metabo®

PROFESSIONAL POWER TOOL SOLUTIONS

SSD 18 LTX 200 BL

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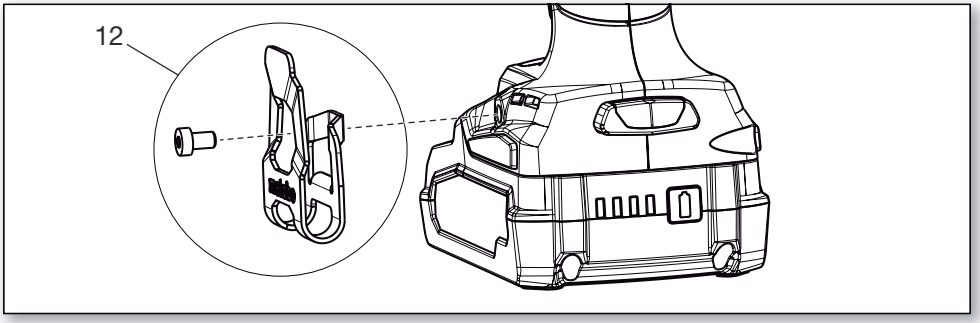
metabo
SSD 18 LTX 200 BL
BRUSHLESS TECHNOLOGY
LiHD
18V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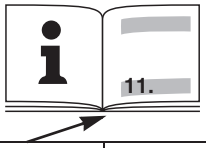


		SSD 18 LTX 200 BL *1) Serial Number: 02396...
U	**V**	18
n_0	**/min, rpm**	0 - 2900
S	**/min, bpm**	4000
H	**-**	⬡ 1/4“ (6,35 mm)
m	**kg (lbs)**	1,3 (2.9)
M_P	**Nm (in-lbs)**	200 (1770)
a_h / K_h	**m/s²**	19,3 / 2,9
L_{pA} / K_{pA}	**dB(A)**	94 / 3
L_{WA} / K_{WA}	**dB(A)**	105 / 3

CE *2) 2014/30/EU, 2006/42/EC, 2011/65/EU
*3) EN 60745-1:2009+A11:2010, EN 60745-2-2:2010, EN 50581:2012

2017-10-10, Bernd Fleischmann ppa. B. F.
Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)
*4) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

Ⓐ

ASC Ultra

ASC 15

ASC 30-36 V

etc.

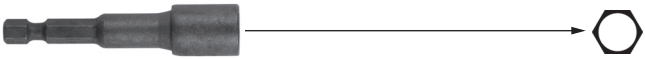
Ⓑ

18 V	3,5 Ah	6.25346	Li-HD
18 V	4,0 Ah	6.25591	Li-Power
18 V	5,2 Ah	6.25592	Li-Power
		etc.	

Ⓒ SSD...:

6.28849

6.28850



etc.

6.28838

使用說明

1. 一致性聲明

我們根據我們的全權責任宣布：按類型和型號 *1) 識別的這些無線衝擊式電鑽符合指令 *2) 和標準 *3) 的所有相關要求。技術檔案在 *4) - 見第 3 頁。

2. 指定用途

衝擊式螺絲起子適合鎖緊和拆下螺絲。

使用者必須全權負責不當使用所造成的任何損壞。

請瞭解並遵守一般事故防範條例，以及隨附的安全資訊。

3. 一般安全說明

為了您的安全與保護您的電動工具，請特別注意有此警示標誌的地方！

警告 – 閱讀使用說明將能降低受傷的風險。

警告 – 請閱讀所有安全警告和所有的說明。 *如未遵守所有安全警告與說明，可能導致觸電、起火和/或嚴重受傷。*

請妥善保存所有安全說明與資訊，以供將來參考。

如需轉交電動工具，必須將這些文件一同轉交。

4. 特殊安全說明

如果工作時使用的緊固件有可能接觸隱藏電線時，一定要握著絕緣手柄操作工具。緊固件若接觸到「帶電」的電線時，可能導致電動工具的金屬部位也「帶電」，造成操作者因此觸電。

