

Panasonic



Intelligent Assembly Systems

CONTENTS

ASSEMBLY TOOLS	
Product Lineup	2
Assembly Tools Benefits	4
Electric Screwdriver	5
Precision Clutch	13
Low Torque Clutch	18
AccuPulse 4.0 / AccuPulse 4.0 HT	19
Features Comparison Chart	26
AccuPulse QP	28
AccuPulse HR	32
High Torque Mechanical Pulse	40
Assembly Tool Accessories	44
Assembly Controllers	46
Assembly Controller Accessories	49
Standard / Optional Accessories Chart	50
Battery Compatibility Table	54
Transducers / Validation Kit	55
Joint Simulators / Rotary Transducers	56
Professional Power Tools	57
Dual Voltage / Battery Technology	58
Impact Driver Features	60
Impact Driver	62
Impact Wrenches	63
Screwdrivers	64
Battery Chargers	66
Battery / Charger Compatibility Chart	67
Li-ion Capacity Tables	68
Standard / Optional Accessory Chart	69

Assembly Tools

Product Lineup

AccuPulse® 4.0 Transducerized **NEW**



EYFMH1
14.4V, 20-60Nm

EYFMH2
14.4V 50-80Nm

AccuPulse® 4.0 HT Transducerized **NEW**



EYFNH1
18V, 70-220Nm

AccuPulse® HR



EYFLA7
10.8V, 3-22Nm

EYFLA8
10.8V, 6-30Nm

EYFLA9
10.8V, 20-60Nm

AccuPulse® QP **NEW**



EYFLF1
10.8V, 3-22Nm

EYFLF2
10.8V, 6-35Nm

High Torque Mechanical Pulse



EYFNA1
18V, 70-200Nm

EYFPA1
21.6V, 160-650Nm

Electric Screwdriver **NEW**



Type A
Controller with
Converted Torque Value
& I/O for PLC

Type B
Controller I/O for PLC

Type C
Wired
Communication
with PLC

Type D
Standalone

Programmable Clutch



EYFGA1N
14.4V, 2-5.5Nm

EYFGA2N
14.4V, 5-8Nm

EYFGA3N
14.4V, 5-10Nm

Basic Clutch



EYFGB1N
14.4V, 2-5.5Nm

EYFGB2N
14.4V, 5-8Nm

EYFGB3N
14.4V, 5-10Nm

Wireless Programmable Clutch



EYFGA1NR
14.4V, 2-5.5Nm

EYFGA2NR
14.4V, 5-8Nm

EYFGA3NR
14.4V, 5-10Nm

Assembly Controllers



EYFR02-1
Single-Tool Controller

EYFR02-2
Two-Tool Controller

EYFR03
Multi-Tool Controller

EYFR04
Multi-Station Controller

Stationary Transducers



EYFST22NM
3/8" Square Drive

EYFST120NM
1/2" Square Drive

EYFST750NM
3/4" Square Drive

Low Torque Clutch



EYFEA1N2S
EYFEA1N
2.7-35.4 in. lbs

 Option for wireless communication

Panasonic Cordless Assembly Tools

Bringing innovation to the assembly line

Benefits

Battery Electronic Sensing System

GuardION



Over-discharge Prevention Sensor

Prevents over-discharge to avoid cell damage or recharge problems

Battery Overheat Protection Sensor

Cuts off power to the motor before the battery temperature rises



Monitoring of Battery Cell Voltage

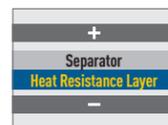
Each cell is monitored by a sensor to ensure optimal charge/discharge control

Battery Sensor

Flashing lamp indicates overheating battery. Battery is automatically reactivated when temperature drops

Heat Resistance Layer Technology

In cases where separator is damaged and abnormal heat is created, HRL acts to contain the heat, just like a firewall



Special Ceramic Coating Layer

Li-Ni Technology

Panasonic-developed Lithium Nickel Oxide chemistry offers the benefits of lower internal resistance, reduced electrical loss, lower temperatures in battery cells deliver longer battery life

Safer Work Environment

Improved Ergonomics

Lightweight and compact, no air hose to drag around

Eliminate Trip Hazards

Removes dangerous air hoses and provides a clear work area

Improved Air Quality

Eliminates airborne oily residue common with air tools

Industry 4.0 Ready

High Resolution Durable Non-contact Transducer (AccuPulse 4.0 & AccuPulse 4.0 HT only)

The transducer can reliably measure torque during pulsing with a non-contact design resulting in high durability of the transducer

Error Proofing

Operator performance, ability to create jobs/groups, reduce error on the production floor

Data

Key data points can be collected and stored locally or remotely

Communication

Allows you to connect with our controller and integrate with MES systems through industry standard protocols (radio tools only)

Manufacturing Costs

Energy Savings

Cordless tools use 99% less energy than air tools

Improved Quality

Increases accuracy by eliminating air pressure fluctuations

Ease of Installation

Complete freedom in assembly area design

Less Maintenance

Eliminates the need for maintaining oilers

Less Tool Downtime

Recovers from power outages within seconds

Electric Screwdriver System

Taking assembly work to the next level

4 Types
12
Models



Product Lineup

4 different types		Traceability						Pokayoke			User-Friendly		
		Type A			Type B			Type C			Type D		
Model Number		EYADA212WA	EYADA218WA	EYADA407WA	EYADA212WB	EYADA218WB	EYADA407WB	EYADA212XC	EYADA218XC	EYADA407XC	EYSDA212XD	EYSDA218XD	EYSDA407XD
Specifications	Power Supply	Power supply from power adapter (sold separately) AC100-240V 50/60Hz						Power supply from power adapter (sold separately) AC100-240V 50/60Hz					
	Motor	Brushless motor (coreless type, DC30V)						Brushless motor (coreless type, DC30V)					
	Drive	1/4" Hex Quick Change						1/4" Hex Quick Change					
	Torque Accuracy	Repeated torque accuracy $\pm 10\%$ (internal measurement conditions)						Repeated torque accuracy $\pm 10\%$ (internal measurement conditions)					
	Controls	Forward/reverse rotation switching + break ON/OFF setting						Forward/reverse rotation switching + Break ON/OFF setting					
	Size	Total length 10.6in, grip diameter $\varnothing 1.5$ in						Total length 10.6in, grip diameter $\varnothing 1.5$ in					
	Weight	Approx. 1.38 lbs						Approx. 1.38 lbs					
Rotation Speed		1,200 rpm	1,800rpm	650rpm	1,200rpm	1,800rpm	650rpm	1,200rpm	1,800rpm	650rpm	1,200rpm	1,800rpm	650rpm
Torque Setting Range		0.3~2.5Nm	0.3~2.0Nm	1.5~4.4Nm	0.3~2.5Nm	0.3~2.0Nm	1.5~4.4Nm	0.3~2.5Nm	0.3~2.0Nm	1.5~4.4Nm	0.3~2.5Nm	0.3~2.0Nm	1.5~4.4Nm
Recommended Fastener Size		M2.5 - M4.5	M2.5 - M4	M3 - M5	M2.5 - M4.5	M2.5 - M4	M3 - M5	M2.5 - M4.5	M2.5 - M4	M3 - M5	M2.5 - M4.5	M2.5 - M4	M3- M5
[Converted] Torque Value Output		Wireless (WLAN) Controller						Communication cable to PLC required					
Data Output Method		Wireless (WLAN) Controller						Communication cable to PLC required					
Fastening Judgement		Upper / lower limit setting of Torque conversion value, rotation time and number of rotations						Upper / lower limit of rotation time					
Sequence Function		Compatible with Controller						Communication cable to PLC required					
Count Function		Count method setting, count return setting, ignore judgment setting, ignore count setting, count-up judgment standby setting, count reset											
Soft Start/Soft Snug Function													
Buzzer													
LED Verification Lamp													
Push/Lever Start Choice													

Various Support Features



Traceability

Type **A**

Work history can be wirelessly recorded

Type A series records the converted torque value of each fastener

The motor current is converted to a torque value and recorded for quality control and process improvement.

*Torque converted value is an approximate value only. Not recommended for strict quality control.

1.20Nm
1.18Nm
1.22Nm
...

(*Type A)



Type **A B**

Data such as batch count, OK/NOK, converted torque value* can be recorded for traceability.



*Converted torque value is Type A only

Traceability

Type **A B**

Controller management software collects and analyzes data up to 80 tools *by wired LAN

Productivity can be improved by operation analysis

Work data such as work time, OK/NOK result and reverse rotation history from rework can be collected and used for work analysis and/or as productivity index. The optional controller management software can collectively analyze work data from up to 10 controllers. In addition, work data can be output in CSV format for more detailed analysis.



Pokayoke

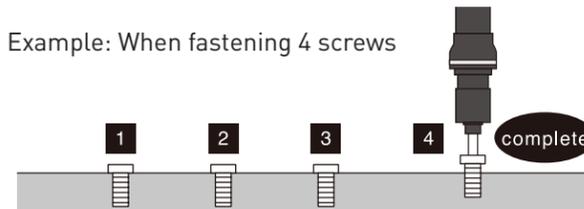
Type **A B C**

Reduce Mistakes

Equipped with batch count function to prevent missed fasteners

The number of fasteners is managed by the batch counter. You can check if the specified number of screws were fastened. Preventing missed fasteners.

Example: When fastening 4 screws

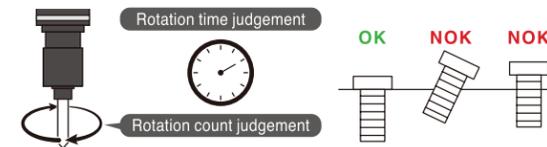


The number of fasteners can be managed by setting the batch count from the controller
*Separate batch counter is not required



Tightening limits

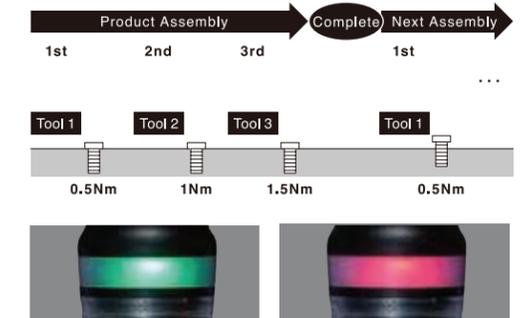
Reduce errors by having control of the tool's rotation time. OK/NOK is displayed with LED colored lamps.



Sequence function for using multiple tools in specific orders. Function is set by controller.

Use according to the fastening order when tightening screws with different torque values. Programmed so that only the tool that is required is enabled.

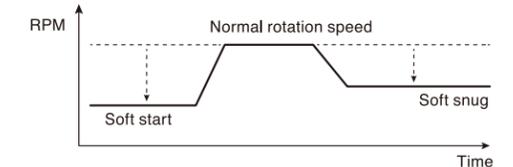
Example: When using 3 tools



Enabled tool is indicated in green. When the wrong tool is operated, it will display red and will not be enabled.

Suitable for brittle plastic screw fastening

- Soft start/soft snug function reduces cross thread errors
- Reduces risk of damaging delicate material with soft snug



User-Friendly

Type **A B C D**

Start Method

Each tool gives you the option between push to start or lever start method



Verification Lamp

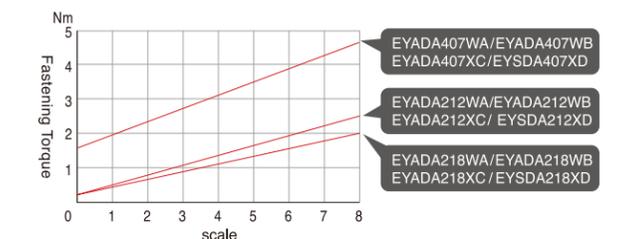
Screw fastening results can be checked visually by the different colors indicated by the LED lamp.



Count-up Setting mode Stopwatch mode (*Only for TypeC)

Clutch Scale and Clutch Torque

Manually rotate the clutch dial to the desired torque value referring to the approximate output.



Wireless Communication



Stable wireless communication

Recommended range
 approx **53 ft** 2.4GHz
 Recommended range
 approx **33 ft** 5GHz

Supports both 2.4GHz and 5GHz frequency

To avoid interference, the frequency can be selected according to the usage environment. There is also an auto channel function that automatically selects an empty channel.

High efficiency antenna design

Stable communication performance is achieved by the highly efficient antenna design (average -5dBi) of the omnidirectional antenna on the controller and the radio module on the tool. Demonstrates high performance with various tool positions and directions.

Data Buffering Function in case of communication disconnection

Work history data can be backed up in the tool and resent to the controller even when communication is temporarily disconnected, allowing work to continue.

High security

Communication data is encrypted and protected by TLS.

Setting and viewing from a web browser

Tool/controller settings and work history data can be viewed from a web browser. No software installation required on your PC.



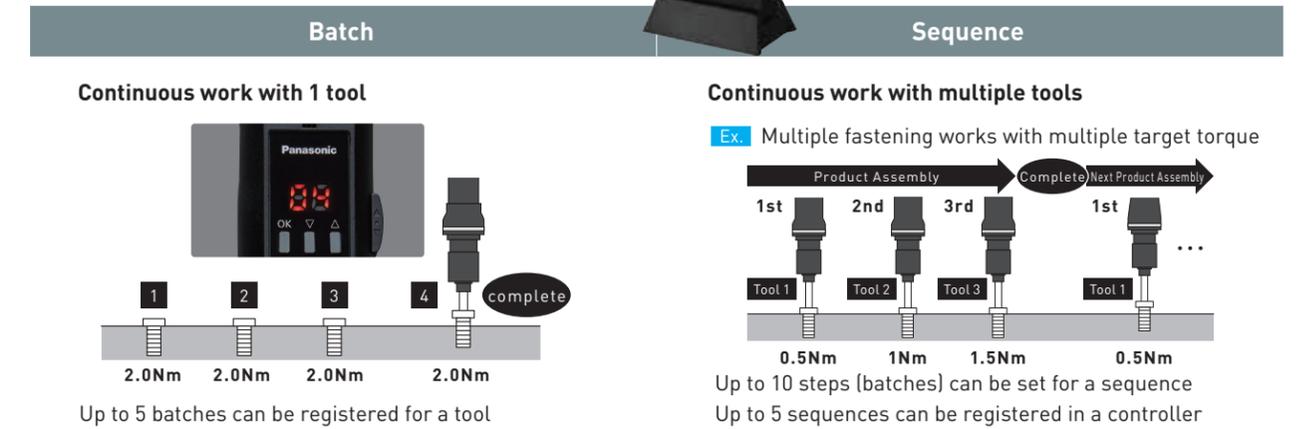
Controller with maximum 8 tools Simultaneous control capability



By using the optional Controller management software, data for up to 10 controllers (up to 80 tools) can be automatically collected and collectively managed.



Flexibility of Assembly Processes



Model	EYARW1
Communication Data	<ul style="list-style-type: none"> • OK/NOK • Torque converted value • Forward/Reverse • Number of rotation • Fastening time
Rated Supply Voltage	AC100-240V 50-60Hz
Communication Method	WLAN (IEEE802.11a/b/g/n)
Frequency Band	United States, Canada 2.412-2.462GHz / 5.180-5.240GHz
Channel	United States, Canada 2.4GHz band : 1ch - 11ch / 5GHz band: 36, 40, 44, 48ch
Recommended Range	2.4GHz band: *approx. 53 ft / 5GHz band: *approx. 33 ft
No. of Connectable Devices	Maximum 8 tools
Input/Output Terminal (I/O)	Input: 8 / Output: 8
Power Consumption	approx. 30W
Dimensions (LxHxW)	approx. 9.40 in x approx. 5.90 in x approx. 1.61 in (Height including antenna: approx 11.06mm)
Weight	1.21 lbs (Main body only)
Communication Interface	<ul style="list-style-type: none"> • Ethernet x 2 • USB-A x1
Communication Protocol	-
Data Storage	Approx 200,000 history data
Optional Accessories	<ul style="list-style-type: none"> • Controller stand • AC adapter
Compatible Tools	EYADA212WA, EYADA212WB, EYADA218WA, EYADA218WB, EYADA407WA, EYADA407WB

<Optional Accessory>



* Communication range varies with operating environment. The presence of metal walls, people, or other objects may result in decreased range.

Tool Types

Type A B



Type C



Type D



Precision Clutch Tools

Ergonomic, Accurate & Repeatable

Standard Features

- High accuracy $\pm 10\%$ at $cmk \geq 1.67$ – ISO 5393*
- Fast-acting, all-steel clutch for increased durability
- Photo interrupter sensor increases clutch life and tool accuracy
- Brushless motor and hybrid switch about doubles the life of the tool
- 60-stage adjustable clutch for precise adjustment
- Tamper-resistant clutch for increased quality
- Programmable version for increased versatility**
- Wireless programmable version for error proofing and data collection***



Basic Clutch Tools



Programmable Clutch Tools**



Wireless Programmable Clutch Tools***

Programmable "Quick Set" Features

Speed Control

Adjustable speed in 10 rpm increments to exactly match the application.

Cross Thread Reduction

The tool first reverses 360 degrees, aligning the threads, greatly reducing the possibility of cross threads.

Cross Thread / Rehit Detection

If the clutch is activated before the programmable minimum runtime, the tool stops the fastening process and signals a NOK fastening.

Auto Downshift

After a programmable period of time, the rpm automatically downshifts to 300 rpms maximizing operator productivity.

Variable Speed Control

Enables variable speed or single speed trigger operation.

Enable / Disable Capable

Remotely enable/disable tools when needed with controller + radio tool combination.

Out of Range / Anti-Theft

When enabled, the tool is disabled if taken out of the controller's wireless range.

Maintenance Interval Alarm

Defined in 10,000 increment cycles to notify the operator of upcoming scheduled maintenance.



LED Light

Program LED to turn on with trigger switch or on/off switch to match operator preference.

Buzzer

The buzzer can be programmed for OK, NOK or Disabled.

*In $\geq 3Nm$ Range.

