

# OPERATING INSTRUCTIONS

## TorqBee®



**TB-P-xxx-xx / TB-A-xxx-xx / TB-S-xxx-xx**

Release date: January 2018

PC-Software: 2.0.2.25 and higher  
Firmware: 2.0.3.4 and higher

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### **NOTICE**

This warning symbol indicates additional information that will make your work easier.



### **WARNING**

General warning to prevent operating errors and failures.



### **DANGER**

This indicates a direct hazard for the worker or the tool. This warning symbol is especially important and must be observed.

## Disposal



Power tools, batteries, accessories and packaging must be disposed of at an environmentally-compatible recycling facility. Power tools and batteries do not go into the household trash.

### Only for EU countries:



#### Directive 2002/96/EG:

Defective power tools must be collected separately and disposed of at an environmentally-compatible recycling facility.

#### Directive 2006/66/EG:

Defective or drained batteries must be collected separately and disposed of at an environmentally-compatible recycling facility.

Drained batteries can be disposed of directly:

#### Germany:

Recyclingzentrum Elektrowerkzeuge  
Osteroder Landstraße 3  
37589 Kalefeld

## Transport

Li-Ion batteries are subject to the specifications in the laws pertaining to hazardous goods. The batteries can be transported on roads by the user without further constraints.

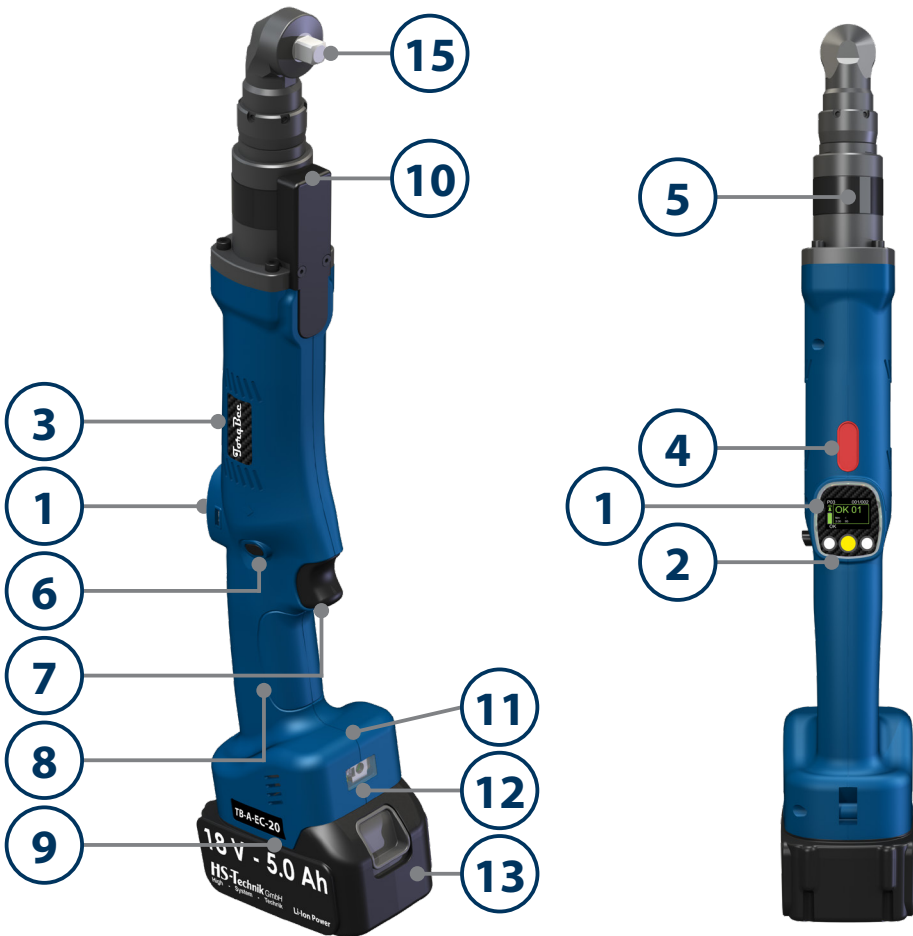
When shipping with third parties (e.g.: freight forwarders), special requirements must be observed for packaging and labeling!

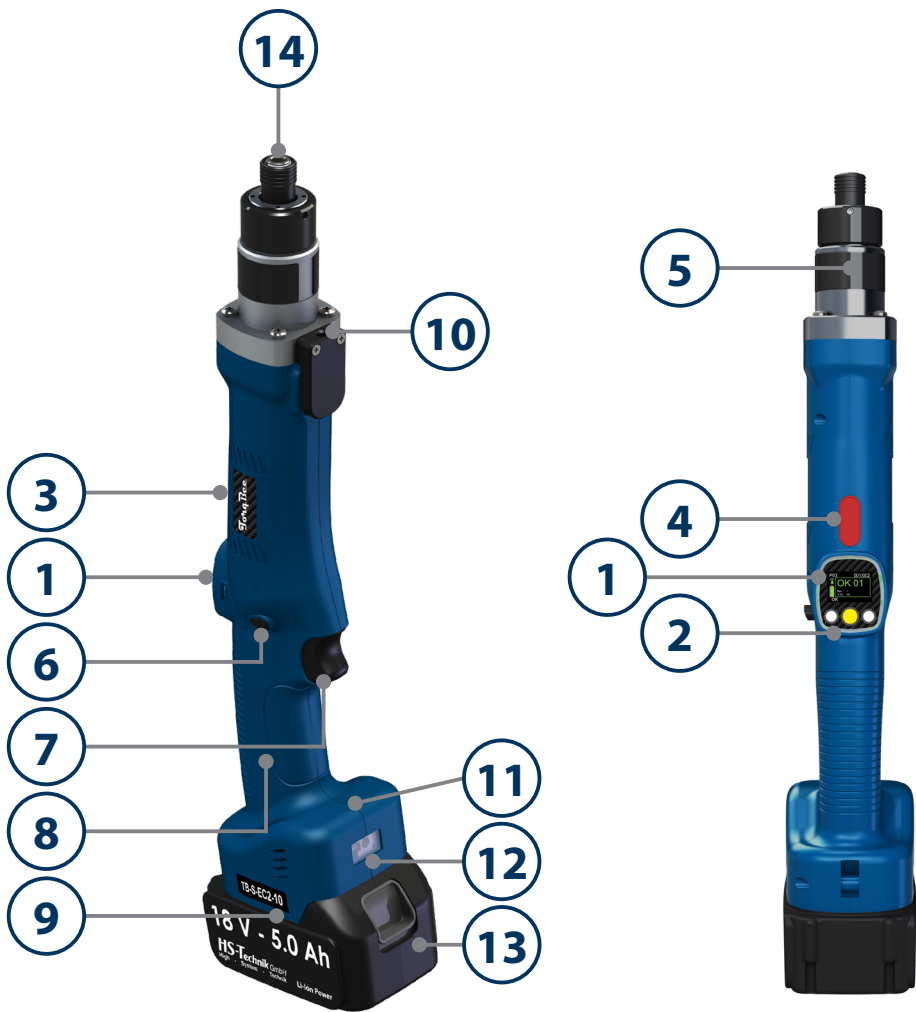
Only ship batteries if the casing is not damaged. Cover the contacts with tape and package the battery so it cannot move around in the packaging. Please comply with other national and international requirements.



- 1 **OLED-Display to led the worker through the process**  
*not available in the Light version*
- 2 **Multi color LED control light**
- 3 **Brushless high-powered motor**
- 4 **Color index**

- 5 **Clutch access**  
*not available in the PRO-M & EC<sup>2</sup> version*
- 6 **CW / CCW**
- 7 **Large trigger**
- 8 **Ergonomical handle**
- 9 **USB interface**
- 10 **Powerful LED**
- 11 **Optional Wi-fi module**  
*not available in the Light version*
- 12 **Optional scanner**  
*not available in the Light version*
- 13 **Premium Li-Ion battery**
- 14 **1/4" hex. socket adapter**
- 15 **3/8" square adapter**







## NOTE

The Light version is equipped with a multi color status LED but do not have a display.







