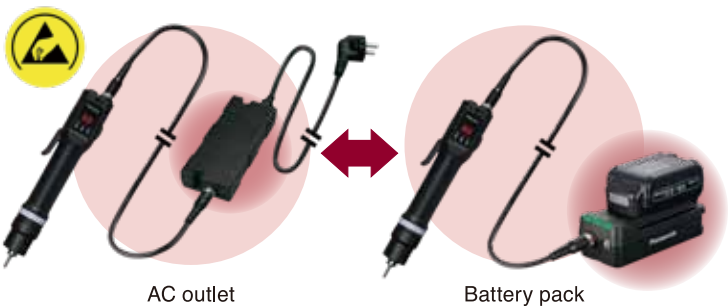


Panasonic DC Clutch Screwdriver

NEW Compact Series B Model EYADB/EYSDB
Series A Model EYADA/EYSDA

Take your
assembly
quality
control to
the next level

- ESD Protection (IEC 61340-5-1:2016)
- Extensive lineup – 10 models
- Wide spec range (160-1,800min⁻¹/0.03-4.4Nm)
- Built-in controller/counter (EYADA/EYADB)
- Pokayoke OK/NOK LED Indication
- Lever/Push start convertible in one body
- Two kinds of power source – AC outlet or battery pack



EYADB

EYADA

■ Main Specifications and Function Chart

● : Available

Model No.			EYADB	EYSDB	EYADA	EYSDA
			110XC	110XD	112XC 212XC 218XC 407XC	112XD 212XD 218XD 407XD
Applicable screw size			M1 - M3		M3 - M5	
Clutch torque setting range			0.03 - 1.2Nm		0.1 - 4.4Nm	
Rated rotation speed			1,000min ⁻¹		650/1,200/1,800min ⁻¹ by model	
Rotation speed change			10 Levels		10 Levels	
Tool body size (length / grip ø)			222mm / 33mm		271mm / 38mm	
Tool body weight			370g		630g	
Power supply (optional AC adaptor)			AC 100-240V, 50/60Hz, 2.6A max /Output DC30V 3A			
Chuck (one touch bit lock) / Bit shank			Φ 4mm shank		Hex 6.35mm shank	
Start method			Push/lever start (convertible)			
Motor			DC 30V Brushless			
ESD Protection			Yes (IEC 61340-5-1 : 2016)			
LED Display			3-Digit display		2-Digit display	
Setting managemen	Parameter presets	5 Types	●			
		1 Type			●	
	Parameter switching	Step pattern mode	●			
	Setting lock	Setting lock	●			
Fastening support	OK/NOK Verification	LED Lamp & buzzer	●		●	
		LED Lamp		●		●
	Fastening count setting	Count mode, Count return, Count reset, Count disable, Judgment disable, Count judgment standby	●		●	
		OK/NOK Judgement	Limit settings (time, rotation count)	●		
		Limit settings (time)			●	
	Thread screw prevention	Soft start & Reverse start	●			
		Soft start			●	
	Tool Selection Prevention	Sequence control (PLC)	●		●	
	In-progress status notification	Flashing lamp	●			
	Loosening operation support	Cycle & speed adjustment available	●			
Specialized application	Missed fastening prevention	Timeout function	●			
	Production count display	Cycle count display (on tool)	●			
		Screw alignment	Auto stop (count available)	●		
		Auto stop			●	
	Reverse thread screw support	Direction setting	●			
	Loosen & Retighten operation	Auto forward/reverse	●			
	Tapped hole inspection	Auto forward/reverse + Auto stop	●			
Fastening data output		Wired (Optional communication cable)	●		●	
Sequence control		Configurable via optional PLC	●		●	
Output signal from tool		Fastening OK	●		●	
		Fastening NOK	●		●	
		Count complete(batch complete)	●		●	
		Forward/Reverse	●		●	
		Timeout	●			

