

Transformerless (AC)
 Brush motor / Brushless motor
 Miniature screw / Precision screw / Machine screw
 1.0 - 3.5 mm



DLV7000/8000 Series Non-CE



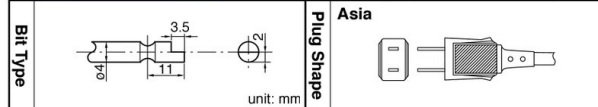
Features

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)

Specifications

Electric Screwdriver	Model	Standard				High Speed	
		DLV7020-EMN	DLV7030-EMN	DLV8020-EMN	DLV8030-EMN	DLV7031-EMN	DLV8031-EMN
	100 V AC Input						
	115 V AC Input	DLV7020-FME*1	DLV7030-FME*1	DLV8020-FME*1	DLV8030-FME*1		
	Starting Method	Lever Start		Push to Start		Lever Start	Push to Start
	Torque Adjustment	Stepless					
	Torque (Nm [lbf-in])	0.05 - 0.55 [0.4 - 4.9]	0.3 - 1.1 [2.7 - 9.7]	0.1 - 0.55 [0.9 - 4.9]	0.3 - 1.1 [2.7 - 8.9]	0.3 - 1.0 [2.7 - 8.9]	
	Free Speed (min ⁻¹)	900	650	900	650	1200	
	Power Consumption (W)	Approx. 25					
	Screw Size	Machine Screw		Machine Screw		Machine Screw	
	(mm)	1.0 - 3.0	2.0 - 3.5	1.0 - 3.0	2.0 - 3.5	2.0 - 3.0	
	Tapping Screw	1.2 - 2.6	2.0 - 3.0	1.2 - 2.6	2.0 - 3.0	2.0 - 3.0	
	Mass (g [lbs])	400 [0.88]		410 [0.90]		400 [0.88]	410 [0.90]

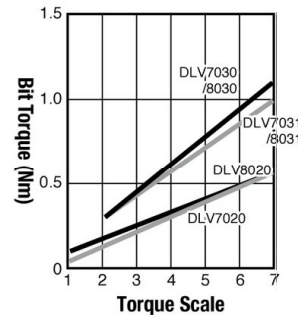


*1: These models are made to order.

Standard Accessories

Model		DLV7020 / 8020	DLV7030 / 8030 / 7031 / 8031
Bit NK4D	No.0 × 2.5 × 44	1	-
	No.1 × 3 × 44	-	1
	No.1 × 4 × 44	1	-
	No.2 × 4 × 44	-	1
Suspension Bail		1	

Torque Diagrams (for reference)



Optional Accessories

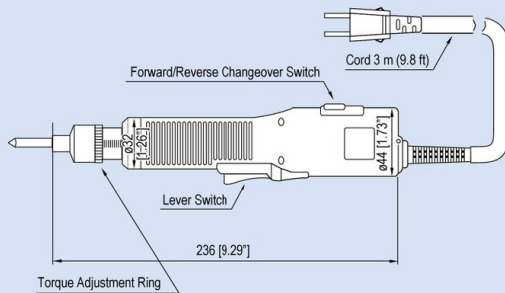


This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set.

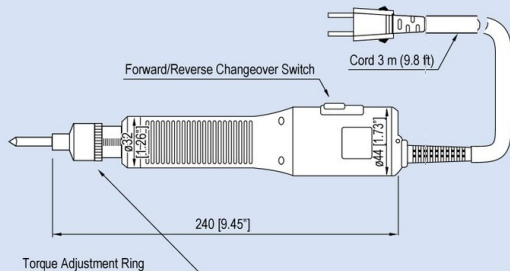
Torque Adjustment Ring Cover
 DLW5300 (TD00332)

External Dimensions

•DLV7020/7030/7031



•DLV8020/8030/8031



unit: mm [inch]

Transformerless (AC)
 Brush motor / Brushless motor
 Miniature screw / Precision screw / Machine screw
 2.6 - 6.0 mm



115V

Jelvo

DLV7100/7200/8100/8200 Series Non-CE



Features

Long Time Selling, Reliable, and High Performance

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

Specifications

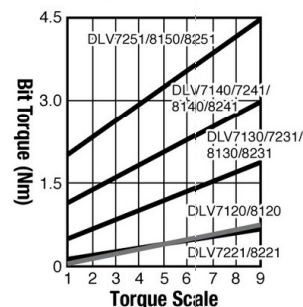
Model	Standard			High Speed			High Torque	Standard			High Torque	High Speed			High Torque	
	DLV7120-FJE	DLV7130-FJE	DLV7140-FJE	DLV7221-FJE	DLV7231-FJE	DLV7241-FJE	DLV7251-FJE	DLV8120-FJE	DLV8130-FJE	DLV8140-FJE	DLV8150-FJE	DLV8221-FJE	DLV8231-FJE	DLV8241-FJE	DLV8251-FJE	
Bit Shank: Hex. 5 mm (0.2")																
Bit Shank: Hex. 6.35 mm (1/4")																
Starting Method	Lever Start							Push to Start								
Input Voltage	115 V AC, 50/60 Hz															
Torque Adjustment	Stepless															
Torque (Nm)	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	0.35 - 0.70	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	
(lbf-in)	[3.10 - 6.20]	[4.4 - 15.1]	[10.6 - 26.6]	[3.10 - 6.20]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	[3.10 - 6.20]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	[3.10 - 6.20]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	
Free Speed (min ⁻¹)	900	900	600	1800	1800	1100	700	900	900	600	400	1800	1800	1100	700	
Power Consumption (W)	Approx. 35			Approx. 45				Approx. 35			Approx. 45					
Screw Size (mm)	Machine Screw 2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	
Tapping Screw	2.6 - 3.0	2.3 - 3.5	3.5 - 4.0	2.6 - 3.0	2.3 - 3.5	3.0 - 4.0	4.5 - 5.0	2.6 - 3.0	2.3 - 3.5	3.5 - 4.0	4.5 - 5.0	2.6 - 3.0	2.3 - 3.5	3.0 - 4.0	4.0 - 5.0	
Mass (g [lbs])	700 [1.54]						890 [1.96]	690 [1.52]			890 [1.96]			690 [1.52]		
Bit Type (mm)	For FJE		For FKE		Asia		Plug Shape									

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

Standard Accessories

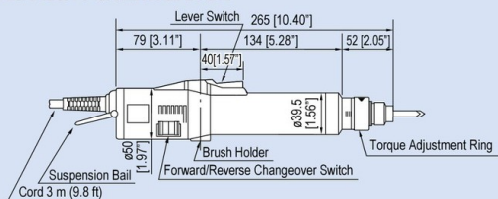
Model	FJE	FKE except DLV7251 / 8150 / 8251-FKE	DLV7251 / 8150 / 8251-FKE
Bit			
NK31 No.1 x 6 x 70	1	-	-
NK31 No.2 x 6 x 70	1	-	-
NK31 No.1 x 7 x 75	-	1	-
NK35 No.2 x 7 x 75	-	-	1
NK35 No.3 x 7 x 50	-	-	1
Pistol Grip (DLW2300)	-	1	1
Spare Carbon Brush		2	
Connection Cord		1	
Suspension Bail		1	

Torque Diagrams (for reference)

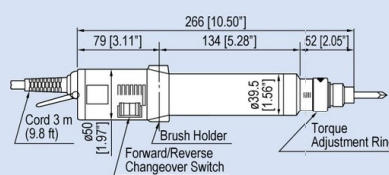


External Dimensions

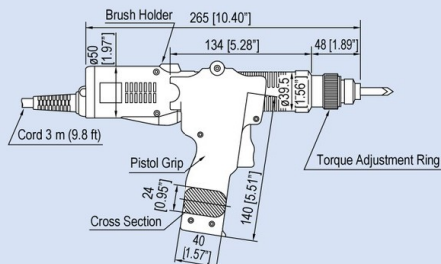
DLV7120/7130/7140/7221/7231/7241



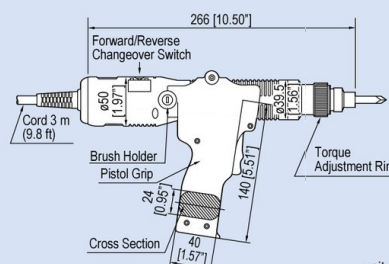
DLV8120/8130/8140/8221/8231/8241



DLV7251



DLV8150/8251



unit: mm [inch]