Precision Clutch Tools

Ergonomic, Accurate & Repeatable

High Accuracy
 $10\% \cdot Cmk \geq 1.67^*$
 (ISO5393)
 *In $\geq 3Nm$ range



OK/NOK both visual and audible indicators. [Buzzer ON/OFF can be selected]

14.4V
 2.0Ah
 4.0Ah
 Optional battery packs: Compact 2.0Ah battery and high capacity 4.0Ah battery

Complete Clutch Tool Line-up Covers a Wide Range of Applications



Basic Clutch Tools



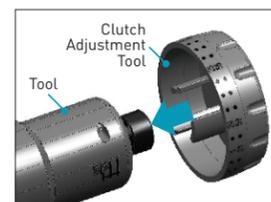
Programmable Clutch Tools



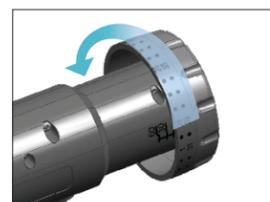
Wireless Programmable Clutch Tools

60 Stage Adjustable Clutch

How to set clutch

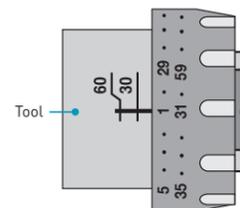


① Insert clutch adjustment tool into nose of tool.



② Turn and set

Rotate clutch adjustment tool clockwise to increase torque and counter clockwise to decrease torque.



Clutch stage "1"

Quickly set the torque by adjusting the scale.

Advanced Fastening Features

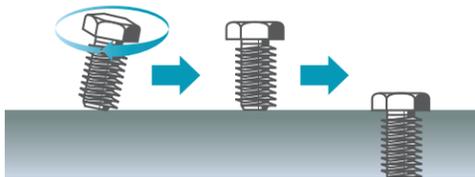


Cross Thread Reduction



The tool first reverses 360°, aligning the threads, greatly reducing the possibility of cross threads.

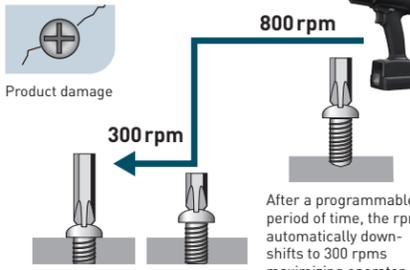
Reverse Rotation!



360° reverse rotation before fastening The screw's threads are aligned with the hole Automatically shifting to normal rotation



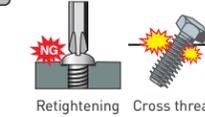
Auto Downshift Function



Reducing the fastener's impact on the material. After a programmable period of time, the rpm automatically downshifts to 300 rpm maximizing operator productivity.



Cross Thread / Rehit Detection



If clutch is activated before the programmable minimum runtime, tool stops the fastening process and signals a NOK fastening.

• Example with 3.0 sec. time setting



Finished with 3.0 sec. rundown time Finished with 2.0 sec. rundown time due to cross thread Finished with 0.5 sec. rundown time due to re-tightening



Maintenance Interval Alarm

The maintenance interval alarm can be set ON or OFF and is defined in 10,000 increment cycles.

When total fastenings are within 10,000 fastenings of the preset maintenance interval, the display blinks notifying operator. Once tool reaches the preset interval, tool is locked out from further use.



Variable Speed Control Function

Enables variable speed or single speed trigger operation.

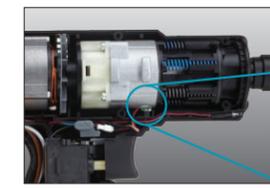


Auto Battery Shut Down

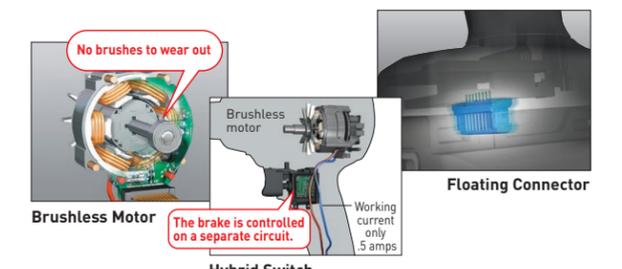
Before the battery power becomes too low to maintain torque, it shuts down the tool and notifies the operator by blinking the LED indicator until a charged battery pack is attached. Standard on all Precision Clutch Tools.

Durable Design

Photo Interrupter Sensor Increases Clutch Life and Tool Accuracy



Sensing the clutch plate movement, the Photo Interrupter Sensor increases clutch life and tool accuracy, not relying on mechanical contacts that wear.



Brushless Motor

Hybrid Switch

The brake is controlled on a separate circuit.

Working current only 5 amps

No brushes to wear out

Floating Connector

Additional Features



Rubber grip

Compact and Lightweight
 A well balanced compact and lightweight design



LED Light
 Program LED to turn on with the trigger switch or ON/OFF switch to match operator preference



Remote Control
 Tool settings can be adjusted only by remote control

Lightweight 2.0Ah Battery (EYFB41B) or Extended Run Time 4.0Ah Battery (EYFB43B) Available



Color Plate for Differentiation
 Each tool is color coded for easy identification



Tool Hanger

Cordless Precision Clutch Tools

						
MODEL		EYFGB1N	EYFGB2N	EYFGB3N	EYFGA1N	
Voltage		14.4V				
Series		Basic Clutch			Programmable Clutch	
Accuracy		±10%• Cmk 1.67 (*Compliant with ISO5393. Measured with the Max RPM setting)(*In 3Nm range)				
Drive		1/4" Hex Quick Change				
Clutch Torque	Nm	2-5.5 Nm	5-8 Nm	5-10 Nm	2-5.5 Nm	
	in. lbs	17.7 - 48.6 in.lbs	44.2 - 70.8 in.lbs	44.2 - 88.5 in.lbs	17.7 - 48.6 in.lbs	
Clutch Setting Stage		1 - 60, Total 60 stages (Approx. 0.08 Nm per stage)				
No Load Speed		0-800 rpm	0-750 rpm	0-450 rpm	0-800 rpm	
Weight	EYFB41B (2.0 Ah)	2.76 lbs	2.76 lbs	2.86 lbs	2.76 lbs	
	EYFB43B (4.0 Ah)	3.31 lbs	3.31 lbs	3.31 lbs	3.31 lbs	
Size (LxHxW)	EYFB41B (2.0 Ah)	7-13/16" x 9-1/8" x 2-15/16"				
	EYFB43B (4.0 Ah)	7-13/16" x 9-6/8" x 2-15/16"				
Wireless Communication		—				
LED Work Light (On/Off Switch)		✓				
OK/NOK Light (Green: OK/ Red: NOK)		✓				
Rehit Prevention (Possible to set per 0.1 sec. between 0-3 sec.)		—			✓	
Battery Indication Lamp: (3 stage)		✓				
Low Power Disable		✓				
Prevent/ Detect Cross Threads & Rehits		—			✓	
Maintenance Interval Alarm		—			✓	
Variable Speed On / Off Switch		—			✓	
LED Light Setting (On / Off or On with pull of switch)		—			✓	
Work Capacity*	EYFB41B	Hard Joint 30°	1200 pcs./pack 1.1 sec./1pcs. (M6: 5.5 Nm)	1050 pcs./pack 1.0 sec./1pcs. (M6: 8 Nm)	1100 pcs./pack 1.0 sec./1pcs. (M6: 10 Nm)	1200 pcs./pack 1.1 sec./1pcs. (M6: 5.5 Nm)
		Soft Joint 720°	540 pcs./pack 1.3 sec./1pcs. (M6: 5.5 Nm)	410 pcs./pack 1.3 sec./1pcs. (M6: 8 Nm)	310 pcs./pack 1.4 sec./1pcs. (M6: 10 Nm)	540 pcs./pack 1.3 sec./1pcs. (M6: 5.5 Nm)
	EYFB43B	Hard Joint 30°	2320 pcs./pack 1.1 sec./1pcs. (M6: 5.5 Nm)	2020 pcs./pack 1.0 sec./1pcs. (M6: 8 Nm)	2150 pcs./pack 1.0 sec./1pcs. (M6: 10 Nm)	2320 pcs./pack 1.1 sec./1pcs. (M6: 5.5 Nm)
		Soft Joint 720°	1070 pcs./pack 1.3 sec./1pcs. (M6: 5.5 Nm)	860 pcs./pack 1.3 sec./1pcs. (M6: 8 Nm)	620 pcs./pack 1.4 sec./1pcs. (M6: 10 Nm)	1070 pcs./pack 1.3 sec./1pcs. (M6: 5.5 Nm)
Charging Time*		EYFB41B Usable Charge: 35min / Full Charge: 40min				
		EYFB43B Usable Charge: 45min / Full Charge: 60min				

Note: *Approximately

				
EYFGA2N	EYFGA3N	EYFGA1NR	EYFGA2NR	EYFGA3NR
14.4V				
Programmable Clutch		Wireless Programmable Clutch		
±10%• Cmk 1.67 (*Compliant with ISO5393. Measured with the Max RPM setting)(*In 3Nm range)				
1/4" Hex Quick Change				
5-8 Nm	5-10 Nm	2-5.5 Nm	5-8 Nm	5-10 Nm
44.2 - 70.8 in.lbs	44.2 - 88.5 in.lbs	17.7 - 48.6 in.lbs	44.2 - 70.8 in.lbs	44.2 - 88.5 in.lbs
1 - 60, Total 60 stages (Approx. 0.08 Nm per stage)				
0-750 rpm	0-450 rpm	0-800 rpm	0-750 rpm	0-450 rpm
2.76 lbs	2.86 lbs	2.76 lbs	2.76 lbs	2.86 lbs
3.31 lbs	3.31 lbs	3.31 lbs	3.31 lbs	3.31 lbs
7-13/16" x 9-1/8" x 2-15/16"				
7-13/16" x 9-6/8" x 2-15/16"				
—		OK Fasten=Green light NOK Fasten=Red light	OK Fasten=Green light NOK Fasten=Red light	OK Fasten=Green light NOK Fasten=Red light
✓				
✓				
✓				
✓				
✓				
✓				
✓				
✓				
1050 pcs./pack 1.0 sec./1pcs. (M6: 8 Nm)	1100 pcs./pack 1.0 sec./1pcs. (M6: 10 Nm)	1200 pcs./pack 1.1 sec./1pcs. (M6: 5.5 Nm)	1050 pcs./pack 1.0 sec./1pcs. (M6: 8 Nm)	1100 pcs./pack 1.0 sec./1pcs. (M6: 10 Nm)
410 pcs./pack 1.3 sec./1pcs. (M6: 8 Nm)	310 pcs./pack 1.4 sec./1pcs. (M6: 10 Nm)	540 pcs./pack 1.3 sec./1pcs. (M6: 5.5 Nm)	410 pcs./pack 1.3 sec./1pcs. (M6: 8 Nm)	310 pcs./pack 1.4 sec./1pcs. (M6: 10 Nm)
2020 pcs./pack 1.0 sec./1pcs. (M6: 8 Nm)	2150 pcs./pack 1.0 sec./1pcs. (M6: 10 Nm)	2320 pcs./pack 1.1 sec./1pcs. (M6: 5.5 Nm)	2020 pcs./pack 1.0 sec./1pcs. (M6: 8 Nm)	2150 pcs./pack 1.0 sec./1pcs. (M6: 10 Nm)
860 pcs./pack 1.3 sec./1pcs. (M6: 8 Nm)	620 pcs./pack 1.4 sec./1pcs. (M6: 10 Nm)	1070 pcs./pack 1.3 sec./1pcs. (M6: 5.5 Nm)	860 pcs./pack 1.3 sec./1pcs. (M6: 8 Nm)	620 pcs./pack 1.4 sec./1pcs. (M6: 10 Nm)
Usable Charge: 35min / Full Charge: 40min				
Usable Charge: 45min / Full Charge: 60min				

EYFEA1N / EYFEA1N2S

Cordless Low Torque Clutch Tool and Driver Kit

7.2V

Voltage		7.2V
Drive		1/4" Hex Quick Change
Torque Range	Nm	High: 2.0 Nm / Low: 6.0 Nm
	ft. lbs	High: 1.47 ft. lbs / Low: 4.43 ft. lbs
	in. lbs	High: 17.7 in. lbs / Low: 53.1 in. lbs
No Load Speed (Torque Setting: RPM)		High: 0-900 rpm Low: 0-300 rpm
Clutch Torque (approx.)		High: 0.3 Nm-2.0 Nm (stage 1-10, 0.19 Nm per stage) Low: 0.3 Nm-4.0 Nm (stage 1-21, 0.19 Nm per stage)
Weight (incl. battery)		1.38 lbs
Size (L x W x H)		5-3/4" x 7-7/8" x 1-5/8"
Max. Screws Driving		High mode: M4 screw Low mode: M5 screw
Features		<ul style="list-style-type: none"> • Auto Shut-Off Function • Auto Power-Stop Function • LED Light • Clutch & H/L switch lock cover • Electronic brake • ESD approved (as per EN 55014-1 and -2)
Working Capacity (Fastening)		Screws in Sheet Metal (M2.5 x 6mm) High: Approx. 1900 pcs. Screws in Sheet Metal (M4 x 10mm) High: Approx. 1850 pcs. Screws in Sheet Metal (M5 x 8mm) Low: Approx. 1450 pcs.
Charging Time		Usable: 35 minutes, Full: 60 minutes (Battery pack EY9L20, charger EY0L20)



EYFEA1N:
Battery pack and battery charger not included.

TYPICAL APPLICATIONS

- Electricians
- Electronics assembly
- Rack/cabinet installers
- Production/assembly work
- Service engineers

Clutch lock cover

WEYFEA1N3137



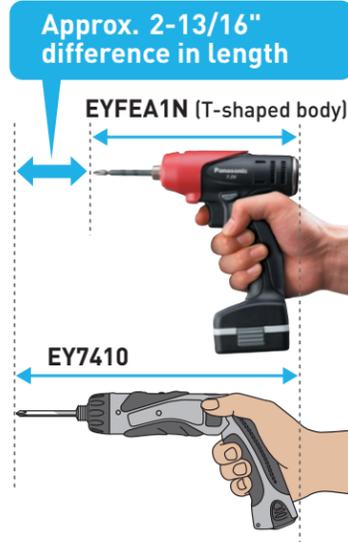
More Features

Compact & Lightweight

User-friendly size and weight of EYFEA1N can reduce operator fatigue. Well balanced, T-shaped body and slim grip improves operator acceptance.

WEIGHT
1.39 lbs

LENGTH
5.7"



Clutch & High/Low Switch Lock Cover

Prevents operator from changing clutch setting or rpm setting by mistake.



LED Light

Operation in dimly lit areas is improved with built-in LED light.



NEW PRODUCT AWARDS WINNER

Panasonic EYFMH series was awarded "Product of the Year" in the Fastening Solutions category for New Product Awards at the 2022 ASSEMBLY Show in Rosemont, IL, United States.

*Charging times are approximate and may be slightly longer depending on conditions.

AccuPulse 4.0 & AccuPulse 4.0 HT

Transducerized Mechanical Pulse Tool achieves both fastening quality and work efficiency



Torque and Angle Monitoring

Max. Shut-Off Torque 220 Nm

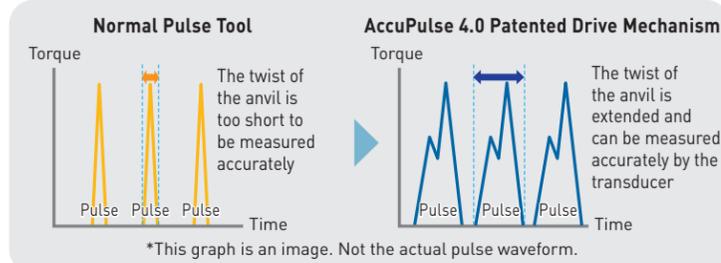
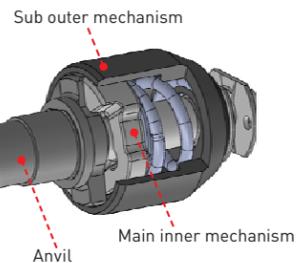
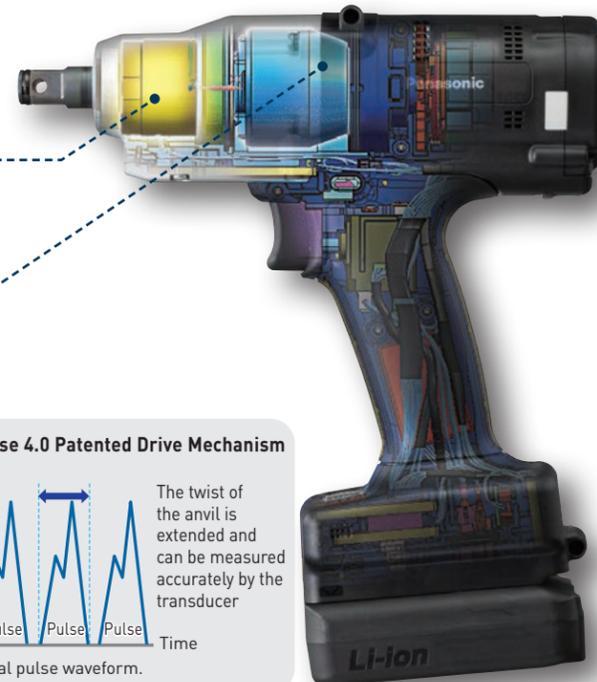
Panasonic Unique Technologies for Mechanical Pulse Torque Sensing

Unique High Sensitivity Torque Transducer

The transducer can reliably measure torque during pulsing with a non-contact design resulting in high durability of the sensor block.

Unique Drive Mechanism with Optimum Pulse Behavior for Torque Sensing

Our patented drive mechanism makes it possible to measure the pulses with a transducer.



Advanced Traceability Data Management

The tool can output torque value, angle value, fastening curve and other traceability data to a PC, tablet or your assembly management system.

60Nm

720°

OK NG

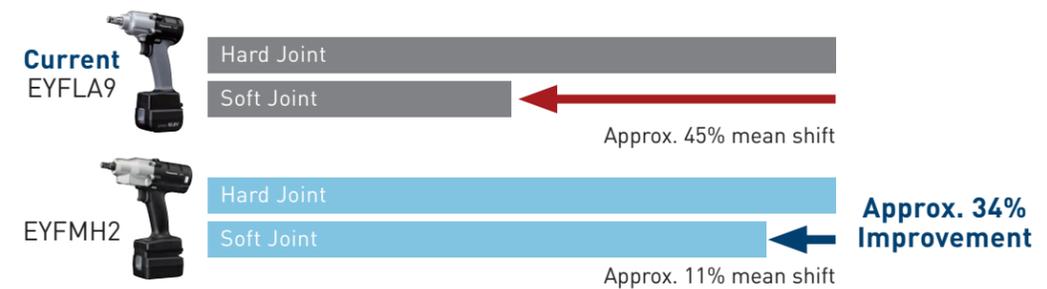
PULSES

Time

Accurate Fastening Performance

Less Mean-Shift (Bolt size: M12 Target torque: 71Nm)

Mean shift is reduced by the torque sensing. In addition, the tool can offset the mean shift by its unique algorithm.



