# Panasonic

m 10.81

# **Assembly Tools**

Bringing Innovation to the Assembly Line







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## Assembly Tools

### AccuPulse<sup>®</sup> HR Series













EYFLA9C/R

10.8V, 20-60Nm



**Product Lineup** 



EYFLA9P/R 10.8V, 20-60Nm

EYFMA2C/R 14.4V, 25-120Nm

### **Mechanical Pulse**

10.8V, 3-22Nm



High Torque Mechanical Pulse



EYFLA5B

10.8V, 6-30Nm

EYFLA5Q/R 10.8V, 6-30Nm



EYFLA6J/R 10.8V, 16-53Nm

EYFLA6B 10.8V, 16-53Nm

### **Assembly Qualifiers**





EYFR02 Single Tool Qualifier

## Multi-Station Qualifier

### Wireless Programmable Clutch







EYFGA2AR 14.4V, 2-5.5Nm 14.4V, 5-8Nm

**EYFGA3AR** 14.4V, 5-10Nm

### **Low Torque Clutch**





EY7410LA2S 0.3 - 3.0 Nm



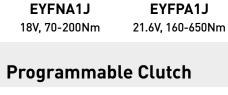
EYFST100NM



1/2" Square Drive

EYFST750NM 3/4" Square Drive

2



10.8V, 6-30Nm



14.4V, 2-5.5Nm

#### EYFGA2A EYFGA3A 14.4V, 5-8Nm 14.4V, 5-10Nm











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# EYFR03



# Multi-Tool Qualifier



14.4V, 25-120Nm



14.4V, 25-100Nm



EYFMA1B 14.4V, 25-100Nm





# Panasonic Cordless Assembly Tools

**Bringing Innovation to the Assembly Line** 

### **Benefits**

Guard ION

### **Electronic Sensing System**



Total

Protection

Tool **Battery** 





- **1. Over-discharge Prevention Sensor** Prevents over-discharge to avoid cell damage or recharge problems
- 2. Battery Overheat Protection Sensor

Cuts off power to the motor before the battery temperature rises

### 3. Monitoring of Battery Cell Voltage



Special Ceramic Coating Lave

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

### 4. Battery Sensor

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

### 5. Heat Resistance Layer Technology

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

#### 6. 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, mobile and compact without awkward hoses and fittings adding weight

#### **Eliminate Trip Hazards**

Removes dangerous air hoses providing a clear work area

#### **Improved Air Quality**

Eliminates airborne oily residue emitted from air tools

### **Durable Long-life Components**

#### Long-life Clutch

All steel clutch for increased durability in EYFG tools

#### **Mechanical Pulse Unit**

Long lasting, low maintenance impulse mechanism in EYFL/M/P tools

#### **Brushless Motor**

Energy-efficient, maintenance-free, nearly doubles the life of the tool

#### **Hybrid Switch**

Carries <.5 amp, about doubles the life of the switch

### 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

# **Precision Clutch Tools**

### Ergonomic, Accurate & Repeatable

### **Standard Features**

- High accuracy ±10% at cmk≥1.67 VDI/VDE2647
- Fast-acting, all-steel clutch for increased durability
- Photo interrupter sensor increases clutch life and tool accuracy
- Brushless motor and hybrid switch can double tool life expectancy
- 60 setting stages setting for precise clutch adjustment
- Tamper-resistant clutch selection for increased output quality
- Programmable version for increased versatility\*\*
- Wireless programmable version for error proofing and data collection\*\*\*





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 rpm maximizing operator productivity.

#### Variable Speed Control

Enables variable speed or single speed trigger operation.

#### Enable / Disable Capable

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

#### **Out of Range / Anti-Theft**

When enabled, the tool will not function if taken out of the wireless range of the qualifier

#### 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.

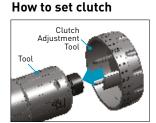


### Complete Clutch Tool Line-up Covers a Wide Range of Applications

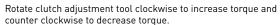


**Programmable Clutch Tools** 

### 60 Stage Adjustable Clutch

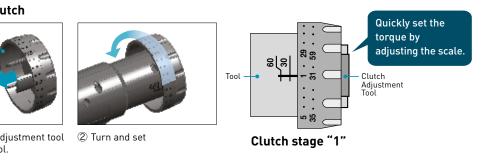


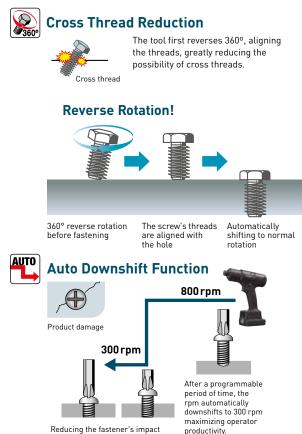
① Insert clutch adjustment tool ② Turn and set into nose of tool





Wireless Programmable Clutch Tools



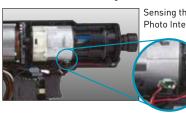


**Durable Design** 

on the material.

#### Photo Interrupter Sensor Increases Clutch Life and Tool Accuracy

productivity.



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

### **Additional Features**





**Compact and Lightweight** A well balanced compact and lightweight design

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



### Cross Thread / Rehit Detection



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

Retightening Cross thread





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 retightening



#### 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.



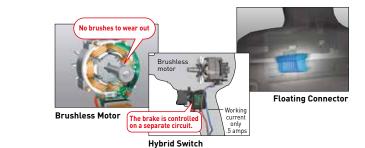
#### Variable Speed Control Function

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.



Remote Control 0 . 0 Tool settings can be adjusted only by remote



0 + 0

0:01

Lightweight 2.0Ah Battery (EYFB41B) or Extended Run Time 4.2Ah Battery (EYFB42B) Available