## NOTE

Depending on the tool configuration the different functions described in the manual can be used. Furthermore each basic function have many subfunctions.

Included in the  
delivery content

Optional available

	Article	Included in the delivery content				Optional available	
		Shut-off clutch	Torque transducer	Reaction sensor	Display	Scanner	Wi-fi
Pistol screwdriver	TB-P-L-xx	✔					
	TB-P-SO-xx	✔			✔	✔	✔
	TB-P-SOP-xx	✔		✔	✔	✔	✔
	TB-P-EC-xx		✔		✔	✔	✔
	TB-P-EC2-xx		✔	✔	✔	✔	✔
Angle screwdriver	TB-A-L-xx	✔					
	TB-A-SO-xx	✔			✔	✔	✔
	TB-A-SOP-xx	✔		✔	✔		✔
	TB-A-EC-xx		✔		✔		✔
	TB-A-EC2-xx		✔	✔	✔	✔	✔
Straight screwdriver	TB-S-L-xx	✔					
	TB-S-SO-xx	✔			✔	✔	✔
	TB-S-SOP-xx	✔		✔	✔	✔	✔
	TB-S-EC-xx		✔		✔	✔	✔
	TB-S-EC2-xx		✔	✔	✔	✔	✔

# 1. IMPORTANT INFORMATION

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## **Danger!**

Before you put the tool down, wait until it has come to a complete stop as otherwise, the tool can jam and you may lose control of the screwdriver.



## **Danger!**

When tightening and unscrewing screws, high reaction torques may arise. Therefore, always keep a tight grip on the tool.



## **Danger!**

Switch the electrical device off immediately if the tool used locks up and be prepared for high reaction torques that can cause kickback. The tool locks up when it is overladed or jams in the workpiece.

## 2. GENERAL INFORMATION

---

### 2.1.0. IMPORTANCE OF THE OPERATING INSTRUCTIONS

This information was written with the intention of being read, understood and complied with in all points by persons responsible for the operation of the TorqBee® screwdriver (hereinafter referred to as the tool).

Prior to start-up, please read the operating instructions and comply with the safety instructions. Work station faults can only be prevented if the contents of these operating instructions are known and fault-free operation can be ensured.

We are not liable for damages and operational errors that result from non-compliance with these operating instructions. If difficulties arise nonetheless, please contact us and we will gladly provide assistance.

### 2.2.0. PROPER INTENDED USE

The tool may only be used, as described in these instructions, to create screw joints suitable for the type of tool.



#### NOTICE

Proper intended use also includes:

- complying with all instructions in the operating instructions
- complying with the inspection and maintenance work.

Any other use beyond this is not considered proper intended use. HS-Technik GmbH is **not** liable for any damages resulting from non-compliance.

### 2.3.0. IMPROPER USE

We are not liable for damages and operational errors that result from non-compliance with these operating instructions or improper use.



### **Danger!**

The tool is not a torque wrench. This tool cannot be used for already tightened connections as otherwise very high reaction torques arise and the motor control and the motor can overheat.

#### **2.4.0. GUARANTEE AND LIABILITY**

Guarantee and liability claims for personal and material damages are excluded if they can be traced back to one or more of the following causes:

- improper use
- improper assembly, start-up, operation and maintenance
- operating the tool with defective safety equipment or improperly installed or non-functioning safety and protective equipment
- non-compliance with the instruction in the operating instructions pertaining to transport, storage, assembly, start-up, operation and maintenance of the tool
- unauthorized structural modifications to the tool
- improper repair
- catastrophes caused by foreign bodies and force majeure

## 2.5.0. COPYRIGHT

These operating instructions are only for the operator and its personnel.

They contain the regulations and instructions, which may neither be completely nor partially

- reproduced
- edited or
- otherwise published.

The copyrights to these operating instructions remain with HS-Technik GmbH.

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## **3. BASIC SAFETY INSTRUCTIONS**

---

### **3.1.0. NOTICES IN THE OPERATING INSTRUCTIONS**

- The basic requirement for safe and proper use and fault-free operation is knowledge of the basic safety instructions and safety regulations.
- In addition, the rules and regulations for the place of use must be followed.

### **3.2.0. OPERATOR'S RESPONSIBILITY**

The operator is obligated to only allow persons to work with this tool who are familiar with the basic regulations for work safety and accident prevention and are trained in how to use the tool. Safety-conscious work of the personnel must be checked at regular intervals.

#### **3.2.1. PERSONNEL'S RESPONSIBILITY**

All persons working with this tool are obligated to comply with the basic regulations for work safety and accident prevention prior to starting work.

#### **3.2.2. PERSONNEL TRAINING**

Only trained and qualified personnel may work with this tool. The responsibilities of the personnel for the assembly, start-up, operation, maintenance and servicing must be clearly defined. Personnel-in-training may only operate the machine in the presence of an experienced person.

### **3.3.0. RISKS WHEN WORKING WITH THE TOOL**

Faults that may hinder safety must be immediately rectified.



### **WARNING**

The tool was built in accordance with the state of the art in technology and the approved safety regulations. Still, when using it, risks to life and limb of the user or third parties or other material assets may arise.



### **WARNING**

Only use the tool

- for the proper intended use
- in working order with regards to safety

## **3.4.0. DANGER FROM ELECTRICAL ENERGY**



### **DANGER**

Only allow a qualified electrician to perform work on this tool. The electrical equipment of the tool must be regularly inspected. Loose connections and charred cables must be immediately repaired. If work must be performed with the tool, remove the battery prior to opening the device.



### **WARNING**

The tool must be kept closed at all times. Access is only permitted for authorized persons with a tool.

## **3.4.1. FUNDAMENTAL SAFETY MEASURES**



### **NOTICE**

The terms "tool" and "power tool" used in the safety instructions pertain to mains-operated power tools (with power cable) and battery operated power tools (without power cord).

### **3.4.1. WORKPLACE SAFETY**

**a) Keep your workspace clean and well lit.**

Disorder or poorly lit workspaces can lead to accidents.

**b) Do not use the tool in an explosive environment,**

in which flammable liquids, gases or dusts are located.

Power tools can generate sparks which can ignite the dust or vapors.

**c) Take environmental influences into account.**

Never subject tools to rain.

Do not use tools in moist or wet environments.

**d) Keep other persons away from tool while in use.**

If you are distracted, you can lose control of the device.

### **3.4.2. ELECTRICAL SAFETY**

**a) Avoid physical contact with grounded surfaces such as pipes, heaters, etc..**

There is an increased risk of electrical shock if your body is grounded.

**b) Keep the device away from rain or moisture.**

Water penetrating into the tool increases the risk of an electrical shock.

**c) Keep the tool away from heat, oil, sharp edges or moving device parts.**



### 3.4.3. PERSONAL SAFETY

**a) Be careful, pay attention to what you are doing and use power tools responsibly.**

Do not use power tools when you are tired or under the influence of drugs, alcohol or medication.

One moment of carelessness when using the tool can lead to severe injuries.

**b) Wear personal safety equipment and always wear protective eyewear.**

Wearing protective safety equipment such as a dust mask, safety shoes, a protective helmet and hearing protection, depending on the type and use of the tool, decreases the risk of injuries.

**c) Avoid unintended start-up.**

Ensure that the power tool is shut off before you connect it to the battery pick it up, or carry it.

If you have your finger on the trigger while carrying the power tool, or the device is connected to the power supply, this can lead to accidents.

**d) Avoid non-ergonomic posture.**

Make sure you are standing stably and always maintain your balance. You can then control the power tool in unexpected situations.

**e) Wear suitable clothing.**

Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewelry or long hair can get caught in moving parts.

### 3.4.4. USING AND HANDLING THE POWER TOOL

**a) Do not overload the tool.**

Use the proper tool for your work. You work better and more safely in the defined output range when using the proper tool.

