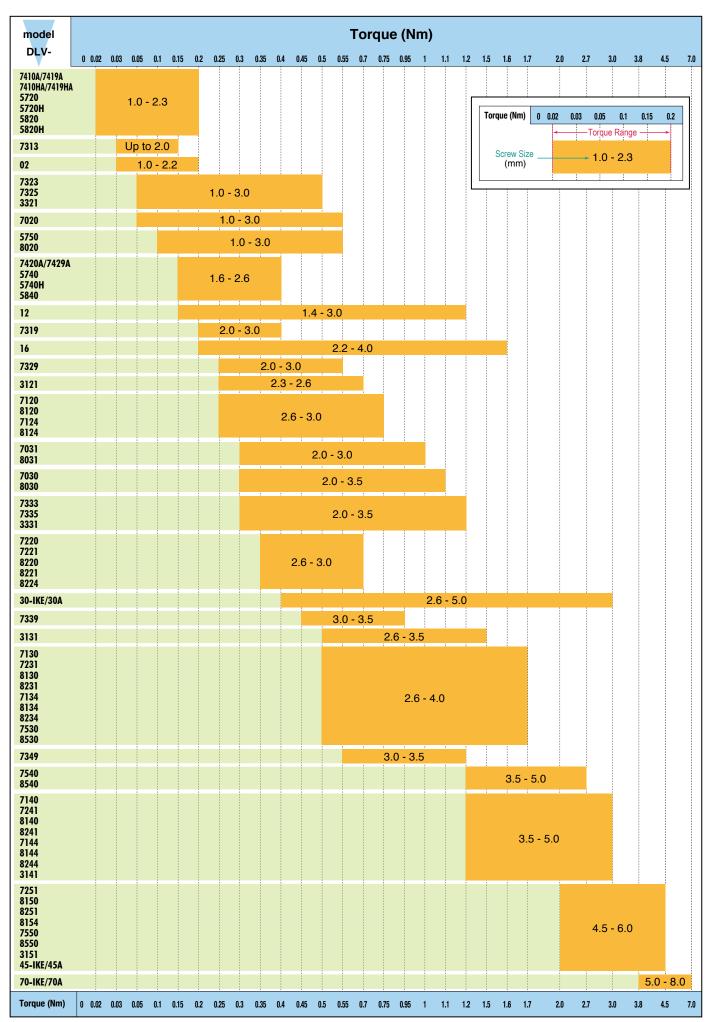




Selection Chart

			Floatria Carand			Cambral	law/Countain
	Page	Series	Electric Screwd	river Features	Starting Method	Model	ler/Counter Voltage
		Series	DLV7410A/7410HA/7420A	Bit Grounding Low Shock ESD	Starting Method	Model	Voltage
	5-6	7400A	DLV7419A/7419HA/7429A	Bit Grounding Low Shock ESD Clean Room		DLC1110	100/115/220/ 230/240 V AC
	_		DLV5720/5720H/5740	Bit Grounding		DLC0350	
	7	5700	DLV5740H/5750	Low Shock		DLC0950	100/115/230 V AC
			DLV3/40H/3/30	ESD		DLC0350	
	8	5800	DLV5820/5820H/5840	Bit Grounding ESD	Lever Start	DLC0250E	100 V AC
AID'	9	7300	DLV7313/7323/7333	Low Voltage		DLC1213A	100/115/ 230/240 V AC
			DLV7325/7335	Clean Room			200/240 V AO
		7200	DLV7321-B E DLV7331-B E	ESD			
	10	7300 -BME/ BKE	DLV7331-B_E DLV7319/7329/7339/7349-BME	Clean Room Low Shock ESD		DLC1213A- B	100/115/ 230/240 V AC
	11	7000	DLV7020/7030/7031	Transformerless	Lever Start		100/115 V AC
	•••	8000	DLV8020/8030/8031		Push to Start	-\	
		7104	DLV7124/7134/7144 DLV8124/8134/8144	Transformerless	Lever Start		
	40	8104		Transformerless			
	12		DLV8154	High Torque	Push to Start		
		8204	DLV8224/8234/8244	Transformerless			
			DIV/7520/7540	High Speed Torque Reach Light			230 V AC
41		7500	DLV7530/7540	Torque Reach Light	Lever Start		
-4	13-14	7000	DLV7550	High Torque	Lovor otart	DLC4511-GGB	
-0(1)		10-14		DLV8530/8540	Torque Reach Light		DLR1510-JE
N N		8500	DLV8550	Torque Reach Light High Torque	Push to Start		
		7100	DLV7120/7130/7140	Transformerless		\setminus	
			DLV7221	Transformerless High Speed	Lever Start		
		7200	DLV7231/7241	Transformerless Level Start	Lever Start		
1			DLV7251 DLV8120/8130/8140	High Torque Transformerless			
	15	8100		Transformerless			115 V AC
		0.00	DLV8150	High Torque			
- 10 M			DLV8221	Transformerless	Push to Start		
		8200	DLV8231/8241	High Speed			
			DLV8251	Transformerless High Torque			
	17	02/12/16	DLV02/12/16	Brushless Motor ESD(BKE)	Lever Start	DLC16S-W□B	100 - 240 V AC
			DLV30A06L/30A12L/30A20L		Lever Start		
			DLV30A06P/30A12P/30A20P		Push to Start		
The state of the s	18	A (30A/45A/70A)	DLV45A06L/45A12L	Transformerless Brushless Motor	Lever Start Push to Start		230 V AC
			DLV45A06P/45A12P DLV70A06L	อเนอเแยรร MOtor	Lever Start		
			DLV70A06P		Push to Start		
			DLV30LL/30SL/30HL-IKE		Lever Start		
	19 30/45/70-IKE		DLV30LP/30SP/30HP-IKE		Push to Start		
			DLV45LL/45SL-IKE	Low Voltage Brushless Motor	Lever Start	DLR70S-WGB DLC70S-WGB	100 - 240 V AC
			DLV45LP/45SP-IKE DLV70LL-IKE	อเนอเแยรร MOtor	Push to Start Lever Start	PIC/U3-WGB	
			DLV70LP-IKE		Push to Start		
	22	3300 (for Automation)	DLV3321/3331	For Automation	External Input	DLC3310	24 V AC
		3100 (for Automation)	DLV3121/3131/3141/3151	1 of Automation			100 V AC
	23-24	A (for Automation)	DLV30A A - (AA)V	Brushless Motor	External		100 V AC
	23-24	(30A/45A/70A)	DLV45A	For Automation	Input Signal		100 V AC
L			DETTORUGH = [MM]K	1	<u> </u>		

Selection Chart



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.

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.



Models for EU

DLV7410A/7419A/7410HA/7419HA/7420A/7429A-BME
DLV7313/7323/7333/7325/7335-CME/CKE
DLV7321/7331-BME/BKE
DLV7319/7329/7339/7349-BME
DLC1213A-GG/GGB/GGU
DLV7530/7540/7550-MKE/BKE
DLV8530/8540/8550-MKE/BKE
DLC4511-GGB/DLR1510-JE
DLC1110-GG/HE
DLV02/12/16
DLV30A/45A/70A-AB
DLV30/45/70-IKE
DLC70S/DLR70S-WGB
DLT1173A/1673A/1973A



Models for the People's Republic of China DLV7321/7331-CMC

DLC1213-GC
DLV8124/8134/8144/8224/8234/8244/8154-MJC
DLV8124/8134/8144/8224/8234/8244/8154-MKC
DLV7124/7134/7144-MJC
DLV7124/7134/7144-MKC
DLV5820C/5820HC/5840C

DLV5720C/5720HC/5740C/5740HC/5750C DLC0350GC/0950GC DLV30/45/70-M□C

DLV30/45/70-SPC(M□C)
DLR5040A-WC
DLV30A/45A/70A-AC





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.

CONTENTS

Selection Chart	
Delvo DLV7400A series	_
Delvo DLV5700 series	
Delvo DLV5800 series	_
Delvo DLV7300 series	_
Delvo DLV7300-BME/BKE series	-1
Delvo DLV7000/8000 series	
Delvo DLV7104/8104/8204 series —————	— 1
Delvo DLV7500/8500 series	— 1
Delvo DLV7100/7200/8100/8200 series —	– 1
Brushless Delvo DLV02/12/16 series	
Brushless Delvo A series DLV30A/45A/70A	— 1
Brushless Delvo DLV30A/45A/70A-IKE series	- 1
DLR70S-WGB	- 2
DLC70S-WGB	- 2
Delvo DLV3100/3300 series (for automation)	_ 2
Brushless Delvo A series (for automation) DLV30A/45A/70A	- 2
DLR5040A/5340-WE	- 2
DLR5640-WN	- 2
Screwdrivers designed for DLR5640-WN	
Torque Checkers —	— 2
Accessories	- 3
Accessories/Optional Cord	— 3
Sleeves and Vacuum Pickups	
NK BIT —	

Features

The light and compact body reduces operator fatigue

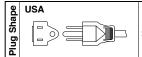
- · Reduces shock applied to workpieces when fastening screws
- ESD (electrostatic discharge) protection compliant with IEC61340-5-1
- · Lightweight (Standard type 230 g, Clean room type 275 g)
- The Clean Room Type complies with Class 3 Clean Room Rating
- The controller can adjust speed
 (Screw-fastening 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

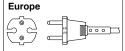


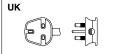
Specifications

	Model	Standard Type	DLV7410A-BME	DLV7410HA-BME	DLV7420A-BME			
	Model	Clean Room Type	DLV7419A-BME	DLV7419HA-BME	DLV7429A-BME			
<u></u>	Starting Metho	od	Lever Start					
	Input Voltage			40 V DC				
.≝	Torque Adjusti	ment		Stepless				
Screwdriver	Torque	(Nm)	0.02	- 0.2	0.15 - 0.4			
[ĕ	Free Speed (min ⁻¹)		500 - 750	700 - 1000	450 - 600			
ပ္ပြင္	Power Consun	nption (W)	Арргох. 10					
2	Screw Size	Machine Screw	1.0 -	· 2.3	1.6 - 2.6			
븅	(mm)	Tapping Screw	1.0 -	- 2.0	1.4 - 2.3			
Electric	Bit Type	(mm)						
	Mass	(g)	<u> </u>	Standard type 230 / Clean room type 275	<u> </u>			

Г	Model	DLC1110-EN	DLC1110-FE	DLC1110-GE	DLC1110-GG	DLC1110-HE	DLC1213A-GGB*1	DLC1213A-HEB*1
13	Features	Standard	Standard	Standard	With CE Mark	With CE Mark	With CE Mark	Standard
13	Input Voltage	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	220 V AC, 50/60 Hz	230 V AC, 50/60 Hz	240 V AC, 50/60 Hz	230 V AC, 50/60 Hz	240 V AC, 50/60 Hz
1	Control Function			Soft Start	Speed Control, ESD Protected			
Plug Shape USA USA UK					Europe	UK	Europe	UK
	Mass (g)	900					







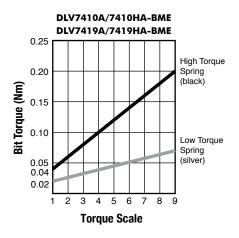
*1: An optional cord is required to connect with this model. Neither DLC1213A-GG nor DLC1213A-HE can be used with the DLV7400A series.

