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## Symbols used in this manual

### **WARNING!**

Denotes impending danger.  
Non-observance of this warning may result in death or extremely severe injuries.

### **CAUTION!**

Denotes a possibly dangerous situation.  
Non-observance of this warning may result in slight injury or damage to property.

### **NOTE**

Denotes application tips and important information.

## Symbols on the power tool



Before switching on the power tool, read the operating manual!



Wear goggles!



Wear ear protection!



Disposal information for the old machine (see page 26)!

## For your safety



### **WARNING!**

Before using the power tool, please read and follow:

- these operating instructions,
- the "General safety instructions" on the handling of power tools in the enclosed booklet (leaflet-no.: 315.915),
- the currently valid site rules and the regulations for the prevention of accidents.

This power tool is state of the art and has been constructed in accordance with the acknowledged safety regulations. Nevertheless, when in use, the power tool may be a danger to life and limb of the user or a third party, or the power tool or other property may be damaged.

- The power tool may be operated only if it is as intended,
  - in perfect working order.
- Faults which impair safety must be repaired immediately.

### Intended use

The plunge saw CS 62 18.0-EC is designed

- for commercial use in industry and trade,
- for lengthwise and cross cuts with a straight cutting path,
- for cutting solid wood and board materials such as chipboard and wood-core plywood and MDF boards up to a maximum thickness of 62 mm,
- for use with circular saw blades which FLEX offers for this machine.

Not permitted are

- the use of HSS saw blades and cutting-off wheels,
- stationary use as a circular bench saw,
- use outdoors in the rain,
- use in potentially explosive areas.

## Safety instructions for circular saws



### **WARNING!**

**Read and follow all safety instructions and other instructions in this manual.**

*Failure to observe the warnings and instructions may cause an electric shock, fire and/or serious injuries. Keep this manual in a safe place for subsequent use.*

### Cutting procedures

- **DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.
- **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.
- **Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- **Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring.** Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- **Always use blades with correct size and shape (diamond versus round) of arbour holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

## Kickback causes and related warnings

Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.

When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.

If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
- **When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
- **Support large panels to minimise the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

- **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- **Use extra caution when sawing into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

### Guard function

- **Check guard for proper closing before each use. Do not operate the saw if guard does not move freely and enclose the blade instantly. Never clamp or tie the guard so that the blade is exposed. If saw is accidentally dropped, guard may be bent.** Check to make sure that guard moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- **Check the operation and condition of the guard return spring. If the guard and the spring are not operating properly, they must be serviced before use.** Guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- **Assure that the base plate of the saw will not shift while performing the "plunge cut" when the blade bevel setting is not at 90°.** Blade shifting sideways will cause binding and likely kick back.
- **Always observe that the guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

### Lower guard function

- **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- **Lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts".** Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
- **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

### Additional safety instructions

- **Do not place hands in the swarf ejector.** You may be injured by the rotating parts.
- **Do not work with the saw above your head.** You do not have adequate control over the electric power tool.
- **Do not operate the electric power tool stationary.** It is not designed to be operated with a saw bench.
- **Do not use saw blades made of HSS steel.** These types of saw blades can break easily.
- **Do not saw any ferrous metals.** Glowing swarf may ignite the dust extraction.

## Noise and vibration

The noise and vibration values have been determined in accordance with EN 62841. The A evaluated noise level of the power tool is typically:

- Sound pressure level: 83 dB(A);
- Sound power level: 94 dB(A);
- Uncertainty: K = 3 dB.

Total vibration value:

- Emission value:  $a_h < 2.5 \text{ m/s}^2$
- Uncertainty:  $K = 1.5 \text{ m/s}^2$



### CAUTION!

*The indicated measurements refer to new power tools. Daily use causes the noise and vibration values to change.*



### NOTE

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 62841 and may be used to compare one tool with another. It may be

used for a preliminary assessment of exposure. The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ.

This may significantly decrease the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.



