

Production tool range 2012

Cordless tools for Production



Satisfying the professional's needs



Torque Tracer

The BFT and BFL Range transmits torque data through blue tooth which is then saved on a windows-based computer.

YOU WORK TO THE HIGHEST STANDARDS, SO DO OUR TOOLS.

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CE All machines in this catalogue conform to CE Marking Regulations.

It is recommended that safety equipment such as eye and ear protection is used when operating power tools.

Makita reserve the right to change specifications at any time owing to their policy of constant improvement. Accessories shown not necessarily supplied. Subject to availability. E&OE.





The Makita cordless tool range for industry is a blend of tried and trusted products, together with some valuable innovations, carefully selected for the demanding needs of professional users.

PRODUCTION TOOLS

Cordless tools for industry

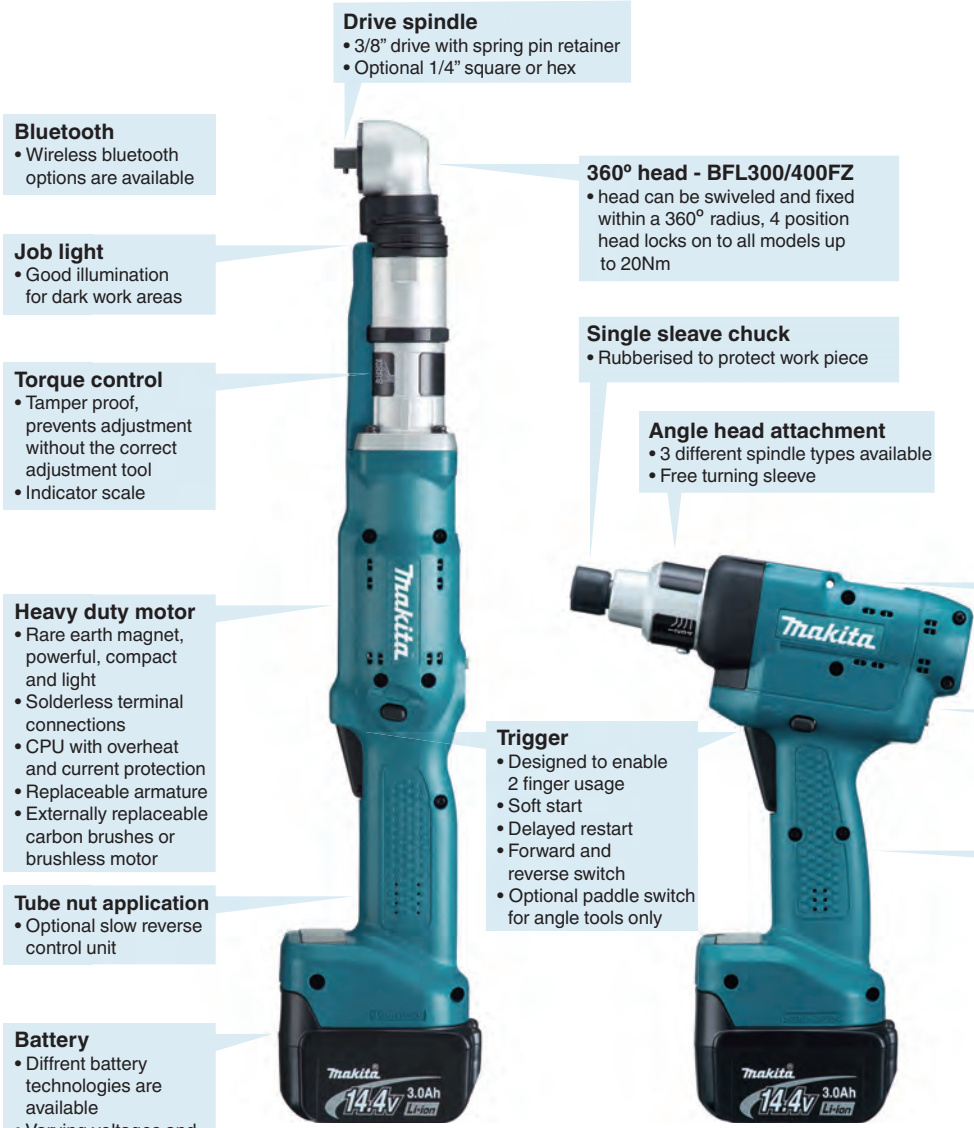
With pin-point accuracy these tools are ideal for production lines, aircraft construction, motor manufacture and small assembly lines where flexibility is needed and cables or pneumatic hoses are not.

You work to the highest standards, so do our tools.



General features

Good design is in the detail



Bluetooth

- Wireless bluetooth options are available

Job light

- Good illumination for dark work areas

Torque control

- Tamper proof, prevents adjustment without the correct adjustment tool
- Indicator scale

Heavy duty motor

- Rare earth magnet, powerful, compact and light
- Solderless terminal connections
- CPU with overheat and current protection
- Replaceable armature
- Externally replaceable carbon brushes or brushless motor

Tube nut application

- Optional slow reverse control unit

Battery

- Different battery technologies are available
- Varying voltages and amp hours are available

Drive spindle

- 3/8" drive with spring pin retainer
- Optional 1/4" square or hex

360° head - BFL300/400FZ

- head can be swiveled and fixed within a 360° radius, 4 position head locks on to all models up to 20Nm

Single sleeve chuck

- Rubberised to protect work piece

Angle head attachment

- 3 different spindle types available
- Free turning sleeve

Trigger

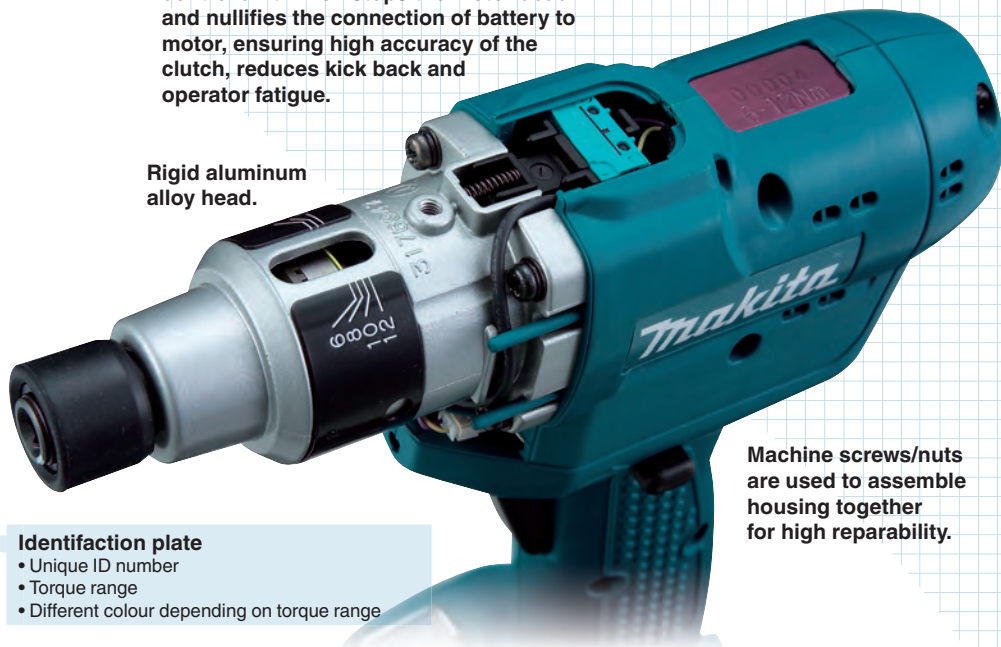
- Designed to enable 2 finger usage
- Soft start
- Delayed restart
- Forward and reverse switch
- Optional paddle switch for angle tools only

Anti Kick Back Head BFT/BFL 300-400		
195231-5	BFT	Fits BFT Spindle M Type (E form)
195232-3	BFT	Fits BFT Spindle N Type
195620-4	BFL	Fits BFL300-400FZ
195621-2	BFL	Fits BFL200FZ 20Nm and below c/w head

The micro switch sends a signal to the control unit which stops the motor dead and nullifies the connection of battery to motor, ensuring high accuracy of the clutch, reduces kick back and operator fatigue.

Identification plate.

Rigid aluminum alloy head.



Identification plate

- Unique ID number
- Torque range
- Different colour depending on torque range

Indication lamp and beeper

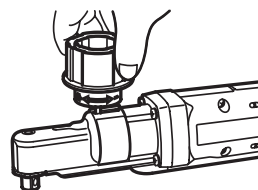
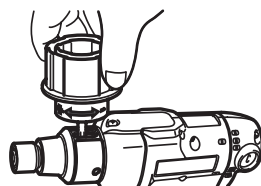
- Fastening torque reached: Green
- Fastening torque not reached: Red and beeping
- Battery warning: Red and beeping

Anti slip handle

- Ergonomically designed for maximum user comfort and low fatigue

Machine screws/nuts are used to assemble housing together for high reparability.

