

Screw Fastening Counter Series

Prevents human error with various functions. * Special models available on request

The error is detected based on the set tightening time.

Self adjustable timer function

The optimum value of screw tightening time is set from the actual screw tightening.

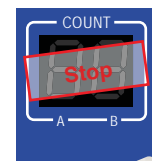
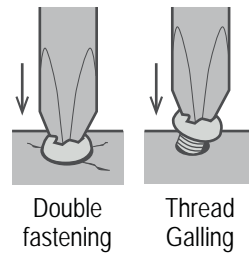


The best time is X seconds per screw



Count Correction Function

Does not count when error is detected.



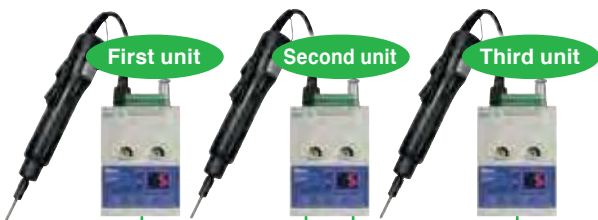
Error !



Human error prevention

Link Connection Function

Multiple screwdrivers can be linked. The other screwdrivers will be in standby state.

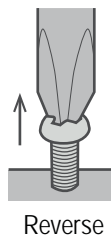


Link Connection

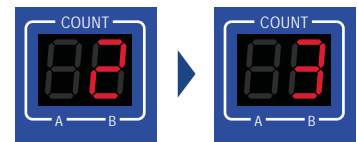
Link Connection

Count Return Function

The remaining number of screw tightening is returned when the rotation is reversed.



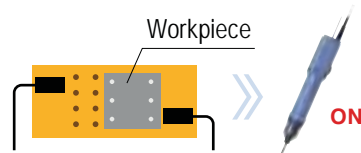
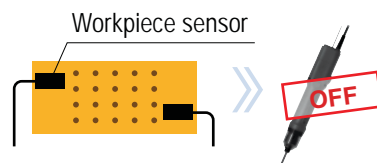
Reverse



Return one count

Driver Lock Function

Unnecessary screwdrivers are locked in conjunction with the workpiece sensor.



Lock when workpiece is not in place !



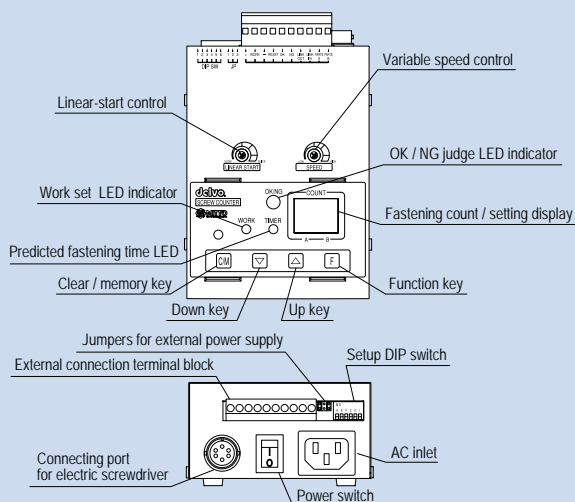
Screw Fastening Counter

DLR5640-WN

- Functions of the controller and counter are integrated into a single unit.
- Equipped with Linear Start Function that gradually increases the rotation speed at start.
- Universal power input for use anywhere in the world.

