2</sub></b>	<b>m<sup>3</sup>/h</b>	460	460	460	460	460	460	460
<b>D<sub>3</sub></b>	<b>Pa</b>	530	530	530	530	530	530	530
<b>D<sub>4</sub></b>	<b>m/s</b>	20	20	20	20	20	20	20
<b>L<sub>pA</sub>/K<sub>pA</sub></b>	<b>dB(A)</b>	85,4 / 3	85,5 / 3	86,6 / 3	87,4 / 3	91 / 3	91 / 3	98 / 3
<b>L<sub>WA</sub>/K<sub>WA</sub></b>	<b>dB(A)</b>	98,4 / 3	98,5 / 3	99,6 / 3	100,4 / 3	101 / 3	100 / 3	107 / 3



KS 216 M					
b x h (mm)	0°	15°	22,5°	30°	45°
0°	120 x 60	110 x 60	105 x 60	100 x 60	80 x 60
45°	120 x 45	110 x 45	105 x 45	100 x 45	80 x 45

KGS 216 M, KGS 18 LTX BL 216					
b x h (mm)	0°	15°	22,5°	30°	45°
0°	305 x 70	295 x 70	280 x 70	260 x 70	215 x 70
45°	305 x 40	295 x 40	280 x 40	260 x 40	215 x 40

KGS 254 M, KGS 18 LTX BL 254					
b x h (mm)	0°	15°	22,5°	30°	45°
0°	305 x 92	295 x 92	280 x 92	260 x 92	215 x 92
45°	305 x 48	295 x 48	280 x 48	260 x 48	215 x 48

KGS 305 M, KGS 18 LTX BL 305						
b x h (mm)	0°	15°	22,5°	30°	45°	60°
0°	305 x 110	309 x 110	296 x 110	273 x 110	215 x 110	160 x 110
45° L	305 x 55	295 x 55	280 x 67	260 x 67	215 x 67	-----
45° R	305 x 40	295 x 40	280 x 40	260 x 40	215 x 40	160 x 40

CE \*2) 2014/30/EU, 2006/42/EC, 2011/65/EU  
 \*3) EN 62841-1:2015, EN 62841-3-9:2021, EN IEC 63000:2018

2022-03-09, Bernd Fleischmann Ppa. B.F.  
 Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)  
 \*4) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

# Original instructions

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## 1. Declaration of Conformity

We, being solely responsible, hereby declare that these chop and mitre saws, identified by type and serial number \*1), meet all relevant requirements of directives \*2) and standards \*3). Technical documents for \*4) - see page 4.

### For UK only:

**UK** We as manufacturer and authorized person  
**CA** to compile the technical file, see \*4) on page 4, hereby declare under sole responsibility that these chop and mitre saws, identified by type and serial number \*1) on page 4, fulfill all relevant provisions of following UK Regulations S.I. 2016/1091, S.I. 2008/1597, S.I. 2012/3032 and Designated Standards EN 62841-1:2015, EN 62841-3-9:2021, EN IEC 63000:2018

## 2. Specified Conditions of Use

The mitre saw is suited for longitudinal and cross cuts, inclined cuts, mitre cuts and double mitre cuts.

Only for KGS...: In addition, it can also create grooves.

Only materials for which the respective saw blade is suited may be machined (approved saw blades see chapter 12. Accessories).

The permitted dimensions of the workpieces must be complied with (see chapter 16. Technical Data).

Workpieces with round or irregular cross-section (such as firewood) must not be cut, as they cannot be held securely during the cutting process. When sawing a thin workpiece laid on its edge, a suitable guide must be used for firm support.

Any other use does not comply with the intended purpose. Unspecified use, modification of the device or use of parts that have not been tested and approved by the manufacturer can cause unforeseeable damage!

## 3. General Safety Information



For your own protection and for the protection of your electrical tool, pay attention to all parts of the text that are marked with this symbol!



**WARNING** – Reading the operating instructions will reduce the risk of injury.

Pass on your power tool only together with these documents.

### General Power Tool Safety Warnings



**WARNING** – Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

**Keep all safety instructions and information for future reference!** The term "power tool" in the

warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

### 3.1 Work area safety

a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.

b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.

c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

### 3.2 Electrical safety

a) **Power tool plugs must match the outlet.** Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.

c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

d) **Do not abuse the cord.** Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

### 3.3 Personal safety

a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.

b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the device may result in personal injury.

e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust extraction can reduce dust-related hazards.

h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

### 3.4 Use and handling of the power tool

a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.

b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.

d) **Store idle power tools out of the reach of children.** Do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

e) **Maintain power tools and accessories with care.** Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) **Use the power tool, accessories, tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

### 3.5 Battery tool use and care

a) **Always charge the batteries only in chargers recommended by the manufacturer.** Chargers designed for a specific type of battery may pose a fire hazard when used together with other battery types.

b) **Use only the batteries provided for this purpose in the power tools.** Use of any other battery packs may create a risk of injury and fire.

c) **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.

d) **Under abusive conditions, liquid may be ejected from the battery. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Escaping battery fluid can cause skin irritation or burns.

e) **Do not use damaged or modified batteries.** Damaged or modified batteries may behave unpredictably and lead to fire, explosion or risk of injury.

f) **Do not expose the battery pack to fire or excessive temperatures.** Fire or temperatures above 130 °C can cause an explosion.

g) **Follow all instructions on charging and never charge the battery or the cordless tool outside the temperature range indicated in the operating instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

### 3.6 Service

a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

b) **Never service damaged batteries.** Any servicing of batteries should only be carried out by the manufacturer or authorised customer service points.

### 3.7 Additional Safety Instructions

– These operating instructions are intended for people with basic technical knowledge regarding the operation of a machine like this or similar electrical power tools. Inexperienced persons are strongly advised to seek competent

advise and guidance from an experienced person before operating this machine.

- The manufacturer assumes no liability for any damage caused by neglect of these operating instructions.