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



**Tool Hanger** 

# **Cordless Precision Clutch Tools**

	MODE	L	EYFGA1A	EYFGA2A	EYFGA3A							
			T	T	T							
	Voltage	e	14.4V	14.4V	14.4V							
	Series	;		Programmable Clutch								
	Accura	cy	±10%• Cmk 1.67 (*Compliant w	ith VDI/VDE 2647. Measured with the M	ax RPM setting)(*In 3Nm range)							
	Drive			A = 1/4" Hex Quick Change								
Clutch	Torque	Nm	2-5.5 Nm	5-8 Nm	5-10 Nm							
otaten	loique	in. lbs.	17.7 - 48.6 in.lbs	44.2 - 70.8 in.lbs	44.2 - 88.5 in.lbs							
	Clutch Settin	g Stage	1 - 60	, Total 60 stages (Approx. 0.08 Nm per s	stage)							
	No Load S	peed	0-800 rpm	0-750 rpm	0-450 rpm							
Wo	ight	EYFB41B (2.0 Ah)	1.25 kg	1.25 kg	1.3 kg							
ine ine	igit	EYFB42B (4.2 Ah)	1.5 kg	1.5 kg	1.55 kg							
EYFB41B (2.0 Ah)			199 mm x 232 mm x 54 mm (Width of battery pack: 75 mm)									
Size (L	Size (LxHxW) EYFB42B (4.2 Ah)		199 mm x	249 mm x 54 mm (Width of battery pacl	k: 75 mm)							
Wir	eless Commur Assembly Qu		-	-	_							
LED	Work Light (0	n/Off Switch)	V	<i>v</i>	<b>v</b>							
OK/NO	K Light (Green	: OK/ Red: NOK)	<b>v</b>	<b>v</b>	<ul> <li>✓</li> </ul>							
Rehit	t Prevention (fi	xed to 0.7sec)	<i>v</i>	~	V							
Batte	ry Indication L	<b>amp:</b> (3 stage)	<b>v</b>	~	~							
	Low Power [	Disable	V	V	<b>v</b>							
Prevent	/Detect Cross	Threads & Rehits	~	~	V							
Ma	iintenance Inte	erval Alarm	~	~	V							
Vari	iable Speed On	/ Off Switch	~	~	<b>v</b>							
(On /	<b>LED Light S</b> Off or On with		~	~	v							
		Hard Joint 30°	1200 pcs/pack 1.1 sec./1pcs (M6: 5.5 N·m)	1050 pcs/pack 1.0 sec./1pcs (M6: 8 N·m)	1100 pcs/pack 1.0 sec./1pcs (M6: 10 N·m)							
Work	EYFB41B	Soft Joint 720°	540 pcs/pack 1.3 sec./1pcs (M6: 5.5 N·m)	410 pcs/pack 1.3 sec./1pcs (M6: 8 N·m)	310 pcs/pack 1.4 sec./1pcs (M6: 10 N·m)							
Capacity*		Hard Joint 30°	2700 pcs/pack 1.1 sec./1pcs (M6: 5.5 N·m)	2350 pcs/pack 1.0 sec./1pcs (M6: 8 N·m)	2500 pcs/pack 1.0 sec./1pcs (M6: 10 N·m)							
	EYFB42B	Soft Joint 720°	1250 pcs/pack 1.3 sec./1pcs (M6: 5.5 N⋅m)	1000 pcs/pack 1.3 sec./1pcs (M6: 8 N·m)	730 pcs/pack 1.4 sec./1pcs (M6: 10 N⋅m)							
<u></u>	- T:- +	EYFB41B	Usable Charge: 35min. / Full Charge: 40min									
Chargin	ng Time*	EYFB42B	U	sable Charge: 50min. / Full Charge: 60m	in							

EYFGA1AR	EYFGA2AR	EYFGA3AR
	and the second se	and the second second
14.4V	14.4V	14.4V
	Wireless Programmable Clutch	
±10%• Cmk 1.67 (*0	Compliant with VDE/VDI 2647. Measured with the Max RPM se	tting) (*In 3 Nm range)
	A = 1/4" Hex Quick Change	E 40 No.
2-5.5 Nm	5-8 Nm	5-10 Nm
17.7 - 48.6 in.lbs	44.2 - 70.8 in.lbs 1 - 60, Total 60 stages (Approx. 0.08 Nm per stage)	44.2 - 88.5 in.lbs
0-800 rpm	0-750 rpm	0-450 rpm
0-000 ( pill	0-730 rpm	0-430 i pin
1.25 kg	1.25 kg	1.3 kg
1.5 kg	1.5 kg	1.55 kg
-		-
	199 mm x 232 mm x 54 mm (Width of battery pack: 75 mm	)
	199 mm x 249 mm x 54 mm (Width of battery pack: 75 mm	)
OK Fasten=Green light NOK Fasten=Red light	OK Fasten=Green light NOK Fasten=Red light	OK Fasten=Green light NOK Fasten=Red light
V	· · · ·	v
<b>v</b>	~	<b>v</b>
<i>v</i>	~	<i>v</i>
~	v	~
~	<i>v</i>	<i>v</i>
<b>v</b>	~	<b>v</b>
<i>v</i>	<i>v</i>	v
~	v	<b>v</b>
V	<i>v</i>	V
1200 pcs/pack	1050 pcs/pack	1100 pcs/pack
1.1 sec./1pcs (M6: 5.5 N⋅m)	1.0 sec./1pcs (M6: 8 N·m)	1.0 sec./1pcs (M6: 10 N·m)
540 pcs/pack 1.3 sec./1pcs (M6: 5.5 N·m)	410 pcs/pack 1.3 sec./1pcs (M6: 8 N·m)	310 pcs/pack 1.4 sec./1pcs (M6: 10 N·m)
2700 pcs/pack 1.1 sec./1pcs (M6: 5.5 N·m)	2350 pcs/pack 1.0 sec./1pcs (M6: 8 N·m)	2500 pcs/pack 1.0 sec./1pcs (M6: 10 N·m)
	1000 pcs/pack	730 pcs/pack
1250 pcs/pack 1.3 sec./1pcs (M6: 5.5 N·m)	1.3 sec./1pcs (M6: 8 N·m)	1.4 sec./1pcs (M6: 10 N·m)

## **EYFEA1 / EY7410**

### Cordless Low Torque Clutch Tool and Driver Kit

Voltage		7.2V						
Drive		1/4" Hex Quick Change						
	Nm	High: 2.0 Nm / Low: 6.0 Nm						
Torque Range	ft. lbs.	High: 1.47 ft. lbs / Low: 4.43 in. lbs						
	in. lbs.	High: 17.7 in. lbs / Low: 53.1 in. lbs						
<b>No Load Spe</b> (Torque Setting:		High: 0-900 rpm Low: 0-300 rpm						
<b>Clutch Torq</b> (approx.)	ue	High: 0.3 N·m-2.0 N·m (stage 1-10, 0.19 N·m per stage) Low: 0.3 N·m-4.0 N·m (stage 1-21, 0.19 N·m per stage)						
Weight (incl. ba	attery)	630 g						
Size (L x W x	: H)	145 mm x 198 mm x 42 mm						
Max. Screws D	riving	High mode: M4 screw Low mode: M5 screw						
Features		<ul> <li>Auto Shut-Off Function</li> <li>Auto Power-Stop Function <ul> <li>LED Light</li> </ul> </li> <li>Clutch &amp; H/L switch lock cover <ul> <li>Electronic brake</li> </ul> </li> </ul>						
<b>Working Capa</b> (Fastening								
Charging Ti	me	Usable: 35 minutes, Full: 60 minutes (Battery pack EY9L20, charger EY0L20)						

### Cordless Screwdriver with Torque Control

Voltage	3.6V
Drive	1/4" Hex Quick Change
Torque Range	High: 1.5 Nm Low: 4.4 Nm
<b>No Load Speed</b> (Torque Setting: RPM)	High: 0-600 rpm Low: 0-200 rpm
Clutch Torque (approx.)	0.3-2.9 N·m (0.1 N·m per stage, total 21 stage)
Weight (incl. battery)	0.5 kg
Size (L x W x H)	276 mm x 134 mm x 46 mm
Charging Time	Usable: 15 minutes, Full: 30 minutes (using EY0L11B charger)
Features	• Cap for clutch lock out • LED work light • 30 min. charging system (Full charge)
<b>Working Capacity</b> (Fastening)	Fastening: Wood Screws in Yellow Pine ø3.1 x 13 mm 600 pcs Screws in Sheet Metal (pre-hole) M5 x 8 mm 1,000 pcs Drilling: Holes in SPC t=1 mm, ø2 85 pcs
Standard Accessory	2 x 1.5VAh Li-ion Battery Pack (EY9L10B) Charger (EY0L11B) Clutch lock cover



## • Electricians

- Electronics assembly
- Rack/cabinet installers
- Production/assembly workService engineers





3.6V

7.2V



EY7410LA2S: Lightweight and accurate\* ±10% Li-ion Auto Shut-Off Screwdriver \*Based on internal measurement



Battery Pack Charger EY9L10B EY0L11B





ALC: NO.