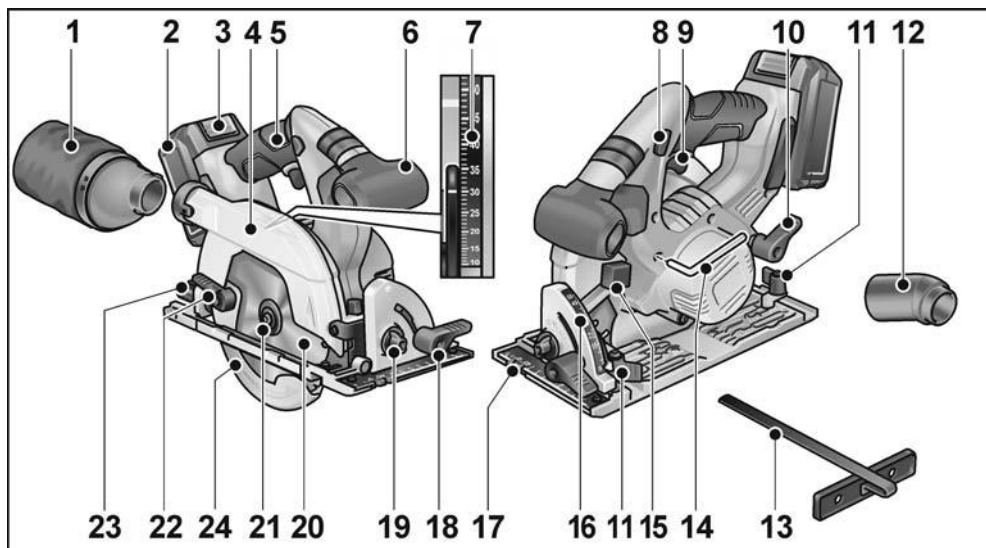
### CAUTION!

*Wear ear protection at a sound pressure above 85 dB(A).*

## Technical specifications

		CS 62 18.0-EC
Machine type		Hand circular saw
Battery	Ah	5
Charging time (Battery 5 Ah)	min	max. 45
Idling speed	r.p.m.	5,000
Saw blade mounting hole	mm	20
max. saw blade-diameter	mm	165
max. cutting width	mm	1.6
max. blank thickness	mm	1.0
max. cutting depth	mm	62
max. mitre cut		50°
Weight according to "EPTA Procedure 01/2003" (with battery 5 Ah)	kg	3.9
Weight battery	kg	0.72
Angle presetting		22.5°, 45°, 50°

## Overview



- |    |   |    |  |
|----|---|----|--|
| 1  | Filter  | 14 | Hexagon-socket key                         |
| 2  | Battery                                       | 15 | Spindle locking button                     |
| 3  | Rechargeable battery release                  | 16 | Mitre angle scale                          |
| 4  | Guard hood                                    | 17 | Base plate                                 |
| 5  | Handle  | 18 | Clamping lever for mitre angle             |
| 6  | Auxiliary handle                              | 19 | Angle preselection                         |
| 7  | Cutting depth scale                           | 20 | Circular saw blade                         |
| 8  | Activation lock for ON/OFF switch             | 21 | Clamping bolt with clamping flange         |
| 9  | ON/OFF switch                                 | 22 | Pull back lever for swing guard            |
| 10 | Clamping lever for cutting depth preselection | 23 | Clamping bolt for mitre angle preselection |
| 11 | Clamping bolt for parallel stop               | 24 | Swing guard (lower guard)                  |
| 12 | Connection                                    |    |  |
| 13 | Parallel stop                                 |    |  |

## Instructions for use



### **WARNING!**

Remove the battery before carrying out any work on the power tool.

### Before switching on the power tool

Unpack power tool and accessories and check that no parts are missing or damaged.

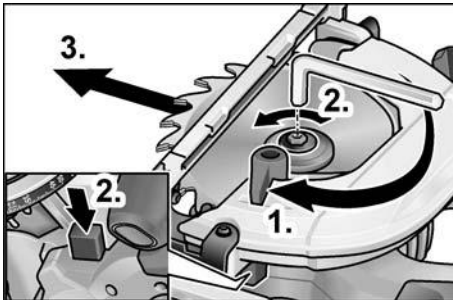
### Attaching or changing the saw blade



### **NOTE**

It is recommended to use only circular saw blades which FLEX offers for use with this machine.

- Only use saw blades with a diameter corresponding with the inscriptions on the saw.
- Select the correct saw blade for the material to be sawn.
- Only use saw blades with a speed rating that is equal to or higher than the speed specified on the electric tool.
- Only use saw blades specified by the manufacturer that comply with EN 847-1.