Information in these instructions is marked as under:



**Danger!**  
Risk of personal injury or environmental damage.



**Risk of electric shock!**  
Risk of personal injury by electric shock.



**Entanglement hazard!**  
Risk of personal injury by body parts or clothing being drawn into the rotating saw blade.



**Caution!**  
Risk of material damage.



**Note:**  
Additional information.

## 4. Special Safety Instructions

- a) **Mitre saws are intended to cut wood or wood-like products, they cannot be used to cut ferrous materials such as bars, rods, studs etc.** Abrasive dust causes moving parts such as the lower guard to jam. Sparks from abrasive cutting will burn the lower guard, the kerf insert and other plastic parts.
- b) **Use clamps to support the workpiece whenever possible. If supporting the workpiece by hand, you must always keep your hand at least 100 mm from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand.** If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact.
- c) **The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut "freehand" in any way.** Unrestrained or moving workpieces could be thrown at high speeds, causing injury.
- d) **Only for KGS...: Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece.** Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.
- e) **Never cross your hand over the intended line of cutting either in front or behind the saw blade.** Supporting the workpiece "cross handed" i.e. holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.
- f) **Never reach behind the fence when the saw blade is rotating, with either hand closer than 100 mm from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning.** The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.
- g) **Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the workpiece, fence and table along the line of the cut.** Bent or warped workpieces can twist or shift and may cause binding on the spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.
- h) **Do not use the saw until the table is clear of all tools, wood scraps, etc. except for the workpiece.** Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.
- i) **Cut only one workpiece at a time.** Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.

j) **Ensure the mitre saw is mounted or placed on a level, firm work surface before use.** A level and firm work surface reduces the risk of the mitre saw becoming unstable.

k) **Plan your work. Every time you change the bevel or mitre angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere with the blade or the guarding system.** Without turning the tool "ON" and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.

l) **Provide adequate support such as table extensions, saw horses, etc. for a workpiece that is wider or longer than the table top.** Workpieces longer or wider than the mitre saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.

m) **Do not use another person as a substitute for a table extension or as additional support.** Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.

n) **The cut-off piece must not be jammed or pressed by any means against the spinning saw blade.** If confined, i.e. using length stops, the cut-off piece could get wedged against the blade and thrown violently.

o) **Always use a clamp or a fixture designed to properly support round material such as rods or tubing.** Rods have a tendency to roll while being cut, causing the blade to "bite" and pull the work with your hand into the blade.

p) **Let the blade reach full speed before contacting the workpiece.** This will reduce the risk of the workpiece being thrown.

q) **If the workpiece or blade becomes jammed, turn the mitre saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material.** Continued sawing with a jammed workpiece could cause loss of control or damage to the mitre saw.

r) **After finishing the cut, release the switch, hold the saw head down and wait for the blade to stop before removing the cut-off piece.** Reaching with your hand near the coasting blade is dangerous.

s) **Only for KGS 254 M, KGS 305 M, KGS 18 LTX BL 216, KGS 18 LTX BL 254, KGS 18 LTX BL 305: Hold the handle firmly if you are completing an incomplete saw cut or if you release the switch before the saw head has reached its lowest position.** The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.

### 4.1 Additional Safety Instructions

- Please also observe the special safety instructions in the respective chapters.
- Where applicable, follow the legal directives or regulations for the prevention of accidents.



#### General hazards!

- Consider environmental conditions:
- When working long stock use suitable supports.
- The machine shall only be started and operated by persons familiar with the machine and who are at any time aware of the dangers associated with the operation of such machines. Persons under 18 years of age may use this machine only in the course of their vocational training, under the supervision of an instructor.
- Keep bystanders, particularly children, out of the danger zone. Do not permit other persons to touch the machine or power cable while it is running.
- Avoid overheating of the saw teeth.
- When sawing plastic, avoid melting of the plastic.



#### Risks of personal injury and crushing by moving parts!

- Do not operate the machine without installed guards.
- Always keep sufficient distance to the saw blade. Use suitable feeding aids, if necessary. Keep sufficient distance to driven components when operating this machine.
- Wait for the saw blade to come to a complete stop before removing cutoffs, scrap, etc. from the work area.
- Cut only stock of dimensions that can be safely held during cutting.
- Use clamping devices or a vice to hold the workpiece. It is held safer by these devices than by your hand.
- Do not attempt to stop the saw blade by pushing the workpiece against its side.
- Remove the mains plug from the socket or remove the detachable battery pack before carrying out any settings, maintenance or repairs.
- If the device is not in use, pull the mains plug or remove the detachable battery pack.



#### Cutting hazard, even with the cutting tool at standstill!

- Wear gloves when changing cutting tools.
- Store saw blade in such manner that nobody will get hurt.



#### Danger from kickback of the saw head (saw blade gets caught in the workpiece and the saw head suddenly kicks back)!

- Select a saw blade suited for the material to be cut.
- Keep the handle tight. When the saw blade enters the workpiece, the risk of kickback is particularly high.
- Cut thin or thin-walled workpieces only with fine-toothed saw blades.
- Always use sharp saw blades. Replace damaged saw blades immediately. There is an increased risk of kickback if a blunt sawtooth gets caught in the workpiece's surface.
- Do not jam any work pieces.
- If in doubt, check work piece for inclusion of foreign matter (e.g. nails or screws).
- Never cut several work pieces at the same time – and also no bundles containing several individual pieces. Risk of personal injury if individual pieces are caught by the saw blade uncontrolled.
- Only for KGS.: When making grooves avoid lateral pressure on the saw blade - use a clamping device.



#### Entanglement hazard!

- Ensure that during operation no parts of the body or clothing can be caught and drawn in by rotating components (**no ties no gloves, no clothes with wide sleeves; contain long hair with a hairnet**).
- Never cut workpieces to which ropes, cords, strings, cables or wires are attached or which contain such materials.