Linton 10.8V

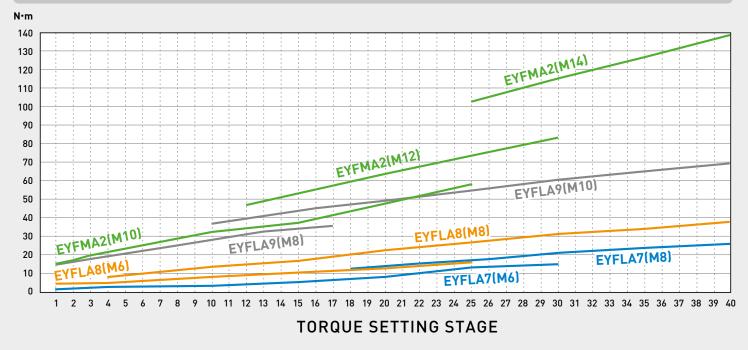
### **Advanced Features**

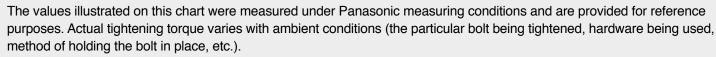
		MODEL																			
		Ν	lech	nani	cal F	Puls	е			jh Toro anical	que Pulse	e AccuPulse									
	EYFLA4A	EYFLA5A/B/Q	EYFLA6B/J	EYFMA1J/B	EYFLA4AR	EYFLA5AR/QR	EYFLA6JR	EYFMA1JR	EYFME1C	EYNA1J	EYFPA1J	EYFLA7A	EYFLA8A/P/C	EYFLA9P/C	EYFMA2P/C	<b>EYFLA7AR</b>	EYFLA8AR/PR/CR	EYFLA9PR/CR	EYFMA2PR/CR		
2-Way Radio Communication (only with EYFR03)																•	•	•	•		
1-Way Radio Communication					•	•	•	•								•	•	•	•		
Cross Thread Reduction									•	•	•	•	•	•	•	•	•	•	•		
Cross Thread /Rehit Detection									•	•	•	•	•	•	•	•	•	•	•		
Rehit Prevention	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Variable Speed Control Function	0	0	0	0	0	0	0	0	•	•	•	•	•	•	•	•	•	•	•		
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)**





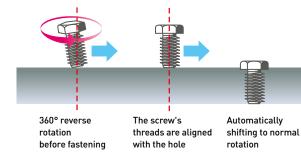
### Advanced Programmable Features

#### **Cross Thread Reduction**

The tool first reverses 540 degrees, aligning the threads, greatly reducing the possibility of cross threads.



#### **Reverse Rotation!**



### 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.

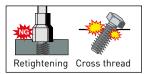
#### Example - Rehit prevention is programmed to one second.





### Cross Thread / **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



Finished with 3.0sec. rundown time

Finished with 2.0sec. rundown time due to cross thread

Finished with 0.5sec. rundown time due to retightening



### 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)



**Flush Detection Detay** This feature delays Flush Torque Detection mode and

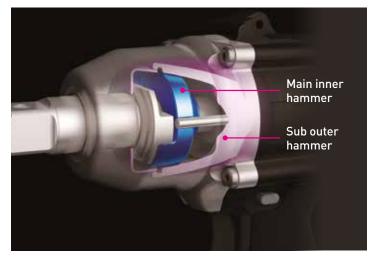


#### **Socket Extension Mode**

This feature adjusts tool's RPM during pulsing to improve accuracy when using an extension.

### AccuPulse HR Technology

### High-Efficiency, Double Hammer Design\*



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



\*Double Hammer 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.

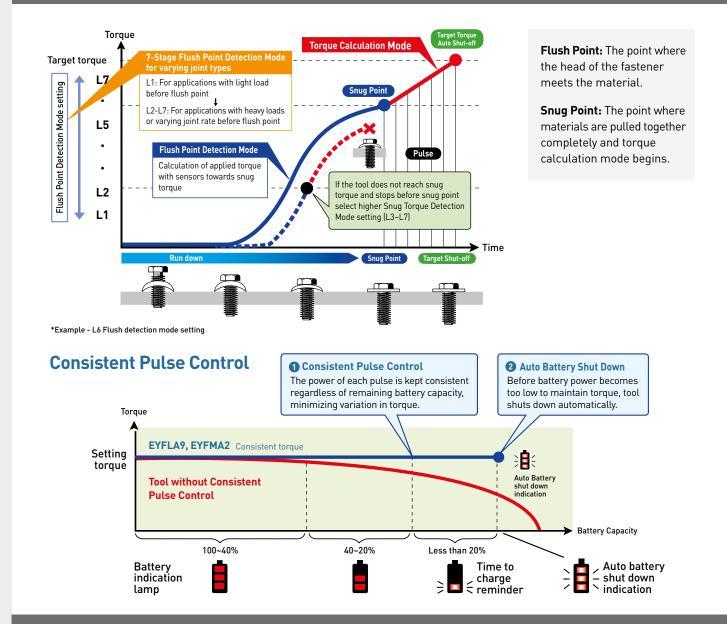






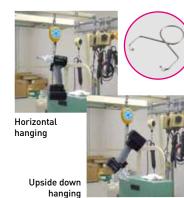
280 unique torque controlled algorithms - 40 stages in each mode L1 - L7.

## AccuPulse HR Technology



### **More Features**

**Tool Hanger** 



Tool can be hung on the balancer both

right side up or upside down



**Tightening** Green light is complete



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

**Tightening Confirmation Lamp** Green light indicates tightening





**LED Light** For operation in dimly lit places.



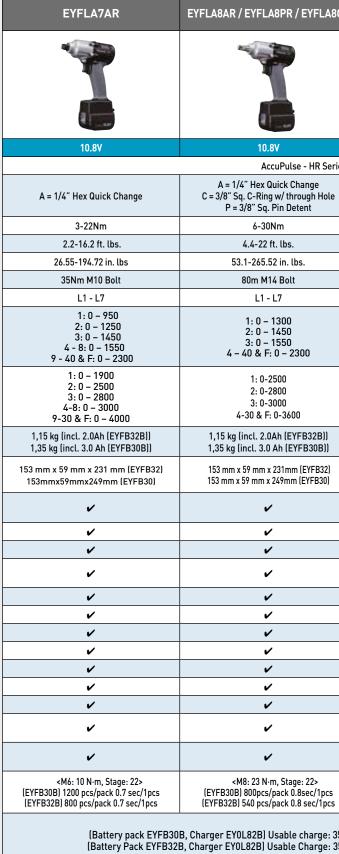
Remote Control Tool setting can be set only by remote control.



