# ELECTRIC SCREWDRIVERS

Cat.No. Dk300e

ISC 900

ISO 9001 Shirakawa Nitto Kohki Co.,Ltd.

A

JΔB

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



### **Professional Tools for Assembling High-Technology Goods**

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

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#### Models for EU

DLV7410A/7419A/7410HA/7419HA/7420A/7429A-BME DLV7313/7323/7333/7321/7331/7325/7335-CME/CKE DLV7321/7331-BME/BKE DLV7319/7329/7339/7349-BME DLC1213A-GG/GGB/GGU DLV30SP/30SL/30HP/30HL/30LP/30LL DLV7530/7540/7550-MKE/BKE DLV8530/8540/8550-MKE/BKE DLC4511-GGB/DLR1510-JE DLC1110-GG/HE

#### 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.

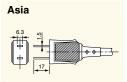


### **Selection Chart**

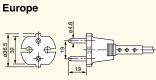
	Electric Screwdriver		Controller	Shape of Plug for Power Supply
	DLV7410A/7419A DLV7410HA/7419HA DLV7420A/7429A	+	DLC1110-EN	Asia + Grounding wire
	DLV5720/5720H/5740	+	DLC0350E	Asia + Grounding wire
	DLV5740H/5750	+	DLC0950E	Asia + Grounding wire
	DLV5820/5820H/5840	+	DLC0250E	USA
		[	DLC1213A-EN	Asia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

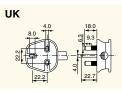
• Regarding "made to order" models and other than the models shown in this catalog, please inquire of the distributor for the price and minimum quantity per model.