Transformerless (AC)
 Brush motor / Brushless motor
 Miniature screw / Precision screw / Machine screw
 2.6 - 6.0 mm



DLV7104/8104/8204 Series Non-CE



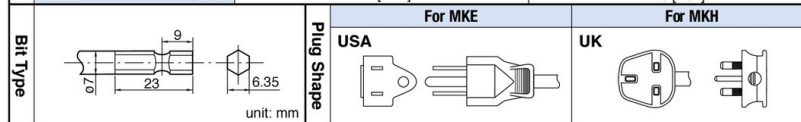
Features

The most popular models have been redesigned

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

Specifications

Model	Plug Shape: USA	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
	Plug Shape: UK	DLV7124-MKH	DLV7134-MKH	DLV7144-MKH	DLV8124-MKH	DLV8134-MKH	DLV8144-MKH	DLV8154-MKH	DLV8224-MKH	DLV8234-MKH	DLV8244-MKH
Starting Method		Lever Start						Push to Start			
Input Voltage		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
	[lbf-in]	[2.2 - 6.6]	[4.4 - 15.1]	[10.6 - 26.6]	[2.2 - 6.6]	[4.4 - 15.1]	[10.6 - 26.6]	[17.7 - 39.8]	[3.1 - 6.2]	[4.4 - 15.1]	[10.6 - 26.6]
Free Speed	(min ⁻¹)	900		600	900		600	400	2000	1800	1100
Power Consumption	(W)	35						45			
Screw Size	Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0
	Tapping Screw	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0	4.5 - 5.0	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0
Mass	(g [lbs])	720 [1.59]				710 [1.57]			910 [2.01]	710 [1.57]	

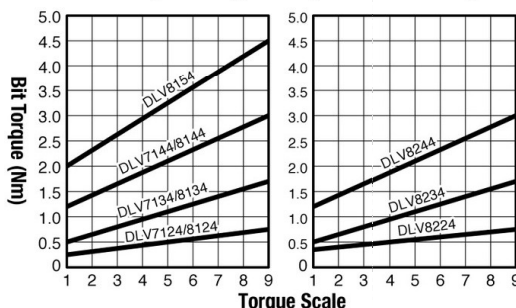


Please contact us for 5 mm bit type.

Standard Accessories

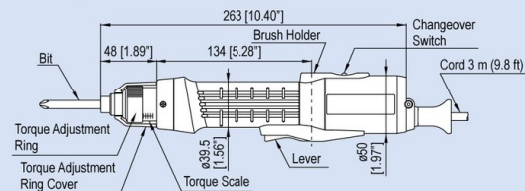
Model		MKE/MKH	8154-MKE/MKH
Bit NK35	No.1 × 7 × 75	1	-
	No.2 × 7 × 75	1	1
	No.3 × 7 × 50	-	1
Spare Carbon Brush		2	
Suspension Bail		1	

Torque Diagrams (for reference)

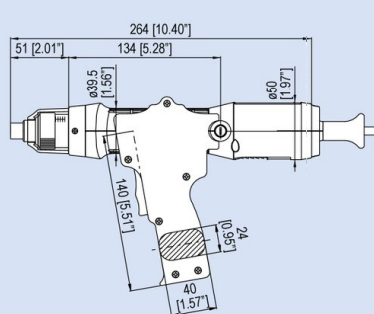


External Dimensions

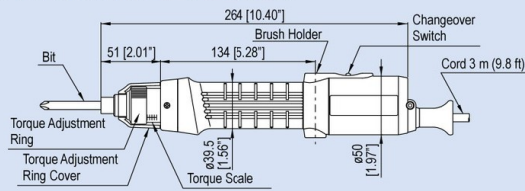
•DLV7124 / 7134 / 7144



•DLV8154



•DLV8124 / 8134 / 8144 / 8224 / 8234 / 8244

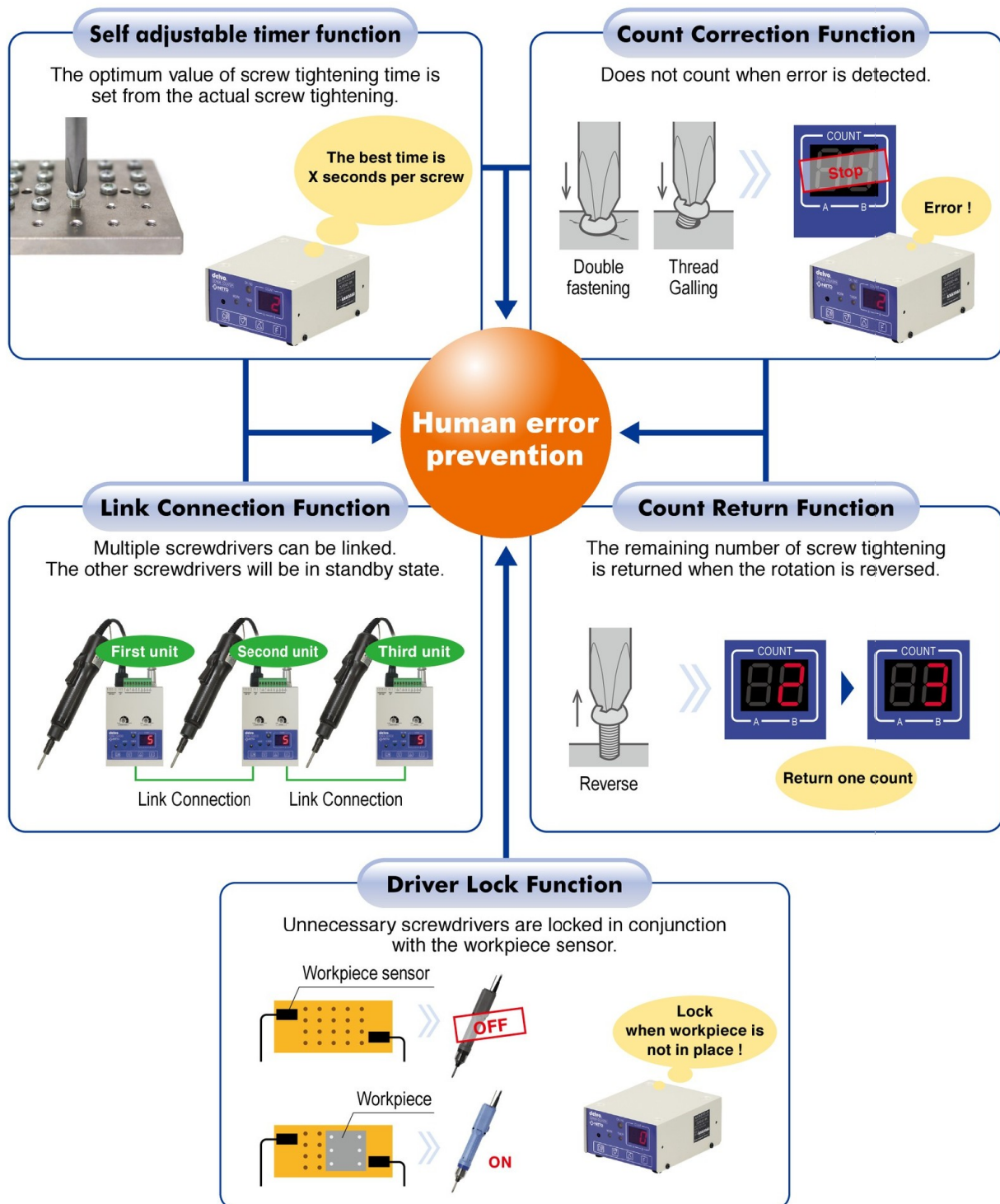


unit: mm [inch]

Screw Fastening Counter Series

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

The error is detected based on the set tightening time.



