



Portable circular saws

K 85 | K 85-18

Cross-cutting system

KSS 80

The saw of the future, available now.

Cross cuts



An ideal application for guide L is cutting structural timber to length, with a max. cutting depth of 82 mm and a max. cross-cutting length of 370 mm.

Rip cuts



Ripping with a guide rail or parallel fence and an ample cutting depth. The two high-performance 18 V batteries of the K 85-18 combine to deliver a sustained output of 36 V.



The portable circular saw K85, the new battery version K85-18 and cross-cutting system KSS80 convince with practical solutions for noticeably more ease of use and efficiency.

NEW: LED work lamp



Bright LEDs illuminate a large working area. In sleep mode, a timer switches the light off after 10 seconds.

ErgoBalance principle



With the MAFELL ErgoBalance-Concept, our portable circular saws are optimized for all types of work. This not only enables precise work, but also optimum ergonomic guidance. This effectively prevents fatigue - despite twice the battery power.



NEW: With 2 CAS batteries for exceptional power, independence and thanks to the CAS battery system, nothing stands in the way of flexible use of other system partners.



Making perfect saw cuts even easier to achieve.

WORKING CLOSE TO THE EDGE OF NARROW MATERIAL



It couldn't be simpler:

The new edge guide facilitates precision even in difficult cutting situations. Two scales on the arms allow the dimensions to be set exactly.

PLUNGE CUTS



It couldn't be simpler:

Practical 2-in-1 functionality greatly eases the execution of plunge cuts. Dispensing with a detachable riving knife, the spring-mounted FLIPP-KEIL further facilitates reliable plunge cutting.

The K 85 / K 85-18 and KSS 80 can be used to cut solid wood, panels, fiberboard, doors and worktops, as well as insulating materials.



FAST BLADE CHANGES

It couldn't be simpler:

Changing the blade is a fast, safe and easy operation. Simply press release button (1) and lift lever (2), lock pivoting guard (3) in the housing, release the flange, take out and exchange the blade, lock it in position and release lever (2).

Whether working close to the edge, executing perfect cross-cuts, or plunge or angle cuts, facilitating rapid blade changes, or offering an elegant solution for adjusting the cutting depth, the K 85-18 / K 85 and KSS 80 epitomize ease of use and efficiency.

CROSS-CUTTING TRACK L Only included in the scope of delivery of the KSS 80



It couldn't be simpler:

The portable circular saw can be securely attached to the guide track to form an integral sawing unit.

One fixed and one adjustable stop allow the saw to be used for angle cuts from -60° - $+50^{\circ}$. You simply push the saw against the work with the two stops on the underside of the track, operate the saw, and the job's done. The track automatically adopts the starting position once the cut has been executed.

MITER CUTS



It couldn't be simpler:

Perfect cutting quality, even when executing bevel cuts: The portable circular saws have been optimized for operation with the guide track. It always cuts right at the rubber lip.

It couldn't be simpler:

The angle fence is easy to attach to the guide track. Simply attach, adjust and lock the adapter, and set the desired angle. The workpiece can now be cut at the exactly set angle.



PRECISE CUTTING RESULTS

The K 85 / K 85-18: Welcome to the future of sawing.



Battery charge indicator

Always in the picture: the battery charge can be checked at any time by pressing a button.

*The battery packs are not included in the scope of delivery.



Highly efficient chip removal

The chips are carried away so efficiently that the vacuum channel cannot become blocked, even when fiberboard is being cut. This benefit is especially crucial when executing plunge cuts in the fiber direction.

FLIPPKEIL

Dispensing with a detachable riving knife, the spring-mounted FLIPPKEIL facilitates reliable plunge cutting. When the blade enters the material, it maintains the starting position initially, before automatically entering the kerf.

LED work lamp

Bright LEDs illuminate a large working area. In sleep mode, a timer switches the light off after 10 seconds.

Clever: the LED light remains on standby for 10 minutes and activates itself when the saw is touched. After a longer period of time, the light is switched on again via the switch.



Innovative pointer

The new pointer automatically follows the machine as it is tilted. It therefore accurately tracks the actual cutting edge over a distance of 52 mm.