Tamper proof torque setting can only be changed with the adjustment tool. Part No. 765027-4



Angle head set.

Part No. 194038-6

Spindle A - 9.5mm square (3/8") - 154725-9

Spindle B - 6.35mm E-form - 154726-7

Spindle C - 6.35mm C-form - 154727-5

The angle head is designed to adjust the screwdriver head in 90° increments. The head fits all BFT and BFL machines up to 20NM.



Bluetooth technology Monitor your production processes.



How Torque Tracer Bluetooth works

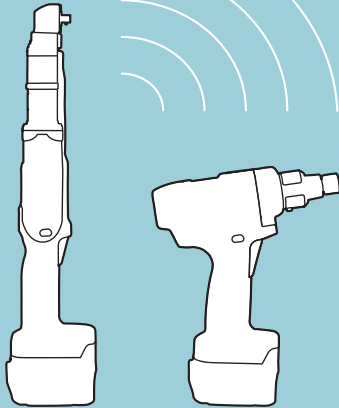
Install Software

CD-ROM comes with the Receiver.
Compatible with Windows XP, onwards.
Software available in English or Italian.
Settings can be password protected.

Receiver (1 to 1 Communication)

Tools can be operated freely within
about 10m (33 feet) range from the
Receiver. OK / NOK judgment on each
fastening and batch count.

Torque Tracer



Transmitted data

- Batch Count, OK / NOK judgment
- Torque value, exc. BFT041R
- Turning angle, exc. BFT041R
- Tool ID number
- Error codes

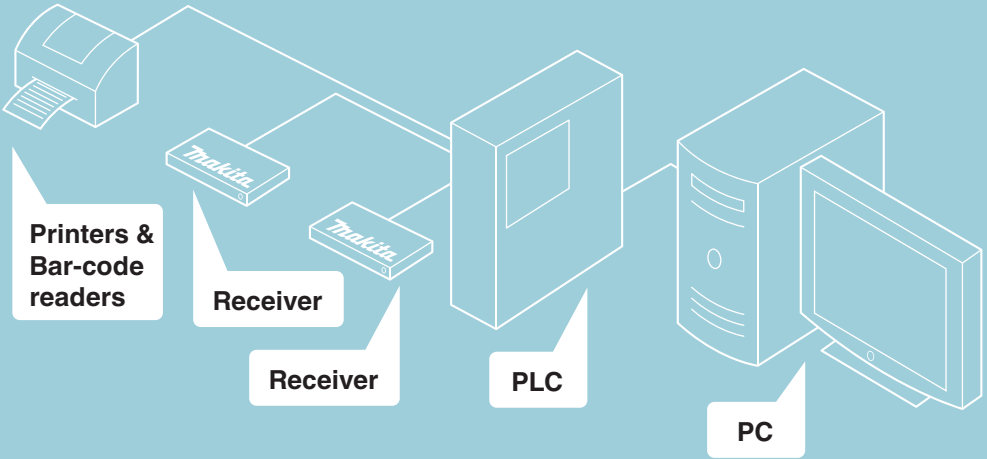
BFT / BFL Range

Fastening data can be temporarily
saved in the tool when transmission
is shut off. The memory will hold
the last 9 fastenings.

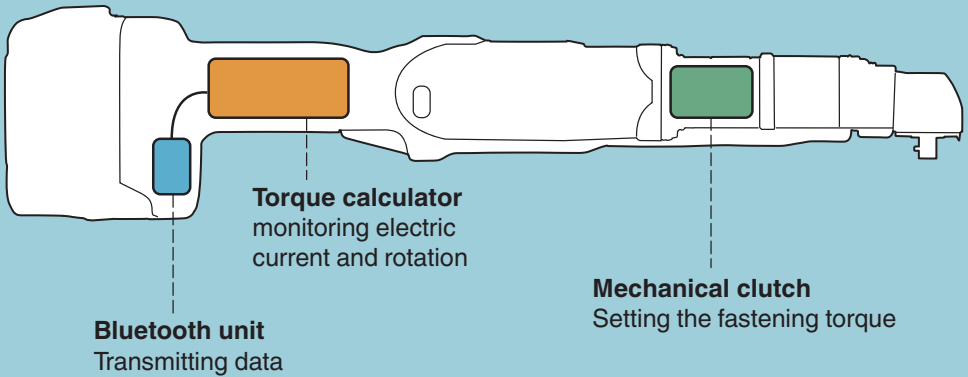
Comparison of function when combining BFT / BFL Series with other devices

	Preventing human error	Saving torque data	Signal from receiver to light
Tool + Receiver + Windows PC 	✓	✓ <small>exc. BFT041R</small>	✓
Tool + Receiver Light beacon	✓	✗	✓
Tool only 	✓	✗	✗

Bluetooth Receivers are compatible with PLC (Programmable logic controllers)



Self torque check system by two independent devices



Competitor data

	Cordless	Saving torque data
Torque Tracer BFT / BFL Series	✓	✓ <small>exc. BFT041R</small>
Competitor A	✗	✓
Competitor B	✓	✗

Lithium-ion battery technology

The battery has evolved

LITHIUM-ION

A revolutionary battery technology

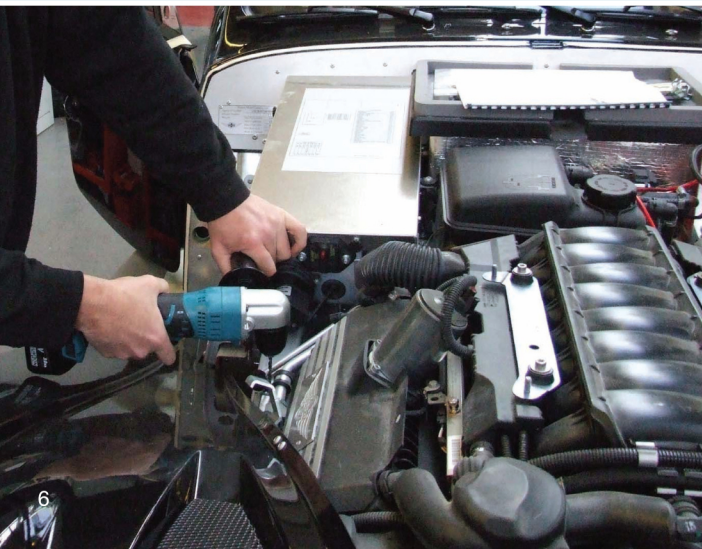
Makita's Lithium-ion tools have proved market winners and now Makita's expanded range offers a comprehensive, powerful and lightweight selection of professional tools to complete any job.

The long-lasting Lithium-ion batteries are 40% lighter than a similar Nickel Metal Hydride (Ni-MH) battery. Lithium-ion batteries feature a high energy density technology that will deliver 430% more working capacity during the lifetime of this battery compared to traditional Ni-Cad batteries. Lithium-ion batteries have an extended length of time during which they hold their charge – even after a long period of storage the batteries will deliver their power.

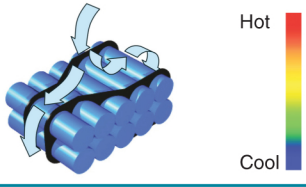
40% lighter

**430% more
run time**

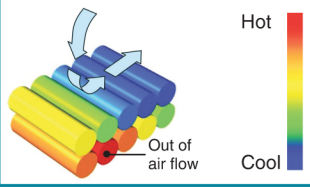
**22 minute
charge time**



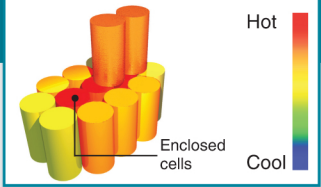
balanced cooling = LONG LIFE.



Unbalanced cooling = SHORT LIFE.



without cooling = SHORT LIFE.

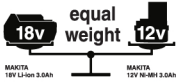


Air flow around the battery

For optimum efficiency battery cells need to be kept at a cool temperature during charging. To enable each cell in the battery to be cooled the unit needs to be designed in such a way that air flow around the battery is maximised. Unlike some other Lithium-ion battery types the Makita battery design allows each cell to be kept at an optimum temperature which extends the battery life.

Unbalanced cooling will give rise to cells who's capacities vary and discharge at different rates, this can result in a battery that has a reduced run time, cycle life and capacity.

