ELECTRIC SCREWDRIVERS

Cat.NO. Dk300c





NITTO KOHKI's "delvo" Electric Screwdrivers contribute to quality improvement of assembly work.



Professional Tools for Assembling High-Technology Goods

NITTO KOHKI's "Delvo" Electric Screwdrivers are high-quality tools for professional use, with special emphasis on precise torque control and long life. They always apply just the correct amount of torque with accurate and positive control at your fingertips. They are smooth and shockless in operation, too. NITTO KOHKI's customer-oriented service system through our sales agents ensures that you can use Delvo Electric Screwdrivers with a high degree of reliability.

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Shockless

Sophisticated clutches and motor braking mechanism reduce the shock at the end of the screw tightening operation and causes less fatigue.

Long Life

Motor brushes stand over a million tightening cycles. They can be replaced easily.

Brushless motors are adopted.

They are eco-friendly, long life, and cover wide torque range.

High Accuracy

High repeatable torque accuracy provides more consistent screw tightening torque.

High Speed

High-speed torque motors cut down screw tightening time and enhance productivity.

Safety Standards

Models with CE Marking (for the European Union) or CCC (for People's Republic of China) are available.

Quieter

Compare Delvo with a conventional pneumatic screwdriver, and you will hear the difference.





DLV7410A / 7419A / 7410HA / 7419HA / 7420A / 7429A-BME DLV7313 / 7323 / 7333 / 7321 / 7331 / 7325 / 7335-CME / CKE DLV7321 / 7331-BME / BKE DLV7319 / 7329 / 7339 / 7349-BME DLC1213A-GG / GGB / GGU DLV30SP / 30SL / 30HP / 30HL / 30LP / 30LL

DLV7530/7540/7550-MKE/BKE DLV8530/8540/8550-MKE/BKE DLC4511-GGB/DLR1510-JE



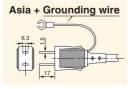
Selection Chart

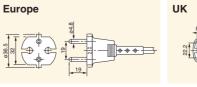
Input Voltage	Screwdriver		Controller	Shape of Plug for Power Supply
	DLV7410A / 7419A DLV7410HA / 7419HA DLV7420A / 7429A	+	DLC1110-EN	Asia + Grounding wire
	DLV5720 / 5720H / 5740	+	DLC0350E	Asia + Grounding wire
	DLV5740H / 5750	+	DLC0950E	Asia + Grounding wire
	DLV5820 / 5820H / 5840	+	DLC0250E	USA
			DLC1213A - EN	Asia + Grounding wire
100 VAC	DLV7313 / 7323 / 7333 - CMN	+	DLC1215 - EN	Asia + Grounding wire
	DLV7325 / 7335 - CMN	•	DLC2310 - CE + DLE3610 - EN	Asia
	DLV7321 / 7331 / 7319 / 7329 / 7339 / 7349 - BMN	+	DLC1213A - ENB	Asia
	DLV30HL / 30SL / 30LL DLV30HP / 30SP / 30LP			USA
	DLV7020 / 7030 / 8020 / 8030 / 7031 / 8031 - EMN			Asia
	DLV7120 / 7130 / 7140 / 7220 / 7231 / 7241 - EJN DLV8120 / 8130 / 8140 / 8220 / 8231 / 8241- EJN DLV8150 / 7251 / 8251 - EKN			Asia
	DLV3121 / 3131 / 3141 / 3151 - EJN			Exclusive cord
	DLV7410A / 7419A DLV7410HA / 7419HA DLV7420A / 7429A	+	DLC1110-FE	USA
	DLV5720 / 5720H / 5740	+	DLC0350F	USA
	DLV5740H / 5750	+	DLC0950F	USA
115 VAC	DLV7313 - CME DLV7321 / 7323 / 7333 / 7331 / 7325 / 7335 - CME / CKE	+	DLC1213A - FE	USA
	DLV7321 / 7331-BME / BKE DLV7319 / 7329 / 7339 / 7349 - BME	+	DLC1213A - FEB	USA
	DLV7020 / 7030 / 8020 / 8030 - FME			Asia
	DLV7410A / 7419A DLV7410HA / 7419HA DLV7420A / 7429A	+	DLC1110-GE	UK
		•		
220 VAC	DLV7313 - CME DLV7321 / 7323 - CME / CKE DLV7333 / 7331 - CME / CKE DLV7325 / 7335 - CME / CKE	+	DLC1213A - GE DLC1215 - GE	UK Asia
	DLV7410A / 7419A DLV7410HA / 7419HA DLV7420A / 7429A	+	DLC1110-GG	Europe
	DLV7410A / 7419A	+	DLC0350G	UK
				Asia + Grounding wire
	DLV5740H / 5750	+	DLC0950G	Asia + Grounding wire
	DLV7313 - CME DLV7321 / 7323 - CME / CKE DLV7333 / 7331 - CME / CKE	+	DLC1213A - GG * DLC1213A - GGU *	Europe
	DLV7325 / 7335 - CME / CKE		DEC1213A - GG0	UK .
230 VAC	DLV7321 / 7331 - BME / BKE DLV7319 / 7329 / 7339 / 7349 - BME	+	DLC1213A - GGB *	Europe
	DLV30HL / 30SL / 30LL DLV30HP / 30SP / 30LP			Europe, USA
	DLV7530 / 7540 / 7550 - MKE / BKE	+	DLC4511 - GGB *	Europe
	DLV8530 / 8540 / 8550 - MKE / BKE	_	DLR1510 - JE *	Europe
	DLV7120 / 7130 / 7140 - JJE / JKE DLV8120 / 8130 / 8140 - JJE / JKE DLV7221 / 8221 - JKE DLV8150 - JKE			Asia
	DLV7410A / 7419A DLV7410HA / 7419HA DLV7420A / 7429A	+	DLC1110-HE	UK
240 VAC	DLV7313 - CME DLV7321 / 7323 / 7333 / 7331/ 7325 / 7335 - CME / CKE	+	DLC1213A - HE	Without Plug
	DLV7321 / 7331 - BME / BKE DLV7319 / 7329 / 7339 / 7349 - BME	+	DLC1213A - HEB	UK

Standard Plug Shape

U.S.A.

Asia





Unit: mm

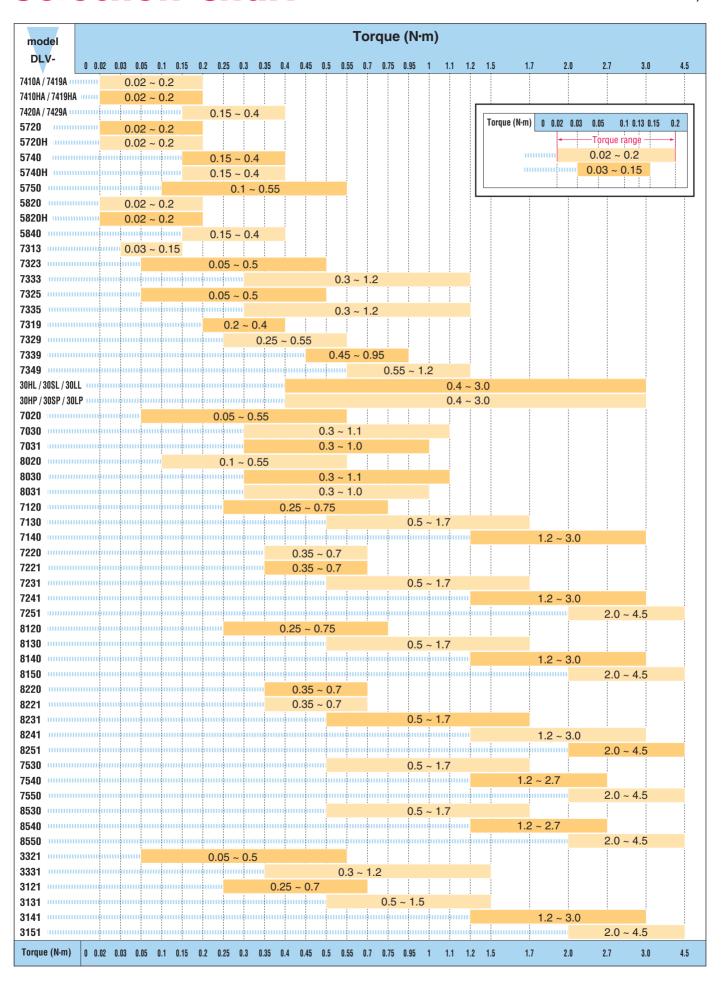
^{*:} Complied With CE marking.

• Regarding "made to order" models and other than the models shown in this catalog, please inquire of the distributor for the price and minimum quantity per model.

Selection Chart

			Sc	rewdriver			Cor	ntroller			
	Page	Series	Model	Screws size	Features	Starting Method	Model	Features			
	5~6	7400A series	DLV7410A / 7419A DLV7410HA / 7419HA	1.0 ~ 2.3			DLC1110	Speed Control			
	U~U	1-tour selles	DLV7420A / 7429A	1.6 ~ 2.6	_		DEGITIO	Soft Start			
			DLV5720		Low Voltage,						
			DLV5720H	1.0 ~ 2.3	Low Shock,		DLC0350	Speed Control			
	7	5700 series	DLV5740		ESD			Soft Start,			
	•		DLV5740H	1.6 ~ 2.6				Signal Output			
			DLV5750	1.0 ~ 3.0				DLC0950			
			DLV5820	10.00				DLC0250	Small size		
	8	5800 series	DLV5820H	1.0 ~ 2.3	Low Voltage, - ESD		DLC0350	Speed Control, Soft Start,			
			DLV5840	1.6 ~ 2.6	LOD		DEGGGGG	Signal Output			
480			DLV7313-CME	Up to 2.0		Lever Start	DLC1213A	Speed Control,			
	9		DLV7321 / 7323-C□E	1.0 ~ 3.0	Low Voltage			Soft Start			
开台	Ĭ		DLV7331 / 7333-C E	2.0 ~ 3.5			DLC1215				
			DLV7325-C E	1.0 ~ 3.0	Low Voltage,		DLC2310	Multiple Control			
		7300 series	DLV7335-C□E DLV7321-B□E	2.0 ~ 3.5 1.0 ~ 3.0	Clean Room						
		TOOD SELIES	DLV7321-B_E DLV7331-B_E	2.0 ~ 3.5	Low Voltage, ESD						
	10		DLV7319-BME		-			Speed Control,			
	10		DLV7329-BME	2.0 ~ 3.0	Low Voltage, Clean Room,		DLC1213A-	Soft Start,			
			DLV7339-BME		Low Shock,			Bit Ground			
			DLV7349-BME	3.0 ~ 3.5	ESD						
	44		DLV30HL / 30SL / 30LL	00 50		Lever Start					
	-11	30 series	DLV30HP / 30SP / 30LP	2.6 ~ 5.0		Push to Start					
			DLV7120	2.6 ~ 3.0							
		7100 series	DLV7130	2.6 ~ 4.0	_						
			DLV7140	3.5 ~ 5.0							
			DLV7220	2.6 ~ 3.0		Lever Start					
		7000 .	DLV7221	0.0 4.0	_						
		7200 series	DLV7231 DLV7241	2.6 ~ 4.0 3.5 ~ 5.0	_						
1			DLV7251	4.5 ~ 6.0							
	12	12	DLV8120	2.6 ~ 3.0						\	
			DLV8130	2.6 ~ 4.0			\	\			
40 P Prints	8			8100 series	DLV8140	3.5 ~ 5.0	- Transformerless				
			DLV8150	4.5 ~ 6.0	Transformeness						
			DLV8220	2.6 ~ 3.0		Push to Start		\			
			DLV8221	2.0 0.0				\			
		8200 series	DLV8231	2.6 ~ 4.0				\			
			DLV8241	3.5 ~ 5.0	-			\			
			DLV8251 DLV7020	4.5 ~ 6.0	-			\			
		7000 series	DLV7020 DLV7030	1.0 ~ 3.0 2.0 ~ 3.5	-	Lever Start		\			
		1000 SELIES	DLV7030	2.0 ~ 3.5	1	Lovoi Otait		\			
	13		DLV8020	1.0 ~ 3.0	-			\			
		8000 series	DLV8030	2.0 ~ 3.5	1	Push to Start		\			
			DLV8031	2.0 ~ 3.0	1			\			
		3300 series	DLV3321	1.0 ~ 3.0			DLC3310	Torque Reach			
		2000 20162	DLV3331	2.0 ~ 3.5	E. D.L.		DEGOSTO	Signal Output			
	14		DLV3121	2.3 ~ 2.6	For Robot (with Torque Reach	External Input					
		3100 series	DLV3131	2.6 ~ 3.5	Signal Output)						
			DLV3141	3.5 ~ 5.0							
			DLV3151	4.5 ~ 6.0							
-61		7500 series	DLV7530 DLV7540	2.6 ~ 4.0	-	Lever Start					
		1 200 Selies	DLV7540 DLV7550	3.5 ~ 5.0 4.5 ~ 6.0	-	LEVEI OLAIL		Speed Control,			
4	15~16		DLV7530	2.6 ~ 4.0	Low Voltage		DLC4511-GGB	Soft Start, Bit Ground,			
		8500 series	DLV8540	3.5 ~ 5.0	-	Push to Start		Signal Output			
		2220001100	DLV8550	4.5 ~ 6.0	1						
				7.0 - 0.0				l			