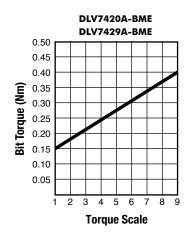
Model DLC1213A-GGB or DLC1213A-HEB + Cord DLW9072

Standard Accessories

JI	Statitual u Accessories								
	No.	DLV7410A	DLV7410HA	DLV7420A	DLV7419A	DLV7419HA	DLV7429A		
l±	No.0 × 1.8 × 44	1	1	-	1	1	-		
m	No.0 × 2.5 × 44	1	1	1	1	1	1		
	No.1 × 4 × 44	-	-	1	-	-	1		
Co	nnection Cable DLW9070	1	1	1	1	1	1		
Sp	ring for Low Torque	1	1	-	1	1	-		
Suspension Bail		1	1	1	1	1	1		
Sleeve for Vacuum DLS2124		-	-	-	1	1	1		

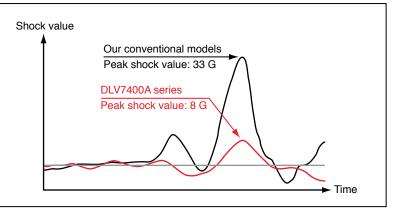
Torque Diagrams (for reference)



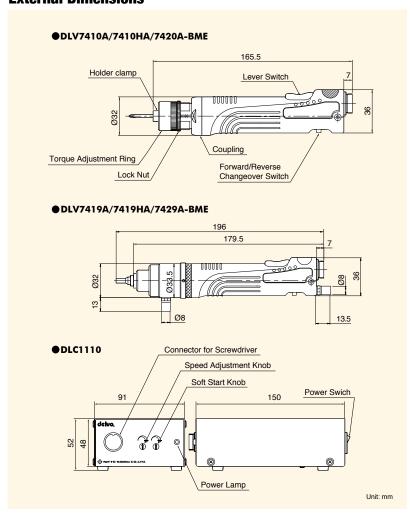


Shock Waveform Comparison between the 7400A series and our conventional models

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



External Dimensions





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

Delvo DLV5700 series Non-CE

For Miniature Screws (1.0 - 3.0 mm)

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





DLV5720/5720H/5740

DLC0350

DLV5740H/5750

DLC0950

Specifications

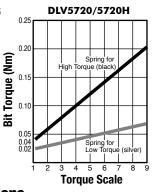
冖	Model		DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750
	Starting Met	thod			Lever Start		
_	Input Voltag	е		40 V DC		36 V	/ DC
ewdriver	Torque Adjustment			Stepless			
5	Torque (Nm)		0.02	- 0.2	0.15	- 0.4	0.1 - 0.55
≩	Free Speed (min ⁻¹)		500 - 750	700 - 1000	450 - 600	1200 - 1800	670 - 1000
Scr	Power Consumption (W)			Approx. 10		Approx. 35	
18	Screw Size	Machine Screw	1.0 -	- 2.3		- 2.6	1.0 - 3.0
景	(mm)	Tapping Screw	1.0 -	- 2.0	1.4 -	- 2.3	1.0 - 2.6
Electric	Bit Type	(mm)			3.5		
	Mass	(g)		230		30	00

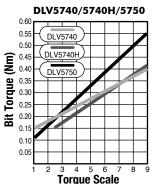
	Model	DLC0350E	DLC0350F	DLC0350G	DLC0950E	DLC0950G
1	Input Voltage	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	230 V AC, 50/60 Hz	100 V AC, 50/60 Hz	230 V AC, 50/60 Hz
Controller	Plug Shape	USA		UK	USA	
	Mass (g)		900		18	00

Standard Accessories

	<u> </u>							
	No.	DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750		
置	No.0 × 1.8 × 44	1			_			
m	No.0 × 2.5 × 44	1		1				
	No.1 × 4 × 44	_	-	1				
Co	nnection Cable	4		1				
	5 m)DLW9081	ı ı			ı			
Su	spension Bail	1			1			
Sp	ring for Low Torque	1			_			

Torque Diagrams (for reference)





Optional Accessories Sleeve Va



Vacuum Pickup DLP5300 (TD04342)

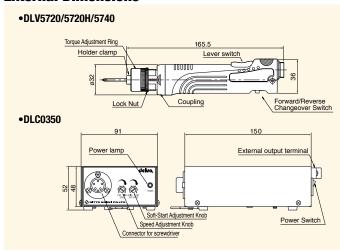
* Please see page 33 for details.



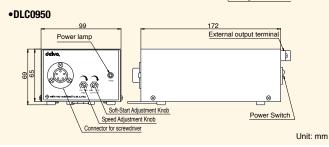
Torque Adjustment Ring Cover DLW5700 (TD02875)

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

External Dimensions



DLV5740H/5750 Torque Adjustment Ring Holder clamp Lever switch Lock Nut Coupling Forward/Reverse O Shift Street Coupling Forward/Reverse O Shift Street Coupling C



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
- · New lever is adopted
- · Low swing bit mechanism
- · Low voltage transless controller



Specifications

<u> </u>	Jooiniou						
	Model		DLV5820	DLV5820H	DLV5840		
1	Starting Met	thod	Lever Start				
	Input Voltag			40 V DC			
1	Torque Adju	stment		Stepless			
ē	Torque	(Nm)	0.02	- 0.2	0.15 - 0.4		
Screwdriver	Free Speed (min-1)		750	1000	600		
§	Power Consumption (W)			Approx. 10			
1 %	Screw Size (mm)	Machine Screw	1.0 - 2.3		1.6 - 2.6		
		Tapping Screw	1.0 -	- 2.0	1.4 - 2.3		
Electric	Bit Type (mm)		-	3.5	-		
	Mass	(g)	230				
	Cord Length		1.5 (with connector)				
L	Grounding Bit Feature		Equipped as standard				

	Model	DLC0250E
	Input Voltage	100 V AC, 50/60 Hz
	Function	Grounded Bit Installation Mechanism
	Mass (g) 300
Controller	Plug Shape	USA
	Case Material	Antistatic material

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

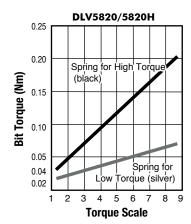
Standard Accessories

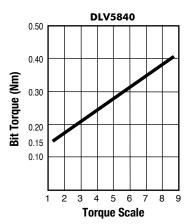
0.	aliaala A000330	1103		
	No.	DLV5820	DLV5820H	DLV5840
蓋	No.0 × 1.8 × 44	1		-
m	No.0 × 2.5 × 44		1	
	No.1 × 4 × 44		1	
Su	spension Bail		1	1
Co	nnection Cable (1.5 m)	1		1
Sn	ring for Low Torque (Silver)		1	_

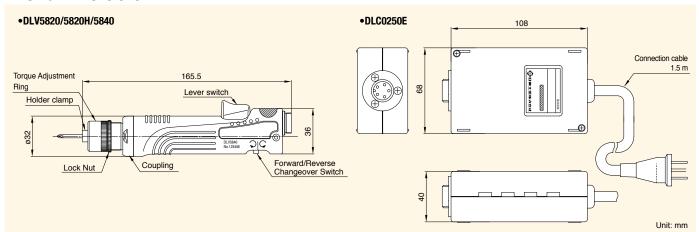
Sleeve Vacuum Pickup DLP5300 (TD04342) * Please see page 33 for details. Torque Adjustment Ring Cover DLW5700 (TD02875)

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

Torque Diagrams (for reference)







Delvo DLV7300 series 🔇

For Miniature Screws (1.0 - 3.5 mm)

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



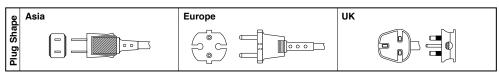
Sı	pecific	ations		Otendend		Olasa Da	U	
<u> </u>	7001110	ationo		Standard		Clean Room Use		
		Bit Shank: ø4 mm	DLV7313-CME	DLV7323-CME	DLV7333-CME	DLV7325-CME*2	DLV7335-CME*2	
	Model							
<u> </u>		Bit Shank:		DLV7323-CKE	DLV7333-CKE	DLV7325-CKE	DLV7335-CKE	
Ver		Hex.6.35 mm		DEVIGEO ORE	DEVIOUS ONE	DETTOES ONE	DETTOOD ONE	
Ę.	Starting M	ethod			Lever Start			
ě	Input Volta	age	36 V DC					
Scr	Torque Ad	justment	Stepless					
		(Nm)	0.03 - 0.15	0.05 - 0.5	0.3 - 1.2	0.05 - 0.5	0.3 - 1.2	
ΞĘ	Free Spee	d (min ⁻¹)	700 -	1000	500 - 700	700 - 1000	500 - 700	
Electric	Power Cor	sumption (W)			Approx. 35			
ш	Screw Siz	Machine Screw	Up to 2.0	1.0 - 3.0	2.0 - 3.5	1.0 - 3.0	2.0 - 3.5	
	(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)		350		40	00	



^{*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)
P	DLC1213A-EN	Standard	100 V AC, 50/60 Hz		Asia	
ا≝ا	DLC1213A-FE*3	Standard	115 V AC, 50/60 Hz		Asia	
≝	DLC1213A-GE	Standard	220 V AC, 50/60 Hz	Soft start,	UK	2300
اق	DLC1213A-GG	With CE Mark	230 V AC, 50/60 Hz	Speed control	Europe	2300
١٥	DLC1213A-GGU	With CE Mark	230 V AC, 50/60 Hz		UK	
	DLC1213A-HE	Standard	240 V AC, 50/60 Hz		Without Plug	

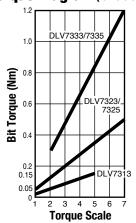
^{*3:} This model is made to order.