■ Rated Specifications <Battery Pack Adaptor>

Model	EYSZP002B			
Function	Battery level LED, Battery protection (dead battery lamp, high battery temperature indicator lamp), Auto-off function, Wall-mountable (bracket included)			
Power supply	Output DC 30V/3A, 1 terminal *for connection with screwdriver cord (EYSXC120B/130B)			
Size/Weight *	Length 178 x Height 55 x Width 74mm/440g (only main body)			
Height with applicable battery pack *	EYFB50 (18V 5Ah) 105mm	EYFB43 (14.4V 4Ah) 104mm	EYFB33 (10.8V 3.8Ah) 104mm	
	EY9L54 (18V 5Ah) 105mm	EY9L47 (14.4V 2Ah) 84mm	EYFB32 (10.8V 2Ah) 86mm	
	EY9L53 (18V 3Ah) 87mm	EYFB41 (14.4V 2Ah) 86mm		
Capacity reference* (with full charge)		112, 212 series Machine screw M3×8	218 series Machine screw M3×8	407 series Machine screw M3×8
	EYFB50	18V 5Ah	8,000 pcs	8,100 pcs
	EYFB33	10.8V 3.8Ah	3,250 pcs	3,450 pcs

* : Numbers are approx.

Compact Series B
For Precision Assembly

Recommended Screw Size

M1-M3

Model No.
EYADB/EYSDB



New



ESD Protection
(IEC 61340-5-1:2016)

*Ground screwdriver body by
connecting AC outlet through
AC power adaptor (EYSZP003B).



EYADB

Torque range (approx.)

0.03-1.2Nm

Weight

370g

Overall Length

222mm

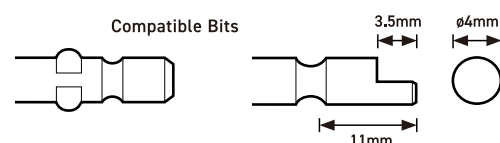
Grip Diameter

ø33mm

Chuck

One-Touch Bit Lock

(Compatible with ø4mm shank bits)



Series A
For General Appliance Assembly

Recommended Screw Size

M3-M5

Model No.
EYADA/EYSDA



ESD Protection
(IEC 61340-5-1:2016)

*Ground screwdriver body by
connecting AC outlet through
AC power adaptor (EYSZP003B).



EYADA

Torque range (approx.)

0.1-4.4Nm

Weight

630g

Overall Length

271mm

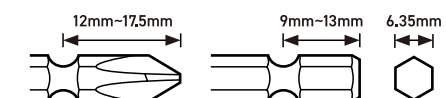
Grip Diameter

ø38mm

Chuck

One-Touch Bit Lock

(Compatible with 6.35 mm hex shank bits)

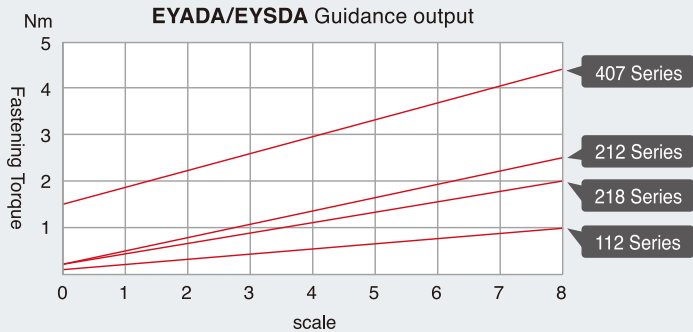
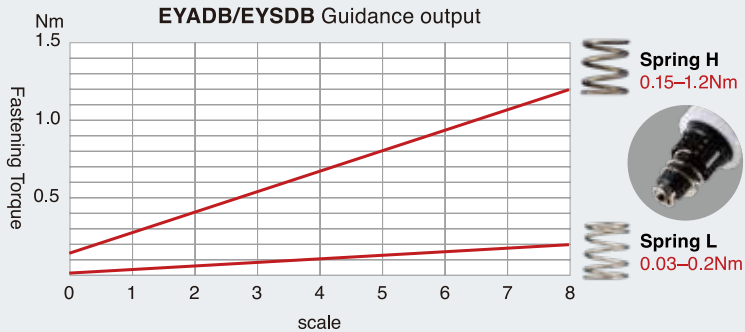