Selection Chart



Features

The light and compact body reduces operator fatigue.

- Reduces shock applied to workpieces when fastening screws.
- Compliant with EN100015-1
- Lightweight (Standard type 230g, Clean room type 275g)
- 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 dowm, 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
- 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.



Specifications

opoullion	1110110					
B/II - I	Standard Type	DLV7410A-BME	DLV7410HA-BME	DLV7420A-BME		
Model	Clean Room Type	DLV7419A-BME	DLV7419HA-BME	DLV7429A-BME		
Starting Meth	od		Lever Start			
Input Voltage			Supply from the dedicated controller			
Torque Adjus	tment		Stepless			
Torque	(N·m)		0.02~0.2	0.15~0.4		
Free Speed	(min ⁻¹)	500~750	700~1000	450~600		
Power Consu	mption (W)	Approx. 10				
Screw Size	Machine Screw	M1.0	~2.3	M1.6~2.6		
(mm)	Tapping Screw	M1.0	~2.0	M1.4~2.3		
Bit Type	(mm)		3.5			
Mass	(g)		Standard type 230 / Clean room type 275			

Standard Accessories

	No.	DLV7410A	DLV7410HA	DLV7420A	DLV7419A	DLV7419HA	DLV7429A
Bit	No.0 x 1.8 x 44	1	1	-	1	1	-
DIL	No.0 x 2.5 x 44	1	1	1	1	1	1
	No.1 x 4 x 44	-	-	1	-	-	1
Connectio	n cord DLW9070	1	1	1	1	1	1
Spring for	Spring for Low Torque		1	-	1	1	-
Suspension Bail		1	1	1	1	1	1
Sleeve for vacuum DLS2124		-	-	-	1	1	1

Controller

Model		DLC1110-GG/HE	DLC1213A-GGB/HEB*1	
Input Volta	age	230V AC		
	Auto stop	0	0	
Function	Soft start	0	0	
Function	Speed control	0	0	
	ESD protected	0	0	
Mass	(g)	900	2,300	

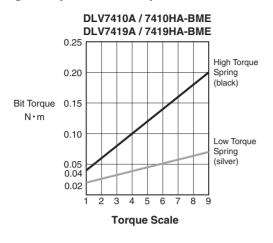
*1 An optional cord is required to connect with this model.

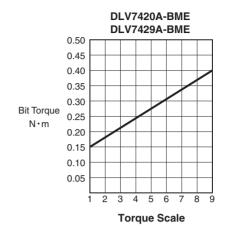
* Neither DLC1213A-GG nor DLC1213A-HE can be used with the DLV7400A series.

Model DLC1213A-GGB or DLC1213A-HEB + Cord DLW9072

DLV7400Aseries

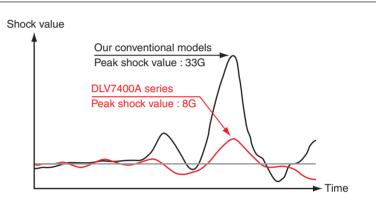
Torque Diagrams (for reference)

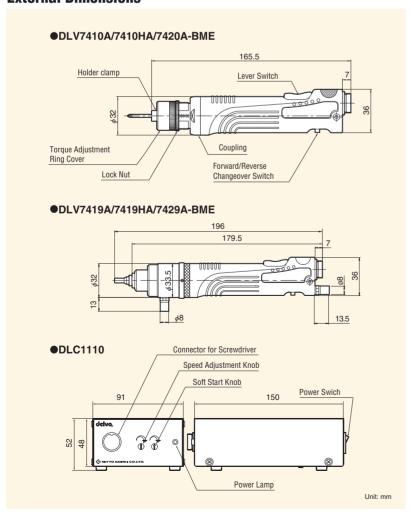




Shock Waveform Comparison between the 7400A series and our conventional models

Value of shock applied to the workpiece as measured using acceleration pickup.







DLV5700series

For Miniature Screws (1.0~3.0mm)

Features

For quality improvement and productivity enhancement

- Grounded bit installation mechanism.
- Electro-static discharge (ESD) control.
- Low-shock for tightening (30% less of standard models)
- Low swing bit mechanism
- Ergonomic design
- High-performance DC motor
- New clutch mechanism





Specifications

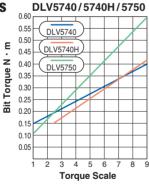
	Model	DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750			
	Starting Method	Lever Start							
	Input Voltage		Supply from the dedicated controller						
ē	Torque Adjustment			Stepless					
≟	Torque (N·m)	0.02-	~0.2	0.15	~0.4	0.1~0.55			
≥	Free Speed (min ⁻¹)	500~750	700~1000	450~600	1200~1800	670~1000			
screwdriver	Power Consumption (W)		Approx. 10			Approx. 26			
Š	Screw Size Machine Screw	1.0~	-2.3	1.6~	~2.6	1.0~3.0			
ΙË	(mm) Tapping Screw	1.0~	-2.0	1.4~	1.0~2.6				
Electric	Bit Type	35 - 0							
	Mass (g)		230	30	0				

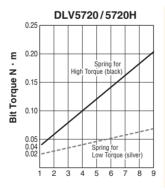
ler	Model	DLC0350E	DLC0350F	DLC0350G	DLC0950E	DLC0950G
<u></u>	Input Voltage (V)	100 VAC	115 VAC	230 VAC	100 VAC	230 VAC
뒫	Power Supply Plug	Asia+Grounding Wire	USA	UK	Asia+Grounding Wire	
ပြ	Mass (g)		900		18	00

Standard Accessories

	No.	DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750
±=	No.0 x 1.8 x 44	1.8 x 44		-		
m	No.0 x 2.5 x 44	1			1	
	No.1 x 4 x 44	_	•		1	
Co	nnection Cable	4		4		
(1	.5M)DLW9081	'				
Sı	ispension bail	1		1		
St	oring for Low Torque	1		-		

Torque Diagrams (for reference)







External Dimensions

●DLV5740H / 5750 ●DLV5720 / 5720H / 5740 Torque Adjustment Ring Lever switch 165.5 Holder clam Holder clamp Lock Nut ●DLC0950 172 External output terminal External output termina Soft-Start Adjustment Knob Soft-Start Adjustment Knob Power Switch Power Switch Speed Adjustment Knob Speed Adjustment Knob

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
- Complied with EN100015-1
- New lever is adopted.
- Low swing bit mechanism
- Low voltage transless controller



Specifications

-	0011104						
	Model		DLV5820	DLV5820H	DLV5840		
	Starting Me	thod		Lever Start			
	Input Voltag	ge	Sup	pply from the dedicated contro	oller		
	Torque Adju	ustment		Stepless			
<u>~</u>	Torque (N·n	n)	0.02	~0.20	0.15~0.40		
Screwdriver	Free Speed	(min ⁻¹)	750	1,000	600		
ΙÞ	Power Cons	sumption (W)	Approx. 10				
ē	Screw Size Machine Screw		M1.0~2.3		M1.6~2.6		
တြ		Tapping Screw	M1.0	M1.0~2.0			
Electric				3.5			
	Mass (g)			230			
	Cord length	(m)		1.5 (with connector)			
	Grounding I	bit feature		Equipped as standard			

	Model	DLC0250E		
-	Input Voltage	100VAC, 50/60Hz		
≗	Function	Automatic stop		
말	ruliciloli	Grounded Bit Installation Mechanism		
Controller	Mass (g)	300		
ျပ	Power Supply Plug	USA		
	Case material	Antistatic material		

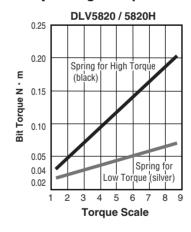
^{*}Electric screwdrivers DLV5800 series can be also used with DLC0350.

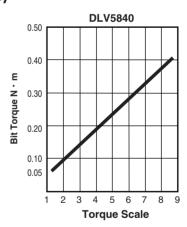
Standard Accessories

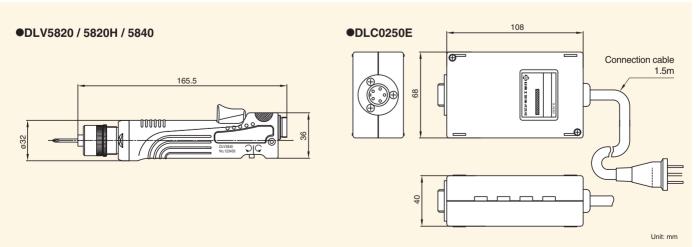
	No.	DLV5820	DLV5820H	DLV5840
Bits	No.0 × 1.8 × 44	1		-
<u> </u>	No.0 x 2.5 x 44		1	
	No.1 x 4 x 44			1
Sι	ispension bail	1		1
Co	onnection cable (1.5M)	-	1	
Sr	ring for low torque (Silver)		-	

Optional Accessories Spring (Special order item) Spiral cord (Special order item)

Torque Diagrams (for reference)







DLV7300series

For Miniature Screws (1mm~3.5mm)

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* Clean Room standards.
 - * Based on Nitto's standard of measurement.