*The values in this chart were measured under Panasonic measuring conditions, and are provided only for reference purpose. Actual tightening torque may vary with ambient conditions.

Validation Data (Socket length: 40mm) (only for reference purpose)

Model	Joint	Socket Length	Bolt Size	Target	1	2	3	4	5	26	27	28	29	30	Average	Accuracy
14.4V EYFMH2	Hard	40mm	M10	50Nm	50	52	51	53	51	51	52	52	49	50	51.8	5.3%
			M12	80Nm	81	82	83	83	82	84	83	80	82	83	81.2	7.1%
18V EYFNH1	Hard	40mm	M12	70Nm	72	73	76	75	76	71	70	72	73	75	72.0	9.6%
			M14	140Nm	138	139	137	142	145	144	138	135	142	133	137.6	8.0%
			M16	190Nm	199	191	182	188	192	194	187	191	184	191	190.2	7.3%

*The values in this chart were measured under Panasonic measuring conditions, and are provided only for reference purpose. Actual tightening torque may vary with ambient conditions.

Tool Manager Data

Tool Manager provides the operator the ability to view history rundown data, like the fastening curve and pulses.

History Details [3] August/17/2022 [Tool Settings] [Export]

OK Torque Result 20.7 Nm vs. Target value: 103.7 %

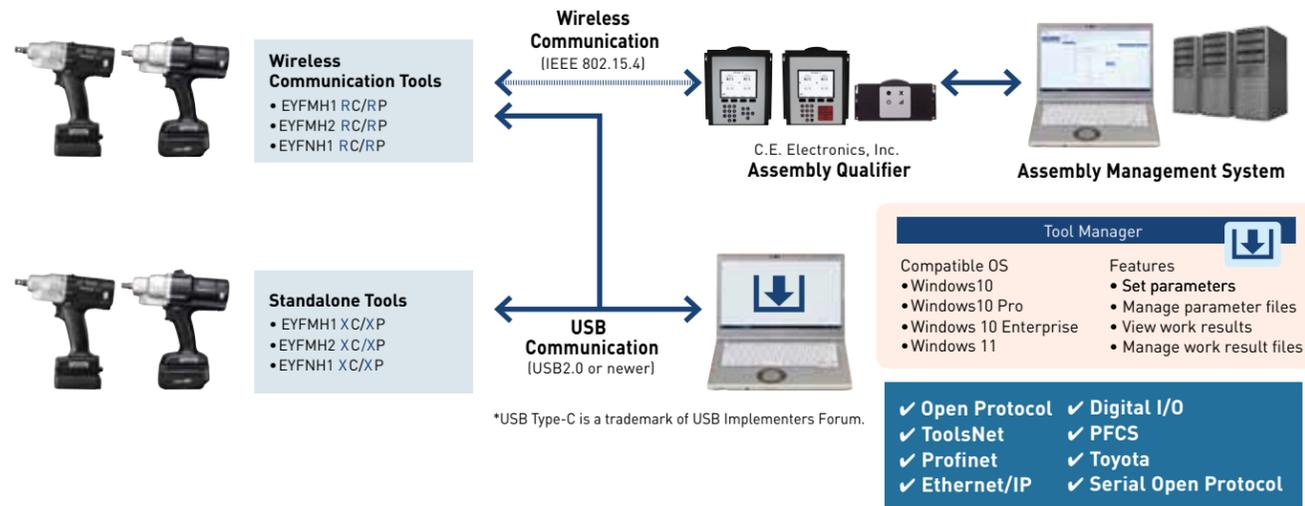
Torque [Nm] vs. Time [s] graph

Pulses	Rundown Time [ms]	Torque	Angle (Before Snug)	Angle (After Snug)	RPM
1	254.7	0.7	2360	0	986
2	283.0	1.6	2360	98	577
3	309.2	2.3	2360	162	407
4	334.6	3.3	2360	201	256
5	359.9	4.0	2360	229	184
6	384.8	4.4	2360	256	181
7	409.8	5.3	2360	283	180
8	434.5	5.9	2360	308	169
9	459.3	6.6	2360	333	168
10	483.6	7.0	2360	354	144
11	507.5	7.8	2360	369	105
12	530.9	8.6	2360	381	85
13	553.8	9.6	2360	389	58

X-axis: Time Y-axis: Torque Scale: 100%

Comment: [] [Close]

System Diagram



Additional Features



Tightening Confirmation Lamp

Multiple lamps can be seen from various angles.



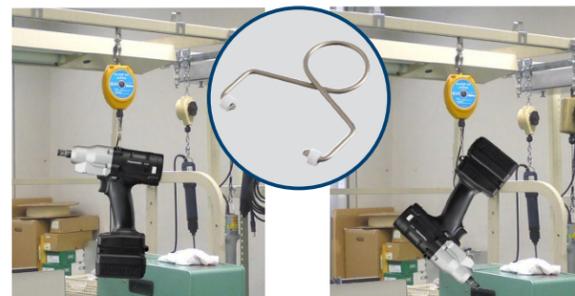
LED Light

For operations in dimly lit places.



USB Connection

Easy connection with PC or tablet using "USB Type-C" on the tool.



Horizontal hanging

Upside down hanging

Tool Hanger

The tool can be hung on the balancer both horizontal and upside down.



Color Plate for Differentiation

Each tool model is color coded for easy identification.

Various Support Features



Cross Thread Reduction

Two types of the programmable features to reduce cross thread.

Soft Start : Lower the no load speed to 100 rpm for a programmable time after trigger is pulled.

360° Reverse : 360° reverse rotation for thread alignment then rotate forward.



Cross thread



Auto Downshift Function

After a programmable period of time, the rpm automatically downshifts to 300 rpm. This can reduce the fasteners impact to the material, maximizing operator's productivity.



Product damage



Retightening Prevention Function

This function prevents the tool from operating within a selected time period after it automatically stops from the torque control function. The switch will not operate even if engaged during this time period.



Angle Error Shut-Off

Tool shuts off when the rundown exceeds its upper angle limit to prevent the material from being damaged.



Variable Speed Control Function

Speed can be controlled by use of the trigger. Speed control function ON and OFF can be selected by remote.



Disable Reverse

The tool is prevented from operating in reverse rotation when this function is ON.



Snug Torque Detection Delay

The tool doesn't activate Snug Torque Detection mode and ignores loads in the middle of rundown for a selected time period.



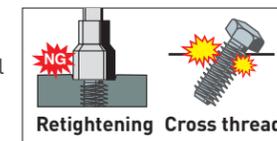
Ignore Rundown Result before Snug

When this function is ON and tool stops before snug point due to trigger release, the rundown result isn't recorded.



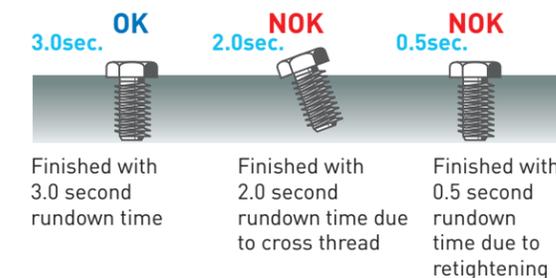
Rundown Error Detecting Function

If the clutch is activated before the programmable minimum runtime, the tool alerts the operator to a NOK fastening. (Time setting: 0.1-3.0sec, 0.1sec per stage)



Retightening Cross thread

Example with 3.0sec. normal time setting



Long Socket Mode

RPM can be adjusted depending on socket length to stabilize torque even with long socket. (h1: for 150mm socket, h2: for 250mm socket).

Features Chart

	AccuPulse 4.0 Transducerized									AccuPulse HT 4.0 Transducerized						
																
	EYFMH1RC	EYFMH1RP	EYFMH1XC	EYFMH1XP	EYFMH2RC		EYFMH2RP	EYFMH2XC	EYFMH2XP	EYFNH1RC	EYFNH1RP	EYFNH1XC	EYFNH1XP			
Drive	C = 1/2" Square Drive with Ring Retainer and Through Hole		P = 1/2" Square Drive Pin Detent		C = 1/2" Square Drive with Ring Retainer and Through Hole		P = 1/2" Square Drive Pin Detent		C = 1/2" Square Drive with Ring Retainer and Through Hole		P = 1/2" Square Drive Pin Detent		C = 1/2" Square Drive with Retainer Ring and Through Hole			
Voltage	14.4V									18V						
Transducer	Highly Durable Magnetostrictive Non-Contact Transducer															
Recommended application	M8 bolt (Tensile bolt) M10 bolt (Normal bolt)								M10 bolt (Tensile bolt) M12 bolt (Normal bolt)				M12 bolt (Tensile bolt) M14 bolt (Tensile bolt) M16 bolt (Normal bolt) M18 bolt (Normal bolt)			
Recommended Torque Range (Hard joint, Short socket 40mm)	20-60 Nm (Setting range: 10-70 Nm)								50-80 Nm (Setting range: 30-140 Nm)				70-220 Nm (Setting range: 50-250 Nm)			
No Load Speed (unit: rpm)	0-2,300 rpm (Max. rpm is adjustable from 1,500 to 2,300 in 100 rpm increments)									0-1,900 rpm (Max. rpm is adjustable from 1,300 to 1,900 in 100 rpm increments)						
Pulses Per Minutes	0-2,700								0-2,600				0-2,400			
Weight	4.08 lbs (2.0Ah EYFB41B) 4.63 lbs (4.0Ah EYFB43B)									7.39 lbs (5.0 Ah EYFB50B) 6.94 lbs (3.0 Ah EYFB51B)						
Size (LxHxW)	8-15/32" x 9-11/16" x 2-13/32" (EYFB41B) 8-15/32" x 10-13/32" x 2-13/32" (EYFB43B)									10-7/16" x 11-37/64" x 2-63/64" (EYFB50B) 10-7/16" x 10-61/64" x 2-63/64" (EYFB51B)						
Function	Torque Result													✓		
	Angle Result													✓		
	Fastening Curve													✓		
	Auto Battery Shutdown													✓		
	Parameters		Standalone Mode: 1, Wireless Communication Mode: Depends on controller		Standalone Mode: 1		Standalone Mode: 1, Wireless Communication Mode: Depends on controller		Standalone Mode: 1		Standalone Mode: 1, Wireless Communication Mode: Depends on controller		Standalone Mode: 1			
	Data Storage													Standalone Mode: approx. 45,000 history data can be stored in case of 1.2 sec. fastening work		
	Wireless Communication		IEEE 802.15.4 (Wireless Communication)		-		IEEE 802.15.4 (Wireless Communication)		-		IEEE 802.15.4 (Wireless Communication)		-			
	Programming													Programmable with included Tool Manager software on any Window PC		
	USB Connection													USB Type-C™		
Work Capacity / Fastening Speed	<M8: 23Nm> (EYFB43) approx. 940 pcs./pack approx. 0.5 sec/1pcs. (EYFB41) approx. 490 pcs./pack approx. 0.5 sec/1pcs. <M10: 43Nm> (EYFB43) approx. 670 pcs./pack approx. 0.7 sec/1pcs. (EYFB41) approx. 350 pcs./pack approx. 0.7 sec/1pcs.								<M12: 71Nm> (EYFB43) approx. 450 pcs./pack approx. 0.9 sec/1pcs. (EYFB41) approx. 230 pcs./pack approx. 0.9 sec/1pcs.				<M12: 100Nm> (EYFB50B) approx. 500 pcs./pack approx. 1.0 sec/1pcs. (EYFB51B) approx. 300 pcs./pack approx. 1.0 sec/1pcs.			
Charging Time	[Battery Pack EYFB41B, Charger EY0L82B] Usable Charge: approx. 35min. Full Charge: approx. 40min [Battery Pack EYFB43B, Charger EY0L82B] Usable Charge: approx. 45min. Full Charge: approx. 60min									[Battery pack EYFB50B, Charger EY0L82B] Usable Charge: approx. 65 min Full Charge: approx. 80 min [Battery pack EYFB51B, Charger EY0L82B] Usable Charge: approx. 45 min Full Charge: approx. 60 min						

Features Comparison Chart

		Model																														
		AccuPulse 4.0 Transducerized						AccuPulse QP				AccuPulse HR						High Torque Mechanical Pulse				Precision Clutch										
		EYFMH1RC/1RP	EYFMH2RC/2RP	EYFMH1XC/1XP	EYFMH2XC/2XP	EYFNH1RP/EYFNH1RC	EYFNH1XP/EYFNH1XC	EYFLF1RA/EYFLF1RC/ EYFLF1RP	EYFLF2RA/EYFLF2RC/ EYFLF2RP	EYFLF1XA/EYFLF1XC/ EYFLF1XP	EYFLF2XA/EYFLF2XC/ EYFLF2XP	EYFLA7AR	EYFLA8AR/8CR/8PR	EYFLA9CR/9PR	EYFMA2CR/2PR	EYFLA7A	EYFLA8A/8C/8P	EYFLA9C/9P	EYFMA2C/2P	EYFNA1CRT/1JRT/1PRT	EYFPA1JRT	EYFNA1C/1J/1P	EYFPA1J	EYFGA1NR	EYFGA2NR	EYFGA3NR	EYFGA1N	EYFGA2N	EYFGA3N	EYFGB1N	EYFGB2N	EYFGB3N
Wireless Communication	OK • NOK Result	•	•			•		•	•			•	•	•	•					•	•			•	•	•						
	Torque Result	•	•			•																										
	Angle Result	•	•			•																										
	Fastening Curve	•	•			•																										
	Auto Parameter Change	•	•			•		•	•			•	•	•	•					•	•											
	Out-of-Range Disable Function	•	•			•		•	•			•	•	•	•					•	•			•	•	•						
	Wireless Communication	•	•			•		•	•			•	•	•	•					•	•			•	•	•						
Data Storage	OK • NOK Result	•	•	•	•	•	•																									
	Torque Result	•	•	•	•	•	•																									
	Angle Result	•	•	•	•	•	•																									
	Fastening Curve	•	•	•	•	•	•																									
Cross Thread Reduction	Soft Start	•	•	•	•	•	•	•	•	•																						
	180° Reverse							•	•	•	•																					
	360° Reverse	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Rundown Error Detection		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Retightening Prevention		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Disable Reverse		•	•	•	•	•	•																									
Variable Speed Control		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Snug Torque Detection Delay		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Angle Error Shut-off		•	•	•	•	•	•																									
Ignore Rundown Result Before Snug		•	•	•	•	•	•																									
Auto Downshift Function																							•	•	•	•	•	•	•	•		
Long Socket Mode		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Maintenance Interval Alarm		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		

* There are models limited to particular region.

* Variable speed control function: Models with "○" don't have ON/OFF setting.

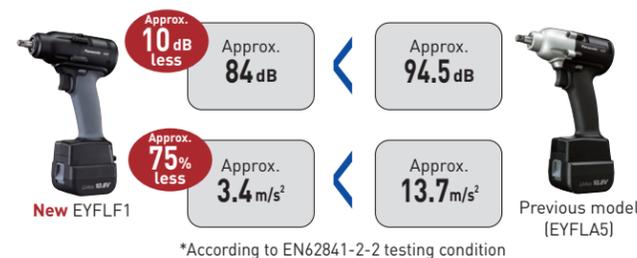


ACCUPULSE[®]
QP SERIES

Low Noise
Low Vibration

Features / Benefits

Lower noise and vibration for an improved working environment



Lower running cost, eco-friendly

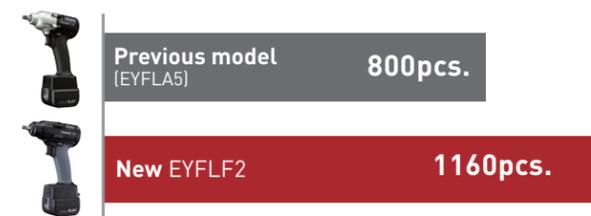


Increased productivity with continuous fastening capability



More work capacity per charge by improved mechanical pulse efficiency

Approx. 1.5 times more work capacity

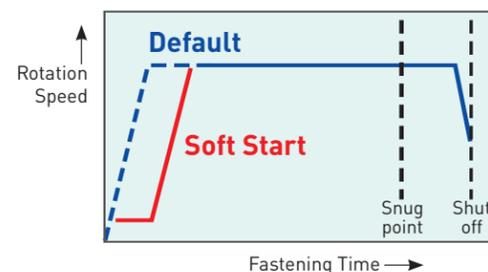


* According to Panasonic internal measurement condition with battery pack EYFB30, M8 and tightening torque 23 Nm

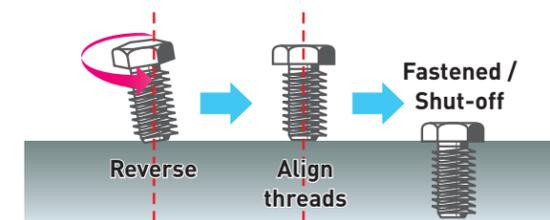
Advanced Fastening Features

Optional settings for preventing cross thread fastening

1 Soft Start 200rpm



2 Reverse Start 180° or 360°



AccuPulse QP Technology

Highly durable split anvil shaft provides reduction of vibration and pulse noise.