		NEW Compact Series B / M1-M3 Compatible				Series A / M3-M5 Compatible							
		Compact Multi-Function		Simple Basic		Multi-Function				Simple Basic			
Model No.		EYADB 110XC		EYSDB 110XD		112XC	212XC	218XC	407XC	112XD	212XD	218XD	407XD
Clutch torque setting range (Nm) *See below for details.		0.03-0.2 with Spring L	0.15-1.2 with Spring H (Two different torque range by changing clutch spring)	0.03-0.2 with Spring L	0.15-1.2 with Spring H (Two different torque range by changing clutch spring)	0.1-1.0	0.3-2.5	0.3-2.0	1.5-4.4	0.1-1.0	0.3-2.5	0.3-2.0	1.5-4.4
Rated rotation speed (min ⁻¹) *Speed change possible. See next page for details.		*(250~) 1,000		(650) 1,000		*(300~) 1,200	*(300~) 1,200	*(450~) 1,800	*(160~) 650	1,200	1,200	1,800	650
Improve Productivity	Data Output & Collection	External output via communication cable		N/A		External output via communication cable				N/A			
	Setting Management	Max. number of parameter		5		N/A		1		N/A			
	Parameter Switching	Standalone tool control (Step pattern mode)		N/A		N/A		N/A		N/A			
Improve Product Quality	Fastening Support Functions	Tool Selection Control (Sequence Control)		PLC Integration supported		N/A		PLC Integration supported		N/A			
		Missed Fastening Prevention / OK-NG Judgment		Count function & Judgment conditions (Rotation count / Time)		N/A		Count function & Judgment conditions (Rotation time)		N/A			
		Cross-Thread Prevention		Soft start & Reverse start		N/A		Soft start function		N/A			
		In-Progress Status Notification		Flashing lamp (After first fastening)		N/A		N/A		N/A			
		Incomplete Count Alert		Count function & Timeout alert		N/A		N/A		N/A			
	Specialized Application	Cycle Count Display		Cycle count display (on tool)		N/A		N/A		N/A			
		Count Function for Loosening & Reverse Thread Screws		Tightening direction setting		N/A		N/A		N/A			
		Screw Alignment		Auto rotation stop (Count available)		N/A		Auto rotation stop		N/A			
		Loosen & Retighten Operation		Auto forward / Reverse switching		N/A		N/A		N/A			
		Tapped Hole Inspection		Auto forward / Reverse switching + Auto stop		N/A		N/A		N/A			
Improve Operability	Selectable Start Method (Push/ Lever)		Yes		Yes		Yes		Yes		Yes		
	Verification Lamp		Yes		Yes		Yes		Yes		Yes		
	Speed Adjustment		10-Speed adjustment (Forward / Reverse)		2-Speed adjustment (Forward / Reverse)		10-Speed adjustment (Forward / Reverse)		10-Speed adjustment (Forward / Reverse)		N/A		

Clutch scale and clutch torque



Scale 0~8
with 192 steps
(Model EYADB/EYSDB)
with 96 steps
(Model EYADA/EYSDA)



Key Supporting Functions by Model

Reducing work mistakes (Screw count errors, manufacturing errors, etc)

DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓	✓	✓	✓

Verification Lamp

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

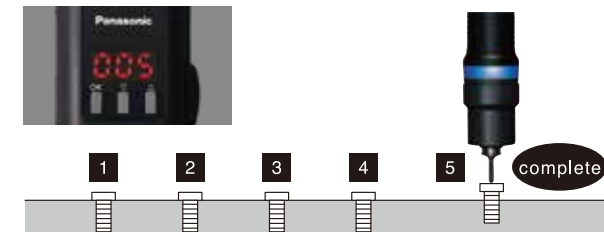
LED Lamp color indication	EYADB	EYSDB	EYADA	EYSDA
OK	●	●	●	●
NOK	●	●	●	●
Setting mode	●	●	●	●
Count-complete	●	N/A	●	N/A
Stopwatch mode	●	N/A	●	N/A
Step pattern mode	●	N/A	N/A	N/A
Rotation count mode	●	N/A	N/A	N/A

DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓		✓	

Equipped with count function to prevent forgotten fastened screws

The number of fastens is managed by the counter in the tool.
* count-up or count-down
* Up to 999 fastens (EYADB), Up to 99 fastens (EYADA)

e.g. When fastening 5 screws

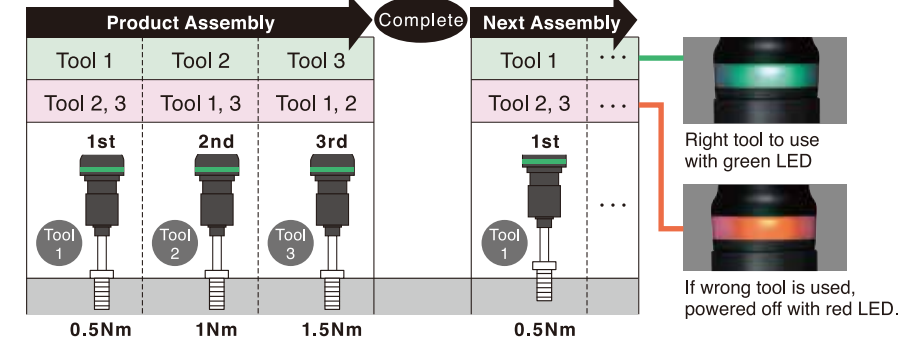


DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓		✓	

Sequence function for using multiple tools in specific orders

According the sequence process set by PLC outside, only the right tool is powered on.

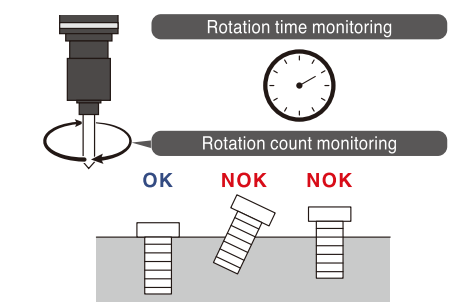
e.g. When using 3 tools



DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓		✓	

Advanced fastening monitoring

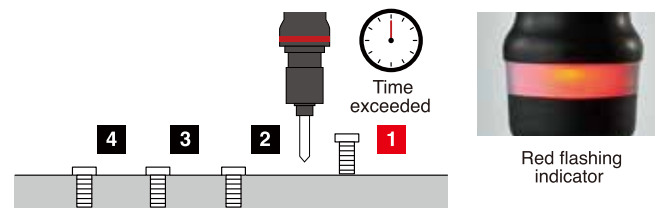
Improve work quality by having control of the tool's rotation time and the threshold for the number of rotations when fastening screws. Work OK/NOK is displayed with LED colored lamps



DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓			

Timeout Function

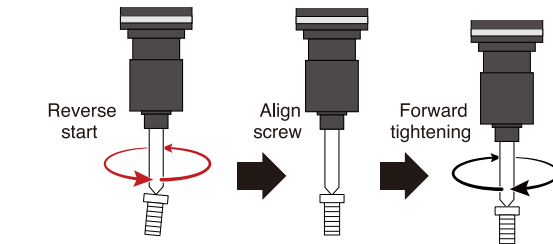
If the preset count is not completed within the set time, the indicator flashes red to alert the operator, preventing missed fastening before the next process.



DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓			

Reverse Start Function

Reverse rotation for a half or full turn aligns the screw before forward tightening, reducing cross-threading and galling.



DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓	★	✓	

Multiple rotation speed setting options

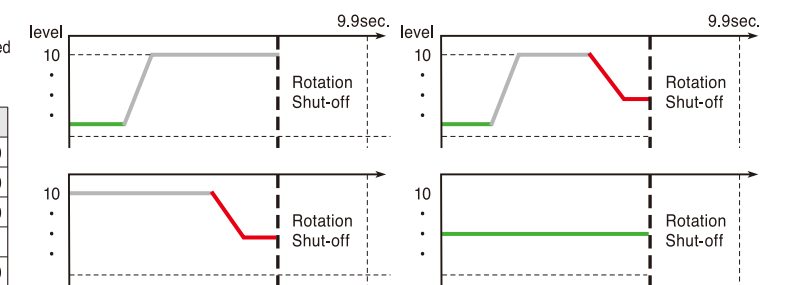
With any mix of soft start and soft snug time, possible to set various rotation speed pattern according to your fastening requirement.

* within 9.9 seconds/fastening * not available in EYSDA models * Level 10 : rated rotation speed

• Rotation speed by level / model (min⁻¹/approx.)

Level	01	02	03	04	05	06	07	08	09	10
EYADA218	450	600	750	900	1,050	1,200	1,350	1,500	1,650	1,800
EYADA212	300	400	500	600	700	800	900	1,000	1,100	1,200
EYADA112	300	400	500	600	700	800	900	1,000	1,100	1,200
EYADA407	160	220	270	330	380	430	490	540	600	650
EYADB110	250	330	420	500	580	670	750	830	920	1,000

Soft start / Soft snug time setting example



Convenience / Security

DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓	✓	✓	✓

Start method



Choice of push or lever start mode. Lever can be removed for push start mode.