MORE POWER LESS WEIGHT



Lithium-ion's weight saving means 18 volt power can be obtained by a battery that weighs the same as a 12 volt Ni-MH battery. Reducing weight whilst retaining power has obvious positive effects on operator fatigue.

EXTENDED BATTERY LIFE



Lithium-ion batteries have greater life spans than their Ni-MH or Ni-Cad counterparts this is due to the increased number of charging cycles Lithium-ion offers and the run time between charges.

OPTIMUM CHARGING



Makita can achieve the massive cycles from their Lithium-ion batteries because of the Optimum Charging System. This unique system enables the battery and charging system to talk to each other via a built in CPU in the charger and CPU in the battery. These two key elements are vital in extending the batteries working life.

Through this two way communication between charger and battery, the charger can recognise the battery and recall its charging history, analyse the batteries condition and usage and charge the battery accordingly.

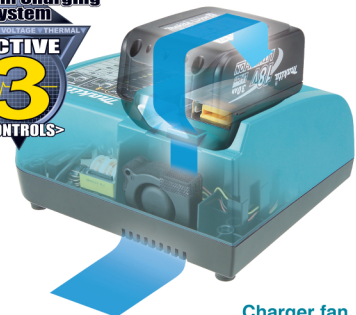
CYCLES TESTED UNDER LOAD

TESTED UNDER LOAD



Makita have obtained the cycle life figure by testing the Lithium-ion 18v 3.0Ah battery under load. 50mm tapping screws were screwed into standard pine, replicating actual use conditions.

Optimum Charging System



Charger fan
Keeps the battery cells cool throughout the charging cycle





PISTOL SCREWDRIVERS

Specially developed for fastening works on assembly lines with brush-less motor technology to provide higher speeds and a more durable, more efficient performance, eliminating issues with critical fastening. Utilising Bluetooth wireless communication to enhance accuracy across the production line these tools are at the forefront of technology.

PISTOL SCREWDRIVERS

Torque shut-off

Low Torque, BFT020/021FZ feature low torque fastening applications when precise torque control is required.

Specially developed for fastening works on assembly lines with features that eliminate issues with critical fastening. Ergonomically sculpted for ultimate usability and low operator fatigue and are easily maintained due to fully modular construction and solderless wiring connections.

- 1/4" hex drive
- High torque accuracy
- Heavy duty motor
- Rare earth magnet
- High accuracy clutch (ISO5393)
- Auto-stop fastening function
- Voltage control level shut-off (VCL)
- Fully moulded control circuit
- Light/buzzer indicator for fastening and low battery power
- Self-testing electronic system
- Impossible to adjust the torque without the adjustment tool

Anti Kick Back Head BFT

453091-4	BFT	Protector D Blue
453092-2	BFT	Protector D Red
453093-0	BFT	Protector D Yellow
453094-8	BFT	Protector D Transparent

	BFT020FZ	BFT021FZ	BFT040FZ	BFT080FZ	BFT081FZ	BFT122FZ	BFT123FZ
No load speed	540rpm	320rpm	950rpm	450rpm	700rpm	320rpm	390rpm
Torque soft joint	0.5-2.0Nm	0.5-2.0Nm	1.0-3.5Nm	3.0-6.5Nm	3.0-7.5Nm	5.0-10.0Nm	5.0-12.0Nm
Torque hard joint	0.5-2.0Nm	0.5-2.0Nm	1.0-4.0Nm	3.0-8.0Nm	3.0-8.0Nm	5.0-12.0Nm	5.0-12.0Nm
Weight*	1.3kg	1.3kg	1.3kg	1.3kg	1.5kg	1.3kg	1.6kg
Noise Levels	70 db(A)	70 db(A)	70 db(A)	70 db(A)	70 db(A)	70 db(A)	70 db(A)
Voltage	9.6v	9.6v	9.6v	9.6v	12v	9.6v	12v

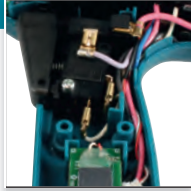
*Weight is measured with a 2.0Ah battery attached to the tool. All models supplied as machine only.

Ni-MH battery	•	•	•	•	•	•	•
Li-ion battery							
Power warning lamp	•	•	•	•	•	•	•
LED job light	•	•	•	•	•	•	•
Fastening light	•	•	•	•	•	•	•
Fastening beeper	•	•	•	•	•	•	•
Auto-stop	•	•	•	•	•	•	•
Anti-tamper settings	•	•	•	•	•	•	•
Bluetooth enabled							
Battery power save							

Battery 2.0Ah	193631-3 BH9020	193631-3 BH9020	193631-3 BH9020	193631-3 BH9020	193345-4 BH1220	193631-3 BH9020	193345-4 BH1220
with power indicator light	193531-7 BH9020A	193531-7 BH9020A	193531-7 BH9020A	193531-7 BH9020A		193531-7 BH9020A	
3.3Ah Battery	193636-3 BH9033	193636-3 BH9033	193636-3 BH9033	193636-3 BH9033	193348-8 BH1233	193636-3 BH9033	193348-8 BH1233
with power indicator light	193591-9 BH9033A	193591-9 BH9033A	193591-9 BH9033A	193591-9 BH9033A		193591-9 BH9033A	
Carbon brush	193466-2	193466-2	193466-2	193466-2	193466-2	193466-2	193466-2



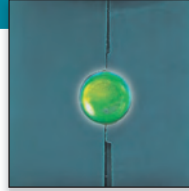
- Torque adjustment indicator scale.
- Slim nose piece.
- 1/4" Hex fitting.
- Side handle grip available for fastening at high turning angles.



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- ID plate and unique serial number.



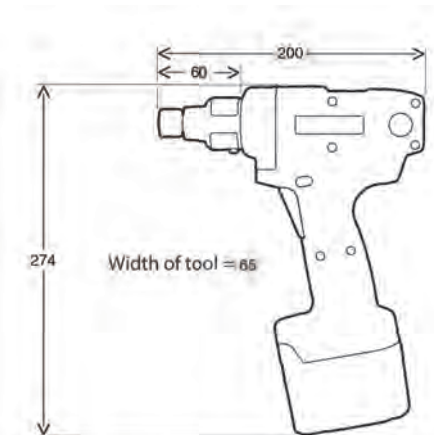
- High intensity LED.
- Soft start 2 finger switch.
- Forward, reverse and lock switch.
- Delayed restart.
- Anti-slip grip.



- Marathon motor AC technology.
- Torque indicator lights
- Externally replaceable carbon brushes.
- 5 brush changes to an armature life.



- Ni-MH Makstar battery technology.
- Memory chip records history of usage for use with charger.



BFT123FZ 12v

PISTOL SCREWDRIVERS

Torque shut-off

High Speed BFT043/083/125FZ feature high rotational speed for increased productivity and optimum cycle time.

Low Speed BFT043/083/125FZ feature low rotational speed for soft joint applications such as fastening rubber clips, gaskets, hoses etc.

Specially developed for fastening works on assembly lines with features that eliminate issues with critical fastening. Ergonomically sculpted for ultimate usability and low operator fatigue and are easily maintained due to fully modular construction and solderless wiring connections.

- 1/4" hex drive
- High torque accuracy
- Heavy duty motor
- Rare earth magnet
- High accuracy clutch (ISO5393)
- Auto-stop fastening function
- Voltage control level shut-off (VCL)
- Fully moulded control circuit
- Light/buzzer indicator for fastening and low battery power
- Self-testing electronic system
- Impossible to adjust the torque without the adjustment tool

Anti Kick Back Head BFT

453091-4	BFT	Protector D Blue
453092-2	BFT	Protector D Red
453093-0	BFT	Protector D Yellow
453094-8	BFT	Protector D Transparent

	BFT043FZ	BFT083FZ	BFT125FZ	BFT042FZ	BFT082FZ	BFT124FZ
No load speed	80rpm	80rpm	150rpm	1200rpm	860rpm	600rpm
Torque soft joint	1.0-4.0Nm	3.0-8.0Nm	5.0-12.0Nm	1.0-3.5Nm	3.0-8.0Nm	5.0-12.0Nm
Torque hard joint	1.0-4.0Nm	3.0-8.0Nm	5.0-12.0Nm	1.0-4.0Nm	3.0-8.0Nm	5.0-12.0Nm
Weight*	1.5kg	1.5kg	1.5kg	1.5kg	1.5kg	1.6kg
Noise Levels	70 db(A)	70 db(A)	70 db(A)	70 db(A)	70 db(A)	70 db(A)
Vibration	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²
Voltage	14.4v	14.4v	14.4v	12v	14.4v	14.4v

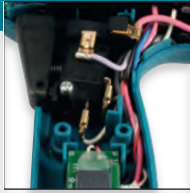
*Weight is measured with a 2.0Ah battery attached to the tool. All models supplied as machine only.