#### **Standard Plug Shape**

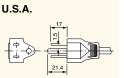


Asia + Grounding wire 20-





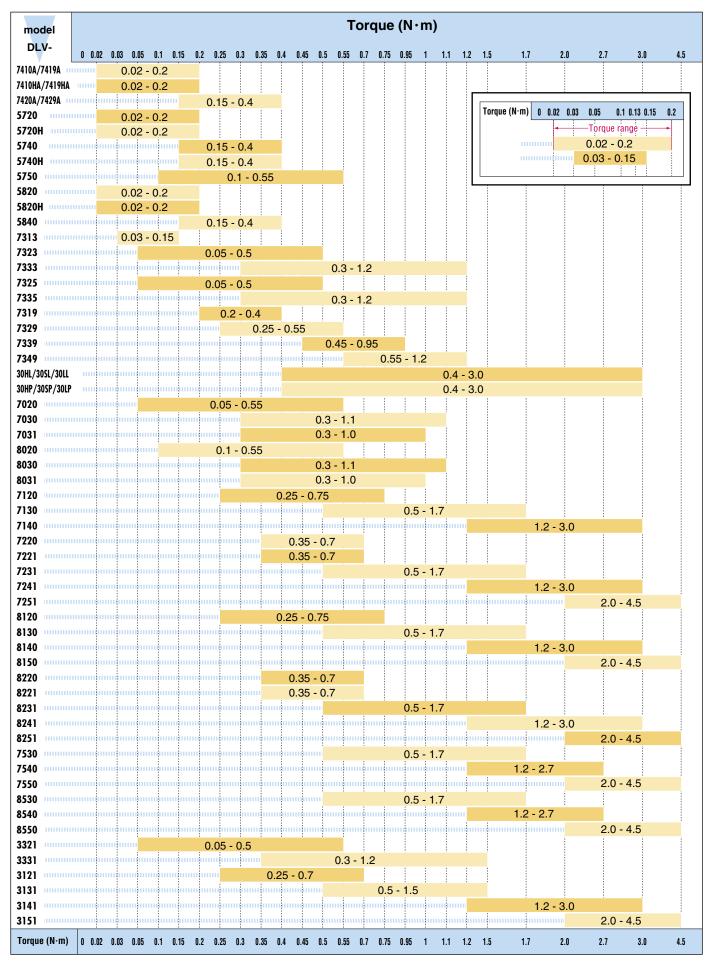
Unit : mm



### **Selection Chart**

$ \begin{array}{                                    $				Electri	ic Screwdr	iver		Cor	ntroller		
5-6         7004xers         0004xers         0004xers <th0< th=""><th></th><th>Page</th><th>Series</th><th>Model</th><th></th><th>Features</th><th>Starting Method</th><th>Model</th><th>Features</th></th0<>		Page	Series	Model		Features	Starting Method	Model	Features		
Image: biology of the		5-6	74004 acrica	-	1.0 - 2.3			DICITIO	Speed Control		
000 5720 000 5780 000 5780 0000 5780 000 5780 000 5780 000 5780 000 5780 000 57		J-0	1400A series		16.26	-		DICITIO	Soft Start		
000         000 <th></th> <th></th> <th></th> <th></th> <th>1.0 - 2.0</th> <th>Low Voltage,</th> <th></th> <th></th> <th></th>					1.0 - 2.0	Low Voltage,					
10         500 series         0.01/37.00 0.01/37.00         1.6 - 2.6 0.01/37.00         C.S.U         0.01/0000000000000000000000000000000000					1.0 - 2.3	Low Shock,		DI C0350			
Div         Div <thdiv< th=""> <thdiv< th=""> <thdiv< th=""></thdiv<></thdiv<></thdiv<>		7	5700 series			_ ESD		DECOUSO			
Image:		-			1.6 - 2.6						
10         200 series DVS220         10.9.23 DVS220         Low Voltige, ESD         10.9.23 ESD         Low Voltige, ESD         10.9.23 DVS217/23/2 (1 0.9.3)         Low Voltige, ESD         10.9.23         DVS220         DVS220         DVS220         Low Voltige, ESD         DVS220         DVS220         Low Voltige, ESD         DVS221/23/23/23/23/23/23/23/23/23/23/23/23/23/					1.0 - 3.0	-		DLC0950			
Image: Section of the sectio				DLV5820				DLC0250	Small size		
Image: biologic		8	5800 series	DLV5820H	1.0 - 2.3			DI CONTO	Speed Control, Soft Start,		
Image: problem in the start in th				DLV5840	1.6 - 2.6	ESD		DLC0350			
99				DLV7313-CME	Up to 2.0		Lever Start				
Image: problem in the section of the sectio		0		DLV7321/7323-C□E	1.0 - 3.0	Low Voltage		DLC1213A			
Image: control in the section of the secti		9		DLV7331/7333-C□E	2.0 - 3.5			/DIC1215	、		
10         700 series DU7319-Buf DU7319-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU730H/309/S00 26-3.0         Low Yoltage, ESD         DU721- Lewer Start         Speed Control, Set Bornd           11         30 series DU739-Buf DU739-Buf DU739-Buf DU739-Buf DU730H/309/S00 DU7210         2.6-3.0         Lewer Start         Lever Start         Push to Start         DU721         2.6-3.0         DU721         2.6-3.0         DU721         2.6-3.0         DU721         2.6-3.0         DU7220         2.6-3.0         DU7220         2.6-3.0         DU7220         2.6-3.0         DU7220         2.6-3.0         DU7220         2.6-3.0         DU7231         2.6-3.0         DU7231         2.6-3.0         DU7231         2.6-3.0         DU7231         <					1.0 - 3.0	Low Voltage,			Multiple Control		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				DLV7335-C 🗆 E	2.0 - 3.5	Clean Room					
			7300 series								
					2.0 - 3.5	ESD			Spood Control		
		10			2.0 - 3.0	Low Voltage,		DLC1213A-			
Image: bit independence independen									Bit Ground		
11         30 series         Div30H/305/30L Div70P/305/30U         2.6 - 5.0         Lever Start           7100 series         0U/7120         2.6 - 3.0         Div700         2.6 - 3.0           7100 series         0U/7120         2.6 - 3.0         Div700         2.6 - 3.0           7200 series         0U/7121         2.6 - 4.0         Div7211         3.5 - 5.0           0U/7211         3.5 - 5.0         Div7211         3.5 - 5.0           0U/7212         2.6 - 4.0         Div7211         3.5 - 5.0           0U/7211         3.5 - 5.0         Div7211         3.5 - 5.0           0U/7212         2.6 - 4.0         Div8150         4.5 - 6.0           DV82210         2.6 - 3.0         Div8231         2.6 - 4.0           DV82211         3.5 - 5.0         Div8231         3.5 - 5.0           DV82211         3.5 - 5.0         Div8231         3.6 - 5.0           DV82211         3.6 - 5.0         Div8231         2.6 - 4.0           0Uv8251         4.5 - 6.0         Div8231         2.6 - 3.0           0Uv8251         4.5 - 6.0         Div8020         1.0 - 3.0           0Uv8251         4.5 - 6.0         Div8030         2.0 - 3.5           0Uv8030         2.0 - 3.5					3.0 - 3.5						
Image:							Lever Start				
Push to Start         Push to Start           100 series         DiV7120         2.6 · 3.0           DiV7220         2.6 · 3.0           DiV7221         2.6 · 3.0           DiV7231         3.5 · 5.0           DiV7231         2.6 · 4.0           DiV8130         2.6 · 4.0           DiV8130         2.6 · 4.0           DiV8221         2.6 · 3.0           DiV8031         2.0 · 3.0           DiV8032         2.0 · 3.0           DiV7030         2.0 · 3.0           DiV8030         2.0 · 3.0           DiV8031         2.6 · 3.0           DiV8032         2.0 · 3.0           DiV80331         2.6 · 3.0		11	30 series		2.6 - 5.0						
7100 series         DLV7130         2.6 · 4.0 DLV7220         Lever Start           12         DLV7221         2.6 · 3.0 DLV7221         2.6 · 3.0 DLV7221         Lever Start           12         DLV7221         2.6 · 3.0 DLV7221         2.6 · 3.0 DLV7221         Lever Start           12         DLV2221         2.6 · 3.0 DLV7221         2.6 · 3.0 DLV7221         Lever Start           12         DLV3120         2.6 · 3.0 DLV7221         2.6 · 3.0 DLV7221         Lever Start           14         DLV3221         2.6 · 4.0 DLV3221         DLV3221         2.6 · 4.0 DLV3221           14         T000 series         DLV7020         1.0 · 3.0 DLV3231         2.0 · 3.0 DLV3231         Push to Start           14         300 series         DLV3321         2.0 · 3.0 DLV3231         2.0 · 3.0 DLV3331         Push to Start           14         3100 series         DLV3331         2.0 · 3.0 DLV3331         Push to Start           14         3100 series         DLV3331         2.0 · 3.0 DLV3331         Push to Start           14         T600 series         DLV3331         2.0 · 3.0 DLV3331         Push to Start           14         T600 series         DLV3331         2.0 · 3.0 DLV3331         Push to Start           14         T600 series         DLV					26-30	-					
Image: bit with the start         Div/7140         3.5 - 5.0         Div/720         2.6 - 3.0           7200 series         Div7221         2.6 - 3.0         Div7221         3.5 - 5.0           Div7221         3.5 - 5.0         Div7221         3.5 - 5.0           Div7221         3.5 - 5.0         Div7221         3.5 - 5.0           Div7210         2.6 - 3.0         Div7210         2.6 - 3.0           Div7210         2.6 - 3.0         Div7210         2.6 - 3.0           Div7210         Div7210         2.6 - 3.0         Div7210           Div7210         Div7210         2.6 - 3.0         Div7210           Div7210         Div7210         2.6 - 3.0         Div7221         2.6 - 3.0           Div7221         2.6 - 3.0         Div7221         2.6 - 3.0           Div7221         2.6 - 3.0         Div7221         2.6 - 3.0           Div7221         2.6 - 3.0         Div7221         Div721           Div7221         2.6 - 3.0         Div7221         Div721           Div7221         2.0 - 3.0         Div7221         Push to Start           Push to Start         Div7321         2.0 - 3.0           Div7321         2.0 - 3.0         Push to Start           Div73			7100 series			-					
1         01/7220         2.6 - 3.0           1/2         01/7221         3.5 - 5.0           1/2         01/7221         3.5 - 5.0           1/2         01/7221         3.5 - 5.0           1/2         01/7221         3.5 - 5.0           1/2         01/7231         3.5 - 5.0           1/2         01/7230         2.6 - 4.0           1/2         01/7230         2.6 - 6.0           01/7231         2.6 - 6.0           01/7230         2.6 - 6.0           01/7231         2.6 - 6.0           01/7231         2.6 - 6.0           01/7231         2.6 - 6.0           01/7231         2.6 - 6.0           01/7231         2.6 - 6.0           01/7231         2.6 - 6.0           01/7231         2.6 - 6.0           01/7231         2.0 - 3.0           01/7231         2.0 - 3.0           01/7231         2.0 - 3.0           01/7231         2.0 - 3.0           01/7231         2.0 - 3.0           01/7231         2.0 - 3.0           01/7231         2.0 - 3.0           01/7331         2.0 - 3.0           01/7331         2.0 - 3.0           01/7331 <th></th> <th></th> <th></th> <th>DLV7140</th> <th></th> <th></th> <th></th> <th></th>				DLV7140							