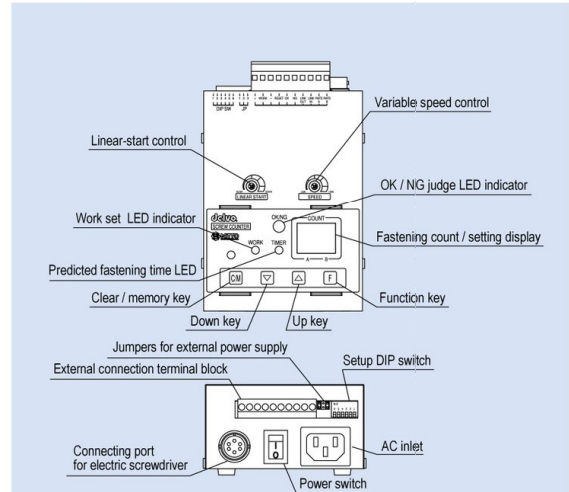
Screw Fastening Counter

DLR5640-WN

- Functions of the controller and counter are integrated into a single unit.
- Equipped with Linear Start Function that gradually increases the rotation speed at start.
- Universal power input for use anywhere in the world.

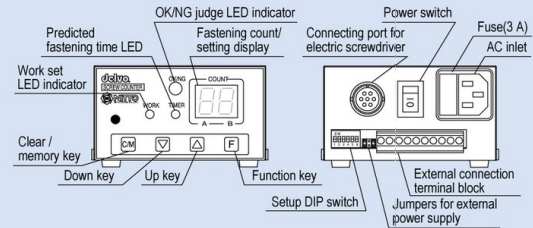


Front and Rear Panels



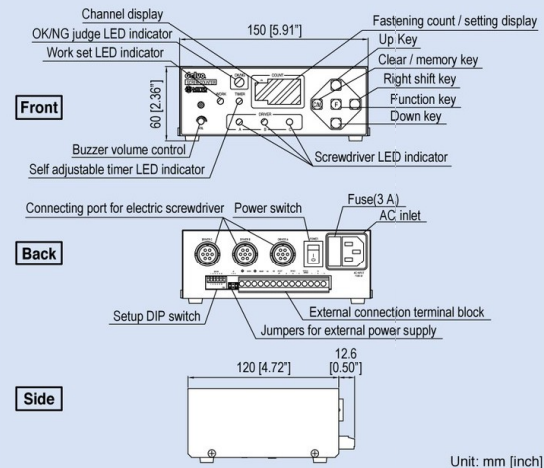
DLR5040A-WE

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



DLR5340-WE

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



Function List

	Self adjusting timer function	Count correct function	Link connection function	Count return function	Driver lock function	Number of connecting ports
DLR5640-WN	•	•	•	•	•	1
DLR5040A-WE	•	•	•	•	•	1
DLR5340-WE	•	•	•	•	•	3

DLR5640-WN Non-CE

Screw Fastening Counter



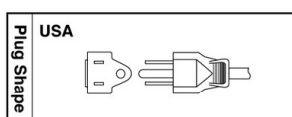
Features

The self-adjustable timer function automatically assesses the time required to complete fastening each screw and reflects it on the judging time setting

- Ideally suited for the assembly lines of vehicles and electrical equipment requiring reliable screw fastening
- The controller receives signals from electric screwdrivers to provide highly reliable screw fastening control
- Functions of the controller and counter are integrated into a single unit
- Count Return Function: When a screw is loosened, a reverse signal output from the electric screwdriver reverses the count by one
- The self-adjustable timer function automatically assesses the time required to complete tightening each screw and reflects it on the judging time setting
- The Count Correction Function does not count elevated screws or double fastening as fastening errors
- External Count Function: To be available to various assembling jobs, the DLR5640 enables counting of two kinds of parts (up to 9 counts each) in addition to the screw tightening counting. These kinds of counting can be used together.
- Link Connection Function: You can build up a simple sequential screw tightening system by connecting the DLR5640 screw tightening counters in series without using any external controller such as a programmable controller
- Driver Lock Function prevents unexpected start of screwdrivers
- Desktop or wall-hung installation is available
- Input voltage range from 100 V AC to 240 V AC is acceptable in any part of the world

Specifications

Model	DLR5640-WN
Count	1 - 99
Counting Method	Count-up / Count-down
Count Correction Function	Count normal fastening only
Self Adjustable Timer Setting	0.01 to 0.99 sec.
Work Detection Function	Yes (1 terminal) / No
External Count Input	2 terminals (PARTS A / PARTS B)
Work Installation Timer Setting	0 to 9.5 sec.
OK Output Timer Setting	0 to 9.5 sec.
NG Alarm	ON(1) / ON(2) / OFF
OK Buzzer	ON(1) / ON(2) / ON(3) / OFF
Count Return Function	ON / OFF
NG Judge Timing	WORK SET / DRIVER ON
Automatic / Manual OK Judge	AUTO / MANUAL
Screwdriver Lock Function	ON / OFF
Multiple Link	Up to 10 counters can be connected.
External Inputs on Terminal Block	SENSOR / RESET / LINK-IN / PARTS A / PARTS B
External Outputs on Terminal Block	OK / NG / LINK-OUT
Parameter Memory	Parameters stored in internal nonvolatile memory
Screwdriver Control	SPEED / LINEAR START
Input Voltage	100 - 240 V AC, 50/60 Hz
Screwdriver Power Supply	33 V DC, 1.5 A
External Dimensions (mm [inch])	W101 x D140 x H57 [W3.98" x D5.51" x H2.24"]
Mass (g [lbs])	800 [1.76]
Accessories	2 m Power cord with USA plug Suspension bail (2 pcs.)



Example of use together with a sensor available in the market



The example of installation

LINK Function (Common to DLR5040A & DLR5640)

When counters are connected and activated in the screw fastening sequence as shown below, all screwdrivers are on standby except the first one in the sequence. Only when the first screw fastening is finished, can the next screwdriver change from standby to ready. When the last fastening in the sequence is finished, the first screwdriver is once again ready and the sequence can be repeated again. N.B. Up to 10 screwdriver/counter sets can be connected to the LINK.



Screwdrivers designed for DLR5640-WN Non-CE



DLV7410A/7410HA/7420A-SPC



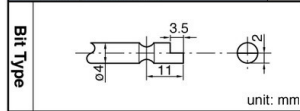
DLV7321/7331-SPC



DLR5640-WN

Specifications

Model	DLV7410A-SPC	DLV7410HA-SPC	DLV7420A-SPC	DLV7321-SPC	DLV7331-SPC
Starting Method	Lever Start				
Torque Adjustment	Stepless				
Torque (Nm [lbf-in])	0.02 - 0.2 [0.2 - 1.8]		0.15 - 0.4 [1.3 - 3.5]	0.1 - 0.5 [1.9 - 4.4]	0.3 - 1.2 [2.7 - 10.6]
Free Speed (min ⁻¹)	500 - 750	700 - 1000	450 - 600	300 - 1000	200 - 700
Power Consumption (W)	Approx. 10				
Screw Size (mm)	Machine Screw	1.0 - 2.3	1.6 - 2.6	1.0 - 3.0	2.0 - 3.5
	Tapping Screw	1.0 - 2.0	1.4 - 2.3	1.2 - 2.6	2.0 - 3.0
Electrostatic Countermeasure	Complied with EN100015-1				
Mass (g [lbs])	230 [0.51]			350 [0.77]	
Cord Length (m)	1.5 (with connector)				
Grounding Bit Feature	Equipped as standard				



Combinations with Electric Screwdrivers

Screwdriver Model	Connection	Remarks
DLV7410A / 7410HA / 7420A-SPC	The cord comes with screwdriver	Screwdriver for the screw fastening counter only
DLV7321 / 7331-SPC	Direct connection to power source	
DLV7410A / 7410HA / 7420A / 7419A / 7419HA / 7429A-BMN	Optional conversion cord (TD02925 DLW9072)	General-purpose screwdriver *1

*1: The Count Return Function is not available.