Conventional Anvil Shaft

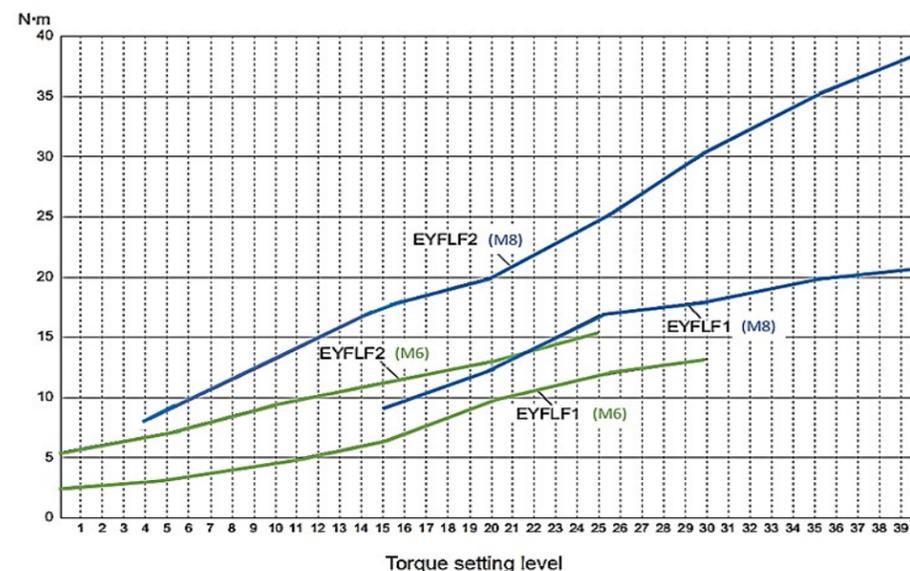
New Split Anvil Shaft
Split anvil absorbs and reduces vibration.

Split anvil shaft

Larger Drive Mechanism reduces pulse noise level and vibration due to lower pulse frequency.

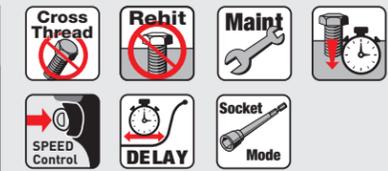
Conventional Pulse Tool
The force of one pulse is small and more pulses are required to complete a fastening.

New Low Noise Mechanical Pulse Mechanism
The force of one pulse is stronger and less pulses are required to complete fastening. The noises are lower in sound and less harsh.

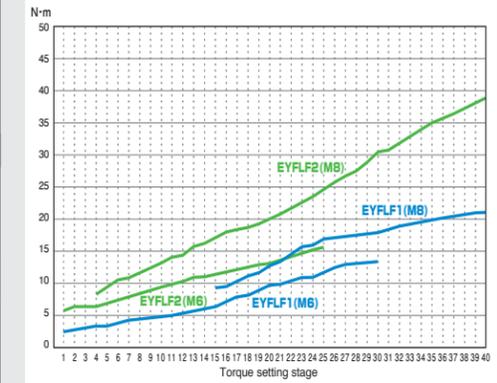


AccuPulse QP with 2-Way Communication					
Low Noise Wireless Communication					
*Battery pack is not included					
	EYFLF1RA	EYFLF1RC/RP	EYFLF2RA	EYFLF2RC/RP	
Drive Type	RA : 1/4" Hex quick change	RC : 3/8" Sq. drive Retainer ring and Pin-hole RP : 3/8" Sq. drive Pin-detent	RA : 1/4" Hex quick change	RC : 3/8" Sq. drive Retainer ring and Pin-hole RP : 3/8" Sq. drive Pin-detent	
Voltage	10.8V				
Application	Screw M5•M6 (Normal-Tensile bolt) M8 bolt (Normal bolt)		M6 bolt (Tensile bolt) M8 bolt (Normal-Tensile bolt)		
Maximum Torque (F mode, fastening 3 sec.)	30 Nm (M10 bolt)	40 Nm (M10 bolt)	70 Nm (M14 bolt)	100 Nm (M14 bolt)	
Torque Range	approx. 3-20 Nm		approx. 6-35 Nm		
Torque Range	Nm		6-35 Nm		
	ft. lbs		4.42-25.81 ft. lbs		
	in. lbs		5.1-309.8 in. lbs		
Torque Setting	40 stage + F (without torque setting mode)				
Snug Torque Detection Mode Setting	7 stages (L1 ~ L7)				
No Load Speed (unit : rpm)	stage1~4: 0~650 stage5~14: 0~950 stage15~19: 0~1200 stage20~40•F: 0~1800		stage1~3: 0~1450 stage4~40•F: 0~1800		
Pulses Per Minute	stage1~19: 0~1300 stage20~40•F: 0~1800		0~2250		
Weight	approx. 3.2 lbs (EYFB30B 3.0Ah) approx. 2.86 lbs (EYFB32B 2.0Ah)				
Size	Length	6.54"	6.57"	6.54"	
	Height	9.80" (EYFB30B), 9.09" (EYFB32B)			
	Width	approx. 2.32" (Width of battery pack: approx. 2.95")			
Vibration *According to EN62841-2-2 testing condition	2.6m/s ²	3.4m/s ²	4.2m/s ²	3.4m/s ²	
Function	Wireless Communication	IEEE 802.15.4 (Wireless Communication)			
	LED Light	ON/OFF switch, Light turns off after five minutes automatically			
	Tightening Confirmation Lamp	OK fastening: Green lamp, NOK fastening: Red lamp			
	Battery Indication Lamp	3 stages			
	Auto Battery Shutdown	✓			
	Soft Start	200 rpm or less			
	Cross Thread Reduction	180° or 360° reverse start			
	Tool Hanger (Optional)	✓			
Work Capacity / Fastening Speed	<M6: 10 Nm, Stage: 21> (EYFB30B) approx. 1290 pcs./pack approx. 0.8 sec/1pcs. (EYFB32B) approx. 780 pcs./pack approx. 0.8 sec/1pcs.	<M6: 10 Nm, Stage: 20> (EYFB30B) approx. 1630 pcs./pack approx. 0.7 sec/1pcs. (EYFB32B) approx. 840 pcs./pack approx. 0.7 sec/1pcs.	<M8: 23 Nm, Stage: 25> (EYFB30B) approx. 800 pcs./pack approx. 1.2 sec/1pcs. (EYFB32B) approx. 500 pcs./pack approx. 1.2 sec/1pcs.	<M8: 23 Nm, Stage: 20> (EYFB30B) approx. 1160 pcs./pack approx. 0.9 sec/1pcs. (EYFB32B) approx. 590 pcs./pack approx. 0.9 sec/1pcs.	
	(Battery pack EYFB30B, Charger EY0L82B) Usable charge: approx. 35 min Full charge: approx. 45 min (Battery Pack EYFB32B, Charger EY0L82B) Usable Charge: approx. 35 min Full Charge: approx. 40 min				

AccuPulse QP					
Low Noise					
*Battery pack is not included					
	EYFLF1XA	EYFLF1XC/XP	EYFLF2XA	EYFLF2XC/XP	
Drive Type	XA : 1/4" Hex quick change	XC : 3/8" Sq. drive Retainer ring and Pin-hole XP : 3/8" Sq. drive Pin-detent	XA : 1/4" Hex quick change	XC : 3/8" Sq. drive Retainer ring and Pin-hole XP : 3/8" Sq. drive Pin-detent	
Voltage	10.8V				
Application	Screw M5•M6 (Normal-Tensile bolt) M8 bolt (Normal bolt)		M6 bolt (Tensile bolt) M8 bolt (Normal-Tensile bolt)		
Maximum Torque (F mode, fastening 3 sec.)	30 Nm (M10 bolt)	40 Nm (M10 bolt)	70 Nm (M14 bolt)	100 Nm (M14 bolt)	
Torque Range	approx. 3-20 Nm		approx. 6-35 Nm		
Torque Range	Nm		6-35 Nm		
	ft. lbs		4.42-25.81 ft. lbs		
	in. lbs		5.1-309.8 in. lbs		
Torque Setting	40 stage + F (without torque setting mode)				
Snug Torque Detection Mode Setting	7 stages (L1 ~ L7)				
No Load Speed (unit : rpm)	stage1~4: 0~650 stage5~14: 0~950 stage15~19: 0~1200 stage20~40•F: 0~1800		stage1~3: 0~1450 stage4~40•F: 0~1800		
Pulses Per Minute	stage1~19: 0~1300 stage20~40•F: 0~1800		0~2250		
Weight	approx. 3.2 lbs (EYFB30B 3.0Ah) approx. 2.86 lbs (EYFB32B 2.0Ah)				
Size	Length	6.54"	6.57"	6.54"	
	Height	9.80" (EYFB30B), 9.09" (EYFB32B)			
	Width	approx. 2.32" (Width of battery pack: approx. 2.95")			
Vibration *According to EN62841-2-2 testing condition	2.6m/s ²	3.4m/s ²	4.2m/s ²	3.4m/s ²	
Function	Wireless Communication	-			
	LED Light	ON/OFF switch, Light turns off after five minutes automatically			
	Tightening Confirmation Lamp	OK fastening: Green lamp, NOK fastening: Red lamp			
	Battery Indication Lamp	3 stages			
	Auto Battery Shutdown	✓			
	Soft Start	200 rpm or less			
	Cross Thread Reduction	180° or 360° reverse start			
	Tool Hanger (Optional)	✓			
Work Capacity / Fastening Speed	<M6: 10 Nm, Stage: 21> (EYFB30B) approx. 1290 pcs./pack approx. 0.8 sec/1pcs. (EYFB32B) approx. 780 pcs./pack approx. 0.8 sec/1pcs.	<M6: 10 Nm, Stage: 20> (EYFB30B) approx. 1630 pcs./pack approx. 0.7 sec/1pcs. (EYFB32B) approx. 840 pcs./pack approx. 0.7 sec/1pcs.	<M8: 23 Nm, Stage: 25> (EYFB30B) approx. 800 pcs./pack approx. 1.2 sec/1pcs. (EYFB32B) approx. 500 pcs./pack approx. 1.2 sec/1pcs.	<M8: 23 Nm, Stage: 20> (EYFB30B) approx. 1160 pcs./pack approx. 0.9 sec/1pcs. (EYFB32B) approx. 590 pcs./pack approx. 0.9 sec/1pcs.	
	(Battery pack EYFB30B, Charger EY0L82B) Usable charge: approx. 35 min Full charge: approx. 45 min (Battery Pack EYFB32B, Charger EY0L82B) Usable Charge: approx. 35 min Full Charge: approx. 40 min				



Tightening Torque Chart (for Reference Use)



The values illustrated on this chart were measured under Panasonic measuring condition and are provided for reference purposes. Actual tightening torque varies with ambient conditions (the particular bolt being tightened, hardware being used, method of holding the bolt in place, etc.).



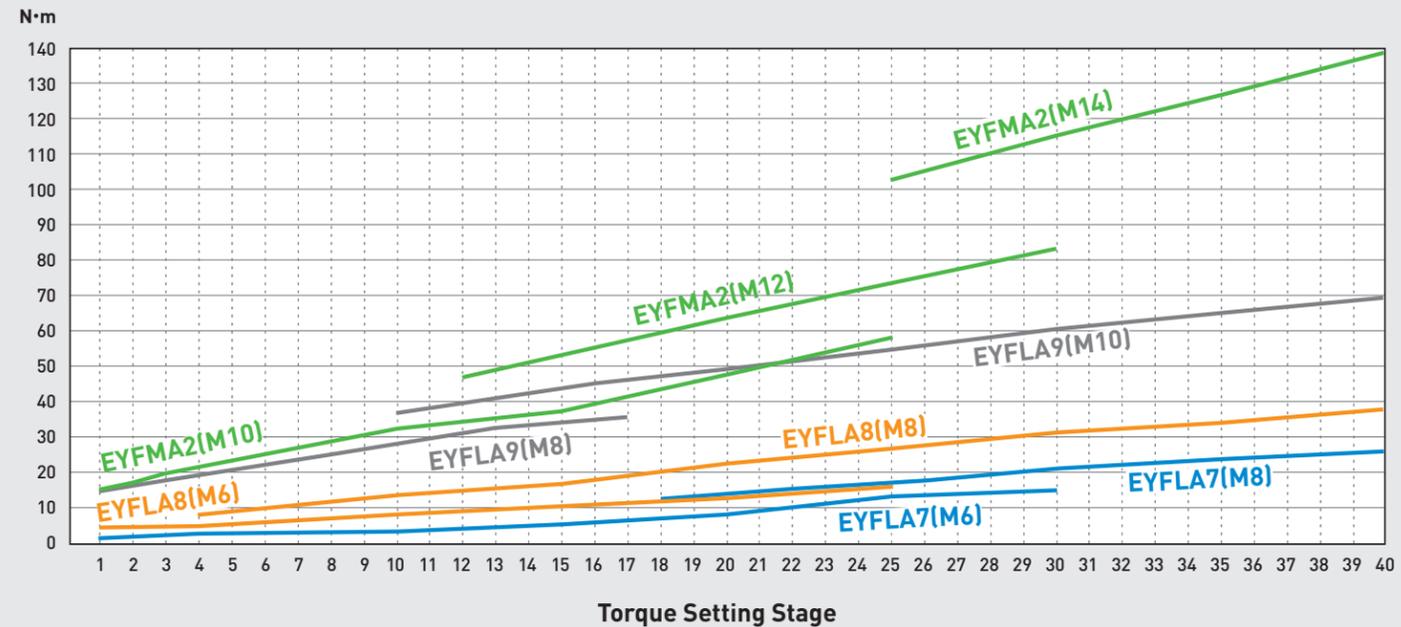
Advanced Features

	High Torque Mechanical Pulse				AccuPulse HR							
	EYNA1P/J/C	EYFPA1J	EYNA1PRT/JRT/CRT	EYFPA1JRT	EYFLA7A	EYFLA8A/P/C	EYFLA9P/C	EYFMA2P/C	EYFLA7AR	EYFLA8AR/PR/CR	EYFLA9PR/CR	EYFMA2PR/CR
2-Way Radio Communication			●	●					●	●	●	●
Cross Thread Reduction	●	●	●	●	●	●	●	●	●	●	●	●
Cross Thread /Rehit Detection	●	●	●	●	●	●	●	●	●	●	●	●
Retightening Prevention Function	●	●	●	●	●	●	●	●	●	●	●	●
Variable Speed Control Function	●	●	●	●	●	●	●	●	●	●	●	●
Maintenance Interval Alarm	●	●	●	●	●	●	●	●	●	●	●	●
Flush Detection Delay					●	●	●	●	●	●	●	●
Socket Extension Mode					●	●	●	●	●	●	●	●
Out-of-Range Disable Function			●	●					●	●	●	●

Some models limited to particular region.

Variable speed control function: Models with "O" don't have ON/OFF setting.

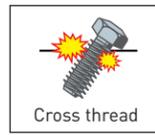
Tightening Torque Chart (for Reference Use)



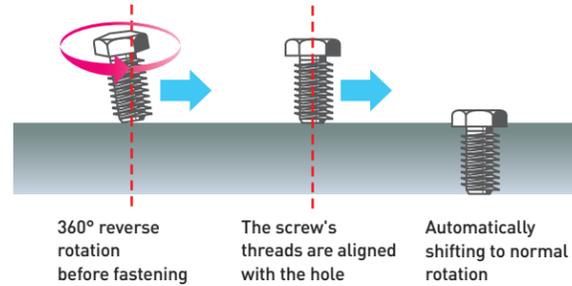
The values illustrated on this chart were measured under Panasonic measuring condition and are provided for reference purposes. Actual tightening torque varies with ambient conditions (the particular bolt being tightened, hardware being used, method of holding the bolt in place, etc.).

Advanced Programmable Features

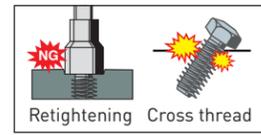
360° Cross Thread Reduction
The tool first reverses 360 degrees, aligning the threads, greatly reducing the possibility of cross threads.



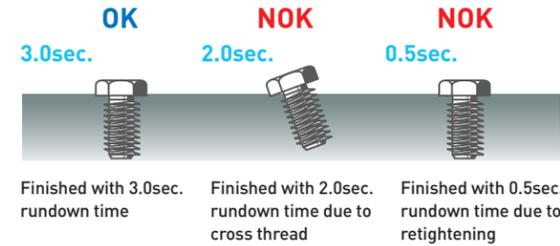
Reverse Rotation!



Retightening / Rehit Detection
If the shut-off is activated before the programmable minimum runtime, tool alerts the operator to a NOK fastening.



• Example with 3.0sec. normal time setting



Rehit Retightening Prevention Function
This function prevents the tool from operating within a selected time period after it automatically stops from the torque control function. The switch will not operate even if engaged during this time period.

Maint Maintenance Interval Alarm
When the total fastening times are within 10,000 of the preset maintenance interval, the display blinks notifying the operator. Once tool reaches the preset interval, tool is locked out from further use. This function can be set to ON or OFF and is defined in 10,000 increment cycles. (Number of settings: 0-990,000 pcs.)

Example - Rehit prevention is programmed to one second.

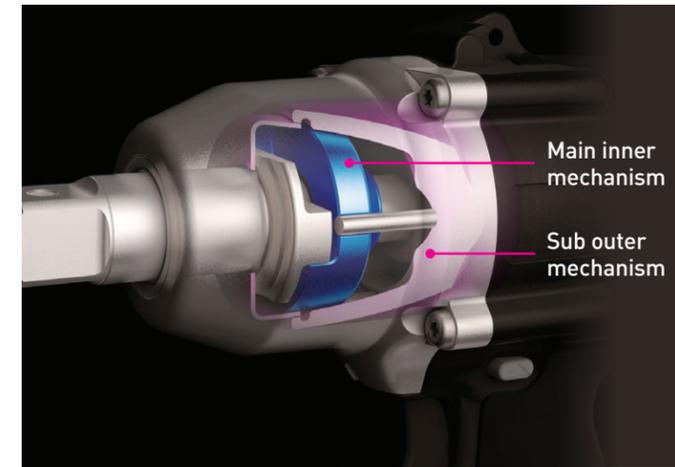


DELAY Flush Detection Delay
This feature delays Flush Torque Detection mode and ignores loads for a selected time period.

SE mode Socket Extension Mode
This feature adjusts tool's RPM during pulsing to improve accuracy when using an extension.