#### Hazard generated by insufficient personal protection gear!

- Wear hearing protection.
- Wear safety glasses.
- Wear dust mask.
- Wear suitable work clothes.
- Wear non-slip footwear.
- Wear gloves when handling saw blades and rough workpieces. Carry saw blades in a container.

**Risk of injury by inhaled wood dust!**

- Work only with a suitable dust collector attached to the saw. The dust extraction unit must comply with the values stated in chapter 16..

**Reducing Dust Exposure:**

- Some of the dust created using this power tool may contain chemicals known to cause cancer, allergic reactions, respiratory disease, birth defects or other reproductive harm. Some examples of such substances are, lead (in paint containing lead), additives used for wood treatment (chromate, wood preservatives), some wood types (such as oak or beech dust).
- The risk from exposure to such substances will depend on how long the user or nearby persons are being exposed.
- Do not let particles enter the body.
- To reduce exposure to these substances: work in a well ventilated area and wear protective equipment, such as dust masks that are specially designed to filter out microscopic particles.
- Observe the relevant guidelines for your material, staff, application and place of application (e.g. occupational health and safety regulations, disposal).
- Collect the particles generated at the source, avoid deposits in the surrounding area.
- Use the supplied dust collection unit and a suitable extraction unit. In this way, fewer particles enter the environment in an uncontrolled manner.
- Reduce dust exposure with the following measures:
  - do not direct the escaping particles and the exhaust air stream towards yourself or nearby persons or towards dust deposits,
  - use an extraction unit and/or an air purifier,
  - ensure good ventilation of the workplace and keep it clean using a vacuum cleaner. Sweeping or blowing stirs up dust.
  - Vacuum or wash protective clothing. Do not blow, beat or brush protective gear.

**Hazard generated by modification of the machine or use of parts not tested and approved by the equipment manufacturer**

- Assemble the machine in strict accordance with these instructions.
- Use only parts approved by the manufacturer. This applies especially to:
  - saw blades (for order numbers, refer to chapter 12. Accessories).
  - Safety devices.
  - Cutting line display
- Do not change any parts.
- Ensure that the speed indicated on the saw blade is at least the same as the max. speed indicated on the saw.

**Hazard generated by machine defects!**

- Before every use check the machine for possible damage: before operating the machine all safety devices, protective guards or slightly damaged parts need to be checked for proper function as specified. Check to see that all moving parts work properly and do not jam. All parts must be correctly installed and fulfil all conditions necessary to ensure perfect operation of the unit.
- Do not use any damaged or contorted saw blades.

**Risk of injury by noise!**

- Wear hearing protection.

**Danger from blocking workpieces or workpiece parts!**

If blockage occurs:

1. switch machine off,

2. Pull the mains plug or remove the detachable battery pack,
3. wear gloves,
4. Clear the blockage using a suitable tool.

**4.2 Special safety instructions for cordless machines:**

Remove the battery pack from the machine before making any adjustments, changing tools, maintaining or cleaning.



Protect battery packs from water and moisture!



Do not expose battery packs to fire!

Do not use faulty or deformed battery packs!

Do not open battery packs!

Do not touch or short circuit battery pack contacts!



A slightly acidic, flammable fluid may leak from defective Li-Ion battery packs!



If battery fluid leaks out and comes into contact with your skin, rinse immediately with plenty of water. If battery fluid leaks out and comes into contact with your eyes, wash them with clean water and seek medical attention immediately!

If the machine is defective, remove the battery pack from the machine.

**Transport of Li-Ion battery packs:**

The shipping of Li-Ion battery packs is subject to laws related to the carriage of hazardous goods (UN 3480 and UN 3481). Inform yourself of the currently valid specifications when shipping Li-Ion battery packs. If necessary, consult your freight forwarder. Certified packaging is available from Metabo.

Only send the battery pack if the housing is intact and no fluid is leaking. Remove the battery pack from the machine for sending. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

**4.3 Symbols on the machine (depends on model)**

Read instructions.



Never place hands into running saw blade.



Hazard area Keep fingers, hands, and arms out of this area if possible.



Wear protective goggles and ear protectors.



Never operate the tool in a damp or wet environment.



CAUTION Do not stare at operating lamp.

**4.4 Safety Devices****Retractable blade guard (4)**

The retractable blade guard protects against unintentional contact with the saw blade and from chips flying about.

**Safety lock (25)**

The machine can only be switched on if the safety lock (right or left) is depressed.

**Parallel guide/ ripping fence (24)**

The parallel guide/ ripping fence prevents that the workpiece can be moved during the cutting process. During operation, the parallel guide/ ripping fence always has to be installed.

Make sure the additional profile (32) is set correctly to support the workpiece in the best manner possible and will not interfere with the blade or the guard. Lock with the locking lever (33).

Without turning the tool on and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the additional profile (32).

An incorrectly adjusted additional profile (32) can, in the event of sloped cuts and double mitre cuts,

get in contact with the saw blade and thus lead to serious injuries.

The additional profile (32) at the parallel guide/ ripping fence has to be moved for inclined cuts after loosening the locking lever (33).

Only for KGS...305...(see Fig. A): This machine has an additional profile on the right and left (32). For specialised cuts, it may be necessary to remove an additional profile (32). To remove it, push the profile so that the 2 triangles are across from one another. In this position, the additional profile (32) can be pulled off from the top. After completing the cut, re-attach the additional profile (32) so that it is not lost.

**5. Overview**

See page 2.

