



Nitto Kohki's "**COO**" contributes to improvement of assembly quality.



"delvo", a screwdriver that realizes high precision torque management

Products with high reliability are born only with reliable tools.

High Precision

A high precision torque is a must to improve assembly quality. "delvo" has high repeatable torque accuracy, and it is possible to equalize the tightening torque.

Long Life

"delvo" with brush motor uses a long life motor that withstands a guaranteed fastening cycle of a million times. "delvo" with brushless motor are eco-friendly and maintenance free that realize high durability.

Shockless

Original clutch and motor stop mechanism minimizes the shock at the end of the screw fastening. It reduces the fatigue of screw fastening.



NITTO KOHKI has made every effort in environmental improvement schemes on a company-wide basis through the implementation of ISO14001 to execute environmentally conscious business activities. As a part of our ongoing commitment to improve the environment, we are also committed to exclude or reduce restricted chemical substances in our products, as designated by the RoHS directives and Laws and Regulations of Chemical Substances in Japan. For further details, please see the following:

Nitto Kohki group companies' Green Procurement Guidelines have been established by their environmental committee which consists of members from all the Nitto Kohki group of companies. Nitto Kohki group companies give preferential treatment to suppliers that work to an environmental policy framework. Nitto Kohki group companies periodically survey their suppliers to ensure their chemical management systems include the monitoring of environmental issues such as the RoHS directives, and Japanese laws and regulations of Chemical Substances to minimize packaging and waste. We are continuing our goal to ensure that our made-to-order items are also covered by our environmental policy.

Green Procurement Policy

Each of the Nitto Kohki group companies is clarifying the control categories of the environmental management substances included in the parts and auxiliary materials constituting Nitto Kohki products and those of the environmental management substances used in the manufacturing processes. We will promote prohibition and reduction of use of the environmental management substances according to such control categories. Through these activities, we will comply with various laws and regulations related to the environmental management substances and reduce the impact to the global environmental conservation and to the ecological system.

Scope of Application



Our Green Procurement Guideline applies to all materials, parts, products, and auxiliary materials which Nitto Kohki Group companies purchase for production or sales.

Our Green Procurement Activities



NITTO KOHKI group companies continually aim to comply with RoHS directives, and Japanese laws and regulations of Chemical Substances.

- Standard products have been RoHS compliant. Green procurement activities on made-to-order products are continuing.
- NITTO KOHKI group companies are now working to the REACH Regulation.
- NITTO KOHKI group companies are building a database of the chemical management substances regulated by the RoHS directives, the REACH Regulation and Japanese laws and regulations of Chemical Substances.

Classification in this catalog

Power type — The type of power source is indicated.

Brush motor Brushless motor — The type of motor is indicated.

Miniature screw Precision screw Machine screw — The type of screw* is indicated.

Screw Size — The size range of screw is indicated.



* Miniature screw ... for 1.0 to 2.6 mm Precision screw ... for 1.0 to 3.5 mm Machine screw ... for 2.6 to 8.0 mm



About Torque Management

The fastening torque generated on the screw varies depending on the screw size, material and the type of workpiece. Always check and manage the torque generated on the screw with a torque wrench., etc. The fastening torque varies depending on the fastening conditions.

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Quick Reference Symbols



Lever Start

Operates when the lever is pressed.



Brushless Motor

Maintenance free, no brush replacement required. Realizes high durability.



Clean room adaption

Adapts to assembly in class 5 clean rooms



Push to Start

Operates when the screwdriver is pressed.



Grounded Bit

Prevents electrostatic breakdown when the bit contacts the workpiece.



Soft Stop

Gradually reduces the rotation speed to improve the screw tightening quality.



Transformerless

A dedicated controller is not required. Operates by commercial power supply.



ESD Protection

Prevents electrostatic charging and saves the workpiece from electrostatic breakdown.



Variable Speed

Can be adjusted to a suitable tightening speed.



Low Voltage

Connect to dedicated controller. Operates at electric voltage under 42V.



Low Shock

Softens the shock at the end of tightening and lowers the load to the workpiece.



Soft Start

Gradually increases the rotation speed to prevent damage to the screw head.

[Brushless Motor - DC Power Supply]

P	0	တ္မ	≤	② 7	(mm)	တ	3	Ĕ	P	Щ	တ္	Ľ	Ş	I.	В	<u> </u>	Con	troller		
Page	Outer Appearance	Series	Model	Torque Range (Nm [lbf·in])		ew Size	Mass (g [lbs])	Lever Start	Push to Start	ESD Protection	Soft Stop	Low Speed	Medium Speed	High Speed	Built-in Screw Counter	SPC Type available (for screw counter)	Model	Outer Appearance		
			DLV04C10L	0.05 - 0.4		max.									¥			11		
7		C Series (Current		[0.4 - 3.5]	1.2	3.0	370	•		•		•	•		•		DCC0101	Texas (A)		
•	-	control type)	DLV10C10L	0.2 - 1.0 [1.8 - 8.9]	1.8	4.0	[0.82]	•		•		•	•		•					
			DLV30S06L					•		•	•	•			•					
			DLV30S06P						•	•	•	•			•		DEA0151N-AZ or			
			DLV30S12L	0.4 - 3.0	2.6	5.0	710	•		•	•		•		•		DEA0241N-AZ			
	11		DLV30S12P	[3.5 - 26.6]	2.0	5.0	[1.57]		•	•	•		•		•					
		S Series	DLV30S20L					•		•	•			•	•		DEA0241N-AZ			
10	# t	(Variable	DLV30S20P						•	•	•			•	•			-		
	- P.	speed type)	DLV45S06L					•		•	•	•			•		DEA0151N-AZ or			
			DLV45S06P	[17.7 - 39.6]	4.5	6.0			•	•	•	•			•		DEA0241N-AZ	The same		
			DLV45S12L				860 [1.90]	•		•	•		•		•					
			DLV45S12P			[1.90]		•	•	•		•		•		DEA0241N-AZ	the same of			
			DLV70S06L	3.8 - 7.0	5.0	8.0		•		•	•	•			•					
			DLV70S06P	[33.6 - 62.0]				_	•	•	•	•			•					
			DLV30A06L					•	•	•		•					DE 40454NL 47			
			DLV30A06P				000	_	_	•		•	_				DEA0151N-AZ or DEA0241N-AZ			
			DLV30A12L	0.4 - 3.0 [3.5 - 26.6]	2.6	5.0	690 [1.52]	•	•	•			•					1		
	THE REAL PROPERTY.		DLV30A12P DLV30A20L	[0.5 - 20.0]			[02]	•	_	•			•	•						
			DLV30A20L DLV30A20P	-					•	•				•			DEA0241N-AZ	Park		
13	- Committee	A Series	DLV45A06L			!		•		•		•		_			DEA0151N-AZ or	7-		
			DLV45A06P	2.0 - 4.5					•	•		•					DEA0241N-AZ	4		
	-		DLV45A12L	[17.7 - 39.8]	4.5	6.0	840	•		•		Ť	•					_		
			DLV45A12P	1			[1.85]		•	•			•				DE 40044N 47			
			DLV70A06L	3.8 - 7.0				•		•		•		•			DEA0241N-AZ			
			DLV70A06P	[33.6 - 62.0]	5.0	8.0			•	•		•		•			1			
			DLV02SL-CKE	0.03 - 0.2	1.0	0.0		•					•					-1		
			DLV02SL-BKE	[0.3 - 1.8]	1.0	2.2		•		•			•			DI C16S	+			
15		DLV02/12/16	DLV12SL-CKE	0.15 - 1.2	1 4	2.0	470	•					•				DI C169			
IJ		DLV02/12/10	DLV12SL-BKE	[1.3 - 10.6]	1.4	3.0	[1.04]	•		•		• DLC16S	DLC16S	6						
	THE RESERVE OF THE PERSON NAMED IN		DLV16SL-CKE	0.2 - 1.6				•					•							
			DLV16SL-BKE	[1.8 - 14.2]	2.2	4.0		•		•			•					//		

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ı	Brushless	Motor -	AC Po	ower :	Supply	, I

Page	Outer Appearance	Series	Model	Torque Range (Nm [lbf·in])		Screw Size	Mass (g [lbs])	Lever Start	Push to Start	ESD Protection	Soft Stop	Low Speed	Medium Speed	High Speed	Built-in Screw Counter	SPC Type available (for screw counter)
			DLV30A06L					•				•				•
			DLV30A06P						•			•				•
			DLV30A12L	0.4 - 3.0	2.6	5.0	700 [1.54]	•					•			•
			DLV30A12P	[3.5 - 26.6]	2.0	5.0			•				•			•
			DLV30A20L					•						•		•
14		A Series	DLV30A20P						•					•		•
17	Carry Carry	71 001100	DLV45A06L					•				•				•
	-		DLV45A06P	2.0 - 4.5	4.5	6.0			•			•				•
	100		DLV45A12L	[17.7 - 39.8]	4.5	0.0	870	•					•			•
			DLV45A12P				[1.92]		•				•			•
			DLV70A06L	3.8 - 7.0	5.0	8.0		•				•				•
			DLV70A06P	[33.6 - 62.0]	0.0	0.0			•			•				•

[Brush Motor - DC Power Supply]

		Brush Motor - DC Power Supply] Σ O																
Page	Out	Series	Model	Tor (Nm [(mm)	Scr	Mas	Lev	Pus	ESI	Cle	Hig	Lov	SP(7			
je	Outer Appearance	ies	del	Torque Range (Nm [lbf-in])	(mm)	ew Size	Mass (g [lbs])	Lever Start	Push to Start	ESD Protection	Clean Room Type	High Speed	Low Shock	SPC Type available (for screw counter)	Model	Adjustable speed	Outer Appearance	
			DI 1/7440A		min.	max.												
			DLV7410A DLV7410HA	0.02 - 0.2 [0.2 - 1.8]	1.0	2.3	230	•		•		•	•	•				
16		7400A	DLV7420A	0.15 - 0.4 [1.3 - 3.5]	1.6	2.6	[0.51]	•		•			•	•	DI 01110			
10		7400A	DLV7419A	0.02 - 0.2	1.0	2.3		•		•	•		•		DLC1110	$ \bullet $	01. 28	
			DLV7419HA DLV7429A	[0.2 - 1.8] 0.15 - 0.4			275 [0.61]	•		•	•	•	•					
			DEVITEOR	[1.3 - 3.5]	1.6	2.6		•		•	•		•					
			DLV5720 DLV5720H	0.02 - 0.2 [0.2 - 1.8]	1.0	2.3	230 [0.51]	•		•		•	•		DLC0350	•		
17		5700	DLV5740 DLV5740H	0.15 - 0.4 [1.3 - 3.5]	1.6	2.6		•		•			•					
			DLV5740H DLV5750	0.1 - 0.55	4.0	0.0	300 [0.66]	•		•		•			DLC0950	•	Sec. 1	
			DUVESOS	[0.9 - 4.9]	1.0	3.0	[0.00]			•			•					
40		5000	DLV5820 DLV5820H	0.02 - 0.2 [0.2 - 1.8]	1.0	2.3	230	•		•		•			B. 000505			
18		5800	DLV5840	0.15 - 0.4 [1.3 - 3.5]	1.6	2.6	[0.51]	•		•					DLC0250E	•	7	
			DLV7313	0.03 - 0.15 [0.3 - 1.3]	Up to	0 2.0		•										-
	-		DLV7323	0.05 - 0.5 [0.4 - 4.4]	1.0	3.0	350 [0.77]	•										
21		7300	DLV7333	0.3 - 1.2 [2.7 - 10.6]	2.0	3.5		•										
			DLV7325	0.05 - 0.5 [0.4 - 4.4]	1.0	3.0	400	•			•							
			DLV7335	0.3 - 1.2 [2.7 - 10.6]	2.0	3.5	[0.88]	•			•							
			DLV7321	0.05 - 0.5 [0.4 - 4.4]	1.0	3.0	350	•		•	•			•	DLC1213A	•		
			DLV7331	0.3 - 1.2 [2.7 - 10.6]		3.5	[0.77]	•		•	•			•				
20		7300-BME/	DLV7319	0.2 - 0.4 [1.8 - 3.5]	2.0	0.0		•		•	•							
20		BKE	DLV7329	0.25 - 0.55 [2.2 - 4.9]		3.0	400	•		•	•							
			DLV7339	0.45 - 0.95 [4.0 - 8.4]	20	2.5	[0.88]	•		•	•							
			DLV7349	0.55 - 1.2 [4.9 - 10.6]	3.0	3.5		•		•	•							
			DLV7530-MKE DLV7530-BKE	0.5 - 1.7 [4.4 - 15.1]	2.6	4.0	650	•		•								
		7500	DLV7540-MKE DLV7540-BKE	1.2 - 2.7 [10.6 - 23.9]	3.5	5.0	[1.43]	•		•					DLC4511 •			
21			DLV7550-MKE DLV7550-BKE	2.0 - 4.5 [17.7 - 39.8]	4.5	6.0	750 [1.65]	•		•							other .	
			DLV8530-MKE DLV8530-BKE	0.5 - 1.7 [4.4 - 15.1]	1] 2.6 4.0 650 • • • 7 (1.43)													
	A	8500	DLV8540-MKE DLV8540-BKE	1.2 - 2.7 [10.6 - 23.9]														
			DLV8550-MKE	2.0 - 4.5	4.5	60	750											
			DLV8550-BKE	[17.7 - 39.8]	4.5	6.0	[1.65]		•	•								

		AC Power S	<u> </u>									
Page	Outer Appearance	Series	Model	Torque Range (Nm [lbf·in])	(mm)	Screw Size	Mass (g [lbs])	Lever Start	Push to Start	ESD Protection	High Speed	SPC Type available (for screw counter)
			DLV7020	0.05 - 0.55 [0.4 - 4.9]	1.0	3.0		•				•
		7000	DLV7030	0.3 - 1.1 [2.7 - 9.7]		3.5	400 [0.88]	•				•
24			DLV7031	0.3 - 1.0 [2.7 - 8.9]	2.0			•			•	•
24			DLV8020	0.1 - 0.55 [0.9 - 4.9]	1.0	3.0			•			•
		8000	DLV8030	0.3 - 1.1 [2.7 - 9.7]		3.5	410 [0.90]		•			•
			DLV8031	0.3 - 1.0 [2.7 - 0.9]	2.0	0.0			•		•	•
			DLV7120	0.35 - 0.70 [3.1 - 6.2]	0.6	3.0		•				•
			DLV7130	0.5 - 1.7 [4.4 - 15.1]	2.6	4.0		•				•
			DLV7140	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0	700	•				•
		7100/ 7200	DLV7221	0.35 - 0.7 [3.1 - 6.2]	2.6	3.0	[1.54]	•			•	
			DLV7231	0.5 - 1.7 [4.4 - 15.1]	2.0	4.0		•			•	•
	- Common of the		DLV7241	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0		•				•
			DLV7251	2.0 - 4.5 [17.7 - 39.8]	4.5	6.0	890 [1.96]	•				•
25			DLV8120	0.35 - 0.70 [3.1 - 6.2]	2.6	3.0			•			•
			DLV8130	0.5 - 1.7 [4.4 - 15.1]	2.0	4.0	690 [1.52]		•			•
			DLV8140	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0			•			•
		8100/	DLV8150	2.0 - 4.5 [17.7 - 39.8]	4.5	6.0	890 [1.96]		•			•
		8200	DLV8221	0.35 - 0.7 [3.1 - 6.2]	2.6	3.0			•		•	
			DLV8231	0.5 - 1.7 [4.4 - 15.1]	2.0	4.0	690 [1.52]		•		•	•
			DLV8241	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0			•			•
			DLV8251	2.0 - 4.5 [17.7 - 39.8]	4.5	6.0	890 [1.96]		•			•
			DLV7124	0.25 - 0.75 [2.2 - 6.6]	2.6	3.0		•		•		
			DLV7134	0.5 - 1.7 [4.4 - 15.1]	0	4.0	720 [1.59]	•		•		
			DLV7144	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0		•		•		
			DLV8124	0.25 - 0.75 [2.2 - 6.6]	2.6	3.0			•	•		
26	-	7104/ 8104/	DLV8134	0.5 - 1.7 [4.4 - 15.1]	0	4.0	710 [1.57]		•	•		
		8204	DLV8144	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0			•	•		
			DLV8154	2.0 - 4.5 [17.7 - 39.8]	4.5	6.0	910 [2.01]		•	•		
			DLV8224	0.35 - 0.7 [3.1 - 6.2]	2.6	3.0			•	•	•	
			DLV8234	0.5 - 1.7 [4.4 - 15.1]		4.0	710 [1.57]		•	•	•	
			DLV8244	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0			•	•		