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

## AccuPulse<sup>®</sup> HR Series

MODELS		EYFLA7A	EYFLA8A / EYFLA8C / EYFLA8P	EYFLA9C / EYFLA9P	EYFMA2C / EYFMA2P			
Voltage		10.8V	10.8V	10.8V	14.4V			
Series			AccuPulse - HR Series		AccuPulse - HR Series			
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	C = 1/2" Sq. C-Ring w/ through Hole P = 1/2" Sq. Pin Detent			
	Nm	3-22Nm	6-30Nm	20-60Nm	25-120Nm			
Torque Range	ft. lbs.	2.2-16.2 ft. lbs.	4.4-22 ft. lbs.	14.75-44.25 ft. lbs	18.44-92.2 ft. lbs			
	in. lbs.	26.55-194.72 in. lbs	53.1-265.52 in. lbs.	177.01-531.04 in. lbs	221.27-1,106.34 in. lbs.			
Max Torque* (F mode, tighte	ning 3 sec.)	35Nm M10 Bolt	80m M14 Bolt	120Nm M14 Bolt	185Nm M16 Bolt			
Flush Detection Mod	les	L1 - L7	L1 - L7	L1 - L7	L1 - L7			
No Load Speed (Torque Set	ting: 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	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	1-40 & F: 0-2900			
Weight		1,15 kg (incl. 2.0 Ah (EYFB32B)) 1,35 kg (incl. 3.0 Ah (EYFB30B))	1,15 kg (incl. 2.0 Ah (EYFB32B)) 1,35 kg (incl. 3.0 Ah (EYFB30B))	1,30 kg (incl. 2.0 Ah (EYFB32B)) 1,45 kg (incl. 3.0 Ah (EYFB30B))	1,40 kg (incl. 2.0 Ah (EYFB41B)) 1,60 kg (incl. 4.2 Ah (EYFB42B))			
Size (L x W x H)		153mmx59mmx231mm (EYFB32) 153mmx59mmx249mm (EYFB30)	153mmx59mmx231mm (EYFB32) 153mmx59mmx249mm (EYFB30)	153mmx59mmx231mm (EYFB32) 153mmx59mmx249mm (EYFB30)	153mmx59mmx231mm (EYFB32) 153mmx59mmx249mm (EYFB30)			
Wireless Communica with Assembly Quali		_	_	_	_			
LED Work Light: (ON/OFF	Switch)	<ul> <li>✓</li> </ul>	<i>v</i>	~	~			
OK/NOK Light: (Green: OK /	Red: NOK)	<ul> <li>✓</li> </ul>	~	~	<b>v</b>			
Rehit Prevention: (Possible to set per 0.1 sec. betw		~	V	~	~			
Battery Indication Lamp:	(3 stage)	v	V	~	<b>v</b>			
Low Power Disable	e	v	V	<i>v</i>	<b>v</b>			
Prevent / Detect Cross Threa	ds & Rehits	<b>v</b>	<ul> <li>✓</li> </ul>	<i>v</i>	<b>v</b>			
Maintenance Interval	Alarm	<b>v</b>	<b>v</b>	<i>v</i>	<b>v</b>			
Variable Speed On / Off	Switch	<b>v</b>	~	<i>v</i>	<b>v</b>			
Variable Speed On / Off	Switch	<i>v</i>	~	<i>v</i>	<b>v</b>			
Buzzer: On / Off		v	V	<i>v</i>	<b>v</b>			
Flush Point Detection Delay set between 0-3 sec 0.1 sec.	per stage)	~	~	~	×			
Socket Extension M (h1:150mm socket, h2: for 250		~	~	~	~			
Work Capacity / Fastening	g Speed*	<m6: 10="" 22="" n·m,="" stage:=""> (EYFB30B) 1200 pcs/pack 0.7 sec/1pcs (EYFB32B) 800 pcs/pack 0.7 sec/1pcs</m6:>	<m8: 22="" 23="" n·m,="" stage:=""> [EYFB30B] 800pcs/pack 0.8sec/1pcs [EYFB32B] 540 pcs/pack 0.8 sec/1pcs</m8:>	<m10: 23="" 43="" n·m,="" stage:=""> (EYFB30B) 400 pcs/pack, 0.8 sec/1pcs (EYFB32B) 260 pcs/pack, 0.8 sec/1pcs</m10:>	<m12: 22="" 71="" n·m,="" stage:=""> (EYFB42B) 600 pcs/pack, 0.8 sec/1pcs (EYFB41B) 270 pcs/pack, 0.8 sec/1pcs</m12:>			
Charging Time*			harger EY0L82B) Usable charge: 33 harger EY0L82B) Usable Charge: 33		(Battery Pack EYFB41, Charger EY0L82B) Usable Charge: 35min., Full Charge: 40min (Battery Pack EYFB42, Charger EY0L82B) Usable Charge: 50min., Full Charge: 60min			



Note: \*Approximately

16





8CR	EYFLA9CR / EYFLA9PR	EYFMA2CR / EYFMA2PR
	10.0V	11.01
riocwi	10.8V th 2-Way Communication	14.4V
TIES WI		
e	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
	20-60Nm	25-120Nm
	14.75-44.25 ft. lbs	18.44-92.2 ft. lbs
	177.01-531.04 in. lbs	221.27-1,106.34 in. lbs.
	120Nm M14 Bolt	185Nm M14 Bolt
	L1 - L7	L1 - L7
	1-40 & F: 0-2300	1-40 & F: 0-2300
	1-40 & F: 0-2800	1-40 & F: 0-2900
	1,30 kg (incl. 2.0Ah (EYFB32B)) 1,45 kg (incl. 3.0 Ah (EYFB30B))	1,40 kg (incl. 2.0 Ah (EYFB32B)) 1,60 kg (incl. 4.2 Ah (EYFB30B))
	153 mm x 59 mm x 231 mm (EYFB32) 153 mm x 59 mm x 249 mm (EYFB30)	153 mm x 59 mm x 231 mm (EYFB32) 153 mm x 59 mm x 249 mm (EYFB30)
	~	V
	~	<i>v</i>
	~	~
	V	V
	~	<ul> <li>✓</li> </ul>
	~	<i>v</i>
	~	~
	~	<ul> <li>✓</li> </ul>
	V	<b>v</b>
	~	V
	~	<u>ب</u>
	~	~
	~	~
5 S	<m10: 23="" 43="" n·m,="" stage:=""> [EYFB30B] 400 pcs/pack, 0.8 sec/1pcs [EYFB32B] 260 pcs/pack, 0.8 sec/1pcs</m10:>	<m12: 22="" 71="" n·m,="" stage:=""> [EYFB42B] 600 pcs/pack, 0.8 sec/1pcs [EYFB41B] 270 pcs/pack, 0.8 sec/1pcs</m12:>
	n., Full charge: 45 min n., Full Charge: 40 min	(Battery Pack EYFB41, Charger EY0L82B) Usable Charge: 35min., Full Charge: 40min (Battery Pack EYFB42, Charger EY0L82B) Usable Charge: 50min., Full Charge: 60min

## **Mechanical Pulse Tools** Virtually No Torque Reaction Up To 650Nm

### **Remote Control Quick-Set Features**

#### **Program Setting**

60 unique torque controlled algorithms - 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)

#### Flush Point Detection (L1/L2)

Determines when the CPU declares the flush point of the fastening process.

L1 – Applications with no pulses before the flush point or when fastening fragile materials like plastic.