AccuPulse HR Technology

High-Efficiency, Double Mechanism Design*



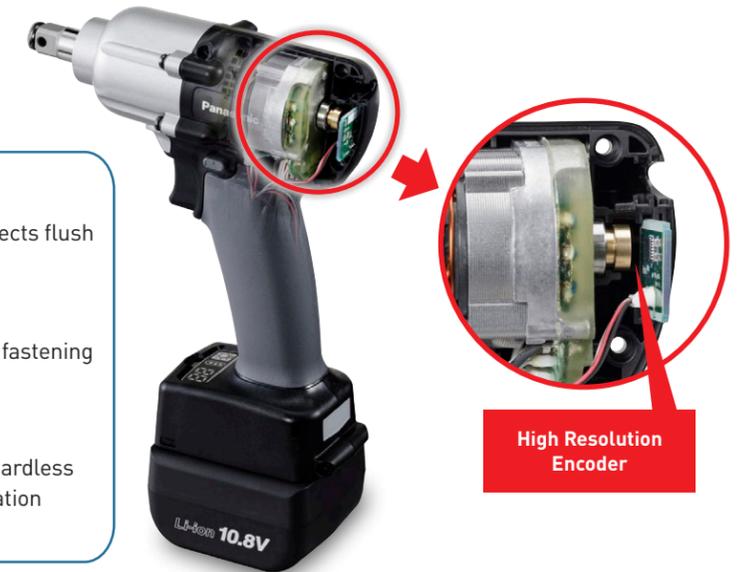
High efficiency twin mechanism design delivers high power while reducing tool size, noise, vibration for reduced operator fatigue



*Double Mechanism Design in EYFLA9/EYFMA2

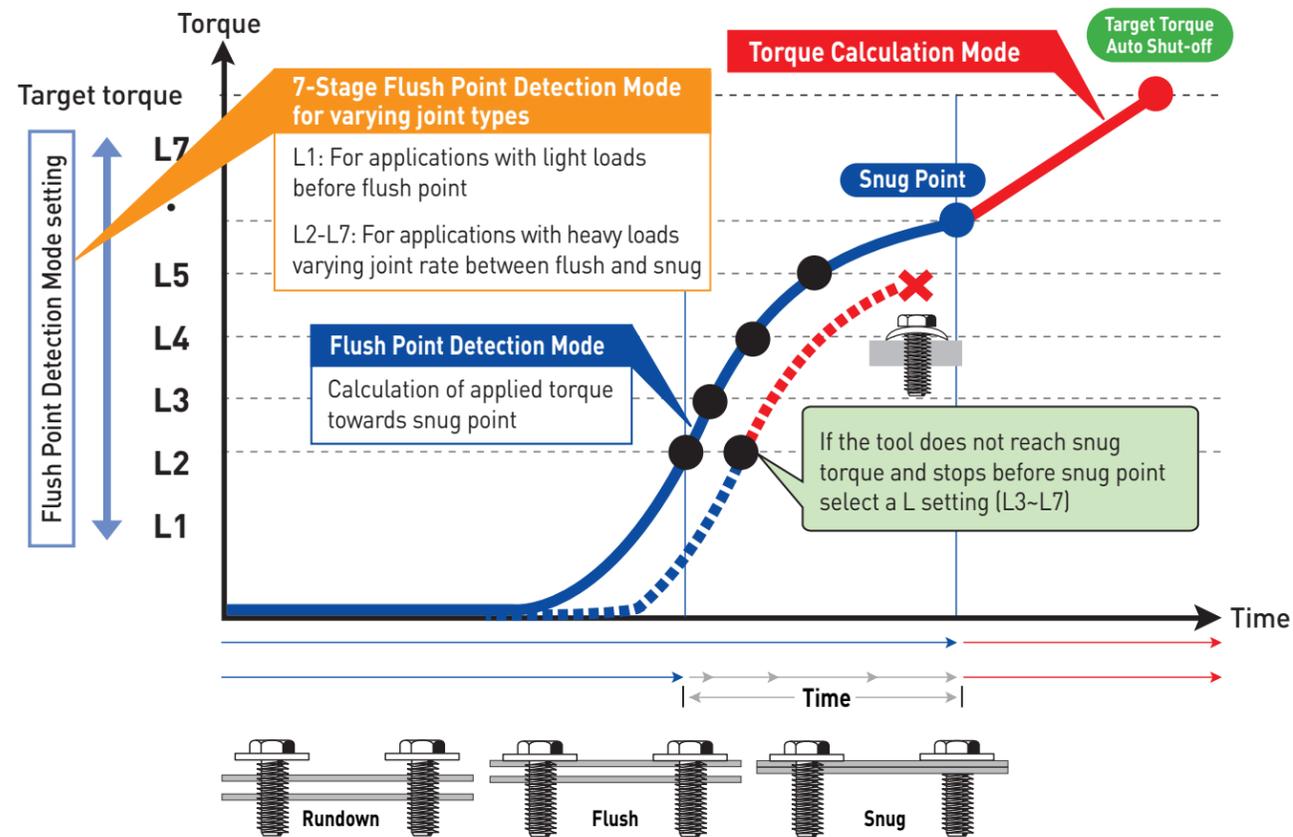
AccuPulse Advanced Technology

- 1 High Resolution Encoder**
Senses motor rotation angle precisely and detects flush point accurately.
- 2 7-Stage Snug Point Detection Mode**
L1-L7 Flush Point Detection enables accurate fastening on a variety of joints.
- 3 Consistent Pulse Control**
The power of each pulse is kept consistent regardless of remaining battery capacity, minimizing variation in torque.



AccuPulse HR & AccuPulse QP Technology

Improved soft joint performance



Flush Point: The point where the head of the fastener meets the material. Finger tight.

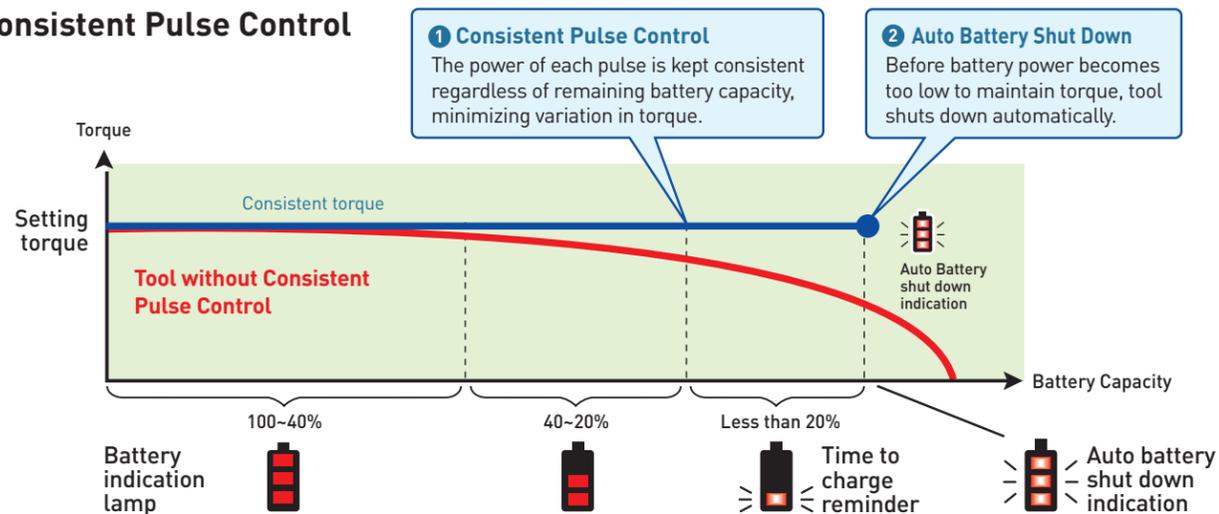
Snug Point: The point where materials are pulled together completely and torque calculation mode begins.

L1: Brittle plastic or hard joint, no prevailing torque. Parts are snug.

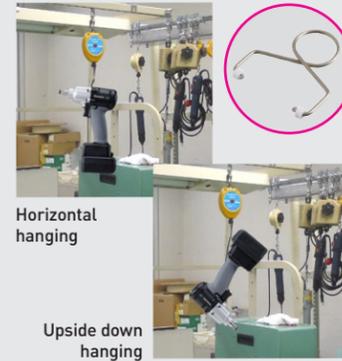
L2: Minor prevailing torque. Parts need to be pulled together.

L3-L7: Major pulling of parts together before snug. Obvious gaps in layers of material.

Consistent Pulse Control



More Features



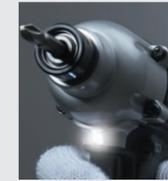
Tool Hanger
Tool can be hung on the balancer both right side up or upside down.



Tightening Confirmation Lamp
Green light indicates tightening is complete.



Needle Bearings
Needle bearings on the output shaft reduce vibration and increase tool life.



LED Light
For operation in dimly lit places.

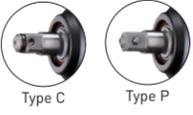


Remote Control
Tool setting can be set only by remote control.

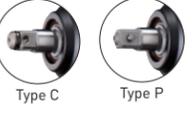


Color Plate for Differentiation
Each tool model is color coded for easy identification.



				
		EYFLA7AR	EYFLA8AR / EYFLA8CR / EYFLA8PR	EYFLA9CR / EYFLA9PR
Voltage		10.8V		
Series		AccuPulse - HR with 2-Way Communication		
Drive		A = 1/4" Hex Quick Change	A = 1/4" Hex Quick Change C = 3/8" Sq. C-Ring w/ through Hole P = 3/8" Sq. Pin Detent	C = 1/2" Sq. C-Ring w/ through Hole P = 1/2" Sq. Pin Detent
Torque Range	Nm	3-22Nm	6-30Nm	20-60Nm
	ft. lbs	2.2-16.2 ft. lbs	4.4-22 ft. lbs	14.75-44.25 ft. lbs
	in. lbs	26.55-194.72 in. lbs	53.1-265.52 in. lbs	177.01-531.04 in. lbs
Max Torque* (F mode, tightening 3 sec.)		35Nm M10 Bolt	80m M14 Bolt	120Nm M14 Bolt
Flush Detection Modes		L1 - L7		
No Load Speed (Torque Setting: RPM)		1: 0 - 950 2: 0 - 1250 3: 0 - 1450 4 - 8: 0 - 1550 9 - 40 & F: 0 - 2300	1: 0 - 1300 2: 0 - 1450 3: 0 - 1550 4 - 40 & F: 0 - 2300	1-40 & F: 0-2300
PPM (Pulses Per Min)		1: 0 - 1900 2: 0 - 2500 3: 0 - 2800 4-8: 0 - 3000 9-30 & F: 0 - 4000	1: 0-2500 2: 0-2800 3: 0-3000 4-30 & F: 0-3600	1-40 & F: 0-2800
Weight		2.53 lbs (incl. 2.0Ah [EYFB32B]) 2.86 lbs (incl. 3.0Ah [EYFB30B])	2.53 lbs (incl. 2.0Ah [EYFB32B]) 2.86 lbs (incl. 3.0Ah [EYFB30B])	2.53 lbs (incl. 2.0Ah [EYFB32B]) 2.86 lbs (incl. 3.0Ah [EYFB30B])
Size (L x W x H)		6-1/32" x 9-51/64" x 2-61/64" H=9-51/64" [EYFB30B] 9-3/32" [EYFB32B]	8A: 6-1/32" x 9-51/64" x 2-61/64" 8C: 6-3/8" x 9-51/64" x 2-61/64" H=9-51/64" [EYFB30B] 9-3/32" [EYFB32B]	6-49/64" x 9-27/64" x 2-61/64" H=9-27/64" [EYFB30B], 9-9/64" [EYFB32B]
2-Way Communication		IEEE 802.15.4 (Wireless Communication)		
LED Work Light: (ON/OFF Switch)		✓		
OK/NOK Light: (Green: OK / Red: NOK)		✓		
Rehit Prevention: (Possible to set per 0.1 sec. between 0-3 sec.)		✓		
Battery Indication Lamp: (3 stage)		✓		
Low Power Disable		✓		
Prevent / Detect Cross Threads & Rehits		✓		
Maintenance Interval Alarm		✓		
Variable Speed On / Off Switch		✓		
Buzzer: On / Off		✓		
Flush Point Detection Delay (Possible to set between 0-3 sec. 0.1 sec. per stage)		✓		
Socket Extension Mode (h1:150mm socket, h2: for 250mm socket)		✓		
Work Capacity / Fastening Speed*		<M6: 10 Nm, Stage: 22> [EYFB30B] 1200 pcs./pack 0.7 sec/1pcs. [EYFB32B] 800 pcs./pack 0.7 sec/1pcs.	<M8: 23 Nm, Stage: 22> [EYFB30B] 800pcs./pack 0.8sec/1pcs. [EYFB32B] 540 pcs./pack 0.8 sec/1pcs.	<M10: 43 Nm, Stage: 23> [EYFB30B] 400 pcs./pack, 0.8 sec/1pcs. [EYFB32B] 260 pcs./pack, 0.8 sec/1pcs.
Charging Time*		[Battery Pack EYFB30B, Charger EYOL82B] Usable charge: 35 min, Full charge: 45 min [Battery Pack EYFB32B, Charger EYOL82B] Usable Charge: 35 min, Full Charge: 40 min		

Note: *Approximately

						
		EYFMA2CR / EYFMA2PR	EYFLA7A	EYFLA8A / EYFLA8C / EYFLA8P	EYFLA9C / EYFLA9P	EYFMA2C / EYFMA2P
Voltage		14.4V	10.8V			14.4V
Series		AccuPulse - HR	AccuPulse - HR			
Drive		C = 1/2" Sq. C-Ring w/ through Hole P = 1/2" Sq. Pin Detent	A = 1/4" Hex Quick Change	A = 1/4" Hex Quick Change C = 3/8" Sq. C-Ring w/ through Hole P = 3/8" Sq. Pin Detent	C = 1/2" Sq. C-Ring w/ through Hole P = 1/2" Sq. Pin Detent	C = 1/2" Sq. C-Ring w/ through Hole P = 1/2" Sq. Pin Detent
Torque Range		25-120Nm 18.44-92.2 ft. lbs 221.27-1,106.34 in. lbs	3-22Nm 2.2-16.2 ft. lbs 26.55-194.72 in. lbs	6-30Nm 4.4-22 ft. lbs 53.1-265.52 in. lbs	20-60Nm 14.75-44.25 ft. lbs 177.01-531.04 in. lbs	25-120Nm 18.44-92.2 ft. lbs 221.27-1,106.34 in. lbs
Max Torque*		185Nm M16 Bolt	35Nm M10 Bolt	80m M14 Bolt	120Nm M14 Bolt	185Nm M16 Bolt
Flush Detection Modes		L1 - L7				
No Load Speed (Torque Setting: RPM)		1-40 & F: 0-2300	1: 0 - 950 2: 0 - 1250 3: 0 - 1450 4 - 8: 0 - 1550 9 - 40 & F: 0 - 2300	1: 0 - 1300 2: 0 - 1450 3: 0 - 1550 4 - 40 & F: 0 - 2300	1-40 & F: 0-2300	1-40 & F: 0-2300
PPM (Pulses Per Min)		1-40 & F: 0-2900	1: 0 - 1900 2: 0 - 2500 3: 0 - 2800 4-8: 0 - 3000 9-30 & F: 0 - 4000	1: 0-2500 2: 0-2800 3: 0-3000 4-30 & F: 0-3600	1-40 & F: 0-2800	1-40 & F: 0-2900
Weight		3.08 lbs (incl. 2.0Ah [EYFB41B]) 3.52 lbs (incl. 4.0Ah [EYFB43B])	2.53 lbs (incl. 2.0Ah [EYFB32B]) 2.86 lbs (incl. 3.0Ah [EYFB30B])	2.53 lbs (incl. 2.0Ah [EYFB32B]) 2.86 lbs (incl. 3.0Ah [EYFB30B])	2.53 lbs (incl. 2.0Ah [EYFB32B]) 2.86 lbs (incl. 3.0Ah [EYFB30B])	3.08 lbs (incl. 2.0Ah [EYFB41B]) 3.52 lbs (incl. 4.0Ah [EYFB43B])
Size (L x W x H)		6-49/64" x 9-27/64" x 2-61/64" H=9-27/64" [EYFB43B], 9-9/64" [EYFB41B]	6-1/32" x 9-51/64" x 2-61/64" H=9-51/64" [EYFB30B] 9-3/32" [EYFB32B]	8A: 6-1/32" x 9-51/64" x 2-61/64" 8C: 6-3/8" x 9-51/64" x 2-61/64" H=9-51/64" [EYFB30B] 9-3/32" [EYFB32B]	6-49/64" x 9-27/64" x 2-61/64" H=9-27/64" [EYFB30B], 9-9/64" [EYFB32B]	6-49/64" x 9-27/64" x 2-61/64" H=9-27/64" [EYFB43B], 9-9/64" [EYFB41B]
2-Way Communication		-				
LED Work Light: (ON/OFF Switch)		✓				
OK/NOK Light: (Green: OK / Red: NOK)		✓				
Rehit Prevention: (Possible to set per 0.1 sec. between 0-3 sec.)		✓				
Battery Indication Lamp: (3 stage)		✓				
Low Power Disable		✓				
Prevent / Detect Cross Threads & Rehits		✓				
Maintenance Interval Alarm		✓				
Variable Speed On / Off Switch		✓				
Buzzer: On / Off		✓				
Flush Point Detection Delay (Possible to set between 0-3 sec. 0.1 sec. per stage)		✓				
Socket Extension Mode (h1:150mm socket, h2: for 250mm socket)		✓				
Work Capacity / Fastening Speed*		<M12: 71 Nm, Stage: 22> [EYFB43B] 510 pcs./pack, 0.8 sec/1pcs. [EYFB41B] 270 pcs./pack, 0.8 sec/1pcs.	<M6: 10 Nm, Stage: 22> [EYFB30B] 1200 pcs./pack 0.7 sec/1pcs. [EYFB32B] 800 pcs./pack 0.7 sec/1pcs.	<M8: 23 Nm, Stage: 22> [EYFB30B] 800pcs./pack 0.8sec/1pcs. [EYFB32B] 540 pcs./pack 0.8 sec/1pcs.	<M10: 43 Nm, Stage: 23> [EYFB30B] 400 pcs./pack, 0.8 sec/1pcs. [EYFB32B] 260 pcs./pack, 0.8 sec/1pcs.	<M12: 71 Nm, Stage: 22> [EYFB43B] 510 pcs./pack, 0.8 sec/1pcs. [EYFB41B] 270 pcs./pack, 0.8 sec/1pcs.
Charging Time*		[Battery Pack EYFB41B, Charger EYOL82B] Usable Charge: 35min, Full Charge: 40min [Battery Pack EYFB43B, Charger EYOL82B] Usable Charge: 45min, Full Charge: 60min	[Battery Pack EYFB30B, Charger EYOL82B] Usable charge: 35 min, Full charge: 45 min [Battery Pack EYFB32B, Charger EYOL82B] Usable Charge: 35 min, Full Charge: 40 min		[Battery Pack EYFB41B, Charger EYOL82B] Usable Charge: 35min, Full Charge: 40min [Battery Pack EYFB43B, Charger EYOL82B] Usable Charge: 45min, Full Charge: 60min	

High Torque Mechanical Pulse Tools



2-Way Communication

2-WAY COMMUNICATION



EYFR02-1
EYFR02-2



EYFR03



EYFR04

High Torque Cordless Mechanical Pulse Tools

Virtually No Torque Reaction

- M16 Bolt up to 400Nm
- M24 Bolt up to 650Nm



21.6V EYFPA

Torque controlled range
160~**650Nm**

Lightweight
approx. **7.7 lbs**

High capacity
4.0Ah

18V EYFNA

Torque controlled range
70~**200Nm**

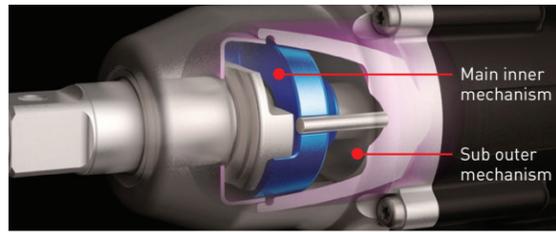
Lightweight
approx. **6.6 lbs**

High capacity
5.0Ah

Advanced Technologies Delivering a Compact, Lightweight Tool with High Torque

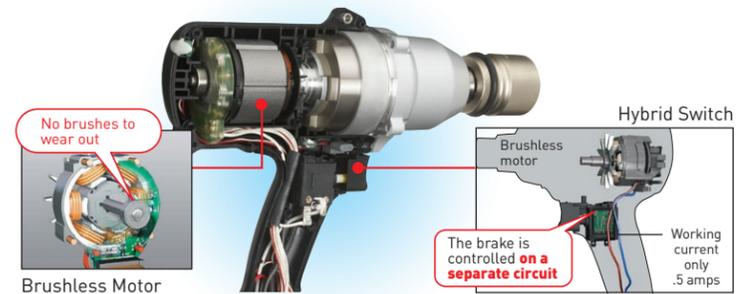
High Efficiency Twin Pulse

New high efficiency twin hammer design delivers high power while reducing tool size, noise, vibration for reduced operator fatigue.