Standard Accessories

=	Mildula Addessolies								
	No.	DLV7313 -CME	DLV7323 -CME	DLV7333 -CME	DLV7323 / 31 / 33-CKE	DLV7325 -CME	DLV7335 -CME	DLV7325 / 35-CKE	
1	No.0 × 1.8 × 44	1	-	_	_	_	_	_	
1	No.0 × 2.5 × 44	1	1	_	_	1	_	_	
퓲	No.1 × 3 × 44	_	-	1	_	_	1	_	
۱"	No.1 × 4 × 44	_	1	_	_	1	_	_	
1	No.1 \times 7 \times 50	_	ı	_	1	-	_	_	
1	$No.2 \times 4 \times 44$	_	ı	1	_	-	1	_	
1	$No.2 \times 4.5 \times 50$	_	ı	_	_	-	_	1	
	$No.2 \times 7 \times 50$	_	1	_	1	-	_	_	
	DLS2124	_	_	_	_	1	_	_	
Sleeve	DLS2127	_	_	_	_	1	1	_	
l é	DLS2130	_	-	_	_	1	1	_	
lõ	DLS2134	_	-	_	_	-	1	_	
1	DLS2135	_	-	_	_	-	_	1	
Su	spension Bail				1				

Torque Diagram (for reference)

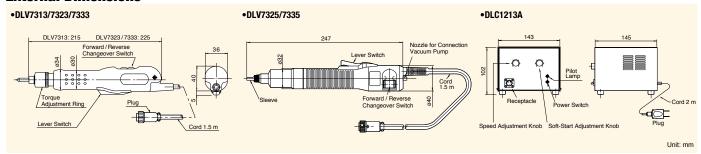


Optional Accessories



Torque Adjustment Ring Cover for DLV7303 DLW5500 (TD00333)

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



Delvo DLV7300-BME/BKE series C€ ■For Miniature Screws (1.0 - 3.5 mm)

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 compliant with IEC61340-5-1
- Meet Class 5*1 or more Clean Room standards
- *1: Based on Nitto's standard of measurement

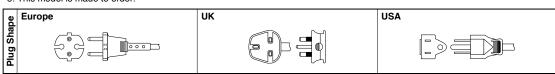


Sı	pecific	ations	ES	SD		ESD / Low Shock				
	Model	Bit Shank:ø4 mm	DLV7321-BME*2	DLV7331-BME*2	DLV7319-BME*2	DLV7329-BME*2	DLV7339-BME	DLV7349-BME*2		
	WOUCI	Bit Shank:Hex. 6.35 mm	DLV7321-BKE	DLV7331-BKE						
	Starting	Method	Lever Start							
	Input Vo	Itage	36 V DC							
	Torque A	djustment	Stepless							
_	Torque (Nm)		0.05 - 0.5	0.3 - 1.2	0.2 - 0.4	0.25 - 0.55	0.45 - 0.95	0.55 - 1.2		
Ě	Free Spe	ed (min ⁻¹)	700 - 1000	500 - 700	700 -	1000	500 - 700			
Screwdriver	Power Consumption (W)		Approx. 35							
ř	Screw S	ize Machine Screw	1.0 - 3.0	2.0 - 3.5	2.0 - 3.0		3.0	- 3.5		
	(mm)	Tapping Screw	1.2 - 2.6	2.0 - 3.0	2.0	- 2.6	2.6 - 3.0			
Electric	Bit Type	For BME			8 11	3.5				
	(mm)	For BKE			Zo 23-	9 6.35				
	Mass	(g)	35	50		40	00			

*2. These models are made to order

*2:	These models are made t	o oraer.				
	Model	Features	Input Voltage	Plug Shape	Control	Mass(g)
<u>e</u>	DLC1213A-ENB	Standard	100 V AC, 50/60 Hz	USA	0 "	
ntrol	DLC1213A-FEB*3	Standard	115 V AC, 50/60 Hz	USA	Grounding, Soft Start.	2300
Į,	DLC1213A-GGB	With CE mark	230 V AC, 50/60 Hz	Europe	Speed Control	2300
10	DLC1213A-HEB	Standard	240 V AC. 50/60 Hz	UK		

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



Measurer	nent Point		Conventional Product	DLV7300-B ☐ E
Handle	Static Electricity	(V)	350	5
natitute	Surface Resistance	(Ω)	more than 1013	10⁴
Lever Switch	Static Electricity	(V)	350	2
Level Switch	Surface Resistance	(Ω)	more than 1013	10⁴
Forward / Reverse Switch	Static Electricity	(V)	25	2
Power Cable	Static Electricity	(V)	110	5
Power Gable	Surface Resistance	(Ω)	more than 1013	10 ¹⁰

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

Bit Torque (Nm)

0.4

Torque Diagram (for reference)

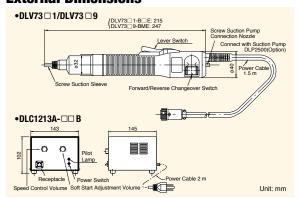
DLV73

Torque Scale

- * 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

	No.	DLV7319/29 -BME	DLV7339/49 -BME	DLV7321 -BME	DLV7331 -BME	DLV7321/31 -BKE
	$No.0 \times 2.5 \times 44$	1	-	1	-	_
-	No.1 × 3 × 44	_	1	-	1	_
Ħ	No.1 × 4 × 44	1	_	1	_	_
	No.1 \times 7 \times 50	_	_	-	_	1
	No.2 × 4 × 44	_	1	1	1	_
	$No.2 \times 7 \times 50$	_	_	1	_	1
4	DLS2124	1	_	l	-	_
ě	DLS2127	1	1	l	I	_
Sleeve	DLS2130	1	1	I	l	_
Ĺ	DLS2134	_	1	-	_	_
Su	spension Bail			1		



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)



Ç,	ecifica	tione						
<u> </u>	JGGIIIG	เนบเเอ		Stan	High Speed			
	Model	100 V AC Input	DLV7020-EMN	DLV7030-EMN	DLV8020-EMN	DLV8030-EMN	DLV7031-EMN	DLV8031-EMN
	Model	115 V AC Input	DLV7020-FME*1	DLV7030-FME*1	DLV8020-FME*1	DLV8030-FME*1		
	Starting Me	thod	Lever	Lever Start Push to Start			Lever Start	Push to Start
	Torque Adj	ustment		Stepless				
١.	Torque	(Nm)	0.05 - 0.55	0.3 - 1.1	0.1 - 0.55	0.3 - 1.1	0.3 - 1.0	
Ne.	Free Speed	(min ⁻¹)	900	650	900	650	1200	
Screwdriver	Power Con	sumption (W)		Approx. 25				ox. 30
ē	Screw Size	Machine Screw	1.0 - 3.0	2.0 - 3.5	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	2.0 - 3.0	
Electric	Bit Type	(mm)			4 11	3.5		
	Mass	(g)	40	00	4	10	400	410
	Plug Shape (EMN/FME	Asia						

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

Standard Accessories

	No.	DLV7020 / 8020	DLV7030 / 8030 / 7031 / 8031		
	$No.0 \times 2.5 \times 44$	1	_		
Bit	No.1 × 3 × 44	_	1		
	No.1 × 4 × 44	1	_		
	No.2 × 4 × 44	-	1		
Suspension Bail		,			

Optional Accessories

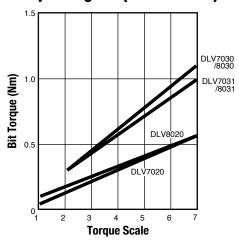


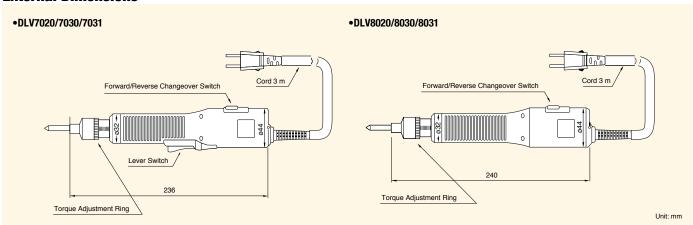
Torque Adjustment Ring Cover

DLW5300 (TD00332)

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

Torque Diagram (for reference)





Delvo DLV7104/8104/8204 series Non-CE ■ For Machine Screws (2.6 - 6.0 mm)

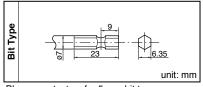
Features

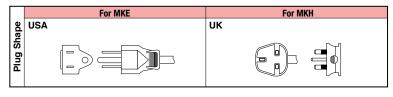
The most popular models have been redesigned

- 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



S	ecificat	tions	Standard				High Torque		High Speed			
			DLV7124- MKE	DLV7134- MKE	DLV7144- MKE	DLV8124- MKE	DLV8134- MKE	DLV8144- MKE	DLV8154- MKE	DLV8224- MKE	DLV8234- MKE	DLV8244- MKE
	Model		DLV7124- MKH	DLV7134- MKH	DLV7144- MKH	DLV8124- MKH	DLV8134- MKH	DLV8144- MKH	DLV8154- MKH	DLV8224- MKH	DLV8234- MKH	DLV8244- MKH
Ver	Starting Me	thod		Lever Start		Push to Start						
Screwdriver	Input Voltag	tage			230 V AC, 50/60 Hz							
	Torque Adjustment					Stepless						
	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
Electric	Free Speed	(min ⁻¹)	90	00	600	90	00	600	400	2000	1800	1100
ie ie	Power Cons	umption (W)			3	35				4	5	
-	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)		720			710		910		710	



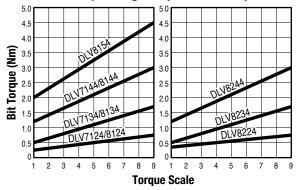


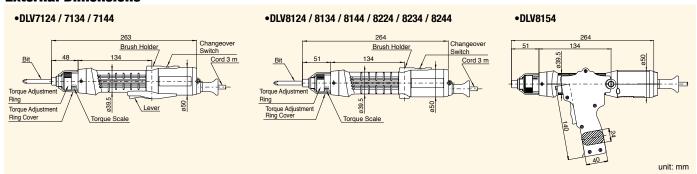
Please contact us for 5 mm bit type.

Standard Accessories

For MKE/MKH	• Bit No.1 × 7 × 75: 1 pc. • Bit No.2 × 7 × 75: 1 pc.	Spare Carbon Brush: 2 pcs.Suspension Bail: 1 pc.		
For 8154-MKE/MKH	• Bit No.2 × 7 × 75: 1 pc. • Bit No.3 × 7 × 50: 1 pc.	Spare Carbon Brush: 2 pcs.Suspension Bail: 1 pc.		

Torque Diagram (for reference)





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 compliant with IEC61340-5-1 (BKE models)



DLR1510-JE

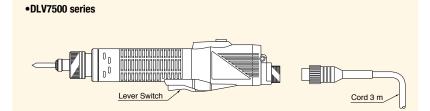
Sı	oecifica [*]	tions	Star	dard	High Torque	Stan	dard	High Torque		
Ē	Madal	Standard	DLV7530-MKE	DLV7540-MKE	DLV7550-MKE	DLV8530-MKE	DLV8540-MKE	DLV8550-MKE		
	Model	ESD	DLV7530-BKE	DLV7540-BKE	DLV7550-BKE	DLV8530-BKE	DLV8540-BKE	DLV8550-BKE		
	Starting Met	hod		Lever Start		Push to Start				
ē	Input Voltag	e			59 V DC					
	Torque Adju	stment	Stepless							
Screwdriv	Torque (Nm)		0.5 - 1.7	1.2 - 2.7	2.0 - 4.5	0.5 - 1.7	1.2 - 2.7	2.0 - 4.5		
Sre!	Free Speed	(min ⁻¹)	1100	700	500	1100	700	500		
	Screw Size	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		
Ιž	(mm)	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		
Electric	Bit Type	(mm)	S 23 9 6.35							
	Mass	(g)	6	50	750	65	50	750		

Measurement point			Conventional product	DLV7500/8500-BKE
Handla	Static Electricity	(V)	350	5
Handle	Surface Resistance	(Ω)	more than 1013	10⁴
Lauren Consider	Static Electricity	(V)	350	2
Lever Switch	Surface Resistance	(Ω)	more than 10 ¹³	10⁴
Forward / Reverse Switch	Static Electricity	(V)	25	2
Connection Cable	Static Electricity	(V)	110	5
Connection capie	Surface Resistance	(Ω)	more than 10 ¹³	10 ¹⁰

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

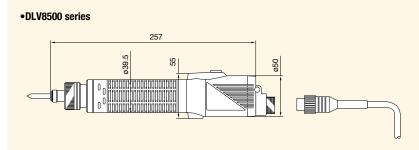
- * Measurement conditions (Temperature: 22 °C Humidity: 66 %)
- (1) Static electricity Earth the measurement equipment and measuring person.
 Grip the screwdriver five times using Ansel Edmont electronic control glove.
 Turn on the switch of the screwdriver.
 Measure each part of the screwdriver using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