**b) Do not use power tools with defective switches.**

A tool that cannot be shut off is dangerous and must be repaired.

**c) Remove the battery before you change tool settings, replace accessories or lay the tool down.**

This safety measure prevents the power tool from starting unintentionally.

**d) Store unused tools out of reach of children.**

Do not allow persons to use the device who are not familiar with it or have not read these instructions. Power tools are dangerous if they are used by inexperienced persons.

**e) Take good care of the power tool.**

Check that moving parts work properly and do not jam, that there are no broken or damaged parts and that the functionality is not hindered. Have damaged parts repaired prior to using the device. Many accidents are caused by poorly maintained power tools.

**f) Keep the tools clean.**

Carefully maintained tools jam less often and are easier to use.

**g) Use the tool, accessories, etc. in accordance with these instructions.**

Take the working conditions and task to be executed into account. The use of power tools for other purposes than the intended use can lead to hazardous situations.

**h) Use the right tool**

Do not use low-output tools for heavy loads. Do not use the tool for purposes and work for which it is not intended.

**i) Check your tool for damage**

Prior to further use of the tool, the safety equipment or damaged parts must be inspected to ensure proper functionality.

Check to ensure the functionality of moving parts, that they don't jam, that no parts are broken and that all parts are properly and correctly installed and all conditions required for the operation of the device have been fulfilled.

Damaged safety equipment and parts should be properly repaired or replaced by a customer service workshop unless otherwise indicated in the operating instructions. Damaged switches must be replaced by a customer service workshop. Do not use tools on which the trigger cannot be easily switched on and off.

### 3.4.5. SERVICE



#### **NOTICE**

Only allow your power tool to be repaired by a qualified technician using only original spare parts, available from HS-Technik GmbH. This ensures that the safety of your device is maintained.

### 3.5.0. LITHIUM-ION BATTERY



#### **NOTICE**

Please make sure to follow the following instructions for using lithium-ion batteries!

- a) Only charge the batteries in chargers recommended by the manufacturer.**  
If the battery is not charged on a suitable charger, it can be permanently damaged.
- b) Only use the provided battery for power tools.**  
The use of other batteries can lead to injuries and fire hazards.
- c) If the battery is not used for a longer period of time, it must not remain on the charger or on the tool.**  
If a work break of more than 3 hours is expected, the battery must be removed from the tool. Otherwise, the battery may be permanently damaged.
- d) The lithium-ion battery should not remain on the charger for longer than 36 hours for safety reasons.**  
Remove the battery from the charger immediately after the charging process is completed.
- e) An empty battery should not be in contact with the tool or a charger that is disconnected from the mains for a longer period of time.**  
In both cases, currents are flowing that deep discharge the battery and can permanently damage it.
- f) Recharge the lithium-ion batteries immediately and never store them when empty.**  
If the battery is stored while disconnected from the tool and the charger, it will maintain a constant capacity over a long period of time. (Loss approx. 5% per year)
- g) Always transport the battery separately from the tool.**  
You thus prevent accidentally switching on the tool and deep discharging the battery.
- h) Do not subject the lithium-ion battery to high temperatures (+ 50°C) or direct sunlight.**  
If the battery gets warmer than 50°C during operation (charging or discharging), it must be removed from the charger or tool immediately.

- i) **Keep the unused battery away from paper clips, coins, keys, nails, screws or other small metal objects which might bridge the contacts. Do not open the battery and do not short-circuit it.**

A short-circuit between the battery contacts can lead to burns, fire or explosions.

- j) **Under extreme use or temperature conditions, batteries can leak.**

Avoid contact with the skin or eyes if the battery leaks. The battery fluid is acidic and can cause chemical burns on tissue. If the fluid comes into contact with skin, immediately wash it with soap and water and then rinse it with lemon juice or vinegar. If the fluid gets into the eyes, flush with water for at least 10 minutes and immediately go to the doctor.

- k) **Make sure that the Li-Ion battery does not fall down or is subject to vibrations and impacts.**

- l) **Clean the contacts regularly with a cotton swab soaked in a high-percent alcohol.**



### **NOTICE**

Lithium-ion batteries have nearly no self-discharge and do not have a memory effect. If properly used, they will reliably supply your tool with power for several years (approx. 700 - 1000 charge cycles).

In general the following applies:

Avoid deep discharging or overcharging the lithium-ion battery under any circumstances. It will be permanently damaged from this.

### 3.8.0. CLEANING AND DISPOSING OF THE TOOL

Use and dispose of used materials and substances properly, in particular cleaning agents and solvents.

**Do not throw the used battery in the household trash, a fire or in water; have it properly disposed of by a specialist shop or the manufacturer.**

### 3.9.0. RISK OF INJURY AND DAMAGE TO THE TOOL



1. Make sure that none of the tool parts are damaged. All damaged parts must be repaired prior to using the device. If you work with damaged tool parts, you risk injury.
2. If you work on raised platforms, wear a safety belt and avoid letting the tool fall down. Non-compliance may lead to injury and significant damage.
3. First remove the battery before you clean the device or perform general maintenance.
4. Never hold your face near the exhaust holes.
5. Avoid skin contact with substances such as lubricating grease and oil. These substances are flammable on skin. If you do come into contact with them, thoroughly wash the area.
6. Avoid unstable working positions. You might fall down and injure yourself.
7. Maintain your tool carefully. Follow the operating instructions for maintenance and cleaning. Keep the handle free of lubrication greases and dirt.
8. Use the tool carefully and pay attention to proper use. Use the tool carefully. When working, the framework conditions should be fulfilled. Always concentrate while working.

## 4. START-UP

---

Do not let the tool fall or allow other objects to fall on the device. Protect it from impact damage. Make sure that the device does not come into contact with sprayed water or oil.

### 4.1.0. INSTALLING OR REMOVING THE BATTERY

- To remove the battery, set the rotational direction switch to the center position, slide the clip on the front side of the battery back and pull it forward away from the machine.
- To install the battery, align the tongue of the battery with the groove in the casing so it can easily slide into place.
- Always slide it on completely until it locks with a click. Check that the battery is correctly locked in place before starting to work.  
If the battery is not installed properly, it can fall out of the tool and lead to injuries.
- Never use force when installing the battery. If the battery cannot be easily slide in, it has not been correctly installed.



- 1 – Clip
- 2 – Remove battery

### 4.1.1. TRIGGER



#### **WARNING**

Before you remove the battery or install it in the screwdriver, please check that the rotating direction switch is in the neutral position.



\* – Trigger



## 4.1.2. ROTATING DIRECTION SWITCH



### **WARNING**

Always check the rotating direction prior to operation.



\* – Rotating direction switch

- To change the rotating direction, the screwdriver is equipped with a rotating direction switch. Only use the rotating direction switch after the screwdriver has come to a complete stop. Changing the rotating direction during operation damages the device.



\* – Rotating direction switch

- If you are not using the screwdriver, set the rotating direction switch to the neutral position.
- To change or set the direction, press the rotating direction switch
  - out to the left
    - for **clockwise rotation**
    - or
  - out to the right
    - for **counter-clockwise rotation**



If the rotating direction switch is set to the center position, the trigger cannot be activated.

### 4.1.3. LED / BARCODE SCANNER



#### **WARNING**

Never look directly at the LED or barcode scanner!

After pressing the trigger, the LED and the barcode scanner will switch on. The afterrun illumination of the LED after the trigger has been pressed can be defined in the HST-Tool-Manager under Settings - General. The released barcode scanner goes off after a barcode is successfully scanned and/or the trigger has been released.



### **NOTICE**

Do not clean the LED with aggressive cleaning agents!



### **NOTICE**

The optional barcode scanner need to be activated in the hardware settings of the HST-Tool-Manager software to be used.

#### **4.1.4. MULTI COLOR LED CONTROL LIGHT**

The TorqBee® series has a LED control function which is near the display and goes around the tool. The light informs the worker at all time about the tools status:

The light can be programmed as glowing, flashing or pulsating with different time periods for each LED signal and different colors.