Optional Accessories

DLW9072(TD02925)

Torque Adjustment Ring Cover
(DLW5700: DLV7400A-SPC
DLW5300: DLV7300-SPC)

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

DLR5040A-WE Non-CE



Specifications

Model	DLR5040A-WE
Count	1 - 99
Counting Method	Count-up / Count-down
Count Correction Function	Count normal fastening only
Self Adjustable Timer Setting	0.01 to 0.99 sec.
Work Detection Function	Yes (1 terminal) / No
External Count Input	2 terminals (PARTS A / PARTS B)
Work Installation Timer Setting	0 to 9.5 sec.
OK Output Timer Setting	0 to 9.5 sec.
NG Alarm	ON(1) / ON(2) / OFF
OK Buzzer	ON(1) / ON(2) / ON(3) / OFF
Count Return Function	ON / OFF
NG Judge Timing	WORK SET / DRIVER ON
Automatic / Manual OK Judge	AUTO / MANUAL
Screwdriver Lock Function	ON / OFF
Multiple Link	Up to 10 counters can be connected.
External Inputs on Terminal Block	SENSOR / RESET / LINK-IN / PARTS A / PARTS B
External Outputs on Terminal Block	OK / NG / LINK-OUT
Parameter Memory	Parameters stored in internal nonvolatile memory
Input Voltage	100 - 240 V AC, 50/60 Hz
External Dimensions (mm [inch])	W100 x D120 x H60 [W3.94" x D4.72" x H2.36"]
Mass (g [lbs])	470 [1.04]

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

Screw Fastening Counter

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

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.



Example of use together with a sensor available in the market

DLR5340-WE Non-CE



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.
OK Output Timer Setting	0 to 9.5 sec.
NG Alarm	ON(1) / ON(2) / OFF
OK Buzzer	ON(1) / ON(2) / ON(3) / ON(4) / ON(5) / OFF
Count Return Function	ON / OFF
Screwdriver Lock 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 [inch])	W150 x D120 x H60 [W5.91" x D4.72" x H2.36"]
Mass (g [lbs])	620 [1.37]

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

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

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

Small



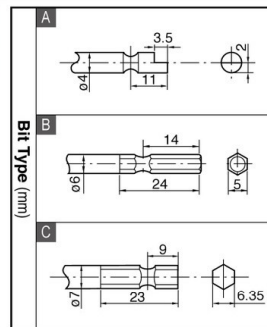
Big

Specifications

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

		Machine Screw (2.6 - 8.0 mm)					
Model	Lever Start	DLV7120-SPC	DLV7130-SPC	DLV7140-SPC	DLV7231-SPC	DLV7241-SPC	DLV7241-SPC
	Push to Start	DLV8120-SPC	DLV8130-SPC	DLV8140-SPC	DLV8231-SPC	DLV8241-SPC	DLV8241-SPC
Input Voltage		100 V AC, 50/60 Hz *1					
Torque Adjustment		Stepless					
Torque	(Nm [lbf-in])	0.35 - 0.70 [3.10 - 6.20]	0.50 - 1.70 [4.4 - 15.1]	1.20 - 3.00 [10.6 - 26.6]	0.50 - 1.70 [4.4 - 15.1]	1.20 - 3.00 [10.6 - 26.6]	1.20 - 3.00 [10.6 - 26.6]
Free Speed	(min ⁻¹)	1000		700	2000	1200	
Power Consumption	(W)	35				45	
Screw Size	Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 4.0	3.5 - 5.0	
	Tapping Screw	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	2.5 - 3.5	3.0 - 4.0	
Bit Type		B *2					
Mass	(g [lbs])	710 [1.57] (7100series) / 570 [1.48] (8100series)			710 [1.57] (7200series) / 670 [1.48] (8200series)		
Cord Length	(m)	3 (with connector)					
Bit Grounding		Equipped as standard					

		Machine Screw (2.6 - 8.0 mm)	
Model	Lever Start	DLV8150-SPC	DLV7251-SPC
	Push to Start	DLV8251-SPC	DLV8251-SPC
Input Voltage		100 V AC, 50/60 Hz *1	
Torque Adjustment		Stepless	
Torque	(Nm [lbf-in])	2.0 - 4.5 [17.7 - 39.8]	
Free Speed	(min ⁻¹)	450	700
Power Consumption	(W)	45	
Screw Size	Machine Screw	4.5 - 6.0	
	Tapping Screw	4.0 - 5.0	
Bit Type		C	
Mass	(g [lbs])	810 [1.79]	
Cord Length	(m)	3 (with connector)	
Bit Grounding		Equipped as standard	



		Machine Screw (2.6 - 8.0 mm)						
Model	Lever Start	DLV30A06L-SPC	DLV30A12L-SPC	DLV30A20L-SPC	DLV45A06L-SPC	DLV45A12L-SPC	DLV70A06L-SPC	
	Push to Start	DLV30A06P-SPC	DLV30A12P-SPC	DLV30A20P-SPC	DLV45A06P-SPC	DLV45A12P-SPC	DLV70A06P-SPC	
Input Voltage		100 V AC, 50/60 Hz *1						
Torque Adjustment		Stepless						
Torque	(Nm [lbf-in])	0.4 - 1.6 / 1.2 - 3.0 [3.5 - 14.2 / 10.6 - 26.6]			2.0 - 4.5 [17.7 - 39.8]		3.8 - 7.0 [33.6 - 62.0]	
Free Speed	(min ⁻¹)	650	1200	2000	650	1200	650	
Power Consumption	(W)	45						
Screw Size	Machine Screw	2.6 - 5.0			4.5 - 6.0		5.0 - 8.0	
	Tapping Screw	2.5 - 4.0			4.0 - 5.0		4.5 - 6.0	
Bit Type		B *2				C		
Mass	(g [lbs])	700 [1.54]			870 [1.92] with pistol grip			
Cord Length	(m)	3 (with connector)						
Bit Grounding		Equipped as standard						

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

Optional Accessories

		
<p>Torque Adjustment Ring Cover DLW5200: DLV7100/7200/8100/8200-SPC DLW5300: DLV7000/8000-SPC</p> <ul style="list-style-type: none"> This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set. Flanged coupling DLW9011 can not be mounted on SPC type 	<p>Pistol Grip DLW2300: DLV7100/7200/ 8100/8200/30/45/70-SPC</p> <ul style="list-style-type: none"> Suitable for horizontal operation 	<p>TD04061 SPC cord for commercial power source (optional)</p> <ul style="list-style-type: none"> Dedicated screwdrivers can be directly plugged in commercial power source.

Transformerless (AC)
 Brush motor **Brushless motor**
 Miniature screw Precision screw **Machine screw**
2.6 - 8.0 mm



Jelvo Brushless Type

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



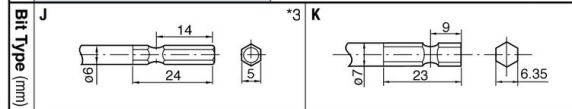
Features

For automatic assembly robot

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

Specifications

		Low Speed	Standard	High Speed	Low Speed	Standard	Low Speed
Model	Bit	DLV30A06A-N(AA) : J	DLV30A12A-N(AA) : J	DLV30A20A-N(AA) : J	DLV45A06A-N(AA) : K	DLV45A12A-N(AA) : K	DLV70A06A-N(AA) : K
	Coupling with flange	DLV30A06A-F(AA) : J	DLV30A12A-F(AA) : J	DLV30A20A-F(AA) : J	DLV45A06A-F(AA) : K	DLV45A12A-F(AA) : K	DLV70A06A-F(AA) : K
	Coupling with M41 screw	DLV30A06A-M(AA) : J	DLV30A12A-M(AA) : J	DLV30A20A-M(AA) : J	DLV45A06A-M(AA) : K	DLV45A12A-M(AA) : K	DLV70A06A-M(AA) : K
Input Voltage		100 V AC, 50/60 Hz					
Torque (Nm [lbf-in])	Low Torque Spring*1	0.4 - 1.6 [3.5 - 14.2]			2.0 - 4.5 [17.7 - 39.8]		3.8 - 7.0 [33.6 - 62.0]
	High Torque Spring*2	1.2 - 3.0 [10.6 - 26.6]					
Free Speed (min ⁻¹)		650	1200	2000	650	1200	650
Screw Size (mm)	Machine Screw	2.6 - 5.0			4.5 - 6.0		5.0 - 8.0
	Tapping Screw	2.5 - 4.0			4.0 - 5.0		4.5 - 6.0
Mass (g [lbs])	Standard coupling	700 [1.54]			780 [1.72]		
	Coupling with flange	760 [1.68]			840 [1.85]		
	Coupling with M41 screw	740 [1.63]			820 [1.81]		
Power Consumption (W)		45					
Starting Method		External input signal					
Input signal		Start signal / Forward signal / Reverse signal (5 - 24 V DC)					
Output signal		Torque-up signal (Voltage under 30 V DC and current 20 mA)					
Standard Accessories		• Bit NK31 (No.2 × 6 × 70): 1 pc. • Low torque spring: 1 pc.			• Bit NK35 (No.2 × 7 × 75): 1 pc.		