**The illustrations are regarded as exemplary for all devices. Therefore, the equipment of your device may differ from the illustrations.**

- 1 Closing the chip bag
- 2 Chip bag
- 3 Dust extraction port
- 4 Retractable blade guard
- 5 Longitudinal stop
- 6 Table
- 7 Turntable
- 8 Table insert
- 9 Locking lever for turntable
- 10 Pawl for snap-in positions of the turntable \*
- 11 Set screw for pulling device\*
- 12 Allen key / tool storage for Allen key
- 13 Work clamp
- 14 Table extension
- 15 Locking lever of the table width extension
- 16 Saw blade lock
- 17 Saw handle
- 18 Cutting line display
- 19 Carrying handle / handles \*
- 20 Hook for cable winding \*
- 21 Locking lever for setting the angle of inclination
- 22 Locking button (to extend the angle of inclination by +/- 2 °)
- 23 Transport lock
- 24 Parallel guide / ripping fence
- 25 Safety lock
- 26 On/off switch of the saw
- 27 Switch for the cutting line display
- 28 Battery pack release button \*
- 29 Capacity indicator button \*
- 30 Capacity and signal indicator \*
- 31 Battery pack\*

\* depends on model / equipment

**6. Setup and transport****KS 216 M: Mount locking lever for pitch adjustment (21)**

(See page 2, fig. top right)

1. Swivel turntable (7) to 0° position.
2. Unscrew the fixing screw from the hexagonal bolt.
3. Put the locking lever (21) onto the hexagonal bolt and tighten in clockwise direction.
4. Pull off the locking lever (21) and put it back onto the hexagonal bolt in an approximately horizontal position and tighten it with the fastening screw.

**Install handle (19) if required (depending on model)**

- Fix the handle (19) as pictured.

**Install table width extension (14) if required (depending on model)**

1. Remove right and left table width extension from the transport packaging.
2. Insert the table width extension with folding length guide (5) on the right side. Ensure the correct side, since it will be difficult to remove if the sides are mixed up.
3. Push in the button (34) and push the guide rails of the table width extensions (14) fully into the mounts. The button (34) will snap into place and the table width extensions are mounted.
4. Set the desired table width and lock the table width extensions with the locking lever (15).

5. To support particularly long workpieces, the two side table width extensions (14) can be removed and connected together (see Fig. B), in order to place them anywhere within the room. After use, always re-attach to the machine.

### Note:

To remove the table width extension (see Fig. B): Pull out to the stop so that the knob (34) can be pushed in through the opening on the back side (for instance with the Allen wrench). Pull the table width extension all the way out.

### Installation

The device has to be mounted on a stable support for safe working.

- The support can be either a suitable mitre saw base frame, a firmly mounted work top or work bench.
- Even when machining larger workpieces the device has to have a secure stand.
- Long workpieces must get additional support with suitable accessories.

### Note:

*For mobile use, the device can also be fixed to a plywood or coreboard panel (500 mm x 500 mm, at least 19 mm thick) using screws. During use, the panel has to be fixed to a work bench using screw clamps.*

1. Fix device to the support using screws.
2. Loosen transport lock (23): Push saw head slightly downwards and hold. Pull out transport lock (23).
3. Swivel saw head slightly upwards.

### Transport

1. Swivel saw head downwards and push in transport lock (23).
2. Only for KGS.: Lock the pulling device in the front position using the set screw (11).
3. Optimally, swivel the turntable (7) 45° to the right.

### Caution!

Do not hold the saw at the protective installations during transport.

4. Lift and carry the device using the carrying handles (19) (equipment-dependent).

Alternative option: push both table width extensions (14) all the way in and lock using the locking lever (15). Lift the machine on both table width extensions (14) and carry it.

## 7. Machine Details

### 7.1 On/Off switch motor

Switching on the motor:

1. Press in and hold the safety locking lever (25) (right or left).
2. Press and hold the on/off switch (26).
3. Release the safety locking mechanism (25).

Switching off the motor:

- Release on/off switch (26).

### 7.2 Cutting line display (18)

In the "Precision Cut Line System" (PCL), an LED placed above the saw blade throws an exact shadow of the saw blade on the workpiece. This means calibration is not required.

1. Activate PCL by pressing the button (27).
2. Lower the saw blade to just a few centimetres over the workpiece, in order to create an exact cutting line.
3. Align the workpiece to the cutting line display.

In cordless devices, the light is activated by briefly pressing the On/Off switch (26). After short break, the light goes off (sleep mode) and is automatically reactivated when resuming work. If the light is not needed, it can be deactivated using the switch (27) to save battery power.

### Danger!

Do not direct the light beam into the eyes of people or animals.

### 7.3 Setting the angle of inclination

After loosening the locking lever (21), the saw can be infinitely inclined between 0° and 45° to the left of the vertical position (37).

Press the locking button (22) during the adjustment process in order to also set angles up to 47° to the left of the vertical/ up to 2° to the right of the vertical.

Only for KGS...305... The saw can also be adjusted to the right of vertical: release the locking lever (21) AND pull the knob (38) forward. The saw can now be tilted to any position between 0° and 45° to the right of vertical (37). Press the locking button (22) during the adjustment process in order to also set angles up to 47° to the right of the vertical.

### Danger!

In order for the angle of inclination not to change when cutting, the locking lever (21) of the swivel arm has to be tightened.

Only for KGS...305..., KS 216 M: You can adapt the position of the locking lever according to your requirements: pull out locking lever, turn and push in the desired position and let engage.

### 7.4 Turntable

Only for KGS...: For mitre cuts, the turntable (7) can be turned to the desired angle after releasing the locking button (9) and pressing the pawl (10). In this manner the cutting angle to the support edge of the workpiece is adjusted.

Only for KS...: For mitre cuts, the turntable can be turned to the desired angle after releasing the locking button (9). In this manner the cutting angle to the support edge of the workpiece is adjusted.

### Danger!

In order for the mitre angle not to change during cutting, the locking handle (9) of the turntable has to be tightened (also in the stop positions!).

### 7.5 Only for KGS...: Pulling device

Using the pulling device, also larger workpieces with greater cross sections can be cut. The pulling device can be used for all types of cuts (straight cuts, mitre cuts, slanted cuts and double mitre cuts, and cutting of grooves).

If the pulling device is not required, lock the pulling device in the rear position using the set screw (11).

### 7.6 Only for KGS...: Cutting depth limitation

Together with the pulling device the cutting depth limitation (47) permits the cutting of grooves.

Turn the set screw and fix with the counter nut. The cutting depth limitation can be deactivated, if the parallel guide (48) is pushed towards the rear.