進行任何調整、轉換或維護前，請取出工具的電池組。

裝回電池組前，確保電動工具已關閉。

請先確認：施工的位置沒有埋設**電線、瓦斯管線或水管** (可使用如金屬探測器的設備偵測)。

固定工件，以免滑動或轉動 (例如，使用螺絲鉗固定)。

電池組不可沾水和受潮！

請勿使電池組接近明火！

不要使用有故障或變形的電池組！

不要拆開電池組！

不可觸碰電路或使電池組短路！

損壞的電池組可能會洩漏弱酸性可燃性液體！

如果電池滲漏出的液體接觸到皮膚，請立即用大量清水沖洗。如果電池滲漏出的液體接觸到眼睛，請用清水沖洗並立即就醫。

如果電動工具損壞，請取出其中的電池組。

務必使用衝擊式螺絲起子適用的鎖螺絲鑽頭。

鎖緊長螺絲必須小心，長螺絲可能會滑動。

只有在工具的電源關閉時，才能將螺絲裝在工具上。

長時間工作時請戴上耳塞。長期暴露在高噪音等級下可能會影響聽覺。

不可處理會產生灰塵或水氣而對於健康有害的材料 (例如石棉)。

LED 燈 (6)：不可直視光學儀器的 LED 光線。

搬運鋰離子電池組：

按照與運送危害商品有關的法律 (UN 3480 和 UN 3481) 運輸鋰離子電池組。運送鋰離子電池組時瞭解目前有效的規範。必要時，請洽詢貨運商。Metabo 提供通過認證的包材。

送交運送的電池組必須外表無損，而且無漏液。送交運送機器時，請取出電池組。避免觸點短路 (例如，用膠帶保護)。

5. 概觀

見第 2 頁。

1 六角鎖螺絲鑽頭的六角主軸附件*
2 鎖定套*
3 旋轉選擇器開關/運送安全裝置
4 觸發開關
5 手柄 (研磨表面)
6 LED 燈
在照明不足的地方作業時使用。工具啟動時，LED 燈會亮起。
7 預選旋轉速度和鎖緊扭矩的設定輪
8 電池組 *
9 電池組釋放按鈕
10 容量指示燈按鈕 *
11 容量和訊號指示燈 *
12 帶鉤 (如圖所示安裝) *

* 端視功能/機型而定

6. 初始操作/設定

進行任何調整或維護前，請取出工具的電池組。裝回電池組前，確保電動工具已關閉。

6.1 電池組

使用前將電池組充電 (8)。

如果性能降低，請將電池組重新充電。

理想的存放溫度介於 10°C 與 30°C 之間。

「鋰電源、LiHD」鋰離子電池組有電量和訊號指示燈：(11)

- 按下按鈕 (10)，LED 指示電量。
- 如果一個 LED 閃爍，表示電池電力幾乎用盡，必須重新充電。

取出：

按下電池組釋放 (9) 按鈕，並向前拉出電池 (8)。

插入：

滑入電池組 (8)，直到卡入為止。

6.2 設定旋轉方向，啟動搬運安全裝置 (開啟鎖定)

⚠ 除非馬達完全停止，否則切勿開啟旋轉選擇器開關或啟動搬運鎖定 (3)！

開啟旋轉選擇器開關/啟動搬運鎖定 (3)。

R = 右旋轉組 (插入螺絲)
L = 左旋轉組 (取出螺絲)
0 = 中央位置：搬運鎖定設定 (開啟鎖定)

6.3 開機與關機

開機：按下觸發開關 (4)。

關機：放開觸發開關 (4)。

6.4 速度/鎖緊扭矩

速度和鎖緊扭矩直接連接。速度愈低，鎖緊扭矩愈低。

鎖緊扭矩受兩方面的影響：

1) 藉由設定輪 (7) 設定預選操作模式/所需的鎖緊扭矩：

P = 最大鎖緊扭矩 (電動模式)
1...10 = 可調整的鎖緊扭矩
S‡ = 尤其對於自攻螺絲：一開始高速 (鑽孔)，稍後低速 (鎖緊螺絲)。

2) 鎖緊扭矩的無級調整：

端視工作環境而定，用力或輕輕按下觸發開關 (4)，便能夠以無級的方式在設定輪的任何位置調整速度和鎖緊扭矩。

建議：進行鎖螺絲測試，決定正確的設定。

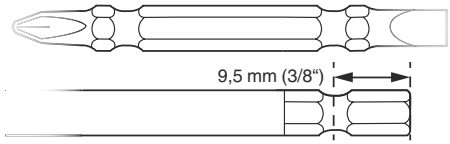
6.5 更換 SSD 的鎖螺絲鑽頭...