DLV7313/7323/7333 DLV7321 / 7331 DLV7325 / 7335 **DLC1213A**

Sp	<u>ecifica</u>	tions		Standard		Clean roo	om use				
		Bit Shank: ø4mm	DLV7313-CME	DLV7323-CME DLV7321-CME	DLV7333-CME DLV7331-CME	DLV7325-CME*1	DLV7335-CME*1				
	Model	Bit Shank:		DLV7323-CKE	DLV7333-CKE DLV7331-CKE	DLV7325-CKE	DLV7335-CKE				
	Starting Me	Hex.6.35mm thod		DLV7321-CKE							
	Input Voltag		Lever Start 24VDC								
	Torque Adju		Stepless								
١.	Torque (N·m	1)	0.03~0.15	0.05~0.5	0.3~1.2	0.05~0.5	0.3~1.2				
\ e	Free Speed		700-	~1000	700~1000 500~700						
声	Power Consumption (W)				Approx.26						
l §	Screw Size	Machine Screw	Up to 2	1~3	2~3.5	1~3	2~3.5				
Screwdriver	OUICW OIZE	Tapping Screw	Up to 1.7	1.2~2.6	2~3	1.2~2.6	2~3				
0,	Bit Type	For CME		35 11							
	(mm)	For CKE		5	9 6.35						
	Mass (g)			350		400					

^{*1:} Vacuum pump for suction of screw is available as option. See page 27 for details of the vacuum pump.

Г	Model	Features	Input Voltage	Control Function	Shape of Plug for Power Supply	Mass(kg)
	DLC1213A-EN	Standard	100 VAC			
1	DLC1213A-FE*1	Standard	115 VAC	Auto stop,	Asia	
١,	DLC1213A-GE	Standard	220 VAC	Soft start,		
	DLC1213A-GG	With CE Mark	230 VAC	Speed control	Europe	2.3
1	DLC1213A-GG U	With CE Mark	230 VAC		UK	
5		Standard	240 VAC		Without Plug	
0	DLC1215-EN	2 Screwdrivers for 1 Controller	100 VAC	Auto stop	Asia	
	DLC1215-GE	2 Screwdrivers for 1 Controller	220 VAC	Auto Stop	Asia	
	DLC2310-CE	Multiple Controller	24 VAC	Auto stop		0.36
1	DLE3610-EN	Power Supply for DLC2310-CE	100 VAC		Asia	9

^{*1:} This model is made to order. *2: See page 17 for details of the models other than DLC1213A series.

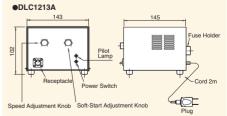
Standard Accessories

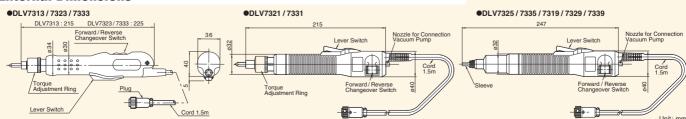
			_							
	No.	DLV7313 -CME	DLV7321 / 23 -CME	DLV7331 / 33 -CME	DLV7321/23/ 31/33-CKE	DLV7325 -CME	DLV7335 -CME	DLV7325 / 35 -CKE		
	No.0 x 1.8 x 44	1	_	_	_	_	_	_		
١	No.0 x 2.5 x 44	1	1	_	_	1	_	_		
Bit	No.1 x 3 x 44	_	_	1	_	_	1	_		
ш	No.1 x 4 x 44	_	1	_	_	1	_	_		
	No.1 x 7 x 50	_	_	_	1	_	_			
	No.2 x 4 x 44	_	_	1	_	_	1	_		
	No.2 x 4.5 x 50	_	_	_	_	_	_	1		
	No.2 x 7 x 50	_	_	_	1	_	_	_		
۵	DLS2124	_	_	_	-	1	_	_		
١š	DLS2127	_	_	_	_	1	1			
ee	DLS2130	_	_	_	_	1	1			
S	DLS2134	_	_	_	_	_	1	_		
0,	DLS2135	_	_	_	_	_	_	1		
Sı	Suspension Bail 1									

DLV7331 /7333/733 1.0 Bit Torque $(\mathbf{N} \cdot \mathbf{m})_{0.6}$ 7321/7323/7325

4 5 **Torque Scale**

Torque Diagrams (for reference)





DLV7300-BMEseries

For Machine Screws (1mm~3.5mm)

Features

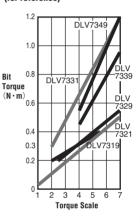
Workpiece-conscious electric screwdrivers.

- 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.
- Meet Class 5* or more Clean Room standards.
 - *Based on Nitto's standard of measurement.



St	ecifica	tions	EG	SD		ESD / Lo	w Chook					
7	,0011100				DI 1/2040 DEFE+1			DI 1/70 40 DESC+1				
	Model	Bit Shank:ø4mm	DLV7321-BME*1	DLV7331-BME*1	DLV7319-BME*1	DLV7329-BME*1	DLV7339-BME	DLV7349-BME*1				
	model	Bit Shank:Hex. 6.35mm	DLV7321-BKE	DLV7331-BKE								
	Starting Me	ethod	Lever Start									
	Input Volta	ge			24'	VDC						
	Torque Adj	ustment		Stepless								
	Torque (N·r	n)	0.05~0.5	0.3~1.2	0.2~0.4	0.25~0.55	0.45~0.95	0.55~1.2				
10	Free Speed	(min ⁻¹)	700~1,000	700~1,000 500~700 700~1,000 500~700								
ĿŠ	Power Cons	sumption (W)	Approx. 26									
ΙŅ	Screw Machine Screw		1~3	2~3.5	2.	3	~3.5					
Screwdriver	Size (mm)	Tapping Screw	1.2~2.6	2~3	2~	2.6	2.6~3					
S	Bit Type	For BME			3 11	5						
	(mm)	For BKE			S 23	9 6.35						
	Mass (g)		35	50	400							

Torque Diagrams (for reference)



^{*1 :} These models are made to order.

er	Model	Input Voltage	Shape of Plug for Power Supply	Control	Mass(kg)	
1	DLC1213A-ENB	100VAC, 50/60Hz	USA	Grounding,		
onti	DLC1213A-FEB*1	115VAC, 50/60Hz	USA	Auto Stop,	2.3	
ပိ	DLC1213A-GGB	230VAC, 50/60Hz	Europe	Soft Start,	2.3	
	DLC1213A-HEB	240VAC, 50/60Hz	UK	Speed Control		

^{*1:} This model is made to order.

Measure	ment point	Conventional product	DLV7309-BM
Hendle	Static Electricity (V)	350	5
Handle	Surface Resistance (Ω)	more than10 ¹³	10 ⁴
Lever Switch	Static Electricity (V)	350	2
Lever Switch	Surface Resistance (∩)	more than10 ¹³	10 ⁴
Forward / Reverse Switch	Static Electricity (V)	25	2
Power Cable	Static Electricity (V)	110	5
rower Gable	Surface Resistance (∩)	more than10 ¹³	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 mesurement 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 continuous gives.

Turn on the switch of the screwdriver.

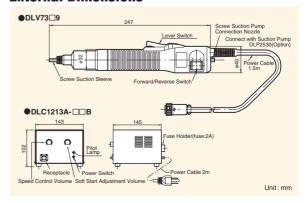
Measure each part of the screwdriver using electronic measurement equipment manufactured by Shishido electrostatic Ltd.

(2) Surface resistance

Measure using Simco Japan surface resistivity measurement equipment.

Standard Accessories

	No.	DLV7319/29 -BME	DLV7339/49 -BME	DLV7321 -BME	DLV7331 -BME	DLV7321/31 -BKE
	No.0 x 2.5 x 44	1	_	1	_	_
L	No.1 x 3 x 44	_	1	_	1	_
蔷	No.1 x 4 x 44	1	_	1	_	_
	No.1 x 7 x 50	_	_	_	_	1
	No.2 x 4 x 44	_	1	_	1	_
	No.2 x 7 x 50	_	_	_	_	1
4	DLS2124	1	_	_	1	_
Sleeve	DLS2127	1	1	_	_	_
Se	DLS2130	1	1	_	-	_
	DLS2134	_	1	_	_	_
Su	spension Bail			1		



Features

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

The series lineup is consisted of high speed(2,000min⁻¹), standard speed (1,200min⁻¹), and low speed(650min⁻¹) types with respective torque range of 0.4~3.0N · m.

 Designed to minimize loss of screw fastening torque that may occur after long-term use, and threfore ensures stable performance.

Both the Lever Start and Push to Start types of models are available. The
Push to Start type is suitable for continuous screw tightening. The Lever
Start type is suited for temporary tightening screws and thightening
screws set at angles.

- Equipped with a clear plastic torque adjustment ring cover.
- Design conforms to the RoHD Directive and thus appeals to the environmentally conscious user.
- Models with CE marking (for the European Union) or CCC (for People's Republic of China) are available.
- Aluminum couplings with colored rubber rings, namely, red, blue, and yellow ones, help operators choose the correct speed type easily.



Specifications

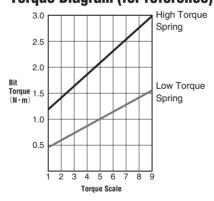
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9h	GUIIIGALIUIIS		High Speed	Standard	Low Speed	High Speed	Standard	Low Speed			
Г		European plug	DLV30HL-MKG	DLV30SL-MKG	DLV30LL-MKG	DLV30HP-MKG	DLV30SP-MKG	DLV30LP-MKG			
	Model	Luropean plug	DLV30HL-MJG	DLV30SL-MJG	DLV30LL-MJG	DLV30HP-MJG	DLV30SP-MJG	DLV30LP-MJG			
	Monei	USA plug	DLV30HL-MKE	DLV30SL-MKE	DLV30LL-MKE	DLV30HP-MKE	DLV30SP-MKE	DLV30LP-MKE			
		OSA plug	DLV30HL-MJE	DLV30SL-MJE	DLV30LL-MJE	DLV30HP-MJE	DLV30SP-MJE	DLV30LP-MJE			
	Starting Method			LEVER			PUSH				
wdriver	Free Speed (min ⁻¹)		2,000	1,200	650	2,000	1,200	650			
	Input Voltage				230	VAC					
		Low Torque Spring (Standard Accessory)	que Spring (Standard Accessory) 0.4~1.6								
		High Torque Spring (Built-in)	1.2~3.0								
M	Power Consumption	(W)	Approx. 45								
cre	Screw Size	Machine Screw	2.6~5.0								
တိ	(mm)	Tapping Screw	2.5~4.0								
	Bit Type (mm)	For MKG/MKE			L & 23	9 6.35					
	Dit Type (IIIII)	For MJG/MJE	14 © 24 5								
	Mass (g)			700							

Standard Accessories

	No.	MJG/MJE	MKG/MKE		
Bit	No.2 x 6 x 70	1	_		
	No.2 x 7 x 75	_	1		
Su	spension Bail	1			
Lo	w Torque Spring	1			

Torque Diagram (for reference)



Optional Accessory



External Dimensions

●DLV30SL / DLV30HL / DLV30LL ●DLV30SP / DLV30HP / DLV30LP Torque Adjustment Ring Torque Adjustment Ring Torque Scale Torque Scale Cord(3m) Cord(3m) 639.5 439.5 Torque Aiustment Torque Ajustment Foward/Reverse Changeover Switch Foward/Reverse Changeover Switch 48.5 46.5 274 Suspension Ball Suspension Ball

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
- 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 6mm machine screws.