12         12<	1			DLV7220		-	Lever Start				
12         DLV7241         3.5 - 5.0 DLV7251         4.5 - 6.0 QLV8120         2.6 - 3.0 QLV8130         2.6 - 4.0 QLV8130         Push to Start           8100 series         DLV8220         2.6 - 3.0 DLV8221         2.6 - 3.0 QLV8221         Push to Start         Push to Start           8200 series         DLV8221         2.6 - 4.0 DLV8221         QLV8221         2.6 - 4.0 QLV8221         Push to Start         Push to Start           7000 series         DLV7030         2.0 - 3.0 DLV8020         1.0 - 3.0 QLV8030         Push to Start         Push to Start           8000 series         DLV7030         2.0 - 3.0 DLV8031         QL0 - 3.0 QLV8031         Push to Start           13         300 series         DLV8031         2.0 - 3.0 DLV3311         Push to Start           14         300 series         DLV3111         3.5 - 5.0 DLV311         Push to Start           14         3100 series         DLV311         2.6 - 4.0 DLV311         Push to Start           7500 series         DLV3151         4.5 - 6.0 DLV3151         Push to Start           7500 series         DLV7530         2.6 - 4.0 DLV7530         Push to Start           7500 series         DLV7550         4.5 - 6.0 DLV7550         Push to Start           9ush to Start         DLC4511-668         Speed Control, Signal Out							DLV7221	2.6 - 3.0			
12         DLV7251         4.5 - 6.0 DLV8120         7.6 - 6.0 DLV8120         7.6 - 6.0 DLV8120         7.6 - 6.0 DLV8120         7.6 - 6.0 - 6.0 - 0.			7200 series	DLV7231	2.6 - 4.0						
12         Div8120         2.6 - 3.0         Div8130         2.6 - 4.0           Div8130         2.6 - 4.0         Div8130         2.6 - 4.0         Div8130         2.6 - 4.0           Div8150         4.5 - 6.0         Div8220         2.6 - 3.0         Div8220         Push to Start           B200 series         Div8221         2.6 - 3.0         Div8221         2.6 - 3.0         Div8221         Div8221         2.6 - 3.0           Div8221         3.5 - 5.0         Div8221         4.5 - 6.0         Div8221         1.0 - 3.0           Div8221         4.5 - 6.0         Div8221         1.0 - 3.0         Div8221         1.0 - 3.0           Mo00 series         Div7020         1.0 - 3.0         Div8030         2.0 - 3.5         Push to Start           Mo00 series         Div8030         2.0 - 3.5         Div8030         2.0 - 3.5         Push to Start           Mo10 series         Div8331         2.0 - 3.5         Div8111         2.6 - 3.5         Push to Start         Push to Start           Mo10 series         Div3331         2.0 - 3.5         Div8111         2.6 - 3.5         Push to Start         Signal Output           Mo10 series         Div3331         2.6 - 3.5         Div8111         3.5 - 5.0         Push to Start						_					
B100 series         DLV8130         2.6 · 4.0         Transformerless         Transformerless         Function in the series in th						-					
8100 series         DLV8140         3.5 - 5.0         Transformeriess         Push to Start           0LV8220         2.6 - 3.0         DLV8221         2.6 - 3.0         Push to Start           0LV8221         3.5 - 5.0         DLV8221         3.5 - 5.0         DLV8221         DLV8221           0LV8221         3.5 - 5.0         DLV8221         3.5 - 5.0         DLV8221         DLV8221           0LV8221         3.5 - 5.0         DLV8221         3.5 - 5.0         DLV8221         DLV8221           10         DLV8221         3.5 - 5.0         DLV8221         DLV8221         DLV8221           10         DLV8020         1.0 - 3.0         DLV8020         DLV8221         DLV8221           10         B000 series         DLV8020         1.0 - 3.0         Push to Start           10         B000 series         DLV8031         2.0 - 3.0         Push to Start           10         Signal Output         Signal Output         External Input         Signal Output           10         Signal Output         DLV3131         2.6 - 4.0         Signal Output           10         DLV7530         2.6 - 4.0         Signal Output         Signal Output           10         DLV7530         2.6 - 4.0         Signal Out		12									
Infansionmeness         Push to Start           0LV8150         4.5 - 6.0           0LV8220         2.6 - 3.0           0LV8221         2.6 - 4.0           0LV8221         3.5 - 5.0           0LV7031         2.0 - 3.5           0LV7031         2.0 - 3.5           0LV8020         1.0 - 3.0           8000 series         0LV3030         2.0 - 3.5           0LV8031         2.0 - 3.5           0LV3031         2.0 - 3.5           0LV3031         2.0 - 3.5           0LV3031         2.0 - 3.5           0LV3121         2.3 - 2.6           0LV3121         2.3 - 2.6           0LV3131         2.6 - 3.5           0LV3131         2.6 - 3.6           0LV3131         2.6 - 3.6           0LV3131         2.6 - 4.0           0LV350         2.6 - 4.0				8100 series			-			$\backslash$	
Image: Part of the start         DLV8220 DLV8221         2.6 - 3.0 DLV8221         Push to Start           B200 series         DLV8221         3.5 - 5.0 DLV8221         4.5 - 6.0 DLV8221						_ Transformerless					
B200 series         DLV8221         2.6 - 3.0           DLV8221         2.6 - 4.0           DLV8231         2.6 - 4.0           DLV8231         3.5 - 5.0           DLV8251         4.5 - 6.0           DLV8251         2.0 - 3.5           DLV7020         1.0 - 3.0           DLV8030         2.0 - 3.5           DLV8031         2.0 - 3.5           DLV8031         2.0 - 3.5           DLV8031         2.0 - 3.5           DLV3311         2.0 - 3.5           DLV3311         2.0 - 3.5           DLV3311         2.0 - 3.5           DLV3311         2.0 - 3.5           DLV3121         2.3 - 2.6           DLV3131         2.6 - 3.5           DLV3141         3.5 - 5.0           DLV7530         2.6 - 4.0           DLV753					4.5 - 6.0		<b>D</b> I I <b>D</b> I				
B200 series         DLV8231         2.6 - 4.0 DLV8251         4.5 - 6.0 DLV8251         4.5 - 6.0 DLV8251         Lever Start           13         7000 series         DLV7020         1.0 - 3.0 DLV7030         2.0 - 3.5 DLV7031         Lever Start           13         8000 series         DLV8020         1.0 - 3.0 DLV8030         2.0 - 3.0 DLV8031         Push to Start           14         3300 series         DLV3121         2.3 - 2.6 DLV3131         Por Robot Signal Output         For Robot Signal Output           14         100 series         DLV7530         2.6 - 4.0 DLV3151         4.5 - 6.0 DLV3151         For Robot Signal Output           15-16         7500 series         DLV7530         2.6 - 4.0 DLV7530         Yith Torque Reach Light         Lever Start           15-16         7500 series         DLV7530         2.6 - 4.0 DLV7530         Yith Torque Reach Light         Yith Torque Reach Light					2.6 - 3.0		Push to Start				
DLV8241         3.5 - 5.0           DLV8251         4.5 - 6.0           DLV8251         4.5 - 6.0           DLV7020         1.0 - 3.0           DLV7030         2.0 - 3.5           DLV7031         2.0 - 3.0           DLV8020         1.0 - 3.0           DLV8030         2.0 - 3.0           DLV8030         2.0 - 3.5           DLV8031         2.0 - 3.0           DLV3121         2.0 - 3.0           DLV3121         2.3 - 2.6           DLV3131         2.6 - 3.5           DLV3151         4.5 - 6.0           DLV3151         4.5 - 6.0           DLV3150         2.6 - 4.0           DLV7500         4.5 - 6.0           DLV7500         2.6 - 4.0           DLV7500         2.6 - 4.0           With Torque Reach Light					26-40	-					
Image: bit with the start         DLV8251         4.5 - 6.0         DLV202         Lever Start           13         DLV7030         2.0 - 3.5         DLV7031         2.0 - 3.0         Lever Start         Lever Start           13         DLV8020         1.0 - 3.0         DLV8030         2.0 - 3.5         DLV8031         2.0 - 3.0           14         DLV8030         2.0 - 3.5         DLV8031         2.0 - 3.0         Push to Start           14         Jano series         DLV331         2.0 - 3.5         DLV8031         2.0 - 3.5           14         DLV331         2.0 - 3.5         DLV331         2.0 - 3.5           DLV3311         2.0 - 3.5         DLV3311         2.0 - 3.5           DLV3121         2.3 - 2.6         With Torque Reach Signal Output)           100 series         DLV3131         2.6 - 3.5           DLV3131         2.6 - 3.5         Signal Output)           1010 series         DLV7530         2.6 - 4.0           DLV7550         4.5 - 6.0         Lever Start           15-16         DLV7550         4.5 - 6.0           DLV7550         4.5 - 6.0         Push to Start           Push to Start         DLC4511-66B           Sti Ground, Signal Output         Signal Out			0-00 301103			-			$\backslash$		