插入鎖螺絲鑽頭：向前滑動鎖定套 (2)，並盡可能朝底部插入鎖螺絲鑽頭。釋放鎖定套 (2)。

⚠ 拉動螺絲起子鑽頭，檢查是否確實固定。

拆下鎖螺絲鑽頭：向前滑動鎖定套 (2)，取下鎖螺絲鑽頭。

⚠ 鎖螺絲鑽頭僅適用於此類插入端：



⚠ 使用的鎖螺絲鑽頭必須符合螺絲。

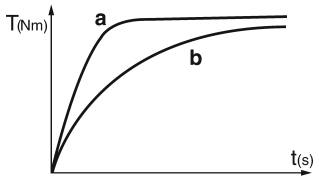
⚠ 不可使用損壞的鎖螺絲鑽頭。

7. 使用

將螺絲裝在工具上，確定筆直對準。

鎖螺絲程序分為兩個部份：**插入螺絲**和**使用撞擊機制鎖緊螺絲**。

鎖緊扭矩取決於衝擊時間長度。



衝擊時間長度大約 5 秒時，即達到最大的鎖緊扭矩。

扭矩曲線取決於應用的類型：

對於硬式鎖螺絲應用 (金屬等硬材料的螺絲鎖緊)，短衝擊時間長度 (a) 即可達到最大鎖緊扭矩。

對於軟式鎖螺絲應用 (木材等軟材料的螺絲鎖緊)，需要較長的衝擊時間長度 (b)。

建議：進行鎖螺絲測試，決定正確的衝擊時間長度。

小心！對於小螺絲，即使未達到 0.5 秒衝擊時間長度，也可達到最大扭矩。

- 鎖螺絲程序的時間長度必須確實監控的原因即在此。
- 藉由設定輪 (7) 設定適當的位置 (請參閱第 6.4 章)。

- 用力或輕輕按下觸

發開關 (4) 後調整鎖緊扭矩，確保螺絲並未損壞，或螺絲頭並未裂損。

8. 配件

務必使用原廠麥太保電池組和麥太保配件。

務必僅使用符合這些使用說明中所列需求和參數的配件。

請參閱第 4 頁。

A 充電器

B 不同容量的電池組
只能使用電壓與電動工具適合的電池組。

C 鎖螺絲鑽頭

關於完整的配件清單，請參閱 www.metabo.com 或產品目錄。

9. 維修

電動工具的維修工作只能交由合格的電工處理！

如果您有 Metabo 電動工具需要修理，請聯絡您的 Metabo 服務中心。如需地址，請參閱 www.metabo.com。

您可以從 www.metabo.com 下載零件清單。

10. 環保

請依照所在國家的法規，以符合環保的方式處置及回收廢棄的工具、包材及配件。

不可將電池組視為一般廢棄物進行處理。故障或用過的電池交由麥太保經銷商處理！

不可使電池組沾水！

僅針對歐盟國家：請勿將電動工具當作家庭廢棄物處置！為遵守歐盟指令 2012/19/EU 針對廢棄電子電機設備及在各國法律系統中之實務作法，廢棄的電動工具必須另外集中並交由環保回收中心處理。在丟棄前，將電動工具的電池組放電。避免觸點短路（例如，用膠帶保護）。

11. 技術規格

相關規格註解，請見第 3 頁。

本公司保留相關權利，可依技術發展而變更相關內容。

U = 電池組電壓

n_0 = 無負載速度

s = 衝擊頻率

H = 工具附件

m = 重量 (含最小電池組)

M_P = 最大鎖緊扭矩 (電動模式)

測量依據 EN 60745 標準確認。

⎓ 直流電

上述技術規格皆含有公差在內 (符合相關的有效標準)。

排放值
使用這些值，可以評估電動工具的排放量，以及比較不同的電動工具。實際數值可能更高或更低，端視特定應用與工具或電動工具的條件而定。在估計這些值時，您也應該包括工作空檔與低使用量期間。根據排放值規定使用者的保護措施，例如必須要擬定的組織步驟。

整體振動總值 (三個方向的向量總和) 依據 EN 60745 判定：

a_h = 振動排放值 (衝擊鎖緊)

K_h = 不確定 (振動)

一般的 A 實際感知音量：

L_{pA} = 聲音壓力等級

L_{WA} = 聲音功率等級

K_{pA}, K_{WA} = 不確定 (噪音等級)

請佩戴防護耳罩！

Original instructions

1. Declaration of Conformity

We declare under our sole responsibility: These cordless impact drivers, identified by type and serial number *1), comply with all relevant requirements of the directives *2) and standards *3). Technical file at *4) - see page 3.