L2 – Applications where tool pulses before achieving the flush point encountered in many prevailing torgue and varying joint rate applications.

#### **Rehit Prevention**

Disables tool for a period of time (up to 3 sec. in 1/10 sec. intervals) after a good fastening shutoff, preventing operator from double hitting the fastener.

#### **Out of Range / Anti-Theft**

When enabled, the tool will not function if taken out of the wireless range of the qualifier. Available on models equipped with radio transmitters only.

#### Enable / Disable Capable

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

#### **EYFNA1 and EYFPA1 Series Only**

#### Prevent and Detect Cross Threads and Rehits

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

#### Maintenance Interval Alarm

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

#### **Speed Control Setting**

Enables variable speed or single speed trigger operation.

#### LED Light

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

#### Buzzer

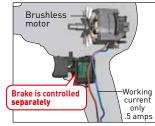
The buzzer can be programmed for OK, NOK, or disabled.

- and rpm between pulses, determining the flush point.
- repeatable final torque.\*



## Long-life Parts Provide Lower Running Costs

#### **Durable Hybrid Switch and Brushless Motor**





Hybrid Switch

#### **Brushless motor**

#### Choice of compact 2.0Ah or high capacity 3.0/4.2/5.0Ah batteries









14.4V 4.2A

21.6V 4.2Ah

14.4V 2.0Ah

#### Additional charging is acceptable

#### No Memory Effect

Panasonic Li-ion batteries won't deteriorate if charged during break or for a short period of time then put back into operation.

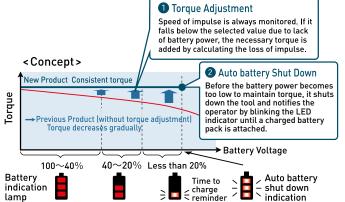
18V 5.0Ah





60 unique torque controlled algorithms - 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)

#### Maintains selected torque level as the battery power drops.



#### **Needle Bearings**



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

### **Retightening Prevention Function**

#### Maintain strict quality control

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.



Lightweight

A well-balanced,

experience less

continuous use.

lightweight design

means workers will

muscle fatigue during

### **More Features**





LED Light For operations in dimly lit places



0 . 0

0.0

0:0:

Panasonin

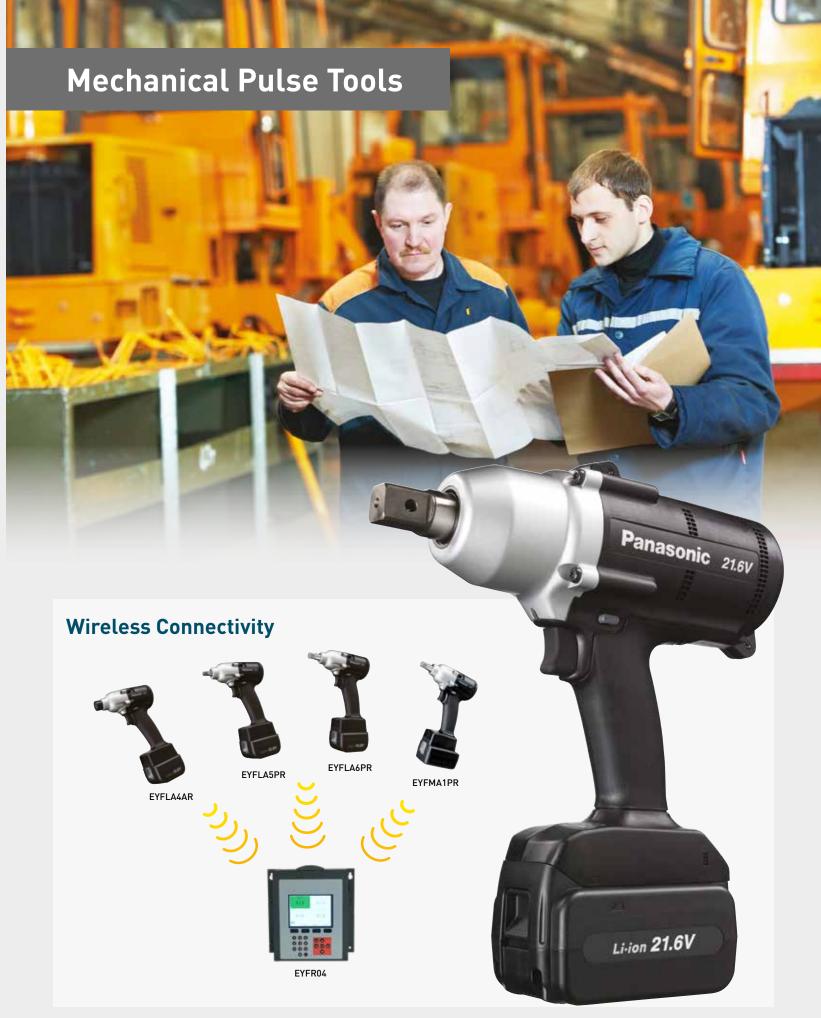
Remote Control

Tool setting can be set

only by remote control.

0







## High Torque 18V & 21.6V Cordless Mechanical Pulse Tools

**Virtually No Torque Reaction** 

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

1000

**21.6V EYFPA** 

Torque controlled range

160~**650**Nm

Lightweight

approx. **3.6 kg** 

High capacity 4.2Ah Lien 21.6V

# **18V EYFNA**

Panasonic 180

Torque controlled range

70~**200**Nm

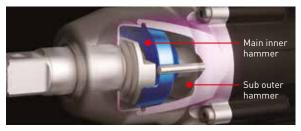
Lightweight appro<u>x. **3.0 kg**</u>

High capacity 5.0Ah

### Advanced Technologies Delivering a Compact, Lightweight Tool with High Torque

#### **High Efficiency Twin Hammer**

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

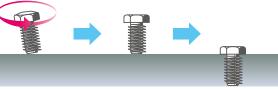


### **Advanced Fastening Features**

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



#### **Reverse Rotation!**



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

#### Maint When the fastenings are within 10,000 f

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)

### **Additional Features**

Ergonomic, computer-aided design for optimal balance and operator comfort

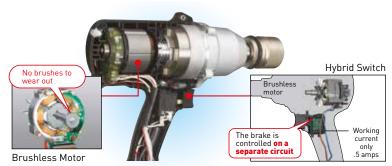


LED Light Program LED to turn on with trigger switch or ON/OFF switch to match operator preference

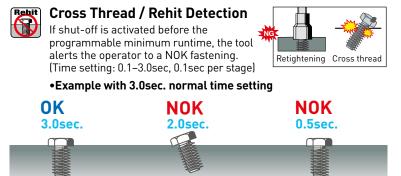


#### Compact, High-Powered Brushless Motor

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.