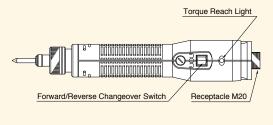
External Dimensions



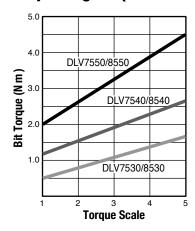
Standard Accessories

	No.	DLV7530 / 7540 / 8530 / 8540	DLV7550 / 8550		
H	No.1 × 7 × 75	1	_		
	No.2 × 7 × 75	1	1		
	No.3 \times 7 \times 50	_	1		
Sp	are Carbon Brush	2			
Co	nnection Cable	1			
Su	spension Bail	1			



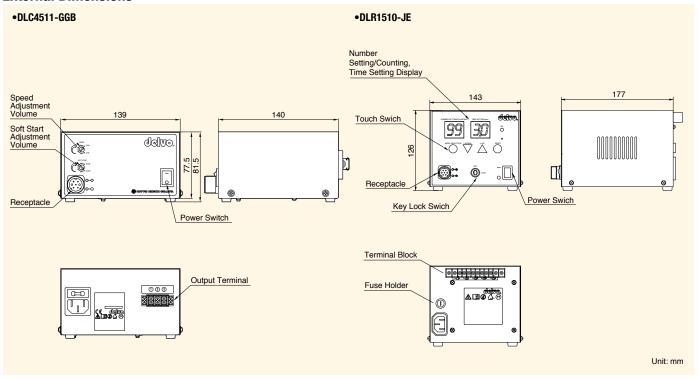


Torque Diagram (for reference)



Specifications

Y,	peomodions						
	Model	DLC4511-GGB	DLR1510-JE				
roller	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				
2	Input Voltage	230 V AC	, 50/60 Hz				
outi	Mass (g)	3500	5100				
ŏ	Plug Shape	Europe					



Delvo DLV7100/7200/8100/8200 series Non-CE ■ For Machine Screws (2.6 - 6.0 mm)



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 6 mm machine screws

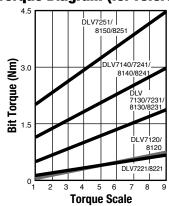
c.	pecifica	tione															
<u>ગ</u>	Jecilica	เเบเเอ		Standard		ŀ	ligh Speed		High Torque		Standard		High Torque	ı	ligh Speed		High Torque
	Model	Bit Shank: Hex. 5 mm	DLV7120- FJE	DLV7130- FJE	DLV7140- FJE	DLV7221- FJE	DLV7231- FJE	DLV7241- FJE		DLV8120- FJE	DLV8130- FJE	DLV8140- FJE	DLV8150- FJE	DLV8221- FJE	DLV8231- FJE	DLV8241- FJE	
ķ	Model	Bit Shank: Hex. 6.35 mm	DLV7120- FKE	DLV7130- FKE	DLV7140- FKE	DLV7221- FKE	DLV7231- FKE	DLV7241- FKE	DLV7251- FKE	DLV8120- FKE	DLV8130- FKE	DLV8140- FKE	DLV8150- FKE	DLV8221- FKE	DLV8231- FKE	DLV8241- FKE	DLV8251- FKE
늘	Starting Met	hod				Lever Start							Push t	o Start			
Š	Input Voltage	е							115	V AC, 50/6	0 Hz						
15	Torque Adjus	stment								Stepless							
ြိ	Torque		0.25 - 0.75	0.5 - 1.7	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
ectric	Free Speed	(min ⁻¹)	900	900	600	1800	1800	1100	700	900	900	600	400	1800	1800	1100	700
<u> </u>	Power Consu	umption (W)	Approx. 35			Approx. 45 Approx. 35											
	Screw Size	Machine Screw			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
	(mm)	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)		700			700		890		690		890		690		890
		For FJE			Fo	r FKE		a) Asi	<u></u>								
Bit Type (mm)	90	24	5			9	6.35	Plug Shape									

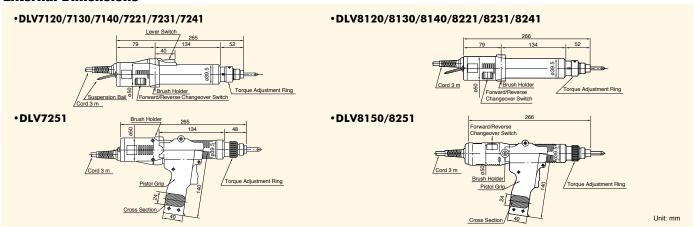
^{*} All models of FJE / FKE series are made to order.

Standard Accessories

	No.	FJE	FKE except DLV7251 / 8150 / 8251-FKE	DLV7251 / 8150 / 8251-FKE	
	No.1 \times 6 \times 70	1	-	-	
-	No.1 \times 7 \times 75	-	1	-	
Bit	$No.2 \times 6 \times 70$	1	-	-	
	No.2 × 7 × 75	-	1	1	
	No.3 \times 7 \times 50	-	-	1	
Spare Carbon Brush 2					
S	uspension Bail	1			

Torque Diagram (for reference)





MEMO	

Brushless Delvo DLV02/12/16 series CE For Machine Screws (1.0 - 4.2 mm)

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 (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)



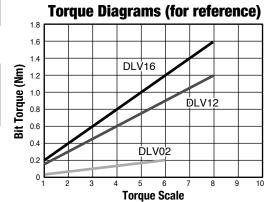
Specifications

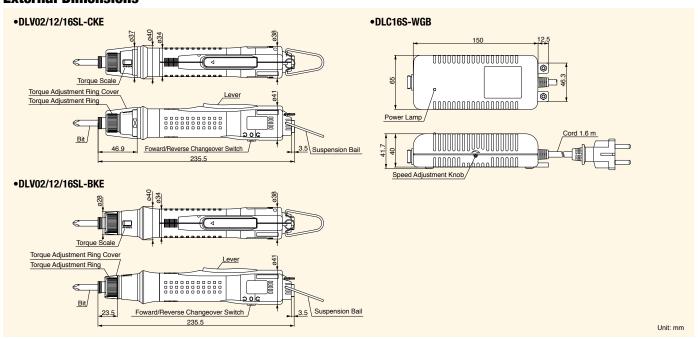
	podifications							
	Model	Standard	DLV02SL-CKE	DLV12SL-CKE	DLV16SL-CKE			
		ESD	DLV02SL-BKE	DLV12SL-BKE	DLV16SL-BKE			
	Starting Metho	d		Lever Start				
<u>ب</u>	Input Voltage			20 - 30 V DC				
<u>§</u> .	Torque Adjustr	nent		Stepless				
Screwdrive	Torque	(Nm)	0.03 - 0.2	0.15 - 1.2	0.2 - 1.6			
ĕ	Free Speed	(min ⁻¹)	700 - 1000					
١	Power Consum	ption (W)	48					
	Screw Size	Machine Screw	1.0 - 2.2	1.4 - 3.0	2.2 - 4.0			
Ξ̈́	(mm)	Tapping Screw	1.0 - 2.0	1.4 - 2.6	2.0 - 3.0			
Screw Size (mm) Tapping Screw 1.0 - 2.0 1.4 - 3.0				 6.35				
	Mass	(g)		470				

	Model	DLC16S-WGB
	Input Voltage	100 - 240 V AC, 50/60 Hz
	Output Voltage	20 - 30 V DC
ē	Function	Speed Control
Controller	Plug Shape	
	Mass (g)	380

Standard Accessories

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





Brushless Delvo A series

DLV30A/45A/70A CE

Features

Mass

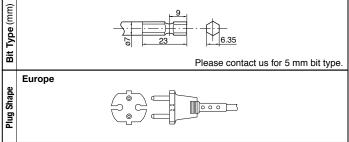
Eco-friendly electric screwdrivers with built-in brushless motors in a transformerless profile

- 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 types of models are avilable
- Equipped with a torque adjsutment ring cover
- · Design confroms to the RoHS Directive and thus appeals to the environmentally conscious user
- · Models with CE marking are available

· Easily detachable Pistol Grip DLW2300 (TD00335) comes with the unit as a standard accessory (DLV45A/70A)



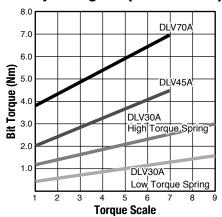
c.	andificat	lione							
ગ	Specifications		Low Speed	Standard	High Speed	Low Speed	Standard	Low Speed	
	Model Bit	Lever Start	DLV30A06L-AB K	DLV30A12L-AB K	DLV30A20L-AB K	DLV45A06L-AB K	DLV45A12L-AB K	DLV70A06L-AB K	
ē	Model DI	Push to Start	DLV30A06P-AB K	DLV30A12P-AB K	DLV30A20P-AB K	DLV45A06P-AB K	DLV45A12P-AB K	DLV70A06P-AB K	
₫	Free Speed	(min ⁻¹)	650	1200	2000	650	1200	650	
§	Input Voltage)	230 V AC, 50/60 Hz						
홍	Torque (Nm)	Low Torque Spring*2		0.4 - 1.6		2.0 - 4.5		3.8 - 7.0	
ű	Torque (Nm) Low Torque Spring*2 High Torque Spring*3			1.2 - 3.0		2.0 -	3.0 - 7.0		
은	Power Consu	imption (W)	Approx. 45						
ᇦ	Screw Size (mm)	Machine Screw	2.6 - 5.0			4.5 -	6.0 - 8.0		
🛎	(mm)	Tapping Screw		2.5 - 4.0		4.0 -	4.5 - 6.0		



^{*1:} ABK type has CE marking *2: Standard Accessory *3: Built-in.