[Brushless Motor]

[Brushless Motor]																
Page	ဝ	Se	M.	(N) T	(E)	Sc	<u> </u>	6	Me	Ŧ				Coupling		
ige	Outer Appearance	Series	Model	Torque Range (Nm [lbf-in])		Screw Size	Mass (g [lbs])	Low Speed	Medium Speed	High Speed	Standard	Flange	M41 Screw	Type of couplings		
			DLV30A06A-N		IIIIII.	max.	700									
			DEVOUAGOA-IV				[1.54]	•			•					
			DLV30A06A-F				760	•				•				
			DIVIDATE A				[1.68]	_				_		1 200		
			DLV30A06A-M				740 [1.63]	•					•			
			DLV30A12A-N	-			700									
							[1.54]		•		•					
			DLV30A12A-F	0.4 - 3.0 [3.5 - 26.6]		5.0	5.0	760 [1.68]		•			•			
			DLV30A12A-M	[0.0 20.0]			740									
			2210071127111				[1.63]		•				•	Standard coupling		
			DLV30A20A-N				700 [1.54]			•	•					
			DLV30A20A-F					760				_				
			DEVOUAZUA-I						[1.68]			•		•		
			DLV30A20A-M	-			740			•			•			
33		A Series	DIVASAGGA N				[1.63]						_			
	-	(for automation)	DLV45A06A-N				780 [1.72]	•			•					
			DLV45A06A-F				840									
							[1.85]	•				•		Flange coupling		
			DLV45A06A-M	2.0 - 4.5			820 [1.81]	•					•			
			DLV45A12A-N	[17.7 - 39.8]	4.5	6.0	780									
			227.07.11277.11				[1.72]		•		•					
			DLV45A12A-F				840		•			•				
			DLV45A12A-M				[1.85] 820		_		\dashv	_				
			DLV45A1ZA-IVI				[1.81]		•				•			
			DLV70A06A-N				780									
			DIV/704004 5	00.76		8.0	[1.72]	•			•			M41 screw coupling		
			DLV70A06A-F	3.8 - 7.0 [33.6 - 62.0]	5.0		8.0	840 [1.85]	•				•			
			DLV70A06A-M	[33.6 - 62.0]			820									
								[1.81]	•					•		

[Brush Motor]

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P	ဝ	S _e	_ ≤	₹ ♂	3	တ္ထ	Mass	Controller
Page	Outer Appearance	Series	Model	Torque Range (Nm [lbf·in])		Screw Size		Model
			DLV3121	0.25 - 0.7 [2.2 - 6.2]	2.3	2.6		
		3100	DLV3131	0.5 - 1.5 [4.4 - 13.3]	2.6	3.5	900	Transformerless
0.5		(for automation)	DLV3141	1.2 - 3.0 [10.6 - 26.6]	3.5	5.0	[1.98]	(controller not required)
35			DLV3151	2.0 - 4.5 [17.7 - 39.8]	4.5	6.0		
		3300	DLV3321	0.05 - 0.5 [0.4 - 4.4]	1.0	3.0	400	DLC3310
		(for automation)	DLV3331	0.3 - 1.2 [2.7 - 10.6]	2.0 3.5		[0.88]	D20010















Jelvo Brushless Type

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







- · Easy fastening setting by controller
- · Current Controlled Torque System suitable for screw fastening work
- · Low-voltage brushless motor
- ESD (electrostatic discharge) protection structure
- For both hand-held / automatic machines
- · Controller has built in counting function. Prevents human errors



Specifications

-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1110110										
	Model		Bit	CE/UL	DLV04C10L-AY K	DLV10C10L-AY K						
				PSE	DLV04C10L-AZ M	DLV10C10L-AZ M						
	Power Sour	ce			DCC0101X-AZP or DCC0101X-AZN							
	Torque Adj	justment			Step	oless						
Ē	Torque	SOFT fastening setting ((1000 mi	n-1 setting)	0.05 - 0.4 [0.4 - 3.5]	0.2 - 1.0 [1.8 - 8.9]						
Electric		SOFT fastening setting (600 min	⁻¹ setting)	0.05 - 0.35 [0.4 - 3.1]	0.2 - 0.45 [1.8 - 4.0]						
	(Nm [lbf·in])	HARD fastening settir	ng		0.05 - 0.4 [0.4 - 3.5]	0.2 - 1.0 [1.8 - 8.9]						
င္ရ	Free Speed	SOFT fastening settir	ıg		600 - 1000							
eΨ	(min ⁻¹)	HARD fastening setting	ng		100 -	1000						
Screwdriver	Screw Size	Machine screw			1.2 - 3.0	1.8 - 4.0						
ě	(mm)	Tapping screw			1.1 - 2.5	1.6 - 3.5						
	Bit Type				NK35 (OD6.35 mm	[1/4"] Hex. Shank)						
	Input Voltag	ge			24 \	' DC						
	Mass				370 g [0).82 lbs]						
	Rated Oper	ation			ON: 0.5 seconds / OFF: 3.5 seconds							

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

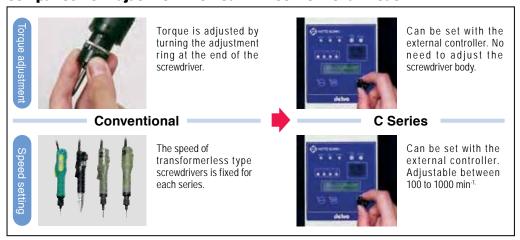
_	Model	D000104V A7 Dt								
	Model	DCC0101X-AZ P*								
	Input Voltage	AC100 - 240 V AC, 50/60Hz								
	Operation Channel	Torque and speed setting in 4-channel memory								
	Function	Can switch to any operation channel								
	Count Function	Tracks screws fastened								
		Workpiece detector can be incorporated								
_	External Start up	Charter and a sample of the sa								
Controller	Control Function	Start up control can be enabled by external input signal								
춫	Input Signal Method	Photocoupler input								
ĕ		(24 V DC drive (5 mA/1 input), respond to PNP output)								
_	Output Signal	Photocoupler output								
	Method	(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								
	Mass	1100 g [2.4 lbs]								
Power cord (Optional)* DLW9220 / DLW9240 / DLW9250										

^{*}DCC0101X-AZN with NPN output also available

^{*}The power cord is sold separately. Ask us for the required power cord when ordering. (see page 9 "Optional Accessories")

delvo Brushless Type

Comparison of Adjustment Method with Conventional Model



SOFT / HARD Fastening Settings

Two types of fastening mode available subject to the workpiece.

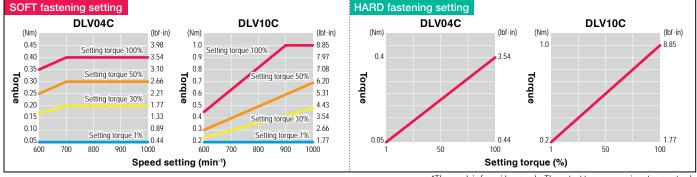
Coordinate the actual workpieces, screws and operating conditions and determine the fastening mode.

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.

Output Torque and Rotation Speed



^{*}The graph is for guidance only. The output torque range is not guaranteed.

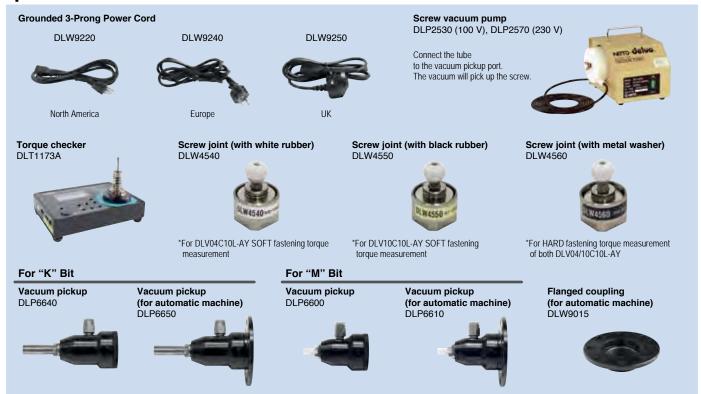
External Signals You can input or output external signals via a signal terminal block

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 in power source for input/output signal common wire, or for the workpiece detection sensor, etc.	Service power source		
3	Channel A	In the 2-bit input signal, specify the operation channel (CH1 to CH4)			
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	Startup with external hiput signal			
7	WORK	Input the workpiece signal (workpiece detection sensor output) • With "count function" (No.11 COUNT-FNC) and "workpiece signal" (No.12 WORK-SNSR) set to ON, the workpiece signal input is valid	Input		
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			
12	Reverse rotation signal	Set output signal during reverse rotation to ON			
13	Count-up (C-UP)	Performance of normal screw tightening (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)				
16	Operation channel 2 (CH2)	Set the channel output signal to ON during operation or settings			
17	Operation channel 3 (CH3)	Set the channel output signal to ON during operation of settings	Output		
18	Operation channel 4 (CH4)				
19	Operation OK	If the set count screw tightening is judged to be 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	Connection impossible			
22	Output signal positive common wire	Connect +24 V DC* • Service power source (terminal No.1) or external +24 V DC can be connected			

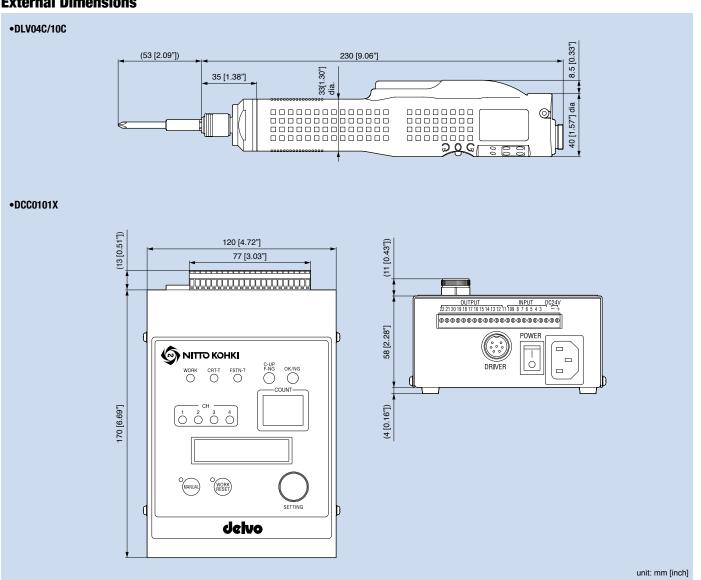
*When PNP output

delvo Brushless Type

Optional Accessories



^{*} Please see page 39 for details.























Low Low Residence Marker Charge Control of the Cont

S Series (Variable speed Type) Model DLV30S/45S/70S €€

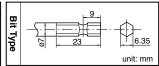


Features

- · Built-in brushless motor
- · Automatic speed control function
- Built-in screw counting function · Setting with the Remote Controller
- · ESD (electrostatic discharge) protection structure



Specifi	cations	Low Speed	Standard	High Speed	Low Speed	Standard	Low Speed	
Model Bit	Lever Start	DLV30S06L-AY K	DLV30S12L-AY K	DLV30S20L-AY K	DLV45S06L-AY K	DLV45S12L-AY K	DLV70S06L-AY K	
DIL	Push to Start	DLV30S06P-AY K	DLV30S12P-AY K	DLV30S20P-AY K	DLV45S06P-AY K	DLV45S12P-AY K	DLV70S06P-AY K	
Power Source			DEA0151N-AZ or DEA0241N-AZ		DEA0151N-AZ or DEA0241N-AZ	DEA02	41N-AZ	
Torque Adju	ustment			Step	oless	•		
Torque	Low Torque Spring*1		0.4 - 1.6 [3.5 - 14.2]		20 45 [1	7.7 20.01	3.8 - 7.0	
(Nm [lbf·in])	High Torque Spring*2	1.2 - 3.0 [10.6 - 26.6]			2.0 - 4.5 [1	7.7 - 39.8]	[33.6 - 62.0]	
Free Speed	(min ⁻¹)	For the details, see separate setting range of speed and torque.						
Speed Leve	I	Lv	1 - Lv9 (Lv1: Min. S	peed Lv9: Max. Sp	eed decreases in a	step-by-step manne	er)	
Power Cons	sumption (W)			4	4			
Screw Size	Machine Screw		2.6 - 5.0		4.5	- 6.0	5.0 - 8.0	
(mm) Tapping Screw			2.5 - 4.0			- 5.0	4.5 - 6.0	
Mass (g [lbs])		710 [1.57]			860 [1.90] (with pistol grip)			
Standard Accessories*3		• Bit NK35 × 2 × 7 • Suspension Bail	• Bit NK35 × 2 × 7 × 75 • Low Torque Spring			• Bit NK35 × 2 × 7 × 75 • Connection Cord (DLW9073) • Suspension Bail • Pistol Grip (DLW2300ESD)		



Please contact us for 5 mm bit type

- *1: Standard Accessory
- *2: Buit-in
- *3: The power cord is sold separately. Ask us for the required power cord when ordering.

delvo Brushless Type

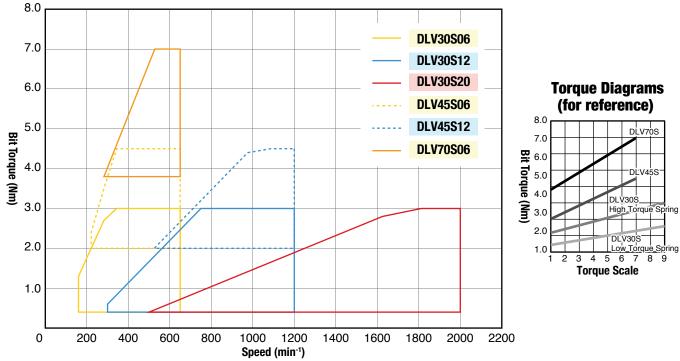
Setting Range of Speed and Torque (for reference only)

		DLV30S06	DLV45S06	DLV70S06			DLV30S12	DLV45S12			DLV30S20
Speed Level	Speed (min-1)		Torque (Nm [lbf·in])		Speed Level	Speed (min-1)	Torque (N	lm [lbf·in])	Speed Level	Speed (min-1)	Torque (Nm [lbf·in])
Lv1	160	0.4 - 1.3 [3.5 - 11.5]	-	-	Lv1	300	0.4 - 0.6 [3.5 - 5.3]	-	Lv1	500	0.4 [3.5]
Lv2	220	0.4 - 2.0 [3.5 - 17.7]	2.0 - 2.4 [17.7 - 21.2]	-	Lv2	420	0.4 - 1.2 [3.5 - 10.6]	-	Lv2	690	0.4 - 0.8 [3.5 - 7.0]
Lv3	280	0.4 - 2.7 [3.5 - 23.9]	2.0 - 3.5 [17.7 - 30.9]	3.8 [33.6]	Lv3	530	0.4 - 1.8 [3.5 - 15.9]	2.0 [17.7]	Lv3	880	0.4 - 1.2 [3.5 - 10.6]
Lv4	340	0.4 - 3.0 [3.5 - 26.6]	2.0 - 4.5 [17.7 - 39.8]	3.8 - 4.6 [33.6 - 40.7]	Lv4	640	0.4 - 2.4 [3.5 - 21.2]	2.0 - 2.6 [17.7 - 23.0]	Lv4	1,060	0.4 - 1.6 [3.5 - 14.1]
Lv5	410	0.4 - 3.0 [3.5 - 26.6]	2.0 - 4.5 [17.7 - 39.8]	3.8 - 5.4 [33.6 - 47.8]	Lv5	750	0.4 - 3.0 [3.5 - 26.6]	2.0 - 3.2 [17.7 - 28.3]	Lv5	1,250	0.4 - 2.0 [3.5 - 17.7]
Lv6	470	0.4 - 3.0 [3.5 - 26.6]	2.0 - 4.5 [17.7 - 39.8]	3.8 - 6.2 [33.6 - 54.9]	Lv6	860	0.4 - 3.0 [3.5 - 26.6]	2.0 - 3.8 [17.7 - 33.6]	Lv6	1,440	0.4 - 2.4 [3.5 - 21.2]
Lv7	530	0.4 - 3.0 [3.5 - 26.6]	2.0 - 4.5 [17.7 - 39.8]	3.8 - 7.0 [33.6 - 62.0]	Lv7	980	0.4 - 3.0 [3.5 - 26.6]	2.0 - 4.4 [17.7 - 38.9]	Lv7	1,630	0.4 - 2.8 [3.5 - 24.7]
Lv8	590	0.4 - 3.0 [3.5 - 26.6]	2.0 - 4.5 [17.7 - 39.8]	3.8 - 7.0 [33.6 - 62.0]	Lv8	1,090	0.4 - 3.0 [3.5 - 26.6]	2.0 - 4.5 [17.7 - 39.8]	Lv8	1,810	0.4 - 3.0 [3.5 - 26.6]
Lv9				3.8 - 7.0 [33.6 - 62.0]				2.0 - 4.5 [17.7 - 39.8]		2,000	

^{*}Speed and torque are for reference only. The actual values depend on the materials to be fastened 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.