Ni-MH battery				•		
Li-ion battery	•	•	•		•	•
Power warning lamp	•	•	•	•	•	•
LED job light	•	•	•	•	•	•
Fastening light	•	•	•	•	•	•
Fastening beeper	•	•	•	•	•	•
Auto-stop	•	•	•	•	•	•
Anti-tamper	•	•	•	•	•	•
Bluetooth enabled						
Fast speed				•	•	•
Slow speed	•	•	•			

2.0Ah Battery				193345-4 BH1220		
3.0Ah Battery	194065-3 BL1430	194065-3 BL1430	194065-3 BL1430		194065-3 BL1430	194065-3 BL1430
3.3Ah Battery				193348-8 BH1233		
with power indicator light						
Carbon brush	193466-2	193466-2	193466-2	193466-2	Brushless	Brushless



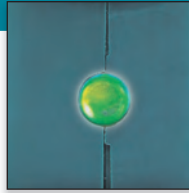
- Torque adjustment indicator scale.
- Slim nose piece.
- 1/4" Hex fitting.
- Side handle grip available for fastening at high turning angles.



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- ID plate and unique serial number.



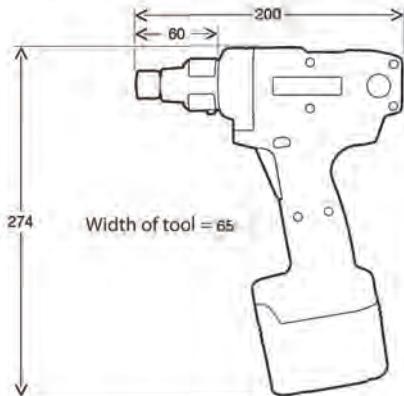
- High intensity LED.
- Soft start 2 finger switch.
- Forward, reverse and lock switch.
- Delayed restart.
- Anti-slip grip.



- Marathon motor AC technology.
- Torque indicator lights
- Externally replaceable carbon brushes.
- 5 brush changes to an armature life.



- Ni-MH Makstar battery technology.
- Memory chip records history of usage for use with charger.



BFT123FZ 12v

PISTOL SCREWDRIVERS

Torque shut-off Bluetooth



Specially developed for fastening works on assembly lines with brushless motor technology to provide higher speeds and a more durable, more efficient performance. Bluetooth wireless communication is built in to the units to provide traceability throughout the production line.

These tools also have a disabling function rendering useless when taken off-site. The BFT range have been designed with weight distribution in mind, the tools are perfectly balanced for operator comfort.

- 1/4" hex drive
- High torque accuracy
- Heavy duty brushless motor
- Blue tooth connectivity
- Anti-tamper torque adjustment
- Self-testing electronic system
- Auto stop fastening function
- High accuracy clutch (ISO5393)

 **Bluetooth**™ see page 6

LITHIUM-ION see page 8

Torque Tracer

	BFT041RZ	BFT082RZ	BFT124RZ
No load speed	800rpm	860rpm	600rpm
Torque soft joint	1.0-4.0Nm	4.0-8.0Nm	5.0-12.0Nm
Torque hard joint	1.0-4.0Nm	4.0-8.0Nm	5.0-12.0Nm
Weight	1.5kg	1.5kg	1.5kg
Noise Levels	70 db(A)	70 db(A)	70 db(A)
Voltage	14.4v	14.4v	14.4v

*Weight is measured with a 2.0Ah battery attached to the tool. All models supplied as machine only.

Ni-MH battery			
Li-ion battery	•	•	•
Power warning lamp	•	•	•
LED job light	•	•	•
Fastening light	•	•	•
Fastening beeper	•	•	•
Auto-stop	•	•	•
Anti-tamper settings	•	•	•
Bluetooth enabled	•	•	•
Battery power save	•	•	•

3.0Ah Battery	194065-3 BL1430	194065-3 BL1430	194065-3 BL1430
Carbon brush	Brushless	Brushless	Brushless

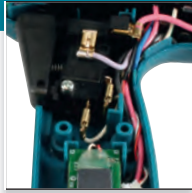
Part number	DESCRIPTION
194444-5	Receiver unit
RCV02	Receiver unit
	Software
	usermanual



Part number	DESCRIPTION
98L82	RS232 cable
98L81	Power supply unit
98L80	USB to RS232 converter unit



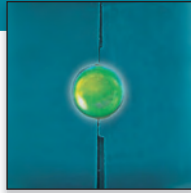
- Torque adjustment indicator scale.
- Slim nose piece.
- 1/4" Hex fitting.
- Anti-kick back.



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- ID plate and unique serial number.



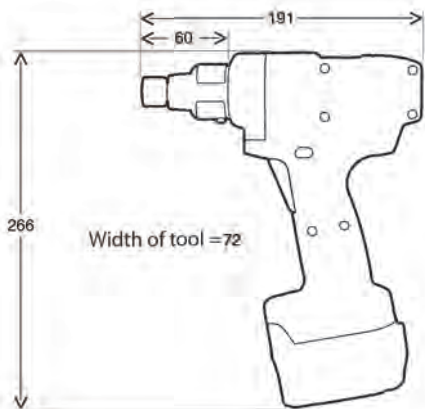
- High intensity LED.
- Soft start 2 finger switch.
- Forward, reverse and lock switch.
- Delayed restart.
- Anti-slip grip.



- Brushless motor technology.
- Red/Green indicator.



- Lithium-ion battery technology.
- Memory chip records history of usage for use with charger.
- Bluetooth transmitter 10 metre range.



BFT124RZ 14.4v





ANGLE SCREWDRIVERS

Specially developed for fastening works on assembly lines with brushless motor technology to provide higher speeds and a more durable, more efficient performance, eliminating issues with critical fastening. Utilising Bluetooth wireless communication to enhance accuracy across the production line these tools are at the forefront of technology.

ANGLE SCREWDRIVERS

Torque shut-off up to 20Nm

Specially developed for fastening works on assembly lines with features that eliminate issues with critical fastening. Ergonomically sculpted for ultimate usability and low operator fatigue and are easily maintained due to fully modular construction and solder-less wiring connections.

- 3/8" Square drive
- High torque accuracy
- Heavy duty motor
- Rare earth magnet
- High accuracy clutch (ISO5393)
- Auto-stop fastening function
- Voltage control level shut-off (VCL)

Anti Kick Back Head BFL 200-300-400

195621-2	BFL	Fits BFL200FZ 20Nm and below c/w head
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	BFL080FZ	BFL081FZ	BFL120FZ	BFL121FZ	BFL200FZ	BFL201FZ
No Load Speed	540rpm	700rpm	250rpm	410rpm	220rpm	360rpm
Torque Soft Joint	2.0-7.5Nm	2.0-7.5Nm	5.0-12.0Nm	5.0-11.5Nm	8.0-18.0Nm	8.0-20.0Nm
Torque Hard Joint	2.0-8.0Nm	2.0-8.0Nm	5.0-12.0Nm	5.0-12.0Nm	8.0-20.0Nm	8.0-20.0Nm
Weight*	1.7kg	2.0kg	1.7kg	2.0kg	2.0kg	1.7kg
Noise Levels	70 db(A)	70 db(A)	70 db(A)	70 db(A)	70 db(A)	70 db(A)
Voltage	9.6v	12v	9.6v	12v	12v	14.4v

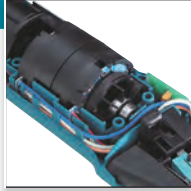
*Weight is measured with a 2.0Ah battery attached to the tool. All models supplied as machine only.

Ni-MH battery	•	•	•	•	•	
Li-ion battery						•
Power warning lamp	•	•	•	•	•	•
LED job light	•	•	•	•	•	•
Fastening light	•	•	•	•	•	•
Fastening beeper	•	•	•	•	•	•
Auto-stop	•	•	•	•	•	•
Anti-tamper	•	•	•	•	•	•

2.0Ah Battery	193631-3 BH9020	193345-4 BH1220	193631-3 BH9020	193345-4 BH1220	193345-4 BH1220	
with power indicator light	193531-7 BH9020A		193531-7 BH9020A			
3.0Ah Battery						194065-3 BL1430
3.3Ah Battery	193636-3 BH9033	193348-8 BH1233	193636-3 BH9033	193348-8 BH1233	193348-8 BH1233	
with power indicator light	193591-9 BH9033A		193591-9 BH9033A			
Carbon brush	193466-2	193466-2	193466-2	193466-2	193466-2	Brushless



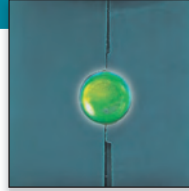
- Torque adjustment indicator scale.
- 3/8" Drive spindle spring pin retainer.
- Anti-kick back.