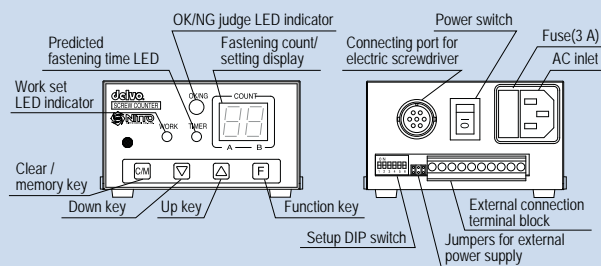


Front and Rear Panels



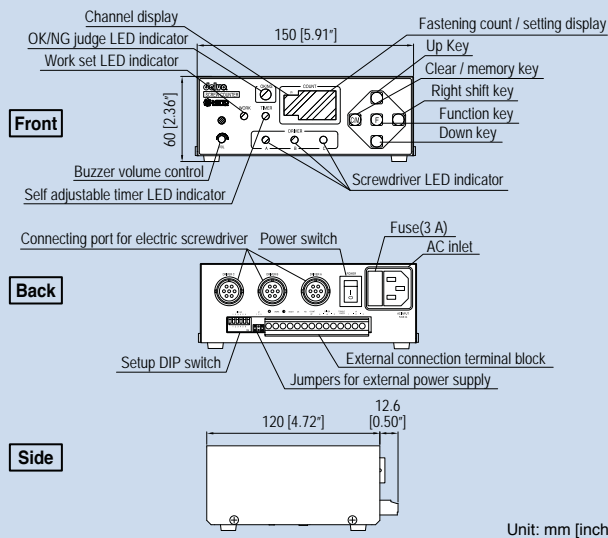
DLR5040A-WE

- Compact and lightweight model.
- A wide range of SPC screwdriver types are available.



DLR5340-WE

- Three dedicated screwdrivers can be connected.
- Eight kinds of screw fastening conditions can be stored in internal memory.



Unit: mm [inch]

Function List

	Self adjusting timer function	Count correct function	Link connection function	Count return function	Driver lock function	Number of connecting ports
DLR5640-WN	•	•	•	•	•	1
DLR5040A-WE	•	•	•	•	•	1
DLR5340-WE	•	•		•	•	3



Features

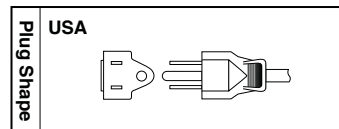
The self-adjustable timer function automatically assesses the time required to complete fastening each screw and reflects it on the judging time setting

- Ideally suited for the assembly lines of vehicles and electrical equipment requiring reliable screw fastening
- The controller receives signals from electric screwdrivers to provide highly reliable screw fastening control
- Functions of the controller and counter are integrated into a single unit
- Count Return Function: When a screw is loosened, a reverse signal output from the electric screwdriver reverses the count by one
- The self-adjustable timer function automatically assesses the time required to complete tightening each screw and reflects it on the judging time setting
- The Count Correction Function does not count elevated screws or double fastening as fastening errors
- External Count Function: To be available to various assembling jobs, the DLR5640 enables counting of two kinds of parts (up to 9 counts each) in addition to the screw tightening counting. These kinds of counting can be used together.

- Link Connection Function: You can build up a simple sequential screw tightening system by connecting the DLR5640 screw tightening counters in series without using any external controller such as a programmable controller
- Driver Lock Function prevents unexpected start of screwdrivers
- Desktop or wall-hung installation is available
- Input voltage range from 100 V AC to 240 V AC is acceptable in any part of the world

Specifications

Model	DLR5640-WN	
Count	1 - 99	
Counting Method	Count-up / Count-down	
Count Correction Function	Count normal fastening only	
Self Adjustable Timer Setting	0.01 to 0.99 sec.	
Work Detection Function	Yes (1 terminal) / No	
External Count Input	2 terminals (PARTS A / PARTS B)	
Work Installation Timer Setting	0 to 9.5 sec.	
OK Output Timer Setting	0 to 9.5 sec.	
NG Alarm	ON(1) / ON(2) / OFF	
OK Buzzer	ON(1) / ON(2) / ON(3) / OFF	
Count Return Function	ON / OFF	
NG Judge Timing	WORK SET / DRIVER ON	
Automatic / Manual OK Judge	AUTO / MANUAL	
Screwdriver Lock Function	ON / OFF	
Multiple Link	Up to 10 counters can be connected.	
External Inputs on Terminal Block	SENSOR / RESET / LINK-IN / PARTS A / PARTS B	
External Outputs on Terminal Block	OK / NG / LINK-OUT	
Parameter Memory	Parameters stored in internal nonvolatile memory	
Screwdriver Control	SPEED / LINEAR START	
Input Voltage	100 - 240 V AC, 50/60 Hz	
Screwdriver Power Supply	33 V DC, 1.5 A	
External Dimensions (mm [inch])	W101 x D140 x H57 [W3.98" x D5.51" x H2.24"]	
Mass (g [lbs])	800 [1.76]	
Accessories	2 m Power cord with USA plug Suspension bail (2 pcs.)	



