

Panasonic



AccuPulse 4+

Transducerized Mechanical Pulse Tools



ACCUPULSE 4+

Achieve both fastening
quality and work efficiency



Traceability



Affordability



User-Friendly



Accuracy



Traceability

Equipped with advanced traceability capabilities essential for ensuring quality assurance, meeting compliance standards in assembly operations. These features enable real-time data capture, historical audit trails, and seamless integration with MES systems.



Affordability

Delivers a cost-efficient solution by integrating advanced fastening technology with oil-free mechanical components and features that minimize long-term operational expenses—without the burden of license fees.



User-Friendly

Engineered with a range of user-friendly features that simplify programming and setup, enhance operator comfort, and boost overall efficiency in manufacturing environments. These intuitive elements help reduce training time, minimize errors, and support seamless day-to-day operation.



Accuracy

Designed for precision, maintains exceptional accuracy at high speeds, reactionless operation—ideal for demanding assembly applications in automotive, agricultural, and advanced manufacturing sectors.

AccuPulse 4+ Advantages

Unique Technologies for Mechanical Pulse Torque Sensing

AccuPulse 4+ pulse torque sensing uses a patented drive and non-contact transducer to deliver accurate, durable torque measurement during pulsing.

1. 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.

2. Patented Drive Mechanism

Unique drive mechanism optimizes the pulse behavior for torque sensing.

3. Snug Detection

The tool measures the angle between pulses to help determine snug. To help with repeatability and difficult applications

4. Buffering

AccuPulse 4+ keeps working even when out of wireless range - ensuring the tool completes the entire batch without interruption. Seamless reconnects when back in wireless range.

5. Four Microprocessors

At the heart of the AccuPulse 4+ are four specialized microprocessors—each dedicated to motor control, communication, torque control, and transducer.



Traceability

Advanced Traceability Data Management

AccuPulse 4+ series delivers powerful benefits through its advanced data capture and wireless communication capabilities, enabling seamless integration with modern assembly systems. By recording and transmitting key metrics such as torque value, angle, fastening curve, OK/NOK status, pulse count, and fastening time. The tool ensures complete visibility into each fastening operation.

This level of traceability allows for real-time quality control, immediate feedback on fastening results, and data-driven process optimization. The wireless communication feature enables the tool to not only send data but also receive updated parameters or instructions from a MES, enhancing flexibility and responsiveness on the production line.



AccuPulse 4+



Panasonic Controller
EYFR04

Wireless Communication

- Torque value
- Angle value
- Fastening curve
- OK/NOK status
- Pulses
- Fastening time



Affordability

AccuPulse 4+ delivers smart savings with lower cost maintenance, powerful battery efficiency, and rugged durability—giving you high-end results without the high-end cost.

The AccuPulse 4+ offers long-term value through oil-free mechanical pulse technology—eliminating routine oil changes and reducing maintenance costs. Its advanced lithium-ion battery provides extended runtime, and fewer replacements, keeping production lines moving efficiently. Internally, the tool is built to withstand the rigors of industrial use. Vibration damping, protective internal coatings, and rubber isolation mounts work together to shield sensitive electronics from shock, moisture, and wear. A non-contact torque transducer further reduces mechanical failure and ensuring consistent accuracy over time.



