C Series (Current control Type) Model DLV04C/10C

For Machine Screws #1 - #4 (1.2 - 4.0 mm)

Features

- Fastening values are easily set in the controller
- Current Controlled Torque System suitable for screw fastening work in different torque settings
- Low-voltage brushless motor
- ESD (electrostatic discharge) protection structure
- For both hand-held and automatic machines
- Controller has built-in screw fastening counting function.

DLV04C10L   DLV10C10L   DCC0101X-AZ

One screwdriver, four settings

* When the same bit is used.

- **Controller offers multiple torque and speed settings.**
  * The range varies depending on SOFT fastening or HARD fastening.

2.21 Lb-in 450 rpm	1st unit
1.33 Lb-in 600 rpm	2nd unit
3.1 Lb-in 1000 rpm	3rd unit
2.66 Lb-in 450 rpm	4th unit

All in one !

Torque: 0.44 - 3.54 Lb-in **(DLV04C)**
[0.05 - 0.4 Nm]
1.77 - 8.85 Lb-in **(DLV10C)**
[0.2 - 1.0 Nm]
Speed: 100 - 1000 rpm

Torque range **0.44 - 8.85** Lb-in

Specifications

Electric Screwdriver	Model		Bit	CE/UL	DLV04C10L-AY	K	DLV10C10L-AY	K
	Power Source				DCC0101X-AZP			
	Torque Adjustment				Adjustment from 1 to 100% in 1% increments			
	Torque	SOFT fastening setting (1000 min⁻¹ setting)			0.4 - 3.5 (0.05 - 0.4)		1.8 - 8.9 (0.2 - 1.0)	
		SOFT fastening setting (600 min⁻¹ setting)			0.4 - 3.1 (0.05 - 0.35)		1.8 - 4.0 (0.2 - 0.45)	
	Lb-in (Nm)	HARD fastening setting			0.4 - 3.5 (0.05 - 0.4)		1.8 - 8.9 (0.2 - 1.0)	
	Free Speed	SOFT fastening setting			600 - 1000			
	rpm	HARD fastening setting			100 - 1000			
	Screw Size	inch thread			#1 - #3		#2 - #4	
	(for reference)	metric coarse thread			1.2 - 3.0 mm		1.8 - 4.0 mm	
	Bit Type				NK35 (OD6.35 mm [1/4"] Hex. Shank)			
	Input Voltage				24 V DC			
	Weight		lbs (g)		0.82 (370)			
	Rated Operation				ON: 0.5 seconds / OFF: 3.5 seconds			

Please contact us for 4 mm bit type ("M" Bit) of CE/UL models.

Controller	Model	DCC0101X-AZ P*
	Input Voltage	AC100 - 240 V AC, 50/60 Hz
	Operation Channel Function	Torque and speed setting in 4-channel memory
		Can switch to any operation channel
	Count Function	Counts the number of screws fastened
		Workpiece detector can be linked
	External Start up Control Function	Start up control can be enabled by external input signal
	Input Signal Method	Photocoupler input
		(24 V DC drive (5 mA/1 input), respond to PNP output)
	Output Signal Method	Photocoupler output
		(30 V DC or less, 30 mA/1 output or less, PNP output method)
	Service Power Source	24 V DC (Maximum capacity 200 mA)
	Power consumption	When on standby: 20 W
		During electric screwdriver rotation (rated): 30 W
	Weight lbs (g)	2.4 (1100)
	Standard Accessory	80" (2 m) cord with UL three-prong plug.

*DCC0101X-AZN with NPN output also available

Output Torque and Rotation Speed

SOFT fastening setting

DLV04C

DLV10C

Setting torque 100%
Setting torque 50%
Setting torque 30%
Setting torque 1%

Bit Torque (Lb-in)
Speed setting (rpm)

