

# A Series (Low Voltage Type) Model DLV30A/45A/70A For Machine Screws #3 - #5/16 (2.6 - 8.0 mm)

## Features

Eco-friendly electric screwdrivers with built-in brushless motors in a low voltage (DC) profile

- Extensive torque range
- Available model with speeds of 650, 1200 or 2000 rpm for DLV30A, 650 or 1200 rpm for DLV45A, and 650 rpm for DLV70A
- Lever Start and Push to Start type models are available
- Includes a torque adjustment ring cover
- Design conforms to the RoHS Directive for the environmentally conscious user
- Includes an easily detachable Pistol Grip DLW2300ESD (TD01965) as a standard accessory (DLV45A, DLV70A)
- ESD (electrostatic discharge) protected housing
- Detachable power code for easy maintenance



## Specifications

Electric Screwdriver											
Model	Bit	Starting Method	Free Speed rpm	Torque Adjustment Lb-in(Nm)		Screw Size (for reference)		Weight lbs(g)	Bit	Power Source	Power Consumption
				Low Torque Spring*1 (Standard Accessory)	High Torque Spring*2 (installed)	Inch Thread	Metric Coarse Thread				
DLV30A06L-AY: K	K	Lever Start	650	3.5 - 14.2 (0.4 - 1.6)	10.6 - 26.6 (1.2 - 3.0)	#3 - #11	2.6 - 5.0 mm	1.52 (690)	Hex 1/4"	DEA0151N-A / DEA0241N-AZ	44 W
DLV30A12L-AY: K			1200							DEA0241N-AZ	
DLV30A20L-AY: K			2000							DEA0151N-A / DEA0241N-AZ	
DLV30A06P-AY: K	K	Push to Start	650	17.7 - 39.8 (2.0 - 4.5)	#9 - #13	4.5 - 6.0 mm	1.85 (840) with Pistol Grip	DEA0151N-A / DEA0241N-AZ			
DLV30A12P-AY: K			1200					DEA0241N-AZ			
DLV30A20P-AY: K			2000					DEA0151N-A / DEA0241N-AZ			
DLV45A06L-AY: K	K	Lever Start	650	33.6 - 62.0 (3.8 - 7.0)	#12 - #5/16"	5.0 - 8.0 mm	1.85 (840) with Pistol Grip	DEA0151N-A / DEA0241N-AZ			
DLV45A12L-AY: K			1200					DEA0241N-AZ			
DLV45A06P-AY: K			K					Push to Start		650	
DLV45A12P-AY: K	1200	DEA0241N-AZ									
DLV70A06L-AY: K	K	Lever Start	650	33.6 - 62.0 (3.8 - 7.0)	#12 - #5/16"	5.0 - 8.0 mm	1.85 (840) with Pistol Grip	DEA0241N-AZ			
DLV70A06P-AY: K		Push to Start						DEA0241N-AZ			

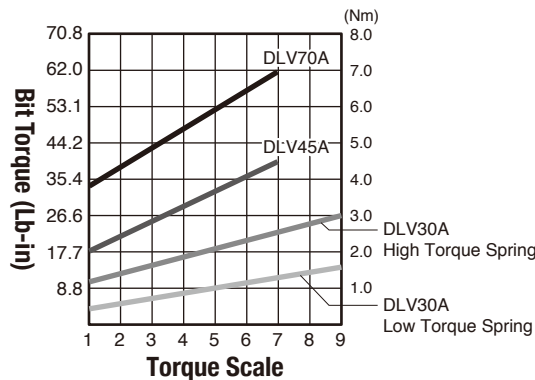
Power Supply					
Model	Input	Output	Maximum Rated Power	Weight lbs(g)	Standard Accessory
DEA0151N-AZ	100 - 240 V AC, 50/60 Hz, 60 W	40 V DC	150 W	1.23 (560)	80" (2 m) cord with UL three-prong plug
DEA0241N-AZ			240 W	1.98 (900)	

\*1: Standard Accessory, \*2: Built-in.