^{*}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			
4	Tellow	Forced stop signal	IIIput			
5 Brown		OK Signal	Output			
6	Blue	NG Signal	Output			
7	Gray	LINK-OUT				
,	Glay	Channel switching signal	Output			
8	Orange	Torque-up (count) signal	Output			
9	Peach	Channel A	Input			
10	Purple	Channel B	Input			
11 Yellow Green		Channel C	Input			
12	12 Black 0 V DC					
Lead wire	e colors are the ones	used in the optional signal cable ass'y DLW90	190.			

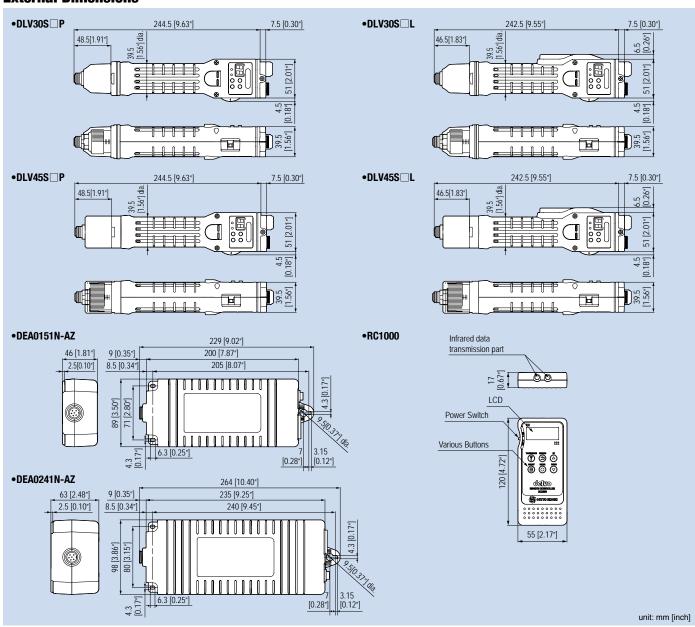
^{*}Either Pin No.4 or 7 must be selected, but not both.



delvo Brushless Type

Optional Accessories



















Jelvo Brushless Type

A Series (Low Voltage Type) Model DLV30A/45A/70A CE



Features

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

- Torque range from 0.4 to 7.0 Nm
- Speed range from 650 to 2000 min-1
- · Both the Lever Start and Push to Start type models are available
- · Equipped with a torque adjustment ring cover
- · Design conforms to the RoHS Directive and thus appeals to the environmentally conscious user
- · Easily detachable Pistol Grip DLW2300 (TD00335) comes with the unit as a standard accessory (DLV45A/70A)
- · ESD (electrostatic discharge) protection structure

Specifications Low Speed Standard High Speed Low Speed Standard Low Speed Lever Start DLV30A06L-AY K DLV30A12L-AY K DLV30A20L-AY K DLV45A06L-AY K DLV45A12L-AY K DLV70A06L-AY K Bit Push to Start DLV30A06P-AY K DLV30A12P-AY K DLV30A20P-AY K DLV45A06P-AY K DLV45A12P-AY K DLV70A06P-AY K **Power Source** DFA0151N-A7 or DFA0241N-A7 DEA0241N-AZ DEA0151N-AZ or DEA0241N-AZ DEA0241N-AZ Stepless **Torque Adjustment** Torque Low Torque Spring* 0.4 - 1.6 [3.5 - 14.2] 2.0 - 4.5 [17.7 - 39.8] 3.8 - 7.0 [33.6 - 62.0] (Nm [lbf·in]) High Torque Spring 1.2 - 3.0 [10.6 - 26.6] Screwdriver (min-1 2000 650 1200 650 Free Speed 650 1200 **Power Consumption** Screw Size | Machine Screw 2.6 - 5.045-60 50 - 80(mm) Tapping Screw 2.5 - 4.0 4.0 - 5.0 4.5 - 6.0 Mass (g [lbs]) 690 [1.52] 840 [1.85] (with Pistol Grip) Standard Accessories Bit NK35 x 2 x 7 x 75 . Connection Cord (DI W9073) Bit NK35 x 2 x 7 x 75 · Low Torque Spring · Connection Cord (DLW9073) · Suspension Bail · Suspension Bail • Pistol Grip (DLW2300ESD) *1: Standard Accessory

Bit Type

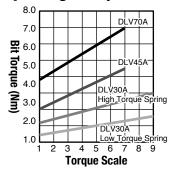
*2: Built-in

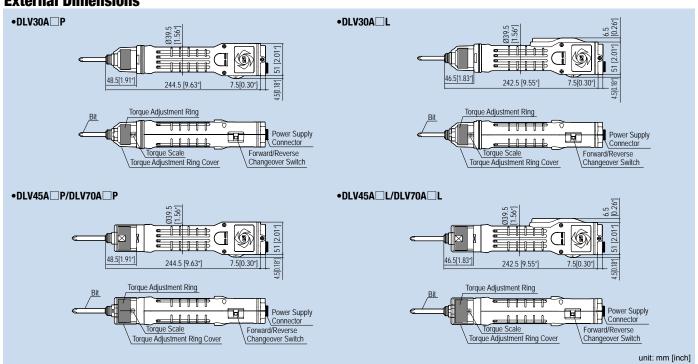
Please contact us for 5 mm bit type.

Po	Model		DEA0151N-AZ	DEA0241N-AZ	
Model Input		100 - 240 V AC, 50/60 Hz, 60 W			
ร	Output		40 V DC		
듈	Maximum Rated Power	(W)	150	240	
ρbly	Mass	(ka)	0.56	0.9	

^{*}The power cord is sold separately. Ask us for the required power cord when ordering.

Torque Diagrams (for reference)

















delvo Brushless Type

A Series (Transformerless Type) Model DLV30A/45A/70A €€

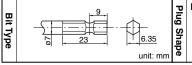


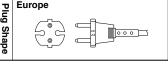
Features

Eco-friendly electric screwdrivers with built-in brushless motors in a transformerless profile

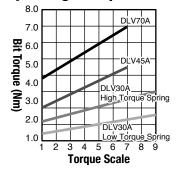
- Torque range from 0.4 to 7.0 Nm
- Speed range from 650 to 2000 min-1
- · Both the Lever Start and Push to Start type models are available
- · Equipped with a torque adjustment ring cover
- · Design conforms to the RoHS Directive and thus appeals to the environmentally conscious user
- · Easily detachable Pistol Grip DLW2300 (TD00335) comes with the unit as a standard accessory (DLV45A/70A)

Specifications Low Speed Standard High Speed Low Speed Standard Low Speed Lever Start DLV30A06L-AB K DLV30A12L-AB K DLV30A20L-AB K DLV45A06L-AB K DLV45A12L-AB K DLV70A06L-AB K Bit DLV30A06P-AB K DLV30A20P-AB K DLV45A06P-AB K DLV45A12P-AB K DLV70A06P-AB K Push to Start DLV30A12P-AB K **Input Voltage** 230 V AC, 50/60 Hz Stepless lectric Screwdriver **Torque Adjustment** Low Torque Spring*1 0.4 - 1.6 [3.5 - 14.2] Torque 2.0 - 4.5 [17.7 - 39.8] 3.8 - 7.0 [33.6 - 62.0] (Nm [lbf·in]) High Torque Spring* 1.2 - 3.0 [10.6 - 26.6] 2000 Free Speed 650 **Power Consumption** Approx. 45 Screw Size Machine Screw 2.6 - 5.0 4.5 - 6.0 5.0 - 8.0 (mm) Tapping Screw 2.5 - 4.040 - 504.5 - 6.0 (g [lbs]) 700 [1.54] 870 [1.92] (with Pistol Grip) Mass • Bit No.2 × 7 × 75 • Suspension Bail **Standard Accessories** • Bit No.2 × 7 × 75 · Suspension Bail · Low Torque Spring 1: Standard Accessory Europe *2: Built-in.





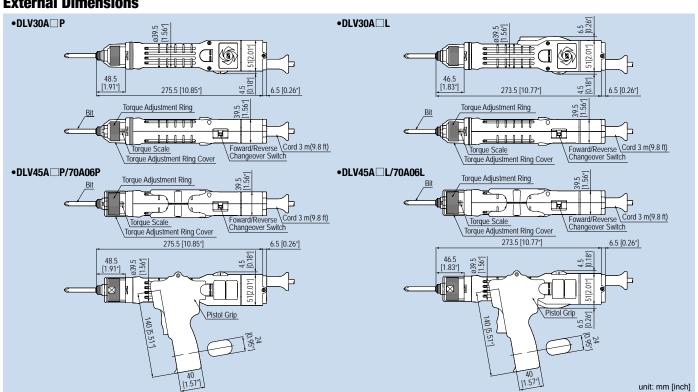
Torque Diagrams (for reference)



Please contact us for 5 mm bit type.

Optional Accessories

















Jelvo Brushless Type

DLV02/12/16 Series CE



Features

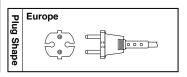
Brushless motors are incorporated for maximum tool life

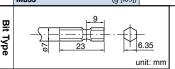
- Ergonomic grip offers greater operator comfort and increased maneuverability
- · Grounded bit system standard
- · Clear plastic torque adjustment cover provided as standard accessory (DLV02/12/16SL-CKE)
- ESD (electrostatic discharge) protection structure (DLV02/12/16SL-BKE)
- Compliant with CE standards
- · Controllers feature an overload detection function. When an overload is detected, the controller stops the screwdriver. Operation can be resumed after the screwdriver is unloaded, and the lever released (DLC16S)
- Universal input voltage from 100 to 240 V AC for easy installation (DLC16S)
- · Variable speed adjustment enables you to select optimum screw tightening speed (DLC16S)

Specifications

	Model	Standard Type	DLV	02SL-CKE	DLV12SL-CKE	DLV16SL-CKE		
		ESD Protection Type	DLV	02SL-BKE	DLV12SL-BKE	DLV16SL-BKE		
匝	Starting Met	thod			Lever Start			
Electri	Input Voltage				20 - 30 V DC			
C	○ Torque Adjustment			Stepless				
Screwdri	Torque	(Nm [lbf·in])	0.03 - 0	0.03 - 0.2 [0.3 - 1.8]				
ew	Free Speed	(min ⁻¹)		700 - 1000				
럌	Power Cons	umption (W)			48			
iver	Screw Size	Machine Screw	1	.0 - 2.2	1.4 - 3.0	2.2 - 4.0		
	(mm)	Tapping Screw	1	.0 - 2.0	1.4 - 2.6	2.0 - 3.0		
	Mass	(g [lbs])			470 [1.04]			

(Model	DLC16S-WGB
알	Input Voltage	100 - 240 V AC, 50/60 Hz
Controller	Output Voltage	20 - 30 V DC
) Ee	Function	Speed Control
_	Mass (g [lbs])	380 [0.84]
_	Mass (g [lbs])	380 [0.84]

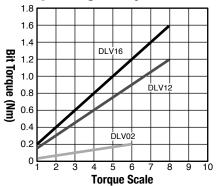


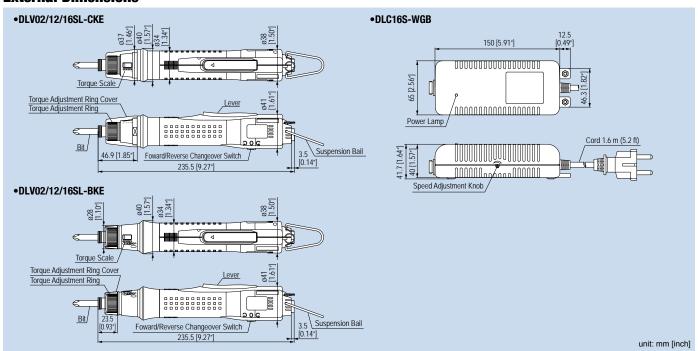


Standard Accessories

Model		DLV02	DLV12	DLV16
Bit	No.0 × 3.8 × 50	1	-	-
	No.1 × 3.8 × 50	1	1	1
	No.2 × 4.5 × 50	-	1	1
Connection Cable		1	1	1

Torque Diagrams (for reference)





















DLV7400A Series 🔇



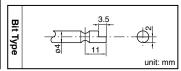
Specifications

	Model	Standard Type	DLV7410A-BME	DLV7410HA-BME	DLV7420A-BME	
		Clean Room Type	DLV7419A-BME	DLV7419HA-BME	DLV7429A-BME	
ᇤ	Starting Method			Lever Start		
Electric	Input Voltage			40 V DC		
	ioi que Aujustilient		Stepless			
Screwdriver	Torque	(Nm [lbf·in])	0.02 - 0.2	0.15 - 0.4 [1.3 - 3.5]		
ew	Free Speed	(min ⁻¹)	500 - 750	700 - 1000	450 - 600	
ď	Power Cons	umption (W)				
er	Screw Size Machine Screw (mm) Tapping Screw Mass (g [lbs])		1.0	- 2.3	1.6 - 2.6	
			1.0	1.4 - 2.3		
			Standard Type 230 [0.51] / Clean Room Type 275 [0.61]			
_						

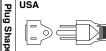
Features

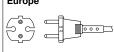
The light and compact body reduces operator fatigue

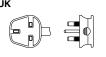
- Reduces shock applied to workpieces when fastening screws
- · ESD (electrostatic discharge) protection structure
- Lightweight (Standard type 230 g, Clean room type 275 g)
- The Clean Room Type complies with Class 3 Clean Room Rating
- The controller can adjust speed (Screw-fastening speed can be set to suit specific fastening conditions)
- The controller provides a soft start function
- The initial speed at screwdriver startup can therefore be slowed down, effectively preventing screw heads from being scratched
- · The built-in coreless motor achieves reduced inertia
- Torque accuracy is within a top-ranked worldwide level (Based on measurements at our laboratory)
- · Compliant with CE standards
- Use of the Screw Fastening Counter prevents human fastening errors and enhances accurate fastening control (No CE marking or CCC applied)
- Screw Fastening Counter Model DLR5640-WN works in conjunction with any dedicated SPC-type electric screwdrivers



	Model	DLC1110-EN	DLC1110-FE	DLC1110-GE	DLC1110-GG	DLC1110-HE	DLC1213A-GGB*1	DLC1213A-HEB*1
S	Features	Standard	Standard	Standard	With CE Mark	With CE Mark	With CE Mark	Standard
ă	Input Voltage	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	220 V AC, 50/60 F	z 230 V AC, 50/60 Hz	240 V AC, 50/60 Hz	230 V AC, 50/60 Hz	240 V AC, 50/60 Hz
Ī₫	Control Function			Soft S	start, Speed Control, ESD F	Protected		
er	Plug Shape	USA	USA	UK	Europe	UK	Europe	UK
	Mass (g [lbs])			900 [1.98]			2300	[5.07]
	LICA	Furana	ши		* 4 . A			







 An optional cord is required to connect with this model. Neither DLC1213A-GG nor DLC1213A-HE can be used with the DLV7400A series.