HARD fastening setting

DLV04C

DLV10C

Bit Torque (Lb-in)
Setting torque (%)
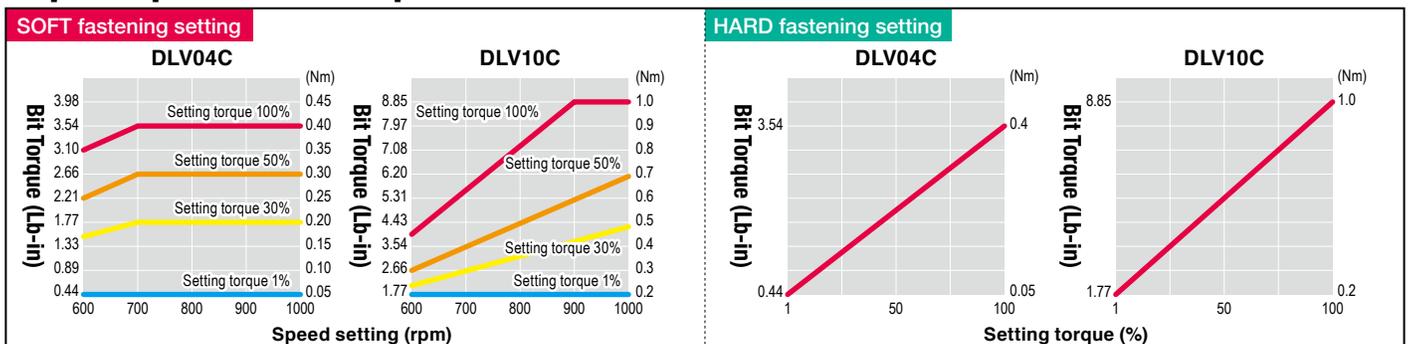
*The graph is for guidance only. The output torque range is not guaranteed.

Comparison of Adjustment Method with Conventional Model

Image of Automation

Torque adjustment

Conventional — Torque is adjusted by turning the adjustment ring at the end of the screwdriver.

C Series — Torque is set with the external controller. No need to adjust the screwdriver body.

Speed setting

Conventional — The speed of transformerless type screwdrivers is fixed for each series.

C Series — Speed is set with the external controller. Adjustable speeds between 100 to 1000 rpm.

Optional Accessories

Screw joint (with white rubber) DLW4540

Screw joint (with black rubber) DLW4550

Screw joint (with metal washer) DLW4560

Screw vacuum pump Connect the tube to the vacuum pickup port. The vacuum will pick up the screw.

Torque checker DLT1173A

For "K" Bit

Vacuum pickup DLP6640

Vacuum pickup (for automatic machine) DLP6650

For "M" Bit

Vacuum pickup DLP6600

Vacuum pickup (for automatic machine) DLP6610

Flanged coupling (for automatic machine) DLW9015

SOFT / HARD Fastening Settings

Two fastening mode settings available.
Choose the setting based on the type of workpiece, screws, and your operating conditions.

SOFT fastening setting Suitable for workpieces with high fastening load such as tapping screws or fastening soft objects such as rubber.

HARD fastening setting Suitable for workpieces with small fastening load such as threaded holes or rigid bodies such as metal.

External Signals

You can input or output external signals via a signal terminal block.

Terminal No.	Function	Details	I/O
1 (+)	+24 V DC	Built-in service power source (Capacity: Maximum 200 mA)	Service power source
2 (-)	0 V DC	• Use power source for input/output signal common wire, or for the workpiece detection sensor, etc.	
3	Channel A	In the 2-bit input signal, specify the operation channel (CH1 to CH4)	Input
4	Channel B	• Valid only when "operation channel switching method" (No.1 CH-CHG) is set to "INPUT"	
5	Forward rotation startup	Startup with external input signal	
6	Reverse rotation startup		
7	WORK	Input the workpiece signal (workpiece detection sensor output) • When "count function" (No.11 COUNT-FNC) and "workpiece signal" (No.12 WORK-SNSR) set to ON, the workpiece signal input is valid	
8	WORK RESET	Reset operation (same as controller [WORK RESET] button	
9	Keylock	Lock the controller button operation • Disable the controller button operation, and prevent setting changes by the operator	
10	Input signal negative common wire	Connect 0 V DC* • Service power source (terminal No.2) or external 0 V DC power source can be connected	
11	Forward rotation signal	Set output signal during forward rotation to ON	Output
12	Reverse rotation signal	Set output signal during reverse rotation to ON	
13	Count-up (C-UP)	Performance of normal screw fastening (torque-up) sets output signal to 0.3 seconds ON	
14	Screw fastening NG (F-NG)	If screw fastening NG, sets output signal to 0.3 seconds ON	
15	Operation channel 1 (CH1)	Set the channel output signal to ON during operation or settings	
16	Operation channel 2 (CH2)		
17	Operation channel 3 (CH3)		
18	Operation channel 4 (CH4)		
19	Operation OK	If the set count screw fastening is completed and operation OK, the output signal is set to ON	
20	Operation NG	When the WORK input signal is OFF during an operation, and the operation is judged to be NG, the output signal is ON	
21	Space	No connection	
22	Output signal positive common wire	Connect +24 V DC* • Service power source (terminal No.1) or external +24 V DC can be connected	