OP : Optional /sold separately

DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
		OP	✓

Grip attachment



EYSXA102B
Convenience for horizontal or high torque fastening

DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓	✓	✓	✓

Free-spin clutch cover



EYSXA104B
for EYADA/EYSDA
EYSXA105B
for EYADB/EYSDB

Minimizing tampering or accidental setting change

DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
✓		✓	

Mode setting button cover



EYSXA103B
for EYADA
EYSXA106B
for EYADB

Double security with tool hanger and screw

OP : Optional /sold separately

DB Series		DA Series	
EYADB	EYSDB	EYADA	EYSDA
OP	OP	OP	OP

Battery Pack Adaptor

EYSZP002B



Free from AC power outlet by supplying stable 30V DC to Panasonic DC Electric Screwdriver.

Convenience for tentative trial/trim/rework, frequent layout change, or long reach requirement for large size products

Providing 'mobility' to DC Electric Screwdriver

• Stable 30V DC supply

Output voltage from adaptor
30V DC

Battery pack 18V DC
14.4V DC
10.8V DC

approx. 8,000 screws
EYADA212, M3 x 8,
18V 5Ah Battery Pack

Boost up battery pack voltage to stable 30V DC



Enough battery capacity
Less battery capacity
Red LED blinks and shuts off power supply before sharp voltage down

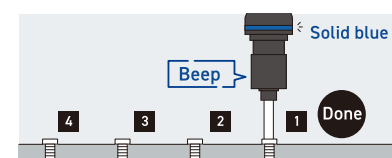
▼ Prevention of Missed Fastening / Cross-Threading & Loose Screw Prevention / Over-, Under-, and Incorrect Torque Prevention

Product proceeds to the next process with missing fastenings

Cause
Operator does not verify fastening count

Solution
Counts fastening operations and notifies upon completion

Fastening Count Setting + Completion Notification

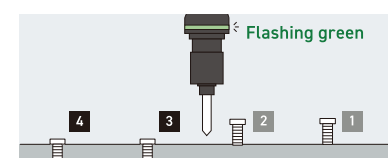


EYADB	EYADA
Buzzer + Verification lamp	Buzzer + Verification lamp

Cause
Completion is mistakenly assumed despite insufficient fastenings

Solution
Notifies work-in-progress status

Lamp Setting (Flashes while waiting from the second screw onward)

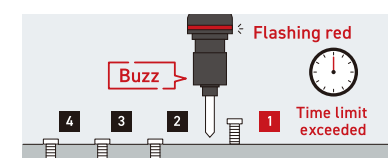


EYADB	EYADA
●	—

Cause
Mistakenly recognizes completion despite insufficient fastenings

Solution
Notifies when work is not completed within takt time

Timeout Setting



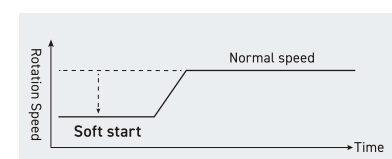
EYADB	EYADA
●	—

Cross-threading or loose screws occur due to misalignment

Cause
High initial rotation speed causes misalignment

Solution
Slows initial rotation for easier thread alignment

Soft Start Setting

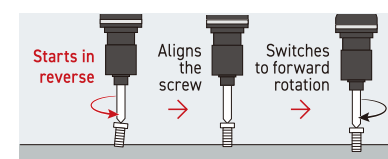


EYADB	EYADA
●	●

Cause
Threads are not properly aligned

Solution
Starts in reverse to properly seat the screw and reduce cross-threading

Reverse Start Setting

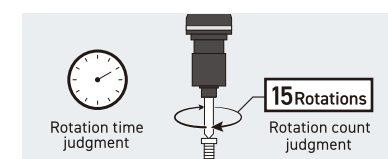


EYADB	EYADA
●	—

Cause
Operator cannot determine fastening quality

Solution
Pass / fail judgment based on time and rotation count thresholds

Judgment Settings by Rotation Time / Rotation Count



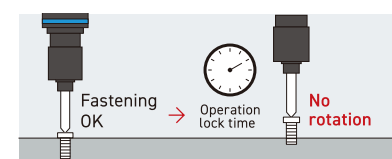
EYADB	EYADA
0.01 sec. increments 0.1 Rotation increments	0.1 sec. increments