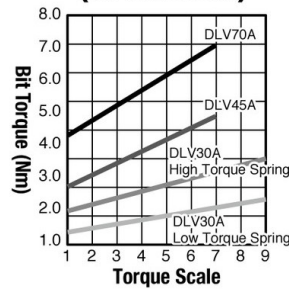
*1: Standard Accessory
 *2: Installed
 *3: DLV30A is available upon request for use with 6.35 mm hex. shank bits.

Optional Accessories

Vacuum Pickup
 DLP7400(M3/M4 screws)
 DLP7400 for high torque (M5/M6 screws)
 * Please see page 39 for details.

Vacuum Pump
 DLP2530/2570

Torque Diagrams (for reference)



Screwdriver Cable Breakdown List

Power/Input Signal Cable

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

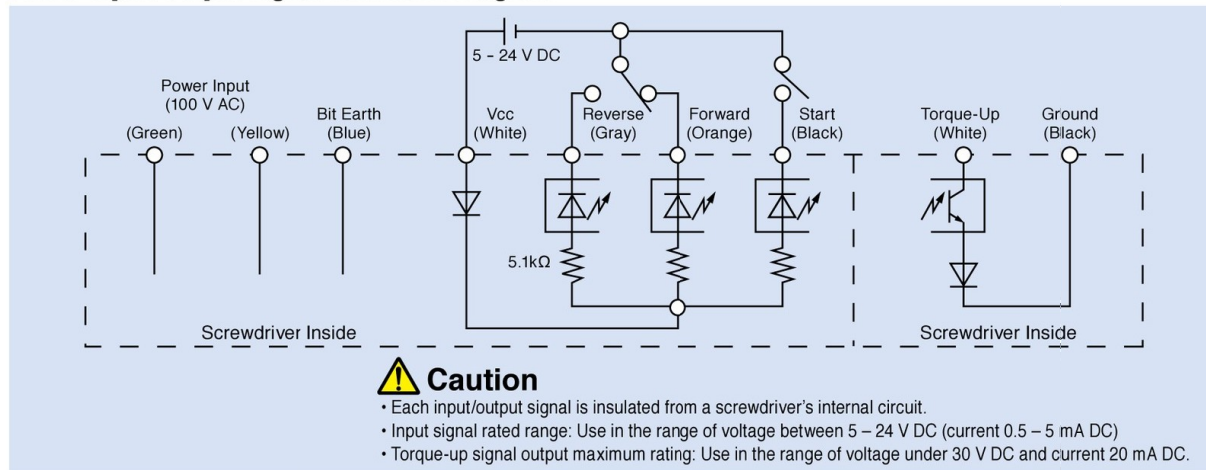
Output Signal Cable

Color	Details
White	Torque-up signal output
Black	Ground

A Series (For Automation) Model DLV30A/45A/70A

Jelvo Brushless Type

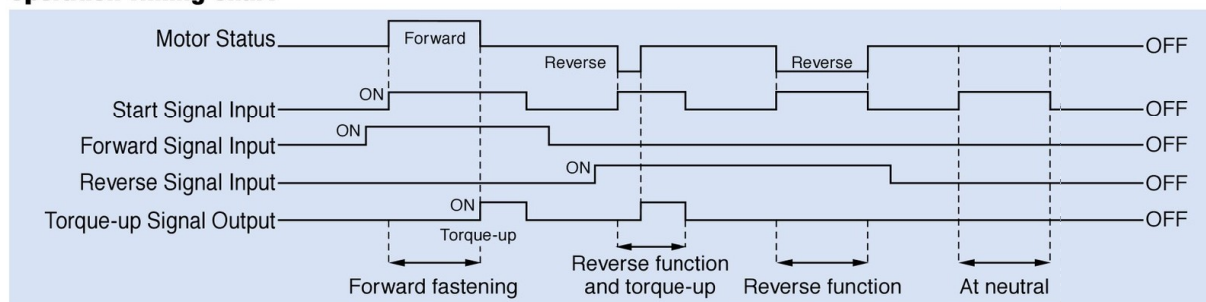
Power Input/Output Signal Schematic Diagram



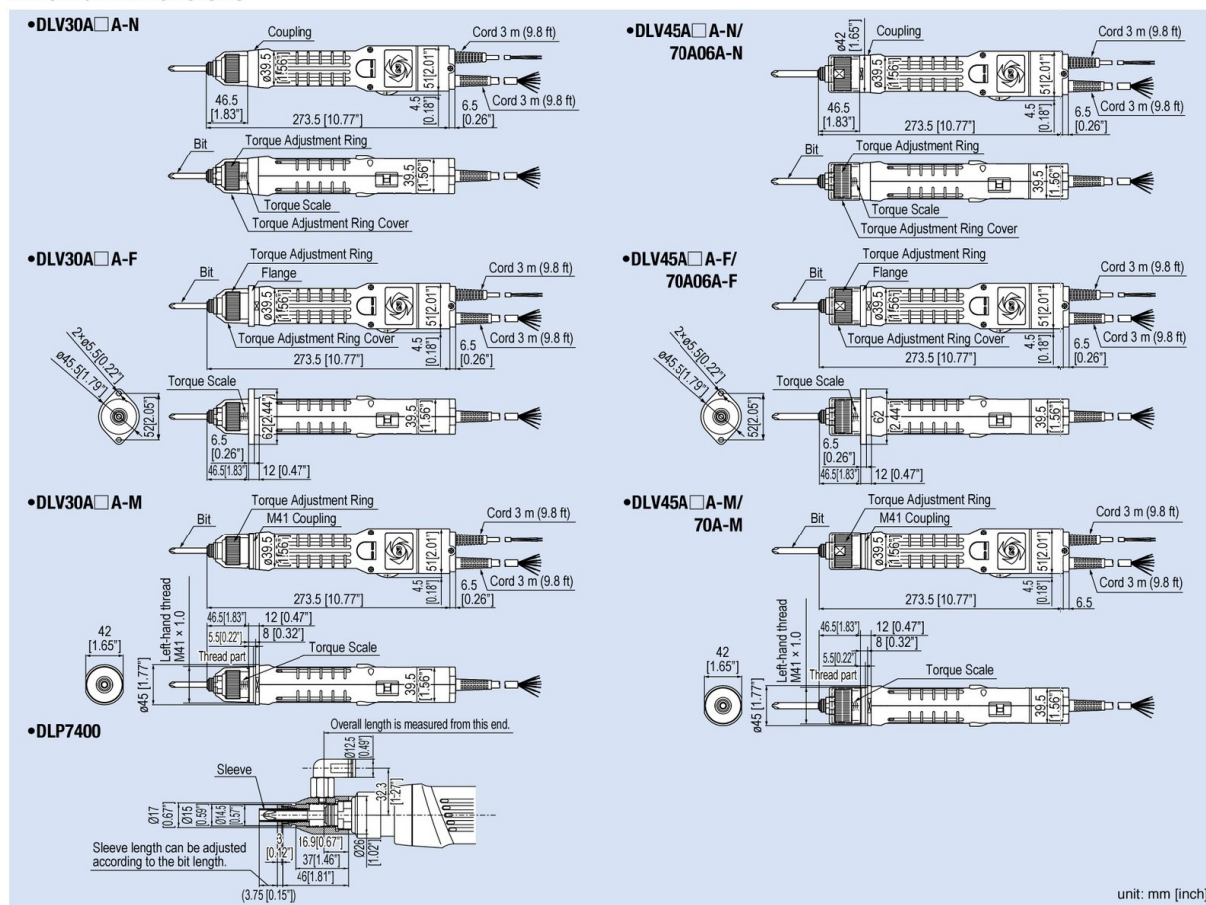
Caution

- 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



External Dimensions



According to Model

Brush motor Brushless motor

Miniature screw Precision screw Machine screw

1.0 - 6.0 mm

DLV3100 Series
Transformerless

DLV3300 Series
Low Voltage



DLV3100/3300 Series (For Automation) Non-CE

DLV3100 series DLV3300 series



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.