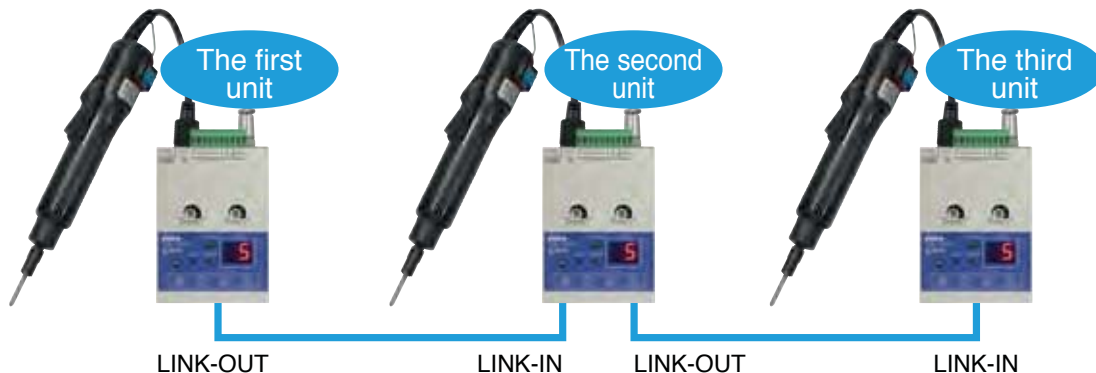
Example of use together with a sensor available in the market



The example of installation

LINK Function (Common to DLR5040A & DLR5640)

When counters are connected and activated in the screw fastening sequence as shown below, all screwdrivers are on standby except the first one in the sequence. Only when the first screw fastening is finished, can the next screwdriver change from standby to ready. When the last fastening in the sequence is finished, the first screwdriver is once again ready and the sequence can be repeated again.
N.B. Up to 10 screwdriver/counter sets can be connected to the LINK.



Screwdrivers designed for DLR5640-WN Non-CE



DLV7410A/7410HA/7420A-SPC

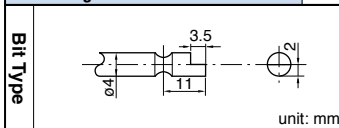
DLV7321/7331-SPC

DLR5640-WN



Specifications

Model	DLV7410A-SPC	DLV7410HA-SPC	DLV7420A-SPC	DLV7321-SPC	DLV7331-SPC
Starting Method	Lever Start				
Torque Adjustment	Stepless				
Torque (Nm [lbf-in])	0.02 - 0.2 [0.2 - 1.8]		0.15 - 0.4 [1.3 - 3.5]	0.1 - 0.5 [1.9 - 4.4]	0.3 - 1.2 [2.7 - 10.6]
Free Speed (min ⁻¹)	500 - 750	700 - 1000	450 - 600	300 - 1000	200 - 700
Power Consumption (W)	Approx. 10			Approx. 35	
Screw Size (mm)	Machine Screw	1.0 - 2.3	1.6 - 2.6	1.0 - 3.0	2.0 - 3.5
	Tapping Screw	1.0 - 2.0	1.4 - 2.3	1.2 - 2.6	2.0 - 3.0
Electrostatic Countermeasure	Complied with EN100015-1				
Mass (g [lbs])	230 [0.51]			350 [0.77]	
Cord Length (m)	1.5 (with connector)				
Grounding Bit Feature	Equipped as standard				



Combinations with Electric Screwdrivers

Screwdriver Model	Connection	Remarks
DLV7410A / 7410HA / 7420A-SPC	The cord comes with screwdriver	Screwdriver for the screw fastening counter only
DLV7321 / 7331-SPC	Direct connection to power source	
DLV7410A / 7410HA / 7420A / 7419A / 7419HA / 7429A-BMN	Optional conversion cord (TD02925 DLW9072)	General-purpose screwdriver *1

*1: The Count Return Function is not available.

Optional Accessories



DLW9072(TD02925)



Torque Adjustment Ring Cover
(DLW5700: DLV7400A-SPC
DLW5300: DLV7300-SPC)

This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set.