Model DLC1213A-GGB or DLC1213A-HEB + Cord DLW9072

Standard Accessories

Model		DLV7410A/DLV7410HA	DLV7420A	DLV7419A/DLV7419HA	DLV7429A
Bit	No.0 × 1.8 × 44	1	-	1	-
	No.0 × 2.5 × 44	1	1	1	1
	No.1 × 4 × 44	-	1	-	1
Connect	ion Cable DLW9070	1	1	1	1
Spring f	or Low Torque	1	-	1	-
Suspension Bail		1	1	1	1
Sleeve fo	or Vacuum DLS2124	-	-	1	1

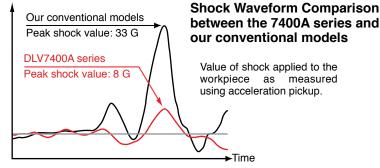
Optional Accessories

0.02

3 4 5 6



Shock value



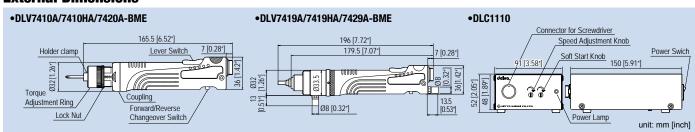
DLV7410A/7410HA **DLV7420A DLV7419A/7419HA DLV7429A** 0.25 0.50 0.45 High To 0.20 0.40 Bit Torque (Nm) (black 0.35 0.15 0.30 0.25 0.10 0.20 Spring 0.15 0.05 0.10 0.05

8

Torque Scale

Torque Diagrams (for reference)

External Dimensions



3 4 5 6 7 8















DLV5700 Series Non-CE



Features

For quality improvement and productivity enhancement

- · Grounded bit installation mechanism
- ESD (electrostatic discharge) protection structure
- Low-shock for tightening
 (30 % less of standard models)
- Low swing bit mechanism
- Ergonomic design
- · High-performance DC motor
- New clutch mechanism

Specifications

一	Model		DI VE700	DIVEZONI	DI VE740	DIVEZAGU	DIVETEO		
			DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750		
	Starting Met	hod	Lever Start						
	Input Voltag	e		40 V DC			36 V DC		
	Torque Adju	stment		Stepless					
믒	Torque	(Nm [lbf·in])	0.02 - 0.2	[0.2 - 0.18]	0.15 - 0.4	[1.3 - 3.5]	0.1 - 0.55 [0.9 - 4.9]		
Electric	Free Speed (min-1)		500 - 750	700 - 1000	450 - 600	1200 - 1800	670 - 1000		
	Power Cons	umption (W)	Approx. 10			Approx. 35			
ဇို	Screw Size	Machine Screw	1.0	- 2.3	1.6 -	1.0 - 3.0			
Screwdriver	(mm)	Tapping Screw	1.0	- 2.0	1.4 - 2.3		1.0 - 2.6		
ď.	Mass	(g [lbs])		230 [0.51]	300 [0.66]				
ver	Standard Ac	cessories	Bit No.0 × 1.8 × 44 Bit No.0 × 2.5 × 44 Connection Cable (1 Suspension Bail Spring for Low Torqu	,	• Bit No.0 × 2.5 × 44 • Bit No.1 × 4 × 44	Connection Cable Suspension Bail	(1.5 m)DLW9081		

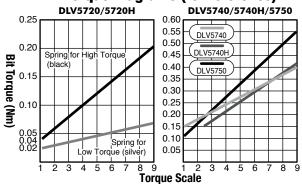
Bit Type	3.5
	unit: mm

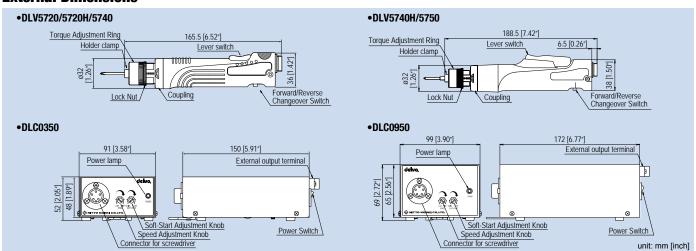
_						
	Model	DLC0350E	DLC0350F	DLC0350G	DLC0950E	DLC0950G
	Input Voltage	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	230 V AC, 50/60 Hz	100 V AC, 50/60 Hz	230 V AC, 50/60 Hz
Controller	Plug Shape	USA		UK III	USA	
	Mass (g [lbs]		900 [1.98]		1800	[3.97]

Optional Accessories



Torque Diagrams (for reference)















DLV5800 Series Non-CE



Features

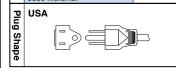
In response to the needs of cell production system, space-saving delvo screwdrivers are released. Controller is designed for emphasis on space-saving size and lightness.

- Clear disengagement of clutch (low-shock mechanism unavailable)
- · Grounded bit installation mechanism
- ESD (electrostatic discharge) protection structure
- · New lever is adopted
- · Low swing bit mechanism
- · Low voltage transformerless controller

Specifications

	Model		DLV5820	DLV5820H	DLV5840		
	Starting Met	thod		Lever Start			
	Input Voltage		40 V DC				
	Torque Adjustment			Stepless			
ш	Torque	(Nm [lbf·in])	0.02 - 0	0.02 - 0.2 [0.2 - 1.8]			
Electric So	Free Speed (min-1)		750	1000	600		
	Power Consumption (W)			Approx. 10			
	Screw Size	Machine Screw	1.0 - 2.3		1.6 - 2.6		
Screwdriver	(mm)	Tapping Screw	1.	1.4 - 2.3			
₫	Mass (g [lbs])		230 [0.51]				
₹.	Cord Length (m)		1.5 (with connector)				
¥	Grounding B	Bit Feature	Equipped as standard				
	Standard Accessories			Connection Cable (1.5 m) pring for Low Torque (Silver)	Bit No.0 × 2.5 × 44 Bit No.1 × 4 × 44 Suspension Bail Connection Cable (1.5 m)		
Bit Typ	2.	3.5	<u></u>				

_	Model	DLC0250E
Controller	Input Voltage	100 V AC, 50/60 Hz
풁	Function	Grounded Bit Installation Mechanism
ĕ	Mass (g [lbs])	300 [0.66]
_	Case Material	Antistatic material
PI	USA	



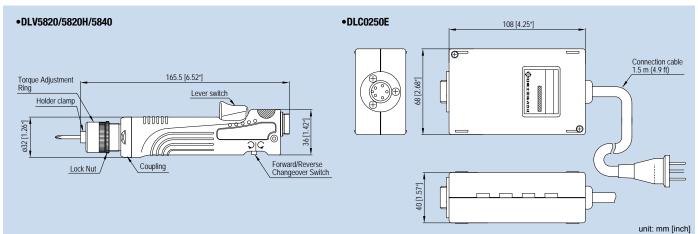
Electric screwdrivers DLV5800 series can be also used with DLC0350.

Optional Accessories



unit: mm

Torque Diagrams (for reference) DLV5820/5820H **DLV5840** 0.25 0.20 0.40 Spring for High Torqu Bit Torque (Nm) 0.15 0.30 0.20 0.15 0.05 0.10 Spring for 0.04 4 5 6 3 4 5 6 7 8 9 8 9 **Torque Scale**















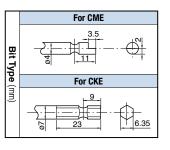
DLV7300 Series CE



Features

- The dedicated controller realizes high-accuracy screw tightening
- · High repeatable torque accuracy
- The controller provides a soft start function. The initial speed at screwdriver startup can therefore be slowed down, effectively preventing screw heads from being scratched.
- Variable speed adjustment enables to select optimum screw tightening speed.
- DLV7325, DLV7335 meet Class 5*1 Clean Room standards
 - *1: Based on Nitto Kohki's standard of measurement

c.	if	actions						
Specifications				Standard	Clean Room Use			
	Model	Bit Shank:ø4 mm	DLV7313-CME	DLV7323-CME	DLV7333-CME	DLV7325-CME*2	DLV7335-CME*2	
Electric		Bit Shank:Hex. 6.35 mm		DLV7323-CKE	DLV7333-CKE	DLV7325-CKE	DLV7335-CKE	
	Starting	Method			Lever Start			
	Input V	oltage	36 V DC					
	Torque	Adjustment	Stepless					
Š	Torque (Nm [lbf·in])		0.03 - 0.15 [0.3 - 1.3]	0.05 - 0.5 [0.4 - 4.4]	0.3 - 1.2 [2.7 - 10.6]	0.05 - 0.5 [0.4 - 4.4]	0.3 - 1.2 [2.7 - 10.6]	
Screw	Free Sp	eed (min-1)	700 -	1000	500 - 700	700 - 1000	500 - 700	
driver	Power (Consumption (W)			Approx. 35			
ĕ	Screw 9	Size Machine Screw	Up to 2.0	1.0 - 3.0	2.0 - 3.5	1.0 - 3.0	2.0 - 3.5	
	(1	mm) Tapping Screw	Up to 1.7	1.2 - 2.6	2.0 - 3.0	1.2 - 2.6	2.0 - 3.0	
Mass (g [lbs])				350 [0.77]		400 [0.88]		

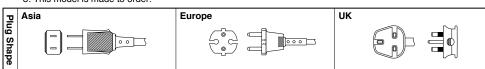


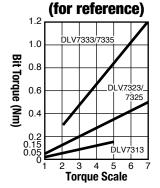
Torque Diagrams

*2: Vacuum pump for suction of screw is available as option. See page 31 for details of the vacuum pump.

	Model	Features	Input Voltage	Control Function	Plug Shape	Mass (g [lbs])
	DLC1213A-EN	Standard	100 V AC, 50/60 Hz	Asia		
ļδ	DLC1213A-FE*3	Standard	115 V AC, 50/60 Hz		Asia	
턁	DLC1213A-GE	Standard	220 V AC, 50/60 Hz	Soft start,	UK	2300
ĕ	DLC1213A-GG	With CE Mark	230 V AC, 50/60 Hz	Speed control	Europe	[5.07]
-	DLC1213A-GGU	With CE Mark	230 V AC, 50/60 Hz		UK	
	DLC1213A-HE	Standard	240 V AC, 50/60 Hz		Without Plug	

*3: This model is made to order.





Standard Accessories

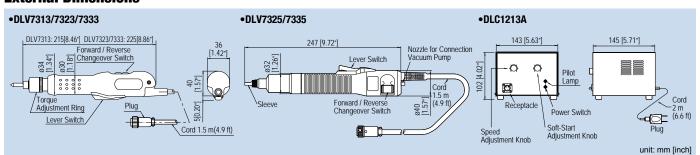
Model		DLV7313 -CME	DLV7323 -CME	DLV7333 -CME	DLV7323 / 31 / 33-CKE	DLV7325 -CME	DLV7335 -CME	DLV7325 / 35-CKE
Bit	No.0 × 1.8 × 44	1	-	-	-	-	-	-
	No.0 × 2.5 × 44	1	1	-	-	1	-	-
	No.1 × 3 × 44	-	-	1	-	-	1	-
	No.1 × 4 × 44	-	1	-	-	1	-	-
	No.1 × 7 × 50	ì	-	-	1	-	-	-
	No.2 × 4 × 44	=	-	1	-	-	1	-
	No.2 × 4.5 × 50	ì	-	-	-	-	-	1
	No.2 × 7 × 50	-	-	-	1	-	-	-
Sleeve	DLS2124	-	-	-	-	1	-	-
	DLS2127	i	-	-	-	1	1	-
	DLS2130	-	-	-	-	1	1	-
	DLS2134	-	-	-	-	-	1	-
	DLS2135	-	-	-	-	-	-	1
Suspens	sion Bail				1			

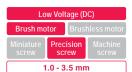
Optional Accessories



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

Torque Adjustment Ring Cover for DLV7303 DLW5500 (TD00333)



















DLV7300-BME/BKE Series CE

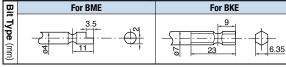


Features

Workpiece-conscious electric screwdrivers

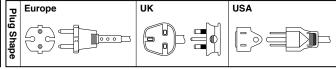
- Statistic electricity buildup is prevented to protect workpieces from electrostatic discharge
- · Minimal impact in screw tightening protects workpieces from damaging and enables stable screw tightening
- · ESD (electrostatic discharge) protection structure
- Meet Class 5*1 or more Clean Room standards
 - *1: Based on Nitto's standard of measurement

c.	ifi	Hana .							
9	pecifica	TIONS	ESD		ESD / Low Shock				
	Model	Bit Shank:ø4 mm	DLV7321-BME*2	DLV7331-BME*2	DLV7319-BME*2	DLV7329-BME*2	DLV7339-BME	DLV7349-BME*2	
		Bit Shank:Hex. 6.35 mm	DLV7321-BKE	DLV7331-BKE					
Ē	Starting Me	thod			Lever Start				
Electric	Input Volta	je			36 V DC				
	Torque Adjustment				Stepless				
Scr	Torque (Nm [lbf·in]) 0.05 - 0.5 [0.4		0.05 - 0.5 [0.4 - 4.4]	0.3 - 1.2 [2.7 - 10.6]	0.2 - 0.4 [1.8 - 3.5]	0.25 - 0.4 [2.2 - 4.9]	0.45 - 0.95 [4.0 - 8.4]	0.55 - 1.2 [4.9 - 10.6]	
W9	Free Speed	(min ⁻¹)	700 - 1000	500 - 700	700 700 - 1000 500 - 700				
Screwdriver	Power Cons	sumption (W)			Appro	ox. 35			
er	Screw Size	Machine Screw	1.0 - 3.0	2.0 - 3.5	2.0	2.0 - 3.0		- 3.5	
	(mm)	Tapping Screw	1.2 - 2.6	2.0 - 3.0	2.0	- 2.6	2.6	- 3.0	
	Mass	(g [lbs])	350	[0.77]		400	[0.88]		



*2: These models are made to order.

	Model	Features	Input Voltage	Plug Shape	Control	Mass (g [lbs])
일	DLC1213A-ENB	Standard	100 V AC, 50/60 Hz	USA	Grounding, Soft Start,	
Control	DLC1213A-FEB*3	Standard	115 V AC, 50/60 Hz	USA		2300
ller	DLC1213A-GGB	With CE mark	230 V AC, 50/60 Hz	Europe		[5.07]
Ť	DLC1213A-HEB	Standard	240 V AC, 50/60 Hz	UK	Speed Control	



^{*3:} This model is made to order.

Measureme	nt Point	Conventional Product	DLV7300-B 🗆 E
Handle	Static Electricity (V)	350	5
наполе	Surface Resistance (Ω)	more than 1013	10⁴
Lauren Orreitada	Static Electricity (V)	350	2
Lever Switch	Surface Resistance (Ω)	more than 1013	10⁴
Forward / Reverse Switch	Static Electricity (V)	25	2
Danier Oakla	Static Electricity (V)	110	5
Power Cable	Surface Resistance (Ω)	more than 1013	10 ¹⁰

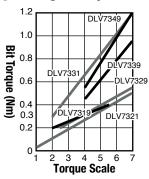
Part	Material
Handle Lever Switch	Synthetic resin with carbon fiber
Power Cable	Anti-static material

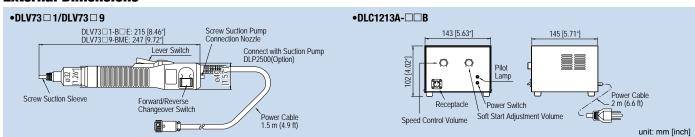
- Measurement conditions (Temperature: 22 °C Humidity: 66 %)
- (1)Static electricity Earth the measurement equipment and measuring person.
- Grip the screwdriver five times using Ansel Edmont electronic control glove.
- Turn on the switch of the screwdriver. Measure each part of the screwdriver using electronic measurement equipment manufactured by Shishido electrostatic Ltd.
- (2)Surface resistance Measure using Simco Japan surface resistivity measurement equipment.