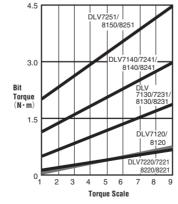
Ç.	aaifiaa	tiono																	
9h	ecifica	LIUIIS		Standard			High	Speed		High Torque		Standard		High Torque		High S	Speed		High Torque
		100VAC Input	DLV7120- EJN	EJN	DLV7140- EJN	DLV7220- EJN		DLV7231- EJN	DLV7241- EJN	DLV7251- EKN	DLV8120- EJN	DLV8130- EJN	DLV8140- EJN	DLV8150- EKN	DLV8220- EJN		DLV8231- EJN	DLV8241- EJN	DLV8251- EKN
	Model	230\/AC Innut	DLV7120- JJE	JJE	DLV7140- JJE						DLV8120- JJE ^{*1}	DLV8130- JJE	DLV8140- JJE						
			DLV7120- JKE	DLV7130- JKE	DLV7140- JKE		DLV7221- JKE				DLV8120- JKE	DLV8130- JKE	DLV8140- JKE	DLV8150- JKE		DLV8221- JKE			
	Starting Me	thod		Lever Start Push to Start															
		Torque Adjustment				Stepless													
	Torque (N·m	n)	0.25~0.75	0.50~1.70	1.20~3.00	0.35~0.70	0.35~0.70	0.50~1.70	1.20~3.00	2.00~4.50	0.25~0.75	0.50~1.70	1.20~3.00	2.00~4.50	0.35~0.70	0.35~0.70	0.50~1.70	1.20~3.00	2.00~4.50
<u>~</u>	Free Speed	(min-1)	900	900	600	3,000	1,800	1,800	1,100	700	900	900	600	400	2,800	1,800	1,800	1,100	700
≗	Power Cons	Approx. 35 Approx. 45						Approx. 35	•			Appro	x. 45						
Screwdriver	Screw	Machine Screw	2.6~3	2.6~4	3.5~5	2.6~3	2.6~3	2.6~4	3.5~5	4.5~6	2.6~3	2.6~4	3.5~5	4.5~6	2.6~3	2.6~3	2.6~4	3.5~5	4.5~6
ē	Size (mm)	Tapping Screw	2.3~3	2.3~3.5	3~4	2.3~3	2.3~3	2.3~3.5	3~4	4~5	2.3~3	2.3~3.5	3~4	4~5	2.3~3	2.3~3	2.3~3.5	3~4	4~5
Sc	Bit Type	For EJN/JJE						-	90	24	14	5							
	(mm)	For EKN/JKE								23	9	6.3	<u>5</u>						
	Mass (g)			700			70	00		890		690		890		69	90		890

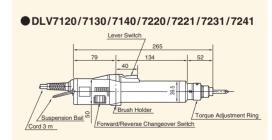
^{*1 :} This model is made to order.

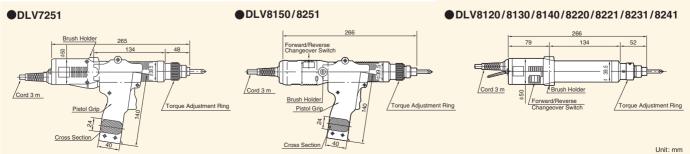
Standard Accessories

	No.	EJN/JJE	JKE excep DLV8150-JKE	EKN/ DLV8150-JKE			
	No.1 x 6 x 70	1	_	_			
퓲	No.1 x 7 x 75	_	1	_			
-	No.2 x 6 x 70	1	_	_			
	No.2 x 7 x 75	_	1	1			
	No.3 x 7 x 50	_	_	1			
Sp	are Carbon Brush	2					
Su	spension Bail	1					

Torque Diagrams (for reference)







^{*2 :} Bit Shank; "- \Box J \Box "=Hex.5mm, "- \Box K \Box "=Hex.6.35mm

100 / 115 VAC 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 (DLV7000series) for each screw alignment and push to start type (DLV8000series) for rapid screw tightening.
- The high-speed type (DLV7031/8031) available at 1200min-1 for improving work efficiency. (100V only)



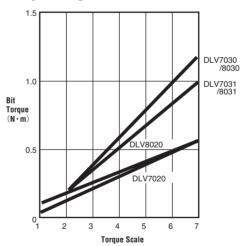
Specifications		tions [Standard				High Speed		
Г	Model	100VAC Input	DLV7020-EMN	DLV7030-EMN	DLV8020-EMN	DLV8030-EMN	DLV7031-EMN	DLV8031-EMN	
		115VAC Input	DLV7020-FME*1	DLV7030-FME*1	DLV8020-FME*1	DLV8030-FME*1			
	Starting M	ethod	Lever	Start	Push t	o Start	Lever Start	Push to Start	
	Torque Ad	Torque Adjustment		Stepless					
_	Torque (N	m)	0.05~0.55	0.3~1.1	0.1~0.55	0.3~1.1	0.3~1.0		
wdriver	Free Speed (min ⁻¹)		900	650	900	650	1,200		
M	Power Con	Power Consumption (W)		Approx. 25				Approx. 30	
Scre	Screw	Machine Screw	1~3	2~3.5	1~3	2~3.5	2-	-3	
ြလ	Size (mm)	Tapping Screw	1.2~2.6	2~3	1.2~2.6	2~3	2-	-3	
	Bit Type (mm)			42	3.5	2			
	Mass (g)		40	0	4	10	400	410	

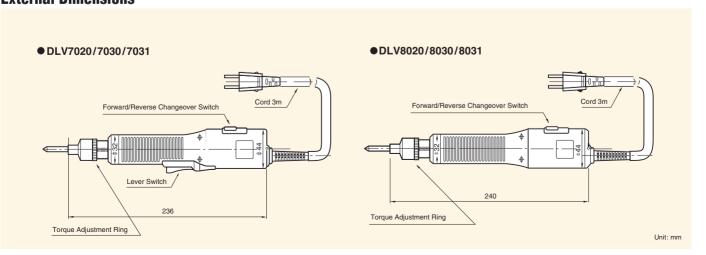
^{*1:} These models are made to order.

Standard Accessories

	No.	DLV7020/8020	DLV7030/8030/7031/8031	
	No.0 x 2.5 x 44	1	_	
Bit	No.1 x 3 x 44	_	1	
	No.1 x 4 x 44	1	_	
	No.2 x 4 x 44	_	1	
Suspension Bail		1		

Torque Diagrams (for reference)





DLV3100/3300series

Automatic Assembly Robot Models(1mm~6mm)

Features

A Labor-Saving "delvo" for Automatic Machines

• Vibration-proof and shock-proof for long continuous screw tightening

- Torque-up signal output
- 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 100VAC power source and are made to order products.
 - DLV3128-EJN DLV3138-EJN
 - DLV3148-EJN DLV3158-EJN

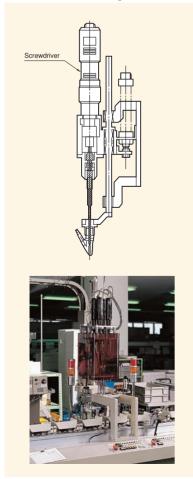
NOTE: The bit mounting is made in a specific way.



Specifications		For Miniature Screws		For Machine Screws				
	Model	DLV3321-CMN	DLV3331-CMN	DLV3121-EJN **1	DLV3131-EJN **1	DLV3141-EJN **1	DLV3151-EJN *1	
	Input Voltage	24 VDC(supplied	I from controller)		100 VAC,	50/60Hz		
	Torque Adjustment			Steple	SS			
	Torque (N·m)	0.05~0.5	0.3~1.2	0.25~0.7	0.5~1.5	1.2~3.0	2.0~4.5	
-	Free Speed (min ⁻¹)	900	600	900		600	450	
<u>چ</u>	Power Consumption (W)	Approx 6		Approx 35			Approx 45	
ν	Screw Size Machine Screw	1~3	2~3.5	2.3~2.6	2.6~3.5	3.5~5	4.5~6	
ē	(mm) Tapping Screw	1.2~2.6	2~3	2.3~3	2.5~3.5	3~4	4~5	
Screwdriver	Bit Type (mm)	Special bit		5mm hex standard bit				
	Mass (g)	40	00	900				

ē	Model	DLC3310	
1=	Input Voltage	24 VAC, 50/60Hz	
발	Output Voltag	24 VDC	
15	Control Function	Autostop	
O	Mass (g)	360	

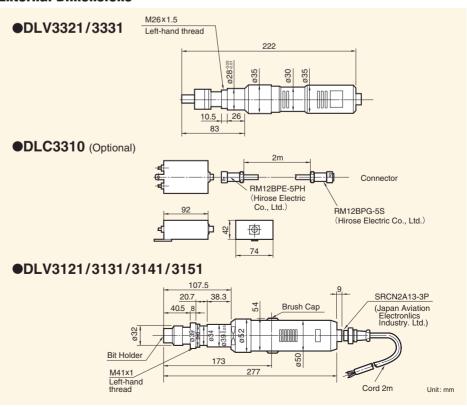
Installation Example



Standard Accessories

Model	DLV3121/3131/3141/3151
Cable	1
Spare Carbon Brush	2

% The 2m cord exclusively for DLV3321/3331 comes with DLC3310 as a standard accessory.



DLV7500/8500series

For Machine Screws (2.6mm~6mm)

Features

Ergonomic and Compact

The new "delvo" fulfills the workers' needs for low vibration, low noise, and easy gripping in a compact design.

High Torque Accuracy

The new "delvo" achieves an accurate and consistent torque with an easily visible torque reach light. The combination of an advanced clutch design and the auto-stop circuit assures torque accuracy.

High Durability

More than a million screws can be accurately tightened with the durable gear/clutch mechanism.

The long life motor with a yoke made of advanced materials further assures a long service life.

Easy Forward / Reverse Operation Horizontal rocker switch is easy to

Pull for Bit Release

preventing inadvertent release.

Holds the bit securely,

Product Safety

The new "delvo" fully complies with European CE safety standards (89/336/EEC, 92/31/EEC, 73/23/EEC). An antistatic option is available.

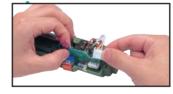
Firm torque control The torque reach light goes on when the set torque is reached. **Power Cord Connector** The power cord is easily detached and replaced allowing easy repair or workstation redesign.

Non-slipping Grip, **Easy to Grasp**

500/8500se

The non-slip surface and shape allows the operator to firmly hold the tool, even at the highest torque settings

operate with the thumb.

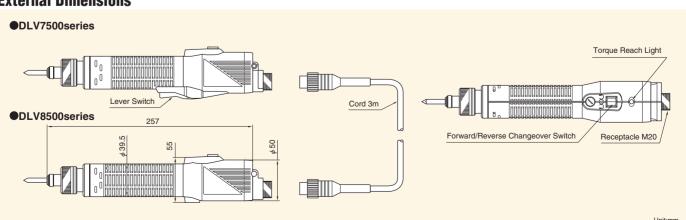


Easy Maintenance Design

Modular design assures easy maintenance.

Antistatic(ESD)

The DLV7500 / 8500-BKE uses the conductible synthetic resin frame body to protect any products which are vulnerable to static electricity. It complies with European static electricity stadards (EN100015-1).