13         DLV7020         1.0 - 3.0         Lever Start           13         7000 series         DLV7030         2.0 - 3.5         DLVer Start           14         01/8020         1.0 - 3.0         Push to Start           14         3300 series         DLV331         2.0 - 3.5           14         01/8030         2.0 - 3.5         DLVer Start           14         3100 series         DLV331         2.0 - 3.5           14         01/8030         2.0 - 3.5         DLVasce           14         01/8031         2.0 - 3.5         DLVasce           10         01/8031         2.6 - 3.5         DLVasce           10         01/8131         2.6 - 3.5         DLVasce           11         3.5 - 5.0         DLV7530         2.6 - 4.0           11         01/7550         4.5 - 6.0         With Torque Reach           15-16         01/7550         4.5 - 6.0         With Torque Reach Light           15-16         01/8500 series         01/85300         2.							1			\	
13         7000 series         DLV7030         2.0 - 3.5         Lever Start           13         10         DLV8020         1.0 - 3.0         Push to Start           8000 series         DLV8030         2.0 - 3.5         Push to Start           0         DLV8030         2.0 - 3.5         Push to Start           0         DLV8031         2.0 - 3.5         Push to Start           0         DLV3321         1.0 - 3.0         Push to Start           14         3300 series         DLV3321         2.0 - 3.5           0         DLV3121         2.3 - 2.6           0         DLV3131         2.6 - 3.5           0         DLV3131         2.6 - 4.0           0         DLV3151         4.5 - 6.0           0         DLV7530         2.6 - 4.0           0         DLV7550         4.5 - 6.0           0         DLV7550         4.5 - 6.0           0         DLV8530         2.6 - 4.0           0         DLV8530         2.6 - 4.0           0         DLV8530				DLV7020		1		1	$\backslash$		
13         DLV8020         1.0 - 3.0         Push to Start           0LV8031         2.0 - 3.5         Push to Start           3300 series         DLV3321         1.0 - 3.0         Push to Start           14         3300 series         DLV3121         2.3 - 2.6         For Robot         For Robot           14         3100 series         DLV3121         2.3 - 2.6         For Robot         External Input         DLC3310         Torque Reach Signal Output           15-16         7500 series         DLV7530         2.6 - 4.0         Signal Output         External Input         Speed Control, Soft Start, Bit Ground, Signal Output           15-16         DLV7550         4.5 - 6.0         With Torque Reach Light         Push to Start         Speed Control, Soft Start, Bit Ground, Signal Output			7000 series	DLV7030		]	Lever Start				
Image: Section of the start         Diversion of the start         Push to Start           B000 series         Diversion of the start         Diversion of the start         Push to Start           Diversion of the start         Diversion of the start         Diversion of the start         Diversion of the start           Market Harmonian of the start         Diversion of the start         Diversion of the start         Diversion of the start           Market Harmonian of the start         Diversion of the start         Diversion of the start         Diversion of the start           Market Harmonian of the start         Diversion of the start         Diversion of the start         Diversion of the start           Market Harmonian of the start         Diversion of the start         Diversion of the start         Diversion of the start           Market Harmonian of the start         Diversion of the start         Diversion of the start         Diversion of the start           Market Harmonian of the start         Diversion of the start         Diversion of the start         Speed Control, soft Start, Bit Ground, Signal Output           Market Harmonian of the start         Diversion of the start         Diversion of the start         Speed Control, Start, Bit Ground, Signal Output		12		DLV7031	2.0 - 3.0				$\backslash$		
DLV8031         2.0 - 3.0         Torque Reach Signal Output           14         3300 series         DLV3321         1.0 - 3.0           DLV3331         2.0 - 3.5         DLV3331         2.0 - 3.5           DLV3121         2.3 - 2.6         DLV3121         2.3 - 2.6           DLV3131         2.6 - 3.5         DLV3131         2.6 - 3.5           DLV3151         4.5 - 6.0         DLV7530         2.6 - 4.0           DLV7530         2.6 - 4.0         DLV7530         2.6 - 4.0           DLV7550         4.5 - 6.0         Mith Torque Reach Light         Lever Start           15-16         DLV8530         2.6 - 4.0         Mith Torque Reach Light           Mith Torque Reach Light         DLV7550         4.5 - 6.0         Mith Torque Reach Light		10			1.0 - 3.0				$\backslash$		
3300 series         DLV3321         1.0 - 3.0         For Robot         DLC3310         Torque Reach         Signal Output           14         10         10         10         3.5         0 <td< th=""><th></th><th></th><th>8000 series</th><th></th><th></th><th>-</th><th>Push to Start</th><th></th><th>\</th></td<>			8000 series			-	Push to Start		\		
3300 series         DLV3331         2.0 - 3.5         For Robot (with Torque Reach Signal Output)         DLC3310         Horque riscuit         Signal Output           14         100 series         DLV3121         2.3 - 2.6         Mutrational Signal Output         External Input         External Input           100 series         DLV3151         2.6 - 3.5         DLV3151         4.5 - 6.0         External Input         External Input         Signal Output           100 series         DLV7530         2.6 - 4.0         DLV7530         2.6 - 4.0         External Input         Speed Control, Soft Start, Bit Ground, Signal Output									\		
Image: Marking the start of the stare of the stare of the start of the start of the start of the st			3300 series					DLC3310			
14         3100 series         DLV3131         2.6 - 3.5         (with Torque Reach Signal Output)         External Input           0100 series         01000 series         0100 series						For Robot			Signal Output		
3100 series         DLV3141         3.5 - 5.0         Stylial Output)           DLV3151         4.5 - 6.0         DLV3151         4.5 - 6.0           DLV7530         2.6 - 4.0         DLV7530         2.6 - 4.0           T500 series         DLV7550         4.5 - 6.0         Lever Start           DLV7550         4.5 - 6.0         With Torque Reach Light         DLC4511-GGB           Soft Start, Bit Ground, Signal Output         DLV8530         2.6 - 4.0         Push to Start		14				(with Torque Reach	External Input				
DLV3151         4.5 - 6.0         Lever Start         Speed Control, Soft Start, Bit Ground, Signal Output           15-16         DLV8530         2.6 - 4.0         Lever Start         Speed Control, Soft Start, Bit Ground, Signal Output			3100 series			Signal Output)					
DLV7530         2.6 - 4.0           DLV7540         3.5 - 5.0           DLV7550         4.5 - 6.0           DLV7550         2.6 - 4.0           DLV7550         2.6 - 4.0           DLV8530         2.6 - 4.0           Push to Start         DLC4511-GGB           Speed Control, Soft Start, Bit Ground, Signal Output						-					
7500 series         DLV7540         3.5 - 5.0           DLV7550         4.5 - 6.0         With Torque Reach Light         Lever Start         Speed Control, Soft Start, Bit Ground, Signal Output           8500 series         DLV8530         2.6 - 4.0         Push to Start         Push to Start											
DLV7550         4.5 - 6.0         With Torque Reach Light         DLC4511-GGB         Speed Control, Soft Start, Bit Ground, Signal Output           8500 series         DLV8540         3.5 - 5.0         Push to Start         Push to Start         Signal Output			7500 series			1	Lever Start				
DLV8530         2.6 - 4.0         Reach Light         DLC4511-GGB         Bit Ground, Signal Output           8500 series         DLV8540         3.5 - 5.0         Push to Start         Push to Start         Bit Ground, Signal Output		15 40				With Torque					
8500 series         DLV8540         3.5 - 5.0         Push to Start         Signal Output		15-16	-16	DLV8530				DLC4511-GGB	Bit Ground,		
<b>DLV8550</b> 4.5 - 6.0			8500 series	DLV8540		]	Push to Start		Signal Output		
				DLV8550	4.5 - 6.0						