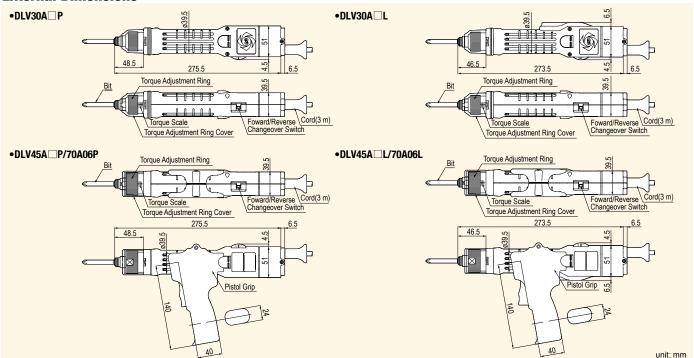
Torque Diagram (for reference)

870 (with Pistol Grip)



Standard Accessories

	DLV30A	DLV45A/70A			
Bit No.2 × 7 × 75	1				
Suspension Bail	1				
Low Torque Spring	1	-			



DLV30/45/70-IKE series **CE**

Features

Incorporates long-life brushless motors

- The newly designed clutch mechanism offers precise torque repeatability over sustained periods of use
- Three series of screwdrivers: DLV30/45/70-IKE can be operated by one standard control unit giving you wide screw tightening torque coverage from 0.4 to 7.0 Nm and maximum free speeds of 650, 1200 or 2000 min⁻¹
- · Compliant with CE



For Machine Screws (2.6 - 8.0 mm)

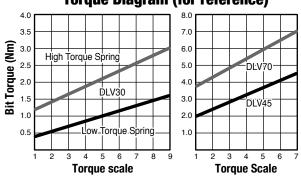
Specifications

	Model	Lever Start	DLV30LL-IKE	DLV30SL-IKE	DLV30HL-IKE	DLV45LL-IKE	DLV45SL-IKE	DLV70LL-IKE		
Screwdriver	Model	Push to Start	DLV30LP-IKE	DLV30SP-IKE	DLV30HP-IKE	DLV45LP-IKE	DLV45SP-IKE	DLV70LP-IKE		
	Input Voltage				40 V	DC				
	Torque Adjustment (Nm)	Low Torque Spring (Standard Accessory)	0.4 - 1.6			2.0 - 4.5		3.8 - 7.0		
		High Torque Spring (Built-in)		1.2 - 3.0						
	*1Adjustable Speed Ran	ge (min ⁻¹)	390 - 650	720 - 1200	1200 - 2000	390 - 650	720 - 1200	390 - 650		
	*1Adjustable Soft Start Time (sec				0 -	-2				
	*1Free Speed at Soft Sta	rt (min ⁻¹)	260	480	800	260	480	260		
	Screw Size (mm)	Machine Screw	w 2.6 - 5.0			4.5 -	5.0 - 8.0			
支	OCICW OIZC (IIIII)	Tapping Screw	2.5 - 4.0			4.0 - 5.0 4.5 -		4.5 - 6.0		
Electric	Mass	(g)	720			870 (with Pistol Grip)				
	Bit Type	(mm)	5 23 9 6.35							
				Bit No.2 × 7 × 75: 1 pc.						
	Standard Accessories				Suspension E	Bail: 1 pc.				
			Lo	w Torque Spring: 1 pc.						
	ontroller				DLR70S-WGB					
L	Ollionei				DLC70S-WGB	(See Page 21)				

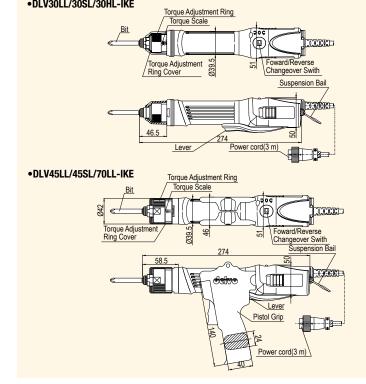
- *1: Values are obtainable in combination with control unit DLR70S-WGB or DLC70S-WGB.
- * IJE types for 5 mm hex. bit are available on request.

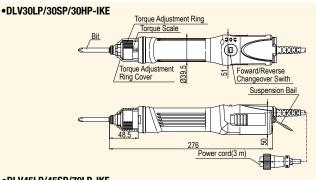


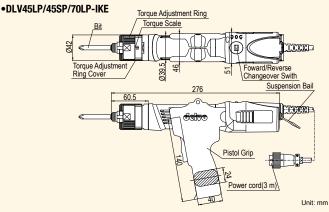
Torque Diagram (for reference)



•DLV30LL/30SL/30HL-IKE







DLR70S-WGB CE

Features

Enhanced versatility by combining controller and counter

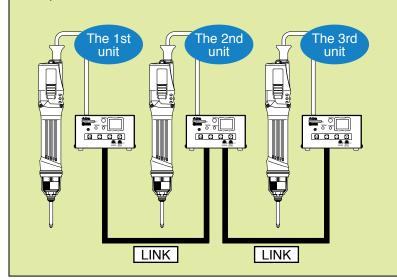
- This model has a "Count Correction" function that does not count alien screws
 with different length, refastened screws that were initially fastened sufficiently,
 or incompletely fastened screws that were fastened in a slanting direction or
 stopped fastening in midcourse
- · "Count Back" function reverses the counting when a screw is unfastened
- Up to four different screw fastening programs can be stored in the internal memory for a wide variety of assembly work
- Sequential screw tightening system (Link Function) can be built up with up to 10 screwdriver/controller sets connected in series
- Equipped with "Stepless Speed Adjustment" function and "Soft Start" function
- Universal input voltage from 100 to 240 V AC for convenient installation



LINK Function

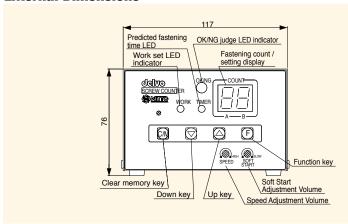
When counters are connected and activated in the screw fastening sequence as shown below, all screwdrivers are on standby except the first one in the sequence. Only when the first screw fastening is finished, can the next screwdriver change from standby to ready. When the last fastening in the sequence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

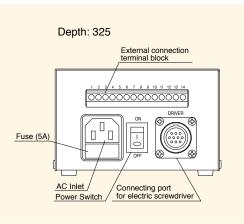
N.B. Up to 10 screwdriver/counter sets can be connected to the LINK.



Specifications

· ·	DI DECO WAD		
Model	DLR70S-WGB		
Input Voltage	100 - 240 V AC, 50/60Hz		
Output Voltage	40 V DC		
Speed Control Function	60 - 100 %		
Soft Start Function	0 - 2 sec.		
Count	0 - 99		
Allowable Number of Screw Fastening Programs	4		
Counting Method	Count-up / Count-down		
Count Correction Function	Count normal fastening only		
Self Adjustable Timer Setting	0.01 to 0.99 sec.		
OK Output Timer Setting	0 to 9.5 sec.		
Count Back Function	ON / OFF ON / OFF		
OK / NG Buzzer			
Input Signal	WORK / RESET / LINK-IN / CH1 / CH2 / TORQUE CHECK		
Output Signal	OK / NG / LINK-OUT / TORQUE UP		
Mass (g)	2100		
Size W × L × H (mm)	117 × 325 × 76		
Bit Grounding	Ready (With a 1MΩ resistor)		
Plug shape	Europe		
Standard Accessories	Power cord (2 m): 1 Fuse (5 A): 1		





DLC70S-WGB CE

Features

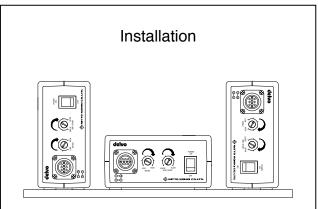
Universal input voltage from 100 to 240 V AC for convenient installation

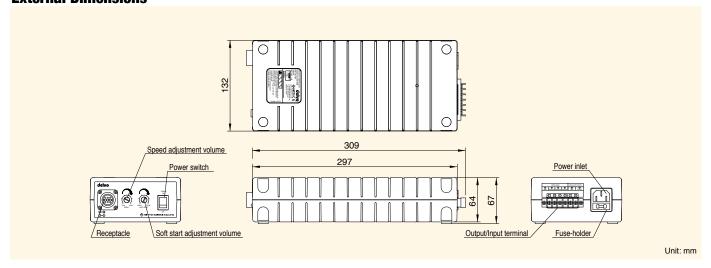
- The controller provides soft start function. The slow startup prevents screw heads from possible damage caused by the disengaged bit.
- Stepless speed adjustment function widens the speed range from 390 to 2000 min⁻¹ for various applications
- The controller outputs: Start, torque-up and reverse is via a dry contact method. These signals can be used for counting up tightened screws and preventing screw tightening errors.
- Applying 24 V DC to the designated terminals on the controller brings the screwdriver to an immediate stop in emergency cases
- · Can be installed either horizontally or vertically



Specifications

Model	DLC70S-WGB			
Features	With speed control and soft start function			
Input Voltage	100 - 240 V AC, 50/60 Hz			
Output Voltage	40 V DC			
Signal Output(contact point type)	Start, Torque up, Reverse (Dry contact)			
Signal Input	Drive Stop Function			
Signal iliput	(With DC 24 V Input Voltage needed)			
Mass (g)	(g) 1800			
Size W × L × H (mm)				
Bit Grounding	Ready (With a 1M Ω resistor)			
Plug shape	Europe			
Standard Accessories	Power cord (2 m): 1 Rubber feet: 4 Fuse (5 A): 1			





Delvo DLV3100/3300 series Non-CE ■ For Miniature Screws & Machine Screws(1.0 - 6.0 mm)

(for automation)

Features

A Labor-Saving "delvo" for Automatic Assembly Robot

· 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 100 V AC power source and are made to order products.
 - DLV3128-EJN DLV3138-EJN
 - DLV3148-EJN DLV3158-EJN

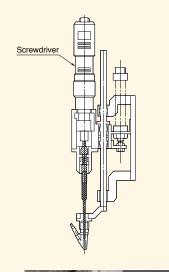
NOTE: The bit mounting is made in a specific way.



Specifications			For Miniat	ure Screws		For Machi	ne Screws	
	Model		DLV3321-CMN	DLV3331-CMN	DLV3121-EJN*1	DLV3131-EJN*1	DLV3141-EJN*1	DLV3151-EJN*1
	Input Voltag	е	36 V DC (supplie	ed from controller)		100 V AC	c, 50/60 Hz	
Ver	Torque Adju	stment			Stepl	ess		
	Torque (Nm)		0.05 - 0.5	0.3 - 1.2	0.25 - 0.7	0.5 - 1.5	1.2 - 3.0	2.0 - 4.5
늗	Free Speed (min ⁻¹)		900	600	90	900 600		
Electric Screwdrive	Power Consumption (W)				Approx. 35	Approx. 35		
	Screw Size	Machine Screw	1.0 - 3.0	2.0 - 3.5	2.3 - 2.6	2.6 - 3.5	3.5 - 5.0	4.5 - 6.0
	(mm)	Tapping Screw	1.2 - 2.6	2.0 - 3.0	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0
	Bit Type (mm) 3.5			5 mm hex standard bit				
	Mass	(g)	40	00		9	00	

<u>ŏ</u> Model		DLC3310	
	Voltage	24 V AC, 50/60 Hz	
₹ Output	t Voltage	36 V DC	
ပိ Mass	(g)	360	

Installation Example

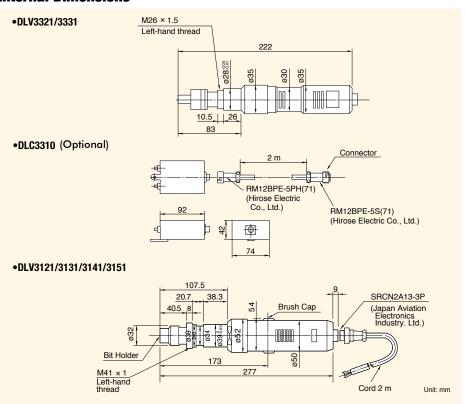




Standard Accessories

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

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



Brushless Delvo A series (for automation)

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.