Standard Accessories

Model		DLV7319/29 -BME	DLV7339/49 -BME	DLV7321 -BME	DLV7331 -BME	DLV7321/31 -BKE
Bit	No.0 × 2.5 × 44	1	-	1	-	-
	No.1 × 3 × 44	-	1	-	1	-
	No.1 × 4 × 44	1	-	1	-	-
	No.1 × 7 × 50	•	-	1	1	1
	No.2 × 4 × 44	-	1	-	1	-
	No.2 × 7 × 50	•	-	1	1	1
Sleeve	DLS2124	1	-	-	-	-
	DLS2127	1	1	-	-	-
	DLS2130	1	1	-	-	-
	DLS2134	-	1	-	-	-
Suspens	ion Bail			1		

Torque Diagrams (for reference)















7500/8500 Series **C**

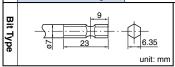


Features

Low vibration, low noise, and easy gripping in a compact design

- The easily visible torque reach light goes on when the set torque is reached
- The combination of an advanced clutch design and the auto-stop circuit assures torque accuracy
- · The long life motor with a yoke made of advanced materials further assures a long service life
- · Compliant with CE standard
- ESD (electrostatic discharge) protection structure (DLV7500/8500-BKE)

Sp	ecifi	cations	Star	dard	High Torque	Stan	High Torque			
	Model	Standard Type	DLV7530-MKE	DLV7540-MKE	DLV7550-MKE	DLV8530-MKE	DLV8540-MKE	DLV8550-MKE		
Г.		ESD Protection Type	DLV7530-BKE	DLV7540-BKE	DLV7550-BKE	DLV8530-BKE	DLV8540-BKE	DLV8550-BKE		
Electric	Starting	Method		Lever Start		Push to Start				
Ťric	Input Vo	ltage		59 V DC						
	Torque A	Adjustment	Stepless							
ř	Torque	(Nm [lbf·in])	0.5 - 1.7 [4.4 - 15.1]	1.2 - 2.7 [10.6 - 23.9]	2.0 - 4.5 [17.7 - 39.8]	0.5 - 1.7 [4.4 - 15.1]	1.2 - 2.7 [10.6 - 23.9]	2.0 - 4.5 [17.7 - 39.8]		
₫	Free Sp	ed (min ⁻¹)	1100	700	500	1100	700	500		
Screwdriver	Screw S	ize Machine Screw	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0		
¥	(n	m) Tapping Screw	2.3 - 3.5	3.0 - 4.0	4.0 - 5.0	2.3 - 3.5	3.0 - 4.0	4.0 - 5.0		
	Mass (g [lbs])		650	650 [1.43]		650 [1.43]	750 [1.65]		



Measureme	nt Point	Conventional Product	DLV7500/8500-BKE
Handle	Static Electricity (V)	350	5
пание	Surface Resistance (Ω)	more than 10 ¹³	10 ⁴
Lauren Curitale	Static Electricity (V)	350	2
Lever Switch	Surface Resistance (Ω)	more than 1013	10 ⁴
Forward / Reverse Switch	Static Electricity (V)	25	2
0	Static Electricity (V)	110	5
Connection Cable	Surface Resistance (Ω)	more than 1013	10 ¹⁰

Part	Material					
Handle Lever Switch	Synthetic resin with carbon fiber					
Power Cable	Anti-static material					

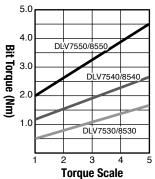
- Measurement conditions (Temperature: 22 °C Humidity: 66 %)
- (1)Static electricity Earth the measurement equipment and measuring person. • Grip the screwdriver five times using Ansel Edmont electronic control glove.
- Turn on the switch of the screwdriver. Measure each part of the screwdriver using electronic measurement equipment manufactured by Shishido electrostatic Ltd.

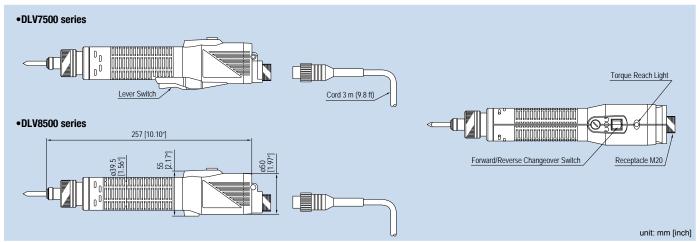
 (2)Surface resistance Measure using Simco Japan surface resistivity measurement equipment.

Standard Accessories

Model		DLV7530 / 7540 / 8530 / 8540	DLV7550 / 8550				
Bit No.1 × 7 × 75		1	-				
No.2 × 7 × 75		1	1				
	No.3 × 7 × 50	-	1				
Spare Ca	arbon Brush	2					
Connect	ion Cable	1					
Suspens	ion Bail	1					

Torque Diagrams (for reference)





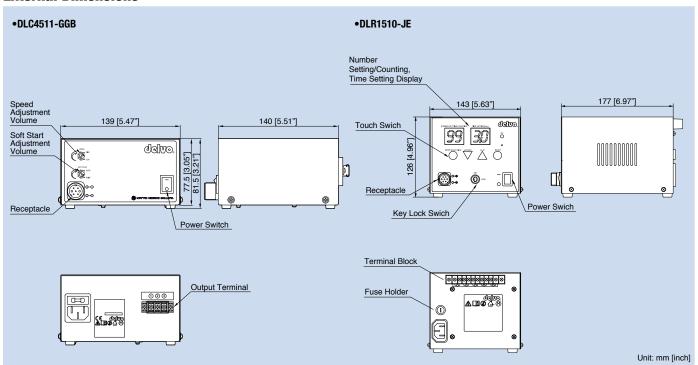






Specifications

_					
	Model	DLC4511-GGB	DLR1510-JE		
Controller	Function	Stepless speed adjustment 80 - 100 % Soft start: adjustable time setting of slow speed (max. 3 sec.) External output signals: start and torque up Electro-static discharge(ESD) control	Screw counting: OK lamp and buzzer for notification Variable non-operation time Setting protection by key lock switch Setting by touch switch for easy operation External output signals: Start, Torque up, Count up & Cycle OK		
를	Input Voltage	230 V AC	C, 50/60 Hz		
er	Mass (g [lbs])	3500 [7.72]	5100 [11.24]		
	Plug Shape	Europe			



MEMO	











DLV7000/8000 Series Non-CE

2.0 - 3.0



Features

100 / 115 V AC Direct Transformerless Precision Miniature Screw Type

- · A built-in controller model saves space and facilitates layout change
- · High repetitive torque accuracy
- Available with lever type (DLV7000 series) for each screw alignment and push to start type (DLV8000 series) for rapid screw tightening
- The high-speed type (DLV7031/8031) available at 1200 min⁻¹ for improving work efficiency (100 V AC only)

c.	!f !	! !~~~							
2	pecifica	tions		Stan	High Speed				
	Model	100 V AC Input	DLV7020-EMN	DLV7030-EMN	DLV8020-EMN	DLV8030-EMN	DLV7031-EMN	DLV8031-EMN	
l_m		115 V AC Input	DLV7020-FME*1	DLV7030-FME*1	DLV8020-FME*1	DLV8030-FME*1			
Elect	Starting Me	thod	Lever	Lever Start Push to Start				Lever Start Push to Start	
Ťric	Torque Adju	stment							
S			0.05 - 0.55 [0.4 - 4.9]	0.3 - 1.1 [2.7 - 9.7]	0.1 - 0.55 [0.9 - 4.9]	0.3 - 1.1 [2.7 - 8.9]	0.3 - 1.0 [2.7 - 8.9]		
cre	Free Speed	(min ⁻¹)	900	650	900	650	1200		
wdriv	Power Cons	umption (W)		Appro	ox. 25		Approx. 30		
1₹	Screw Size	Machine Screw	10-30	20-35	10-30	20-35	20-	3.0	

1.2 - 2.6

1.2 - 2.6

*1: These models are made to order.

410 [0.90]

2.0 - 3.0

Standard Accessories

(mm) Tapping Screw

Model		DLV7020 / 8020	DLV7030 / 8030 / 7031 / 8031
Bit No.0 × 2.5 × 44		1	-
	No.1 × 3 × 44	-	1
	No.1 × 4 × 44	1	-
	No.2 × 4 × 44	-	1
Spare Ca	rbon Brush		1

Optional Accessories



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

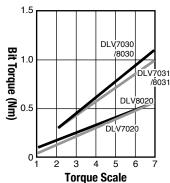
Torque Adjustment Ring Cover DLW5300 (TD00332)

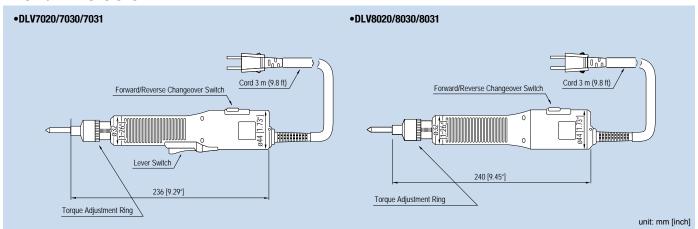
Torque Diagrams (for reference)

400 [0.88]

2.0 - 3.0

410 [0.90]

















DLV7100/7200/8100/8200 Series Non-CE



Features

Long Time Selling, Reliable, and High Performance

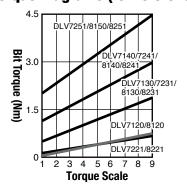
- Transformerless space saving model built in automatic stop circuit
- Combination of unique clutch mechanism and automatic stop circuit maintains high repetitive torque accuracy
- The lever start type DLV7100 / 7200 series is suited for temporarily tightening screws and tightening screws set at angles
- The DLV8100 / 8200 series is push to start type for continuous screw tightening
- The high speed type DLV7200 / 8200 series enhances working efficiency
- The high torque type DLV7251 / 8150 / 8251 series is equipped with a grip, which is useful for tightening big screws like 6 mm machine screws

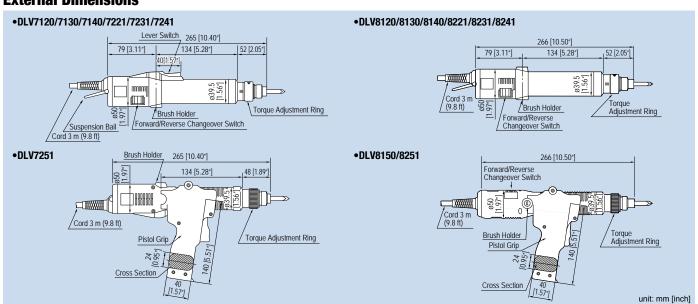
C.	ooifi	cations															
Эþ	CUIII	Lativii5		Standard		l	High Speed High Tor		High Torque	Standard		High Torque		High Speed	i	High Torque	
		Bit Shank:	DLV7120-	DLV7130-	DLV7140-		DLV7231-			DLV8120-	DLV8130-		DLV8150-	DLV8221-		DLV8241-	
		Hex. 5 mm (0.2")	FJE	FJE	FJE	FJE	FJE	FJE		FJE	FJE	FJE	FJE	FJE	FJE	FJE	
		Bit Shank:	DLV7120-	DLV7130-	DLV7140-	DLV7221-	DLV7231-	DLV7241-	DLV7251-	DLV8120-	DLV8130-	DLV8140-	DLV8150-		DLV8231-	DLV8241-	DLV8251-
١_		Hex. 6.35 mm (1/4")	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE	FKE
듣	Starting	Method				Lever Start	ever Start Push to Start										
ctric	Input Vo	Itage							115	V AC, 50/6	0 Hz						
	Torque A	djustment								Stepless							
Scr	Torque	(Nm)	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5
ew	[lbf·in] [3.10 - 6.20] [4.4 - 15.1] [10.			[10.6 - 26.6]	[3.10 - 6.20]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	[3.10 - 6.20]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	[3.10 - 6.20]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	
Screwdrive	Free Spe	ed (min ⁻¹)	900	900	600	1800	1800	1100	700	900	900	600	400	1800	1800	1100	700
èr	Power C	onsumption (W)		Approx. 35			Appro	x. 45			Approx. 35				Approx. 45		
	Screw S	ize Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0
	(m	m) Tapping Screw	2.6 - 3.0	2.3 - 3.5	3.5 - 4.0	2.6 - 3.0	2.3 - 3.5	3.0 - 4.0	4.5 - 5.0	2.6 - 3.0	2.3 - 3.5	3.5 - 4.0	4.5 - 5.0	2.6 - 3.0	2.3 - 3.5	3.0 - 4.0	4.0 - 5.0
	Mass	(g [lbs])			700	[1.54]			890 [1.96]		690 [1.52]		890 [1.96]		690 [1.52]		890 [1.96]
Bặt		For FJE			For FKE		ַ פ	Asia				* All mod	dels of FJ	E / FKE s	eries are	made to	order.
t Type (mm)	90	24	5	70	23	6.	Plug Shape			00	⊐						

Standard Accessories

Model		FJE	FKE except DLV7251 / 8150 / 8251-FKE	DLV7251 / 8150 / 8251-FKE				
Bit No.1 × 6 × 70		1	-	-				
No.1 × 7 × 75		-	1	-				
No.2 × 6 × 70		1	-	-				
	No.2 × 7 × 75	-	1	1				
	No.3 × 7 × 50	-	-	1				
Spare Ca	arbon Brush		2					
Suspens	ion Bail		1					

Torque Diagrams (for reference)















DLV7104/8104/8204 Series Non-CE



Features

The most popular models have been redesigned

- · Equipped with bit grounding mechanism
- · Long-life cam is utilized
- The clear plastic torque adjustment ring cover minimizes unintentional tampering of the preset torque
- The changeover switch enables operators to change forward/reverse rotation with a single hand
- · The ergonomically designed grip can be held tightly to resist against tightening reaction force, resulting in reduced operator fatigue

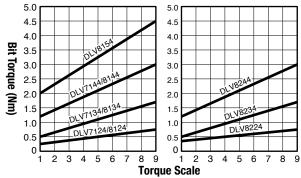
C.	socifico	tions										
<u>ə</u>	ecifica	เเบเเร			Stan	dard			High Torque		High Speed	
	Model	Plug Shape: USA	DLV7124- MKE	DLV7134- MKE	DLV7144- MKE	DLV8124- MKE	DLV8134- MKE	DLV8144- MKE	DLV8154- MKE	DLV8224- MKE	DLV8234- MKE	DLV8244- MKE
		Plug Shape: UK	DLV7124- MKH	DLV7134- MKH	DLV7144- MKH	DLV8124- MKH	DLV8134- MKH	DLV8144- MKH	DLV8154- MKH	DLV8224- MKH	DLV8234- MKH	DLV8244- MKH
l,,	Starting Me	thod		Lever Start					Push to Start			
ec	Input Voltag	е	230 V AC, 50/60 Hz									
Electric	Torque Adju	stment					Ste	pless				
	Torque	(Nm)	0.25 - 0.75	0.5 - 1.7	1.2 - 3.0	0.25 - 0.75	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	0.35 - 0.7	0.5 - 1.7	1.2 - 3.0
Screwdriver		[lbf·in]	[2.2 - 6.6]	[4.4 - 15.1]	[10.6 - 26.6]	[2.2 - 6.6]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	[3.1 - 6.2]	[4.4 - 15.1]	[10.6 - 26.6]
Ψd	Free Speed	(min ⁻¹)	91	00	600	90	00	600	400	2000	1800	1100
Į.	Power Cons	umption (W)		35					45			
¥	Screw Size	Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0
	(mm)	Tapping Screw	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0	4.5 - 5.0	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0
	Mass	(g [lbs])		720 [1.59]			710 [1.57]				710 [1.57]	
			I_	F	or MKE		For MKH					
Bit Type	- 10	23	6.35 unit: mm	USA		UK						

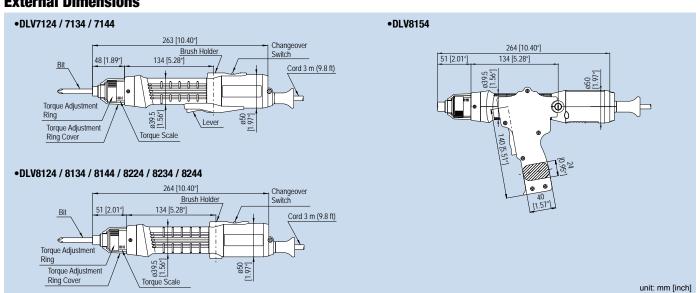
Please contact us for 5 mm bit type.

Standard Accessories

Model		MKE/MKH	8154-MKE/MKH			
No.1 × 7 × 75 No.2 × 7 × 75		1	-			
		1	1			
	No.3 × 7 × 50	-	1			
Spare Ca	rbon Brush	2				
Suspens	ion Bail	,	1			

Torque Diagrams (for reference)

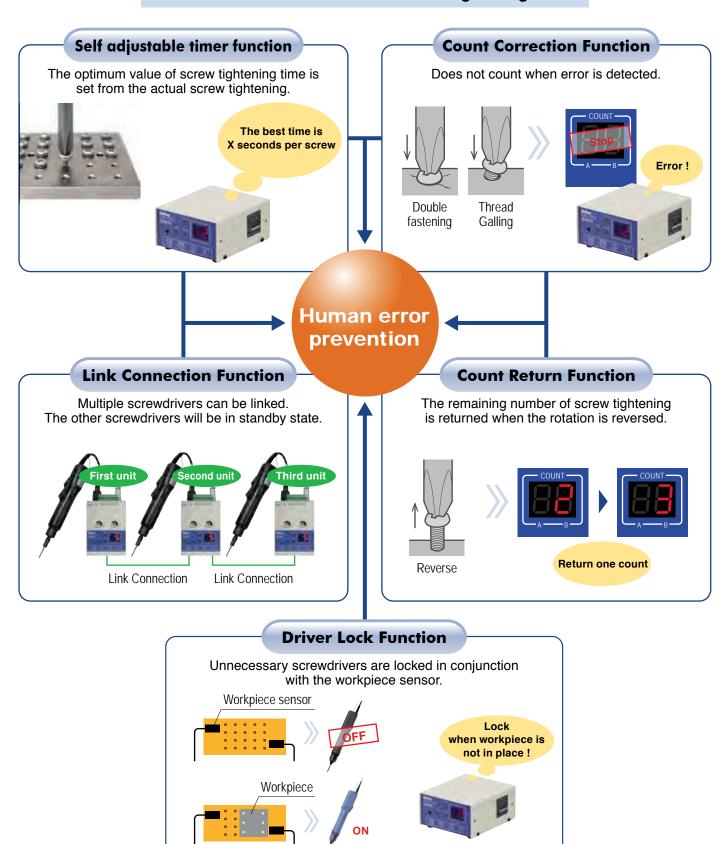




Screw Fastening Counter Series

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

The error is detected based on the set tightening time.