### **WARNING!**

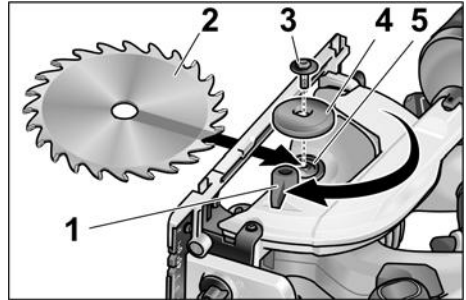
Remove the battery before carrying out any work on the power tool.

- Press and hold down the spindle lock.
- Loosen clamping screw anti-clockwise using enclosed hexagon-socket key.
- Unscrew clamping screw (3) and remove front clamping flange (4).
- Take saw blade (2) downwards out of the housing.



### **CAUTION!**

- Note installation position of back (5) and front clamping flange (4).
- The cutting direction of the teeth (direction of arrow on the saw blade) and direction-of-rotation arrow on the housing must agree.



- Clean rear (5) and front clamping flange (4) as required.
- Insert saw blade from below into the housing.
- Attach the front clamping flange (4) and manually tighten the locking screw (3) in a clockwise direction.
- Press and hold down the spindle lock. Tighten clamping screw (3) with hexagon-socket key.

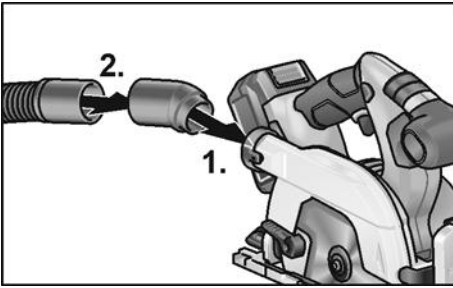
### Dust extractor



### **WARNING!**

Dust released from materials, such as lead paints, some types of wood, minerals and metal, may be hazardous to the operator or people in the vicinity. Inhaling or touching these dusts may result in respiratory diseases and/or allergic reactions.

- Ensure the work place is well ventilated!
  - If possible, use external dust extraction.
  - It is recommended to wear a respirator mask belonging to filter class P2.
- Prevent dust from accumulating at the workplace. Dust can easily ignite.



- Insert connection (1.).
- Secure suction hose with adapter on connection (2.).
- Connect extraction hose to the dust extraction system.  
Follow the operating instructions for the dust extraction system!  
Check the attachment!

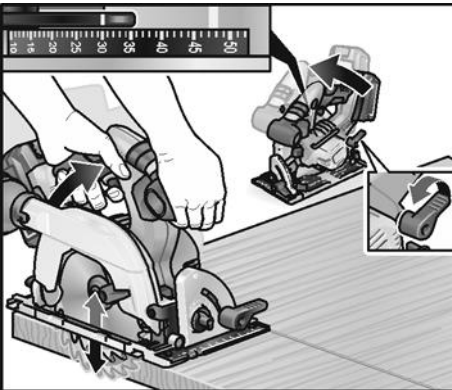
### Setting the cutting depth

#### **i** NOTE

To ensure optimum cutting results, the cutting depth should be 2–5 mm greater than the material thickness to be cut.

#### **!** WARNING!

Remove the battery before carrying out any work on the power tool.

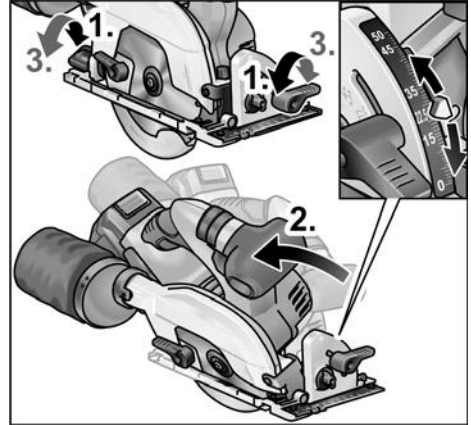


- Loosen toggle screw of the cutting depth setting.
- Set required cutting depth on the scale.
- Tighten toggle screw.

### Setting the mitre angle

#### **i** NOTE

In the case of mitre cuts, the cutting depth is less than the value displayed on the scale for the cutting depth.