Finished with 3.0sec. rundown time Finished with 2.0sec. rundown time due to cross thread

Finished with 0.5sec. rundown time due to retightening



#### 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.

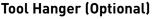


#### **Speed Control Function**

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



Non-skid rubber grip



Suspend tool vertically or horizontally from a balancer



Vertical position



#### Tightening Confirmation Lamp

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





Horizontal position

# Mechanical Pulse Tools

MODELS	5	EYFLA4A	EYFLA4AR	EYFLA5A/EYFLA5B	EYFLA5AR	EYFLA6B/EYFLA6J	EYFLA6JR				
		1	1	Ĩ	Ĩ		1				
Voltage	•	10.8V	10.8V	10.8V	10.8V	10.8V	10.8V				
Shut-off me	thod			Mechanical Pu	lse - SR Series						
Drive		A = 1/4" Hex Quick Change	A = 1/4" Hex Quick Change	A = 1/4" Hex Quick Change P = 3/8" Sq. Pin Detent	A = 1/4" Hex Quick Change P = 3/8" Sq. Pin Detent	J = 1/2" Sq. Through Hole P = 1/2" Sq. Pin Detent	J = 1/2" Sq. Through Hole P = 1/2" Sq. Pin Detent				
	Nm	3-22Nm	3-22Nm	6-30Nm	6-30Nm	16-53Nm	16-53Nm				
Torque Range	ft. lbs.	2.2-16.2 ft. lbs.	2.2-16.2 ft. lbs.	4.4-22 ft. lbs.	4.4-22 ft. lbs.	11.8-39 ft. lbs.	11.8-39 ft. lbs.				
	in. lbs.	26.55-194.72 in. lbs	26.55-194.72 in. lbs	53.1-265.52 in. lbs.	53.1-265.52 in. lbs.	141.61-469.09 in. lbs.	141.61-469.09 in. lbs.				
Max Torque (F tightening 3		Approx. 40Nm M10 Bolt	Approx. 40Nm M10 Bolt	Approx. 90Nm M14 Bolt	Approx. 90Nm M14 Bolt	Approx. 120Nm M14 Bolt	Approx. 120Nm M14 Bolt				
Flush Detection	Modes	L1-L2	L1-L2	L1-L2	L1-L2	L1-L2	L1-L2				
No Load Spo (Torque Setting		1: 0-950 2: 0-1300 3: 0-1450 4-8: 0-1550 9-30 & F: 0-2300	1: 0-950 2: 0-1300 3: 0-1450 4-8: 0-1550 9-30 & F: 0-2300	1: 0-1300 2: 0-1450 3: 0-1550 4-30 & F: 0-2300	1: 0-1300 2: 0-1450 3: 0-1550 4-30 & F: 0-2300	1-30 & F: 0-2300	1-30 & F: 0-2300				
1: 0-1900           2: 0-2500           3: 0-2800           4-8: 0-3000           9-30 & F: 0-4000		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: 0-2500 2: 0-2800 3: 0-3000 4-30 & F: 0-3600	1-30 & F: 0-3000	1-30 & F: 0-3000					
Weight	1,15 kg (incl. 2.0Ah		1,15 kg (incl. 2.0Ah EYFB32) 1,30 kg (incl. 3.0 Ah EYFB30)	1,15 kg (incl. 2.0Ah EYFB32) 1,30 kg (incl. 3.0 Ah EYFB30)	1,15 kg (incl. 2.0Ah EYFB32) 1,30 kg (incl. 3.0 Ah EYFB30)	1,25 kg (incl. 2.0Ah EYFB32) 1,40 kg (incl. 3.0 Ah EYFB30)	1,25 kg (incl. 2.0Ah EYFB32) 1,40 kg (incl. 3.0 Ah EYFB30)				
Size (L x W x	x H)	158 mm x 59 mm x 231mm (EYFB32B) 158 mm x 59 mm x 248mm (EYFB30B)	158 mm x 59 mm x 231mm (EYFB32B) 158 mm x 59 mm x 248mm (EYFB30B)	158 mm x 59 mm x 231mm (EYFB32B) 158 mm x 59 mm x 248mm (EYFB30B)	158 mm x 59 mm x 231mm (EYFB32B) 158 mm x 59 mm x 248mm (EYFB30B)	172 mm x 59 mm x 231mm (EYFB32B) 172 mm x 59 mm x 248mm (EYFB30B)	172 mm x 59 mm x 231 mm (EYFB32B) 172 mm x 59 mm x 248 mm (EYFB30B)				
Wireless Commu with assembly q		_	OK Fasten=Green light, NOK Fasten=Red light	—	OK Fasten=Green light, NOK Fasten=Red light	—	OK Fasten=Green light, NOK Fasten=Red light				
LED Work Li (ON/OFF Swi		~	~	~	~	~	~				
OK/NOK Lig (Green: OK / Re		~	~	~	~	~	~				
Rehit Prevention: (Pos per 0.1 sec. betweer		~	~	~	~	~	~				
Battery Indicatio (3 stage)		V	V	V	V	V	~				
Low Power Di	isable	~	~	~	~	~	<b>v</b>				
Prevent / Detec Threads & Re		—	-	—	—	—	-				
Maintenance Interv	val Alarm	-	-	—	—	—	—				
Variable speed On/	Off Switch	_	_	_	_	_	_				
LED Light Setting or On with pull o		_	_	_	_	_	_				
Buzzer: On /		-	-	-	-	-	-				
Snug torque detect (Possible to set b 0-3 sec. 0.1 sec. pe	etween	_	—	_	_	_					
Long socket mode (h1: socket, h2: for 250m	: for 150mm	—	_	—	-	-	-				
Work Capacity/Fa Speed	astening	<m6: 10="" n·m<br="">(EYFB30B) approx. 1200 pcs (EYFB32B) approx. 800 pcs</m6:>	n, Stage: 19> s/pack, approx. 0.7 sec/1pcs /pack, approx. 0.7 sec/1pcs	(EYFB30B) approx. 800 pcs	n, Stage: 22> /pack, approx. 0.8 sec/1pcs /pack, approx. 0.8 sec/1pcs	<m10: 23="" 43="" n·m,="" stage:=""> [EYFB30B] approx. 500 pcs/pack, approx. 0.9 sec/1pcs [EYFB32B] approx. 330 pcs/pack, approx. 0.9 sec/1pcs</m10:>					
Charging Ti	me			B, Charger EY0L82B) Usable ( B, Charger EY0L82B) Usable (							