The K 85 / K 85-18 saws are perfectly equipped to meet the future challenges of the woodworking trades. Not only in view of their exemplary material and build qualities, but also thanks to their well-conceived user-friendliness and compatible dual-battery technology.

Blade changes

For a fast blade change, simply press the release button, lift the lever and lock the pivoting guard in the housing.



Manual retraction of pivoting guard

The pivoting guard is quickly and simply retracted from the saws' second handle. This allows the machine to be offered up easily and reliably, especially when executing bevel cuts.



Fast and reliable cutting depth adjustment

The 2-in-1 functionality allows the cutting depth to be set quickly and reliably. Simply release lock (1), set the cutting depth on the scale, and re-engage the lock. Plunge cuts are controlled by the same method.



Outstanding scale readability

Thanks to the new tilting arrangement, reading the scale is easier than ever before, from 0 to 60°.



Repeat stop for cutting depth

The cutting depth can be preset and locked in the range from 25 to 88 mm.



High build quality

The honeycomb design of the magnesium die-cast baseplate achieves extreme rigidity and an optimized weight profile.

Fence locking

When working with the parallel fence and edge guide, the four locking points and scale reference point facilitate precise adjustment.

The KSS system: Making light work of perfect cross-cuts.



Compatibility

The portable circular saws K 85-18 and K 85 are equipped with a compatible baseplate. This allows the special accessory guide L to be fitted later at any time.



Detaching the track

The quick-release catch enables you to detach the machine from the track in a single, quick action. The saw can then be used as a separate portable circular unit with all the functionality of the K 85-18 / K 85.

Rubber lip

Serves as a marking and cutting edge for all applications in the range 0° – 60°. It also ensures clean, tear-free cuts.

The KSS 80 offers even greater ease of use for frequent cross-cuts. The specially designed guide track makes cross-cutting faster and neater than ever before - down to a depth of 82 mm.



Operating principle

You simply push the saw against the work with the two stops on the underside of the track, operate the saw, and the job's done.



Angle cuts

The desired angle is set using the well-positioned scale. For extra convenience, locking positions are provided for the common angles 0° , $\pm 22.5^\circ$ and $\pm 45^\circ$.



REPEAT STOP

For frequently required angles, the two repeat stops are fixed in place on the underside of guide L.



Cutting length

The KSS operating principle allows a max. cross-cutting length of 370 mm.

The MAFELL ErgoBalance principle: focusing on the user.

MORE CONTROL

Flexible settings

The scales, pointers and levers/locks are perfectly arranged to facilitate precise settings.



User-friendly switch positioning

The lockout and operating switches are conveniently positioned on the handle.



Ergonomic depth adjustment

The 2-in-1 functionality allows the cutting depth to be set quickly and reliably. Simply release lock, set the cutting depth on the scale, and re-engage the lock. Plunge cuts are controlled by the same method.



BETTER BALANCE

Handle shape

By sitting comfortably in the hand and offering generous contact for all the fingers, the ergonomic handle fosters relaxed and fatigue-free operation.



Perfect center of gravity

All our machines have an ideal center of gravity for fatigue-free working – irrespective of the selected attachment or power pack.



With the MAFELL ErgoBalanceConcept, our portable circular saws are optimized for all types of work. This not only enables precise work, but also optimum ergonomic guidance. This effectively prevents fatigue - despite twice the battery power.

Our new cordless portable circular saw in particular offers every convenience for daily use on site where mains power is unavailable. Our designers focused their attention on ergonomics and ease of use. Owing to precise analysis of the center of gravity, for example, the new saw is perfectly balanced. All thanks to the MAFELL ErgoBalance principle.

ENHANCED SAFETY

Safe blade changes

Simply pressing the release button and raising the lever automatically engages the starting lockout and sawblade lock.

LED work lamp – no shadow

Bright LED lamps with an afterglow effect illuminate a large working area.

Superior workmanship

The exceptional build quality is exemplified by neat joints, smooth edges and the gently curved shape of the housing and all controls.

Battery technology: delivering even greater stamina.