More information about the programming you'll find in the HST-Tool-Manager manual.

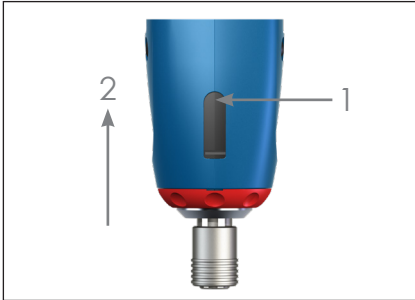


Color:



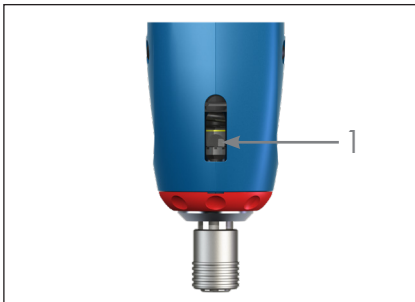
## 4.2.0. SETTING THE TIGHTENING TORQUE

For the **TorqBee®/TorqBee® PRO series** the tightening torque will be adjusted with a mechanical clutch.



- 1 – Push down the clip
- 2 – Slide the clip backwards

- To adjust the clutch the protection clip has to be removed
- Push down the clip at the back carefully. Then the clip can easily slide backwards. The clutch is visible now.



- 1 – Clutch adjustment

- Now the clutch is adjustable with an adjustment tool.

anti-clockwise: lower torque  
clockwise: higher torque

After the adjustment the clip needs to be put back in its initial position. It will close and lock then automatically.



Now the torque must be checked with a torque measurement unit. If the requested value isn't reached the clutch needs to be adjusted again.

For the **TorqBee® PRO-M series** the tool will be programmed with the HST-Tool-Manager software. Check, that the screwdriver is configured and parameterized correctly.



**NOTICE**

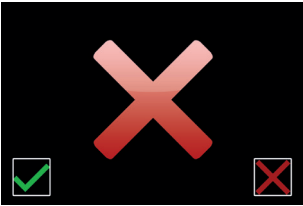
See HST-Tool-Manager operating instructions



**RISK OF INJURY**

If a low torque is expected and a very high torque is set unintentionally.

### 4.3.0. CANCEL JOB



If you want to execute a job later or you have scanned the wrong barcode, you can cancel this after the release.

To do this, hold down the display button for approx. 3 seconds. The cancel symbol will appear. Confirm this by pressing the left side display button.

### 4.3.0. BACK-UP STRATEGY

If the connection to the controller (process controls) via wireless connection through an access point is interrupted and a job has already been released in the screwdriver, it should be further processed if possible. After completing the job, the screwdriver will try to send the screwing process results. If the connection to the process controls cannot be restored, the screwing process results must be manually secured (read out the tool using the HST-Tool-Manager software and saved).

Then, after removing the battery, the back-up strategy can be used to continue working.

To do this, hold down the trigger and slide the battery back on. After approx. 3 seconds, the "set-up symbol" will appear on the display. You can now release the trigger and will be in the set-up menu.

By pressing the menu button, you can go to the next menu point. By pressing the trigger, you can select a menu point. Using the left button, confirm your selection; with the right button, cancel the selection.

## NOTICE



To activate the back-up strategy, the "Set-up" menu must be activated in the software under the general settings. Also activate the "scanner selectable" so the set-up menu point "Scanner" can be selected. If you also activate "Manual mode selectable", the set-up menu points "M" and "Scanner M" will be released. So you can select different programs per display, the check mark next to "Manual mode active" must also be selected.



With the left button,  
confirm the  
entry / selection.

Using the menu button  
on the display, you  
can go to the next  
menu point.

With the right button,  
cancel / decline the  
entry / selection.

In the "Scanner M" menu point, select the scan mode for scanning barcodes for program selection. Scan the barcodes for the screwing job as in regular mode. Then, you will receive the release for the corresponding program with the number of screws.

The screwing results are not transmitted to the process controls for central storage. You can, however, read out the screwing process results with the Tool-Manager software and save them as file.

Go forward with the menu button until the "Scanning M" logo appears. The tool have to be programmed accordingly with the HST-Tool-Manager.



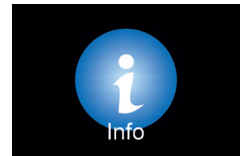
Press the trigger to select the setting.



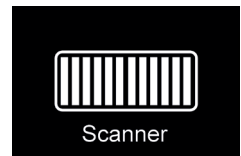
To confirm the back-up strategy with scanning function, press the left button on the display.



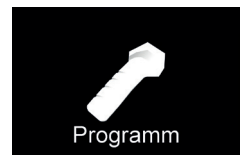
In the Info menu point, the most current battery voltage, network coverage RSSL and the version of the firmware can be displayed.



In the Scanner menu point, the scanner can be selected to read in network settings using a barcode. Scanning for program selection is not possible in this mode.



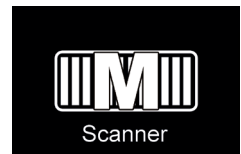
In the Program menu point, a program can be selected from the list of stored programs.



In the M menu point, manual mode can be selected (M = manual mode). This activates the "standard program" (yellow star).



In the Scanner M menu point, the scanner can be selected to scan barcodes for program selection. The barcodes and their assignment to a program must be stored in the tool.



By activating the Exit menu point, you will exit the setup menu. The tool will switch back into normal mode.



## 4.5.0. OPERATION



### WARNING

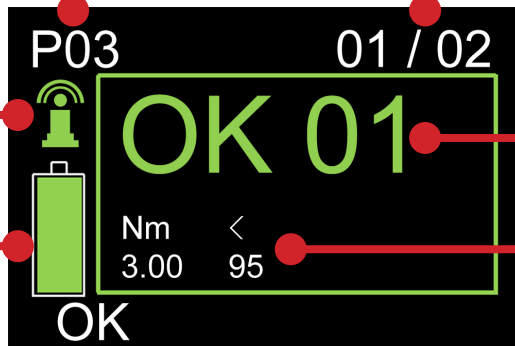
Hold the screwdriver with its tool insert straight against the screwing location with the necessary compression force, otherwise, it may be damaged (cam-out effect).

To ensure the SAFETY and RELIABILITY of the product, repairs, all other potential maintenance or adjustments should be performed by HS-Technik GmbH or an authorized specialist.

## 5. DISPLAY

Tool serial number or program number of the active program, e.g.: P03

Counting function:  
Counts the processed screws per screwing instance e.g. 01/03 means 1. screw of 3 successfully screwed in



Function display:  
green: connected  
yellow: searching for connection  
red: no connection

Battery display:  
Shows the charging status of the battery in 5 different statuses.

The display elements can be modified in the HST-Tool-Manager so the worker is shown, for instance, precise values for the screw joints, rotational angle, only an OK or NOK or the counting process. The display elements can be presented in German or English. Furthermore, you can set in which unit the values are output (Nm, lbf.in, lbf.ft).

**Main display window:**

In the main display window, the worker is shown the results of the screwing processes, warnings, commands and symbols and texts to make controlling the tool easier. This way, the worker always knows directly whether his work was correct, which torque range is specified for the next screw joint or why the tool is not executing a screwing process. Furthermore, the worker is notified in time by the integrated battery management system that the battery needs to be changed before it can be damaged due to deep discharging.

**Display text window:**

Shows the text for the current status or expected action.



Battery status:  
50% - 100%



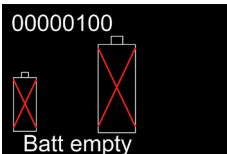
Battery status:  
30% - 50%



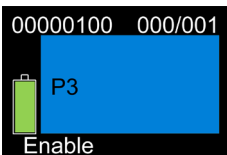
Battery status:  
10% - 30%



Battery status:  
5% - 10%



Battery status:  
less than 5%



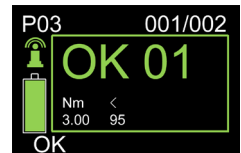
Screwdriver is released for the selected / scanned screwing process. When using the barcode scanner, if there is "NO NUMBER", the corresponding barcode appears on the blue display element as a release.