## Standard Accessories

For DLV30A	<ul style="list-style-type: none"> <li>• Bit NK35 × 2 × 7 × 75</li> <li>• Suspension Bail</li> <li>• Low Torque Spring</li> <li>• Connection Cord (DLW9073)</li> </ul>
For DLV45A, DLV70A	<ul style="list-style-type: none"> <li>• Bit NK35 × 2 × 7 × 75</li> <li>• Suspension Bail</li> <li>• Connection Cord (DLW9073)</li> <li>• Pistol Grip (DLW2300ESD)</li> </ul>

## Torque Diagram (for reference)



**S Series (Variable speed Type) Model DLV30S/45S/70S**  For Machine Screws #3 - #5/16 (2.6 - 8.0 mm)

**Features**

- High power brushless motor
- Adjustable speed control for machine or tapping screws
- Programmable three stage speed control
- Built-in screw counting function
- Configures setting with optional remote controller
- ESD(electrostatic discharge) protected housing
- Detachable power cord for easy maintenance



**Programmable Three Stage Speed Control Function**

Low speed start-up minimizes cross-threading, stripped screws.

High speed drive increases productivity.

Low speed at torque-up minimizes stripped screw and overshott torque.

<Step 1>

<Step 2>

<Step 3>

**Built-in Screw Fastening Counter**

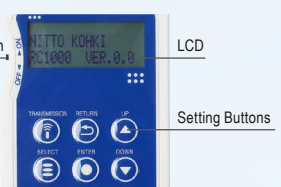
- Batch counting
- Fastening time monitoring, OK(Pass)/Fail(NG) decision



**LEDs and Setting Buttons on the Screwdriver**



**Part Names of the Remote Controller**



**Specifications**

Model	Starting Method	Torque Adjustment Lb-in(Nm)		Screw Size (for reference)		Weight lbs(g)	Bit	Power Source	Power Consumption
		Low Torque Spring (Standard Accessory)	High Torque Spring (installed)	Inch Thread	Metric Coarse Thread				
DLV30S06L-AYK	Lever Start	3.5 - 14.2 (0.4 - 1.6)	10.6 - 26.6 (1.2 - 3.0)	#3 - #11	2.6 - 5.0 mm	1.57 (710)	Hex 1/4"	DEA0151N-A / DEA0241N-AZ	44 W
DLV30S12L-AYK								DEA0241N-AZ	
DLV30S20L-AYK								DEA0151N-A / DEA0241N-AZ	
DLV30S06P-AYK	Push to Start	17.7 - 39.8 (2.0 - 4.5)	#9 - #13	4.5 - 6.0 mm	1.90 (860) with Pistol Grip	DEA0241N-AZ			
DLV30S12P-AYK						DEA0241N-AZ			
DLV30S20P-AYK						DEA0151N-A / DEA0241N-AZ			
DLV45S06L-AYK	Lever Start	33.6 - 62.0 (3.8 - 7.0)	#12 - #5/16"	5.0 - 8.0 mm	1.85 (840)	DEA0241N-AZ			
DLV45S12L-AYK						DEA0241N-AZ			
DLV45S06P-AYK						DEA0151N-A / DEA0241N-AZ			
DLV45S12P-AYK	Push to Start	-	-	-	-	DEA0241N-AZ			
DLV70S06P-AYK						DEA0241N-AZ			
DLV70S12P-AYK	Push to Start	DEA0241N-AZ							

**Power Supply**

Model	Input	Output	Maximum Rated Power	Weight lbs(g)	Standard Accessory
DEA0151N-AZ	100 - 240 V AC, 50/60 Hz, 60 W	40 V DC	150 W	1.23 (560)	80" (2 m) cord with UL three-prong plug
DEA0241N-AZ			240 W	1.98 (900)	