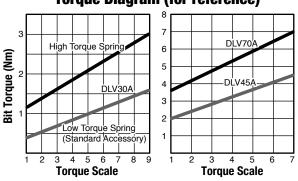
Oncelliantions				30A		45A (Higl	1 Torque)	70A (High Torque)		
S	ecitic	ations	Low Speed	Standard	High Speed	Low Speed	Standard	Low Speed		
		Standard coupling	DLV30A06A-N(AA) J	DLV30A12A-N(AA) J	DLV30A20A-N(AA) J	DLV45A06A-N(AA) K	DLV45A12A-N(AA) K	DLV70A06A-N(AA) K		
	Model Bit	Coupling with flange	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		
	Tavana	(Nm)	Low to	rque spring (Accessory) 0.	4 - 1.6	2.0	4.5	3.8 - 7.0		
	Torque	(INIII)	High torque spring (Installed) 1.2 - 3.0			2.0 -	4.5	3.0 - 7.0		
	Free Spee	d (min ⁻¹)	650	1200	2000	650	1200	650		
	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		
crewdriver		Standard coupling		700		780				
M	Mass (g	Coupling with flange		760		840				
		Coupling with M41 screw		740		820				
S		nsumption (W)	45							
cţri	Input Volt	age	100 V AC, 50/60 Hz							
E	Starting N	lethod	External input signal							
	Input sign	al	Start signal / Forward signal / Reverse signal (5 - 24 V DC)							
	Output sig	ınal		Toro	ue-up signal (Voltage unde	er 30 V DC and current 20	mA)			
	Bit Type	(mm)	*1 *1				<u> </u>			
	Standard	Accessories	E	Bit NK31 × 2 × 6 × 70: 1 pc. Low torque spring: 1 pc. Bit NK35 × 2 × 7 × 75: 1 pc.						

^{*1:} DLV30A is available upon request for use with 6.35 mm hex. shank bits.

Optional Accessories



Torque Diagram (for reference)



Screwdriver Cable Breakdown List

Power/Input Signal Cable

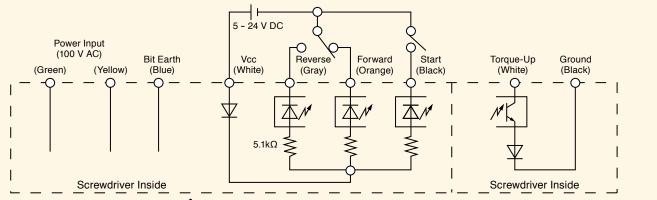
1 OWO// Impat Oighar Oabio					
Color	Details				
Green	Power input				
Yellow	Power input				
Blue	Bit earth				
White	Input signal common (Vcc)				
Black	Start signal input				
Orange	Forward signal input				
Gray	Reverse signal input				

Power input voltage: 100 V AC

Output Signal Cable

Color	Details
White	Torque-up signal output
Black	Ground

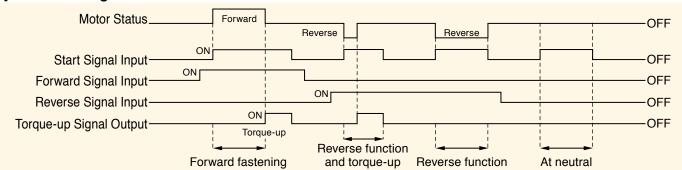
Power Input/Output Signal Schematic Diagram

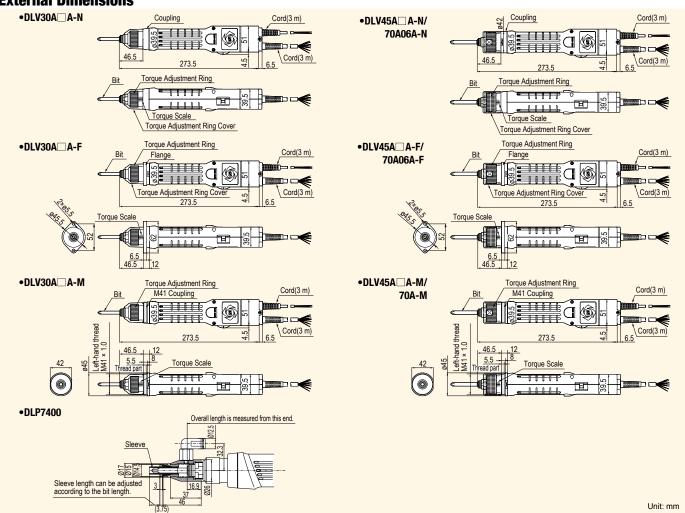


Caution

- Each input/output signal is insulated from a screwdriver's internal circuit.
- Input signal rated range: Use in the range of voltage between 5 24 V DC (current 0.5 5 mA DC)
- Torque-up signal output maximum rating: Use in the range of voltage under 30 V DC and current 20 mA DC.

Operation Timing Chart





Features

For prevention of human fastening errors and enhanced fastening management accuracy

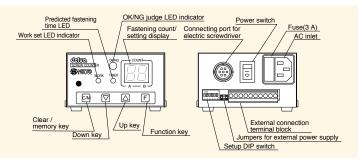
- · Ideally suited for the assembly lines of vehicles and electrical equipment requiring reliable screw fastening
- The controller receives signals from electric screwdrivers to provide highly reliable screw fastening control
- Count Return Function: When a screw is loosened, a reverse signal output from the electric screwdriver reverses the count by one
- The Count Correction Function does not count elevated screws or double fastening
- Input voltage range from 100 to 240 V AC is acceptable in any part of the world (The screwdrivers to be used in combination with the counter require input power supplies that are written on the respective nameplate)
- Link Connection Function: You can build up a simple sequential screw tightening system by connecting the DLR5040A-WE screw tightening counters in series without using any external controller such as a programmable controller
- Driver Lock Function prevents unexpected start of screwdrivers
- Compact and Lightweight (Compared with our conventional models decreased by 30 % in volume and by 38 % in mass)
- SPC type screwdrivers for DLR5040A-WE are designed on the basis of established transformerless screwdrivers

stening control ic screwdriver Example of use together with a sensor available in the market

Specifications

l	Model	DLR5040A-WE		
l	Count	1 - 99		
l	Counting Method	Count-up / Count-down		
	Count Correction Function	Count normal fastening only		
	Self Adjustable Timer Setting	0.01 to 0.99 sec.		
l	Work Detection Function	Yes (1 terminal) / No		
	External Count Input	2 terminals (PARTS A / PARTS B)		
١.	Work Installation Timer Setting	0 to 9.5 sec.		
Screw Counter	OK Output Timer Setting	0 to 9.5 sec.		
]	NG Alarm	ON(1) / ON(2) / OFF		
Ņ	OK Buzzer	ON(1) / ON(2) / ON(3) / OFF ON / OFF WORK SET / DRIVER ON AUTO / MANUAL		
١×	Count Return Function			
<u>ē</u>	NG Judge Timing			
ကြ	Automatic / Manual OK Judge			
	Screwdriver Lock Function	ON / OFF		
l	Multiple Link	Up to 10 counters can be connected.		
	External Inputs on Terminal Block	SENSOR / RESET / LINK-IN / PARTS A / PARTS B		
l	External Outputs on Terminal Block	OK / NG / LINK-OUT		
	Parameter Memory	Parameters stored in internal nonvolatile memory		
l	Input Voltage	100 - 240 V AC, 50/60 Hz		
ĺ	External Dimensions (mm)	W100 × D120 × H60		
ĺ	Mass (g)	470		
Λ		rong plug. This product is for use outside		

Front and Rear Panels



LINK Function

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

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

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

DLR5340-WE No

Non-CE

Features

Up to three sets screwdrivers can be connected to one counter

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

Specifications

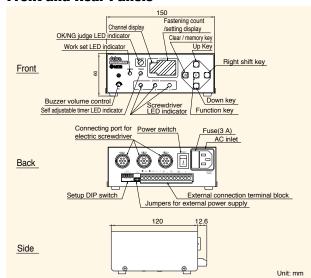
	Model	DLR5340-WE			
	Count	0 - 99			
	Counting Method	Count-up / Count-down			
	Count Correction Function	Count normal fastening only			
	Self Adjustable Timer Setting	0.01 to 2.50 sec.			
	Work Detection Function	Yes (1 terminal) / No			
_	Work Installation Timer Setting	0 to 9.5 sec.			
Screw Counter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

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

Screw Fastening Counter



Front and Rear Panels



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



Dedicated

S	Screwdrivers			Miniature Screw(1.0 - 3.5 mm)					
	Model -	Leve	r Start	DLV7020-SPC	DLV7030-SPC	DLV7031-SPC			
	Model	Push	ı to Start				DLV8020-SPC	DLV8030-SPC	DLV8031-SPC
	Input V	oltag/	e			100 V AC,	, 50/60 Hz		
	Torque	Adju	stment			Step	less		
ě	Torque (Nm)		0.05 - 0.55	0.3 - 1.1	0.3 - 1.0	0.1 - 0.55	0.3 - 1.1	0.3 - 1.0	
ĮĘ	Free Speed (min-1)		900	650	1200	900	650	1200	
Š			umption (W)	Approx. 25		Approx. 30	Approx. 25		Approx. 30
رزا	Screw S (mm)	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
1			Tapping Screw	1.2 - 2.6	2.0 - 3.0	2.0 - 3.0	1.2 - 2.6	2.0 - 3.0	2.0 - 3.0
Electric	Bit Typ	e	(mm)	3.5					
	Mass (g)			380 390					
	Cord Lo	ength	(m)			3 (with co	onnector)		
	Bit Gro	undin	g			Equipped a	s standard		

Optional Accessories



Torque Adjustment Cover (DLW5200: DLV7100/7200/ 8100/8200-SPC DLW5300: DLV7000/8000-SPC)

- Tampering or accidental turning of the torque adjustment cover by an operator can be prevented
- Flanged coupling DLW9011 can not be mounted on SPC type



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.



Dedicated

50	rew	drivers			Machine S	Screw(2.6 -	8.0 mm)				Е	Built-in brus	shless moto	or	
	Model	Lever Start	DLV7120 -SPC	DLV7130 -SPC	DLV7140 -SPC		DLV7251 -SPC	DLV7241 -SPC	DLV7231 -SPC	DLV30A 06L-SPC	DLV30A 12L-SPC	DLV30A 20L-SPC	DLV45A 06L-SPC	DLV45A 12L-SPC	DLV70A 06L-SPC
	wodei	Push to Start	DLV8120 -SPC	DLV8130 -SPC	DLV8140 -SPC	DLV8150 -SPC	DLV8251 -SPC	DLV8241 -SPC	DLV8231 -SPC	DLV30A 06P-SPC	DLV30A 12P-SPC	DLV30A 20P-SPC	DLV45A 06P-SPC	DLV45A 12P-SPC	DLV70A 06P-SPC
	Input V	oltage						100 \	/ AC, 50/60 H	łz *1					
·	Torque	Adjustment							Stepless						
Screwdriver	Torque	(Nm)	0.25 - 0.75	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	2.0 - 4.5	1.2 - 3.0	0.5 - 1.7	0.4	4 - 1.6/1.2 - 3	.0	2.0	- 4.5	3.8 - 7.0
φ	Free Sp	peed (min ⁻¹)	10	00	700	450	700	1200	2000	650	1200	2000	650	1200	650
ē		Consumption (W)	35			45									
	Screw	Size Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	4.5 - 6.0	3.5 - 5.0	2.6 - 4.0		2.6 - 5.0		4.5	- 6.0	5.0 - 8.0
걆	(mm) Tapping Screw	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0	4.0 - 5.0	3.0 - 4.0	2.5 - 3.5		2.5 - 4.0		4.0	- 5.0	4.5 - 6.0
Electric	Bit Typ	e (mm)	90	24	⊕ 55 *2	23			90	14	<u></u> 00	*2	₩ Zø	23	6.35
	Mass (g) 710(7100series)/670(8100series)			81	810 710(7200series)/670(8200series) 700				87	0 with pistol g	ırip				
	Cord Lo	ength (m)	(m) 3 (with connector)												
	Bit Gro	unding	Equipped as standard												

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

DLR5640-WN Non-CE

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

3	pecincations		
	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	
F	Count Return Function	ON / OFF	
ΙĘ	NG Judge Timing	WORK SET / DRIVER ON	
Screw Counter	Automatic / Manual OK Judge	AUTO / MANUAL	
×	Screwdriver Lock Function	ON / OFF	
ř	Multiple Link	Up to 10 counters can be connected.	
Ιŭ	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)	W101 × D140 × H57	
	Mass (g)	800	
	Plug Shape	USA	
	Accessories	2 m Power cord with U.S.A plug Suspension bail (2 pcs.)	