EYFMA1B/EYFMA1J	EYFMA1JR	EYFNA1J	EYFPA1J	EYFME1C			
14.4V	14.4V	18V	21.6V	14.4V			
	1	Mechanical Pulse - SR Series	1	1			
P = 1/2" Sq. Pin Detent	P = 1/2" Sq. Pin Detent	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	C = 1/2" Square Drive with Ring Retainer and Through Hole			
25-100Nm	25-100Nm	70-200Nm	160-650Nm	10-53Nm			
18.4-73.8 ft. lbs.	18.4-73.8 ft. lbs.	51.6-147.5 ft. lbs.	118-479.4 ft. lbs.	7.3 - 39 ft. lbs			
221.27-885.07 in. lbs.	221.27-885.07 in. lbs.	619.55-1770.15 in. lbs.	1416.12-5752.98 in. lbs.	88.5 - 469,09 ft. lbs			
Approx. 185Nm M14 Bolt	Approx. 185Nm M14 Bolt	Approx. 470Nm M24 Bolt	Approx. 700Nm M24 Bolt	Approx. 80Nm M14 bolt			
L1-L2	L1-L2	L1-L2	L1-L2	L1-L2			
1-30 & F: 0-2300	1-30 & F: 0-2300	1-30 & F: 0-2300	1-30 & F: 0-2300	0 ~2300			
1-30 & F: 0-3200	1-30 & F: 0-3200	1-30 & F: 0-2200	1-30 & F: 0-2200	0 ~3500			
1.3 kg (incl. 2.0Ah EYFB41) 1.5 kg (incl. 4.2Ah EYFB42)	1.3 kg (incl. 2.0Ah EYFB41) 1.5 kg (incl. 4.2Ah EYFB42)	3.0 kg (incl. 5.0Ah (EYFB50B))	3.6 kg (incl. 4.2Ah (EYFB60B))	1.5 kg (incl. 2.0Ah EYFB41) 1.7 kg (incl. 4.2Ah EYFB42)			
172 mm x 59 mm x 231 mm (EYFB32B) 172 mm x 59 mm x 248 mm (EYFB30B	172 mm x 59 mm x 231 mm (EYFB32B) 172 mm x 59 mm x 248 mm (EYFB30B)	233 mm x 77 mm x 286 mm	233 mm x 77 mm x 286 mm	381 mm x 96 mm x 60 mm (EYFB41B) 399 mm x 96 mm x 60 mm (EYFB42B)			
_	OK Fasten=Green light, NOK Fas- ten=Red light	_	_	_			
~	~	V	~	~			
~	~	~	~	v			
~	V	~	V	~			
~	~	~	~	~			
v	~	~	~	v			
_	_	~	~	~			
_	_	~	~	v			
_	_	v	v	v			
_	_	<i>v</i>	v	v			
_	_	V	<i>v</i>	v			
_		_	_	_			
				-			
	pack, approx. 0.9 sec/1pcs						
Usable Charge: approx. 50 mi (Battery Pack EYFB4)	2B, Charger EY0L82B) n., Full Charge: approx. 60 min IB, Charger EY0L82B) n., Full Charge: approx. 40 min	Battery pack EYFB50B, Charger EYOL82B) Usable Charge: approx. 65 min. Full Charge: approx. 80 min	(Battery pack EYFB60B, Charger EY0L82B) Usable Charge: approx. 65 min. Full Charge: approx. 85 min	(Battery Pack EYFB41, Charger EY0L82B) Usable Charge: 35min, Full Charge: 40min(Bat- tery Pack EYFB42, Charger EY0L82B) Usable Charge: 50min, Full Charge: 60min			

## Assembly Tool Accessories

#### **Batteries & Chargers** EYFB32B EYFB41B EYFB42B EY9L20B EYFB30B 14.4V 4.2Ah Li-ion 7.2V 1.5Ah Li-ion 10.8V 2.0Ah Li-ion 10.8V 3.0Ah Li-ion 14.4V 2.0Ah Li-ion Battery Pack Battery Pack Battery Pack **Battery Pack Battery Pack** EYFB50B EYFB60B EY0L20B EY0L82B 18V 5.0Ah Li-ion 21.6V 4.2Ah Li-ion 7.2V Charger 10.8V - 28.8V Charger Battery Pack **Battery Pack Protector Covers** EYFA02-H EYFA03-H EYFA04-H EYFA06-H EYFA10-H Battery Protector Battery Protector for **Battery Protector** Battery Protector **Battery Protector** for EYFB30B EYFB40B/EYFB42B for EYFB41B for EYFB50B for EYFB32B EYFA08-H EYFA05 EYFA01 EYFA09 EYFG Tool Protectors EYFLA4/5/6, EYFMA1 Tool Protectors EYFNA Tool Protectors **Battery Protector** for EYFB60B -A (blue) -Y (yellow) -A (blue) -Y (yellow) -A (blue) -Y (yellow) -H (gray) -H (gray) -G (green) -H (gray) -G (green)



#### Accessories



EYFA32B **Clutch Adjustment Tool** for EYFG Series Tools



EYFA40B EYFG Tool Hanger



EYFA13

EYFLA7/8/9, EYFMA2 Tool Protectors

-A (blue), -Y (yellow)

-H (gray), -D (orange) -G (green)

EYFA41B EYFN/EYFP Tool Hanger



WEYFEA1N3137 Clutch Lock Out Cover for EYFEA1N



EYFA12

EYFME Tool Protectors

-A (blue), -Y (yellow)

-H (gray), -G (green)

EYFA31B Remote Control for all EYFG/EYFL/ EYFM/EYFN/EYFP Tools

# **Panasonic Quality Control Monitoring**

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



X

Transmitter is located in tool handle. Does not increase the size of the tool.

### Comparison of Assembly Qualifiers

MODEL	EYFR02B	EYFR03A	EYFR04A							
	• * •									
Graphics Display	-	~	<b>v</b>							
Multiple Stations	-	_	~							
Number of Tools Connectivity	1	16	16							
Number of Tools Simultaneously	1	16	4							
1-Way Radio Communication	<b>v</b>	~	<b>v</b>							
NEW! 2-Way Radio Communication	_	~	_							
Discrete Inputs/Outputs	1/2	8/12	8/12							
USB Ports	-	1	1							
Ethernet Ports	-	2	2							
Serial Port	1	1	1							
Remote Inputs/Outputs Connection	-	V	V							
PLC Integration	<b>v</b>	V	~							
Ethernet IP/Open Protocol & ToolsNet	_	V	V							
Data Collection	_	10,000 rundows onboard or via Ethernet	5,000 rundows per station onboard or via Ethernet							
Batch Counting	*With PLC	V	<b>v</b>							
Tool Sequencing	-	V	~							
Bar Code Scan Capability	-	v	<b>v</b>							
Remote Tool Disable	<b>v</b>	v	V							
Out of Range Disable / Anti-Theft	V	~	V							
Recommended Range		33' (10M)								
Rated Supply Voltage		AC 100-240V, 50/60 Hz								
I/O Voltage	5A @ 30VDC	2A @	24VDC							
Dimensions (L x H x W)	254mmx119mmx73mm	247mmx23	5mmx95mm							
Operating Temperature Range		14-140°F ((-10)-60°C)								
Compatible Tools	EYFGA1AR, EYFGA2AF EYFGA7AR, EYFLA8AR 	R, EYFGA3AR, EYFLA4AR, EYFLA5AR, EYFLA5QR, E R, EYFLA8CR, EYFLA8PR, EYFLA9CR, EYFLA9PR, E	YFLA6JR, EYFMA1JR, YFMA2CR, EYFMA2PR							

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



## EYFR03A

## Multi-Tool Assembly Qualifier

# **Wireless Communication** ))) (((OK/NOK light on the tool flashes green/red to indicate the completion of each fastener.