## 8. Initial Operation

### 8.1 Connect chip sack / chip and dust extraction unit

#### Danger!

Some types of wood dust (e.g. beech, oak, ash) may cause cancer when inhaled.

- Only use a suitable dust extraction unit or installed dust sack.
- In addition, use a dust mask, as not all saw dust is collected or extracted.
- Regularly empty the dust sack. Wear a dust mask while emptying the sack.

If you operate the device with the supplied dust sack:

- Attach the dust sack (2) to the chip extraction adapter nozzle (3). Ensure that the closure (1) of the dust sack is closed.

If you connect the device to a dust extraction unit:

- Use a suitable adapter to connect it to the chip extraction adapter nozzle (see chapter 12. "Accessories").
- Ensure that the dust extraction unit meets the requirements stated in chapter 16. "Technical Specifications".
- Observe the dust collector's operating instructions as well!

### 8.2 Installing the workpiece clamping device

The workpiece clamping device (13) can be installed in two positions:

- For wide workpieces: Insert the workpiece clamping device into the rear drilling (35) of the table.
- For narrow workpieces: Insert the workpiece clamping device into the front drilling (36) of the table.

### 8.3 For mains powered machines only

#### Danger!

#### High voltage

Operate machine only on a power source meeting the following requirements (see also chapter 16. "Technical Specifications"):

- Mains voltage and system frequency must conform to the voltage and frequency shown on the machine's rating label;
- fuse protection by a residual current operated device (RCD) of 30 mA sensitivity;
- outlets properly installed, earthed or grounded, and tested.
- Make sure the power supply cable is out of the way, so that it does not interfere with the work and does not pose a tripping hazard or will get damaged.
- Use only rubber-jacketed extension cables with sufficient lead cross-section (3 x 1.5 mm<sup>2</sup>).
- Use extension cables for outdoor areas. When working outdoors, only use the correspondingly marked extension cable approved for this purpose.
- Avoid accidental start-up. Ensure that the on/off switch is switched off when inserting the plug in the socket.

### 8.4 For cordless machines only

- Avoid accidental start-up. Before fitting the battery pack, make sure that the machine is switched off.

#### Battery pack

Charge the battery pack (31) before use.

Recharge the battery pack if performance diminishes.

Instructions on charging the battery pack can be found in the operating instructions of the Metabo charger.

Battery packs have a capacity and signal display (30) (depends on design variant):

- Press the button (29), the LEDs indicate the charge level.
- The battery pack is almost empty and must be recharged if one LED is flashing.

#### Removing and inserting the battery pack

Removal: press the battery pack release button (28) and pull the battery pack (31) forwards.

To insert: Slide the battery pack (31) in until it engages.

## 9. Operation

- Before starting work, check to see that the following are in proper working order.
- Assume proper operating position:
  - at the front of the saw;
  - in front of the saw;
  - next to the line of cut.

#### Danger!

Always fasten the workpiece with the workpiece clamping device (13).

**Danger of crushing!**

When inclining or swivelling the saw head, never reach into the hinge area or below the device!

- Hold the saw head during inclination.
- Use during work:
  - work support – for long stock, which would otherwise fall off the table on completion of the cut;
  - dust sack or dust extraction unit.
- Cut only stock of dimensions that can be safely held during cutting.
- Always hold the workpiece down on the table and do not jam it. Do not attempt to stop the saw blade by pushing the workpiece against its side. Risk of personal injury if the saw blade is blocked.

**9.1 Straight cuts****Starting position:**

- Transport lock (23) pulled out.
- Saw head swivelled upwards.
- Only for KGS...: Cutting depth limitation (48) deactivated.
- Turntable is in 0° position, locking button (9) for turntable is tightened.
- The inclination of the swivel arm to the vertical is 0°, locking lever (21) for inclined position is tightened.
- Only for KGS...: Pulling device all the way back.
- Only for KGS...: The locking screw (11) of the pulling device is released.
- Set workpiece stop (24): Release the locking lever (33). Move the additional profile (32) (KGS...305...: the additional profiles) in such a way that the workpiece is supported in the best manner possible and will not interfere with the blade or the guard. Fix in place using the locking lever (33).

**Cutting the workpiece:**

1. Push the workpiece against the parallel guide/ripping fence and clamp using the workpiece clamping device (13).
2. Only for KGS.: For wider workpieces: pull the saw head forwards (towards the operator) (pulling device).
3. Activate the safety lock (25), press on/off switch (26) and keep pressed.
4. Slowly lower the saw head at the handle all the way down and, if required, push towards the rear (away from the operator). During the sawing process press on the workpiece just enough for the motor speed not to lower too much.
5. Cut work piece in a single pass.
6. Release the on/off switch (26) and slowly let the saw head swivel back into the upper starting position.

**9.2 Mitre cuts****Starting position:**

- Transport lock (23) pulled out.
- Saw head swivelled upwards.
- Only for KGS...: Cutting depth limitation (48) deactivated.
- Inclination of the swivel arm to the vertical is 0°, locking lever (21) for inclination setting is tightened.
- Only for KGS...: Pulling device all the way back.
- Only for KGS...: The locking screw (11) of the pulling device is released.
- Set workpiece stop (24): Release the locking lever (33). Push the additional profile (32) (KGS...305...: the additional profiles) all the way toward the saw blade, so that the workpiece is supported as well as possible. Fix in place using the locking lever (33).

**Cutting the workpiece:**

1. Loosen the locking handle (9) of the turntable and loosen safety catch for KGS...: (10).
2. Set the desired angle.
3. Tighten the locking button (9) of the turntable.