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.



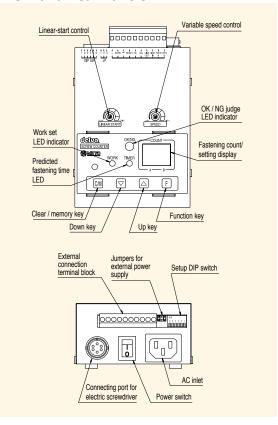


▲Example of use together with a sensor available in the market



lacktriangleThe example of installation

Front and Rear Panels



Screwdrivers designed for DLR5640-WN Non-CE Screw Fastening Counter





Specifications

оробінові									
Model		DLV7410A-SPC	DLV7410HA-SPC	DLV7420A-SPC	DLV7321-SPC	DLV7331-SPC			
Starting Method		Lever Start							
Torque Adjustme	ent		Stepless						
Torque	(Nm)	0.02	- 0.2	0.15 - 0.4	0.1 - 0.5	0.3 - 1.2			
Free Speed	(min ⁻¹)	500 - 750	700 - 1000	450 - 600	300 - 1000	200 - 700			
Power Consump	tion (W)		Approx. 10		Appr	ox. 35			
Screw Size	Machine Screw	1.0	- 2.3	1.6 - 2.6	1.0 - 3.0	2.0 - 3.5			
(mm)	Tapping Screw	1.0	- 2.0	1.4 - 2.3	1.2 - 2.6	2.0 - 3.0			
Bit Type (mm)		3.5							
Electrostatic Cou	untermeasure	Complied with EN100015-1							
Mass	(g)	230 350							
Cord Length	(m)	1.5 (with connector)							
Grounding Bit Fe	eature	Equipped as standard							

Combinations with Electric Screwdrivers

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



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







Specifications

<u>ગ</u>	Jecincanons								
	Model	DLT1173A	DLT1673A	DLT1973A					
	Measurement Range (Nm)	0.015 - 1.500	0.15 - 10.00	4.00 - 12.00					
	Calibration Precision	Within \pm 0.5% (Full Scale) For 0.2 Nm or less \pm 1 digit	Within \pm 0.5% (Full Scale) For 2 Nm or less \pm 1 digit	Within ± 0.5% (Full Scale)					
	Display	4-digit digital display	y (Single-line) Data sampling: 1000 times/sec. Disp	lay 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							
ē	Auto Power Off	Power off if left untouched for 10 minutes							
Checker	External Output	As per USB output Mitsutoyo Digimatic							
픙	Analog Output	Approx. 1.5 V max.	Approx. 1.0 V max.	Approx. 1.1 V max.					
	Analog output	No zero offset; identical waveforms produced in PP, PD, and TR modes							
Torque	Continuous Operation Time	20 hours							
2	External Dimensions (mm)	W160 × D	W160 × D110 × H47						
	Mass (g)	11	00	1400					
	Rechargeable Battery		Nickel metal hydride battery						
	Charger Type	DLE1833A							
	Input Voltage for Charger Charging Time	100 - 240 V AC, 50/60 Hz							
		Asia	Europe						
	Plug Shape (Asia & Europe)	=====							

Standard Accessories

		DLT1173A	DLT1	673A	DLT1973A
Joint/Bit		Screw Joint	Bit Joint	Spring for Joint	Soft Joint
Model		DLW4430	DLW4360	DLW4660	DLW4000
Measuring	(Nm)	0.15 - 1.5	0.15 - 6.5	0.15 - 1.5	4.0 - 12.0

Optional Accessories

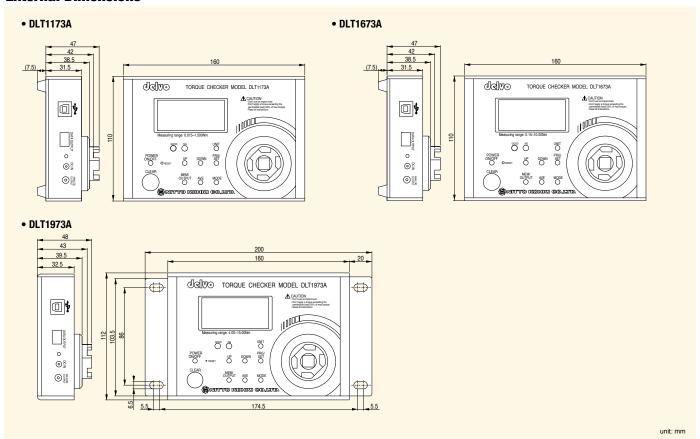
Model	Model	Part No.	Shape	Torque Range	DLT1173A	DLT1673A	DLT1973A
	DLW4330	TD03305	OD 4 mm type	0.015 to 0.25 Nm	0	_	-
Bit Joint	DLW4340	TD03306	OD 4 mm type	0.15 to 1.5 Nm	0	0	-
Dit 30iiit	DLW4350	TD03307	Hex 5 and Hex 6.35 types	0.15 to 1.5 Nm	0	0	-
	DLW4360	TD03308	Hex 5 and Hex 6.35 types	0.15 to 6.5 Nm	I	0	_
Screw Joint	DLW4430	TD03309	screw type(Bit size No.1)	0.15 to 1.5 Nm	0	0	-
Screw Julii	DLW4530*1	TD03310	screw type(Bit size No.2)	0.15 to 5 Nm	-	0	_
Soft Joint	DLW4000	TD04123	Hex 13 type	4.0 to 12.0 Nm	I	0	0
Hard Joint			4.0 to 12.0 NIII	-	_	0	
Spring	DLW4660	TV03826	Spring for DLW4340, 4350, 4430		0	0	_

^{⊚:} Standard accessories⊘: Available as option—: Unsupported*1 DLW4530 must be used at 5 Nm or less.



Selection of Torque Checker

DLT1173A (for miniature screw)	DLT1673A	DLT1973A
DLV3300 series*2, DLV5700 series, DLV5800 series, DLV7300 series	DLV7100 series, DLV8100 series, DLV7200 series, DLV8200 series, DLV7500 series	DLV45/70-IKE
DLV7000 series, DLV8000 series, DLV7400A series	DLV8500 series, DLV3100 series*3, DLV30/45/70-IKE series, A(DLV30A/45A/70A) series	DLV45A/70A



^{*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.

Accessories

Tool Balancer



Easy to adjust tension by using handle.

Model		TW-06R	TW-1R	RW-3	RW-5
Capacity	(g)	200 - 600	500 - 1500	1000 - 3000	2500 - 5000
Stroke	m)	1.5	1.5	2	2
Mass	(g)	300	300	700	900

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)		3800		

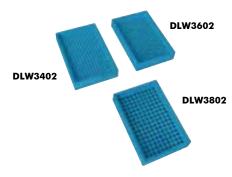
Pistol Grip DLW2300/2300ESD

(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)	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.

Model Part No.		Applicable Screwdriver	
DLW5200 TD00331		DLV7100, 7200, 8100 and 8200 series	
DLW5201*1 TD05639		DLV7100, 7200, 8100, 8200, 30 series and DLV30A	
DLW5300 TD00332		DLV7301, 7000, 8000 series (for 4 mm bit)	
DLW5400 TD01883		DLV7301 series (for 6.35 mm bit)	
DLW5500	TD00333	DLV7303 series (for 4 mm & 6.35 mm bit)	
DLW5600 TD00334		DLV7500, 8500 series	
DLW5700 TD02875		DLV5700, 5800, 7400A series	

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

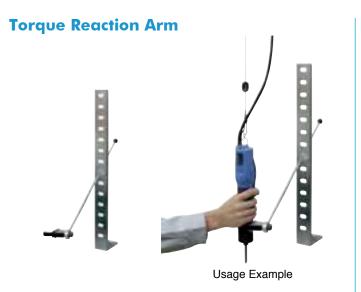
Flanged Coupling DLW9011

(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.

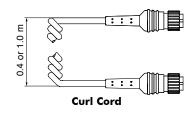
Accessories

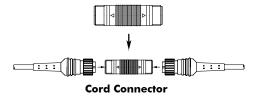


For enhanced productivity and prevention of operator's repetitive motion injury, a torque reaction arm should be used all together.

Part No.	Decription	Applicable Screwdriver
TD06180	Torque Reaction Arm	DLV30, 45, 70-IKE series A series(DLV30A/45A/70A)

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		

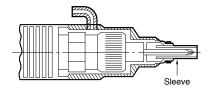
^{*1: &}quot;5P to 6P Exchange Cord" is used to connect "5-prong Screwdriver" to "6-prong Controller".

Sleeves and Vacuum Pickups

■ For DLV7400A/5700/5800/7300/7000/8000 series

Vacuum Pickup

DLP6500 (for DLV7000, 8000 series Electric Screwdrivers)



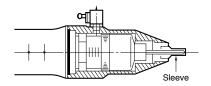
DLP5300 (for DLV7400A, 5700, 5800 series Electric Screwdrivers)

DLP7100 (for DLV7313 Electric Screwdriver)
DLP7200 (designed for OD 4 mm Shank Bit for

DLV7323/7333 Electric Screwdrivers)

DLP7300 (designed for 6.35 mm Hex. Shank Bit for

DLV7323/7333 Electric Screwdrivers)



Standard Set

Vacuum Pickup (Part No.)	DLP5300 (TD04342)	DLP6500 (TD00343)	DLP7100 (TD00345)	DLP7200 (TD00346)	DLP7300 (TD00347)
	DLS2120 × 1 pc.	DLS2124 × 1 pc.	DLS2122 × 1 pc.	DLS2123 × 1 pc.	DLS2135 × 1 pc.
Accessories	DLS2124 × 1 pc.	DLS2127 × 1 pc.	DLS2124 × 1 pc.	DLS2124 × 1 pc.	
7.0000001100		DLS2130 × 1 pc.	DLS2127 × 1 pc.	DLS2127 × 1 pc.	