### **Selection Chart**



### **DLV7400A** series

#### Features

#### The light and compact body reduces operator fatigue.

- Reduces shock applied to workpieces when fastening screws.
- Compliant with EN100015-1
- 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 dowm, effectively preventing screw heads from being scratched.
- The built-in coreless motor achieves reduced inertia.
- Torque accuracy is within a top-ranked worldwide level. (Based on measurements at our laboratory)
- · Compliant with CE
- Use of the Screw Fastening Counter prevents human fastening errors and enhances accurate fastening control. (No CE marking or CCC applied.)
- Screw Fastening Counter Model DLR5640-WE works in conjunction with any dedicated SPC-type electric screwdrivers.





#### **Specifications**

-									
	Model	Standard Type	DLV741	DA-BME	DLV7410HA-BME	DLV7420A-BME			
	Wouei	Clean Room Type	DLV741	9A-BME	DLV7419HA-BME	DLV7429A-BME			
	Starting Metho	bo			Lever Start				
Input Voltage Torque Adjustment Torque (N·m) Free Speed (min <sup>-1</sup> ) Power Consumption (W)				40 V DC					
				Stepless					
vdr	Torque	(N∙m)			0.02 - 0.2	0.15 - 0.4			
rev	Free Speed	(min <sup>-1</sup> )	500 -	750	700 - 1,000	450 - 600			
	Power Consun	nption (W)		Approx. 10					
Electric	Screw Size	Machine Screw		1.0	1.6 - 2.6				
ec	(mm)	Tapping Screw		1.0	1.4 - 2.3				
ш	Bit Type	(mm)							
	Mass	(g)		Standard type 230 / Clean room type 275					
-	Model		DLC1110-GG / HE	DLC1213A-GGB / HEB*1	*1 An optional cord is required to connect with	these models.			
	Input Voltage		230 V AC	50/60 Hz	Neither DLC1213A-GG nor DLC1213A-HE c	an be used			
ler		Auto Stop	0	0	with the DLV7400A series.				
ntrolleı	F	Soft Start	0	0	Model DLC1213A-GGB or DLC1213A-HEB + Cord	DLW9072			
	Function		$\cap$	$\cap$					

2,300

**Speed Control** 

ESD Protected

(g)

	No.	DLV7410A	DLV7410HA	DLV7420A	DLV7419A	DLV7419HA	DLV7429A
t:	No.0 x 1.8 x 44	1	1	-	1	1	-
B	No.0 x 2.5 x 44	1	1	1	1	1	1
	No.1 x 4 x 44	-	-	1	-	-	1
Coi	nnection Cord DLW9070	1	1	1	1	1	1
Spi	ring for Low Torque	1	1	-	1	1	-
Sus	spension Bail	1	1	1	1	1	1
Sle	eve for Vacuum DLS2124	-	-	-	1	1	1