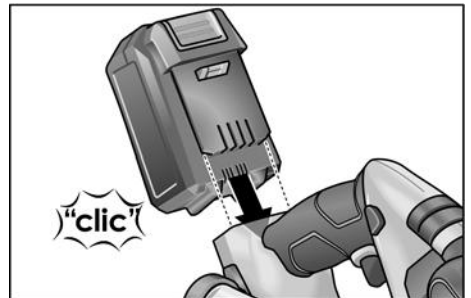
#### **!** WARNING!

Remove the battery before carrying out any work on the power tool.

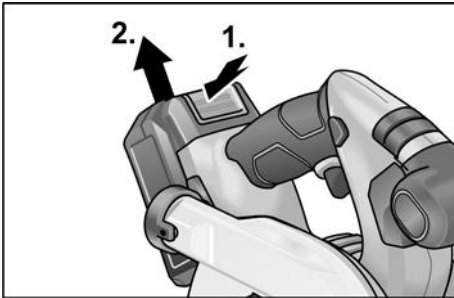
- Loosen the T-screws (1.).
- Set required mitre angle with the aid of the scale (2.).
- Tighten the T-screws (3.).

### Inserting/replacing the battery

- Press the charged battery into the power tool until it clicks into place.



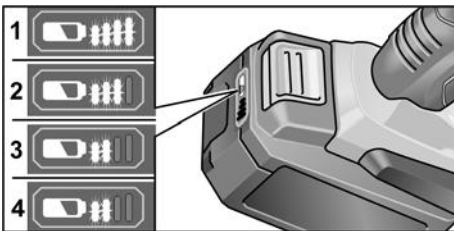
- To remove, press the release button (1.) and pull out the battery (2.).



**CAUTION!**  
Protect the battery contacts when the battery is not being used. Loose metal parts may short-circuit the contacts – Explosion and fire hazard!

### Battery state of charge

- Press the button to check the state of charge at the state of charge indicator LEDs.



The indicator goes out after 5 seconds. If one of the LEDs flashes, the battery must be recharged. If none of the LEDs light up after the button is pressed, the battery is faulty and must be replaced.

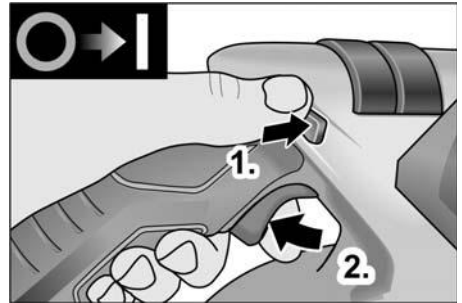
### Switching on and off



#### CAUTION!

For reasons of safety the switch is not locked and must be held down during sawing.

The switch interlock prevents the power tool from being switched on unintentionally. Initially always switch on saw in working position.



- Press up and hold down the switch interlock (1.).
- Press and hold down the switch (2.).
- Release switch interlock (when the saw has been plunged).

Switching off:

- Release the switch.

### Parallel stop



#### WARNING!

Remove the battery before carrying out any work on the power tool.

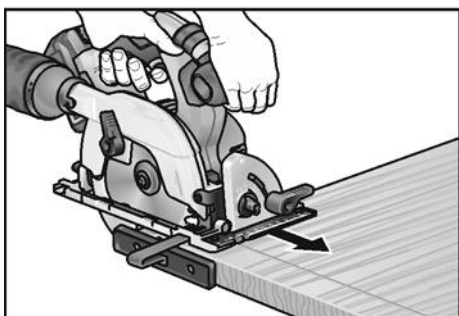
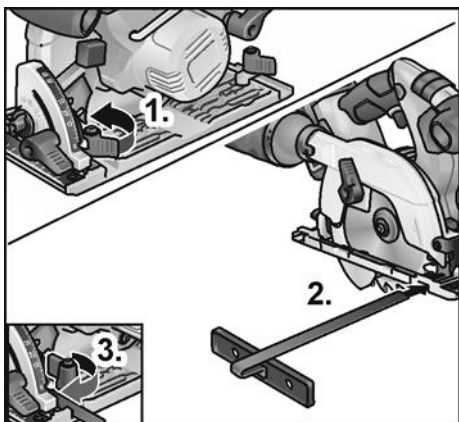


#### NOTE

Before the saw can be placed in the supplied transportation case, the parallel stop must be removed.

The parallel stop can be attached on the left or right in the direction of thrust of the saw.