**Setting Range of Speed and Torque (for reference only)**

Speed Level	Speed (rpm)	DLV30S06			DLV45S06			DLV70S06		
		Torque (Lb-in [Nm])			Torque (Lb-in [Nm])			Torque (Lb-in [Nm])		
Lv1	160	3.5 - 11.5 [0.4 - 1.3]	-	-	-	-	-	-	-	-
Lv2	220	3.5 - 17.7 [0.4 - 2.0]	17.7 - 21.2 [2.0 - 2.4]	-	-	-	-	-	-	-
Lv3	280	3.5 - 23.9 [0.4 - 2.7]	17.7 - 30.9 [2.0 - 3.5]	33.6 [3.8]	-	-	-	-	-	-
Lv4	340	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	33.6 - 40.7 [3.8 - 4.6]	-	-	-	-	-	-
Lv5	410	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	33.6 - 47.8 [3.8 - 5.4]	-	-	-	-	-	-
Lv6	470	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	33.6 - 54.9 [3.8 - 6.2]	-	-	-	-	-	-
Lv7	530	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	33.6 - 62.0 [3.8 - 7.0]	-	-	-	-	-	-
Lv8	590	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	33.6 - 62.0 [3.8 - 7.0]	-	-	-	-	-	-
Lv9	650	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	33.6 - 62.0 [3.8 - 7.0]	-	-	-	-	-	-

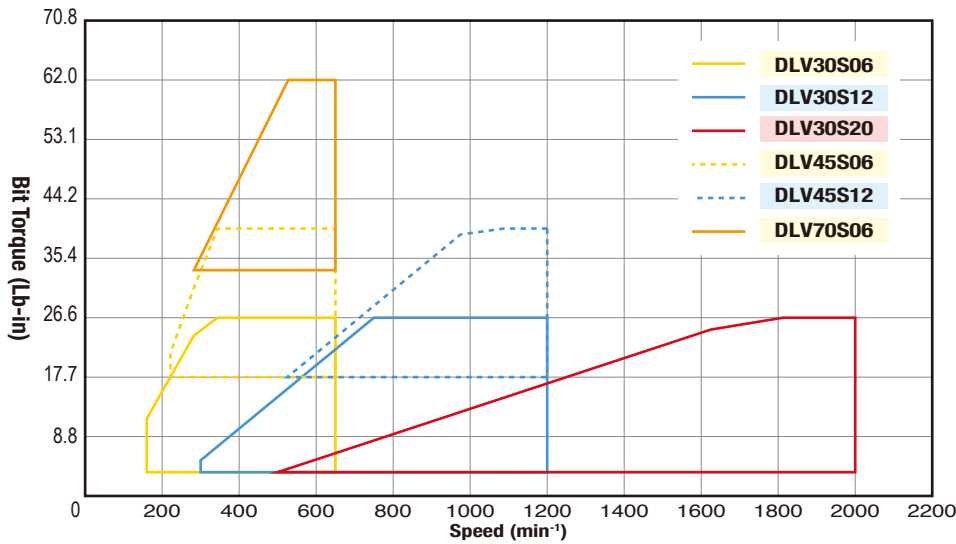
Speed Level	Speed (rpm)	DLV30S12		DLV45S12	
		Torque (Lb-in [Nm])		Torque (Lb-in [Nm])	
Lv1	300	3.5 - 5.3 [0.4 - 0.6]	-	-	-
Lv2	420	3.5 - 10.6 [0.4 - 1.2]	-	-	-
Lv3	530	3.5 - 15.9 [0.4 - 1.8]	17.7 [2.0]	-	-
Lv4	640	3.5 - 21.2 [0.4 - 2.4]	17.7 - 23.0 [2.0 - 2.6]	-	-
Lv5	750	3.5 - 26.6 [0.4 - 3.0]	17.7 - 28.3 [2.0 - 3.2]	-	-
Lv6	860	3.5 - 26.6 [0.4 - 3.0]	17.7 - 33.6 [2.0 - 3.8]	-	-
Lv7	980	3.5 - 26.6 [0.4 - 3.0]	17.7 - 38.9 [2.0 - 4.4]	-	-
Lv8	1,090	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	-	-
Lv9	1,200	3.5 - 26.6 [0.4 - 3.0]	17.7 - 39.8 [2.0 - 4.5]	-	-