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- ID plate and unique serial number.



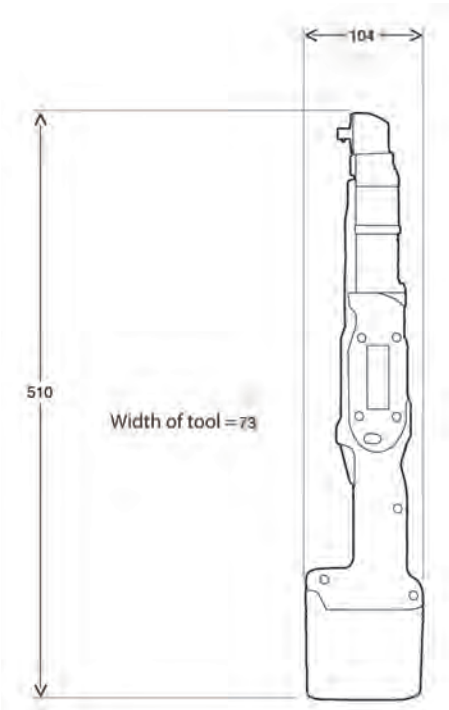
- High intensity LED.
- Soft start 2 finger switch.
- Forward, reverse and lock switch.
- Delayed restart.
- Anti-slip grip.



- Marathon motor AC technology.
- Red/Green indicator.
- Externally replaceable carbon brushes on 9.6v and 12v models.



- Ni-MH Makstar battery technology.
- Memory chip records history of usage for use with charger.
- Brushless motor BFL300 and BFL400.



BFL121FZ 12v

ANGLE SCREWDRIVERS

Torque shut-off up to 40Nm

Specially developed for fastening works on assembly lines with features that eliminate issues with critical fastening. Ergonomically sculpted for ultimate usability and low operator fatigue and are easily maintained due to fully modular construction and solder-less wiring connections.

- 3/8" square drive
- High torque accuracy
- Heavy duty motor
- Rare earth magnet
- High accuracy clutch (ISO5393)
- Auto-stop fastening function
- Voltage control level shut-off (VCL)
- Fully molded control circuit
- Light/buzzer indicator for fastening and low battery power
- Self-testing electronic system
- Impossible to adjust the torque without the adjustment tool
- Brushless motor

Anti Kick Back Head BFL 300-400		
195620-4	BFL	Fits BFL300-400FZ

	BFL300FZ	BFL400FZ
No Load Speed	400rpm	260rpm
Torque Soft Joint	16.0-30.0Nm	25.0-40.0Nm
Torque Hard Joint	16.0-30.0Nm	25.0-40.0Nm
Weight*	2.3kg	2.4kg
Noise Levels	72 db(A)	73 db(A)
Voltage	14.4v	14.4v

*Weight is measured with a 2.0Ah battery attached to the tool.
All models supplied as machine only.

Optional Accessarys	BFL300FZ	BFL400FZ
Slow reverse control unit	631816-8	631817-6
Paddle switch lever assembly	194008-5	194008-5



Ni-MH battery	•	•
Li-ion battery		
Power warning lamp	•	•
LED job light	•	•
Fastening light	•	•
Fastening beeper	•	•
Auto-stop	•	•
Anti-tamper settings	•	•
Bluetooth enabled		
Battery power save		

2.7Ah Battery	193992-1 BH1427	193992-1 BH1427
3.0Ah Battery	194065-3 BL1430	194065-3 BL1430
Carbon brush	Brushless	Brushless



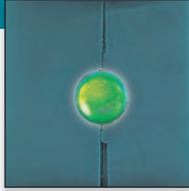
- Torque adjustment indicator scale.
- 3/8" Drive spindle spring pin retainer.
- Anti-kick back.



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- ID plate and unique serial number.



- High intensity LED.
- Soft start 2 finger switch.
- Forward, reverse and lock switch.
- Delayed restart.
- Anti-slip grip.



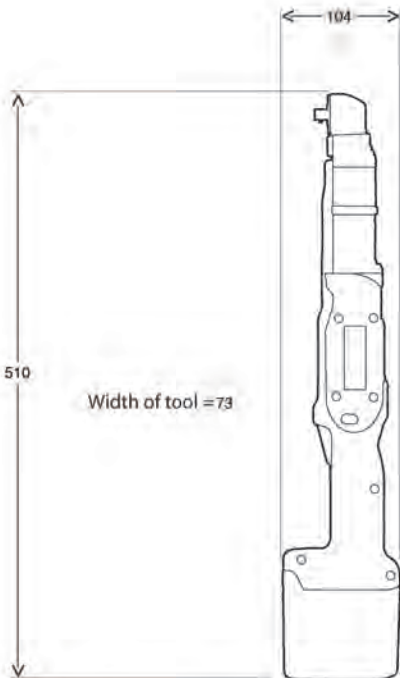
- Marathon motor AC technology.
- Red/Green indicator.
- Externally replaceable carbon brushes on 9.6v and 12v models.



- Ni-MH Makstar battery technology.
- Memory chip records history of usage for use with charger.
- Brushless motor BFL300 and BFL400.



BFL400FZ 14.4v



ANGLE SCREWDRIVERS

Torque shut-of bluetooth



Specially developed for fastening works on assembly lines with brushless motor technology to provide higher speeds. Bluetooth wireless communication is built in to the units to provide traceability throughout the production line. These tools also have a disabling function rendering useless when taken off site.

- 3/8" square drive
- High torque accuracy $\pm 7\%$
- Heavy duty brushless motor
- Blue-tooth connectivity
- Anti-tamper torque adjustment
- Self testing electronic system
- Auto-stop fastening function
- High accuracy clutch (ISO5393)
- Torque calculated value
- Angle calculated value

 **Bluetooth**™ see page 6

LITHIUM-ION see page 8

Torque Tracer

	BFL201RZ	BFL301RZ	BFL402RZ
No Load Speed	360rpm	260rpm	200rpm
Torque Soft Joint	10.0-20.0Nm	16.0-30.0Nm	25.0-40.0Nm
Torque Hard Joint	10.0-20.0Nm	16.0-30.0Nm	25.0-40.0Nm
Weight	1.7kg	1.9kg	2.0kg
Noise Levels	72 db(A)	74 db(A)	72 db(A)
Voltage	14.4v	14.4v	14.4v

*Weight is measured with a 2.0Ah battery attached to the tool. All models supplied as machine only.

Ni-MH battery			
Li-ion battery	•	•	•
Power warning lamp	•	•	•
LED job light	•	•	•
Fastening light	•	•	•
Fastening beeper	•	•	•
Auto-stop	•	•	•
Anti-tamper settings	•	•	•
Bluetooth enabled	•	•	•
Battery power save			

3.0Ah Battery	194065-3	194065-3	194065-3
	BL1430	BL1430	BL1430
Carbon brush	Brushless	Brushless	Brushless

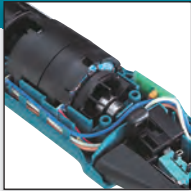
Part number	DESCRIPTION
194444-5	Receiver unit Software
RCV02	Receiver unit Software usermanual



Part number	DESCRIPTION
98L82	RS232 cable
98L81	Power supply unit
98L80	USB to RS232 converter unit



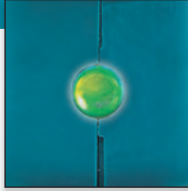
- Torque adjustment indicator scale.
- 3/8" Drive spindle spring pin retainer.
- Anti-kick back.



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- ID plate and unique serial number.



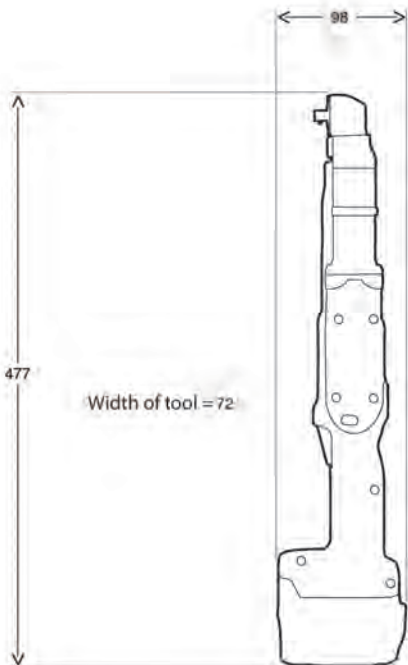
- High intensity LED.
- Soft start 2 finger switch.
- Forward, reverse and lock switch.
- Delayed restart.
- Anti-slip grip.