Sleeve DLS2000 series (Plastic)

(for DLP5300/6500/7100/7200/7300 Vacuum Pickups and DLV7325/7335 Electric Screwdrivers)



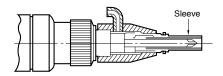
	Bit				
Model	Part No.	ød	øD		
DLS2120	TD00348	2			
DLS2121	TD00349	2.2	2.5	N= 0 4 0 44	
DLS2122	TD00350	2.5	3.5	No.0 × 1.8 × 44	
DLS2123	TD00351	2.7			
DLS2124	TD00352	3.1			$\dashv \oplus$
DLS2125	TD00353	3.3	4.5	No.0 × 2.5 × 44	∵ g
DLS2126	TD00354	3.5	4.5		<u> </u>
DLS2127	TD00355	3.7	1		Head d×L)
DLS2128	TD00356	4		No.1 × 3 × 44	
DLS2129	TD00357	4.2		190.1 ^ 3 ^ 44	! ભુ ∵
DLS2130	TD00358	4.5	5.5	No.1 × 4 × 44	hillips (No. ×
DLS2131	TD00359	4.7		190.1 ^ 4 ^ 44	ᆫᆸ
DLS2132	TD00360	5.1			-
DLS2133	TD00361	5.3	6.5	No.2 × 4 × 44	
DLS2134	TD00362	5.6		NO.2 * 4 * 44	
DLS2135	TD00363	6.1	7		

Sleeves and Vacuum Pickups

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

Vacuum Pickup

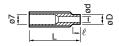
DLP7000 (for DLV7100, 7200, 8100, 8200- J series Electric Screwdrivers)



Standard Set

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

Sleeve DLS3000 series (Metal)

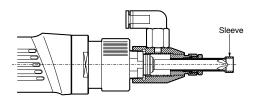


Sleeve							
e	øD	ød	Part No.	Model			
5	7	5.6	TD00364	DLS3222			
	9	6.1	TD05024	DLS3223			
-	9	6.4	TD00365	DLS3224			
	9	7.1	TD00366	DLS3225			
	7	4.6	TD00367	DLS3226			
18	7	5.1	TD00368	DLS3227			
	7	5.6	TD00369	DLS3228			
	9	6.1	TD00370	DLS3229			
-	9	6.4	TD00371	DLS3230			
	9	7.1	TD00372	DLS3231			

■ For DLV7100, 7200, 8100, 8200 series DLV30, 45, 70-IKE series A series(DLV30A, 45A, 70A)

Vacuum Pickup

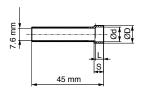
DLP7400



Standard Set

Vacuum Pickup (Part No.)	DLP7400 (TD07285)	DLP7400 for high torque (TD07286)	
	OD 5mm Hex. Shank	OD 6.35mm Hex. Shank	
Accessories	DLS3223 × 1 pc.	DLS4220 × 1 pc.	
Accessories	DLS3225 × 1 pc.	DLS4221 × 1 pc.	

Sleeve DLS4000 series (Metal)

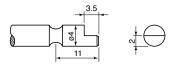


	Sleeve								
Model	Part No.	ød	øD	L	S	Bit Phillips Head (No. × d × L)			
Model	Part No.	mm	mm	mm	mm	(IVO. ~ U ~ L)			
DLS4220	TD08001	9.1	11	5	6	No.1 × 7 × 75			
						NK 35 No.2 × 7 × 75			
DLS4221	TD08002	10.6	12.5	5.5	7	No.3 × 7 × 75			

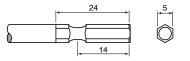
Unit: mm

NK BIT

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



■ For DLV7100, 7200, 8100, 8200, 3100, 30-IKE, A(DLV30A) series

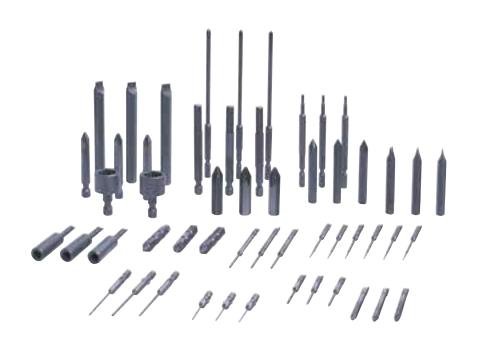


OD 4 mm Shank

OL.) 4 Mn	n Shar	1K		Unit: mn	
	Model	Part No.	Si	ize	Dimensions	
	WOUCI	raitino.	No.× d × L		Dimensions	
Phillips	NK4D	TD20009 TD20010 TD20021 TD20022 TD20029 TD20030 TD20037 TD20038	00 0	2 44 64 1.8 64 2.5 44 64 3 44 64	No. 20 3.5	
		TD20039 TD20040 TD20047 TD20048 TD20050	2 3	4 64 4 64 6 44 6 44	No. 11	
	Model	Part No.	W >	k T × L	Dimensions	
Plain Slot	NK4DM	TD20051 TD20052 TD20053 TD20054 TD20055	2 2.5 3 4 5	0.3 0.3 0.4 44 0.5 0.65	20 3.5	
	Model	Part No.		H × L	Dimensions	
Hexagon Head	NK4DX	TD20056 TD20057 TD20058 TD20059 TD20060		1.5 2 2.5 3 4	3.5 0 11 11	
	Model	Part No.	Н	« d » L	Dimensions	
Hex Socket	NK4DB	TD20064 TD20065 TD20066 TD20067	4 4.5 5 5 5.5	6 7 7 8	Ø _H 9 3.5 11 11 11 11 11 11 11 11 11 11 11 11 11	

OD 5 mm Hex. Shank

OD 5 IIIII HEX. SHUIK				Unit: mm			
	Model Part No.			Size	Dimensions		
			No.	×d×L			
		TD20193		4 70	- p 90		
		TD20194		100	l		
		TD20196	1	5 70			
S		TD20197		100	30 14 5		
Phillips	NK31	TD20200		6 70	L		
듄	111101	TD20201		100	اِت		
		TD20210		5 70	No. 8 1 1 0		
		TD20211	2	100	' <u> 14 </u>		
		TD20214		6 70	L 24 5		
		TD20215		100	7		
	Model	Part No.		No.× L	Dimensions		
		TD20224		1 70	y X-X'		
Phillips		TD20225		100	l ^ *5		
≣	NK16	TD20232		70	No. X 14		
듄		TD20233		2 100) ^L \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
		TD20235		150			
	Model	Part No.	$H \times d \times L$		Dimensions		
		TD20254	2	4 70	pl		
		Part No.		H × L			
ᅙ		TD20256		2.5	30 1 14 5		
ĕ		TD20258		3	8		
Ξ	NK31X	TD20260		4 70			
ago	I IIII	TD20262		5	1 14 1		
Hexagon Head				· · · ·	L 24 5		
Ŧ							
					О _Н 14 5		
	Model	Part No.	H × D	×d×L	Dimensions		
		TD20272	5.5 9	4 70	p 9g		
		TD20274	6 10	4.5 70			
		TD20276	7 44	- 70			
Hex Socket		TD20277	7 11	5.5 100	25 24 5		
	NK31B	TD20278	8 13	6 70]		
		TD20279	0 13	100	90		
		TD20282	10 16	8 70			
		TD20283	10 16	° 100	H 25 14 14		
				1 1 -	L 1 24 5		
					- L 3		



NK BIT

For DLV7500, 8500, 7100, 7200, 8100, 8200, 02, 12, 16, 30/45/70-IKE

A(DLV30A/45A/70A) series





OD 6.35 mm Hex. Shank Unit: mm Size Model Part No. **Dimensions** No.× d × L TD20306 TD20307 75 100 4 TD20308 50 75 100 120 150 TD20309 TD20310 TD20311 TD20312 200 50 75 TD20313 TD20319 TD20320 NK35 100 TD20321 2 TD20322 TD20323 150 200 50 75 TD20324 TD20327 TD20328 TD20329 100 120 150 TD20330 TD20331 TD20332 Model Part No. **Dimensions** TD20335 TD20336 3.8 NK36 50 TD20337 2 TD20338 Model Part No. Dimensions No.× L TD20354 50 75 TD20355 100 TD20356 TD20357 TD20358 150 TD20359 200 50 75 TD20362 **1**21 NK15 TD20363 100 150 TD20364 2 TD20366 200 TD20367 75 100 150 TD20371 TD20372 TD20374 TD20375 Model Part No. $W \times T \times L$ **Dimensions** TD20378 50 75 Plain Slot TD20379 0.9 NK35M TD20380 100 Model Part No. **Dimensions** $H \times d \times L$ TD20382 1.27 3 70 TD20385 TD20388 Hexagon Head Part No. H × L NK35X TD20391 2.5 TD20394 70 TD20400 50 TD20404 H × D **Dimensions** Model Part No. TD20442 75 10 8 16 TD20443 100 Hex Socket 0 ------6.35 TD20457 75 NK35BN 13 19 10 TD20458 100 25

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

SAFETY GUIDE

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



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.

MEMO	



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Focused on you

NITTO KOHKI CO., LTD.

Fax: +1-630-924-0303

Fax: +1-630-924-0808

Head Office -

9-4, Nakaikegami 2-chome, Ohta-ku, Tokyo 146-8555, Japan

Fax: +81-3-3753-8791 E-mail: overseas@nitto-kohki.co.jp Tel: +81-3-3755-1111

Web www.nitto-kohki.co.jp/e

Overseas Affiliates / Offices

NITTO KOHKI U.S.A., INC.

46 Chancellor Drive, Roselle, Illinois 60172, U.S.A. For Tool

Tel: +1-630-924-9393

For Cupla Fax: +1-630-924-1174

Tel: +1-630-924-5959

For Pump

Tel: +1-630-924-8811 www.nittokohki.com/

NITTO KOHKI EUROPE GMBH

Gottlieb-Daimler-Str. 10, 71144 Steinenbronn, Germany Tel: +49-7157-989555-0 Fax: +49-7157-989555-40 www.nitto-kohki.eu/

NITTO KOHKI EUROPE GMBH UK Branch

Unit A5, Langham Park Industrial Estate, Maple Road, Castle Donington, Derbyshire DE74 2UT, United Kingdom Tel: +44-1332-653800 Fax: +44-1332-987273 www.nitto-kohki.eu/

NITTO KOHKI AUSTRALIA PTY LTD

77 Brandl Street, Eight Mile Plains, Queensland 4113, Australia Tel: +61-7-3340-4600 Fax: +61-73340-4640 www.nitto-australia.com.au/

NITTO KOHKI (SHANGHAI) CO., LTD.

Room1506, Suite C, Orient International Plaza, No.85 Loushanguan Road, Shanghai 200336, China Fax: +86-21-6472-6957 Tel: +86-21-6415-3935

NITTO KOHKI (SHANGHAI) CO., LTD. Shenzhen Branch

2005C Shenzhen ICC Tower, Fuhuasanlu 168, Futian District, Shenzhen, Guangdong 518048, China Tel: +86-755-8375-2185 Fax: +86-755-8375-2187 www.nitto-kohki.cn/

NITTO KOHKI CO., LTD. Singapore Branch

10 Ubi Crescent #01-62, Ubi Techpark Lobby D, Singapore 408564 Tel: +65-6227-5360 Fax: +65-6227-0192 www.nitto-kohki.co.jp/e/nksb/index.html

NITTO KOHKI CO., LTD. Bangkok Representative Office

M&A Business Center, Q-House Convent Bldg., 38 Convent Rd., Silom, Bangrak, Bangkok 10500, Thailand Tel: +66-2632-0307 Fax: +66-2632-0308 www.nittobkk.com/

NITTO KOHKI CO., LTD. India Liaison Office

3rd Floor, Building No.9-A DLF Cyber City, Phase-III, Gurgaon, Haryana 122002, India Fax: +65-6227-0192 Tel: +91-124-454-5031

NITTO KOHKI CO., LTD. Mexico Representative Office

Torre Corporativo 1 Piso 11 Central Park Armando Birlain Shaffler #2001 Col Centro Sur, Queretaro, Qro, C.P. 76090, Mexico Tel: +52-442-290-1234





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