Speed Level	Speed (rpm)	DLV30S20	
		Torque (Lb-in [Nm])	
Lv1	500	3.5 [0.4]	-
Lv2	690	3.5 - 7.0 [0.4 - 0.8]	-
Lv3	880	3.5 - 10.6 [0.4 - 1.2]	-
Lv4	1,060	3.5 - 14.1 [0.4 - 1.6]	-
Lv5	1,250	3.5 - 17.7 [0.4 - 2.0]	-
Lv6	1,440	3.5 - 21.2 [0.4 - 2.4]	-
Lv7	1,630	3.5 - 24.7 [0.4 - 2.8]	-
Lv8	1,810	3.5 - 26.6 [0.4 - 3.0]	-
Lv9	2,000	3.5 - 26.6 [0.4 - 3.0]	-

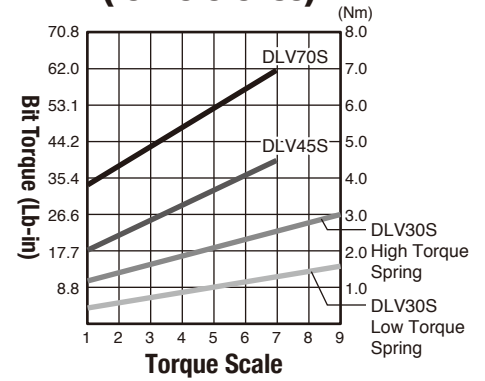
\*Speed and torque are for reference only. The actual values depend on the fastening material and size of screws. The values are not guaranteed.

### Setting Range for Standard Models

The low speed level is effective in hard-to-fasten applications such as tapped holes in sheet metal, stainless steel, and plastic. The high speed level is effective in shortening the cycle time in an assembly line.



### Torque Diagrams (for reference)



\*Graphs are for reference only. The actual values depend on usage conditions.

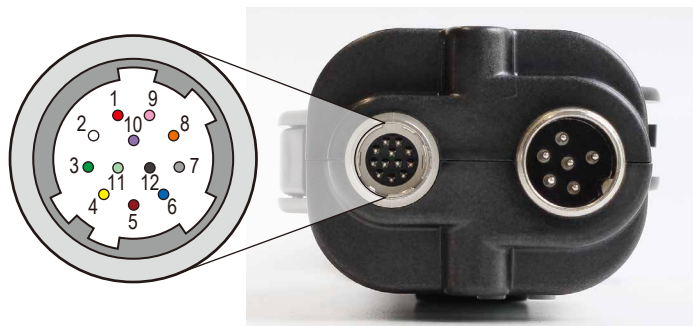
### Equipped with the External Signal Connector

The screwdriver can accept an external signal or output a signal externally through the external signal connector.

Pin No.	Lead wire color	Signal	Input / output
1	Red	+24 V DC power (supplied from outside)	
2	White	Workpiece Signal	Input
3	Green	Reset signal	Input
4	Yellow	LINK-IN	Input
		Forced stop signal	
5	Brown	OK Signal	Output
6	Blue	NG Signal	Output
7	Gray	LINK-OUT	Output
		Channel switching signal	
8	Orange	Torque-up (count) signal	Output
9	Peach	Channel A	Input
10	Purple	Channel B	Input
11	Yellow Green	Channel C	Input
12	Black	0 V DC	

Lead wire colors are the ones used in the optional signal cable ass'y DLW9090.

\*Either Pin No.4 or 7 must be selected, but not both.



### Standard Accessories

For DLV30S	<ul style="list-style-type: none"> <li>• Bit NK35 x 2 x 7 x75</li> <li>• Suspension Bail</li> <li>• Low Torque Spring</li> <li>• Connection Cord (DLW9073)</li> </ul>
For DLV45S DLV70S	<ul style="list-style-type: none"> <li>• Bit NK35 x 2 x 7 x75</li> <li>• Suspension Bail</li> <li>• Connection Cord (DLW9073)</li> <li>• Pistol Grip (DLW2300ESD)</li> </ul>

### Optional Accessories

<p><b>Remote Controller</b> RC1000</p> 	<p><b>Signal Cable Ass'y</b> DLW9090 (3 m)</p> 	<p><b>Connection Cord</b> DLW9073 (1.5 m)</p> 	<p><b>Relay Cord</b> (To connect DLW9073 and DLW9073) DLW9074</p> 
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\*Standard accessory of screwdrivers