4. Cut workpiece, as described for "Straight cuts".

**9.3 Inclined cuts****Starting position:**

- Transport lock (23) pulled out.
- Saw head swivelled upwards.
- Only for KGS...: Cutting depth limitation (48) deactivated.
- Turntable is in 0° position, locking button (9) for turntable is tightened.
- Only for KGS...: The locking screw (11) of the pulling device is released.
- Only for KGS...: Pulling device all the way back.
- Set workpiece stop (24): Release the locking lever (33). Move the additional profile (32) (KGS...305...: the additional profiles) in such a way that the workpiece is supported in the best manner possible and will not interfere with the blade or the guard. Fix in place using the locking lever (33).
- Only for KGS...305...: For certain angle settings, it may be necessary to remove one of the additional profiles (32). To remove it, push the profile so that the 2 triangles are across from one another. In this position, the additional profile (32) can be pulled off from the top. After completing the saw cut, re-attach the additional profile (32) so that it is not lost.

**Cutting the workpiece:**

1. Loosen the locking lever (21) for the inclination setting at the rear side of the saw.
2. Slowly tilt the swivel arm into the desired position. For details see chapter 7.3.
3. Tighten the locking lever (21) for the inclination setting.
4. Cut the workpiece, as described for "Straight cuts".

**9.4 Double mitre cuts****Note:**

*The double mitre cut is a combination of mitre cut and inclined cut. This means, the workpiece is cut at an angle to the rear contact edge and at an angle to the top.*

**Danger!**

With a double mitre cut, the saw blade is easier accessible due to the steep inclination – this results in a higher risk of injury. Always keep sufficient distance to the saw blade!

**Starting position:**

- Transport lock (23) pulled out.
- Saw head swivelled upwards.
- Only for KGS...: Cutting depth limitation (48) deactivated.
- Lock the turn table in the desired position.
- Swivel arm inclined at desired angle to the workpiece surface and locked. For details see chapter 7.3.
- Only for KGS...: The locking screw (11) of the pulling device is released.
- Only for KGS...: Pulling device all the way back.
- Set workpiece stop (24): Release the locking lever (33). Move the additional profile (32) (KGS...305...: the additional profiles) in such a way that the workpiece is supported in the best manner possible and will not interfere with the blade or the guard. Fix in place using the locking lever (33).
- Only for KGS...305...: For certain angle settings, it may be necessary to remove one of the additional profiles (32). To remove it, push the profile so that the 2 triangles are across from one another. In this position, the additional profile (32) can be pulled off from the top. After completing the saw cut, re-attach the additional profile (32) so that it is not lost.

**Cutting the workpiece:**

- Cut the workpiece, as described for "Straight cuts".

**9.5 Only for KGS...: Sawing grooves****Note:**

*The cutting depth limitation together with the pulling device permits the cutting of grooves. This does not result in a separating cut, but only a cut of a certain depth is effected in the workpiece.*

**Risk of kickback!**

When cutting grooves it is particularly important that no lateral pressure is exerted on the saw blade. Otherwise, the saw head might suddenly kick back! Use a clamping device when cutting grooves. Avoid lateral pressure on the saw head.

**Starting position:**

- Transport lock (23) pulled out.
- Saw head swivelled upwards.
- Swivel arm inclined at desired angle to the workpiece surface and locked. For details see chapter 7.3.
- Lock the turn table in the desired position.
- Set screw (11) of the pulling device has been loosened.
- Pulling device at the very rear.

**Cutting the workpiece:**

1. Set the cutting depth limitation (47) to the desired cutting depth and fix with counter nut. Push the stop of the cutting depth limitation (48) to the front.
2. Loosen safety lock (25) and swivel saw head downwards to check the set cutting depth:
3. Effect trial cut.
4. If required, repeat steps 1 and 3 until the desired cutting depth has been set.
5. Cut the workpiece, as described for "Straight cuts".

**10. Care And Maintenance****Danger!**

Prior to all maintenance and cleaning jobs pull the mains plug or remove the detachable battery pack (31).

- Repair and maintenance work other than described in this section should only be carried out by qualified specialists.
- Replace damaged parts, in particular safety installations, only with original parts. Parts not approved by the equipment manufacturer can cause unforeseeable damage.
- Check to see that all safety devices are operational again after each service.

**10.1 Saw blade change****Risk of burning!**

Directly after cutting the saw blade can be very hot. Let a hot saw blade cool down. Do not clean the hot saw blade with combustible liquids.

**Risk of injury, even with the blade at standstill!**

When loosening and tightening the tensioning screw (39) the retractable blade guard (4) has to be swivelled over the saw blade. Wear gloves when changing blades.

1. Pull the mains plug or remove the detachable battery pack (31).
2. Put the saw head in the upper position.
3. Lock saw blade: press the locking button (16) and turn the saw blade with the other hand until the locking button engages. Hold down the locking button.
4. Remove the tensioning screw with washer (39) on the saw blade shaft with Allen key (12) in clockwise direction (left-hand thread!).
5. Push the retractable blade guard (4) up and hold.
6. Carefully remove outer flange (40) and saw blade (41) from the saw blade shaft and close again the retractable blade guard.

**Danger!**

Do not use cleaning agents (e.g. to remove resin residue) that could corrode the light metal components of the saw; the stability of the saw would be adversely affected.

7. Cleaning the clamping surfaces:

- Saw blade shaft (44),
- saw blade (41),
- outer flange (40),
- inner flange (43).

**Danger!**

Place inner flange properly! If this is not the case, the saw can block or the saw blade could work loose. The inner flange is in the correct position if the ring groove points towards the saw blade and the flat side to the motor.

8. Put on inner flange (43).
9. Push the retractable blade guard (4) up and hold.
10. Place a new saw blade - pay attention to direction of rotation: Seen from the left (open) side, the arrow on the saw blade has to correspond to the direction of the arrow (42) on the saw blade cover!

**Danger!**

Use only saw blades, which fulfil the requirements and specifications listed in these operating instructions.

Use only saw blades designed for the maximum speed (see "Technical Specifications") - if unsuitable or damaged saw blades parts are used, parts can be ejected due to centrifugal force in an explosive-type manner.

Saw blades intended for cutting wood or similar materials have to conform to EN 847-1.