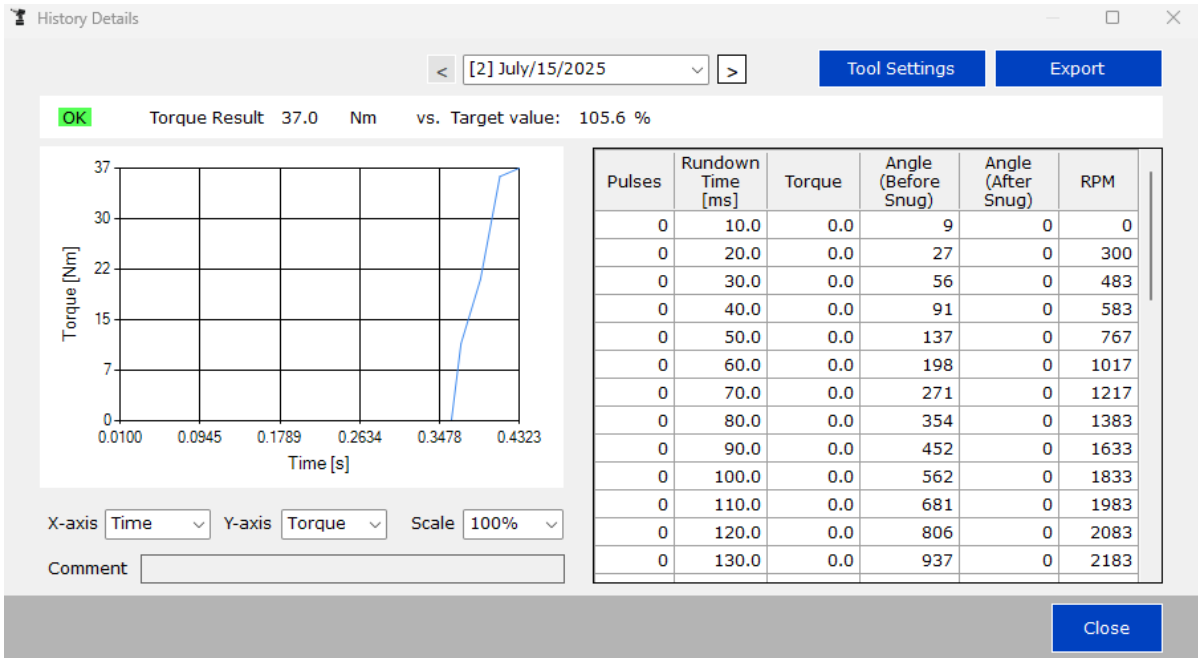
User-Friendly

Designed for ease of use with intuitive controls, visual feedback, hanging option, and simple connectivity for seamless operation in any assembly environment.

Developed with user-friendliness at its core, this tool offers a suite of features designed to simplify operation and boost productivity on the assembly line. The improved setup process allows for streamlined configuration and torque output adjustment, with the flexibility of both automatic and manual setup. From variable or fixed trigger control to a bright LED light. Visual indicators, such as the multi-view tightening confirmation lamp, provide immediate feedback, while the USB Type-C connection enables fast setup and seamless data transfer.