0

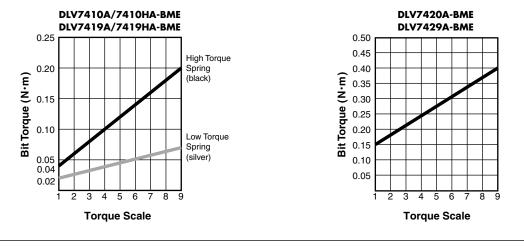
900

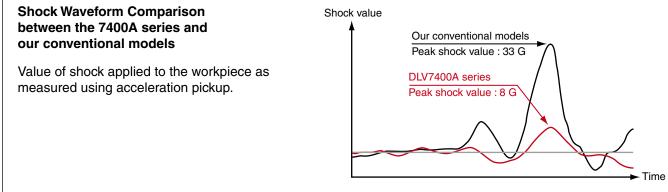
Cont

Function

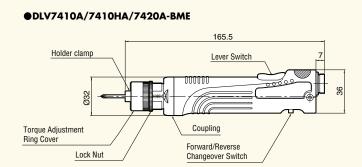
Mass

#### **Torque Diagrams (for reference)**

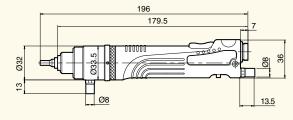


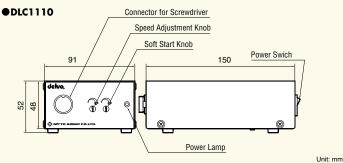


#### **External Dimensions**



#### •DLV7419A/7419HA/7429A-BME







### **DLV5700** series

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



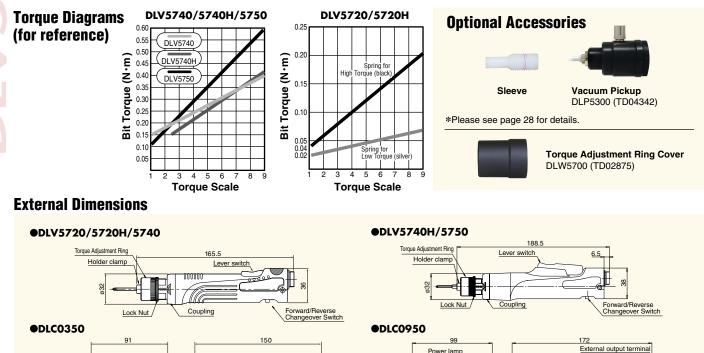
DLC0950	

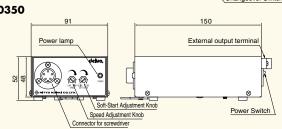
#### **Specifications**

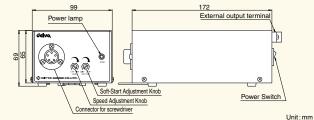
<u> </u>							
	Model	DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750	
	Starting Method			Lever Start			
	Input Voltage		40 V DC		36 V DC		
ē	Torque Adjustment			Stepless			
l≘l	Torque (N·m)	0.02	- 0.2	0.15	- 0.4	0.1 - 0.55	
Screwdriver	Free Speed (min <sup>-1</sup> )	500 - 750	700 - 1,000	450 - 600	1,200 - 1,800	670 - 1,000	
15	Power Consumption (W)		Approx. 10	Approx. 35			
N.	Screw Size Machine Screw	1.0	- 2.3	1.6 -	2.6	1.0 - 3.0	
15	(mm) Tapping Screw	1.0 - 2.0 1.4			.4 - 2.3 1.0 - 2.6		
Electric	Bit Type (mm)						
	Mass (g)		230			00	
۲	Model	DLC0350E	DLC0350F	DLC0350G	DLC0950E	DLC0950G	
∎	Input Voltage	100 V AC, 50/60 Hz	115 V AC. 50/60 Hz	230 V AC, 50/60 Hz	100 V AC. 50/60 Hz	230 V AC, 50/60 Hz	
Controller	Power Supply Plug	Asia + Grounding Wire	USA	UK	Asia + Grou		
ပြီ	Mass (g)		900		1,8	00	

#### **Standard Accessories**

Γ	No.	DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750		
	■ No.0 x 1.8 x 44	1			-			
19	No.0 x 2.5 x 44	1			1			
	No.1 x 4 x 44	-	-		1			
	Connection Cable	1		1				
	1.5 m)DLW9081	·						
18	Suspension Bail	1		1				
1	Spring for Low Torque	1			-			







### **DLV5800** Series

For Miniature Screws (1.0 - 2.6 mm)

#### **Features**

In response to the needs of cell production system space-saving DELVO screwdrivers are released.

- Controller is designed for emphasis on space-saving size and lightness.
- Clear disengagement of clutch (low-shock mechanism unavailable)
- Grounded bit installation mechanism
- Complied with EN100015-1
- New lever is adopted.
- Low swing bit mechanism
- Low voltage transless controller



#### **Specifications**

_								
	Model		DLV5820	DLV5820H	DLV5840			
	Starting Me	thod	Lever Start					
	Input Voltag		40 V DC					
	Torque Adju	ıstment		Stepless				
P P	Torque	(N·m)	0.02	- 0.20	0.15 - 0.40			
ļĘ	Free Speed	(min <sup>-1</sup> )	750	1,000	600			
2	Power Cons		Approx. 10					
١ð		Machine Screw	1.0 - 2.3		1.6 - 2.6			
ြတိ	(mm)	Tapping Screw	1.0 - 2.0		1.4 - 2.3			
Electric (	Bit Type	(mm)	-C					
	Mass	(g)	230					
	Cord Length		1.5 (with connector)					
	Grounding I	Bit Feature	Equipped as standard					
Electric Screwdriver	Mass Cord Length	(g) 1 (m)	-č	230 1.5 (with connector)				

	Model	DLC0250E
-	Input Voltage	100 V AC, 50/60 Hz
le	Function	Automatic stop
tro	Fullction	Grounded Bit Installation Mechanism
Controller	Mass (g)	300
O	Power Supply Plug	USA
	Case Material	Antistatic material
	Case Material	Antiistatic matchai

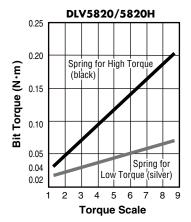
\* Electric screwdrivers DLV5800 series can be also used with DLC0350.