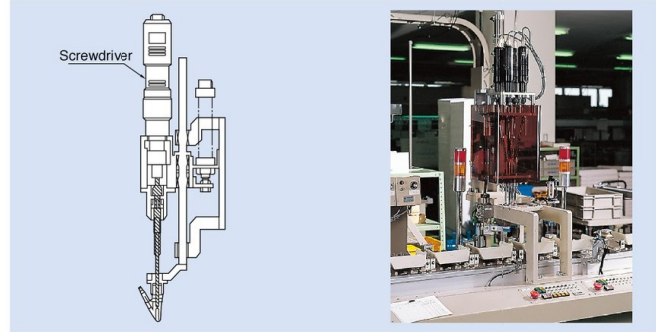
Specifications

Electric Screwdriver	For Precision Screws		For Machine Screws			
	DLV3321-CMN	DLV3331-CMN	DLV3121-EJN*1	DLV3131-EJN*1	DLV3141-EJN*1	DLV3151-EJN*1
Input Voltage	36 V DC (supplied from controller)		100 V AC, 50/60 Hz			
Torque Adjustment	Stepless					
Torque (Nm [lbf-in])	0.05 - 0.5 [0.4 - 4.4]	0.3 - 1.2 [2.7 - 10.6]	0.25 - 0.7 [2.2 - 6.2]	0.5 - 1.5 [4.4 - 13.3]	1.2 - 3.0 [10.6 - 26.6]	2.0 - 4.5 [17.7 - 39.8]
Free Speed (min ⁻¹)	900	600	900		600	450
Power Consumption (W)	Approx. 35					
Screw Size (mm)	Machine Screw	2.0 - 3.5	2.3 - 2.6	2.6 - 3.5	3.5 - 5.0	4.5 - 6.0
	Tapping Screw	1.0 - 2.6	2.0 - 3.0	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0
Mass (g [lbs])	400 [0.88]		900 [1.98]			
Standard Accessories	• Connection Cord (2 m): 1 pc. • Spare Carbon Brush: 2 pc.					
Bit Type (mm)	For CMN		For EJN			

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

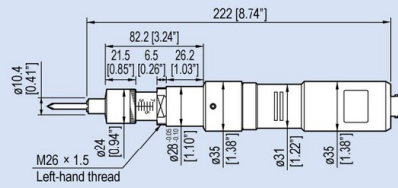
Controller	DLC3310
Input Voltage	24 V AC, 50/60 Hz
Output Voltage	36 V DC
Mass (g [lbs])	360 [0.79]

Installation Example

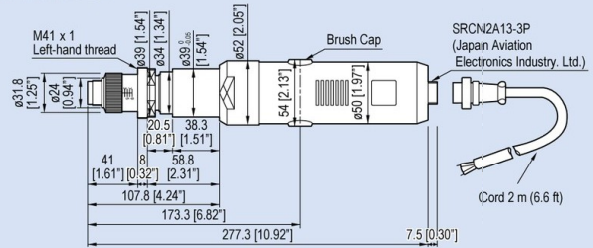


External Dimensions

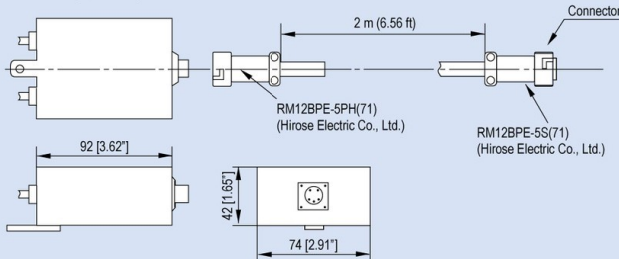
•DLV3321/3331



•DLV3121/3131/3141/3151



•DLC3310 (Optional)



unit: mm [inch]

DLT1173A/1673A/1973A Series

Torque Checker



Features

Maintaining high assembly quality with ease

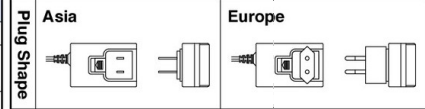
- Measured data is stored even after the power is turned off, preventing any data loss
- Energy saving type with AUTO POWER OFF function (Power is automatically turned off when left unused for 10 minutes)
- A program designed for uploading the data stored in the "delvo" torque checkers to a computer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



Click

Specifications

Model	DLT1173A	DLT1673A	DLT1973A
Measurement Range (Nm[lbf·in])	0.015 - 1.500 [0.13 - 13.3]	0.15 - 10.00 [13.5 - 88.5]	4.00 - 12.00 [35.4 - 106.2]
Calibration Precision	Within ± 0.5% (Full Scale) For 0.2 Nm [2 lbf·in] or less ± 1 digit	Within ± 0.5% (Full Scale) For 2 Nm [20 lbf·in] or less ± 1 digit	Within ± 0.5% (Full Scale)
Display	4-digit digital display (Single-line)	Data sampling: 1000 times/sec.	Display rate: 12 times/sec.
Measuring Unit	kgf · cm, Nm, lbf · in (selectable)		
Data Memory	800 pieces of data		
Measuring Direction	CW and CCW		
Measuring Mode	3 modes: PD-TR-PP		
Auto Power Off	Power off if left untouched for 10 minutes		
External Output	As per USB output Mitsutoyo Digimatic		
Analog Output	Approx. 1.5 V max.	Approx. 1.0 V max.	Approx. 1.1 V max.
Continuous Operation Time	20 hours		
External Dimensions (mm) [inch]	W160 × D110 × H47 [W6.3" × D4.33" × H1.85"]		W200 × D112 × H48.5 [W7.9" × D4.41" × H1.89"]
Mass (g [lbs])	1100 [2.43]		1400 [3.09]
Rechargeable Battery	Nickel metal hydride battery		
Charger Type	DLE1833A		
Input Voltage for Charger	100 - 240 V AC, 50/60 Hz		
Charging Time	4 hours		
Standard Accessories	• Screw Joint (DLW4430)	• Bit Joint (DLW4360) • Spring for Joint (DLW4660)	• Soft Joint (DLW4000)