2. Specified Use

The impact screwdriver is suitable for driving in and removing screws.

The user bears sole responsibility for any damage caused by improper use.

Generally accepted accident prevention regulations and the enclosed safety information must be observed.

3. General safety instructions

For your own protection and for the protection of your power 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.

WARNING Read all safety warnings and instructions. *Failure to follow all safety warnings and instructions may result in electric shock, fire and/or serious injury.*

Keep all safety instructions and information for future reference.
Pass on your electrical tool only together with these documents.

4. Special Safety Instructions

Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Remove the battery pack from the machine before any adjustments, conversions or servicing are performed.

Before fitting the battery pack, make sure that the machine is switched off.

Ensure that the spot where you wish to work is free of **power cables, gas lines or water pipes** (e.g. using a metal detector).

Secure the workpiece to prevent slipping or rotation (e.g. by securing with screw clamps).

Protect battery packs from water and moisture!

Do not expose battery packs to naked flame!
Do not use faulty or deformed battery packs!
Do not open battery packs!
Do not touch or short-circuit battery packs!

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.

Only screwdriving bits suitable for the impact screwdriver must be used.

Take care when driving in long screws - risk of slipping.

Mount the machine on the screw only when it is switched off.

Wear ear protectors when working for long periods of time. High noise levels over a prolonged period of time may affect your hearing.

Materials that generate dusts or vapours that may be harmful to health (e.g. asbestos) must not be processed.

LED lights (6): Do not observe the LED radiation directly with optical instruments.

Transport of li-ion battery packs:

The shipping of li-ion battery pack 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).

5. Overview

See page 2.

1 Hexagon socket attachment for hexagon screwdriving bits*
2 Locking sleeve*
3 Rotation selector switch / Transporting safety device
4 Trigger
5 Handle (gripping surface)
6 LED light
For working on dimly lit areas. The LED lights light up when the machine is switched on.

7 Setting wheel for preselecting rotational speed and tightening torque
8 Battery pack *
9 Battery pack release button
10 Capacity indicator button *
11 Capacity and signal indicator *
12 Belt hook (attach as shown) *

* depending on the features / model

6. Initial Operation/Setting

Remove the battery pack from the machine before any adjustment or maintenance is carried out. Before fitting the battery pack, make sure that the machine is switched off.

6.1 Battery pack

Charge the battery pack before use (8).

If performance diminishes, recharge the battery pack.

The ideal storage temperature is between 10°C and 30°C.

"Li-Power, LiHD" li-ion battery packs have a capacity and signal indicator: (11)
- Press the button (10), the LEDs indicate the charge level.
- If one LED is flashing, the battery pack is almost flat and must be recharged.

Removal:
Press the battery pack release (9) button and pull the battery pack (8) forwards.

Inserting:
Slide in the battery pack (8) until it engages.

6.2 Setting the direction of rotation, engaging the transporting safety device (switch-on lock)

Do not actuate the rotation selector switch or engage the transportation lock (3) unless the motor has stopped completely!

Actuate the rotation selector switch / Engage the transportation lock (3)

R = Right rotation set (insert screws)
L = Left rotation set (remove screws)
0 = Central position: transportation lock setting (switch-on lock)

6.3 Switching on and off

Switching on: press the trigger switch (4).

Switching off: release the trigger switch (4).

6.4 Speed / tightening torque

The speed and tightening torque are connected directly. The lower the speed, the lower the tightening torque.

The tightening torque is influenced in two ways:

1) Preselect operating mode/desiredtightening torque at the setting wheel (7):

P = max. tightening torque (power mode)

1...10 = adjustable tightening torque

s = especially for self-cutting screws: at the beginning high speed (for drilling) and later low speed (for tightening the screw).