- Brushless motor technology.
- Red/Green indicator.



- Lithium-ion battery technology.
- Memory chip records history of usage for use with charger.



BFL402RZ 14.4v

PISTOL IMPACT DRIVERS/WRENCH

Programmable pistol screwdriver

Specially developed for fastening works on assembly lines with features that control torque values and prevent over-tightening. High speed and lightweight.

Ergonomically sculpted for ultimate usability and low operator fatigue. The range is fitted with quick change chucks and are easily maintained due to fully modular construction and solderless wiring connections.

Batteries BH9020A or BH9033A must be used with BTD042Z and BTD062Z.

- 1/4" hex drive
- Torque controlled
- Heavy-duty motor
- Rare earth magnet
- Programmable impact
- Auto-stop fastening function
- Voltage control level shut-off (VCL)
- Fully-molded control circuit
- Low battery power indicator
- Light indicator shows complete or incomplete fastening
- Anti-tamper

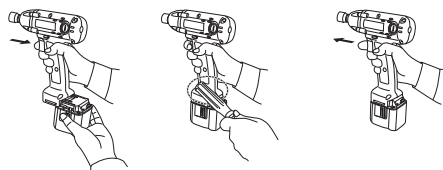
	BTD042Z	BTD062Z
No Load Speed	0-2,500rpm	0-2,500rpm
Torque	0-40.0Nm	0-65.0Nm
Impact	0-3,500ipm	0-3,000ipm
Machine screws	M4-M8	M4-M8
Bolts	M5-M10	M5-M12
Weight*	1.06kg	1.09kg
Noise Levels	91 db(A)	90 db(A)
Vibration	7.5 m/s ²	9 m/s ²
K value	1.5 m/s ²	1.5 m/s ²
Voltage	9.6v	9.6v

*Weight is measured with a 2.0Ah battery attached to the tool. All BTD models supplied as machine only.

Ni-MH battery	•	•
Li-ion battery		
Power warning lamp	•	•
LED job light		
Fastening light	•	•
Fastening beeper		
Auto-stop	•	•
Anti-tamper settings		
Bluetooth enabled		

Battery 2.0Ah with (power indicator light A)	193631-3 BH9020A	193631-3 BH9020A
Battery 3.3Ah with (power indicator light A)	193636-3 BH9033A	193636-3 BH9033A
Carbon brush	193466-2	193466-2

Auto-Stop setting for number of impacts



This tool has a convenient auto-stop mechanism that allows you to preset the desired number of impacts in terms of the application. The tool then stops automatically after reaching the preset number of impacts.

1. Pulling the switch trigger, insert the battery cartridge. Keep on pulling the switch trigger after inserting the battery cartridge. (The indicating lamp on the back of the tool will flash about 10 times, then the lamp will keep lighting up lit.)
2. Hit the tool housing around the grip once with a screwdriver etc. (The indicating lamp will go out.)
3. Release the switch trigger. (The indicating lamp will keep lighting up lit for 0.5 seconds, then the lamp will go out.)
4. Hit the tool housing preset number of first digit except 0. (The indicating lamp will light up in green color. Then, the light goes out.)

Example: When the preset number is 12, hit the tool housing once.

5. Pull the switch trigger, then release it.
6. Hit the tool housing preset number of second digit except 0. (---The indicating lamp will light up in red color. Then, the light goes out.)

Example: When the preset number is 12, hit the tool housing two times.

7. Pull the switch trigger, then release the switch trigger. (The indicating lamp will light up.)
8. Remove the battery cartridge. (Presetting has finished. The indicating lamp will go out.)



- 1/4" Hex Drive.



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- Rubber protectors in different colours are available.



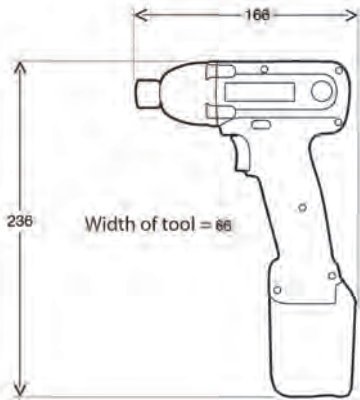
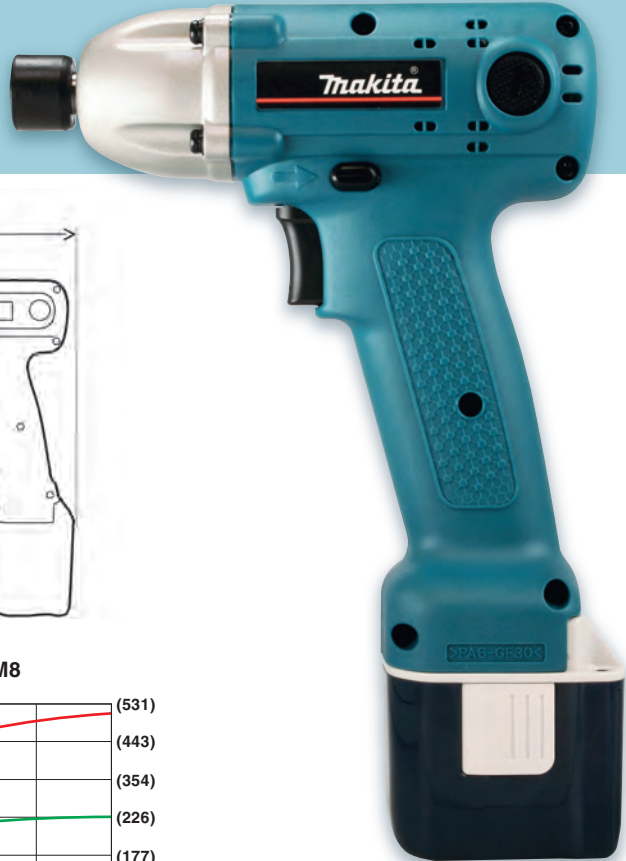
- Soft start switch.
- Forward, reverse and lock switch.
- Anti-slip grip.
- Electric brake.



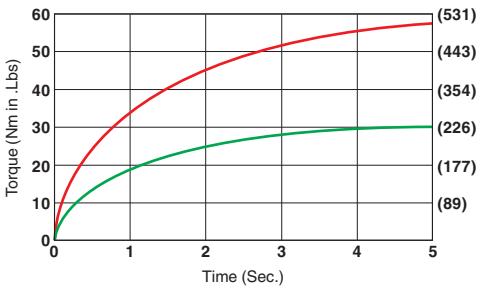
- Marathon motor AC technology.
- Red/Green indicator.
- Externally replaceable carbon brushes.



- Ni-MH Makstar battery technology.
- Memory chip records history of usage for use with charger.



Fastening high tensile bolt M8



— BTD062
— BTD042

BTD062Z 9.6v

PISTOL IMPACT DRIVERS

Pistol screwdriver

Specially developed for fastening works on assembly lines. Highspeed and lightweight. Ergonomically sculpted for ultimate usability and low operator fatigue. The range is fitted with quick change chucks and are easily maintained due to fully modular construction and solder less wiring connections.

- 1/4" hex drive
- Torque controlled
- Heavy duty motor
- Rare earth magnet
- Programmable impact
- Fully moulded control circuit
- Light indicator shows complete or incomplete fastening
- RFE3 models comes with 2 x batteries, charger, belt clip and carry case.
- Z models are body only

LITHIUM-ION

see page 8

	TD020DSE	TD090DWE TD090DZ	BTD133RFE BTD133Z	BTD134RFE BTD134Z
No Load Speed	2,300rpm	0-2,400rpm	0-1,100/0-1,800/0-2,400rpm	0-2,400rpm
Torque	20.0Nm	0-90.0Nm	0-160.0Nm	0-155.0Nm
Impact	3,000ipm	0-3,500ipm	0-1,100/0-2,600/0-3,200ipm	0-3,200ipm
Machine screws	M3-M8	M4-M8	M4-M8	M4-M8
Bolts	M3-M8	M5-M12	M5-M14	M5-M14
Weight*	0.53kg	0.92kg	1.4kg	1.4kg
Noise power Level	93 db(A)	103 db(A)	103 db(A)	103 db(A)
Noise pressure Level	82 db(A)	92 db(A)	92 db(A)	92 db(A)
Vibration	6.5 m/s ²	10 m/s ²	13 m/s ²	13 m/s ²
K value	1.5	1.5	2.0	1.5
Voltage	7.2v	10.8v	14.4v	14.4v

Ni-MH battery				
Li-ion battery	•	•	•	•
Power warning lamp				
LED job light	•	•	•	•
Variable speed trigger		•	•	•
Electronic brake	•	•	•	•
Forward/reverse rotation	•	•	•	•
Driving Shank	1/4" Hex	1/4" Hex	1/4" Hex	1/4" Hex

1.0Ah Battery	194355-4 BL0710			
1.3Ah Battery		19550-6 BL1013		
3.0Ah Battery			194065-3 BL1430	194065-3 BL1430
Carbon brush	N/A	N/A	Brushless	194427-5



- 1/4" Hex Drive



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- Rubber protectors in different colours are available.