Selection of Torque Checker

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

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

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

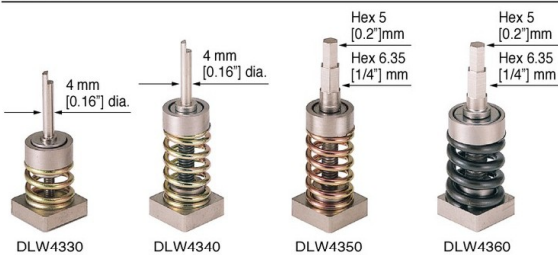
Optional Accessories

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

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

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

Bit Joint



Screw Joint



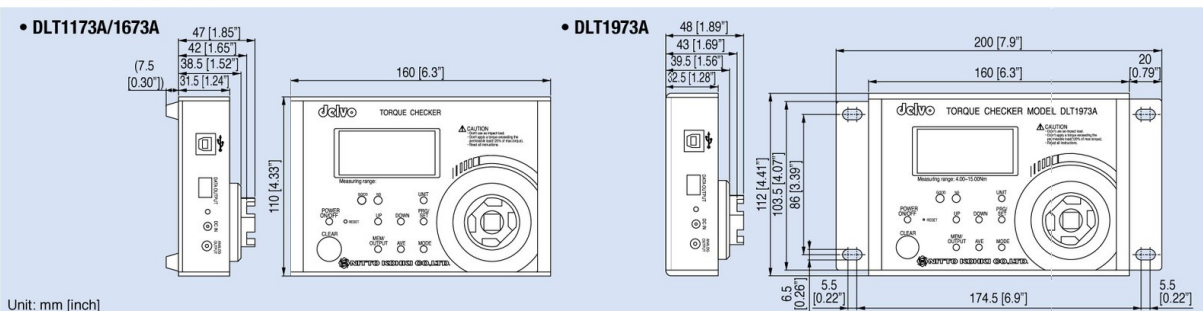
Soft Joint



Hard Joint

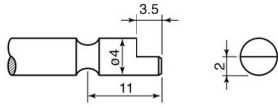


External Dimensions

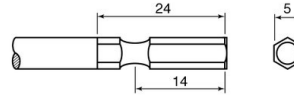


NK BIT

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



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



OD 4 mm Shank

Unit: mm

Model	Part No.	Size			Dimensions
		No. x	d	L	
Phillips NK4D	TD20009	00	2	44	
	TD20010			64	
	TD20021		1.8	44	
	TD20022			64	
	TD20029			44	
	TD20030		2.5	44	
	TD20037			64	
	TD20038		3	64	
	TD20039			44	
	TD20040		4	64	
	TD20047			44	
	TD20048		2	4	
TD20050		3	6	44	
Plain Slot NK4DM	TD20051	2	0.3	44	
	TD20052	2.5	0.3		
	TD20053	3	0.4		
	TD20054	4	0.5		
	TD20055	5	0.65		
Hexagon Head NK4DX	TD20056	1.5	44		
	TD20057	2			
	TD20058	2.5			
	TD20059	3			
	TD20060	4			
	Hex Socket NK4DB	TD20064			4
TD20065		4.5	7		
TD20066		5	7		
TD20067		5.5	8		

OD 5 mm Hex. Shank

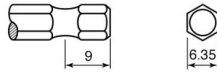
Unit: mm

Model	Part No.	Size			Dimensions				
		No. x	d	L					
Phillips NK31	TD20193	1	4	70					
	TD20194			100					
	TD20196		5	70					
	TD20197			100					
	TD20200		6	70					
	TD20201			100					
	TD20210		2	5		70			
	TD20211					100			
	TD20214					70			
	TD20215					100			
Phillips NK16	TD20224	1	70						
	TD20225		100						
	TD20232		70						
	TD20233		2		70				
	TD20235		150						
Hexagon Head NK31X	TD20254	2	4	70					
	TD20256	2.5	70						
	TD20258	3							
	TD20260	4							
	TD20262	5							
	Hex Socket NK31B	TD20272		5.5		9	4	70	
		TD20274		6		10	4.5	70	
		TD20276		7		11	5.5	70	
		TD20277						100	
		TD20278		8		13	6	70	
TD20279						100			
TD20282		10	16	8	70				
TD20283					100				



NK BIT

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



OD 6.35 mm Hex. Shank

Unit: mm

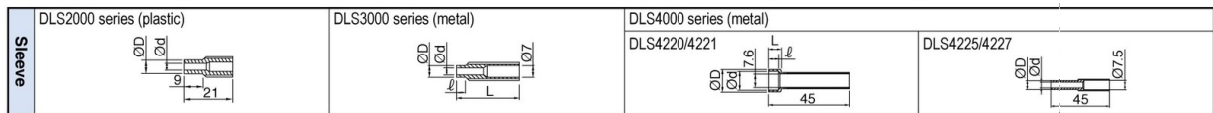
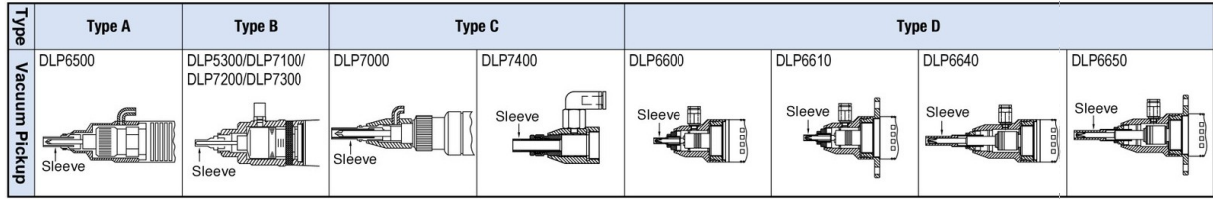
Model	Part No.	Size		Dimensions		
		No. x	d x L			
Phillips NK35	TD20306	1	4	75		
	TD20307			100		
	TD20308			50		
	TD20309			75		
	TD20310			100		
	TD20311			120		
	TD20312	2	7	150		
	TD20313			200		
	TD20319			50		
	TD20320			75		
	TD20321			100		
	TD20322			120		
	TD20323	3	7	150		
	TD20324			200		
	TD20327			50		
	TD20328			75		
TD20329	100					
TD20330	120					
TD20331	150					
TD20332	200					
Model	Part No.	No. x	d x L	Dimensions		
Phillips NK36	TD20335		0	No. 28 L		
	TD20336	1	3.8			
	TD20337	2	4.5			
	TD20338					
Model	Part No.	No. x	L	Dimensions		
Phillips NK15	TD20354	1	1	50		
	TD20355			75		
	TD20356			100		
	TD20357			120		
	TD20358	150				
	TD20359	200				
	TD20362	2	1	50		
	TD20363			75		
	TD20364			100		
	TD20366			150		
	TD20367	3	1	200		
	TD20371			75		
	TD20372			100		
	TD20374			150		
TD20375	200					
Model	Part No.	W x T x L	Dimensions			
Plain Slot NK35M	TD20378	7	0.9	50		
	TD20379			75		
	TD20380			100		
Model	Part No.	H x d x L	Dimensions			
Hexagon Head NK35X	TD20382	1.27	3	70		
	TD20385	1.5				
	TD20388	2				
	Part No.	H x L		No. 15 L		
	TD20391	2.5	70			
	TD20394	3				
	TD20397	4				
	TD20400	5			50	
	TD20404	6				
	Model	Part No.	H x D x d x L	Dimensions		
Hex Socket NK35BN	TD20442	10	16	8	No. 25 L 9 23 6.35	
	TD20443					100
	TD20457	13	19	10		75
	TD20458					100

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



Vacuum Pickups and Sleeves

Screwdriver series	Vacuum Pickup			Sleeve (Standard accessory)		
	Type	Model	Part No.	Model		
DLV7000/DLV8000/DLV3300	Type A	DLP6500	TD00343	DLS2124/DLS2127/DLS2130		
DLV7400A/DLV5700/DLV5800	Type B	DLP5300	TD04342	DLS2120/DLS2124		
DLV7313		DLP7100	TD00345	DLS2122/DLS2124/DLS2127		
DLV7323/DLV7333		DLP7200	TD00346	DLS2123/DLS2124/DLS2127		
		For \varnothing 4 mm	DLP7300	TD00347	DLS2135	
For HEX. 6.35 mm (1/4")		DLP7000	TD00344	DLS3223/DLS3225		
DLV7100/DLV7200/DLV8100/DLV8200	Type C	DLP7400	TD07285-0	DLS3223/DLS3225		
DLV7104/DLV8104/DLV8204		DLP7400	TD07286-0	DLS4220/DLS4221		
DLV30A		Type D	DLP6600/DLP6610	TD08748/TD08751	DLS2124/DLS2127/DLS2134	
DLV30S			DLP6640/DLP6650	TD08804/TD08805	DLS4225/DLS4227	
A series	For HEX. 6.35 mm (1/4")					
S series	(M5, M6)					
C series	For \varnothing 4 mm					
	For HEX. 6.35 mm (1/4")					



DLS2000 series For \varnothing 4 mm

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

DLS3000 series For HEX. 5 mm

Model	Part No.	Sleeve \varnothing D		\varnothing		L		Bit (No. x d x L) (+)		
		mm	inch	mm	inch	mm	inch			
DLS3222	TD00364	5.6	0.22	7	0.28	5	0.2	No. 1 x 5 x 70		
DLS3223	TD05024	6.1	0.24	9	0.35				34	1.34
DLS3224	TD00365	6.4	0.25							
DLS3225	TD00366	7.1	0.28	7	0.28	18	0.71	No. 1 x 4 x 100		
DLS3226	TD00367	4.6	0.18							
DLS3227	TD00368	5.1	0.2							
DLS3228	TD00369	5.6	0.22							
DLS3229	TD00370	6.1	0.24	9	0.35	65	2.56	No. 1 x 5 x 100		
DLS3230	TD00371	6.4	0.25					No. 1 x 5 x 100		
DLS3231	TD00372	7.1	0.28					No. 2 x 6 x 100		

DLS4000 series For HEX. 6.35 mm (1/4")

Model	Part No.	Sleeve \varnothing D		\varnothing		L		Bit (No. x d x L) (+)
		mm	inch	mm	inch	mm	inch	
DLS4220	TD08001	9.1	0.36	11	0.43	5	0.2	No. 2 x 7 x 75
DLS4221	TD08002	10.6	0.42	12.5	0.49	5.5	0.22	
DLS4225	TD09344	4.6	0.18	7	0.28			No. 1 x 4 x 75
DLS4227	TD09345	5.6	0.22					

Accessories

Tool Balancer



Easy to adjust tension by using handle.