Retightening / double tightening occurs

Cause
Operator does not follow retightening restrictions

Solution
Prevents restart within the set time

Operation Lock Setting (Double-Tightening Prevention)



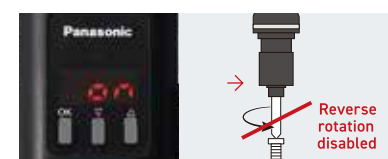
EYADB	EYADA
●	●

Screws are loosened

Cause
Operator does not follow loosening restrictions

Solution
Reverse rotation disabled regardless of switch position

Reverse Rotation Lock Setting



EYADB	EYADA
●	—

Incorrect tool is selected

Cause
Multiple tools are suspended in cell production

Solution
Only required tools are enabled for operation (Powered ON)

Drive Enable Setting via External Input + PLC Integration



EYADB	EYADA
●	●

▼ Fastening Condition Settings / Production Progress / Monitoring / Reduction of Judgment Errors and Work Loss

Need to quickly switch conditions when tasks change

Solution
Register settings by screw type

Parameter Registration

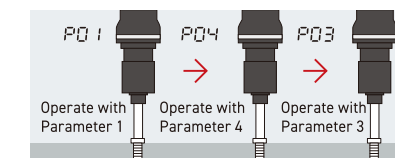
P01	Parameter 1	P04	Parameter 4
P02	Parameter 2	P05	Parameter 5
P03	Parameter 3	ESC	Back

EYADB	EYADA
●	—

Need to switch conditions for different tasks within one cycle

Solution
Automatically switches parameters during operation

Step Pattern Registration

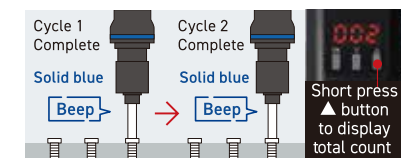


EYADB	EYADA
●	—

Need to monitor production progress

Solution
Quickly check counts on the built-in tool counter

Cycle Count Function



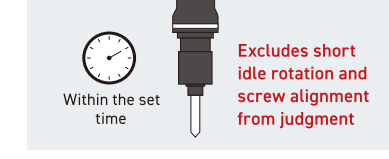
EYADB	EYADA
●	—

NG Judgment occurs during screw alignment or screw pickup

Cause
Normally, even short rotation triggers clutch judgment

Solution
Clutch activation within the set time is ignored

Judgment Disable Setting



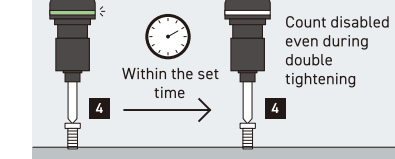
EYADB	EYADA
●	●

Retightening or verification tightening advances the count

Cause
Normally, every clutch activation is counted

Solution
Clutch activation within the set time is ignored

Count Disable Setting



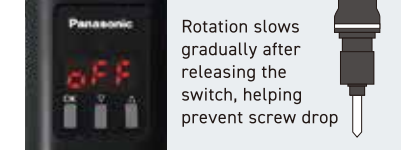
EYADB	EYADA
●	●

Brake engages when picking up screws from the feeder, causing screw drops

Cause
Brake activates immediately after screw pickup during rotation, causing screw release