Compact, High-Powered Brushless Motor

Compact and high-power brushless motor accomplishes heavy load applications.



*Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints.

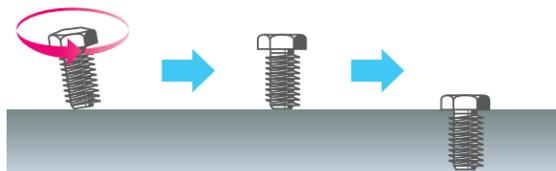
Advanced Fastening Features

Cross Thread Reduction

The tool first reverses 360 degrees, aligning the threads, greatly reducing the possibility of cross threads.



Reverse Rotation!



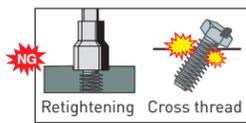
360° reverse rotation before fastening The screw's threads are aligned with hole Automatically shifting to normal rotation

Maintenance Interval Alarm

When the fastenings are within 10,000 fastenings of the preset maintenance interval, the display blinks notifying the operator. Once tool reaches the preset interval, the tool is locked out from further use. This function can be set ON or OFF and is defined in 10,000 increment cycles. (Number of setting: 0-990,000 pcs.)

Cross Thread / Rehit Detection

If shut-off is activated before the programmable minimum runtime, the tool alerts the operator to a NOK fastening. (Time setting: 0.1-3.0sec, 0.1sec per stage)



•Example with 3.0sec. normal time setting



Auto Battery Shut Down

Before battery power becomes too low to maintain torque, tool automatically shuts down. Blinking LED notifies operator until a charged battery is attached.

Speed Control Function

Speed can be controlled from trigger. Speed control function ON and OFF can be selected by remote.

Additional Features



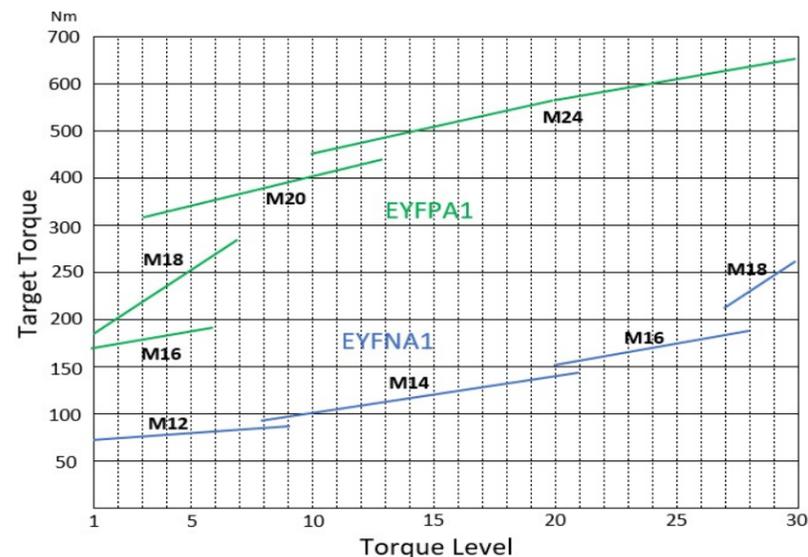
LED Light

Program LED to turn on with trigger switch or ON/OFF switch to match operator preference



Tightening Confirmation Lamp

OK/NOK both visual and audible indicators. Buzzer ON/OFF can be selected.



High Torque Mechanical Pulse Tool



		EYFNA1CRT/EYFNA1JRT/ EYFNA1PRT	EYFNA1C/EYFNA1J/ EYFNA1P	EYFPA1JRT	EYFPA1J
Voltage		18V		21.6V	
Drive		C = 1/2" Square Drive with Ring Retainer and Through Hole J = 1/2" Square Drive with Through Hole P = 1/2" Square Drive Pin Detent		J = 3/4" Sq. Through Hole	
Torque Range	Nm	70-200Nm		160-650Nm	
	ft. lbs	51.6-147.5 ft. lbs		118-479.4 ft. lbs	
Max Torque* (F mode, tightening 3 sec.)		Approx. 470Nm M24 Bolt		Approx. 700Nm M24 Bolt	
Flush Detection Modes		L1-L2			
No Load Speed (Torque Setting: RPM)		1-30 & F: 0-1900			
PPM (Pulses Per min)		1-30 & F: 0-2200			
Weight		6.6 lbs (incl. 5.0Ah (EYFB50B))		7.7 lbs (incl. 4.0Ah (EYFB61B))	
Size (L x W x H)		9-11/64" x 11-1/4" x 3-1/32"		9-27/32" x 11-5/8" x 2-61/64"	
2-Way Communication		IEEE 802.15.4 (Wireless Communication)	—	IEEE 802.15.4 (Wireless Communication)	—
LED Work Light: (ON/OFF Switch)		✓			
OK/NOK Light: (Green: OK / Red: NOK)		✓			
Rehit Prevention: (Possible to set per 0.1 sec. between 0-3 sec.)		✓			
Battery Indication Lamp: (3 stage)		✓			
Low Power Disable		✓			
Prevent / Detect Cross Threads & Rehits		✓			
Maintenance Interval Alarm		✓			
Variable Speed On / Off Switch		✓			
Buzzer: On / Off		✓			
Work Capacity / Fastening Speed*		Battery Pack: EYFB50B 5.0 Ah M12: 100 Nm, Stage: 13 approx.500pcs./pack		Battery Pack: EYFB61B M16: 180 Nm, Stage: 6 approx.450pcs./pack	
Charging Time		(Battery pack EYFB50B, Charger EYOL82B) Usable Charge: approx. 65 min Full Charge: approx. 80 min		(Battery pack EYFB61B, Charger EYOL82B) Usable Charge: approx. 65 min Full Charge: approx. 85 min	

Note: *Approximately

Assembly Tool Accessories

Batteries & Chargers



EY9L20B
7.2V 1.5Ah Li-ion
Battery Pack



EYFB30B
10.8V 3.0Ah Li-ion
Battery Pack



EYFB32B
10.8V 2.0Ah Li-ion
Battery Pack



EYFB41B
14.4V 2.0Ah Li-ion
Battery Pack



EYFB43B
14.4V 4.0Ah Li-ion
Battery Pack



EYFB50B
18V 5.0Ah Li-ion
Battery Pack



EYFB51B
18V 3.0Ah Li-ion
Battery Pack



EYFB61B
21.6V 4.0Ah Li-ion
Battery Pack



EY0L20B
7.2V Charger



EY0L82B
10.8V - 28.8V Charger

Protector Covers



EYFA02-H
Battery Protector
for EYFB30B



EYFA03-H
Battery Protector
for EYFB32B



EYFA04-H
Battery Protector for
EYFB42B/EYFB43B



EYFA06-H
Battery Protector
for EYFB41B



EYFA10-H
Battery Protector
for EYFB50B



EYFA11-H
Battery Protector
for EYFB51B



EYFA08-H
Battery Protector
for EYFB61B



EYFA05
EYFG Tool Protectors
-A (blue) -Y (yellow)
-H (gray)



EYFA13
EYFLA7/8/9, EYFMA2 Tool Protectors
-A (blue), -Y (yellow)
-H (gray), -D (orange) -G (green)



EYFA15
EYFLF Tool Protectors
-A (blue) -Y (yellow)
-H (gray) -D (orange) -G (green)



EYFA14
EYFMH Tool Protectors
-A (blue) -Y (yellow)
-H (gray) -D (orange) -G (green)



EYFA09
EYFNA Tool Protectors
-A (blue) -Y (yellow)
-H (gray) -G (green)



EYFA07
EYFNP Tool Protectors
-A (blue) -Y (yellow)
-H (gray) -G (green)



EYFA16
EYFNH1 Tool Protectors
-A (blue) -Y (yellow) -H (gray)
-D (orange) -G (green)

Accessories



EYFA32B
Clutch Adjustment
Tool for EYFG



EYFA40B
Tool Hanger for
EYFMH & EYFG,
and EYFLF



EYFLM-H
EYFL/EYFM
Tool Hanger



EYFA41B
EYFN/EYFP/
EYNH1 Tool Hanger



WEYFEA1N3137
Clutch Lock Out
Cover for EYFEA1N



EYFA31B
Remote Control for
all EYFG/EYFL/EYFM/EYFN/
EYFP/ EYFLF to EYFA31B

Panasonic Quality Control Monitoring

With highly efficient tools and controllers, Panasonic offers a reliable quality control system.



Comparison of Assembly Controllers

					
MODEL	EYFR02-1	EYFR02-2	EYFR03A	EYFR03B	EYFR04A
Graphics Display	—	—	—	✓	—
Multiple Stations	—	—	—	—	✓
Number of Tools Connectivity	1 (Option to upgrade to 2 tools with additional fee)	2	—	16	—
Number of Tools Simultaneously	1 (Option to upgrade to 2 tools with additional fee)	2	—	16	4
1-Way Radio Communication	—	—	✓	—	—
2-Way Radio Communication	—	—	✓	—	—
Discrete Inputs/Outputs	2/4	—	8/12	—	8/12
USB Outputs	—	—	1	—	—
Ethernet Ports	1	—	—	2	—
Serial Ports	—	—	—	1	—
Remote Inputs/Outputs Connection	—	—	—	✓	—
PLC Integration	—	✓	—	*With Remote I/O Box	✓
Data Collection	2,500 rundowns onboard or via Ethernet	—	10,000 rundowns onboard or via Ethernet	—	5,000 rundowns per station onboard or via Ethernet
Batch Counting	—	*With PLC	—	✓	—
Tool Sequencing	—	—	✓	—	—
Bar Code Scan Capability	—	—	✓	—	—
Remote Tool Disable	—	—	✓	—	—
Out of Range Disable / Anti-Theft	—	—	✓	—	—
Recommended Range	—	—	33' (10M)	—	—
Rated Supply Voltage	—	—	AC 100-240V, 50/60 Hz	—	—
I/O Voltage	—	—	2A @ 24V	—	—
Dimensions (L x H x W)	9-1/16" x 14-1/8" x 3-1/2"	—	10-1/4" x 10-3/4" x 4-1/4"	—	—
Operating Temperature Range	—	—	14-140°F (-10-60°C)	—	—
Compatible Tools	EYFGA1NR, EYFGA2NR, EYFGA3NR, EYFNA1CR, EYFNA1CRT, EYFNA1JR, EYFNA1JRT, EYFNA1PR, EYFNA1PRT, EYFPA1JR, EYFPA1JRT, EYFLA7AR, EYFLA8AR, EYFLA8CR, EYFLA8PR, EYFLA9CR, EYFLA9PR, EYFMA2CR, EYFMA2PR, EYFM1RC, EYFMH1RP, EYFMH2RC, EYFMH2RP, EYFLF1RA, EYFLF1RC, EYFLF1RP, EYFLF2RA, EYFLF2RC, EYFLF2RP, EYFNH1RC, EYFNH1RP				

Communication range varies with operating environment. The presence of metal walls, people or other objects may result in decreased range. Software available for download for EYFR02B and EYFR03 models.

EYFR02-1

Single-Tool Assembly Controller

OK/NOK light on the tool housing flashes green/red to indicate the completion of each fastener.

Green light Indicates a successful fastening

Red light indicates unsuccessful fastening

- ✓ Ethernet/IP
- ✓ Digital I/O
- ✓ Open Protocol
- ✓ ToolsNet

To see all of the features refer to 2-Way Communication Settings on page 52

Option to upgrade to 2 tools with additional fee

EYFR02-2

Two-Tool Assembly Controller

OK/NOK light on the tool housing flashes green/red to indicate the completion of each fastener.

Green light Indicates a successful fastening

Red light indicates unsuccessful fastening

- ✓ Ethernet/IP
- ✓ Digital I/O
- ✓ Open Protocol
- ✓ ToolsNet

To see all of the features refer to 2-Way Communication Settings on page 52

EYFR03A/B

Multi-Tool Assembly Controller

OK/NOK light on the tool flashes green/red to indicate the completion of each fastener.

Stores up to 10,000 fastenings

- ✓ Open Protocol
- ✓ ToolsNet
- ✓ Profinet
- ✓ Ethernet/IP
- ✓ Digital I/O
- ✓ PFCS
- ✓ Toyota
- ✓ Serial Open Protocol

Discrete I/O to PLC

Remote I/O

Utilizing I/O or fieldbus capabilities improves quality and productivity

2-Way Compatible Tools - AccuPulse 4.0, AccuPulse HR 2-Way and High Torque Mechanical Pulse 2-Way

EYFR04A

Multi-Station Assembly Controller

2-WAY COMMUNICATION

OK/NOK light on tool flashes green/red to indicate completion of each fastener.

Stores up to 5,000 fastenings per station

4 Interfaces
Multi-Station feature allows use of 1 controller over 4 stations to configure 16 tools in any combination.

Discrete I/O to PLC

Remote I/O

- ✓ Open Protocol
- ✓ ToolsNet
- ✓ Profinet
- ✓ Ethernet/IP
- ✓ Digital I/O
- ✓ PFCS
- ✓ Toyota
- ✓ Serial Open Protocol

Programming Modes
Parameters - Run one tool at a time
Jobs - Allows parameters to run in a specified order.

Process Control
Utilizing I/O or fieldbus capabilities improves quality and productivity

2-Way Compatible Tools - AccuPulse 4.0, AccuPulse HR 2-Way and High Torque Mechanical Pulse 2-Way

2-way Communication Settings

- Create fastening strategies by automatically changing tool settings.
- Tools settings can be controlled both via remote or controller.
- Compatible with parameter, group and job modes.
- Tools OK/NOK blinks to notify user of active tools in sequence



Features that can be set/sent from Controller or sent by the Tool

- OK/NOK
- Torque setting stage (1-40)
- Flush detection setting (L1-L7)
- Buzzer setting
- Flush detection delay
- LED light setting
- Rundown error detecting
- Variable speed control
- Reset settings
- Maintenance interval alarm
- Out of range disable function
- Cross thread reduction
- Retightening prevention
- Long socket mode
- Enable/Disable



Parameter settings sent from Controller

- Shut-off torque
- Torque limits
- Offset settings
- Angle Limits
- Shut-off by angle error
- Snug point detection
- No load speed
- Rundown error detection
- Retightening prevention
- Soft start upshift
- Snug torque detection delay
- Long socket mode
- Shut-off pulse count
- Graphic sending - ON/OFF
- Enable/Disable



Result Data Received

- Product ID (Serial number)
- Work ID
- Timestamp
- Parameter ID
- OK/NOK
- Shut-off torque
- Target torque
- Torque limit
- Angle
- Angle limit
- Offset
- Number of pulses
- Working time
- Battery capacity at the start of work
- Reason for abnormal stop
- Rundown graph

Controller Features

Tool Distance

A highly reliable data signal can be transmitted if tool is within 10m (33 feet) of the assembly controller and if there are no barriers between tool and controller.



Out-of-Range Anti-Theft Function

In the event that wireless communication cannot be completed between tool and controller, tool will be disabled and cannot be operated. Operation of this function is set on tool body with remote control.



Enable/Disable Tools

Tools can be locked out to prevent use after batch is completed and/or when not in use. Tools can be enabled again when needed.

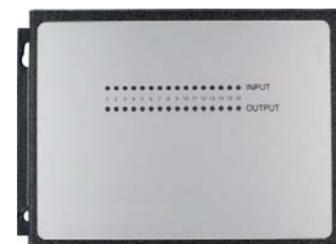


PROGRAMMING SPECIFICATIONS

Model	Parameter Mode	Group Mode	Job Mode	Interface Mode
EYFR02-1	5	-	-	-
EYFR02-2	10 (5 Per Tool)	-	Select up to 2 tools/groups to run in a sequence.	-
EYFR03A/B	100	Select up to 4 tools to run simultaneously.	Select up to 16 tools/groups to run in a sequence.	-
EYFR04A	40 (Per interface)	-	Run up to 4 jobs simultaneously with up to 16 tools.	Select up to 4 interfaces

EYFEXP16

I/O Expansion Module



- Expansion module for EYFR03 & EYFR04 provides discrete I/O functions
- 16 user-assignable inputs and outputs with a single common reference point
- Up to four EYFEXP16 modules may be chained from a single EYFR03 & EYFR04 if additional inputs or outputs are needed
- Display shows status of inputs and outputs for the module or an error code if module has detected a communications error
- Includes Expansion Cable
- Compact size (L x H x W): 9" x 5 1/2" x 2 1/2"
- Weight: 2.5 lbs

EYFRZ02CA

I/O Cable for EYFR02B Assembly Controllers - 25 ft.