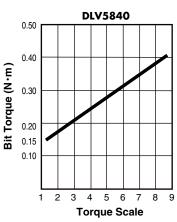
#### **Standard Accessories**

	No.	DLV5820	DLV5820H	DLV5840
Bit	No.0 x 1.8 x 44	-	1	-
B	No.0 × 2.5 × 44	-	1	1
	No.1 x 4 x 44		1	
Su	spension Bail	-	1	
Co	nnection Cable (1.5 m)	-	1	
Sp	ring for Low Torque (Silver)	-	1	-

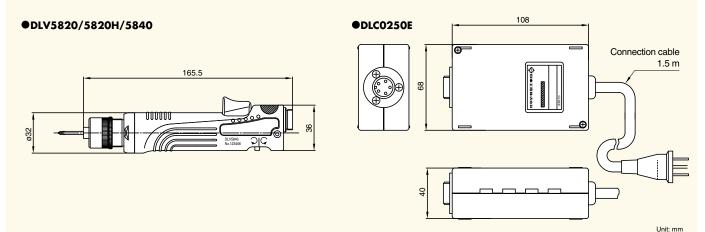


#### **Torque Diagrams (for reference)**





#### **External Dimensions**



### **DLV7300** series

For Miniature Screws (1.0 - 3.5 mm)

#### Features

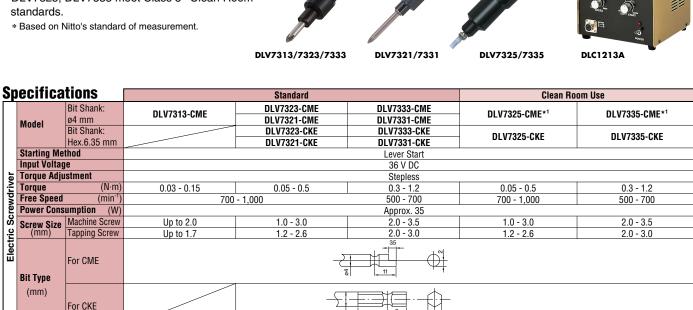
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Electric

Mass

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

(g)



20

350

6.35

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

	Model	Features	Input Voltage	<b>Control Function</b>	Shape of Plug for Power Supply	Mass(kg)
	DLC1213A-EN	Standard	100 V AC, 50/60 Hz			
	DLC1213A-FE*1	Standard	115 V AC, 50/60 Hz	Auto stop,	Asia	
F	DLC1213A-GE	Standard	220 V AC, 50/60 Hz	Soft start,		
olle	DLC1213A-GG	With CE Mark	230 V AC, 50/60 Hz	Speed control	Europe	2.3
ţ	DLC1213A-GG U	With CE Mark	230 V AC, 50/60 Hz		UK	
ő	DLC1213A-HE	Standard	240 V AC, 50/60 Hz		Without Plug	
-	DLC1215-EN*2	2 Screwdrivers for 1 Controller	100 V AC, 50/60 Hz	Auto stop	Asia	
	DLC1215-GE*2	2 Screwdrivers for 1 Controller	220 V AC, 50/60 Hz	Auto stop	Asia	
	DLC2310-CE*2	Multiple Controller	24 V AC, 50/60 Hz	Auto stop		0.36
	DLE3610-EN*2	Power Supply for DLC2310-CE	100 V AC, 50/60 Hz		Asia	9

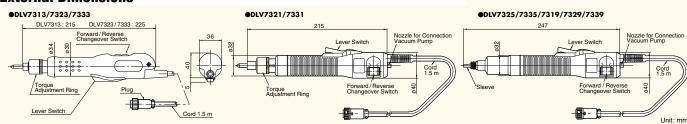
\*1: This model is made to order. \*2: See page 18 for details of the models other than DLC1213A series.

#### **Standard Accessories**

	No.	DLV7313 -CME	DLV7321 / 23 -CME	DLV7331/33 -CME	DLV7321/23/ 31/33-CKE	DLV7325 -CME	DLV7335 -CME	DLV7325 / 35 -CKE
	No.0 x 1.8 x 44	1	_	_	_	_	—	—
	No.0 x 2.5 x 44	1	1	_	_	1	_	—
Ш	No.1 x 3 x 44	_	_	1	_	_	1	—
1	No.1 x 4 x 44	_	1	_	_	1	_	—
	No.1 x 7 x 50	-	-	-	1	-	_	—
	No.2 x 4 x 44	_	-	1	-	-	1	—
	No.2 x 4.5 x 50	_	-	-	-	-	_	1
	No.2 x 7 x 50	_	_	-	1	_	_	_
	DLS2124	_	_	—	_	1	_	—
18	DLS2127	_	_	—	_	1	1	—
Slee	DLS2130	_	_	—	_	1	1	—
5		_	_	_	_	_	1	_
	DLS2135	_	_	_	_	_	_	1
Su	spension Bail				1			

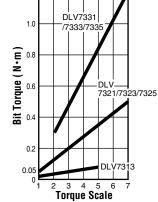
#### OLC1213A 143 use Holde Pilo . - Cord 2 m Switch Adjustment Knob Soft-Start Adjustment Knob

#### **External Dimensions**



#### Torque Diagram (for reference) 1.2

400



### DLV7300-BME/BKE series For Miniature Screws (1.0 - 3.5 mm)

#### **Features**

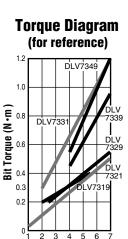
#### Workpiece-conscious electric screwdrivers.

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



#### **Specifications**

۶ŀ	Decifica	TIONS	E	SD		ESD / Lo	w Shock						
	Model	Bit Shank:ø4 mm	DLV7321-BME*1	DLV7331-BME*1	DLV7319-BME*1	DLV7329-BME*1	DLV7339-BME	DLV7349-BME*1					
	Wouer	Bit Shank:Hex. 6.35 mm	DLV7321-BKE	DLV7331-BKE									
	Starting Me	thod	Lever Start										
	Input Voltag	je	36 V DC										
	Torque Adju	ıstment	Stepless										
Ver 1	Torque	(N·m)	0.05 - 0.5	0.3 - 1.2	0.2 - 0.4	0.25 - 0.55	0.45 - 0.95	0.55 - 1.2					
Screwdriver	Free Speed	(min <sup>-1</sup> )	700 - 1,000	500 - 700	700 -	1,000	500	- 700					
e.	Power Cons	sumption (W)		Approx. 35									
Scr	Screw Size	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			3								
	(mm)	For BKE				9 6.35							
	Mass	(a)	35	50		4(	00						



2 3 4 5 6 Torque Scale

\*1 : These models are made to order.

er	Model	Input Voltage	Shape of Plug for Power Supply	Control	Mass(kg)
<b>ම</b>	DLC1213A-ENB	100 V AC, 50/60 Hz	USA	Grounding,	
1 E	DLC1213A-FEB*1	115 V AC, 50/60 Hz	USA	Auto Stop,	2.3
ပိ	DLC1213A-GGB	230 V AC, 50/60 Hz	Europe	Soft Start,	2.5
	DLC1213A-HEB	240 V AC, 50/60 Hz	UK	Speed Control	

\*1: This model is made to order.