## Status displays

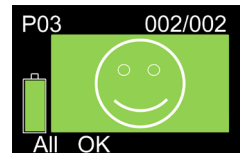
The device is ready to use.



The first of two screw joints was successful. Second screwing process must still be executed. Results of the first screw joint are displayed. This notice is also available as an NOK notice.

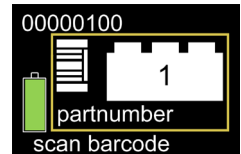


Both of the screwing processes were successful and have reached the specified reference (e.g. Nm) or were in the specified differential range. This notice is also available as an NOK notice.

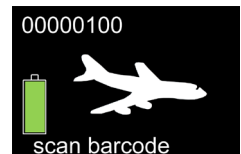


Scanning request:

Component 1, 2 or 3, depending on the number in the component of the display has to be scanned before the screwdriver is released.



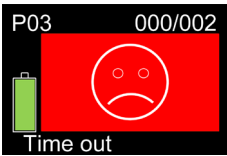
Airplane / product ID must be scanned before the screwdriver is released. Symbol can also be a car.



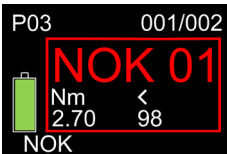
Screwdriver is locked and is currently being configured using the HST-Tool-Manager via Wi-fi. Battery must not be removed.



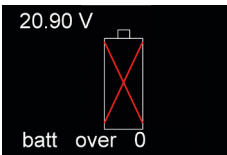
## Status displays



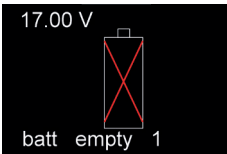
The screwing process for one or more screws was not processed within the specified time.



Specifications were not achieved during the screwing process. Values of the screw joint are displayed.



Maximum battery voltage exceeded



Battery voltage too low



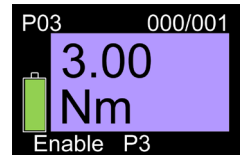
Screwdriver has successfully started up, but cannot connect to the superordinate controls.



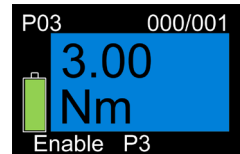
NOK must be separately confirmed by the worker pressing a button on the display.

## Status displays

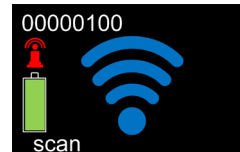
Screwdriver has received a release for program 3.  
This will unscrew the screw with 3.00 Nm.



Screwdriver has received a release for program 3.  
This will process the screw with 3.00 Nm.



Screwdriver tries to dial into the network.



Screwdriver has found the network connection and connects.



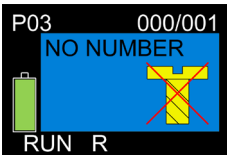
Previously lost connections to the network were restored.



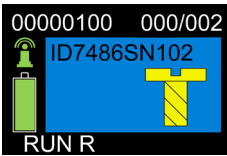
Screwdriver has lost the connection to the network.



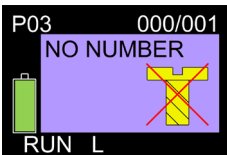
## Status displays



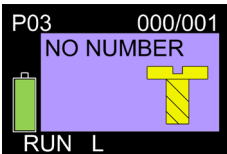
Releasing the trigger during a screwing process is permitted. Trigger was released during the screwing process. The screwing process can continue. When using the barcode scanner, if there is "NO NUMBER", the corresponding barcode appears on the blue display element as a release.



Screwing process is running  
When using the barcode scanner, if there is "NO NUMBER", the corresponding barcode appears on the blue display element as a release.



Releasing the trigger during an unscrewing process is permitted. Trigger was released during the unscrewing process. The unscrewing process can continue. When using the barcode scanner, if there is "NO NUMBER", the corresponding barcode appears on the blue display element as a release.



Unscrewing process is running  
When using the barcode scanner, if there is "NO NUMBER", the corresponding barcode appears on the blue display element as a release.



After confirming the NOK ("CONFIRM OK" display), the screw must first be unscrewed prior to the next release.

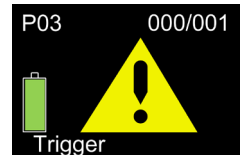


The rotating direction switch stands on counter-clockwise rotation, unscrewing is not allowed. The NOK-scewing in front needs to be acknowledged. This can be programmed in the settings with the HST-Tool-Manager.

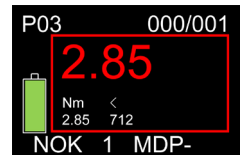


## Status displays

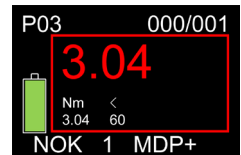
Battery was installed, screwdriver starts, but cannot connect to the network. Press the trigger to start a new connection.



Current redundancy of the torque was too low.



Current redundancy of the torque was too high.



The worker must inspect the screw after a screwing process, a time frame for this can be set (e.g. 15 seconds) and confirm it on the display himself. The timer runs backward to its reference point. (Graphic stops at 10.9 seconds) If the screw is not confirmed within the set time, NOK is automatically selected.



The tool has to be calibrated and will be released after the calibration.



The tool must be serviced and will not be released until after the confirmation from the service personnel.



## Status displays



Maximum screwing time for the released program was exceeded.



Released program is deactivated on this screwdriver.



Released program does not exist on this screwdriver.



Released program sequence does not exist on this screwdriver.

Most common error notifications are illustrated for you here. Since there are several status and error notifications in the electronics area, it is not possible to list them all. If you come across a status or error notification that doesn't make sense, please feel free to contact us. Many displays can deviate slightly depending on the software settings. For more information, look at your settings and the operating instructions from HST-Tool-Manager. If an error occurs several times, please contact our support team.

The display elements (status notifications) were created partially with and partially without a Wi-fi connection to a superordinate control system. As soon as the power tool is connected to a control system, the Wi-fi symbol appears over the battery display.

# Error displays

Maximum allowable torque exceeded, contact the manufacturer



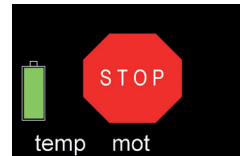
Maximum allowable current exceeded, contact the manufacturer



Temperature of the controls exceeded, contact manufacturer



Temperature of the motor exceeded, contact manufacturer



Maximum logic voltage exceeded, tool must be repaired!



SD card not found in the screwdriver or is defective. If the problem is not solved by inserting a new SD card, please contact the manufacturer.



## 6. ACCESSORIES

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- Software



### **NOTICE**

Improper use of potential supplemental devices or accessories from other manufacturers may pose a risk (of injury) to persons.



### **NOTICE**

Only use supplemental devices or accessories for the intended purpose. We will gladly assist you if you have questions.

**You can request exploded drawings and spare parts list with the article no. at [info@hs-technik.com](mailto:info@hs-technik.com) or via telephone +49 (0) 7628 / 9111-0.**



### **NOTICE**

All screwdrivers are delivered with software.