Do not use:

- saw blades made of high-alloy speed steel (HSS);
- damaged saw blades;
- cut-off wheel blades.

**Danger!**

- Mount saw blade using only genuine parts.
  - Do not use loose-fitting reducing rings; the saw blade could work loose.
  - Saw blades have to be mounted in such way that they do not wobble or run out of balance and cannot work loose during operation.
11. Close again retractable blade guard (4).
  12. Slide on outer flange (40) - The flat side has to point towards the motor!
  13. Put on the tensioning screw with the washer (39) in anti-clockwise direction (left-hand thread) and tighten by hand.
  14. Lock saw blade: press the locking button (16) and turn the saw blade with the other hand until the locking button engages. Hold down the locking button.

**Danger!**

- Do not extend the hexagon wrench.
  - Do not tighten the tensioning screw by hitting the hexagon wrench.
15. Firmly tighten the tensioning screw (39) using the hexagon wrench (12).
  16. Check function. To do so, swivel the saw head down:
    - when folding down the retractable blade guard, it has to provide free access to the saw blade without touching other parts.
    - When folding the saw upwards into the starting position, the retractable blade guard has to cover the saw blade automatically.
    - Rotate the saw blade manually. You should be able to rotate the saw blade into any possible position without touching other parts.

**10.2 Table insert change****Danger!**

With a damaged table insert (8) there is a risk of small parts getting stuck between table insert and saw blade, blocking the saw blade. Replace damaged table inserts immediately!

1. Remove screws at table insert. If required, rotate turntable and incline saw head to be able to reach the screws.
2. Remove table insert.
3. Insert new table insert.
4. Tighten the screws at the table insert.

**10.3 Adjust parallel guide/ripping fence**

1. Loosen Allen screws (45).
2. Adjust the parallel guide/ripping fence (24) in such a way that it is exactly perpendicular to the saw blade when the turntable engages in the 0° position.
3. Tighten the Allen screws (45).

**10.4 Adjust the tilt setting**

The adjusting screws (46) for setting the tilt are located on the left and right of the machine. For KGS 305 they are also in the upper area (0°) (see Fig. J):

KGS/KS...: left screw = 0°, right screw = 45°  
KGS 305 M: left screw = 45° to the left, top screw = 0°, right screw = 45° to the right

Loosen the hexagonal locking nuts, adjust the Inbus adjusting screw slightly, and then fix in place again using the hexagonal locking nut. Check the tilt setting using a square. If necessary, repeat procedure.

**10.5 Reset the clamping lever**

Only if necessary: If insufficient clamping force is achieved when using the lever (15) and (33), they can be adjusted.

Unscrew the Torx screw in the lever, remove the lever and put it back onto the hexagonal bolt with a slight twist. Tighten it again using the Torx screw.

**10.6 Cleaning the device**

Remove chips and saw dust with vacuum cleaner or brush from:

- adjustment installations
- controls;
- motor vent slots;
- space under table insert;
- Cutting line display (remove the saw blade, clean with a cloth or soft brush.)
- Protective cover system

**10.7 Storage of device****Danger!**

- Store the device in such a way that it cannot be put into operation by unauthorised personnel.
- Ensure that the stationary device cannot cause injury.

**Caution!**

- Do not store the saw outdoors, in unprotected areas or in damp or wet locations.

**10.8 Maintenance****Prior to each use**

- Remove saw chips with vacuum or brush.
  - Check power cable and power cable plug or battery pack for damage; if necessary have damaged parts replaced by a qualified electrician.
  - Check all movable parts if they can be moved freely across the entire range of movement.
- Regularly, depending on conditions of use**
- Check all screwed joints, retighten if necessary.
  - Check reset function of the saw head (saw head has to return to the upper starting position by means of spring force), if required have spring replaced.

- Slightly oil guide elements.

**11. Tips and Tricks**

- Use appropriate supports on the left and right of the saw for long workpieces.
- Hold workpiece on the right of the saw blade for suitable cuts.
- When cutting small pieces, use additional guide (a suitable wooden board attached with screws to the guide of the device, can be used as additional guide).
- When cutting a curved (contorted) board (49) place the convex side at the parallel guide/ripping fence.
- Do not cut workpiece upright, but flat on the turntable.

**12. Accessories**

Use only original Metabo or CAS (Cordless Alliance System) battery packs and accessories.

Use only accessories that fulfil the requirements and specifications listed in these operating instructions.

- A** Spray for maintenance and care for the removal of resin residues and to preserve the metal surfaces. 0911018691
- B** Extraction adapter "Multi" for the connection of extraction hoses with 44, 58 or 100 mm adapter 0910058010
- C** Metabo all-purpose vacuum cleaner (see catalogue)
- D** Stands:
- |                             |           |
|-----------------------------|-----------|
| Universal machine stand UMS | 631317000 |
| Mobile stand KSU 251 Mobile | 629007000 |
| Stand KSU 251               | 629005000 |
| Stand KSU 401               | 629006000 |
- E** Roller stand:  
RS 420 0910053353
- F** Chargers: ASC 145, etc.

**G** Battery packs with different capacities. Buy battery packs only with voltage suitable for your power tool.  
Order no.: 625369000 (8.0 Ah, LiHD)  
Order no.: 625368000 (5.5 Ah, LiHD)  
etc.