NEW

LiHD

LiHD batteries set new standards in the combination of high performance, long service life and versatility. The high-performance cells of the LiHD batteries offer maximum power for every application.

LiHDX

With the new tabless technology, the current is no longer transmitted via individual points, but via a full-surface connection of anode and cathode. This results in lower internal resistance and less heating of the cells for

- Even better performance
- Even longer running times and service life



ENHANCED PERFORMANCE

- New cell technology in a re-engineered power pack.
- High-current busbars and enlarged contacts.
- Special copper alloy cell connectors for 3x enhanced conductivity.

LONGER SERVICE LIFE, EXTREMELY RUGGED

- Outstanding protection against internal contamination provided by full encapsulation, varnished circuit boards and the well sealed cover.
- Cells protected by rubber buffers.
- More usable energy results in less frequent charging.
- Rubberized battery pack offers non-slip stability and impact protection.

LONGER RUNTIME

- More active material in the cells, use of high-grade materials (silver and copper).

The upgraded PowerTanks for our cordless tools feature advanced processor-controlled battery technology. A key advantage lies in continuous monitoring of all the relevant parameters of the individual battery cells, including temperature and charge. The floating battery cells are also ideally protected against mechanical influences. This ensures a prolonged long service and fewer downtimes.

CAS. MAKING EVERYTHING EASY.



The battery packs are fully compatible with MAFELL's other 18 Volt power tools. In fact, they also match all the tools in the Cordless Alliance System (CAS) – the multi-vendor battery system of the leading power tool brands. CAS encompasses a huge selection of powerful cordless tools for an enormous variety of applications. Users benefit from needing fewer battery types on-site – in ideal circumstances, just one.

Technical data / Delivery scope includes

Type	K 85-18	K 85	KSS 80
Technical data			
Nominal input	-	2.300 W (3.1 hp)	2.300 W (3.1 hp)
Nominal voltage	2 x 18 V	-	-
Nominal no-load speed	2.800 -5.200 rpm	2.250 – 4.400 rpm	2.250 – 4.400 rpm
Cutting depth off rail	0 – 88 mm (3 7/16 in.)	0 – 88 mm (3 7/16 in.)	0 – 88 (3 7/16 in.)
at 45°	0 – 61.5 mm (2 7/16 in.)	0 – 61.5 mm (2 7/16 in.)	0 – 61.5 mm (2 7/16 in.)
at 60°	0 – 44.5 mm (1 3/4 in.)	0 – 44.5 mm (1 3/4 in.)	0 – 44.5 mm (1 3/4 in.)
Cutting depth on rail	0 - 82 mm (1 3/4 in.)	0 - 82 mm (3 1/4 in.)	0 - 82 mm (3 1/4 in.)
Cutting length at 90°	-	-	370 mm (14 9/16 in.)
Tilt range	0 – 60°	0 – 60°	0 – 60°
Angle cuts			-60 - +50°
Weight (EPTA)	8.1 kg (17,9 lbs) (including battery)	6.8 kg (15 lbs)	8.4 kg (18,5 lbs)



Model

Delivery scope includes

91E302 Cordless Portable Circular Saw K 85-18 PURE in L-MAX

- 1 TCT saw blade
237 x 1,8/2,5 x 30 mm
(9 5/16 in.), AT, 12 teeth
- 1 Parallel guide fence K 85-PA
- 1 Allen key 5 mm

91E701 Portable Circular Saw K 85

- 1 TCT saw blade
237 x 1,8/2,5 x 30 mm
(9 5/16 in.), AT, 12 teeth
- 1 Allen key 5 mm
- 1 Mains cable 10 m (32.8 ft)

91F201 Cross-Cutting System KSS 80

- 1 TCT saw blade
237 x 1,8/2,5 x 30 mm
(9 5/16 in.), AT, 12 teeth
- 1 Allen key 5 mm
- 1 Parallel guide fence K 85-PA
- 1 Guide track L
- 1 Mains cable 10 m (32.8 ft)