#### 16 to 1

Up to 16 tools can communicate over a secure connection simultaneously with qualifier to indicate OK/NOK fastenings.

simultaneously in a sequence

2-Way Compatible Tools - Accupulse HR 2Way Series Only 1-Way Compatible Tools - AccuPulse HR 2Way Series and Mechanical Radio Version

### 2-way Communication Settings

- Create fastening strategies by automatically changing tool settings.
- Tools settings can be controlled both via remote or qualifier.
- 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 Qualifier 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

## EYFR04A

### Multi-Station Assembly Qualifier



1-Way Compatible Tools - AccuPulse HR 2Way Series and Mechanical Radio Version

## EYFR02B



Green light Indicates a Red light indicates successful fastening unsuccessful fastening

Utilizing I/O or fieldbus capabilities improves quality and productivity

### **Qualifier Features**

#### **Tool Distance**

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

# 10m (33 feet Utilizes a highly reliable radio system to extend the operating range



Features Chart																							
			1								1	Mode	el			1	1		1				
	EYFLA4A	<b>EYFLA5A</b>	<b>EYFLA5Q</b>	<b>EYFLA5B</b>	EYFLA6J	EYFLA6B	EYFMA1J	EYFMA1B	EYFLA4AR	<b>EYFLA5AR</b>	<b>EYFLA5QR</b>	EYFLA6JR	EYFMA1JR	EYFME1C	EYFNA1C	EYFPA1J	EYFGA1A	EYFGA2A	EYFGA3A	EYFGA1AR	EYFGA2AR	<b>EYFGA3AR</b>	EYFEA1N
Torque adjustment	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							
Auto battery shut down	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Retightening prevention function	•	•	•	•	•	•	•	•	•	•	•	•	•	•									
Cross thread reduction														•	•	•	•	•	•	•	•	•	
Rundown error detecting function														•	•	•	•	•	•	•	•	•	
RPM adjustment																	•	•	•	•	•	•	
Auto downshift function																	•	•	•	•	•	•	
Maintenance interval alarm														•	•	•	•	•	•	•	•	•	
Variable speed control function	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•	•	•	•	•	•	•	•	0
Wireless Communication									•	•	•	•	•							•	•	•	

#### **Out-of-Range Anti-Theft Function**

In the event that wireless communication cannot be completed between tool and qualifier, 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.

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

# Transducers / Joint Simulators

### Stationary Transducers

MODEL NUMBER	TORQUE RANGE [Nm]	DRIVE
EYFST22NM	2.2 – 22	3/8" Square
EYFST100NM	10 – 100	1/2" Square
EYFST750NM	75 - 750	3/4" Square

- USB Plug 'n 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 sable included



#### 750Nm 3/4" Sq. Drive

### Joint Simulators

MODEL NUMBER	TORQUE RANGE [Nm]	BOLT SIZE	DRIVE
EYFJS22NM	22	M8	3/8" Square
EYFJS100NM	100	M12	1/2" Square
EYFJS200NM	200	M16	3/4" Square
EYFJS400NM	400	M24	3/4" Square

- 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 represents 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





### Battery Pack/Battery Charger – Compatibility Chart

VOLTAGE	MODEL	BATTERY	CHARGING TIMES USABLE: FULL CHARGE	CHARGER
21.6V	EYFPA1J	EYFB60B (4.2Ah)	65 min : 85 min	
18V	EYFNA1J	EYFB50B (5.0Ah)	65 min : 80 min	
14.4V	EYFGA1A/AR, EYFGA2A/AR, EYFGA3A/AR	EYFB41B (2.0Ah)	35 min : 40 min	EY0L82B
	EYFMA1J/1JR, EYFMA1P, EYFMA2P/PR	EYFB42B (4.2Ah)	50 min : 60 min	ETUL82B
10.8V	EYFLA4A/4AR, EYFLA5A/5AR, EYFLA5B, EYFLA5Q/5QR	EYFB30B (3.0Ah)	35 min : 45 min	
	EYFLA6J/6JR, EYFLA6B, ,EYFLA7A/7AR, EYFLA8A/C/B/AR/ CR/PR, EYFLA9C/P/CR/PR	EYFB32B (2.0Ah)	35 min : 40 min	
7.2V	EYFEA1N, EYFEA1N2S	EY9L20B	35 min : 60 min	EY0L20B

### Mechanical Pulse Tool Working Capacities\*

	MODELS	EYFLA4A EYFLA4AR	EYFLA5A/5B/5Q EYFLA5AR/5QR	EYFLA6J/6B EYFLA6JR	EYFMA1J/1B EYFMA1JR	EYFNA1J	EYFPA1J
	Settings	M6: 10Nm Stage: 19	M8: 23Nm Stage: 22	M10: 43Nm Stage: 23	M12: 71Nm Stage: 22	M14: 100Nm Stage: 13	M16: 180Nm Stage: 6
	EYFB30B 3.0Ah Battery	1200 pcs/pack 0.7 sec/1 pcs	800 pcs/pack 0.8 sec/1 pcs	500 pcs/pack 0.9 sec/1 pcs	-	-	_
Application Capacity/	EYFB42B 4.2Ah Battery	_	-	-	785 pcs/pack 0.9 sec/1 pcs	_	_
Working Speed	EYFB50B 5.0Ah Battery	-	-	-	-	500 pcs/pack 1.0 sec/1 pcs	-
	EYFB60B 4.2Ah Battery	_	-	_	_	_	450 pcs/pack 0.7 sec/1 pcs

#### AccuPulse Working Capacities\*

	MODELS	EYFLA7A/EYFLA7AR	EYFLA8A/AR/C/CR/P/PR	EYFLA9C/CR/P/PR	EYFMA2C/CR/P/PR
	Settings	M6: 10Nm, Stage: 22	M8: 23Nm, Stage: 22	M10: 43Nm, Stage: 23	M12: 71Nm, Stage: 22
Application Capacity/ Working Speed	EYFB30B 3.0Ah Battery	1200 pcs/pack 0.7 sec/1pcs	800 pcs/pack 0.8 sec/1pcs	400 pcs/pack 0.8 sec/1pcs	_
	EYFB32B 2.0Ah Battery	800 pcs/pack 0.7 sec/1pcs	540 pcs/pack 0.8 sec/1pcs	260 pcs/pack 0.8 sec/1pcs	_
	EYFB42B 4.2Ah Battery	-	-	_	600 pcs/pack 0.8 sec/1pcs
	EYFB41B 2.0Ah Battery	—	—	_	270 pcs/pack 0.8 sec/1pcs

### Precision Clutch Tool Working Capacities\*

	MODELS	JOINT	EYFGA1A/AR	EYFGA2A/AR	EYFGA3A/AR
	Settings		M6 - 5.5Nm	M6 - 8Nm	M6 - 10Nm
Application Capacity/ Working Speed	EYFB41B 2.0Ah Battery	Hard Joint 30°	1200 pcs/pack 1.1 sec/1 pcs	1050 pcs/pack 1.0 sec/1 pcs	1100 pcs/pack 1.0 sec/1 pcs
		Soft Joint 720°	540 pcs/pack 1.3 sec/1 pcs	410 pcs/pack 1.3 sec/1 pcs	310 pcs/pack 1.4 sec/1 pcs
	EYFB42B 4.2Ah Battery	Hard Joint 30°	2700 pcs/pack 1.1 sec/1 pcs	2350 pcs/pack 1.0 sec/1 pcs	2500 pcs/pack 1.0 sec/1 pcs
		Soft Joint 720°	1250 pcs/pack 1.3 sec/1 pcs	1000 pcs/pack 1.3 sec/1 pcs	730 pcs/pack 1.4 sec/1 pcs

### Low Torque Clutch Tool and Driver Working Capacities\*

	MODEL	FASTENING	EYFEA1N	
Application Capacity/ Working Speed	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	

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