Specifications		Si	andard	High Torque	Stan	dard	High Torque	
	Model	Standard	DLV7530-MKE	DLV7540-MKE	DLV7550-MKE	DLV8530-MKE	DLV8540-MKE	DLV8550-MKE
	Monei	ESD	DLV7530-BKE	DLV7540-BKE	DLV7550-BKE	DLV8530-BKE	DLV8540-BKE	DLV8550-BKE
	Starting Me	thod		Lever Start			Push to Start	
	Input Volta	ge	34VDC					
	Torque Adjustment		Stepless					
ē	Torque	(N·m)	0.5~1.7	1.2~2.7	2.0~4.5	0.5~1.7	1.2~2.7	2.0~4.5
<u>÷</u>	Free Speed	(min ⁻¹)	1,100	700	500	1,100	700	500
) ×	Screw	Machine Screw	2.6~4	3.5~5	4.5~6	2.6~4	3.5~5	4.5~6
Screwdriv	Size (mm)	Tapping Screw	2.3~3.5	3~4	4~5	2.3~3.5	3~4	4~5
"	Bit Type (mm)				23	6.35		
	Mass (g)		650	650	750	650	650	750

Measurei	nent point	Conventional product	DLV7500-BKE
Handla	Static Electricity (V)	350	5
Handle	Surface Resistance (Ω)	more than10 ¹³	10 ⁴
Lever Switch	Static Electricity (V)	350	2
Lever Switch	Surface Resistance (Ω)	more than10 ¹³	10 ⁴
Forward / Reverse Switch	Static Electricity (V)	25	2
Power Cable	Static Electricity (V)	110	5
T OWET GADIE	Surface Resistance (Ω)	more than10 ¹³	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 mesurement 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

oller	Model	Features	Input Voltage	Mass (kg)	Size W x L x H (mm)
15	DLC4511-GGB **	With Speed Control and Soft Start Function	230VAC	3.5	139x140x81.5
	DLR1510-JE **	Screw Counter	230VAG	5.1	143x177x126

% Shape of plug for power supply is "Europe" type.% Please see page 17 for details of DLC4511-GGB and DLR1510-JE.

Standard Accessories

	No.	DLV7530/7540/ 8530/8540	DLV7550/8550		
Bit	No.1 x 7x 75	1	_		
	No.2 x 7x 75	1	1		
	No.3 x 7x 50	_	1		
Sp	are Carbon Brush	2			
Power Cord		1			
Sι	spension Bail	1			





● DLC4511-GGB/DLR1510-JE



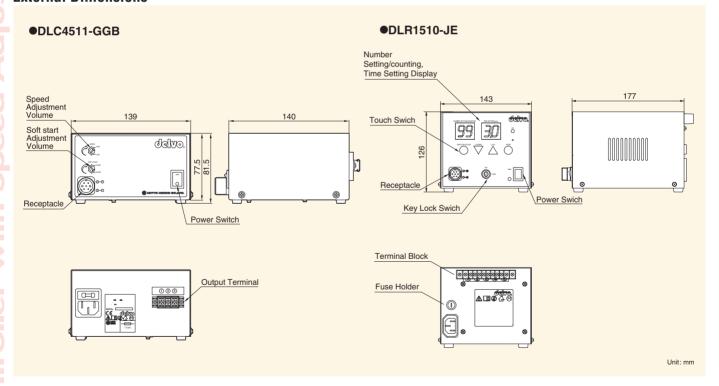


DLC4511-GGB

DLR1510-JE

Specifications

Model	Control Function	Input Voltage	Mass (kg)	Size W x L x H (mm)
DLC4511-GGB	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		3.5	139 x 140 x 81.5
DLR1510-JE	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	230VAC	5.1	143 x 177 x 126



Multiple Controllers

● AC Power Supply DLE3610/Controller DLC2310

Designed specially for use with up to a maximum of 24 "delvo" 7300 Series Electric Screwdrivers connected with attached 15m extension cords drawn out on both sides (each side handles up to 12 screwdrivers),

DLE3610 AC Power Supply and DLC2310 Controller can boost productivity and reduce costs of setting up production lines. The dedicated controller DLC2310 is employed for each screwdriver. If more than four units of DLV7300 series are used, installation cost of Model DLE3610 and DLC2310 will be beneficial effectively.

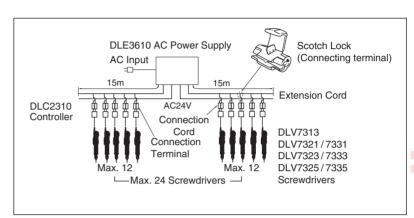




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I	DLC2310

Model	DLE3610-EN		
Input Voltage (Primary Side)	100 VAC, 50/60Hz		
Secondary Output	24 VAC, 15A		
Capacity	360 VA		
External Dimensions (mm)	W190 x H134 x D188		
Shape of Plug for Power Supply	Asia		
Mass (kg)	9		
Accessories	Two 15m extension cords		
Model	DLC2310-CE		
Input Voltage (Primary Side)	24 VAC		
Secondary Output	24 VDC, 2A		
Control Function	Auto stop		
External Dimensions (mm)	W74 x H42 x D118		
Mass (kg)	0.36		
Accessories	Two 0.5m connection cords and two scotch locks (Connecting terminal)		



Multiple Controller DLC1215

DLC1215 can control two screwdrivers by one controller.

Model	DLC1215-EN	DLC1215-GE	
Input Voltage	100 VAC	220 VAC	
Output Voltage	24 V[OC x 2	
Control Function	Auto stop		
Shape of Plug for Power Supply	As	sia	
External Dimensions (mm)	W143 x H102 x D145		
Mass (kg)	2	.4	

NOTE: Each "delvo" screwdriver should be operated independently when tightening screws even though this controller will support up to two "delvo" screwdrivers. Operating two units simultaneously may cause malfunction of the controller.



DLC1215

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
- The high torque type DLV7251 / 8150 / 8251 series is equipped with a grip, which is useful for tightening big screws like 6mm machine screws.

Specifications

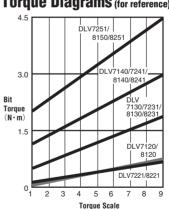
<u> </u>	opecifications			Standard		ŀ	ligh Speed		High Torque		Standard		High Torque		ligh Spee	d	High Torque
	Model	Bit Shank: Hex.5mm	DLV7120- LJT	DLV7130- LJT	DLV7140- LJT	DLV7221- LJT	DLV7231- LJT	DLV7241- LJT		DLV8120- LJT	DLV8130- LJT	DLV8140- LJT	DLV8150- LJT	DLV8221- LJT	DLV8231- LJT	DLV8241- LJT	
	Model	Bit Shank: Hex. 6.35mm	DLV7120- LKT	DLV7130- LKT	DLV7140- LKT	DLV7221- LKT	DLV7231- LKT	DLV7241- LKT	DLV7251- LKT	DLV8120- LKT	DLV8130- LKT	DLV8140- LKT	DLV8150- LKT	DLV8221- LKT	DLV8231- LKT	DLV8241- LKT	DLV8251- LKT
	Starting Me	thod				Lever Start							Push t	o Start			
	Input Voltag	e							115	VAC, 50/6	0Hz						
	Torque Adju									Stepless							
1	Torque (N·n		0.25~0.75		1.2~3.0	0.35~0.7	0.5~1.7	1.2~3.0	2.0~4.5	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	2.0~4.5
1.5	Free Speed		900	900	600	1,800	1,800	1,100	700	900	900	600	400	1,800	1,800	1,100	700
Screwdriver	Power Consumption (W)			Approx. 35		Approx. 45			Approx. 35		Approx. 45						
2	Screw	Machine Screw	2.6~3	2.6~4	3.5~5	2.6~3	2.6~4	3.5~5	4.5~6	2.6~3	2.6~4	3.5~5	4.5~6	2.6~3	2.6~4	3.5~5	4.5~6
S S	Size (mm)	Tapping Screw	2.3~3	2.3~3.5	3~4	2.3~3	2.3~3.5	3~4	4~5	2.3~3	2.3~3.5	3~4	4~5	2.3~3	2.3~3.5	3~4	4~5
	Bit Type	For LJT						90		14	5						
	ык туро	For LKT								9	6.35	<u>i.</u>					
L	Mass (g)			700			700		890		690		890		690		890

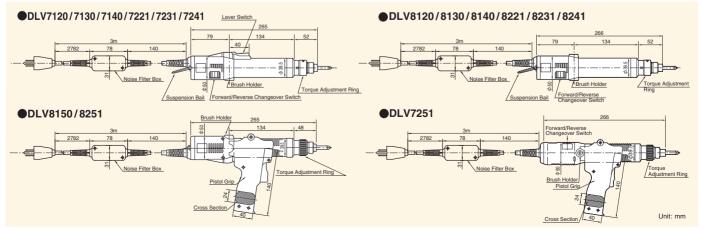
- *1 : All models of LJT/LKT series are made to order.
- *2 : Only Chinese instuction manual is available for LJT/LKT series.

Standard Accessories

	No.	LJT	LKT except DLV7251/8150/8251-LKT	DLV7251/8150/8251-LKT		
	No.1 x 6 x 70	1	_	_		
L	No.1 x 7 x 75	_	1	_		
ä	No.2 x 6 x 70	1	_	_		
	No.2 x 7 x 75	_	1	1		
	No.3 x 7 x 50	_	_	1		
S	pare Carbon Brush	2				
S	uspension Bail	1				

Torque Diagrams (for reference)





Specifications

		Lever Start	DLV30SL-MKC	DLV30HL-MKC	DLV30SL-MJC	DLV30HL-MJC		
	Model	Push to Start	DLV30SP-MKC	DLV30HP-MKC	DLV30SP-MJC	DLV30HP-MJC		
	Input Voltage			230	VAC			
	Torque Adjustment	Low Torque Spring (Standard Accessory)	0.4 ~ 1.6					
	(N·m)	High Torque Spring (Built-in)		1.2 -	- 3.0			
P	Free Speed (mir	n ⁻¹)	1,200	2,000	1,200	2,000		
Screwdriver	Power Consumption (W)		Approx. 45					
8	Screw Size	Machine Screw		2.6 ~	~ 5.0			
l e	(mm)	Tapping Screw		2.5 -	~ 4.0			
Š	Bit Type (mm)		L 23	9 6.35	2	14 5		
	Mass (g)			7	00			
	Standard Access	ories	● Bit No.2 x 7 x 75 : 1pc. ● Suspension Bail : 1pc. ● Bit No.2 x 6 x 70 : 1pc. ● Suspension Bail : 1pc. ● Low Torque Spring : 1pc.					