### **HST-3123**

Adjustment tool for  
TorqBee Light  
TorqBee  
TorqBee PRO



### **HST-3580**

Suspension (without balancer) for:  
TB-A-EC-30      TB-A-EC2-30  
TB-A-EC-55      TB-A-EC2-55  
TB-A-EC-85      TB-A-EC2-85



### **HST-3581**

Adaption for torque reaction arms:  
TB-A-EC-55      TB-A-EC2-55  
TB-A-EC-85      TB-A-EC2-85

## 7. TECHNICAL DATA

### 7.1.0. PISTOL SCREWDRIVER

TorqBee Light	Torque	Speed max.	Adapter	Dimensions in mm	Weight in kg
TB-P-L-4	1.0 - 4.0 Nm	1,050 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-L-5	1.5 - 5.0 Nm	850 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-L-6	1.5 - 6.5 Nm	850 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-L-10	1.5 - 9.0 Nm	570 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-L-12	3.0 - 13.0 Nm	460 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-L-24	5.0 - 24.0 Nm	170 rpm	1/4" - Form E	-	-

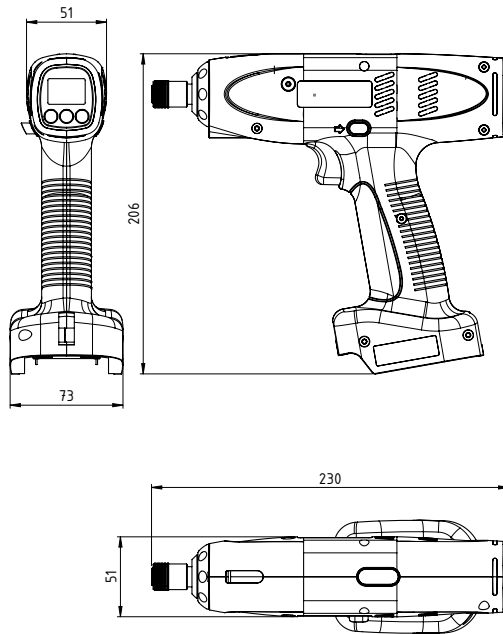
TorqBee Standard	Torque	Speed max.	Adapter	Dimensions in mm	Weight in kg
TB-P-SO-4	1.0 - 4.0 Nm	1,050 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SO-5	1.5 - 5.0 Nm	850 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SO-6	1.5 - 6.5 Nm	850 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SO-10	1.5 - 9.0 Nm	570 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SO-12	3.0 - 13.0 Nm	460 rpm	1/4" - Form E	230 x 51 x 206	1.25

TorqBee PRO	Torque	Speed max.	Adapter	Dimensions in mm	Weight in kg
TB-P-SOP-4	1.0 - 4.0 Nm	1,050 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SOP-5	1.5 - 5.0 Nm	850 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SOP-6	1.5 - 6.5 Nm	850 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SOP-10	1.5 - 9.0 Nm	570 rpm	1/4" - Form E	230 x 51 x 206	1.25
TB-P-SOP-12	3.0 - 14.0 Nm	460 rpm	1/4" - Form E	230 x 51 x 206	1.25

TorqBee PRO-M	Torque	Speed max.	Adapter	Dimensions in mm	Weight in kg
TB-P-EC-10	0.8 - 11.0 Nm	570 rpm	1/4" - Form E	230 x 51 x 206	1.15
TB-P-EC-12	1.0 - 14.0 Nm	460 rpm	1/4" - Form E	230 x 51 x 206	1.15

TorqBee EC <sup>2</sup>	Torque	Speed max.	Adapter	Dimensions in mm	Weight in kg
TB-P-EC2-10	0.8 - 11.0 Nm	570 rpm	1/4" - Form E	230 x 51 x 206	1.15
TB-P-EC2-12	1.0 - 14.0 Nm	460 rpm	1/4" - Form E	230 x 51 x 206	1.15

18 V batteries without deep discharge protection can be used.  
 Special types are not considered in this listing.  
 Data of weight and length are without battery.



Dimensions in mm

## 7.2.0. ANGLE SCREWDRIVER

<b>TorqBee Light</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-A-L-10	1.5 - 9.0 Nm	540 rpm	1/4" - Form E	411 x 73 x 92	1.35
TB-A-L-12	3.0 - 13.0 Nm	550 rpm	3/8" square	436 x 73 x 92	1.30
TB-A-L-20	5.0 - 20.0 Nm	360 rpm	3/8" square	436 x 73 x 92	1.30
TB-A-L-30	8.0 - 30.0 Nm	200 rpm	3/8" square	483 x 73 x 92	1.50
TB-A-L-50	15.0 - 50.0 Nm	160 rpm	3/8" square	483 x 73 x 92	1.50
TB-A-L-75	25.0 - 75.0 Nm	90 rpm	1/2" square	526 x 73 x 92	1.80

<b>TorqBee Standard</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-A-SO-10	1.5 - 9.0 Nm	540 rpm	1/4" - Form E	411 x 73 x 92	1.35
TB-A-SO-12	2.5 - 13.0 Nm	550 rpm	3/8" square	436 x 73 x 92	1.30
TB-A-SO-20	5.0 - 20.0 Nm	360 rpm	3/8" square	436 x 73 x 92	1.30
TB-A-SO-30	8.0 - 30.0 Nm	200 rpm	3/8" square	483 x 73 x 92	1.50
TB-A-SO-50	15.0 - 50.0 Nm	160 rpm	3/8" square	483 x 73 x 92	1.50
TB-A-SO-75	25.0 - 75.0 Nm	90 rpm	1/2" square	526 x 73 x 92	1.80

<b>TorqBee PRO</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-A-SOP-10	1.5 - 9.0 Nm	540 rpm	1/4" - Form E	411 x 73 x 92	1.35
TB-A-SOP-12	2.5 - 13.0 Nm	550 rpm	3/8" square	436 x 73 x 92	1.30
TB-A-SOP-20	5.0 - 20.0 Nm	360 rpm	3/8" square	436 x 73 x 92	1.30
TB-A-SOP-30	8.0 - 30.0 Nm	200 rpm	3/8" square	483 x 73 x 92	1.50
TB-A-SOP-50	15.0 - 50.0 Nm	160 rpm	3/8" square	483 x 73 x 92	1.50
TB-A-SOP-75	25.0 - 75.0 Nm	90 rpm	1/2" square	526 x 73 x 92	1.80



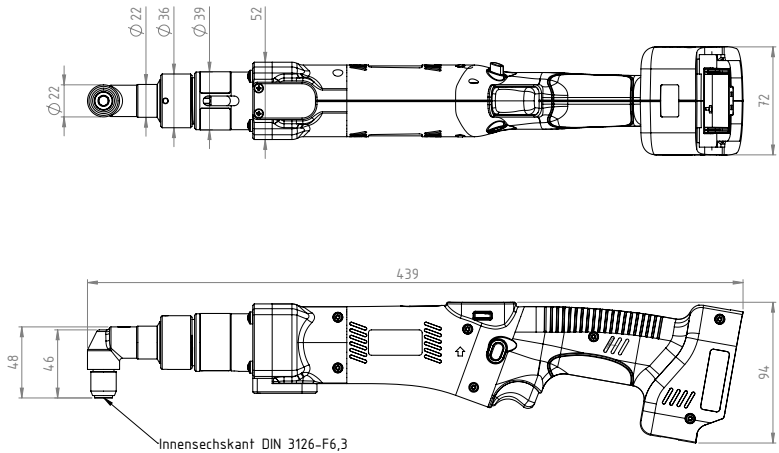
<b>TorqBee PRO-M</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-A-EC-10	1.5 - 10.0 Nm	540 rpm	1/4" - Form E	411 x 73 x 92	1.35
TB-A-EC-12	2.0 - 13.0 Nm	600 rpm	3/8" square	451 x 73 x 92	1.40
TB-A-EC-15	1.5 - 15.0 Nm	430 rpm	1/4" - Form E	-	-
TB-A-EC-20	5.0 - 20.0 Nm	320 rpm	3/8" square	441 x 73 x 92	1.20
TB-A-EC-30	8.0 - 32.0 Nm	290 rpm	3/8" square	541 x 73 x 92	1.20
TB-A-EC-55	15.0 - 55.0 Nm	160 rpm	3/8" square	600 x 73 x 92	1.40
TB-A-EC-85	25.0 - 85.0 Nm	90 rpm	1/2" square	644 x 73 x 92	2.90