2) Stepless adjustment of the tightening torque:

The speed and tightening torque can be adjusted steplessly in any position of the setting wheel by pressing the trigger (4) firmly or lightly, thus adapting to working conditions.

Recommendation: determine the correct setting by carrying out trial screwdriving.

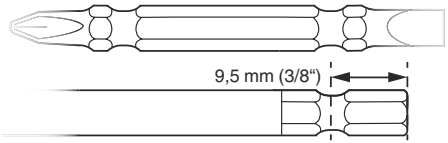
6.5 Changing screwdriving bit for SSD...

Inserting screwdriving bit: Slide locking sleeve (2) forward and insert screwdriving bit as far as the stop. Release locking sleeve (2).

Pull on the screwdriver bit to check that it is correctly seated.

Removing screwdriving bit: Slide locking sleeve (2) forward and remove screwdriving bit.

Only use screwdriving bits with such plug-in ends:



The screwdriving bit used must match the screw.

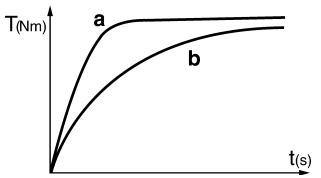
Damaged screwdriving bits must not be used.

7. Use

Mount the machine on the screw, ensuring it is aligned straight.

The screwdriving process has two elements:
inserting the screw and
tightening the screw with the percussion mechanism.

The tightening torque depends on the impact duration.



With an impact duration of approx. 5 seconds, the maximum tightening torque has been reached.

The torque curve depends on the type of application:

With a hard screwdriving application (screw-couplings in hard material such as metal), maximum tightening torque is already reached after a short impact duration (a).

With a soft screwdriving application (screw-couplings in soft material such as wood), a longer impact duration (b) is required.

Recommendation: determine the correct impact duration by carrying out trial screwdriving.

Caution! With **small screws,** maximum torque can be reached even below an impact duration of 0.5 seconds.

- This is why the duration of the screwdriving process must be monitored exactly.
- Set a suitable position on the setting wheel (7) (see chapter 6.4).
- Adjust the tightening torque by pressing firmly or lightly on the trigger (4), ensuring that the screw is not damaged or that the screw head does not tear off.

8. Accessories

Only use original Metabo battery packs and Metabo accessories.

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

See page 4.

A Chargers
B Battery packs with different capacity
Only use battery packs with the appropriate voltage for your power tool.
C Screwdriving bits

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

9. Repairs

Repairs to electrical tools must be carried out by qualified electricians ONLY!

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

You can download spare parts lists from www.metabo.com.

10. Environmental Protection

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

Battery packs must not be disposed of with regular waste. Return faulty or used battery packs to your Metabo dealer!

Do not allow battery packs to come into contact with water!

Only for EU countries: Never dispose of power tools in your household waste! In accordance with European Guideline 2012/19/EU on used electronic and electric equipment and its implementation in national legal systems, used power tools must be collected separately and handed in for environmentally compatible recycling. Before disposal, discharge the battery pack in the power tool. Prevent the contacts from short-circuiting (e. g. by protecting them with adhesive tape).

11. Technical specifications

Explanatory notes on the specifications on page 3.

Changes due to technological progress reserved.

U = Voltage of battery pack
n_0 = No-load speed
s = Impact frequency
H = Machine tool attachment
m = Weight (with smallest battery pack)
M_P = max. tightening torque (power mode)
Measured values determined in conformity with EN 60745.

⎓ Direct current

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

Emission values
Using these values, you can estimate the emissions from this power tool and compare these with the values emitted by other power tools. The actual values may be higher or lower, depending on the particular application and the condition of the tool or power tool. In estimating the values, you should also include work breaks and periods of low use. Based on the estimated emission values, specify protective measures for the user - for example, any organisational steps that must be put in place.

Vibration total value (vector sum of three directions) determined in accordance with EN 60745:
a_h = Vibration emission value(screwdriving with impact)
K_h = Uncertainty (vibration)

Typical A-effective perceived sound levels::
L_{pA} = Sound pressure level
L_{WA} = Acoustic power level
K_{pA}, K_{WA} = Uncertainty (noise level)

Wear ear protectors!

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Metabowerke GmbH
Metabo-Allee 1
72622 Nuertingen
Germany
www.metabo.com

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