						High Torque	High S	peed
		Lever Start	DLV7120-JJC	DLV7130-JJC	DLV7140-JJC			
	Model (220V)	Push to Start	DLV8120-JJC	DLV8130-JJC	DLV8140-JJC	DLV8150-JJC	DLV8231-JJC	DLV8241-JJC
	WIUUEI (220V)	Lever Start	DLV7120-JKC	DLV7130-JKC				
ē		Push to Start	DLV8120-JKC	DLV8130-JKC	DLV8140-JKC	DLV8150-JKC	DLV8231-JKC	DLV8241-JKC
driver	Torque Adjustment		Stepless					
ě	Torque (N·m)		0.25~0.75	0.5~1.7	1.2~3.0	2.0~4.5	0.5~1.7	1.2~3.0
Scr	Free Speed (min ⁻¹)		900 600			400	1,800	1,100
i.	Power Consumption (W)		Approx. 35			Approx. 45		
Electr	Screw Size	Machine Screw	2.6~3	2.6~4	3.5~5	4.5~6	2.6~4	3.5~5
ਜ਼	(mm)	Tapping Screw	2.3~3	2.5~3.5	3~4	4~5	2.5~3.5	3~4
	Mass (g)		700 (710	Oseries), 690 (810) series)	890	700 (7200 series),	690 (8200 series)
	Standard Accessories		Each 1pc.of bit No.12 1pc. Suspension Bai, 2		the cace of DLV7251 / 8	150 / 8251 each 1pc.of N	o.2×7×75 / No.3×7×50)	

Bit (mm)	●JJC type	<u>14</u> <u>24</u> <u>5</u>	●JKC type	9	○ 6.35

Model	Model		DLV7331-CMC	DLV7321-CKC	DLV7331-CKC				
Starting Method			Lever Start						
Input Voltage			24\	/DC					
Torque Adjustment			Step	oless					
Torque (N·m) Free Speed (min ⁻¹) Power Consumption (W)	Torque (N·m)		0.3~1.2	0.05~0.5	0.3~1.2				
Free Speed (min ⁻¹)		700~1,000	500~700	700~1,000	500~700				
Power Consumption (W)		Approx. 26							
Screw Size	Machine Screw	1~3	2~3.5	1~3	2~3.5				
은 (mm)	Tapping Screw	1.2~2.6	2~3	1.2~2.6	2~3				
Bit (mm)		3.9	3.5						
Mass (g)			3:	50					

	111400 (9)	
ē	Model	DLC1213-GC
olle.	Input Voltage	AC 220V
ontr	Control Function	Auto Stop, Soft Start, Speed Control
ပိ	Mass (g)	2300

_	muss (g)		2000							
	Model		DLV5720C	DLV5720HC	DLV5740C	DLV5740HC	DLV5750C			
	Starting Method			Lever Start						
	Torque Adjustment				Stepless					
ē	Torque (N·m)		0.02	2~0.2	0.15	~0.4	0.1~0.55			
≟	Free Speed (min ⁻¹)		500~750	700~1,000	450~600	1,200~1,800	670~1,000			
rewdriver	Power Consumption (W)			Approx. 10		Appr	ox. 26			
Scre	Screw Size (mm)	Machine Screw	1.0~	~2.3	1.6~	~2.6	1.0~3.0			
	Tapping Screw		1.0~	~2.0	1.4~2.3		1.0~2.6			
Electric	Bit (mm)			3.5						
	Mass (g)		230			300				
	Standard Accessories		Bit (No.0 × 1.8 × 44 • No.0 × 2.5 × 44) Each 1 piece Connection Cable (1.5M) DLW9081 : 1 piece Suspension Bail : 1 piece Spring for Low Torque : 1 piece Bit (No.0 × 2.5 × 44 • N Connection Cable (1.5M) Suspension Bail : 1 piece			n.1 × 4 × 44) Each 1 piece DLW9081 : 1 piece				
ē	Model			DLC0350GC		DLCO	950GC			
Controller	Input Voltage		AC 220V							
ខ	Mass (g)		900 1800				300			

Example of use together

with a sensor available in

the market

Features

For prevention of human fastening errors and enhanced fastening management accuracy

- · Ideally suited for the assembly lines of vehicles and electrical equipment requiring reliable screw fastening.
- The controller receives signals from electric screwdrivers to provide highly reliable screw fastening control.
- Count Return Function: When a screw is loosened, a reverse signal output from the electric screwdriver reverses the count by one.
- The Count Correction Function does not count elevated screws or double fastening as fastening errors.
- Input voltage range from 100 to 240VAC 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 DLR5640 screw tightening counters in series without using any external controller such as a programmable controller.
- Driver Lock Function prevents unexpected start of screwdrivers.
- Compact and Lightweight (Compared with our conventional models decreased by 30% in volume and by 38% in mass.)
- SPC type screwdrivers for DLR5040A-WN are designed on the basis of established transformerless screwdrivers.

of

LINK function

When counters are connected via multiple link connection, all screwdrivers are placed in the standby state and will not start except the one to be initially operated. In the connection shown on the right, all screws will be fastened by the time the third screwdriver finishes screws. (Up to 10 counters can be connected.)



power source.

Setup DIP switch

Specifications

	Model	DLR5040A-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 second
	Work detection function	Yes (1 terminal) / No
	External count input	2 terminals (PARTS A / PARTS B)
	Work installation timer setting	0 to 9.5 seconds
	OK output timer setting	0 to 9.5 seconds
	NG alarm	ON(1)/ON(2)/OFF
ē	OK buzzer	ON(1)/ON(2)/ON(3)/OFF
Counter	Count return function	ON / OFF
ပိ	NG judge timing	WORK SET / DRIVER ON
crew	Automatic / manual OK judge	AUTO / MANUAL
Scre	Screwdriver lock function	ON / OFF
۳	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
	Power supply	100VAC~240VAC, 50/60Hz **See the bottom asterisk.**
	Dimensions (mm)	100 (W) ×60 (H) ×120 (D)
	Mass (g)	600

Accessory: 1.5m cord with UL three-prong plug.

Dedicated Screwdrivers for DLR5040A-WN



TD04061 SPC cord for commercial power source (optional)

Dedicated screwdrivers can be directly plugged in commercial

Dedicated	screwdrivers		Min	iature scre	w(1~3.5r	mm)		Machine screw (2.6~6mm)					DLV30 Type			
Model	Lever start	DLV7020-SPC	DLV7030-SPC	DLV7031-SPC				DLV7120-SPC	DLV7130-SPC	DLV7140-SPC		DLV7231-SPC	DLV7241-SPC	DLV7251-SPC		
Monei	Push to start				DLV8020-SPC	DLV8030-SPC	DLV8031-SPC	DLV8120-SPC	DLV8130-SPC	DLV8140-SPC	DLV8150-SPC	DLV8231-SPC	DLV8241-SPC	DLV8251-SPC	DLV30SP-SPC	DLV30HP-SPC
Input Volt	age		100V													
Torque Ad	djustment	Stepless														
Torque (N	I·m)	0.05~0.55	0.30~1.10	0.30~1.00	0.10~0.55	0.30~1.10	0.30~1.00	0.25~0.75	0.50~1.70	1.20~3.00	2.00~4.50	0.50~1.70	1.20~3.00	2.00~4.50	0.40~	~3.00
Free spee	ed (min ⁻¹)	900	650	1,200	900	650	1,200	1,0	000	700	450	2,000	1,200	700	1,200	2,000
Power Cor	nsumption (W)	Appro	ox. 25	Approx. 30	Appro	ox. 25	Approx. 30		Approx. 35				Approx. 45			
Screw Siz	e Machine Screw	1~3	2~3.5	2~3	1~3	2~3.5	2~3	2.6~3	2.6~4	3.5~5	4.5~6	2.6~4	3.5~5	4.5~6	2.6	~5
(mm)	Tapping Screw	1.2~2.6	2~3	2~3	1.2~2.6	2~3	2~3	2.3~3	2.5~3.5	3~4	4~5	2.5~3.5	3~4	4~5	2.5	~4
Bit Type (mm)	-	φ4	3.5	-(2		ф6	24	5	6.35mm (1/4") hex shank	ф6 ————————————————————————————————————	14	6.35mm (1/4") hex shank	ф6 Т	14
Mass (g)			380			390		710(7100series) / 670(8100series) 810 710(7200series) 670(8200series) 8			810	70	00			
Cord leng	th (m)	3 (3 (with connector)										
Output sig	gnals						S	tart, Torque	up, Revers	se						
Grounding	n bit feature							Equipped a	as standard							

^{*} The voltage of the dedicated screwdrivers for DLR5040A-WN is 100V. When you need different voltage screwdrivers, please contact our distributor or us.

DLR5340-WN

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.

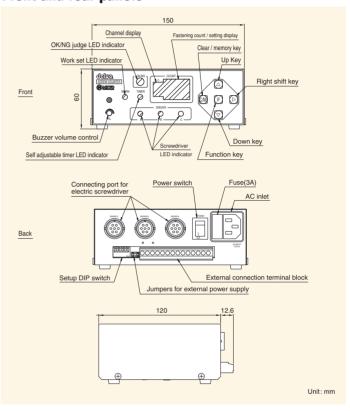
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Specifications

	Model	DLR5340-WN		
	Count	0~99		
	Counting method	Count-up / Count-down		
	Count correction function	Count normal fastening only		
	Self adjustable timer setting	0.01 to 2.50 seconds		
	Work detection function	Yes (1 terminal) / No		
_	Work installation timer setting	0 to 9.5 seconds		
Screw Counter	OK output timer setting	0 to 9.5 seconds		
no.	NG alarm	ON(1)/ON(2)/OFF		
S ≥	OK buzzer	ON(1)/ON(2)/ON(3)/ON(4)/ON(5)/OFF		
ř	Count return function	ON / OFF		
တိ	Screwdriver lock function	ON / OFF		
	Screwdriver cord connection	Single cord connection (Signal and power lines)		
	External inputs on terminal block	SENSOR / RESET / TORQUE CHECK ch1/2/3		
	External outputs on terminal block	OK, NG, COUNT-UP, DRIVER A/B/C		
	Power supply	100VAC~240VAC, 50/60Hz *See the bottom asterisk.*		
	Dimensions (mm)	150 (W) ×60 (H) ×120 (D)		
	Mass (g)	620		

Accessory: 1.5m cord with UL three-prong plug.

Front and rear panels



Dedicated Screwdrivers for DLR5340-WN





Dedicated screwdrivers can be directly plugged in commercial power source.

Dadiaatad																
Dealcated	screwdrivers		Min	iature scre	w(1~3.5r	nm)		Machine screw(2.6∼6mm)				DLV30	DLV30 Type			
Model	Lever start	DLV7020-SPC	DLV7030-SPC	DLV7031-SPC				DLV7120-SPC	DLV7130-SPC	DLV7140-SPC		DLV7231-SPC	DLV7241-SPC	DLV7251-SPC		
Model	Push to start				DLV8020-SPC	DLV8030-SPC	DLV8031-SPC	DLV8120-SPC	DLV8130-SPC	DLV8140-SPC	DLV8150-SPC	DLV8231-SPC	DLV8241-SPC	DLV8251-SPC	DLV30SP-SPC	DLV30HP-SPC
Input Volt	age							10	0V							
Torque Ac	djustment							Step	oless							
Torque (N	J·m)	0.05~0.55	0.30~1.10	0.30~1.00	0.10~0.55	0.30~1.10	0.30~1.00	0.25~0.75	0.50~1.70	1.20~3.00	2.00~4.50	0.50~1.70	1.20~3.00	2.00~4.50	0.40	~3.00
Free spee	ed (min ⁻¹)	900	650	1,200	900	650	1,200	1,0	000	700	450	2,000	1,200	700	1,200	2,000
Power Cor	nsumption (W)	Appro	ox. 25	Approx. 30	Appro	x. 25	Approx. 30		Approx. 35				Appr	ox. 45		
Screw Siz	e Machine Screw	1~3	2~3.5	2~3	1~3	2~3.5	2~3	2.6~3	2.6~4	3.5~5	4.5~6	2.6~4	3.5~5	4.5~6	2.6	i~5
(mm)	Tapping Screw	1.2~2.6	2~3	2~3	1.2~2.6	2~3	2~3	2.3~3	2.5~3.5	3~4	4~5	2.5~3.5	3~4	4~5	2.5	i~4
Bit Type (mm)	-	φ4	3.5	_	2		ф6	24	5	6.35mm (1/4") hex shank	φ6	14	6.35mm (1/4") hex shank	φ6	14
Mass (g)			380			390		710(7100series) / 670(8100series) 810 710(7200series)/670(8200series) 810			7	00				
Cord leng	th (m)	3 (with connector)					•									
Output siç	gnals	Start, Torque up, Reverse														
Grounding	g bit feature							Equipped a	as standard							

^{*} The voltage of the dedicated screwdrivers for DLR5340-WN is 100V. When you need different voltage screwdrivers, please contact our distributor or us.

DLR5640-WN

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 100VAC to 240VAC is acceptable in any part of the world.