<b>TorqBee EC<sup>2</sup></b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-A-EC2-10	1.5 - 10.0 Nm	540 rpm	1/4" - Form E	411 x 73 x 92	1.35
TB-A-EC2-12	2.0 - 13.0 Nm	600 rpm	3/8" square	451 x 73 x 92	1.40
TB-A-EC2-15	1.5 - 15.0 Nm	430 rpm	1/4" - Form E	-	-
TB-A-EC2-20	5.0 - 20.0 Nm	400 rpm	3/8" square	441 x 73 x 92	1.20
TB-A-EC2-30	8.0 - 32.0 Nm	290 rpm	3/8" square	541 x 73 x 92	1.20
TB-A-EC2-55	15.0 - 55.0 Nm	160 rpm	3/8" square	600 x 73 x 92	1.40
TB-A-EC2-85	30.0 - 85.0 Nm	90 rpm	1/2" square	644 x 73 x 92	2.90

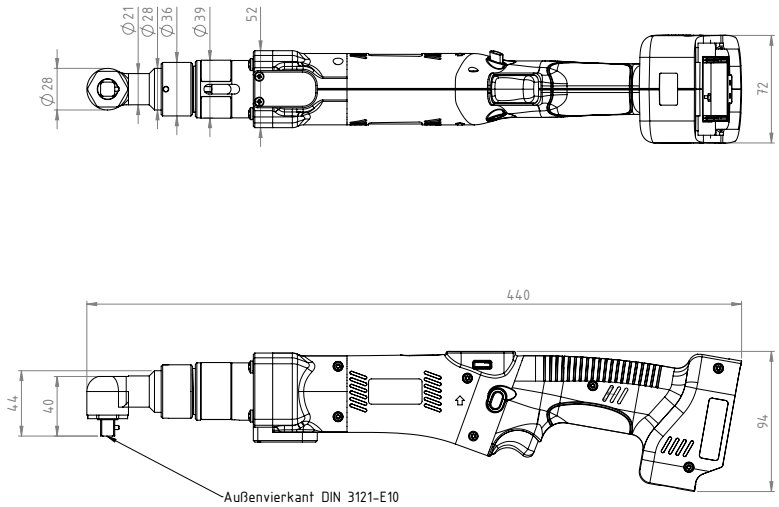
From 60 Nm on a torque reaction arm is recommended.  
 18 V batteries without deep discharge protection can be used.  
 Special types are not considered in this listing.  
 Data of weight and length are without battery.

# TorqBee Light / Standard / PRO

TB-A-L-10  
 TB-A-SO-10  
 TB-A-SOP-10



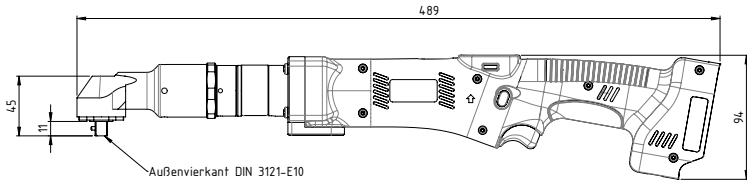
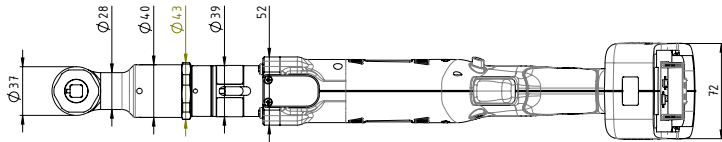
TB-A-L-12  
 TB-A-L-20  
 TB-A-SO-12  
 TB-A-SO-20  
 TB-A-SOP-12  
 TB-A-SOP-20



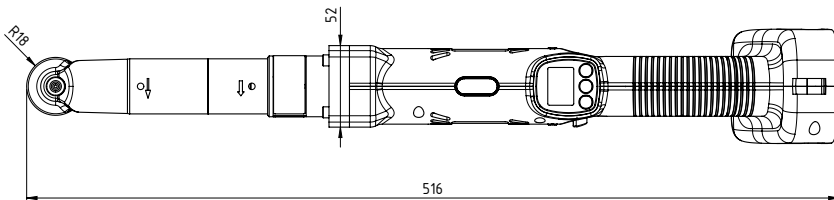
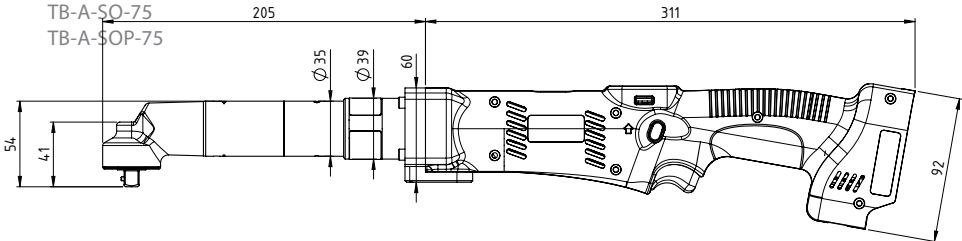
Dimensions in mm  
 Not to scale