Solution
Disables brake function within the set time

Brake Setting

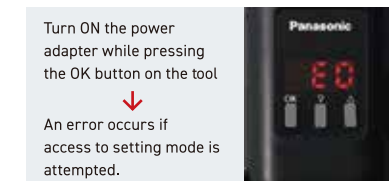


EYADB	EYADA
●	●

Do not want operators to change settings

Solution
Prevents access to setting mode

Setting Lock

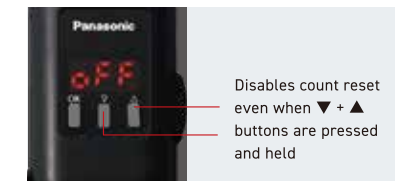


EYADB	EYADA
●	—

Do not want operators to recover from a mistake by themselves

Solution
Prevents easy changes to count Settings

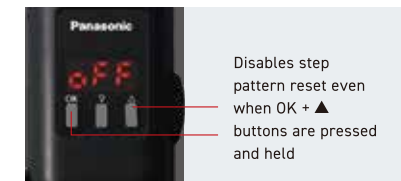
Count Reset Permission Setting



EYADB	EYADA
●	●

Solution
Prevents easy changes to work patterns

Step Pattern Reset Permission Setting



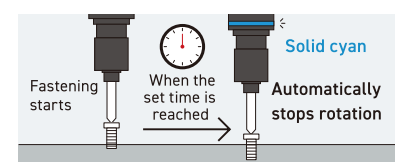
EYADB	EYADA
●	—

▼ Thread Starting / Loosening Work / Reverse-Thread Work

Need to stop the screw midway (for thread starting)

Solution
Stops rotation before seating at the set time

Automatic Rotation Stop Setting

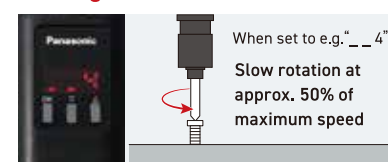


EYADB	EYADA
●	●

Need to adjust rotation speed during loosening (reverse rotation)

Solution
Allows rotation speed adjustment only during reverse rotation

Reverse Rotation Speed Level Setting

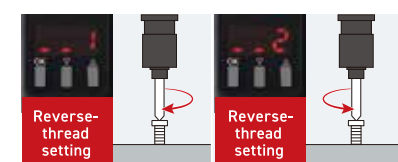


EYADB	EYADA
●	—

Need to use advanced functions for reverse threads or loosening (reverse rotation)

Solution
Reverses the fastening direction to enable functions in forward rotation

Fastening Direction Setting



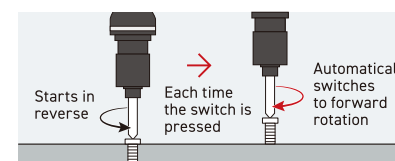
EYADB	EYADA
●	—

▼ Sequential Loosening & Tightening / Tap Hole Inspection / Mixed-Process Operations

Need to loosen first and retighten after wiring work

Solution
Rotation direction switches each time the switch is pressed (or the bit is pushed)

Automatic Forward / Reverse Switching Setting

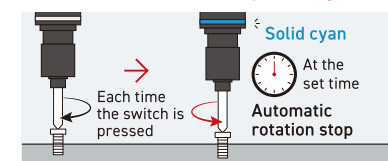


EYADB	EYADA
●	—

Need to inspect tap hole quality using a tap drill

Solution
Rotation direction switches each time the switch is pressed and stops at the desired time

Automatic Forward / Reverse Switching + Automatic Rotation Stop Setting

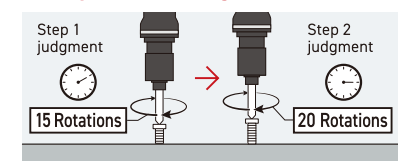


EYADB	EYADA
●	—

Need separate pass/fail criteria for different screw lengths within one cycle

Solution
Set appropriate rotation time and rotation count for long and short screws

Parameter Registration + Step Pattern Registration



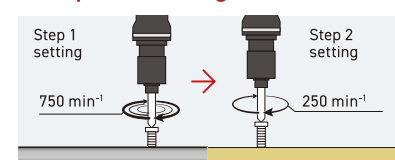
EYADB	EYADA
●	—

▼ Mixed-Process Operations

Need different rotation speeds for different materials within one cycle

Solution
High speed for metal parts, low speed for resin parts

Parameter Registration + Step Pattern Registration

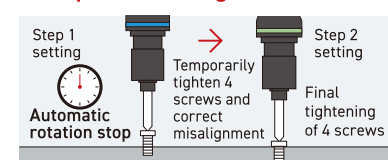


EYADB	EYADA
●	—

Sheet metal misalignment causes unstable fastening

Solution
Temporarily tightens with automatic rotation stop, corrects misalignment, then performs final tightening