Specifications

<u> </u>	occinications				
	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 second			
	Work detection function	Yes (1 terminal) / No			
	External count input	2 terminals (PARTS A / PARTS B)			
	Work installation timer setting	0 to 9.5 seconds			
	OK output timer setting	0 to 9.5 seconds			
	NG alarm	ON(1)/ON(2)/OFF			
ᡖ	OK buzzer	ON(1)/ON(2)/ON(3)/OFF			
Counter	Count return function	ON / OFF			
ß	NG judge timing	WORK SET / DRIVER ON			
≥	Automatic / manual OK judge	AUTO / MANUAL			
Screw	Screwdriver lock function	ON / OFF			
0	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			
	Power supply	AC100 ~ 240V 50/60Hz			
	Screwdriver power supply	DC33V / 1.5A			
	Dimensions (mm)	$101(W) \times 57(H) \times 140(D)$			
	Mass (g)	800			
	Accessories	Power cord with U.S.A plug (1.5m) Suspension bail (2pcs.)			

LINK function (Commom to DLR5040A & DLR5640)

When counters are connected by way of LINK connection, the screwdrivers excluding the one to be operated become standby state and cannot be operated. Whole screw fastening is completed when the screw fastening of the third screwdriver finished.

N.B: Up to 10 counters can be connected.

The first unit

The second unit

LINK-OUT LINK-IN LINK-OUT LINK-IN

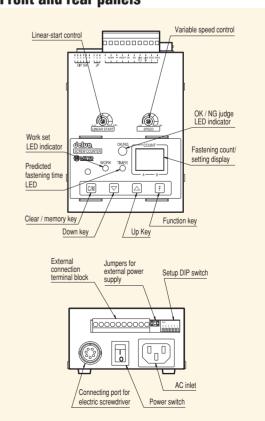


Take to

▲Example of use together with a sensor available in the market

ightharpoonupThe example of installation

Front and rear panels



Screwdrivers designed for Screw Fastening Counter DLR5640-WN







DLV7410A/7410HA/7420A-SPC

DLV7321/7331-SPC

Specifications

Model		DLV7410A-SPC	DLV7410HA-SPC	DLV7420A-SPC	DLV7321-SPC	DLV7331-SPC			
Starting metho	d			Lever start switch					
Torque Adjustn	nent	Stepless							
Torque (N·m)		0.02	~ 0.20	0.15 ~ 0.40	0.10 ~ 0.50	0.30 ~ 1.20			
Free speed (min ⁻¹)		500 ~ 750	500 ~ 750		300 ~ 1000	200 ~ 700			
Power Consumption (W)			Approx. 10	Appro	ox. 26				
Screw Size	Machine Screw	M1.0	~ 2.3	M1.6 ~ 2.6	M1.0 ~ 3.0	M2.0 ∼ 3.5			
(mm)	Tapping Screw	M1.0	~ 2.0	M1.4 ~ 2.3	M1.2 ~ 2.6	M2.0 ~ 3.0			
Bit type (mm)		3.5							
Electrostatic co	untermeasure	Complied with EN100015-1							
Mass (g)			230		35	50			
Cord length (m)		1.5 (with connector)						
Output signals		Start, Torque up, Reverse							
Grounding bit f	eature			Equipped as standard					

Combinations with electric screwdrivers

Screwdriver model	Connection	Remarks		
DLV7410A/7410HA/7420A-SPC	The cord comes with screwdriver	Caroundriver for the agreey factoring acceptor only		
DLV7321 / 7331-SPC	Direct connection to power source	Screwdriver for the screw fastening counter only		
DLV7410A / 7410HA / 7420A / 7419 / 7419HA / 7429-BMN	Optional conversion cord (TD02925 DLW9072)			
DLV7321 / 7331-BMN **2	Direct connection to power source	General-purpose screwdriver *1		
DLV7313 / 7323 / 7333 / 7321 / 7331 / 7325 / 7335-CMN **2	Optional conversion cord (TD02826)			

^{*1:} The Count Return Function is not available.

*2: When used with DLV732 series, the torque adjust ring of screwdriver should be set more than torque scale 2.



Features

The smallest ever and space saving.

- Prompt and steady screw feeding minimizes the waiting time for the next screw.
- ESD complied design prevents possible damage on electric parts by electrostatic discharge.
- Incorporated power supply adapter saves extra space and enables easy production line layout changes.
- Accepts screws with head thickness up to 0.15mm.



Specifications

Model		DSF1120A	DSF1140A	DSF1170A	DSF1200A		
	100V 50/60Hz	DSF1120A-EN	DSF1140A-EN	DSF1170A-EN	DSF1200A-EN		
Input voltage	115V 50/60Hz	DSF1120A-FE	DSF1140A-FE	DSF1170A-FE	DSF1200A-FE		
	230V 50/60Hz	DSF1120A-GE	DSF1140A-GE	DSF1170A-GE	DSF1200A-GE		
Nominal screw diameter (mm)		φ1.2	φ1.4	φ1.7	φ2		
Tank capacity	*	1,000 pcs.	700 pcs.	400 pcs.	350 pcs.		
Screw Feed Sp	eed	Less than one second per piece					
Dimensions (mm)	W45 x D170 x H102					
Mass (kg)		1.5					
Power consum	ption (W)	Approx. 5					
Shape of plug fo	r power supply	Asia					
Accessories		Hex. Wrench: 1pc. Power cord: 1pc. of 2m					

* The tank capacity is a guideline when the tank is filled up with screws of 5mm long.

Applicable screw size

(Unit: mm)

Nominal diameter	Head shape	Head diameter	Head thickness	Length	Major diameter of external thread
φ1.2		ϕ 1.5 \sim ϕ 2.0	0.15~0.50		Up to 1.2
φ1.4	Pan head	φ1.7~φ2.7	0.15~0.70	2~5	Up to 1.4
φ1.7	1 all lieau	ϕ 1.9 \sim ϕ 3.2	0.15~0.90		Up to 1.7
φ2		$\phi 2.3 \sim \phi 3.5$	0.15~1.00		Up to 2.0
φ1.2		ϕ 1.5 \sim ϕ 2.0	0.15~0.50		Up to 1.2
φ1.4	Countersunk	ϕ 1.7 \sim ϕ 2.7	0.15~0.70	2E	Up to 1.4
φ1.7	head	φ1.9~φ3.2	0.15~0.90	3~5	Up to 1.7
φ2		φ2.3~φ4.2	0.15~1.30		Up to 2.0

%The tank capacity is a guideline when the tank is filled up with screws of 5mm long

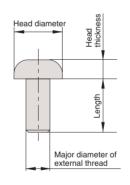
Optional expansion tank

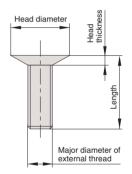
Part No.		TD04943							
Tank capacity **	for DSF1120 6,000 pcs.	for DSF1140 4,000 pcs.	for DSF1170 2,400 pcs.	for DSF1200 2,000 pcs.					

* The tank capacity is a guideline when the tank is filled up with screws of 5mm long.



Countersunk head







The total tank capacity can be increased by mounting optional screw container on top.



Screw tray

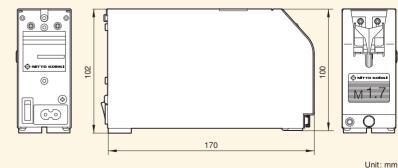
The tray for receiving the screws dropped from the bit guide. The body height adjustment can be done at 10mm interval. (Possible to tilt the front body forward)



External Dimensions

●DSF1000Aseries

54



DLT1133/DLT1173/DLT1633/DLT1673 series

Features

- Have a wide measuring ranges of 0.015~0.15N·m(DLT1133/1173) and 0.15~5.0N·m (DLT1633/1673); particularly, DLT1133/1173 can reliably make micro-torque measurement which requires high precision.
- Store the measured data up to 100 ones even after the power is turned off, preventing any data loss. In addition, the data can be fed into a personal computer through RS232C connector, realizing paperless control for measured torque data.
- Free program designed for uploading the torque data stored in "delvo" torque checkers into computers can be downloaded from NITTO KOHKI's website
- Can run 15 hours continuously with the battery fully charged (more than two weeks on the condition of one-hour operation per day). In addition, it is of energy saving type with AUTO POWER OFF function (to turn OFF power automatically when left unused for 10 minutes).



Specifications

opcorribations	DI T4400	DI T4470	DI T4000	DI T4070				
Model	DLT1133	DLT1173	DLT1633	DLT1673				
Measurement range (N·m)	0.015	~1.5	0.15	~6.5				
Calibration precision	Within±0.5% For 0.2N∙m or	6 (Full Scale), less, <u>+</u> 1 digit	Within±0.5% For 2N•m or l					
Display		4-digit digital display (S	Single-line) Data sampling: 1,000 times/sec Displa	Data sampling: 1,000 times/sec Display rate: 12 times/sec				
Measuring unit			kgf • cm-N·m-lbf • in (selectable)					
Data memory		100 pieces of data						
Measuring direction	CW and CCW							
Measuring mode	3 modes: PD-TR-PP							
Auto power off	Powered off if left untouched for 10 minutes							
External output	As	per RS232C output (single	e-direction,no procedure,100 data items) Mitsutoyo Di	gimatic (sequential output)				
Analog output	Approx.1.5V max. Approx.1.0V max							
Allalog output	No zero offset ; identical waveforms produced in PP, PD, and TR modes							
Rechargeable battery			Nickel-cadmium battery					
Charger Type	DLE1833	DLE1873	DLE1833	DLE1873				
Input Voltage for Charger	100VAC	230VAC	100VAC	230VAC				
Charging time			8 hours					
Continuous operation time			15 hours					
External dimensions			160 x 110 x 47mm	<u> </u>				
Mass (g)			1,000					

Standard Accessories

	Joint	Joint	Joint	Spring	Joint	Spring
Model	DLW4340	DLW4430	DLW4360	DLW4660	DLW4360	DLW4660
Measuring (N·m)	0.15~1.5	0.15~1.5	0.15~6.5	0.15~1.5	0.15~6.5	0.15~1.5
Torque checker	DLT1133	DLT1173	DLT.	1633	DLT	1673









DLW4660 (TD03316)

Optional Accessories

Model	Part No.	Model	Specifications	DLT1133	DLT1173	DLT1633	DLT1673
Bit Joint	TD03305	DLW4330	OD 4mm type, Torque Range : 0.015 to 0.25 N·m	0	0	_	_
	TD03306	DLW4340	OD 4mm type, Torque Range : 0.15 to 1.5 N·m	0	0	0	0
Dit Juliit	TD03307	DLW4350	Hex 5 and Hex 6.35 types, Torque Range : 0.15 to 1.5 N⋅m	0	0	0	0
	TD03308	DLW4360	Hex 5 and Hex 6.35 types, Torque Range : 0.15 to 6.5 N⋅m	_	_	0	0
Screw Joint	TD03309	DLW4430	#1 screw type, Torque Range : 0.15 to 1.5 N·m	0	0	0	0
Screw Joint	TD03310	DLW4530*	#2 screw type, Torque Range : 0.15 to 5 N·m	_	_	0	0

Selection of Torque Checker

DLT1133 / DLT1173 (for miniature screw)	DLT1633 / DLT1673
DLV3300 series*1 / DLV5700 series / DLV5800 series / DLV7300 series	DLV7100 series / DLV8100 series / DLV7200 series / DLV8200 series
DLV7800 series / DLV7000 series / DLV8000 series	DLV7500 series / DLV8500 series / DLV3100 series*2 / DLV30series

^{*1} A reversible screwdriver is required to loosen the measuring joint.