Model	TW-06R	TW-1R	RW-3	RW-5
Capacity (g [lbs])	200 - 600 [0.44 - 1.32]	500 - 1500 [1.1 - 3.31]	1000 - 3000 [2.2 - 6.61]	2500 - 5000 [5.51 - 11.02]
Stroke (m [inch])	1.5 [5.9"]		2 [7.8.7"]	
Mass (g [lbs])	300 [0.66]		700 [1.54]	900 [1.98]

Vacuum Pump DLP2500 series



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

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

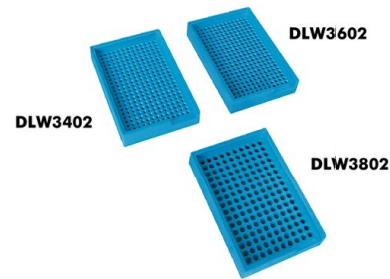
Pistol Grip DLW2300/2300ESD

(for DLV7100, 7200, 8100, 8200, 7500, 8500, 30/45/70-IKE, S(DLV30S/45S/70S) series 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 build-up and dust attached to the shaker box.

Model	DLW3402	DLW3602	DLW3802
Part No.	TD04110	TD04111	TD04112
Hole Pitch (mm [inch])	6 [0.24"]		8 [0.31"]
Hole Depth (mm [inch])	13.5 [0.53"]		
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 series and DLV30A (Transformerless Type)
DLW5202	TD08486	DLV45S/70S and DLV45A/70A
DLW5203	TD09222	DLV30S and DLV30A (Low Voltage Type)
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
-	TV07315	DLV02/12/16SL-BKE series
-	TV06787	DLV02/12/16SL-CKE series

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

Flanged Coupling DLW9011

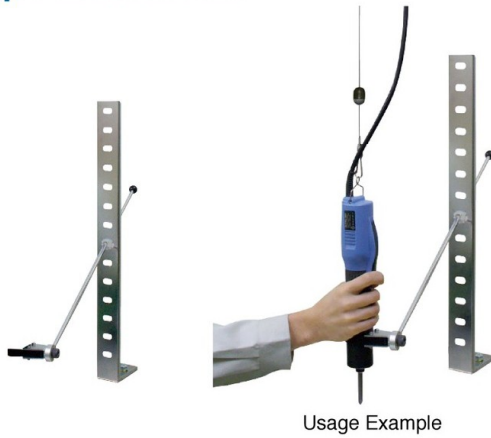
(for DLV7100, 7200, 8100, and 8200 series Electric Screwdrivers)
*Can not be mounted on SPC type



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

Accessories

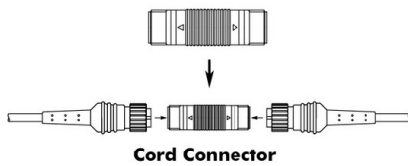
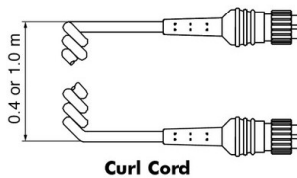
Torque Reaction Arm



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

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

Optional Cord



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

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

*1: "5P to 6P Exchange Cord" is used to connect "5-prong Screwdriver" to "6-prong Controller".

SAFETY GUIDE

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



WARNING:

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.



WARNING

- Keep work area clean. Cluttered work areas and benches invite accidents and injuries.
- Consider proper working environments for each tool carefully. Do not expose electric tools to extreme amounts of moisture or direct contact with water or rain. Keep area well lit at all times to prevent hidden dangers and never operate the equipment near flammable liquids or in gaseous or explosive atmospheres.
- Prevent operators from electric shock. When using electric tools, prevent body contact with grounded surfaces (e.g. pipes and outer frames of radiators, microwave ovens, and refrigerators, etc.).
- Keep all electric tools and power cords away from children and all unauthorized personnel. Also all visitors should be kept away from work area.
- Properly store tools and accessories while not in use. They should be kept in a dry, locked-up location out of reach of children or unauthorized personnel.
- Do not force tool. It will do the job better and more safely at the rate for which it was intended.
- Use the right electric power tool that can complete the job within its specifications. Do not attempt to adapt improper attachments or accessories to complete a job. Do not use the tool for other than what they were designed for.
- Dress properly. Do not wear loose clothing and/or accessories. (gloves, necklace etc.) They can be caught in moving parts. Non-skid footwear is recommended in outdoor operation. Wear protecting hair covering to contain long hair.
- Always wear safety glasses during operation. Wear respiratory protection when working in an environment where dust particles are generated during operation.
- Do not abuse cord. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- Use clamps or a vise to secure the work piece tightly and eliminate vibration. Never hold the work piece with your hands, keep both hands on the electric tool for increased productivity.
- Do not overreach. Keep proper footing and balance at all times.
- Maintain tools with care. For safe and efficient work, use the proper bit and check it regularly. Do not use the bit with a worn out or deformed tip. When oiling and replacing parts, follow the instructions given by the instruction manual. Inspect tool cords periodically and if damaged, have them replaced by an authorized service facility. Keep handles dry, clean, and free from oil and grease.
- Disconnect a tool or a controller when not in use, when repairing, or when changing accessories and bits, etc.
- Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tools before turning it on.
- Always avoid an unexpected start by having all power switches in the off position prior to attaching to a power supply. Never carry tools with your finger on the on/off switch when the power is attached. Never plug the cord into a receptacle while your finger is on the on/off switch.
- When the tool is used outdoors, use an electric extension cord or cable suitable for outdoor use.
- Stay alert. Watch what you are doing. When using electric tools, take good care of tool handling, working manner, and surrounding conditions. Use common sense. Do not operate tool when you are tired.
- Check damaged parts. Before further use of the tool, an accessory or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended functions. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. When repairing or replacing parts, follow the directions of the instruction manual. The part that is damaged should be properly repaired or replaced by an authorized service facility unless otherwise indicated elsewhere in this operation manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch cannot be turned on and off.
- Use only recommended accessories and attachments as per tool operator manual and "delvo" general catalog. Use of improper accessories and attachments may result in an accident or serious injury.
- Any repairs on the tool should be performed only by an authorized service facility. Do not modify the tool that is complying with the safety standard. If the repairman who has poor knowledge and skill repairs the tool, the tool may not give a good performance and result in an increased risk of injury to the user.
- The power source must be limited to the individual tools specifications as stated on the nameplate or instruction manual. If used at a higher or lower voltage than indicated, it may cause failure and result in an increased risk of injury to the user.
- Before work operation carefully check if there are underground installations such as conduit, water pipe, and gas pipe, etc. If a tool should touch them, it might cause electric shock, electric leak, or gas leak.
- Hold the tool body firmly so as not to be swung by it when using. If not, this may cause injury.
- Do not bring hand or face close to moving parts such as bit etc. when using. This may cause injury.
- When you have dropped the tool by mistake, carefully check the tool if there is breakage, cracks or deformation. This may cause injury.



CAUTION

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