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.



DLR5040A-WE

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

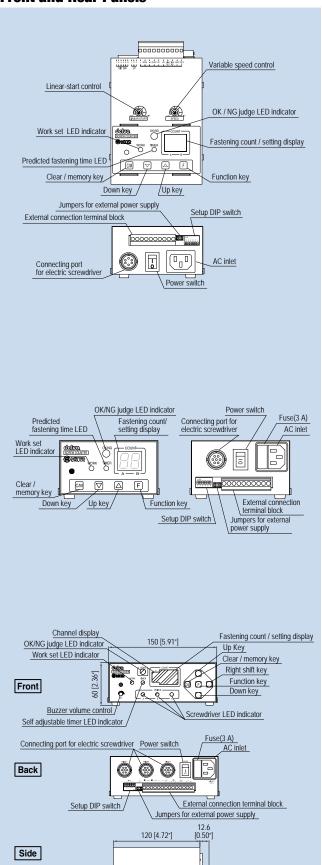


DLR5340-WE

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



Front and Rear Panels



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

Unit: mm [inch]

DLR5640-WN Non-CE

Screw Fastening Counter



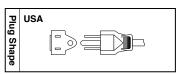
Features

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

opeomoations	
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

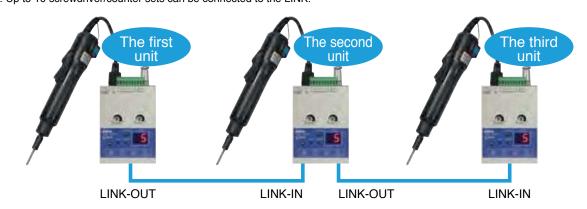


The example of installation

LINK Function (Commom 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.





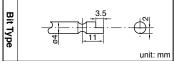
Screwdrivers designed for DLR5640-WN Non-CE





Specifications

Model		DLV7410A-SPC	DLV7410HA-SPC	DLV7420A-SPC	DLV7321-SPC	DLV7331-SPC		
Starting Metho	od		Lever Start					
Torque Adjustr	nent			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 Consum	nption (W)		Approx. 10			Approx. 35		
Screw Size	Machine Screw	1.0	1.0 - 2.3		1.0 - 3.0	2.0 - 3.5		
(mm)	Tapping Screw	1.0	1.0 - 2.0		1.2 - 2.6	2.0 - 3.0		
Electrostatic C	ountermeasure		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					

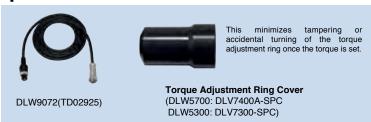


Combinations with Electric Screwdrivers

Screwdriver Model	Connection	Remarks	
DLV7410A / 7410HA / 7420A-SPC	The cord comes with screwdriver	C	
DLV7321 / 7331-SPC	Direct connection to power source	Screwdriver for the screw fastening counter only	
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



DLR5040A-WE Non-CE

Specifications

Count Correction Function

Work Detection Function

OK Output Timer Setting

Count Return Function

NG Judge Timing

Parameter Memory

External Dimensions

Multiple Link

Input Voltage

External Count Input

Self Adjustable Timer Setting

Work Installation Timer Setting

Automatic / Manual OK Judge

External Inputs on Terminal Block

External Outputs on Terminal Block

Screwdriver Lock Function

Counting Method

Count

NG Alarm

OK Buzzer

Screw Fastening Counter



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)
- of established transformerless screwdrivers

SPC type screwdrivers for DLR5040A-WE are designed on the basis

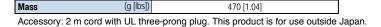
LINK Function

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

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



DLR5040A-WE

1 - 99

Count-up / Count-down

Count normal fastening only

0.01 to 0.99 sec

Yes (1 terminal) / No

2 terminals (PARTS A / PARTS B)

0 to 9.5 sec.

0 to 9.5 sec.

ON(1) / ON(2) / OFF

ON(1) / ON(2) / ON(3) / OFF

ON / OFF

WORK SET / DRIVER ON

AUTO / MANUAI

ON / OFF

Up to 10 counters can be connected.

SENSOR / RESET / LINK-IN / PARTS A / PARTS B

OK / NG / LINK-OUT

Parameters stored in internal nonvolatile memory

100 - 240 V AC, 50/60 Hz

W100 x D120 x H60 [W3.94" x D4.72" x H2.36"]

DLR5340-WE Non-CE

(mm [inch])



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	on	Count normal fastening only
Self Adjustable Timer Se	etting	0.01 to 2.50 sec.
Work Detection Function	1	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 Functi	on	ON / OFF
Screwdriver Cord Conne	ction	Single cord connection (Signal and power lines)
External Inputs on Term	inal Block	SENSOR / RESET / TORQUE CHECK / ch1/2/3
External Outputs on Terr	ninal Block	OK / NG / COUNT-UP / DRIVER A/B/C
Input Voltage		100 - 240 V AC, 50/60 Hz
External Dimensions	(mm [inch])	W150 × D120 × H60 [W5.91" × D4.72" × H2.36"]
Mass	(g [lbs])	620 [1.37]

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



Dedicated Screwdrivers for DLR5040A-WE and DLR5340-WE Non-CE

Small



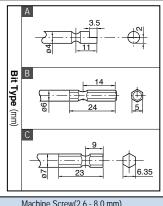
Specifications		Miniature Screw (1.0 - 3.5 mm)					
Model	Lever Start	DLV7020-SPC	DLV7030-SPC	DLV7031-SPC	-	-	-
	Push to Start	-	-	-	DLV8020-SPC	DLV8030-SPC	DLV8031-SPC
Input Voltag	je			100 V AC	, 50/60 Hz		
Torque Adju	ıstment			Step	oless		
Torque	(Nm [lbf·in])	0.05 - 0.55 [0.4 - 4.9]	0.30 - 1.10 [2.7 - 9.7]	0.30 - 1.00 [2.7 - 8.9]	0.10 - 0.55 [0.9 - 4.9]	0.30 - 1.10 [2.7 - 9.7]	0.30 - 1.00 [2.7 - 0.9]
Free Speed	(min ⁻¹)	900	650	1200	900	650	1200
Power Cons	sumption (W)	Approx. 25		Approx. 30	Approx. 25		Approx. 30
Screw Size	Machine Screw	1.0 - 3.0	2.0 - 3.5	2.0 - 3.0	1.0 - 3.0	2.0 - 3.5	2.0 - 3.0
(mm)	Tapping Screw	1.2 - 2.6	2.0	- 3.0	1.2 - 2.6	2.0	- 3.0
Bit Type		A					
Mass (g [lbs])		380 [0.84] 390 [0.86]					
Cord Length (m)		3 (with connector)					
Bit Groundi	ng			Equipped a	as standard		



		Machine Screw(2.6 - 8.0 mm)					
Model	Lever Start	DLV7120-SPC	DLV7130-SPC	DLV7140-SPC	DLV7231-SPC	DLV7241-SPC	
	Push to Start	DLV8120-SPC	DLV8130-SPC	DLV8140-SPC	DLV8231-SPC	DLV8241-SPC	
Input Voltag	ge			100 V AC, 50/60 Hz *1			
Torque Adju	ıstment			Stepless			
Torque	(Nm [lbf·in])	0.35 - 0.70 [3.10 - 6.20]	0.50 - 1.70 [4.4 - 15.1]	1.20 - 3.00 [10.6 - 26.6]	0.50 - 1.70 [4.4 - 15.1]	1.20 - 3.00 [10.6 - 26.6]	
Free Speed	(min ⁻¹)	1000		700	2000	1200	
Power Cons	sumption (W)	35			45		
Screw Size	Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 4.0	3.5 - 5.0	
(mm)	Tapping Screw	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	2.5 - 3.5	3.0 - 4.0	
Bit Type		B *2					
Mass (g [lbs])		710 [1.57] (7100series) / 670 [1.48] (8100series) 710 [1.57] (7200series) / 670 [1.48] (8200series				/ 670 [1.48] (8200series)	
Cord Length (m)		3 (with connector)					
Bit Groundi	ng	Equipped as standard					



		Machine Screv	/(2.6 - 8.0 mm)	
Model	Lever Start	•	DLV7251-SPC	
	Push to Start	DLV8150-SPC	DLV8251-SPC	
Input Voltag	je	100 V AC,	50/60 Hz *1	
Torque Adju	stment	Step	less	
Torque	(Nm [lbf·in])	2.0 - 4.5 [1	7.7 - 39.8]	
Free Speed	(min ⁻¹)	450	700	
Power Cons	umption (W)	45		
Screw Size	Machine Screw	4.5 - 6.0		
(mm)	Tapping Screw	4.0 - 5.0		
Bit Type		С		
Mass	(g [lbs])	810 [1.79]		
Cord Length	1 (m)	3 (with connector)		
Bit Groundi	ng	Equipped as standard		



7	

Big

				Widefillie Serev	V(2.0 0.0 IIIII)			
Model	Lever Start	DLV30A06L-SPC	DLV30A12L-SPC	DLV30A20L-SPC	DLV45A06L-SPC	DLV45A12L-SPC	DLV70A06L-SPC	
	Push to Start	DLV30A06P-SPC	DLV30A12P-SPC	DLV30A20P-SPC	DLV45A06P-SPC	DLV45A12P-SPC	DLV70A06P-SPC	
Input Voltag	je			100 V AC,	50/60 Hz *1			
Torque Adju	stment			Step	oless			
Torque	(Nm [lbf·in])	0.4 - 1.6 /	1.2 - 3.0 [3.5 - 14.2 / 1	0.6 - 26.6]	2.0 - 4.5 [1	7.7 - 39.8]	3.8 - 7.0 [33.6 - 62.0]	
Free Speed	(min ⁻¹)	650	1200	2000	650	1200	650	
Power Cons	sumption (W)	45						
Screw Size	Machine Screw		2.6 - 5.0			4.5 - 6.0 5.		
(mm)	Tapping Screw		2.5 - 4.0		4.0 - 5.0		4.5 - 6.0	
Bit Type			B *2 C			С		
Mass (g [lbs])		700 [1.54]			870 [1.92] with pistol grip			
Cord Length	1 (m)	3 (with connector)						
Bit Grounding Equipped as standard								
*d . Diana	the Disease and the few ables well-as a well-billible to Disease and the conference of the COT was billible.							

^{*1:} Please contact us for other voltage availabilities. *2: Please contact us for 6.35 mm bit type.

Optional Accessories



Torque Adjustment Ring CoverDLW5200: DLV7100/7200/8100/8200-SPC DLW5300: DLV7000/8000-SPC

- This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set.
- Flanged coupling DLW9011 can not be mounted on SPC type



Pistol Grip DLW2300: DLV7100/7200/ 8100/8200/30/45/70-SPC

· Suitable for horizontal operation



TD04061 SPC cord for commercial power source (optional)

 Dedicated screwdrivers can be directly plugged in commercial power source.







Jelvo Brushless Type

A Series (For Automation) Model DLV30A/45A/70A Non-CE



Features

For automatic assembly robot

- Three series of screwdrivers can be mounted on the XY robot
- · Automatic screw tightening achieves a labor-saving or unattended process
- · Long-life brushless motors are incorporated in the electric screwdrivers
- Standard coupling, flange coupling, and left-hand thread coupling are available for installation
- The electric screwdriver generates the torque-up signal
- The screwdrivers can be connected to a sequencer to control starting, forward rotation, and reverse rotation
- An electrical noise preventive measure is employed to avoid malfunction. Each input/output signal is insulated from a screwdriver's internal circuit by a photocoupler.

2	ecifica	ations	Low Speed	Standard	High Speed	Low Speed	Standard	Low Speed	
	Model Bit	Standard coupling	DLV30A06A-N(AA) J	DLV30A12A-N(AA) J	DLV30A20A-N(AA) J	DLV45A06A-N(AA) K	DLV45A12A-N(AA) K	DLV70A06A-N(AA) K	
		Coupling with flange	DLV30A06A-F(AA) J	DLV30A12A-F(AA) J	DLV30A20A-F(AA) J	DLV45A06A-F(AA) K	DLV45A12A-F(AA) K	DLV70A06A-F(AA) K	
		Coupling with M41 screw	DLV30A06A-M(AA) J	DLV30A12A-M(AA) J	DLV30A20A-M(AA) J	DLV45A06A-M(AA) K	DLV45A12A-M(AA) K	DLV70A06A-M(AA) K	
	Input Volta	ige	·	·	100 V AC,	50/60 Hz	·		
	Torque	Low Torque Spring*1		0.4 - 1.6 [3.5 - 14.2]		2.0 - 4.5 [1	77 20 01	3.8 - 7.0 [33.6 - 62.0]	
ш	(Nm [lbf·in])	High Torque Spring*2		1.2 - 3.0 [10.6 - 26.6]		1] 0.4 - 0.2	3.0 - 7.0 [33.0 - 02.0]		
Electric	Free Speed	(min ⁻¹)	650	1200	2000	650	1200	650	
ric.	Screw	Machine Screw		2.6 - 5.0		4.5 -	- 6.0	5.0 - 8.0	
	Size (mm)	Tapping Screw	2.5 - 4.0			4.0 - 5.0 4.5 - 6.0			
Screwdriver	Mass	Standard coupling	700 [1.54]			780 [1.72]			
₫	(g [lbs])	Coupling with flange	760 [1.68]			840 [1.85]			
Ϋ́		Coupling with M41 screw	740 [1.63]			820 [1.81]			
Ť	Power Con	sumption (W)	45						
	Starting M	ethod			External in	External input signal			
	Input signa	al	Start signal / Forward signal / Reverse signal (5 - 24 V DC)						
	Output sig	nal		Toro	que-up signal (Voltage unde	der 30 V DC and current 20 mA)			
	Standard A	Accessories		Bit NK31 × 2 × 6 × 70: 1 pc	3.	•	Bit NK35 × 2 × 7 × 75: 1 pc	3.	
			•	 Low torque spring: 1 pc. 					
Bit			*3		*1: Standard Accessor	ry			
Ţ	_	14		_ ^ _	*2: Built-in				
0	l ₩.					ole upon request for use with 6.35 mm hex. shank bits.			