**Saw blades for KS 216 M / KGS 216 M:**

- H** Saw blade Power Cut Wood - professional 628009000  
216 x 2.4 / 1.8 x 30 24 WZ 5° neg  
for longitudinal and transverse cuts in solid wood
- I** Saw blade Precision Cut Classic 628060000  
216 x 2.4 / 1.8 x 30 40 WZ 5° neg  
for longitudinal and transverse cuts in solid wood and chipboard

**J** Saw blade Multi Cut Classic 628066000  
216 x 2.4 / 1.8 x 30 60 FZ/TZ 5° neg  
for longitudinal and transverse cuts in coated materials, laminate, plastic and aluminium profiles

**Saw blades for KGS 254 M:**

**K** Saw blade Precision Cut Classic 628061000  
254 x 30 x 2.4 / 1.8, 48 WZ 5° neg  
for longitudinal and transverse cuts in solid wood and chipboard

**L** Saw blade Multi Cut - professional 628223000  
254 x 30 x 2.4 / 1.6, 80 FZ/TZ 5° neg  
for longitudinal and transverse cuts in coated materials, laminate, plastic and aluminium profiles

**Saw blades for KGS 305 M:**

**M** Saw blade Precision Cut Classic 628064000  
305 x 30 x 2.4 / 1.8, 56 WZ 5° neg  
for longitudinal and transverse cuts in solid wood and chipboard

**N** Saw blade Multi Cut 628091000  
305 x 30 x 2.8 / 2.0 96 FZ/TZ 5° neg,  
for longitudinal and transverse cuts in coated materials, laminate, plastic and aluminium profiles

**Saw blades for KGS 18 LTX BL 216:**

**O** Saw blade "cordless cut wood - classic" 628065000  
216 x 1.8 / 1.2 x 30 40 WZ 5°  
for longitudinal and transverse cuts in solid wood and chipboard

**Saw blades for KGS 18 LTX BL 254:**

**P** Saw blade "cordless cut wood - classic" 628690000

254x2,2/1,6x30mm 48 WZ  
for longitudinal and transverse cuts in solid wood  
and chipboard

#### Saw blades for KGS 18 LTX BL 305:

Q Saw blade "cordless cut wood - classic"  
628693000  
305x2,2/1,6x30mm 56 WZ  
for longitudinal and transverse cuts in solid wood  
and chipboard

For a complete range of accessories, see  
www.metabo.com or the catalogue.

### 13. Repairs



#### Danger!

Repair of power tools must be carried out by  
qualified electricians only!

A defective mains cable must be replaced only  
with a special, original mains cable from Metabo  
available from the Metabo service.

If you have Metabo power tools that require  
repairs, please contact your Metabo service  
centre. For addresses see www.metabo.com.

You can download a list of spare parts from  
www.metabo.com.

### 14. Environmental Protection

Observe national regulations on environmentally  
compatible disposal and on the recycling of  
disused machines, packaging and accessories.

Packaging materials must be disposed of  
according to their labelling in accordance with  
municipal guidelines. Further information can be  
found at www.metabo.com in the "Service"  
section.



Only for EU countries: never dispose of  
power tools in your household waste!  
According to European Directive 2012/19/  
EU on Waste from Electric and Electronic  
Equipment and implementation in national law,  
used power tools must be collected separately  
and recycled in an environmentally-friendly  
manner.

### 15. Troubleshooting Guide

Following you will find a description of problems  
and faults that you may remedy yourself. If the  
corrective measures described here do not help,  
kindly refer to chapter 13. "Repairs".



#### Danger!

There are particularly many accidents in  
connection with problems and faults. Therefore  
keep in mind:

- Prior to each correction of faults, pull the mains  
plug or remove the detachable battery pack  
(31).
- Check to see that all safety devices are  
operational after each fault service.

#### No trimming function

Transport lock activated:

- pull out transport lock.

#### Cutting power too low

Saw blade blunt (possibly tempering marks on  
blade body);

Saw blade unsuitable for the material (see  
chapter 12. "Accessories");

Saw blade contorted:

- Replace saw blade (see chapter 10.  
"Maintenance").

#### Saw vibrates strongly / saw blade does not run in a circular manner

Saw blade contorted:

- Replace saw blade (see chapter 10.  
"Maintenance").

Saw blade not installed properly:

- Install saw blade properly (see chapter 10.  
"Maintenance").
- Turn the saw blade toward the interior flange in  
this position if necessary.

#### Turntable hard to turn

Chips under turntable:

- remove chips.

#### Cutting line indicator light is very weak

When using wood rich in resin, the LED may  
become soiled.

- In this case, clean the lens with benzene.

## 16. Technical Specifications

Explanatory notes regarding the specifications on  
page 4.

Subject to change in accordance with technical  
progress.

U	= mains voltage / voltage of battery pack
I	= Rated power
F	= Min. fuse protection
P <sub>1</sub>	= rated input power
IP	= protection class
n <sub>0</sub>	= No-load speed
v <sub>0</sub>	= Max. cutting speed
D	= saw blade diameter (outer)
d	= saw blade hole (inside)
b	= max. tooth width of the saw blade
A	= dimensions (lxwxh)
m	= weight

Requirements for chip and dust extraction unit:

D <sub>1</sub>	= connection diameter of the extraction nozzle
D <sub>2</sub>	= minimum air throughput
D <sub>3</sub>	= minimum negative pressure at extraction nozzle
D <sub>4</sub>	= minimum air speed at extraction nozzle

Maximum cross-section of workpiece, see table  
on page 4.

Values measured as per EN 62841.

Permitted ambient temperature during operation:  
-20 °C (-4°F) to 50 °C (120°F) (limited performance  
with temperatures below 0 °C (32°F)). Permitted  
ambient temperature for storage: 0 °C (32°F) to 30  
°C (86°F).

Recommended ambient temperature when  
charging: 0 °C to 40 °C

~ AC Power

== direct current

Machine in protection class II

The technical specifications quoted are subject to  
tolerances (in compliance with relevant valid  
standards).

#### ⚠ Emission values

These values make it possible to assess the  
emissions from the power tool and to compare  
different power tools. The actual load may be  
higher or lower depending on operating  
conditions, the condition of the power tool or the  
accessories used. Please allow for breaks and  
periods when the load is lower for assessment  
purposes. Arrange protective measures for the  
user, such as organisational measures based on  
the adjusted estimates.

Typical A-effective perceived sound levels  
(according to EN 62841):

L<sub>pA</sub> = sound pressure level

L<sub>WA</sub> = acoustic power level

K<sub>pA</sub>, K<sub>WA</sub> = Uncertainty



#### Wear ear protectors!