# TorqBee Light / Standard / PRO

- TB-A-L-30
- TB-A-L-50
- TB-A-SO-30
- TB-A-SO-50
- TB-A-SOP-30
- TB-A-SOP-50



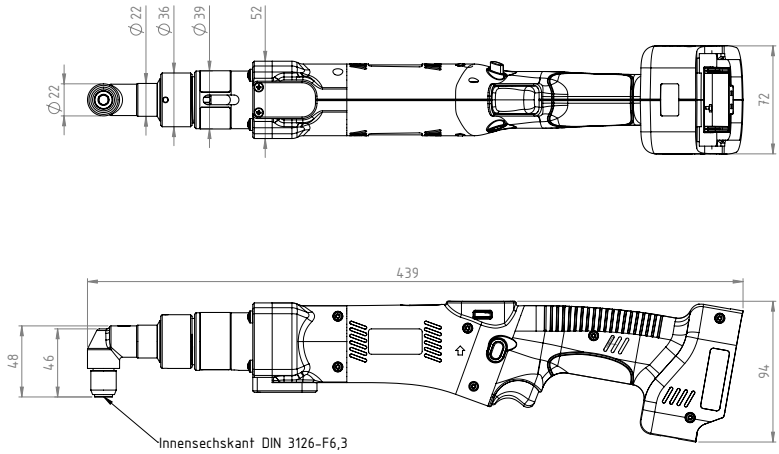
- TB-A-L-75
- TB-A-SO-75
- TB-A-SOP-75



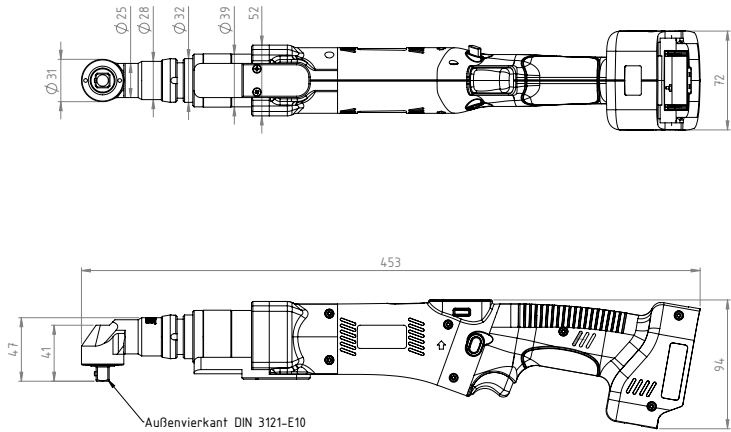
Dimensions in mm  
Not to scale

# TorqBee PRO-M / EC<sup>2</sup>

TB-A-EC-10  
TB-A-EC2-10

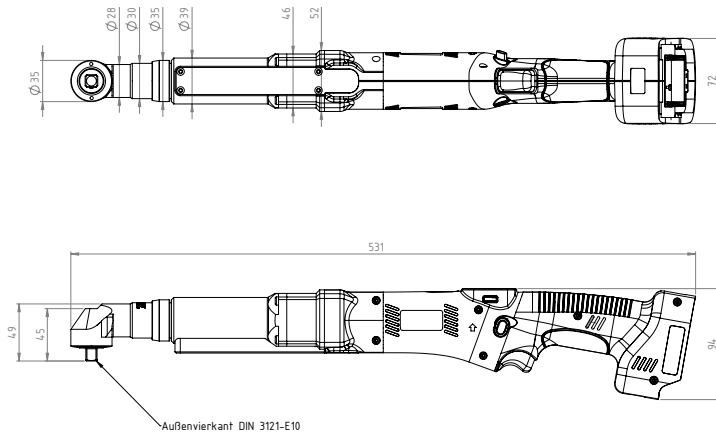


TB-A-EC-20  
TB-A-EC2-20

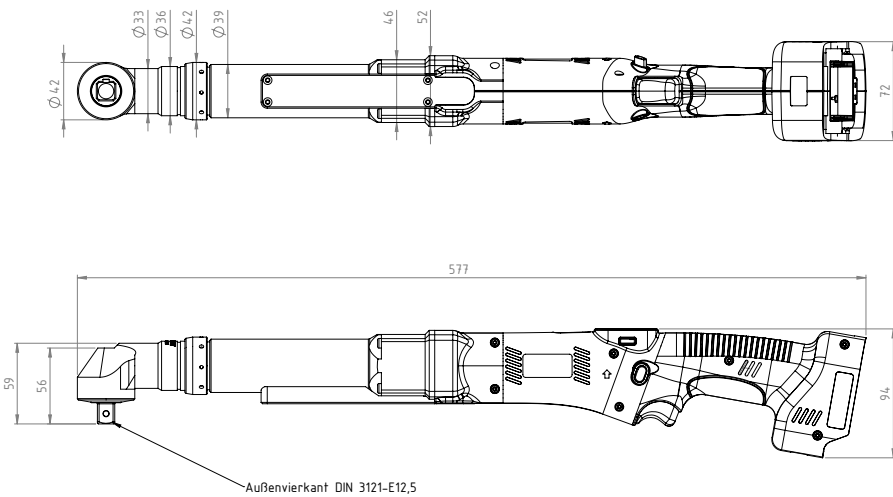


Dimensions in mm  
Not to scale

TB-A-EC-30  
TB-A-EC2-30



TB-A-EC-55  
TB-A-EC2-55

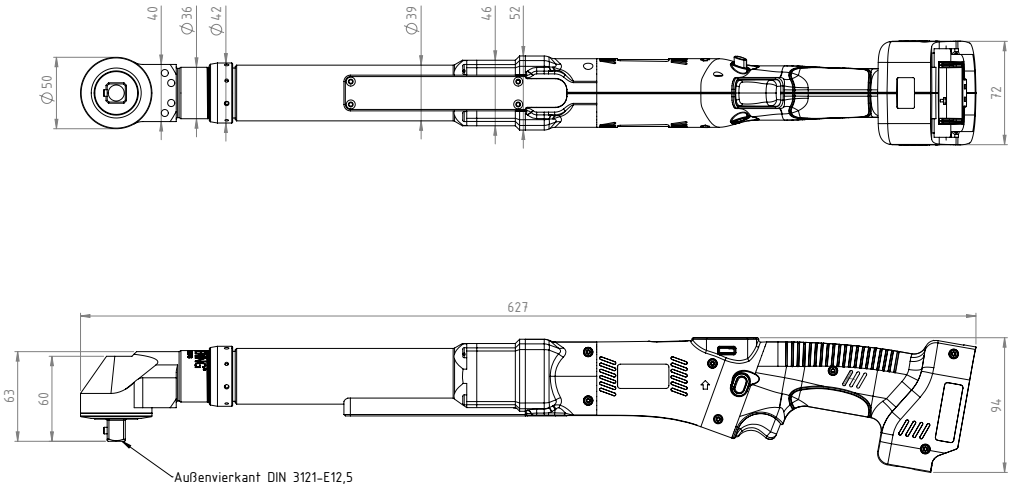


Dimensions in mm  
Not to scale

# TorqBee PRO-M / EC<sup>2</sup>

TB-A-EC-10

TB-A-EC2-10



Dimensions in mm  
Not to scale



## 7.2.0. STRAIGHT SCREWDRIVER

<b>TorqBee Light</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-S-L-3	0.5 - 2.5 Nm	1,600 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-L-4	1.0 - 4.0 Nm	1,050 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-L-6	1.75 - 6.5 Nm	850 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-L-10	2.0 - 10.0 Nm	570 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-L-12	3.0 - 13.0 Nm	460 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-L-24	8.0 - 33.0 Nm	170 rpm	3/8" square	410 x 73 x 92	1.00

<b>TorqBee Standard</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-S-SO-3	0.5 - 2.5 Nm	1,600 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SO-4	1.0 - 4.0 Nm	1,050 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SO-6	1.75 - 6.5 Nm	850 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SO-10	2.0 - 10.0 Nm	570 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SO-12	3.0 - 13.0 Nm	460 rpm	1/4" - Form E	410 x 73 x 92	1.00

<b>TorqBee PRO</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-S-SOP-3	0.5 - 2.5 Nm	1,600 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SOP-4	1.0 - 4.0 Nm	1,050 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SOP-6	1.75 - 6.5 Nm	850 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SOP-10	2.0 - 10.0 Nm	570 rpm	1/4" - Form E	410 x 73 x 92	1.00
TB-S-SOP-12	3.0 - 13.0 Nm	460 rpm	1/4" - Form E	410 x 73 x 92	1.00



<b>TorqBee PRO-M</b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-S-EC-3	0.35 - 3.5 Nm	1,600 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC-5	0.5 - 5.0 Nm	1,050 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC-6	0.6 - 6.5 Nm	850 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC-10	0.8 - 11.0 Nm	570 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC-12	1.0 - 14.0 Nm	460 rpm	1/4" - Form E	410 x 73 x 92	0.95

<b>TorqBee EC<sup>2</sup></b>	<b>Torque</b>	<b>Speed max.</b>	<b>Adapter</b>	<b>Dimensions in mm</b>	<b>Weight in kg</b>
TB-S-EC2-3	0.35 - 3.5 Nm	1,600 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC2-5	0.5 - 5.0 Nm	1,050 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC2-6	0.6 - 6.5 Nm	850 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC2-10	0.8 - 11.0 Nm	570 rpm	1/4" - Form E	410 x 73 x 92	0.95
TB-S-EC2-12	1.0 - 14.0 Nm	460 rpm	1/4" - Form E	410 x 73 x 92	0.95

18 V batteries without deep discharge protection can be used.  
 Special types are not considered in this listing.  
 Data of weight and length are without battery.

# CE CONFORMITY DECLARATION

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We herewith declare that the devices specified below comply with the relevant CE guidelines with regards to design and construction type.

If the devices are modified without our authorization, this declaration will be null and void.

The devices specified below comply with the valid EGB / EMV standards applicable at the time of publication.

## Manufacturer:

Company: HS-Technik GmbH  
Location: Im Martelacker 12  
D-79588 Efringen-Kirchen  
Phone: 07628-9111-0  
Fax: 07628-9111-90

## Description of the device:

**Programmable battery-operated screwdriver**

## Model:

TorqBee® -TB-x-xxx-xx

## Applied CE guidelines:

2006/42/EG  
2014/30/EU  
EN55014  
DIN EN 60745-1

HS-Technik GmbH  
Im Martelacker 12, D-79588 Efringen-Kirchen



H.-Martin Hanke  
Manager

Date: 09.03.2018



# **HS** *Technik* GmbH

**High - System - Technik**

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Die technischen Daten in dieser Drucksache geben einen Anhalt, sind aber ohne Gewähr!  
Konstruktionsänderungen vorbehalten. Unsere Konstruktionsvorschläge sind unverbindlich!

The technical data in these printed material provide support, but are not guaranteed!  
Constructional changes reserved. Our construction recommendations are non-binding!