^{*} DLW4530 must be used at 5N·m or less.

^{*2} A reversible screwdriver is required to loosen the measuring joint. Screw type joint is required.

Accessories

Tool Balancer RWseries



Easy to adjust tension by using handle.

Model	TW-1R	RW-3	RW-5	
Capacity (kg)	0.2 ~ 1.5	1.0 ~ 3.0	2.5 ~ 5.0	
Stroke (m)	1.5	2		
Mass (kg)	0.3	0.7 0.9		

Vacuum Pump DLP2500 series



Electric Screwdrivers can be used with Vacuum Pump and Vacuum Pickup. The sleeve of Vauum 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			
Voltage	100VAC, 50/60 Hz	230VAC, 50/60Hz			
Power Consumption (W)	30(50Hz), 26(60Hz)				
Achievable Vacuum (-KPa)	-33.3				
Flow Rate (at Outlet) (l/mm)	24				
Screw Size (mm)	4 or less				
Mass (kg)	3	.8			

Pistol Grip DLW2300/2300ESD

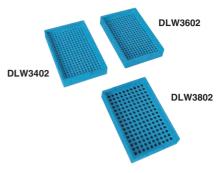
(for DLV7100, 7200, 8100, 8200, 7500, 7600, 8500, 8600, and 30 series Electric Screwdrivers)



Easy-to-attach grip suitable for horizontal operation.

Shaker Box made of anti-electrostatic resin

(for 2,3 and 4mm Screws)



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)	6	6	8
Hole Depth (mm)	13.5	13.5	12.5
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.

Part No.	Model	Applicable Screwdriver
TD00331	DLW5200	7100, 7200, 8100 and 8200 series
TV05143	DLW5201*	7100, 7200, 8100, 8200, and 30 (brushless) series
TD00332	DLW5300	7301,7000,8000 series (for 4mm bit)
TD01883	DLW5400	7300 series (for 6.35mm bit)
TD00333	DLW5500	7303 series (for 4mm & 6.35mm bit)
TD00334	DLW5600	7500, 8500 series
TD02875	DLW5700	5700, 5800, 7400A, series

^{*}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)



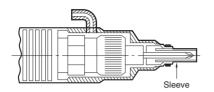
Provides a flange which enables the operator to apply axial pressure through the heel of the hand.

Sleeves and Vacuum Pickups

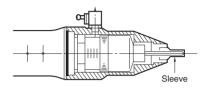
■ For DLV7400A/7800/7300/7000/8000 series

Vacuum Pickup

DLP6500 (for DLV7000 and 8000 Series Electric Screwdrivers)



DLP5100 (for DLV7800 Electric Screwdrivers)
DLP5300 (for DLV7400A/5800 Electric Screwdrivers)
DLP7100 (for DLV7313 Electric Screwdriver)
DLP7200 (designed for OD 4mm Shank Bit for
DLV7323/7333 Electric Screwdrivers)
DLP7300 (designed for OD 6.35mm Hex. Shank Bit for
DLV7323/7333 Electric Screwdrivers)



Standard set

Vacuum Pickup (Part No.)	DLP5100 (TD00342)	DLP5300 (TD04342)	DLP6500 (TD00343)	DLP7100 (TD00345)	DLP7200 (TD00346)
	DLS2124×1pc.	DLS2120×1pc.	DLS2124×1pc.	DLS2122×1pc.	DLS2123×1pc.
Accessories	DLS2127×1pc.	DLS2124×1pc.	DLS2127×1pc.	DLS2124×1pc.	DLS2124×1pc.
			DLS2130×1pc.	DLS2127×1pc.	DLS2127 ×1pc.

Sleeve DLS2000 series (Plastic)

(for DLP5100/5300/6500/7100/7200 Vacuum Pickups and DLV7325/7335 Electric Screwdrivers)

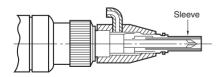


	Sleeve	Bit			
Part No.	Model	ød	øD	Part No.	
TD00348	DLS2120	2]
TD00349	DLS2121	2.2		No.0 x 1.8 x 44	
TD00350	DLS2122	2.5	3.5	NO.U X 1.0 X 44	
TD00351	DLS2123	2.7			$ \oplus $
TD00352	DLS2124	3.1			Head d x L)
TD00353	DLS2125	3.3		No.0 x 2.5 x 44	🛱 💆 🗌
TD00354	DLS2126	3.5	4.5	NO.0 X 2.5 X 44	ᄓᇎᆔ
TD00355	DLS2127	3.7			
TD00356	DLS2128	4		No.1 x 3 x 44	Phillips (No. x
TD00357	DLS2129	4.2		NO.1 X 3 X 44	
TD00358	DLS2130	4.5	5.5	No.1 x 4 x 44	
TD00359	DLS2131	4.7		NO.1 X 4 X 44] —
TD00360	DLS2132	5.1			1
TD00361	DLS2133	5.3	6.5	No.2 x 4 x 44	
TD00362	DLS2134	5.6		INO.∠ X 4 X 44	
TD00363	DLS2135	6.1	7		

■ For DLV7100/7200/8100/8200-□J□series

Vacuum Pickup

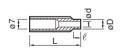
DLP7000 (for DLV7100/7200/8100/8200 Series Electric Screwdrivers)



Standard set

Vacuum Pickup (Part No.)	DLP7000 (TD00344)
Accessories	DLS3223×1pc.
Accessories	DLS3225×1pc.

Sleeve DLS3000 series (Metal)



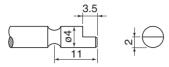
Unit: mm

Unit: mm

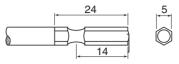
		Bit					
Part No.	Model	ød	øD	ℓ(mm)	L(mm)	Dit	
TD00364	DLS3222	5.6	7	5		No.1 x 5 x 70	
TD05024	DLS3223	6.1	9		34		\oplus
TD00365	DLS3224	6.4	9	_	34	No.2 x 6 x 70	_
TD00366	DLS3225	7.1	9				ead x L)
TD00367	DLS3226	4.6	7			No.1 x 4 x 100	P × H
TD00368	DLS3227	5.1	7	18		NO.1 X 4 X 100	w ×
TD00369	DLS3228	5.6	7		65	No.1 x 5 x 100	<u>.</u> 6
TD00370	DLS3229	6.1	9		05	No.2 x 5 x 100	hillips (No.
TD00371	DLS3230	6.4	9] —		No.2 x 6 x 100	_
TD00372	DLS3231	7.1	9			NU.∠ X 0 X 100	

NK BIT

■ For DLV7400/7800/7300/ 7000/8000/3300series



■ For DLV7100/7200/8100/8200/3100series



0[4mn	n Sha	nk			Unit: mm	
	Model	;	Size		Part	Dimensions	
		No.	No. \times d \times L		No.		
		00	2	44	TD20009		
			<u> </u>	64	TD20010	b 8 3.5	
			1.8	44	TD20021	No.	
		0		64	TD20022	20 111	
Cross Point			2.5	64	TD20029 TD20030		
Po	NK4D	_		44	TD20030		
SS			3	64	TD20037		
5		1		44	TD20039	J 3.5	
_			4	64	TD20033	No.	
				44	TD20047	11	
		2	4	64	TD20048	L	
		3	6	44	TD20050	. 14	
	Model	$W \times T \times L$			Part No.	Dimensions	
		2	0.3		TD20051		
=		2.5	0.3	1	TD20052		
Plain Slot	NK4DM	NIKADBA	3	0.4	44	TD20053	
Æ		4	0.5		TD20054	20 111	
Pla		5	0.65	1	TD20055	- 20 - 1 L - 11 - 1	
						71	
	Model		Н :	× L	Part No.	Dimensions	
pe			1.5		TD20056		
<u> </u>			2		TD20057	7 3.5	
Ξ	NK4DX		2.5	44	TD20058		
300	MADA		3		TD20059		
Hexagon Head			4		TD20060	L H	
エ					1		
	Model	Н	\times d :	× L	Part No.	Dimensions	
		4	6		TD20064	5 3.5	
		4.5	7	44	TD20065	6 3.5 3.5	
et		5	7		TD20066	H 0 11	
Hex Socket	NK4DB	5.5	8		TD20067	 	
S	INN4DB						
ج ج							
_							

OD 5mm Hex. Shank

	it:	m	

	Model		S	ize		Part	Dimensions	
	Model		No.	× d :	× L	No.	Difficuations	
				4	70 100	TD20193 TD20194	No.	
ij			1	5	70 100	TD20196 TD20197	No. 30 114 24 5	
Cross Point	NK31			6	70 100	TD20200 TD20201		
S			2	5	70 100	TD20210 TD20211	No. 14	
				2	6	70 100	TD20214 TD20215	<u>L</u> 24 5
	Model			No.	× L	Part No.	Dimensions	
oint				1	70 100	TD20224 TD20225	No. 27 X-X'	
Cross Point	NK16			2	70 100	TD20232 TD20233	No. X'- 14 5	
	Model	H × d × L		TD20235 Part No.	Dimensions			
	Monei		2	× a >	≺ L	TD20254		
				H ;		Part No.	°H 30 14	
Hexagon Head	NK31X			2.5 3 4	70	TD20256 TD20258 TD20260	L 24 5	
lexag				5		TD20262	L 14 5	
_							H 114 5	
	Model	$H \times D \times d \times L$		Part No.	Dimensions			
		5.5	9	4	70	TD20272	D 99	
et		6	10	4.5	70 70	TD20274 TD20276	о _Н от 14 ф	
ock	NK31B	7	11	5.5	100	TD20277	L 24 5	
Hex Socket	INFOID	8	13	6	70 100	TD20278 TD20279		
		10	16	8	70 100	TD20282 TD20283	<u> H 25 14 24 5</u>	

■ For DLV7200/8100/8200series



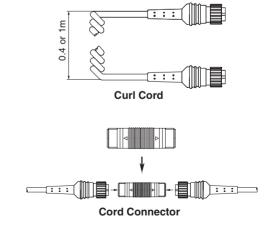


OD 6.35mm Hex. Shank

Unit: mm

							O1111. 111111	
Model		No.×d × L					Dimensions	
Cross Point	NK35		1	7	50 75	30870 30871	No. 9 9 6.35	
			2		50 75	30872 30873		
			3		50 75	30874 30875	L 23 6.35	
Model		No.× L			< L	Part No.	Dimensions	
Cross Point	NK15			2	75 100 150	30876 30877 30878	No. X-, X-X' X-X' 12 12 6.35	
				3	75 100 150	30879 30880 30881		
Model		H × L			κ L	Part No.	Dimensions	
Hexagon Head	NK35X			5 6	50	30882 30883	°H P	
Hexag	Нехад						L 23 6.35	
Model		$H \times D \times d \times L$				Part No.	Dimensions	
Hex Socket	NK35BN	10	0 16	8	75 100	30884 30885		
Hex S		13	19	10	75 100	30886 30887	H 25 L 23 6.35	

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
TD02416	Extension Cord For 5P	DLV7300	2
TD02486	Extension Cord For 6P		2
TD01882	Curl Cord		0.4
TD02820	Curl Cord	DLV7500/8500	1
TD02438	Cord Connector DLW9100		

^{*1: &}quot;5P to 6P Exchange Cord" can 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 not avoided by following the instructions given, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided by following 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.

♠ WARNING

- 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.



★ Specifications and designs are subject to change at any time without notice.



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