Features

For prevention of human fastening errors and enhanced fastening management accuracy

- Ideally suited for the assembly lines of vehicles and electrical equipment requiring reliable screw fastening
- The controller receives signals from electric screwdrivers to provide highly reliable screw fastening control
- Count Return Function: When a screw is loosened, a reverse signal output from the electric screwdriver reverses the count by one
- The Count Correction Function does not count elevated screws or double fastening
- Input voltage range from 100 to 240 V AC is acceptable in any part of the world

(The screwdrivers to be used in combination with the counter require input power supplies that are written on the respective nameplate)

- Link Connection Function: You can build up a simple sequential screw tightening system by connecting the DLR5040A-WE screw tightening counters in series without using any external controller such as a programmable controller
- Driver Lock Function prevents unexpected start of screwdrivers
- Compact and Lightweight (Compared with our conventional models decreased by 30 % in volume and by 38 % in mass)
- SPC type screwdrivers for DLR5040A-WE are designed on the basis of established transformerless screwdrivers

Specifications

Model	DLR5040A-WE
Count	1 - 99
Counting Method	Count-up / Count-down
Count Correction Function	Count normal fastening only
Self Adjustable Timer Setting	0.01 to 0.99 sec.
Work Detection Function	Yes (1 terminal) / No
External Count Input	2 terminals (PARTS A / PARTS B)
Work Installation Timer Setting	0 to 9.5 sec.
OK Output Timer Setting	0 to 9.5 sec.
NG Alarm	ON(1) / ON(2) / OFF
OK Buzzer	ON(1) / ON(2) / ON(3) / OFF
Count Return Function	ON / OFF
NG Judge Timing	WORK SET / DRIVER ON
Automatic / Manual OK Judge	AUTO / MANUAL
Screwdriver Lock Function	ON / OFF
Multiple Link	Up to 10 counters can be connected.
External Inputs on Terminal Block	SENSOR / RESET / LINK-IN / PARTS A / PARTS B
External Outputs on Terminal Block	OK / NG / LINK-OUT
Parameter Memory	Parameters stored in internal nonvolatile memory
Input Voltage	100 - 240 V AC, 50/60 Hz
External Dimensions (mm [inch])	W100 x D120 x H60 [W3.94" x D4.72" x H2.36"]
Mass (g [lbs])	470 [1.04]

Accessory: 2 m cord with UL three-prong plug. This product is for use outside Japan.

LINK Function

When counters are connected and activated in the screw fastening sequence as shown below, all screwdrivers are on standby except the first one in the sequence. Only when the first screw fastening is finished, can the next screwdriver change from standby to ready. When the last fastening in the sequence is finished, the first screwdriver is once again ready and the sequence can be repeated again.

N.B. Up to 10 screwdriver/counter sets can be connected to the LINK.



Example of use together with a sensor available in the market

DLR5340-WE Non-CE



Features

Up to three sets screwdrivers can be connected to one counter

- Up to eight kinds of screw fastening conditions can be stored in internal memory for a wide variety of assembly work
- Count-up signal outputs
- Space saving
- The Count Correction Function does not count elevated screws or double fastening as fastening errors
- Count Return Function: When a screw is loosened, a reverse signal output from the electric screwdriver reverses the count by one

Specifications

Model	DLR5340-WE
Count	0 - 99
Counting Method	Count-up / Count-down
Count Correction Function	Count normal fastening only
Self Adjustable Timer Setting	0.01 to 2.50 sec.
Work Detection Function	Yes (1 terminal) / No
Work Installation Timer Setting	0 to 9.5 sec.
OK Output Timer Setting	0 to 9.5 sec.
NG Alarm	ON(1) / ON(2) / OFF
OK Buzzer	ON(1) / ON(2) / ON(3) / ON(4) / ON(5) / OFF
Count Return Function	ON / OFF
Screwdriver Lock Function	ON / OFF
Screwdriver Cord Connection	Single cord connection (Signal and power lines)
External Inputs on Terminal Block	SENSOR / RESET / TORQUE CHECK / ch1/2/3
External Outputs on Terminal Block	OK / NG / COUNT-UP / DRIVER A/B/C
Input Voltage	100 - 240 V AC, 50/60 Hz
External Dimensions (mm [inch])	W150 x D120 x H60 [W5.91" x D4.72" x H2.36"]
Mass (g [lbs])	620 [1.37]

Accessory: 2 m cord with UL three-prong plug. This product is for use outside Japan.