EYFR03CA

I/O Cable for EYFR03/EYFR04A Assembly Controllers (Discrete I/O) - 25 ft.



EYFR-SPL4

4 Way Serial Barcode Splitter for EYFR04 Controller Hook up to 4 Barcode scanners with Serial Communication
Developed and tested for the Symbol LS2208 barcode scanner



Standard / Optional Accessory Chart

- STANDARD
- OPTIONAL

		CLUTCH											ACCUPULSE HR											HIGH TORQUE														
		7.2V		14.4V									10.8V							14.4V				18V					21.6V									
		EYFEA1N	EYFEA1N2S	EYFEA1N	EYFEA1N2S	EYFGA2N	EYFGA2NR	EYFGA3N	EYFGA3NR	EYFGB1N	EYFGB2N	EYFGB3N	EYFLA7A	EYFLA7AR	EYFLA8A	EYFLA8AR	EYFLA8C	EYFLA8CR	EYFLA8P	EYFLA8PR	EYFLA9C	EYFLA9CR	EYFLA9P	EYFLA9PR	EYFMA2C	EYFMA2CR	EYFMA2P	EYFMA2PR	EYFNA1C	EYFNA1CRT	EYFNA1J	EYFNA1JRT	EYFNA1P	EYFNA1PRT	EYFPA1J	EYFPA1JRT		
BATTERY PACKS																																						
7.2V 1.5Ah Li-ion Battery Pack	EY9L20B	○	●																																			
10.8V 2.0Ah Li-ion Battery Pack	EYFB32B														○	○	○																					
10.8V 3.0Ah Li-ion Battery Pack	EYFB30B														○	○	○																					
14.4V 2.0Ah Li-ion Battery Pack	EYFB41B			○	○	○	○	○	○	○	○													○	○	○	○											
14.4V 4.2Ah Li-ion Battery Pack	EYFB42B			○	○	○	○	○	○	○	○													○	○	○	○											
14.4V 4.0Ah Li-ion Battery Pack	EYFB43B			○	○	○	○	○	○	○	○													○	○	○	○											
18V 3.0Ah Li-ion Battery Pack	EYFB51B																											○	○	○	○	○	○					
18V 5.0Ah Li-ion Battery Pack	EYFB50B																											○	○	○	○	○	○					
21.6V 4.0Ah Li-ion Battery Pack	EYFB61B																																	○	○			
CHARGERS																																						
Charger for Panasonic Li-ion Battery 7.2V	EY0L20B	○	●																																			
Charger for Panasonic Li-ion Batteries 10.8V - 21.6V	EY0L82B			○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
CONTROLLERS																																						
Single-Tool Controller	EYFR02-1				○	○	○	○	○	○	○				○									○														
Two-Tool Controller	EYFR02-2				○	○	○	○	○	○	○				○									○														
Multi-Tool Controller	EYFR03A				○	○	○	○	○	○	○				○									○														
Multi-Tool Controller	EYFR03B				○	○	○	○	○	○	○				○									○														
Multi-Station Controller	EYFR04A				○	○	○	○	○	○	○				○									○														
TOOL COVERS																																						
Protector for EYFB30B Battery - Gray	EYFA02-H														○	○	○																					
Protector for EYFB32B Battery - Gray	EYFA03-H														○	○	○																					
Protector for EYFB43B Battery - Gray	EYFA04-H			○	○	○	○	○	○	○	○													○	○	○	○											
Protector for EYFB41B Battery - Gray	EYFA06-H			○	○	○	○	○	○	○	○													○	○	○	○											
Protector for EYFB50B Battery - Gray	EYFA10-H																											○	○	○	○	○	○					
Protector for EYFB51B Battery - Gray	EYFA11-H																											○	○	○	○	○	○					
Protector for EYFB61B Battery - Gray	EYFA08-H																																		○	○		
Protector for EYFGA	EYFA05- A, Y, H			○	○	○	○	○	○	○	○																											
Protector for EYFLA7/8/9 & EYFMA2	EYFA13- A, Y, H, D, G														○	○	○																					
Protector for EYFNA 18V	EYFA09- A, Y, H, G																																					
Protector for EYFPA 21.6V	EYFA07- A, Y, H, G																																		○	○		
ACCESSORIES																																						
Clutch Adjustment Tool for EYFGA Clutch Tools	EYFA32B			●	●	●	●	●	●	●	●																											
Clutch Lock Out Cover EYFEA1N	WEYFEA1N3137	●	●																																			
Remote Control for all EYFLA, EYFMA, EYFNA, EYFPA, EYFGA, EYFLF	EYFA31B			○	○	○	○	○	○	○	○				○	○	○							○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Tool Hanger for AccuPulse 4.0 (EYFMH), AccuPulse QP (EYFLF), Clutch (EYFG)	EYFA40B			○	○	○	○	○	○	○	○																											
Tool Hanger for High Torque Mechanical Pulse (EYFNA & EYFPA)	EYFA41B																											○	○	○	○	○	○	○	○	○	○	
Tool Hanger for AccuPulse HR (EYFLA & EYFMA)	EYFLM-H														○	○	○																					

A - Blue, Y - Yellow, H - Gray, G - Green, D - Orange

Battery Pack/Battery Charger – Compatibility Chart

BATTERY	TOOL	VOLTAGE	AMP HOUR	CHARGING TIMES USABLE : FULL CHARGE	CHARGER
EY9L20B	EYFEA1N, EY7420	7.2V	1.5Ah	35 min : 60 min	EY0L20B
EYFB30B	AccuPulse HR (FLA7/8/9), AccuPulse QP (FLF1/2)	10.8V	3.0Ah	35 min : 45 min	EY0L82B
EYFB32B	AccuPulse HR (FLA7/8/9), AccuPulse QP (FLF1/2)	10.8V	2.0Ah	35 min : 40 min	
EYFB41B	AccuPulse 4.0 (MH1/2), AccuPulse HR (MA2), Clutch	14.4V	2.0Ah	35 min : 40 min	
EYFB43B	AccuPulse 4.0 (MH1/2), AccuPulse HR (MA2), Clutch	14.4V	4.0Ah	50 min : 60 min	
EYFB50B	AccuPulse 4.0 HT (NH1), High Torque (NA1)	18V	5.0Ah	65 min : 80 min	
EYFB51B	AccuPulse 4.0 HT (NH1), High Torque (NA1)	18V	3.0Ah		
EYFB61B	High Torque (PA1)	21.6V	4.0Ah	65 min : 85 min	

Discontinued Models

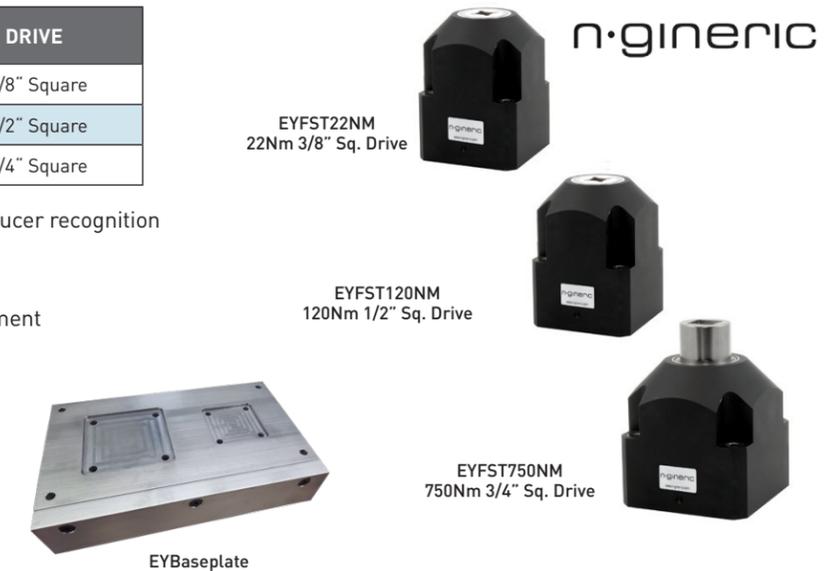
Discontinued Model Numbers	Torque Range [Nm]	Replaced By	New Torque Range [Nm]
EYFLA4A	3-22	EYFLA7A	3-22
EYFLA4AR	3-22	EYFLA7AR	3-22
EYFLA5A	6-30	EYFLA8A	6-30
EYFLA5AR	6-30	EYFLA8AR	6-30
EYFLA5P	6-30	EYFLA8P	6-30
EYFLA5PR	6-30	EYFLA8PR	6-30
EYFLA5Q	6-30	EYFLA8C	6-30
EYFLA5QR	6-30	EYFLA8CR	6-30
EYFLA6J	16-53	EYFLA9C	20-60
EYFLA6JR	16-53	EYFLA9CR	20-60
EYFLA6P	16-53	EYFLA9P	20-60
EYFLA6PR	16-53	EYFLA9PR	20-60
EYFMA1J	25-100	EYFMA2C	25-120
EYFMA1JR	25-100	EYFMA2CR	25-120
EYFMA1P	25-100	EYFMA2P	25-120
EYFMA1PR	25-100	EYFMA2PR	25-120

Transducers / Joint Simulators

Stationary Transducers

MODEL NUMBER	TORQUE RANGE [Nm]	DRIVE
EYFST22NM	2.2 – 22	3/8" Square
EYFST120NM	10 – 120	1/2" Square
EYFST750NM	75 - 750	3/4" Square

- USB Plug in Play Technology – automatic transducer recognition
- Accuracy class: 0.1 % of F.S.R.
- Smart memory – transducer retains settings
- Full bridge strain gauge based torque measurement
- 24 bit analog-to-digital converter (ADC) on rotor
- 126 Kbps data transfer via photocoupler
- Powerful 32-bit-cpu
- Robust, built to last utilizing an aluminum housing and double ball bearings
- User selectable bi-directional measurement
- Simple PC based software
- Ultra-compact size
- Economy software & USB cable included



Joint Simulators

JOINT SIMULATOR KITS				
MODEL NUMBER	TORQUE RANGE	DRIVE	BOLT SIZE	INCLUDED PARTS
EYFJS22NM	3-22 Nm	3/8" Square	M8	Includes 4.5mm, 5mm, 6mm Washers, M8 Spacer and M8 Base, M8x40mm Bolt and Grease
EYFJS100NM	16-100 Nm	1/2" Square	M12	Includes 4.5mm, 5mm, 5.5mm 6mm, 6.5mm, 7mm, 9mm Washers, M12 Spacer and M12 Base, M12x40mm Bolt, M12x20mm Bolt and Grease
EYFJS120NM	72-120 Nm	1/2" Square	M14	Includes 9mm Washers, M14 Spacer, M14 Base, M14x50mm Bolts and Grease
EYFJS120NM -2	16-120 Nm	1/2" Square	M12 and M14	EYFJS100Nm + EYFJS120NM Combination
EYFJS200NM	70-200 Nm	3/4" Square	M16	Includes 7mm, 7.5mm, 9mm Washers, M16 Spacer, M16 Base, M16x50mm Bolt and Grease
EYFJS400NM	160-400 Nm	3/4" Square	M24	Includes 10mm, 11mm Washers, M24 Spacer, M24 Base, M24x55mm Bolt and Grease

ACCUPULSE 4.0 VALIDATION KIT AND TRANSDUCER				
MODEL NUMBER	TORQUE RANGE	DRIVE	BOLT SIZE	INCLUDED PARTS
EYFJS-MHK	AccuPulse 4.0 Validation Kit	1/2" Square	M8 and M12	Includes EYFJS-MH1 and EYFJS-MH2, EYFST120 NM (Stationary Transducer), USB, USB Cable and Grease and SeaHorse Protective Case
EYFJS-MH1	AccuPulse 4.0 MH1 Validation	1/2" Square	M8	Includes 5mm Washers, M8 Spacer, M8 Base, M8x40mm Bolt and Grease
EYFJS-MH2	AccuPulse 4.0 MH2 Validation	1/2" Square	M12	Includes 6mm Washers, M12 Spacer, M12 Base, M12x50mm Bolt and Grease

- Multiple cup washer sizes provide a more accurate simulation of clamp load
- Geared structure resolves frictional issues inherent in conventional joint simulators
- Limited components better represent real world applications
- Cup washers are laser engraved for differentiating between sizes
- Lightweight joint simulator reduces issues with inertia and increases torque accuracy
- Heat treated stainless steel components ensure long life even in harsh environments
- Standard off the shelf bolts can easily be replaced
- Cup washers are sized for specific working torque ranges
- Accurately certify any type of shut-off tool or hand wrench
- Minimal points of lubrication significantly reduces frictional changes during the rundown
- Grease included



Joint Simulators

Proprietary Joint Simulator design for testing all tool types

- Mechanical Pulse
- Clutch Tools
- Transducerized Tools
- Oil Pulse Tools
- Current Controlled Tools
- Click & Beam Wrenches
- Joint Simulator Torque
- Range 22Nm - 400Nm



- Multiple Cup Washer stacks provide a more accurate simulation of clamp load.
- Qty. 4 Cup Washers
Less moving parts, do not require grease and they do not slide against each other.
- At only 8 oz, the lightweight joint simulator significantly reduces issues with inertia and increases torque accuracy.

Rotary Transducers

MODEL NUMBER	TORQUE RANGE [Nm]	OVERLOAD PROTECTED	DRIVE
EYFRT50CNM	.05 - .50	Yes	1/4" Hex
EYFRT100CNM	.1 - 1	Yes	1/4" Hex
EYFRT200CNM	.2 - 2	Yes	1/4" Hex
EYFRT5NM	.5 - 5	—	1/4" Hex
EYFRT10NM	1 - 10	—	1/4" Hex
EYFRT20NM	1 - 20	—	1/4" Hex
EYFRT50NM	1 - 50	—	3/8" Square
EYFRT100NM	1 - 100	—	1/2" Square
EYFRT200NM	1 - 200	—	1/2" Square
EYFRT500NM	1 - 500	—	3/4" Square

n-gineric



Lean System

- Ultra compact size. Extremely convenient for tight spaces
- Integrated electronics eliminate the need for a separate analyzer
- Basic software version included, compatible with Windows based PC or tablets
- Mini USB cable included

Multiple Interface Options

- RS-485
- Ethernet
- USB

High Resolution Incremental Encoder (0.1 degrees)

- High precision strain gauge based torque sensors
- Brushless energy and signal transmission system
- Immediate conversion from analog to digital at the point of reading from the rotor. Other systems convert analog readings outside of the transducers and require separate analyzer hardware
- Converts analog to digital at 24 bits
- Contactless, photocoupler transmission bitrate of 176 kb per second

Durable

- Double bearings
- Mechanical overload protection clutch in sensors up to 200 cNm range

Professional Cordless Power Tools



Ni-MH



EY6220N/
EY6220NQ
Cordless Drill & Driver Kit

3.6V



EY7411LA1S
Drill & Driver

EY7410LA1C/
EY7410LA2S
Drill & Driver

7.2V



EY7420LA2J
Drill & Driver

14.4V / 18V Series with Dual Voltage



EY75A4X
Impact Driver



EY75A5X
Impact Wrench



EY75A7X
Impact Driver

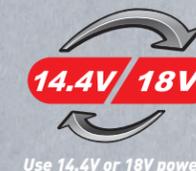


EY75A8X
Impact Wrench

18V



EY7552X
Impact Wrench



TOUGH IP™

Dual-Voltage and Battery Technology

Versatility, high performance and long runtimes



14.4V

14.4V batteries offer lightweight comfort in a compact size.

18V

Using 18V batteries maximizes runtime.

Panasonic battery packs offer protection, durability and long life

Monitoring of Individual Battery Cells

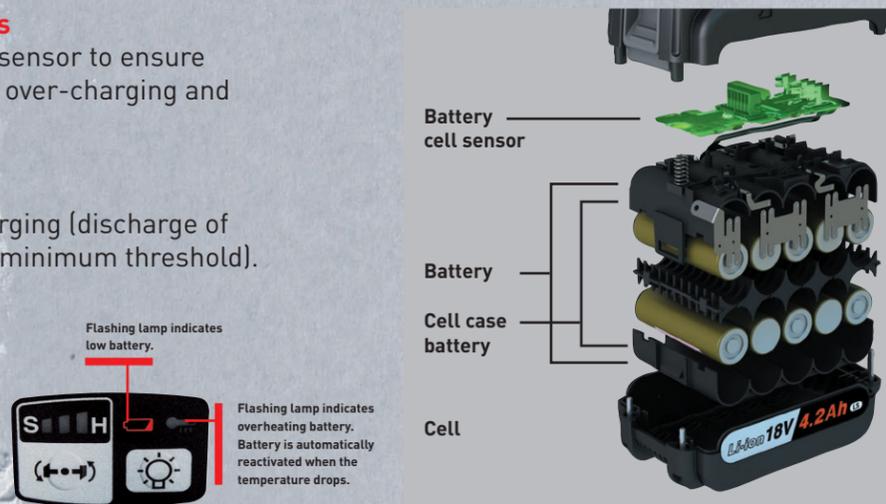
Each 3.6V segment is monitored by a sensor to ensure optimal discharge control, preventing over-charging and over-discharging.

Over-discharge Prevention Sensor

A sensor works to prevent overdischarging (discharge of the battery until voltage falls below a minimum threshold).

Battery Overheat Protection Sensor

A temperature sensor cuts off power to the motor before the battery temperature rises to a harmful level and flashes a warning lamp on the tool's control panel to notify the user.