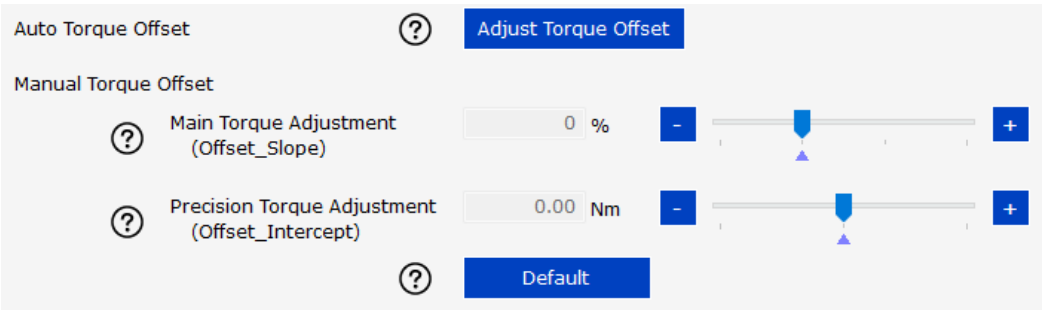
Tool Manager Data

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



Improved Setup Process - Reduced Setup Time

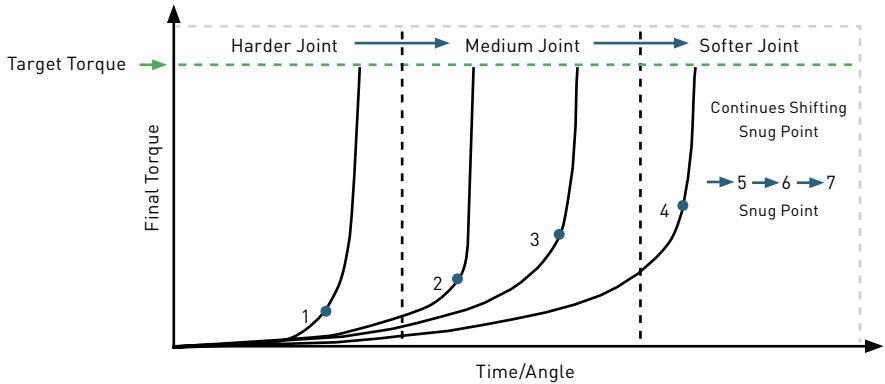
There are two methods available for programming the tool on the application: Auto Torque Offset and Manual Torque Offset. The Manual Torque Offset method provides enhanced control, allowing for more precise customization during tool programming.



Accuracy

Less Mean-Shift

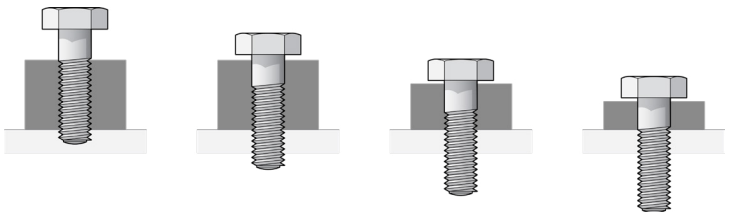
AccuPulse 4+ Snug Detection 101



Torque Sensing Plus - Tool will shut off when the both sensor torque and angle between pulses meet the shut off condition; Target torque is met, and target angle is met or less

- Less torque increase
- Better repeatability over inconsistent conditions. Improved mean shift by 34%

Works for prevailing torque, pulling parts together, softer joints or bolt pattern misalignment



Product Features

AccuPulse 4+ Product Features

Engineered with the operator in mind, AccuPulse 4+ features a bright LED for enhanced visibility, bold color plates for quick tool recognition, and a high-visibility confirmation lamp that instantly signals fastening success—making every job faster, safer, and smarter.



Batteries are not compatible with consumer tools



Color Plate for Easy identification

Each tool model is color-coded for easy identification



LED Light

For operations in dimly lit places



Slip Resistant Grip

Outfitted with a non-slip grip to enhance user stability during operation



Tightening Confirmation Lamp

Multiple lamps can be seen from various angles and Blue LED flashes to indicate active tool

Support Features



Snug Detection

AccuPulse 4+ introduces advanced Torque Sensing with Pulse Angle Monitoring, elevating fastening reliability by tracking angle changes between pulses to ensure precision. Users can select from snug detection 1 through 7, it adjusts the threshold angle to match specific application requirements, allowing for greater control and repeatability.



Buffering

AccuPulse 4+ continues to operate outside wireless coverage, ensuring uninterrupted batch completion through autonomous control protocols. (Can store up to 50 rundowns) *Does not work with graphing enabled & only applies to radio tools

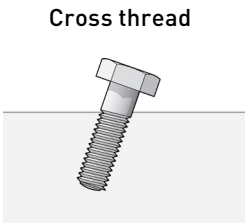


Cross Thread Reduction

Two types of the programmable features to reduce cross thread.

Soft Start: Sets the no load speed to the lowest rpm for a programmable time after trigger is pulled (time setting: 0.1-1.0 sec).

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



Disable Reverse

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



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 (time setting: 0.1-3.0 sec).



Variable Speed Control Function

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



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 (time setting: 0.1-3.0 sec).



Angle Error Shut-Off

Tool reports NOK and EA when the rundown exceeds its upper angle limit to prevent the material from being damaged.