- Forward, reverse and lock switch.
- Anti slip grip.
- Ergonomically designed.
- Variable speed switch.
- Electronic brake.



- Brushless motor technology.



- Lithium-ion battery technology.
- Memory chip records history of usage for use with charger.
- Belt clip.
- No memory effect.
- 22 minute charge.



TD0090DZ 10.8v



TD020DSE 7.2v



BTD133RFE 14.4v

PISTOL IMPACT DRIVERS

Pistol screwdriver

Specially developed for fastening works on assembly lines. Highspeed and lightweight. Ergonomically sculpted for ultimate usability and low operator fatigue. The range is fitted with quick change chucks and are easily maintained due to fully modular construction and solderless wiring connections.

- 1/4" hex drive
- Torque controlled
- Heavy duty motor
- Rare earth magnet
- Programmable impact
- Fully-molded control circuit
- Light indicator shows complete or incomplete fastening
- RFE models comes with 2 x batteries, charger, belt clip and carry case.
- Z models are body only

LITHIUM-ION

see page 8

	BTD140RFE BTD140RFE3 BTD140Z	BTD145RFE BTD145RFE3 BTD145Z	BTD146RFE BTD146Z
No Load Speed	0-2,300rpm	0-1,300/0-2,000/0-3,400rpm	0-2,300rpm
Torque	0-145.0Nm	0-160.0Nm	0-160.0Nm
Impact ipm	0-3,200ipm	0-1,300/0-2,800/0-3,400ipm	0-3,200ipm
Machine screws	M4-M8	M4-M8	M4-M8
Bolts	M5-M14	M5-M14	M5-M14
Weight*	1.3kg	1.3kg	1.5kg
Noise power Level	101 db(A)	104 db(A)	104 db(A)
Noise pressure Level	90 db(A)	93 db(A)	93 db(A)
Vibration	17 m/s ²	12 m/s ²	15 m/s ²
K value	1.5	2.0	2.0
Voltage	18v	18v	18v

Ni-MH battery			
Li-ion battery	•	•	•
Power warning lamp			
LED job light	•	•	•
Variable speed trigger	•	•	•
Electronic brake	•	•	•
Forward/reverse rotation	•	•	•
Driving Shank	1/4" Hex	1/4" Hex	1/4" Hex
3.0Ah Battery	194204-5 BL1830	194204-5 BL1830	194204-5 BL1830
Carbon brush	194427-5	Brushless	194427-5



- 3/8" Drive spindle spring pin retainer.
- 1/4" Hex Drive



- All solderless terminal connections.
- CPU micro-computer, with overheat and current protection.
- Rubber protectors in different colours are available.



- Forward, reverse and lock switch.
- Anti-slip grip.
- Ergonomically designed.
- Variable speed switch.
- Electronic brake.



- Brushless motor technology.



- Lithium-ion battery technology.
- Memory chip records history of usage for use with charger.
- Belt clip.
- No memory effect.
- 22 minute charge.



BTD145RFE 18v

PISTOL IMPACT WRENCH

Pistol impact wrench

The BTW450 is a powerful but compact and lightweight cordless impact wrench powered by a

18v 3.0Ah Lithium-ion battery featuring rubber joint construction for prevention of battery failure.

Highest in its class for fastening torque 440Nm (325 ft/lbs) Lightest in its class 3.4kg (7.5lbs).

- 1/2" square drive
- Same fastening torque forwards and reverse
- Lightest in its class 3.4kg
- Powerful DC motor with replaceable carbon brushes
- Compact design 266mm long
- High power to weight ratio 440Nm
- Forward and reverse rocker switch
- Compact high capacity batteries
- 22 minute charge time
- Torque at 6 seconds after seating
- RFE models comes with 2 x batteries, charger, belt clip and carry case.
- Z models are body only



see page 8

	TW100D	BTW152RFE	BTW251RFE BTW251Z	BTW450RFE BTW450Z
No Load Speed	0-2,300rpm	0-2,400rpm	0-2,100rpm	1,600rpm
Torque	110Nm	200Nm	230Nm	440Nm
Impact	0-3,000ipm	0-3,200ipm	0-3,200ipm	2,400imp
Bolts	M8-M12	M8-M16		
Weight*	0.95kg	1.5kg	1.5kg	3.4kg
Noise power Level	99 db(A)	102 db(A)	101 db(A)	105 db(A)
Noise pressure Level	88 db(A)	91 db(A)	90 db(A)	94 db(A)
Vibration	8 m/s ²	8 m/s ²	9 m/s ²	19 m/s ²
K value	1.5	1.5	1.5	1.5
Voltage	10.8v	14.4v	18v	18v

Ni-MH battery				
Li-ion battery	•	•	•	•
Power warning lamp				
LED job light	•	•	•	•
Variable speed trigger	•	•	•	
Electronic brake	•	•	•	
Forward/reverse rotation	•	•	•	•
Driving Shank	3/8" Square	1/2" Square	1/2" Square	1/2" Square

1.3Ah Battery	19550-6 BL1013			
3.0Ah Battery		194065-3 BL1430		
3.0Ah Battery			194204-5 BL1830	194204-5 BL1830
Carbon brush	N/A	194427-5	194427-5	194435-6



- 1/2" square drive.
- Hammer case cover.
- LED job light.



- All solderless terminal connections.
- Compact design.



- Soft start switch.
- Forward, reverse and lock switch.
- Anti slip grip.
- Ergonomically designed.
- Large rocker switch.



- Marathon motor AC technology.
- Externally replaceable carbon brushes.
- Vibration absorbing cushion rubbers.



- Lithium-ion battery technology.
- Memory chip records history of usage for use with charger.
- Belt clip.
- No memory effect.
- 22 minute charge.



BTW450RFE 18v



TW100D 10.8v



BTW251Z 18v

ANGLE IMPACT DRIVERS

Angle driver

High fastening performance, compact angle-head, features soft grip and LED light.

Lightweight high capacity batteries.

- 1/4" hex drive pull forward collar
- Optional 3/8" square drive
- Same fastening torque forwards and reverse
- Heavy duty motor
- Rare earth magnet
- Slim body and grip for operator comfort
- Angle-head can be rotated
- LED job light
- 22 minute charge time
- RFE models comes with 2 x batteries, charger, belt clip and carry case.
- Z models are body only

LITHIUM-ION

see page 8

	BTL060REF BTL060Z	BTL061RFE BTL061Z
No Load Speed	0-2,000rpm	0-2,000rpm
Torque	60Nm	60Nm
Impact	0-3,000ipm	0-3,000ipm
Machine screws	M4-M8	M4-M8
Standed bolts	M4-M8	M4-M12
High tensile bolts	M4-M8	M4-M8
Weight	1.7kg	1.5kg
Noise power Level	102 db(A)	102 db(A)
Noise pressure Level	91 db(A)	91 db(A)
Vibration	9 m/s ²	9 m/s ²
K value	1.5	1.5
Voltage	14.4v	18v

*Weight is measured with a 3.0Ah battery attached to the tool. All models supplied as machine only.

Optional Accessory Part number	DESCRIPTION
154725-9*	Spidle A - 9.5mm square (3/8)

Li-ion battery	•	•
LED job light	•	•
Varible speed trigger	•	•
Electronic brake	•	•
Forwar/reverse rotation	•	•

3.0Ah Battery	194065-3 BL1430	
3.0Ah Battery		194204-5 BL1830
Carbon brush	N/A	N/A



- 1/4" Hex Drive.
- LED job light.
- Phosphorescent bumper.
- Compact angle-head.
- Head can be rotated.



- All solderless terminal connections.
- Electronic brake.



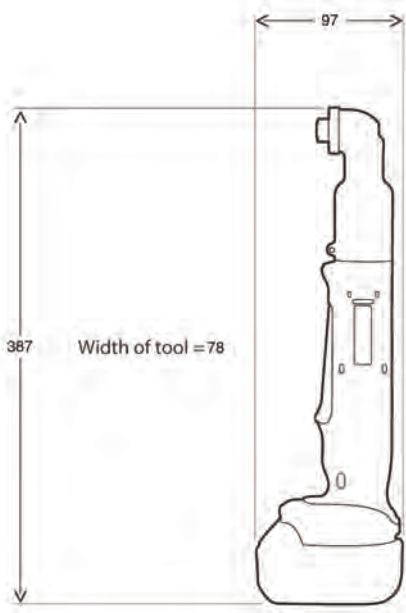
- Paddle switch for operator comfort.
- Anti-slip grip.
- Variable speed control switch.
- Ergonomically designed handle.