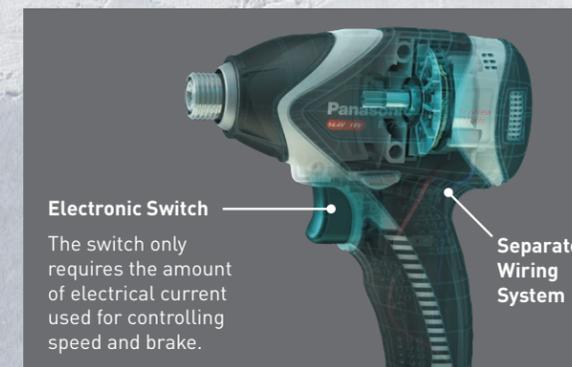
Cordless Tools with Advanced Features

Tough. Durable. Innovative.

Panasonic has developed intelligent power tools to increase task efficiency as well as operate in tough conditions of various jobsites. Panasonic continues to evolve its technology and provide tools that meet any type of job requirements.

Featuring dust and water resistant technologies, our tools comply with International Protection standards.

Long-lasting, Brushless Motor



Intelligent Power Tool Evolution
TOUGH IP™

Switch

An additional rubber cap seals the switch and protects it against dust and water.



Electronic Circuit

Electronic circuits and battery pack are protected to withstand water and dust.



Battery

Battery cells are designed to protect against moisture and keep performing at their best.



Results

Panasonic cordless tools are protected with a dust-tight, water-tight design and are IP56 certified per IEC standards. Every day we demonstrate our ongoing commitment to heavy industry by providing workers with superior tools for the harshest job conditions.

International Protection Code classifies the degree of protection provided against intrusion of solid foreign objects and liquids in electrical machinery and fixtures as defined by IEC standards.

Dust Resistance Level indicates the degree of protection provided against the intrusion of solid foreign objects using a scale of six levels.

Level	Brief description
1	Protected against solid foreign objects of 50mm Ø and greater
2	Protected against solid foreign objects of 12.5mm Ø and greater
3	Protected against solid foreign objects of 2.5mm Ø and greater
4	Protected against solid foreign objects of 1.0mm Ø and greater
5	Dust protected
6	Dust-tight

IP56

HIGH LEVEL TEST RESULTS

Water Resistance Level Indicates the degree of protection provided against the intrusion of water associated with harmful effects using a scale of eight levels.

Level	Brief description
1	Protected against vertically falling water drops
2	Protected against vertically falling water drops when enclosure tilted up to 15°
3	Protected against spraying water
4	Protected against splashing water
5	Protected against water jets
6	Protected against powerful water jets
7	Protected against the effects of temporary immersion in water
8	Protected against the effects of continuous immersion in water



Impact Driver

Works Hard, Stays Cool & Comfortable

1. ADVANCED ERGONOMICS



The shorter brushless motor helped create an ultra-compact, high-powered impact driver with optimum ergonomics.

2. MULTIPLE MODES FOR ALL APPLICATIONS



Hard:
For heavy duty applications.



Medium:
For general fastening applications.



Soft:
For delicate applications, like drywall.



Self-drilling screw mode
For self-drilling screws into metal.



SELF DRILLING SCREW MODE

Self-Drilling Screw mode starts at highest speed to drill through the metal and then switches to *H mode* (High impact) to powerfully cut initial thread. After that, load is reduced so it automatically switches to slower *S mode* (Soft impact) to limit potential of stripping threads on fastener or material. (Less than Ø4 x 15mm).

Impact Drivers

EY75A4X

1/4" Hex Impact Driver

Dual Voltage Technology



EY75A4X:
Battery pack and battery charger not included.

- High power: Impact Mode: 1,370 in. lbs (114 ft. lbs)
- Brushless motor and hybrid switch
- Electric brake

- 1/4" hex quick connect collet
- Low battery indicator, belt hook and LED work light
- Compact size (L x H x W): 5-5/8" x 9-17/32" x 2-13/16"
- Light weight (incl. EY9L54B 5.0Ah battery): 3.53 lbs

Tool Specs	
Max. Torque	1,370 in. lbs*
Speed at No Load	0 - 2,500 rpm
Impact/min	0 - 3,000 ipm

*M14 High tensile bolt tightening for 3 sec.



Use 14.4V or 18V power!

*Charging times are approximate and may be slightly longer depending on conditions.

EY75A7X

1/4" Hex Impact Driver

Dual Voltage Technology



EY75A7X:
Battery pack and battery charger not included.

- High power: Impact Mode: 1,416 in. lbs (118 ft. lbs)
- Brushless motor and hybrid switch
- Self-drilling Screw mode
- Electric brake

- 1/4" hex quick connect collet
- Low battery indicator, belt hook and LED work light
- Compact size (L x H x W): 4-21/32" x 9-17/32" x 2-19/32"
- Light weight (incl. EY9L54B 5.0Ah Battery): 3.75 lbs

Tool Specs	High/Hard Mode	Medium Mode	Low/Soft Mode	Self-drilling Screw Mode
Max. Torque	1,416 in. lbs**	1,150 in. lbs**	230 in. lbs***	1,150 in. lbs**
Speed at no load	0 - 2,500 rpm	0 - 1,450 rpm	0 - 950 rpm	0 - 2,500 rpm
Impact/min	0 - 3,100 ipm	0 - 2,900 ipm	0 - 1,900 ipm	0 - 1,200 ipm

**M14 High tensile bolt tightening for 3 sec.

***M10 High tensile bolt tightening for 3 sec.



Use 14.4V or 18V power!

*Charging times are approximate and may be slightly longer depending on conditions.

EY75A5X

1/2" Impact Wrench

Dual Voltage Technology



EY75A5X:
Battery pack and battery charger not included.

- High power: Impact Mode: 1,815 in. lbs (151 ft. lbs)
- Brushless motor and hybrid switch
- Variable speed trigger/reversible
- 1/2" square drive with 1/4" quick change adapter (EY9HX111E)

- Electric brake
- Low battery indicator, belt hook and LED work light
- Compact size (L x H x W): 6-1/8" x 9-17/32" x 2-13/32"
- Light weight (incl. battery): 3.75 lbs

Standard Accessory	
1/2" square drive to 1/4" quick change adapter	
EY9HX111E	

Tool Specs	
Max. Torque	1,815 in. lbs*
Speed at No Load	0 - 2,300 rpm
Impact/min	0 - 3,500 ipm

*M16 high tensile bolt tightening for 3 seconds



Use 14.4V or 18V power!

*Charging times are approximate and may be slightly longer depending on conditions.

Impact Wrenches



EY75A8X

1/2" Impact Wrench

Dual Voltage Technology



EY75A8X:
Battery pack and battery charger not included.

- Newly designed hammer mechanism for high power & durability in a compact form
- High power max torque: 280Nm/206 ft. lbs (18V)
- Brushless motor and hybrid switch
- Variable speed trigger/reversible
- Electric brake

		HIGH	MEDIUM	LOW
RPM	14.4V	0 - 2,300	0 - 1,500	0 - 1,000
	18V	0 - 2,500	0 - 1,500	0 - 1,000

- 1/2" square drive with ball detent
- Low battery indicator, belt hook and LED work light
- Ultra compact size (L x H x W): 5-5/8" x 9-13/16" x 2-7/8"
- Light weight (incl. EY9L54B 5.0Ah battery): 3.96 lbs



Use 14.4V or 18V power!

			HIGH (M20)	MEDIUM (M16)	LOW (M12)
TORQUE	14.4V	Nm	260	140	120
		Ft lbs	192	103	88
	18V	Nm	280	140	120
		Ft lbs	206	103	88

*Charging times are approximate and may be slightly longer depending on conditions.

EY7552X

High Torque Impact Wrench

18V



EY7552X:
Battery pack and battery charger not included.

- High torque output 470Nm (346 ft. lbs)
- Twin hammer design for durability, speed & size
- 1/2" square drive with friction ring and through hole design
- Low vibration and noise level

Tool Specs	
Max. Torque	470Nm (346 ft. lbs)
Speed at no load	0 - 1,550 rpm
Impact/min	0 - 2,400 ipm

- Electric brake
- Battery level indicator
- Compact size (L x H x W): 8-7/16" x 9-15/16" x 3-1/16"
- Light weight (incl. battery): 5.7 lbs

*Charging times are approximate and may be slightly longer depending on conditions.

EYC949B

14.4V 4.0Ah Power Supply Kit



Includes
2 - 14.4V 4.0Ah (EY9L49B)
1 - Charger (EY0L82B)

EYC954B

18v 5.0Ah Power Supply Kit



Includes
2 - 18v 5.0 Ah (EY9L54B)
1 - Charger (EY0L82B)
(Replaces EYC950B)

Screwdrivers

EY6220NQ / EY6220N

Cordless Drill & Driver Kit

2.4V



EY6220N:
1 battery pack included.
Charger not included.

- Max. Torque: Low: 26 in. lbs. High: 13 in. lbs.
- Speed at no load: Low: 200 rpm High: 400 rpm
- Clutch Torque (approx.): 3.5, 6.3, 9.1, 11.9, 14.7, 17.5 in. lbs. (multi-stage) (Max. Torque at 6 position)
- Easily converts from straight to pistol form
- 2-speed gear box
- Multi-stage clutch plus drill, 1/4" hex drive
- Gear lock mechanism for manual tightening
- EY6220NQ Kit includes 1 - EY6220, 1 - (EY9221B) 2.8Ah 2.4V Ni-MH battery, and 1 - (EY0L11B) charger.



EY7410LA2S / EY7410LA1C

Cordless Screwdriver Kit

3.6V



EY7410LA1C:
1 battery pack included.
Charger not included.

- Compact size (L x H x W): 10-7/8" x 5-9/32" x 1-13/16" in straight format
- Powerful: Low: 39.0 in. lbs. High: 13.3 in. lbs.
- 2-speed reversible: Low: 200 rpm High: 600 rpm
- Clutch torque (Approx.): 2.7-25.7 in. lbs. (0.9 in. lbs. per stage, total 21 stage)
- 21-stage clutch with auto shut off
- 1/4" hex quick change chuck
- LED work light, low battery indicator
- EY7410LA2S Kit includes 1 - EY7410, 2 - (EY9L10B) 1.5Ah 3.6V Li-ion batteries, 1 - (EY0L11B) charger, and case.



*Charging times are approximate and may be slightly longer depending on conditions.

Battery Chargers

EY7411LA1S

Cordless Screwdriver Kit with Batch Counting

3.6V



EY7411:
1 battery pack, clutch cover and charger included.

- Batch count function up to 99 fasteners
- 21-stage clutch with auto shut off (Approx.): 2.7-25.7 in. lbs.
- Rehit prevention function, 3 programmable tones for batch complete
- 2-speed/reversible: Low: 200 rpm High: 600 rpm
- LED work light, low battery indicator
- Long lasting 1.5Ah Li-ion battery
- 1/4" hex quick change chuck
- Powerful: Low: 39.0 in. lbs. High: 13.3 in. lbs.
- Compact size (L x H x W): 10-7/8" x 5-9/32" x 1-13/16" in straight format
- Kit includes 1 - EY7411LA1S, 1 - (EY9L10B) 1.5Ah 3.6V Li-ion battery, 1 - (EY0L11B) charger, 1 - (EY9X007E) clutch cover



EY7420LA2J / EY7420X

Screwdriver Kit

7.2V



EY7420X:
Battery pack and battery charger not included.

- 21-stage clutch with auto shut off (Approx.): Low: 2.7-35.4 in. lbs. High: 2.7-17.7 in. lbs.
- 2-speed/reversible: Low: 300 rpm High: 900 rpm
- No low battery disable*
- 1/4" hex quick change chuck
- Powerful: High: 17.7 in. lbs. Low: 53.1 in. lbs.
- Compact size (L x H x W): 5-3/4" x 7-7/8" x 1-5/8"
- Max. screw driving: High: M4 screw Low: M5 screw
- EY7420LA2J Kit includes 1 - (EY7420) Tool, 2 - (EY9L20B) 1.5Ah 7.2V Li-ion battery, 1 - (EY0L20B) charger, 1 - (WEYFEA1N3137) clutch lock cover

Screwdriver Working Capacity*

	MODEL	FASTENING	EYFEA1N
Application Capacity	EY9L20B 1.5Ah battery	Screws in sheet metal (M2.5 x 1/4")	High: 1900 pcs
		Screws in sheet metal (M4 x 3/8")	High: 1850 pcs
		Screws in sheet metal (M5 x 5/16")	Low: 1450 pcs

Note: *Approximately

*Tool will not maintain torque level at low battery condition.

BATTERY	TOOL	VOLTAGE	AMP HOUR	BATTERY TYPE	CHARGING TIME	BATTERY CHARGER
EY9221B	EY6220N	2.4V	2.8Ah	Ni-MH (N Type)	45 min	EY0L11B
EY9L10B	EY7410 EY7411	3.6V	1.5Ah	Li-ion (LA Type)	15 min : 30 min	
EY9L20B	EY7420	7.2V	1.5Ah	Li-ion (LA Type)	60 min : 35 min	EY0L20B
EY9L49B	EY75A4X EY75A5X EY75A7X EY75A8X	14.4V	4.0Ah	Li-ion (LS Type)	50 min : 60 min	EY0L82B
EY9L54B	EY75A4X EY75A5X EY75A7X EY75A8X EY7552X	18V	5.0Ah	Li-ion (LS Type)	65 min : 80 min	

Battery Pack / Battery Charger Compatibility Chart

▲ Usable Charge (80%) ● Full Charge (100%)

Voltage	Model	Battery	Charging Time												Charger					
			15	30	35	40	50	55	60	65	70	75	80							
18V	 EY75A4 EY75A5 EY75A7 EY75A8	 EY9L54B							▲		▲								EY0L82B	
14.4V		 EY9L49B							▲											
3.6V	EY7410 EY7411	 EY9L10B															▲	●		EY0L11B
7.2V	EY7420	 EY9L20B																	●	EY0L20B
2.4V	EY6220	 EY9221B																	●	EY0L11B

Li-ion Capacity Table

Impact Drivers

Voltage			18V	14.4V
Model No.			EY75A4	EY75A7
Battery Type			EY9L54B	EY9L49B
Fastening	Wood Screws in Yellow Pine	dia. 3/16" x 2-15/16"	610 pcs.	490 pcs.
	Self-Drilling Screws in SPC	dia. 5/32" x 1/2" t=1/16"	990 pcs.	750 pcs.
Bolting	Standard Tensil Bolt	M16 x 1" t=3/8"	1,150 pcs.	1,050 pcs.
	Standard Tensil Bolt	M12 x 1" t=3/8"	2,700 pcs.	2,300 pcs.
	High Tensil Bolt	M12 x 1" t=3/8"	340 pcs.	300 pcs.

Impact Wrenches

Voltage			18V	14.4V
Model No.			EY75A8	EY75A5
Battery Type			EY9L54B	EY9L49B
Fastening	Wood Screws in Yellow Pine	dia. 3/16" x 2-15/16"	660 pcs.	550 pcs.
	Wood Screws in Yellow Pine	dia. 3/16" x 4-3/4"	144 pcs.	120 pcs.
	Self-Drilling Screws in SPC	dia. 5/32" x 1/2" t=1/16"	1,140 pcs.	950 pcs.
Bolting	Standard Tensil Bolt	M16 x 1" t=3/8"	1200 pcs.	1,000 pcs.
	Standard Tensil Bolt	M14 x 1" t=3/8"	1308 pcs.	1,090 pcs.
	High Tensil Bolt	M12 x 1" t=3/8"	420 pcs.	350 pcs.

High Torque Impact Wrench

Voltage			18V
Model No.			EY7552
Battery Type			EY9L54B
Fastening	SPAX screws in yellow pine	dia. 8mm x 80mm	210 pcs.
Bolting	Standard Tensil Bolt	M16 x 25mm, t=10mm 2 sec.	300 pcs.
	Standard Tensil Bolt	M16 x 25mm, t=10mm 2 sec. *with extension	180 pcs.
	Standard Tensil Bolt	M12 x 25mm, t=10mm 1 sec.	640 pcs.
	High Tensil Bolt	M24 x 25mm, t=10mm 3 sec.	220 pcs.
	Standard Tensil Bolt	M20 x 25mm, t=10mm 2.5 sec.	250 pcs.
	Standard Tensil Bolt	M16 x 25mm, t=10mm 2 sec.	300 pcs.

Screwdrivers

Voltage		2.4V	3.6V	3.6V
Model No.		EY6220NQ	EY7410LA2S	EY7411LA1S
Battery Type		EY9221B	EY9L10B (LA)	EY9L10B (LA)
Wood Screws	dia. 1/8" x 1/2"	280 pcs.	600 pcs.	600 pcs.
Screws in	M5 x 5/16"	530 pcs.	1,000 pcs.	1,000 pcs.
Holes in SPC	dia. 1/16", *t=1/16"	45 pcs.	85 pcs.	85 pcs.

Standard / Optional Accessory Chart

● STANDARD

○ OPTIONAL

Voltage		14.4V/18V				18V	3.6V			7.2V	2.4V	
Model No.		EY75A4X	EY75A5X	EY75A7X	EY75A8X	EY7552X	EY7411LA1S	EY7410LA2S	EY7410LA1C	EY7420LA2J	EY6220NQ	EY6220N
18V Battery Pack (5.0Ah Li-ion Battery Type S)		EY9L54B	○	○	○	○						
14.4V Battery Pack (4.0Ah Li-ion Battery Type S)		EY9L49B	○	○	○							
7.2V Battery Pack (1.5Ah Li-ion Battery Type LA)		EY9L20B								●		
3.6V Battery Pack (1.2Ah Li-ion Battery Type L)		EY9L10B					●	●	●			
2.4V Battery Pack (2.8Ah Ni-MH Battery Type N)		EY9221B									●	●
Power Supply Kit 14.4V 4.0Ah Power Supply Kit		EYC949B	○	○								
Power Supply Kit 18v 5.0Ah Power Supply Kit		EYC954B	○	○		○						
Charger for Li-ion 10.8V - 28.8V		EY0L82B	○	○		○						
Charger for Li-ion, Ni-MH battery		EY0L11B					●	●	○		●	○
Attachable 1/2" to 1/4" Quick Change Adapter		EY-9HX111E		●								
Clutch Lock Cover		EY9X007E					●	○	○			

**Panasonic Eco Systems North America
Assembly Tools Division**

Two Riverfront Plaza
Newark, NJ 07102-5490

For more information, visit our website at
na.panasonic.com/us/assemblytools

**Panasonic Canada, Inc
Life and Device Solutions Division**

5770 Ambler Drive
Mississauga, Ontario, L4W 2Te

Design and specifications subject to change without notice.