6.35

Optional Accessories



Screwdriver Cable Breakdown List

Power/Input Signal Cable

i owei/iriput olgital cable			
Color	Details		
Green	Green Power input		
Yellow Power input			
Blue	Bit earth		
White	Input signal common (Vcc)		
Black	Start signal input		
Orange Forward signal input			
Gray Reverse signal input			

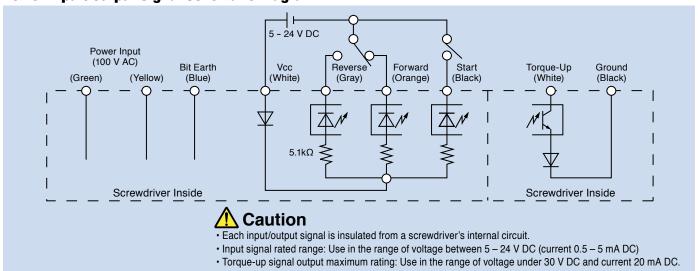
Power input voltage: 100 V AC

Output Signal Cable

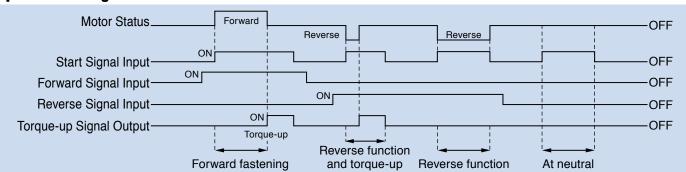
Color	Details
White	Torque-up signal output
Black	Ground

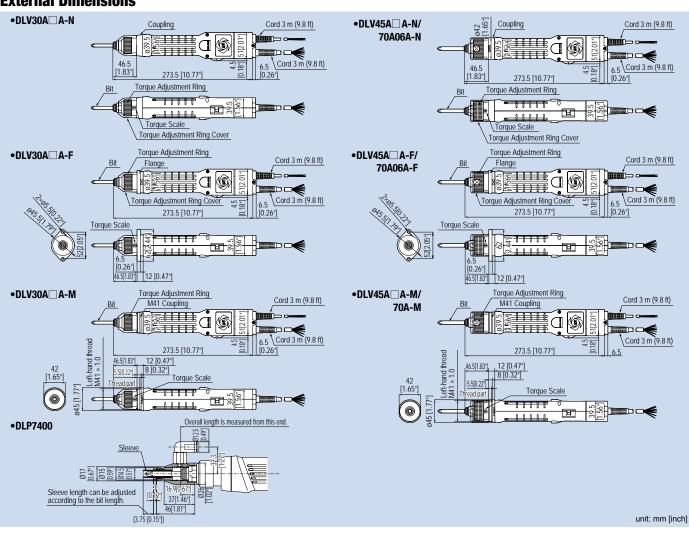
delvo Brushless Type

Power Input/Output Signal Schematic Diagram



Operation Timing Chart













DLV3151-EJN*1

2.0 - 4.5 [17.7 - 39.8]

450

Approx. 45

4.5 - 6.0

4.0 - 5.0

DLV3100/3300 Series (For Automation) Non-CE

DLV3100 series DLV3300 series

alflaatla

Features

DLV3121-EJN*1

0.25 - 0.7 [2.2 - 6.2]

Approx. 35

2.3 - 2.6

2.3 - 3.0

A Labor-Saving "delvo" for Automatic Assembly Robot

- · Vibration-proof and shock-proof for long continuous screw tightening
- Torque-up signal output

Stepless

900

- · High repetitive torque accuracy
 - 1: Models DLV3121 / 3131 / 3141 / 3151 have no bit-holding function. Please order the following models with bit holding function if required, but they require 100 V AC power source and are made to order products.
 - DLV3128-EJN DLV3138-EJN
 - DLV3148-EJN DLV3158-EJN

DLV3131-EJN*1

0.5 - 1.5 [4.4 - 13.3]

2.6 - 3.5

2.5 - 3.5

• Cable (2 m): 1 pc.

NOTE: The bit mounting is made in a specific way.

For Machine Screws

100 V AC, 50/60 Hz

900 [1.98]

DLV3141-EJN*1

1.2 - 3.0 [10.6 - 26.6]

600

3.5 - 5.0

3.0 - 4.0

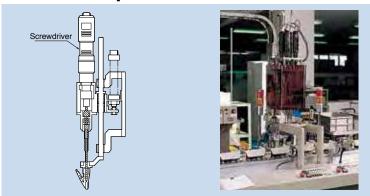
Spare Carbon Brush: 2 pc.

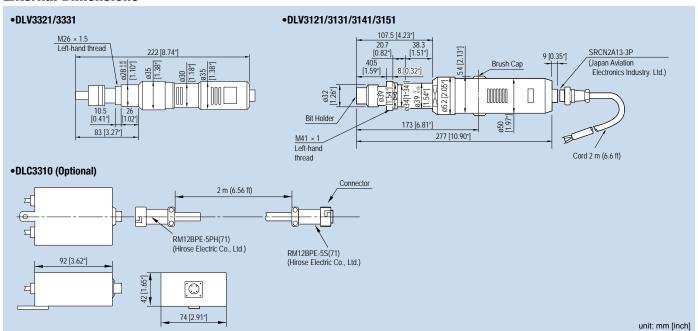
2 b	ecitica	tions		For Precisi	on Screws			
	Model		DLV33	321-CMN	DLV3331-CMN			
l	Input Voltag	е	3	36 V DC (supplied from controller)				
Electric	Torque Adju	stment						
I∄.	Torque (Nm [lbf·in])		0.05 - 0.5 [0.4 - 4.4]		0.3 - 1.2 [2.7 - 10.6]			
	Free Speed	(min ⁻¹)		900	600			
ř	Power Cons	umption (W)						
<u>ŏ</u>	Screw Size	Machine Screw	1.0 - 3.0		2.0 - 3.5			
Screwdriver	(mm)	Tapping Screw	1.2 - 2.6		2.0 - 3.0			
14	Mass	(g [lbs])		400 [[0.88]			
	Standard Ac	cessories						
Bit		For CMN			For EJN			
t Type (mm)	7-	3.5		90	24 5			
0	Model			DLC:	3310			

THE Z III COLU EXCLUSIVELY FOR I	DLV3321/3331	COLLIG2 MILLI	DEC3310 as	a statiuatu	accessory.

| Model | DLC3310 | Input Voltage | 24 V AC, 50/60 Hz | Output Voltage | 36 V DC | Mass | (g [ibs]) | 360 [0.79]

Installation Example





DLT1173A/1673A/1973A Series **C**

Torque Checker



Features

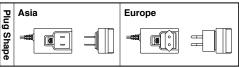
Maintaining high assembly quality with ease

- Measured data is stored even after the power is turned off, preventing any data loss
- Energy saving type with AUTO POWER OFF function (Power is automatically turned off when left unused for 10 minutes)
- A program designed for uploading the data stored in the "delvo" torque checkers to a computer is available to download free from the NITTO KOHKI website:

www.nitto-kohki.co.jp/e/prd/e-dl/delvo.html

Click

<u> </u>						
Model	DLT1173A	DLT1673A	DLT1973A			
Measurement Range (Nm[lbf·in]	0.015 - 1.500 [0.13 - 13.3]	0.15 - 10.00 [13.5 - 88.5]	4.00 - 12.00 [35.4 - 106.2]			
Calibration Precision	Within ± 0.5% (Full Scale) For 0.2 Nm [2 lbf·in] or less ± 1 digit	Within ± 0.5% (Full Scale) For 2 Nm [20 lbf·in] or less ± 1 digit	Within ± 0.5% (Full Scale)			
Display	4-digit digital display (Single-line	e) Data sampling: 1000 times/se	ec. Display rate: 12 times/sec			
Measuring Unit		kgf • cm, Nm, lbf • in (selectable)				
Data Memory		800 pieces of data				
Measuring Direction		CW and CCW				
Measuring Mode		3 modes: PD-TR-PP				
Auto Power Off	Pov	ver off if left untouched for 10 min	utes			
External Output	As pe	er USB output Mitsutoyo Digi	imatic			
Analog Output	Approx. 1.5 V max. Approx. 1.0 V max. Approx. 1.1 V max.					
	No zero offset; identical waveforms produced in PP, PD, and TR modes					
Continuous Operation Time	20 hours					
External Dimensions (mm)	W160 × D	W200 × D112 × H48.5				
[inch	[W6.3" × D4.	33" × H1.85"]	[W7.9" × D4.41" × H1.89"]			
Mass (g [lbs])	1100	[2.43]	1400 [3.09]			
Rechargeable Battery		Nickel metal hydride battery				
Charger Type		DLE1833A				
Input Voltage for Charger		100 - 240 V AC, 50/60 Hz				
Charging Time		4 hours				
Standard Accessories	Screw Joint (DLW4430)	Bit Joint (DLW4360) Spring for Joint (DLW4660)	Soft Joint (DLW4000)			



Selection of Torque Checker

DLT1173A	DLT1673A	DLT1973A
DLV3300*2	DLV7100/7200/	DLV45A/70A
DLV5700	8100/8200	DLV45S/70S
DLV5800	DLV7500/8500	DLV45A/70A
DLV7300	DLV3100*3	(automation)
DLV7000/8000	DLV30A/45A	
DLV7400A	DLV30S/45S	
DLV02/12	DLV16	
DLV04C/10C	DLV7104/8104/8204	
	DLV30A/45A	
	(automation)	

- *2: A reversible screwdriver is required to loosen the measuring joint.
- *3: A reversible screwdriver is required to loosen the measuring joint. Screw joint is required.

Optional Accessories

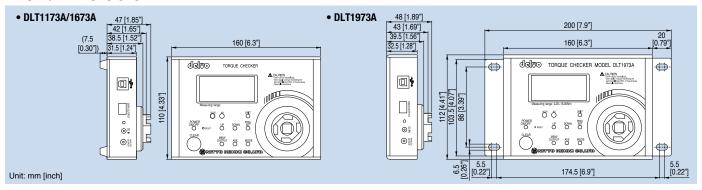
Specifications

	Model	Part No.	Shape	Torque Range	DLT1173A	DLT1673A	DLT1973A
Bit Joint	DLW4330	TD03305	OD 4 mm [0.16"] type	0.015 - 0.25 Nm [0.13 - 2.2 lbf·in]	0	_	_
	DLW4340	TD03306	OD 4 mm [0.16"] type	0.15 - 1.5 Nm [1.3 - 13.3 lbf·in]	0	0	_
	DLW4350	TD03307	Hex 5 [0.2"] and Hex 6.35 [1/4"] types	0.15 - 1.5 Nm [1.3 - 13.3 lbf·in]	0	0	_
	DLW4360	TD03308	Hex 5 [0.2"] and Hex 6.35 [1/4"] types	0.15 - 6.5 Nm [1.3 - 57.5 lbf·in]	_	0	_
Screw Joint	DLW4430	TD03309	screw type (Bit size No.2)	0.15 - 1.5 Nm [1.3 - 13.3 lbf·in]	0	0	_
	DLW4530*1	TD03310	screw type (Bit size No.2)	0.15 - 5 Nm [1.3 - 44.3 lbf·in]	_	0	_
Soft Joint	DLW4000	TD04123	Hex 13 [0.51"] type	4.0 - 12.0 Nm [35.4 - 106.2 lbf·in]	_	0	0
Hard Joint	DLW4040	TD04124	(Hex. head bolt)	4.0 - 12.0 NIII [35.4 - 106.2 IDI-III]	_	_	0
Spring	DLW4660	TV03826	Spring for DLW4340, 4350, 4430	-	0	0	_

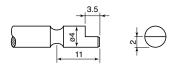
^{*1} DLW4530 must be used at 5 Nm[44.3 lbf·in] or less.

○: Standard accessories ○: Available as option —: Unsupported

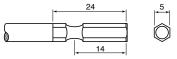




■ For DLV7400A, 5700, 5800, 7300, 7000, 8000, 3300 series



■ For DLV7100, 7200, 8100, 8200, 3100, A(DLV30A) series

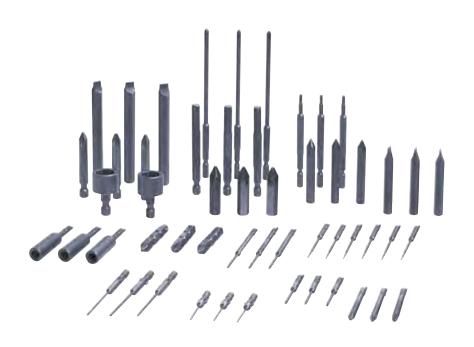


OD 4 mm Shank

) 4 mn	ii Siidi	IIX			Unit: mn
Model			Si	ize		
	Model	Part No. No. × d ×			٠ L	Dimensions
Phillips	NK4D	TD20009 TD20010 TD20021 TD20022 TD20029 TD20030 TD20037 TD20038 TD20039 TD20040	00 0	2 1.8 2.5 3 4	44 64 44 64 44 64 44 64 44	No. 20 3.5
		TD20047 TD20048 TD20050	2 3	4	44 64 44	L 11
	Model	Part No.	W >	< T :	ĸ L	Dimensions
Plain Slot	NK4DM	TD20051 TD20052 TD20053 TD20054 TD20055	2 2.5 3 4 5	0.3 0.3 0.4 0.5 0.65	44	3.5
	Model	Part No.		Н :	к L	Dimensions
Hexagon Head	NK4DX	TD20056 TD20057 TD20058 TD20059 TD20060		1.5 2 2.5 3 4	44	3.5
	Model	Part No.	Н :	< d :	× L	Dimensions
Hex Socket	NK4DB	TD20064 TD20065 TD20066 TD20067	4 4.5 5 5.5	6 7 7 8	44	8 3.5 L 11

OD 5 mm Hex. Shank

					Unit: mn
	Model	Part No.		ize	Dimensions
			No. 3	× d × L	
		TD20193		4 70	p 90
		TD20194		100	l
		TD20196	1	5 70	114
₽		TD20197		100	30 14 5
₹	NK31	TD20200		6 70	
Philips NK31		TD20201		100	اه
S		TD20210		5 70	No.
		TD20211	2	100	' <u> 14 - -</u>
		TD20214		6 70	L <u>24</u> 5
		TD20215		100	
	Model	Part No.		No.× L	Dimensions
_		TD20224		1 70	▼ X-X¹
ᆰ		TD20225		100	No. (2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
≣	NK16	TD20232		70	X' - 14
Phillips		TD20233		2 100	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
٠,		TD20235		150	
	Model	Part No.	Н :	×d×L	Dimensions
		TD20254	2	4 70	p 9
_		Part No.		H × L	30 14 14
Hexagon Head		TD20256		2.5	- 30 L 24 5
ã		TD20258		3	8
8	NK31X	TD20260		70	
크	INICOLA	TD20262		5	14 14
효					L 24 5
ď					
					14
					L 5
	Model	Part No.	H×D:	×d×L	Dimensions
		TD20272	5.5 9	4 70	p 9d
		TD20274	6 10	4.5 70	
I		TD20276	7 11	5.5 70	9 D D D D D D D D D D D D D D D D D D D
œ.		TD20277	, , , , ,	100	L 1 24 5
က်	NK31B	TD20278	8 13	6 70	
8		TD20279	0 13	100	90
Hex Socket		TD20282	10 16	8 70	
÷		TD20283	10 10	100	H 25 24
					L 1 5
				1 1	



■ For DLV7500, 8500, 7100, 7200, 8100, 8200, 02, 12, 16, A(DLV30A/45A/70A) series





OD 6.35 mm Hex. Shank

		OD 6.35 mm Hex. Shank					Unit: mm
	Model Part No.		Dimensions				
	mouci	Turt No.		No. ×	d	× L	Difficusions
		TD20306			4	75	
		TD20307			7	100	No.
		TD20308				50	30
		TD20309 TD20310		1		75 100	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
		TD20310		-		120	1
		TD20311				150	
		TD20313		1		200	
v		TD20319				50	
Ξ.	NK35	TD20320				75	
Phillips		TD20321		2	7	100	
()		TD20322 TD20323				120	No.
		TD20323 TD20324		-		150 200	
		TD20324				50	_ L
		TD20328		1		75	
		TD20329		3		100	
		TD20330] 3		120	
		TD20331				150	
		TD20332				200	
	Model	Part No.		No. ×	d	× L	Dimensions
₽		TD20335		0			
≝	NK36	TD20336		1	3.8	50	No. \$\infty \frac{28}{28}
Phillips		TD20337		2	4.5	+	20 L
		TD20338			4.5		7
	Model	Part No.			No.	× L	Dimensions
		TD20354				50	
		TD20355				75 100	
	NK15	TD20356 TD20357			1	120	
		TD20357				150	
		TD20359				200	
무		TD20362				50	No. 8
Phillips		TD20363				75	12
sd		TD20364			2	100	
		TD20366				150	
		TD20367				200	
		TD20371 TD20372				75 100	
		TD20372			3	150	
		TD20375				200	
	Model	Part No.		W ×	т	× L	Dimensions
v		TD20378				50	~1
<u>a</u>		TD20379		7	0.9	75	⊢l <u>></u>
n (C	NK35M	TD20380				100	
Plain Slot							 L'
	Model	Part No.		Н×	d	× L	Dimensions
				1.27			DI
		TD20382					
_		TD20385		1.5	3	70	
Hex				1.5	3	70	0 I I I I I I I I I I I I I I I I I I I
Hexago	NIVOTY	TD20385		1.5		70 × L	'
Hexagon	NK35X	TD20385 TD20388		1.5			'
Hexagon He	NK35X	TD20385 TD20388 Part No.		1.5	Н		15
Hexagon Head	NK35X	TD20385 TD20388 Part No. TD20391 TD20394 TD20397		1.5	H 2.5 3 4	× L	
Hexagon Head	NK35X	TD20385 TD20388 Part No. TD20391 TD20394 TD20397 TD20400		1.5	H 2.5 3 4 5	× L	15
Hexagon Head		TD20385 TD20388 Part No. TD20391 TD20394 TD20397 TD20400 TD20404		2	H 2.5 3 4 5 6	× L 70 50	15
Hexagon Head	NK35X Model	TD20385 TD20388 Part No. TD20391 TD20394 TD20397 TD20400 TD20404 Part No.	Н >	2	H 2.5 3 4 5 6	× L 70 50 × L	
		TD20385 TD20388 Part No. TD20391 TD20394 TD20397 TD20400 TD20404 Part No.	H >	2	H 2.5 3 4 5 6	× L 70 50 × L 75	Dimensions
	Model	TD20385 TD20388 Part No. TD20391 TD20394 TD20397 TD20400 TD20404 Part No. TD20442 TD20443	10	2 x D x	2.5 3 4 5 6 c d	× L 70 50 × L 75 100	Dimensions
		TD20385 TD20388 Part No. TD20391 TD20394 TD20397 TD20400 TD20404 Part No. TD20442 TD20443 TD204457		2 × D ×	2.5 3 4 5 6	× L 70 50 × L 75 100 75	Dimensions
Hexagon Head Hex Socket	Model	TD20385 TD20388 Part No. TD20391 TD20394 TD20397 TD20400 TD20404 Part No. TD20442 TD20443	10	2 x D x	2.5 3 4 5 6 c d	× L 70 50 × L 75 100	Dimensions

If Bits other than the above are required, please contact Nitto Kohki or our distributors.