- Forward, reverse and lock switch.
- Slim design more control.
- prevents hand fatigue.























- Lithium-ion battery technology.
- Memory chip records history of usage for use with charger.
- Belt clip.
- No memory effect.
- 22 minute charge.



BTL061RFE 18v

BATTERIES

Batteries, Chargers and Adaptors

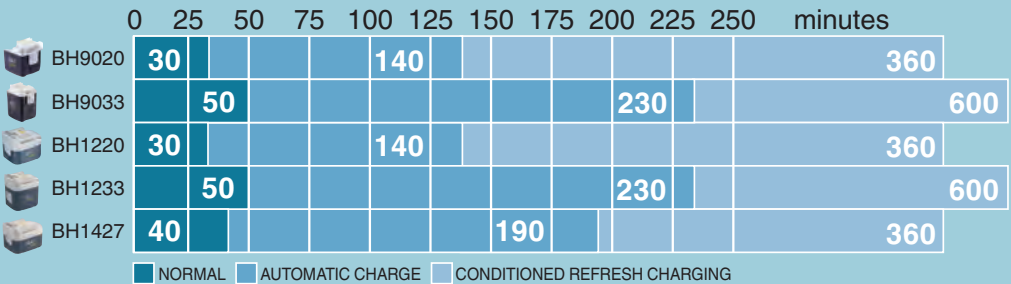
	18V	14.4V	10.8V	7.2V
Li-ion 3.0Ah	 BL1830 (194204-5)	 BL1430 (194065-3)		
Li-ion 1.3AH			 BL1013 (194550-6)	
Li-ion 1.0Ah				 BL0710 (194355-4)
	14.4V	12V	9.6V	
Makstar Ni-MH 3.3Ah	 BH1433 (193354-3)	 BH1233 (193930-3)	<i>Power indicator light</i>  BH9033A (193591-9)	
		 BH1233C (193930-3)	 BH9033 (193636-3)	
Makstar Ni-MH 2.7Ah	 BH1427 (193992-1)			
Makstar Ni-MH 2.0Ah	 BH1420 (193351-9)	 BH1220 (193345-4)	<i>Power indicator light</i>  BH9020A (193590-1)	
			 BH9020 (193631-3)	
	240v	240v	110v	Automotive
Battery Chargers	 DC10WA 7.2v - 10.8v	 DC18RC 7.2v - 18v	 DC18RA/1 7.2v - 18v	 DC18SE 7.2v - 18v
	Refresh	Converter		
Adaptors	 ADP03 193682-6	 ADP04 193947-6		
	To be used with DC18RC or the DC24SC.	Converts DC18RC and the DC24SC for use with Ni-Cad and Ni-MH 7.2v - 18v batteries.		

Battery indicator light

BH9020A and **BH9033A** batteries are fitted with power indicator lamps. When the battery is in good condition the '(C)' lamp is on, if the battery has been over discharged or stored for long periods of time this light will blink. Sometimes the actual remaining battery fuel is different from that displayed by the battery. It is recommended to refresh charge the batteries once a week to prevent this happening.

	(C)	E	F
100% - 80%	●	■	■
80% - 60%	●	■	□
60% - 40%	●	■	□
40% - 10%	●	□	□
10% - 0%	☼	□	□

Battery refreshing adaptor (ADP03) refresh times



Battery checker (194088-1)

MAKSTAR Battery Checker detects the number of charges, and diagnoses the condition of MAKSTAR Ni-MH/ Li-ion batteries. This equipment reads the history of the battery from the built-in CPU, finds how the operator treated the battery, and gives the right advice to MAXIMIZE THE LIFE OF THE BATTERY.

It can be also used for simple-checking conventional Makita batteries, using the adapter which is included with the Battery Checker. Battery Checker works with Makita Makstar charger DC24SA, DC24SC and a PC. PC is not included in the set.



ESSENTIAL EXTRAS

General accessories and protectors



PART NUMBER	TOOL MODEL NUMBER	TOOL TYPE
193874-7	Attachment for a side handle	BFT and BFL machines
273443-1	Side handle	BFT and BFL machines
765025-8	Torque adjuster tool	BFT and BFL machines
000000-0	Paddle switch	BFL080F, 081F, 120F, 121F, 200F, 300F, 400F
194038-6	Angle head	BFT and BFL machines
154725-9*	Spidle A - 9.5mm square (3/8)	BFT and BFL machines
154726-7*	Spidle B - 6.35mm E-form	BFT and BFL machines
154727-5*	Spidle C - 6.35mm C-form	BFT and BFL machines
154730-6	Spidle F - 6.35mm 1/4 hex sq	BFT and BFL machines
195231-5	BFT Spindle M Type	BFT Anti kick back heads 1/4 hex E-form
195621-2	BF200FZ and below c/w head	BFL Anti kick back heads
195620-4	BFT300-400FZ	BFL Anti kick back heads

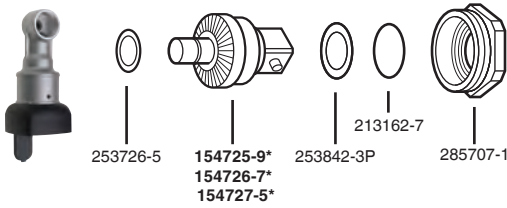
TOOL PROTECTOR



PART NUMBER	TOOL MODEL NUMBER	COLOUR	TOOL TYPE
450331-1	BFT range	Clear	9.6v-12v Screwdriver
418423-2	BFT040FZ	Yellow	9.6v Screwdriver
418424-0	BFT080FZ	Blue	9.6v Screwdriver
418425-8	BFT122FZ / BFT123FZ	Red	9.6v-12v Screwdriver
417349-5	BTD042Z / BTD062Z	Clear	9.6v Impact driver
417835-6	BTD042Z / BTD062Z	Blue	9.6v Impact driver
417834-8	BTD042Z / BTD062Z	Red	9.6v Impact driver
418032-7	BFL080FZ	Yellow	9.6v Angle screwdriver
418064-4	BFL120FZ / BFL123FZ	Blue	9.6v Angle screwdriver
418065-2	BFL200FZ	Red	9.6v Angle screwdriver
418743-4	BFL300FZ Body	Blue	14.4v Angle screwdriver
418744-2	BFL400FZ Body	Red	14.4v Angle screwdriver
418746-8	BFL300FZ Head	Blue	14.4v Angle screwdriver
418750-7	BFL400FZ Head	Red	14.4v Angle screwdriver
A-51253	BFT anti kick back head range	Yellow	9.6v-12v Screwdriver
A-51269	BFT anti kick back head range	Blue	9.6v-12v Screwdriver
A-51275	BFT anti kick back head range	Red	9.6v-12v Screwdriver
A-51281	BFT anti kick back head range	Clear	9.6v-12v Screwdriver
453091-4	BFL anti kick back head range	Blue	9.6v-12v Angle screwdriver
453092-2	BFL anti kick back head range	Red	9.6v-12v Angle screwdriver
453093-0	BFL anti kick back head range	Yellow	9.6v-12v Angle screwdriver
453094-8	BFL anti kick back head range	CLEAR	9.6v-12v Angle screwdriver

ESSENTIAL EXTRAS Pouches and holsters

Angle head spindle assembly



The angle-head is designed to adjust the screwdriver head in 90° increments. The head fits all BFT screwdrivers and BFL angle machines up to 20 Nm.



PART NUMBER	INDIVIDUAL PART NUMBER	DESCRIPTION
194444-5		Receiver unit
		Software
RCV02		Receiver unit
		Software
		usermanual
98L82		RS232 cable
98L81		Power supply unit
98L80		USB to RS232 converter unit



PART NUMBER	IMAGE	PART NUMBER	IMAGE
P-53970 P-71825 (BLUE) Quick release belt automotive		P-54209 P-79821 (BLUE) Pouch 1 pocket Nissan	
P-53992 P-79815 (BLUE) Drill holster right hand		P-63719 P-79837 (BLUE) Pouch 2 pocket Nissan	
P-56954 Drill holster left hand		P-54031 2 pocket fixing pouch automotive	
P-71679 TD020D pouch (min order 10 units)		P-54025 3 pocket fixing pouch automotive	
P-79186 BTD042Z and BTD062Z Impact driver holster automotive			

Dealer stamp



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