Ausführung

Delivery scope includes

91E302 + 208171 Cordless Portable Circular Saw K 85-18 PURE in L-MAX

- 1 TCT saw blade
237 x 1,8/2,5 x 30 mm
(9 5/16 in.), AT, 12 teeth
- 1 Parallel guide fence K 85-PA
- 1 Allen key 5 mm
- +
- 1 Guide track L

91E702 Portable Circular Saw K 85 in L-MAX

- 1 TCT saw blade
237 x 1,8/2,5 x 30 mm
(9 5/16 in.), AT, 12 teeth
- 1 Allen key 5 mm
- 1 Parallel guide fence K 85-PA
- 1 Mains cable 10 m (32.8 ft)

Tools / Special accessories

Illustration	Designation	Order No.
	Guide rail F 80, 0,8 m (2,6 ft) long	204380
	F 110, 1,1 m (3,6 ft) long	204381
	F 160, 1,6 m (5,2 ft) long	204365
	F 210, 2,1 m (6,9 ft) long	204382
	F 310, 3,1 m (10,2 ft) long	204383
	Connecting piece F-VS for joining two guide rails	204363
	Angle fence F-WA	205357
	Suction clamping system Aeroxfix F-AF 1F with 1,3 m rail, adapters for above and underneath rail, flexible hose	204770
	Flexible hose FXS-L up to 3,2 m (10.6 ft) long	205276
	Guide rail bag TZ-FST for guide rails up to 1,6 m	095257
	Guide pocket set: F 80 + F 160 + F-WA + F-VS + 2 x F-SZ 180MM + Guide pocket	209592
	Guide pocket set: 2 x F 160 + F-VS + 2 x F-SZ 180 MM + 1 guide pocket	209591
	Guide track L max. cutting length 370 mm (14 9/16 in.)	208171
	End cap F-EK 2 pieces	205400
	Non-slip profile F-HP 6,8M 6.8 m (22.3 ft.) long	204376
	Splinter guard F-SS 3,4M 3.4 m (11.2 ft.) long	204375
	Lever clamp F-SZ 180MM; 2 pieces, for fixing guide rail to workpiece	207770

Illustration	Designation	Order No.
	Dust bag	206921
	Parallel guide fence K 85-PA	205323
	Roller edge guide K 85-UA	205166
	TCT saw blade 237 x 1.8/2.5 x 30 mm (9 5/16 in.), AT, 12 teeth for rip cuts in wood	092590
	TCT saw blade 237 x 1.8/2.5 x 30 mm (9 5/16 in.), AT, 24 teeth, for rip cuts and cross-cutting in wood	092591
	TCT saw blade 237 x 1.8/2.5 x 30 mm (9 5/16 in.), AT, 56 teeth for cross-cutting in wood	092592
	L-MAX	095170
	Battery-PowerTank 18 M 99 LiHD (18 V, 99 Wh, 5,5 Ah)	094503
	Battery-PowerTank 18 M 144 LiHD (18 V, 144 Wh, 8 Ah)	094498
	Battery-PowerTank 18 M 144 LiHDX (18 V, 144 Wh, 8 Ah)	094520
	Battery-PowerStation APS M, 18V	094492
	High-speed charger APS M+	094509
	Power-Set 2 2x 18 M 99 LiHD + APS M	209599
	Power-Set 3 2x 18 M 144 LiHD + APS M+	209598
	Power-Set 4 2x 18 M 144 LiHDX + APS M+	212615

In order to develop a better tool for carpenters, we at MAFELL often take a special approach: We change our point of view and completely reconceive the tool in essential parts. At the same time, we always keep in mind the future requirements of the woodworking trade.

From this way of thinking, paired with an outstanding material and processing quality, amazing solutions emerge again and again. For example, in terms of functionality and ease of use. It is our claim that you no longer have to think about your tools when doing your work. Simply because we at MAFELL have already done so extensively. After all, we have a common goal: the perfect job. Or in brief:

creating excellence

Your MAFELL authorized dealer:



MAFELL AG · Beffendorfer Straße 4 · 78727 Oberndorf · Germany
Telefon +49 7423 812-114 · E-Mail export@mafell.de · www.mafell.com