Rundown Error Detecting Function

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

Example with 3.0 sec. normal time setting

OK (Green light)	NOK (Red light)	NOK (Red light)
Finished with 3.0 second rundown time	Finished with 2.0 second rundown time due to cross thread	Finished with 0.5 second rundown time due to retightening



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.



Maintenance Interval Alarm (Pulse Time)

This alarm counts the pulsing time that has been accumulated since the tool started to be used and reminds you of maintenance timing. When you have 1 hour or less to go before the set time, the control panel display will give you a warning (setting value 0 hours to 99 hours).



Socket Extension Length

Three different socket extension length to choose from. (40mm 1.5 inch, 150mm 6 inch, 250mm 10 inch). You are able to change it during the Torque Offset Procedure.

Specifications - AccuPulse 4+

Specifications for all AccuPulse® 4+ Transducerized models

															
Model Numbers				EYFMH3RC EYFMH3RP EYFMH3XC EYFMH3XP				EYFMH4RC EYFMH4RP EYFMH4XC EYFMH4XP				EYFNH2RC EYFNH2RP EYFNH2XC EYFNH2XP			

General

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-Tensile bolt)	M12 bolt/M14 bolt (Tensile bolt) M16 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)
Snug Point Detection Level	0-7 Stages (0:OFF, 1-7)		
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)
Impact Per Minute	0-2,700	0-2,600	0-2,400
Weight (Inc. battery)	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)

Technical

Work Capacity / Fastening Speed	M8: 23Nm approx. 940 pcs./pack approx. 0.5 sec/1pcs. (EYFB43) approx. 490 pcs./pack approx. 0.5 sec/1pcs. (EYFB41) M10: 43Nm approx. 670 pcs./pack approx. 0.7 sec/1pcs. (EYFB43) approx. 350 pcs./pack approx. 0.7 sec/1pcs. (EYFB41)	M12: 71Nm approx. 450 pcs./pack approx. 0.9 sec/1pcs. (EYFB43) approx. 230 pcs./pack approx. 0.9 pcs./1pcs. (EYFB41)	M12: 100Nm approx. 500 pcs./pack approx. 1.0 sec/1pcs. (EYFB50B) approx. 300 pcs./pack approx. 1.0 sec/1pcs. (EYFB51B)
Voltage	14.4V		18V
Charging Time	Usable Charge: approx. 35min. Full Charge: approx. 40min (Battery Pack EYFB41B, Charger EY0L82B) Usable Charge: approx. 45min. Full Charge: approx. 60min (Battery Pack EYFB43B, Charger EY0L82B)		Usable Charge: approx. 65 min Full Charge: approx. 80 min (Battery pack EYFB50B, Charger EY0L82B) Usable Charge: approx. 45 min Full Charge: approx. 60 min (Battery pack EYFB51B, Charger EY0L82B)

Specifications - AccuPulse 4+ (continued)

Specifications for all AccuPulse® 4+ Transducerized models

Model Numbers	EYFMH3RC, EYFMH3RP, EYFMH4RC EYFMH4RP, EYFNH2RC, EYFNH2RP	EYFMH3XC, EYFMH3XP, EYFMH4XC EYFMH4XP, EYFNH2XC, EYFNH2XP
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Functions

Torque Result	✓	✓
Angle Result	✓	✓
Fastening Curve	✓	✓
Auto Battery Shutdown	✓	✓
Buffering	✓	✓

Parameters	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 rundown	
Wireless Communication	IEEE 802.15.4 (Wireless Communication)	-
Programming	Programmable with included Tool Manager software on any Window PC	
USB Connection	USB Type-C™	
Advanced Fastening Features	For more information, please refer to the Owner's Manual	

Drive



C = 1/2" Square Drive with Ring Retainer and Through Hole

EYFMH3RC, EYFMH3XC, EYFMH4RC
EYFMH4XC, EYFNH2RC, EYFNH2XC



P = 1/2" Square Drive Pin Detent

EYFMH3RP, EYFMH3XP, EYFMH4RP
EYFMH4XP, EYFNH2RP, EYFNH2XP



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