Parameter Registration + Step Pattern Registration

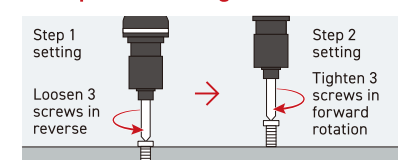


EYADB	EYADA
●	—

Need to remove and refasten components in one process

Solution
Need to remove and refasten components in one process

Parameter Registration + Step Pattern Registration



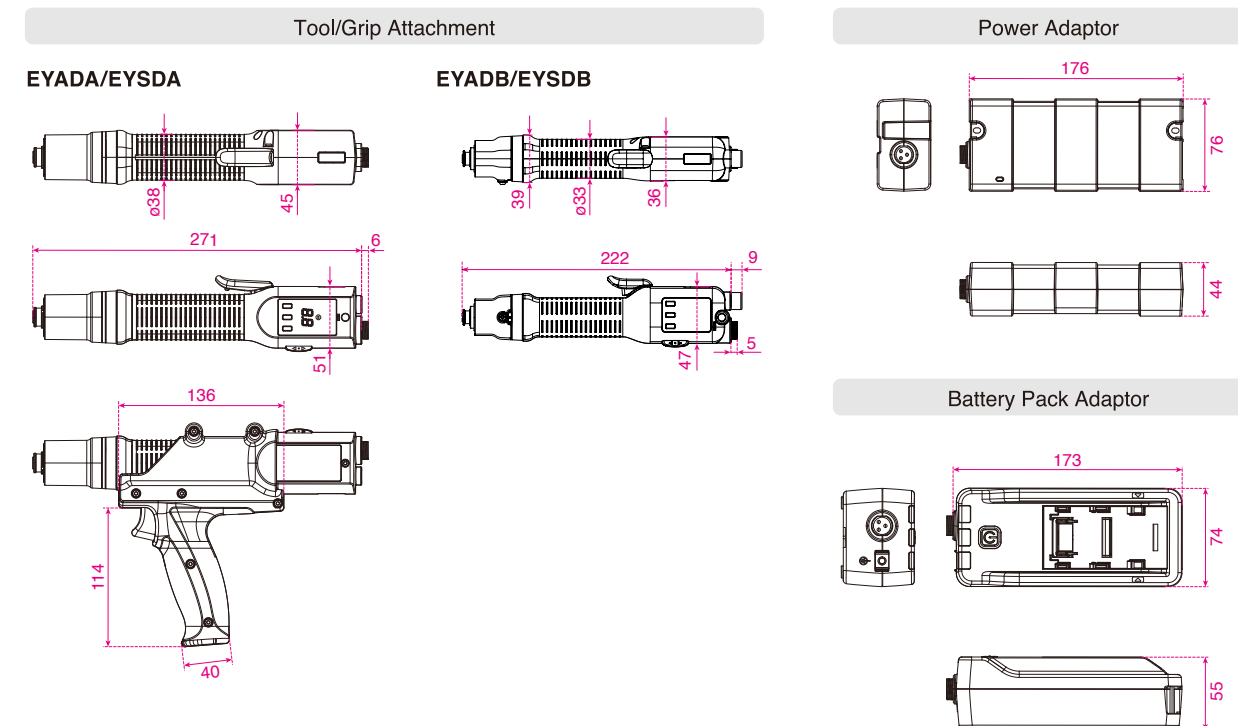
EYADB	EYADA
●	—

■ Accessory Chart

● : Standard ○ : Sold separately

Accessory			EYADB	EYSDB	EYADA				EYSDA			
			110XC	110XD	112XC	212XC	218XC	407XC	112XD	212XD	218XD	407XD
Power adaptor / cord		EYSZP003B	○			○					○	
Battery pack adaptor		EYSZP002B	○			○					○	
2m Screwdriver cord		EYSXC120B	●			●					●	
3m Screwdriver cord		EYSXC130B	○			○					○	
Communication cable		EYAXC230B	●	—		○					—	
Hanging hook		EYSXA100B		●		●					●	
Clutch cover (Non-ESD)		EYSXA101B		—		○					○	
Clutch cover (ESD)		EYSXA104B		—		●					●	
		EYSXA105B		●		—					—	
Grip attachment		EYSXA102B		—	○	○	○	●	○	○	○	●
Mode setting button cover		EYSXA103B		—		●					—	
		EYSXA106B	●	—		—					—	

■ Dimension



The design and specification of products are constantly changing in the interest of improvement. Whilst every care has been taken in preparation of this catalogue, some changes may not have been indicated and may have occurred after publication. Check with your distributor for details.