- Attach wing screw/clamping bracket/spring for mounting the parallel stop (1.).
- Insert parallel stop and set to required width (2.).
- Tighten the wing screw (3.).

## Working with the power tool

### CAUTION!

After the power tool has been switched off, the saw blade continues running briefly. When the rotating saw blade touches the workpiece, the power tool may recoil.

### NOTE

Excessive feed reduces the performance of the power tool, impairs the cutting quality and reduces the service life of the saw blade.

## Sawing along a scribe mark

- Connect extraction hose.
- Set cutting depth to the required dimension.
- If required, set mitre angle.

- Switch on dust extraction system.
- Hold the handle with your right hand.
- Place saw bench on the workpiece.
- Switch on saw and wait until the saw blade has reached the maximum speed.
- Slowly feed the saw along the material.

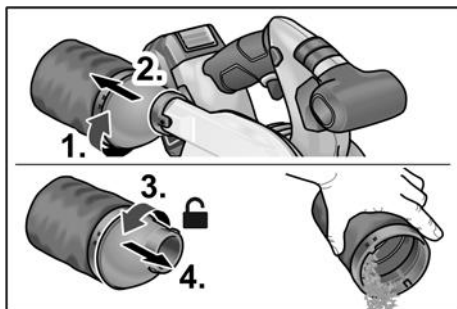
### NOTE

The cut marks on the saw bench show the position of the saw blade for a right-angle cut.



- Feed the saw evenly through the material.
- After cutting:
  - Switch off the saw. Saw blade continues running briefly!
  - When the saw is lifted, the saw blade returns to the initial position and the guard is locked.
- At the end of work:
  - Thoroughly clean the electric power tool and accessories.

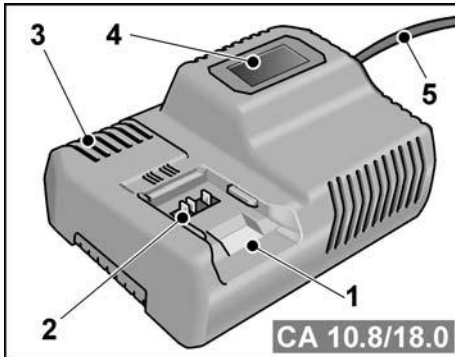
Filter:



### NOTE

To process large workpieces or to cut straight edges, you can also attach a bar or similar implement to the workpiece and guide the circular saw with the saw bench along this auxiliary stop.

## Charger



- 1 Insertion slot for battery
- 2 Contacts
- 3 Ventilation slots
- 4 Operating state display
- 5 Power cord with mains plug

The CA 10.8/18.0 charger is designed to charge FLEX batteries of the following types

- AP 10.8 (2.5 Ah),
- AP 18.0 (2.5 Ah),
- AP 10.8 (5.0 Ah),
- AP 18.0 (5.0 Ah).

### Tips for a long battery service life

#### **CAUTION!**

*Never charge batteries at temperatures below 0 °C or above 55 °C.*

*Do not charge batteries in environments with high air humidity or ambient temperature*

*Do not cover batteries and the charger during the charging process.*

*Pull out the charger mains plug at the end of the charging process.*

Battery and charger heat up during the charging process. This is perfectly normal!

Lithium-ion batteries do not exhibit the established "memory effect". Nevertheless, a battery should be completely discharged before charging and the charging process should always be fully completed.

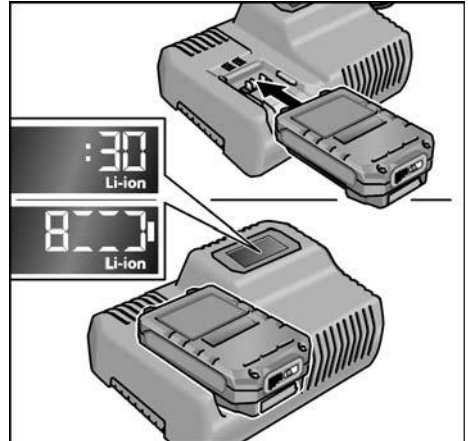
If batteries are not used for an extended period of time, store them partially charged in a cool place.