Vacuum Pickups and Sleeves

Screwdriver series			Vacuum Pickup		Sleeve (Standard acces	sory)
Screwuriver series	Туре	Model	Part No.	Model		
DLV7000/DLV8000/DLV3300		Type A	DLP6500	TD00343	DLS2124/DLS2127/DLS2130	
DLV7400A/DLV5700/DLV5800			DLP5300	TD04342	DLS2120/DLS2124	
DLV7313		Type B	DLP7100	TD00345	DLS2122/DLS2124/DLS2127	
DLV7323/DLV7333	DLV7323/DLV7333 For Ø4 mm		DLP7200	TD00346	DLS2123/DLS2124/DLS2127	
	For 6.35 mm (1/4")		DLP7300	TD00347	DLS2135]
DLV7100/DLV7200/DLV8100/DLV8200			DLP7000	TD00344	DLS3223/DLS3225	
DLV7104/DLV8104/DLV8204						1 piece each
delvo Brushless Type A series 30A	For HEX. 5 mm	Type C	DLP7400	TD07285-0	DLS3223/DLS3225	
delvo Brushless Type S series 30S	(M3, M4)	Туре С				
delvo Brushless Type A series 45A/75A	For HEX. 6.35 mm		DLP7400 for High Torque	TD07286-0	DLS4220/DLS4221	
delvo Brushless Type S series 45S/75S (M5, M6)						
delvo Brushless Type C series	For Ø4 mm	Type D	DLP6600/DLP6610	TD08748/TD08751	DLS2124/DLS2127/DLS2134]
	For 6.35 mm (1/4")	Туре Б	DLP6640/DLP6650	TD08804/TD08805	DLS4225/DLS4227	

Type	Type A Type B		Type C		Type D			
Vacuum Pickup	DLP6500	DLP5300/DLP7100/ DLP7200/DLP7300 Sleeve	DLP7000 Sleeve	DLP7400/DLP7400 for High Torque	Sleeve	DLP6610	DLP6640 Sleeve	DLP6650 Sleeve
Sleeve	DLS2000 series (plastic	21	DLS3000 series (metal)	<u> </u>	DLS4220/4221	45	DLS4225/4227	45

DLS2000 series

Model	Part No.	Ø	d	Ø	D	Bit (No. × d × L) (+)	
Model	rait No.	mm	inch	mm	inch		
DLS2120	TD00348	2	0.08				
DLS2121	TD00349	2.2	0.09	3.5	0.14	N- 0 10 44	
DLS2122	TD00350	2.5	0.1	3.5	0.14	No. 0 × 1.8 × 44	
DLS2123	TD00351	2.7	0.11				
DLS2124	TD00352	3.1	0.12				
DLS2125	TD00353	3.3	0.13	4.5	0.18	N- 0 0 5 44	
DLS2126	TD00354	3.5	0.14	4.5		0.10	No. 0 × 2.5 × 44
DLS2127	TD00355	3.7	0.15				
DLS2128	TD00356	4	0.16			N- 1 2 44	
DLS2129	TD00357	4.2	0.17	F F	0.22	No. 1 × 3 × 44	
DLS2130	TD00358	4.5	0.18	5.5	0.22	N. 4 44	
DLS2131	TD00359	4.7	0.19			No. 1 × 4 × 44	
DLS2132	TD00360	5.1	0.2				
DLS2133	TD00361	5.3	0.21	6.5	0.26	N= 2 4 44	
DLS2134	TD00362	5.6	0.22			No. 2 × 4 × 44	
DLS2135	TD00363	6.1	0.24	7	0.28		

DLS3000 series

Sleeve										
Model	Part No.	Ø	ød		øD &		L		L	Bit (No. × d × L) (+)
Wodel	i ait No.	mm	inch	mm	inch	mm	inch	mm	inch	
DLS3222	TD00364	5.6	0.22	7	0.28	5	0.2			No. 1 × 5 × 70
DLS3223	TD05024	6.1	0.24					34	1.34	100.1 × 5 × 70
DLS3224	TD00365	6.4	0.25	9	0.35			34	1.34	No. 2 × 6 × 70
DLS3225	TD00366	7.1	0.28							100. 2 × 0 × 70
DLS3226	TD00367	4.6	0.18							No. 1 × 4 × 100
DLS3227	TD00368	5.1	0.2	7	0.28	18	0.71			110. 1 × 4 × 100
DLS3228	TD00369	5.6	0.22					65	2.56	No. 1 × 5 × 100
DLS3229	TD00370	6.1	0.24					00	2.50	No. 1 × 5 × 100
DLS3230	TD00371	6.4	0.25	9	0.35					No. 2 × 6 × 100
DLS3231	TD00372	7.1	0.28							NU. 2 × 0 × 100

DLS4000 series

Sleeve										
Model	Part No.	Q	id	øD		Q		L		Bit (No. × d × L) (+)
		mm	inch	mm	inch	mm	inch	mm	inch	
DLS4220	TD08001	9.1	0.36	11	0.43	5	0.2	6	0.24	No. 2 × 7 × 75
DLS4221	TD08002	10.6	0.42	12.5	0.49	5.5	0.22	7	0.28	100. 2 × 7 × 75
DLS4225	TD09344	4.6	0.18	7	0.28					No. 1 × 4 × 75
DLS4227	TD09345	5.6	0.22] /	0.28				-	No. 1 × 5 × 75

Tool Balancer



Easy to adjust tension by using handle.

Model	TW-06R	TW-1R	RW-3	RW-5	
Capacity (g [lbs])	200 - 600 [0.44 - 1.32]	500 - 1500 [1.1 - 3.31]	1000 - 3000 [2.2 - 6.61]	2500 - 5000 [5.51 - 11.02]	
Stroke (m [inch])	Stroke (m [inch]) 1.5 [2 [78.7"]		
Mass (g [lbs])	300	[0.66]	700 [1.54]	900 [1.98]	

Vacuum Pump DLP2500 series



Electric Screwdrivers can be used with Vacuum Pump and Vacuum Pickup. The sleeve of Vacuum Pickup sucks the screw and holds it on the bit, enabling the operator to pick it up with the tool itself, thus improving operational efficiency and operator's productivity.

Model		DLP2530	DLP2570	
Features		Standard	With CE mark	
Voltage		100 V AC, 50/60 Hz	230 V AC, 50/60 Hz	
Power Consumption	(W)	30(50 Hz), 26(60 Hz)		
Achievable Vacuum	(kPa)	-21.3		
Flow Rate (at Outlet)	(L/min)	24(50 Hz), 26(60 Hz)		
Screw Size (mm)		4 or less		
Mass	(g [lbs])	3800	[8.38]	

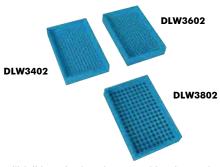
Pistol Grip DLW2300/2300ESD

(for DLV7100, 7200, 8100, 8200, 7500, 8500, 30/45/70-IKE and A(DLV30A/45A/70A) series Electric Screwdrivers)



Easy-to-attach grip suitable for horizontal operation.

Shaker Box Made of Anti-electrostatic Resin



The screws will fall into the heads-up position for easier vacuum or magnetic pickup.

The anti-electrostatic resin greatly reduces static buid-up and dust attached to the shaker box.

Model		DLW3402	DLW3602	DLW3802
Part No.		TD04110	TD04111	TD04112
Hole Pitch (mm [inch])		6 [0	8 [0.31"]	
Hole Depth (mm [inch])		13.5 [0.53"]		12.5 [0.49"]
No. of Holes		273	273	160
Screw Size	(mm)	1.7 - 2	2 - 2.6	3 - 4

Torque Adjustment Ring Cover



Fits over torque adjustment cover to minimize tampering or accidental turning once the torque is set.

Model	Part No.	Applicable Screwdriver
DLW5200	TD00331	DLV7100,7200,8100 and 8200 series
DLW5201*1	DLW5201*1 TD05639 DLV7100,7200,8100 series and DLV30A	
DLW5202	W5202 TD08486 DLV45S/70S and DLV45A/70A	
DLW5203	TD09222	DLV30S and DLV30A
DLW5300	DLW5300 TD00332 DLV7301, 7000, 8000 series (for 4 mm bit)	
DLW5400 TD01883 DLV7301 series (for 6.35 mm bit)		DLV7301 series (for 6.35 mm bit)
DLW5500	DLW5500 TD00333 DLV7303 series (for 4 mm & 6.35 mm bit)	
DLW5600	DLW5600 TD00334 DLV7500, 8500 series	
DLW5700	TD02875	DLV5700, 5800, 7400A series
-	- TV07315 DLV02/12/16SL-BKE series	
-	TV06787	DLV02/12/16SL-CKE series

^{*1:} As this is a clear plastic cover, torque scale can be seen even after mounted on the screwdriver.

Flanged Coupling DLW9011

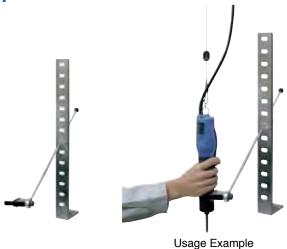
(for DLV7100, 7200, 8100, and 8200 series Electric Screwdrivers) *Can not be mounted on SPC type



Provides a flange which enables the operator to apply axial pressure through the heel of the hand.

Accessories

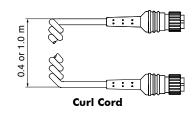
Torque Reaction Arm

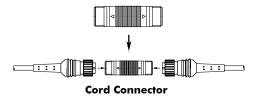


For enhanced productivity and prevention of operator's repetitive motion injury, a torque reaction arm should be used all together.

Part No.	Decription	Applicable Screwdriver
TD06180	Torque Reaction Arm	A series(DLV30A/45A/70A) S series(DLV30S/45S/70S)

Optional Cord





Please inquire of the distributor for the price and minimum quantity on each optional cord.

Part No.	Optional Cord	Applied Models	Length (m)						
TD02826	5P to 6P Exchange Cord*1		0.1						
TD02548	Extension Cord For 5P	DLV7300 series	3.0						
TD03159	Extension Cord For 6P		2.0						
TD01882	Curl Cord		0.4						
TD02820	Curl Cord	DLV7500/8500 series	1.0						
TD02438	Cord Connector DLW9100								

^{*1: &}quot;5P to 6P Exchange Cord" is used to connect "5-prong Screwdriver" to "6-prong Controller".

SAFETY GUIDE

Be sure to read and understand the following safety notations and all safety precautions.

MARNING:

Indicates a potentially hazardous situation which, if failure to comply with the instructions given, could result in serious injury or death.

CAUTION:

Indicates a potentially hazardous situation which, if failure to comply with the instructions given, could result in injury or material damage.

Safety Precautions

- Be sure to follow the safety precautions to keep accidents such as fires, electroshock, and injuries from occurring.
- Before using your tool, please read this manual carefully so that you may use it properly to get the most out of it.
- Keep the manual handy so you can use it whenever necessary.

MARNING

- Keep work area clean. Cluttered work areas and benches invite accidents and injuries.
- Consider proper working environments for each tool carefully. Do not expose
 electric tools to extreme amounts of moisture or direct contact with water or
 rain. Keep area well lit at all times to prevent hidden dangers and never
 operate the equipment near flammable liquids or in gaseous or explosive
 atmospheres.
- Prevent operators from electric shock. When using electric tools, prevent body contact with grounded surfaces (e.g. pipes and outer frames of radiators, microwave ovens, and refrigerators, etc.).
- Keep all electric tools and power cords away from children and all unauthorized personnel. Also all visitors should be kept away from work area.
- Properly store tools and accessories while not in use. They should be kept in a dry, locked-up location out of reach of children or unauthorized personnel.
- Do not force tool. It will do the job better and more safely at the rate for which
 it was intended.
- Use the right electric power tool that can complete the job within its specifications. Do not attempt to adapt improper attachments or accessories to complete a job. Do not use the tool for other than what they were designed for.
- Dress properly. Do not wear loose clothing and/or accessories. (gloves, necklace etc.) They can be caught in moving parts. Non-skid footwear is recommended in outdoor operation. Wear protecting hair covering to contain long hair.
- Always wear safety glasses during operation. Wear respiratory protection when working in an environment where dust particles are generated during operation.
- Do not abuse cord. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- Use clamps or a vise to secure the work piece tightly and eliminate vibration.
 Never hold the work piece with your hands, keep both hands on the electric tool for increased productivity.
- Do not overreach. Keep proper footing and balance at all times.
- Maintain tools with care. For safe and efficient work, use the proper bit and check it regularly. Do not use the bit with a worn out or deformed tip. When oiling and replacing parts, follow the instructions given by the instruction manual. Inspect tool cords periodically and if damaged, have them replaced by an authorized service facility. Keep handles dry,clean, and free from oil and grease.
- Disconnect a tool or a controller when not in use, when repairing, or when changing accessories and bits, etc.

- Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tools before turning it on.
- Always avoid an unexpected start by having all power switches in the off
 position prior to attaching to a power supply. Never carry tools with your finger
 on the on/off switch when the power is attached. Never plug the cord into a
 receptacle while your finger is on the on/off switch.
- When the tool is used outdoors, use an electric extension cord or cable suitable for outdoor use.
- Stay alert. Watch what you are doing. When using electric tools, take good care of tool handling, working manner, and surrounding conditions. Use common sense. Do not operate tool when you are tired.
- Check damaged parts. Before further use of the tool, an accessory or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended functions. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. When repairing or replacing parts, follow the directions of the instruction manual. The part that is damaged should be properly repaired or replaced by an authorized service facility unless otherwise indicated elsewhere in this operation manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch cannot be turned on and off.
- Use only recommended accessories and attachments as per tool operator manual and "delvo" general catalog. Use of improper accessories and attachments may result in an accident or serious injury.
- Any repairs on the tool should be performed only by an authorized service facility. Do not modify the tool that is complying with the safety standard. If the repairman who has poor knowledge and skill repairs the tool, the tool may not give a good performance and result in an increased risk of injury to the user.
- The power source must be limited to the individual tools specifications as stated on the nameplate or instruction manual. If used at a higher or lower voltage than indicated, it may cause failure and result in an increased risk of injury to the user.
- Before work operation carefully check if there are underground installations such as conduit, water pipe, and gas pipe, etc. If a tool should touch them, it might cause electric shock, electric leak, or gas leak.
- Hold the tool body firmly so as not to be swung by it when using. If not, this
 may cause injury.
- Do not bring hand or face close to moving parts such as bit etc. when using.
 This may cause injury.
- When you have dropped the tool by mistake, carefully check the tool if there is breakage, cracks or deformation. This may cause injury.

CAUTION

- Install bits or accessories securely in accordance with the operation manual.
 Insufficient installation may cause injury.
- Whenever setting the torque, unplug the cable of the tools. Adjusting the torque setting during rotation may cause injury.
- When operating a tool at high places, check that there is no person under the places. Do not stumble over the cord nor drop the material or tool body. This may cause injury.
- Never leave a tool running unattended on the working bench or floor.
 Always turn the power switch or lever to the off position and disconnect from the power source when not in use.
- Do not overload to the extent that the motor locks or the clutch malfunctions.
 This may cause smoke, fire, failure or injury.
- If the tool is overheating or functioning abnormally, stop using the screwdriver immediately and inspect it to see whether any repairs are necessary.
 Otherwise this may cause failure or injury.
- The electric screwdriver may overheat depending on the type of screw, type of screw-tightened material, or frequency of use. To avoid overheating, stop operating the screwdriver for a time or use several drivers in alteration.
 Overheating may reduce the life of the product or cause failure or injury.
- The fastening torque may vary depending on how the product is operated or held, the type of screw, and the fastening conditions. Use a torque wrench or similar tool to check that the fastening torque is appropriate.



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