## Charging process

### **CAUTION!**

*Insert only original batteries in the supplied charger.*

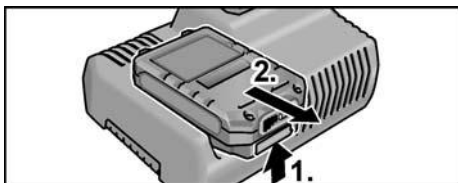
- Insert the charger mains plug. The display backlighting lights up green for 2 seconds and then goes out again. OK is displayed.



- Insert the battery fully into the charger until it clicks into place.
  - The time remaining in the charging process (until the battery is fully charged) and a graphic representation of the state of charge are shown alternately in the display.
  - The display backlighting lights up orange when the battery is charged less than 80%.
  - When the battery charge reaches 80% the display lights up green and OK is indicated.
- The battery is fully charged when the display **OK 8888%** appears.

The green backlighting goes out after a short time.

- Remove the battery from the charger.



- Pull out the mains plug.

### **i** NOTE

*If the display flashes after the battery is inserted in the charger, there is a fault in the battery or in the charger.*

 *Display flashes slowly.  
Backlighting orange.*

*The battery is too hot or too cold. The charging process starts when the battery reaches the charging temperature (0°C...55°C).*

 *Display flashes rapidly.  
Backlighting red.*

*Remove the battery from the charger and insert again. If the same display persists, the battery is faulty. Replace the battery or have it checked at an authorised repair shop.*

*If this error message is displayed again with a different battery, this indicates that there is a fault in the charger. Have the charger checked at an authorised repair shop.*

## Maintenance and care

### **⚠** WARNING!

*Remove the battery before carrying out any work on the power tool.*

## Cleaning

### Cleaning the electric power tool

#### **⚠** WARNING!

*Do not use water or liquid detergents.*

- Regularly blow out the housing interior and motor with dry compressed air.
- Clean saw bench, setting devices and guard using a vacuum cleaner and brush. Ensure that the lower guard moves smoothly.
- Occasionally spray joints with machine oil.
- Also clean the guide rail, otherwise the saw will not be guided properly resulting in an inaccurate cut.

## Charger

### **⚠** WARNING!

*Before performing any work, pull out the mains plug. Do not use water or liquid detergents.*

- Remove dirt and dust from the housing with a brush or a dry cloth.

## Repairs

Repairs may be carried out by an authorised customer service centre only.

### **i** NOTE

*During the warranty period do not loosen the screws on the motor housing. Non-compliance will deem the guarantee obligations of the manufacturer null and void.*

## Spare parts and accessories

Other accessories, in particular insertion tools, can be found in the manufacturer's catalogues.

Exploded drawings and spare-part lists can be found on our homepage:

[www.flex-tools.com](http://www.flex-tools.com)

## Disposal information

### **⚠** WARNING!

*Render redundant power tools unusable:*

- mains operated power tool by removing the power cord,
- battery operated power tool by removing the battery.



EU countries only.

Do not dispose of electric power tools in the household waste!

In accordance with the European Directive 2012/19/EU on Waste Electrical and Electronic Equipment and its incorporation into national law, used power tools must be collected separately and recycled in an environmentally friendly manner.



**Raw material recovery instead of waste disposal.**

Device, accessories and packaging should be recycled in an environmentally friendly manner. Plastic parts are identified for recycling according to material type.

**⚠ WARNING!**

*Do not throw batteries into the household waste, fire or water. Do not open used batteries.*

EU countries only:

In accordance with Directive 2006/66/EC defective or used batteries must be recycled.

**NOTE**

*Please ask your dealer about disposal options!*

**CE-Declaration of Conformity**

We declare under our sole responsibility that the product described under "Technical specifications" conforms to the following standards or normative documents:

EN 62841 in accordance with the regulations of the directives 2014/30/EU, 2006/42/EG, 2011/65/EU.

Responsible for technical documents:  
FLEX-Elektrowerkzeuge GmbH, R & D  
Bahnhofstrasse 15, D-71711 Steinheim/Murr

Eckhard Rühle  
Manager Research &  
Development (R & D)

Klaus Peter Weinper  
Head of Quality  
Department (QD)

19.06.2018

FLEX-Elektrowerkzeuge GmbH  
Bahnhofstrasse 15, D-71711 Steinheim/Murr

**Exemption from liability**

The manufacturer and his representative are not liable for any damage and lost profit due to interruption in business caused by the product or by an unusable product. The manufacturer and his representative are not liable for any damage which was caused by improper use of the product or by use of the product with products from other manufacturers.