Measure	ment Point	Conventional Product	DLV7300-B	
llandla	Static Electricity	(V)	350	5
Handle	Surface Resistance	(Ω)	more than 10 <sup>13</sup>	10 <sup>4</sup>
Lever Switch	Static Electricity	(V)	350	2
Level Switch	Surface Resistance	(Ω)	more than 10 <sup>13</sup>	10 <sup>4</sup>
Forward / Reverse Switch	Static Electricity	(V)	25	2
Power Cable	Static Electricity	(V)	110	5
Fower Gable	Surface Resistance	(Ω)	more than 10 <sup>13</sup>	10 <sup>10</sup>

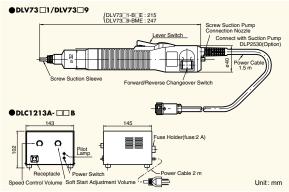
## Part Material Handle Lever Switch Synthetic resin with carbon fiber Power Cable Anti-static material

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

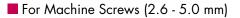
#### **Standard Accessories**

	No.	DLV7319/29 -BME	DLV7339/49 -BME	DLV7321 -BME	DLV7331 -BME	DLV7321/31 -BKE
	No.0 x 2.5 x 44	1	_	1	_	—
+	No.1 x 3 x 44	—	1	—	1	—
Bit	No.1 x 4 x 44	1	—	1	—	—
	No.1 x 7 x 50	_	_	—	_	1
	No.2 x 4 x 44	_	1	—	1	—
	No.2 x 7 x 50	_	_	—	_	1
	DLS2124	1	_	—	_	—
Sleeve	DLS2127	1	1	—	_	—
Sle	DLS2130	1	1	—	—	—
	DLS2134	—	1	—	—	—
Sı	uspension Bail			1		

#### **External Dimensions**



### **DLV30** series



#### Features

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

- The series lineup is consisted of high speed(2,000 min<sup>-1</sup>), standard speed (1,200 min<sup>-1</sup>), and low speed(650 min<sup>-1</sup>) types with respective torque range of 0.4 - 3.0 N·m.
- · Designed to minimize loss of screw fastening torque that may occur after long-term use, and threfore ensures stable performance.
- Both the Lever Start and Push to Start types of models are available. The Push to Start type is suitable for continuous screw tightening. The Lever Start type is suited for temporary tightening screws and thightening screws set at angles.
- Equipped with a clear plastic torque adjustment ring cover.
- Design conforms to the RoHS Directive and thus appeals to the environmentally conscious user.
- · Models with CE marking (for the European Union) or CCC (for People's Republic of China) are available.
- · Aluminum couplings with colored rubber rings, namely, red, blue, and yellow ones, help operators choose the correct speed type easily.



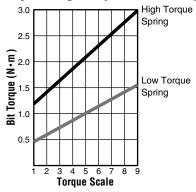
#### Creations

2	pecifications		High Speed	Standard	Low Speed	High Speed	Standard	Low Speed			
		European Plug	DLV30HL-MKG	DLV30SL-MKG	DLV30LL-MKG	DLV30HP-MKG	DLV30SP-MKG	DLV30LP-MKG			
	Model	Lutopean riug	DLV30HL-MJG	DLV30SL-MJG	DLV30LL-MJG	DLV30HP-MJG	DLV30SP-MJG	DLV30LP-MJG			
	WUUEI	USA Plug	DLV30HL-MKE	DLV30SL-MKE	DLV30LL-MKE	DLV30HP-MKE	DLV30SP-MKE	DLV30LP-MKE			
		USA Flug	DLV30HL-MJE	DLV30SL-MJE	DLV30LL-MJE	DLV30HP-MJE	DLV30SP-MJE	DLV30LP-MJE			
	Starting Method			LEVER			PUSH				
	Free Speed	(min <sup>-1</sup> )	2,000	1,200	650	2,000	1,200	650			
l av	Input Voltage				230 V AC,	50/60 Hz					
		Low Torque Spring (Standard Accessory)	0.4 - 1.6								
Screwdri	(N·m)	High Torque Spring (Built-in)	1.2 - 3.0								
	<b>Power Consumption</b>	(W)	Approx. 45								
		Machine Screw	2.6 - 5.0								
Ē	Screw Size (IIIIII)	Tapping Screw	2.5 - 4.0								
Electric	Bit Type (mm)	For MKG/MKE				9 6.35					
	5 <b></b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	For MJG/MJE			- 90	14 24 5					
	Mass	(g)	700								

#### Standard Accessories

> 0 70					
2 x 6 x 70	1 –				
		1			
sion Bail	1				
lue Spring	1				
	2 x 7 x 75 sion Bail	2 x 7 x 75 —			

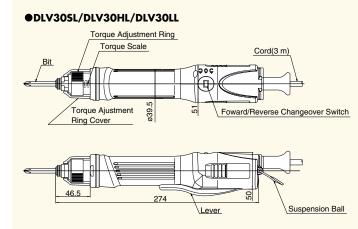
#### **Torque Diagram (for reference)**



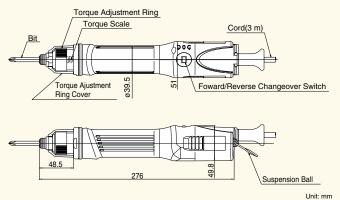
#### **Optional Accessory**



#### **External Dimensions**



#### DLV30SP/DLV30HP/DLV30LP



### DLV7100/7200/8100/8200 series

#### **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.



#### **Cnacifications**

Эþ	ecification	CIONS		Standard	ł		High	Speed		High Torque		Standard		High Torque		High S	Speed		High Torque
		100 V AC Input	EJN	DLV7130- EJN	DLV7140- EJN	DLV7220- Ejn		DLV7231- EJN	DLV7241- EJN	DLV7251- EKN	DLV8120- EJN	DLV8130- EJN	DLV8140- EJN	DLV8150- EKN	DLV8220- EJN		DLV8231- EJN	DLV8241- EJN	DLV8251- EKN
	Model	230 V AC Input	DLV7120- JJE	DLV7130- JJE	DLV7140- JJE						DLV8120- JJE <sup>*1</sup>	DLV8130- JJE	DLV8140- JJE						
		200 V Ao Input	DLV7120- JKE	DLV7130- JKE	DLV7140- JKE		DLV7221- JKE				DLV8120- JKE	DLV8130- JKE	DLV8140- JKE	DLV8150- JKE		DLV8221- JKE			
.	Starting Met	thod				Lever	Start							P	ush to Star	l			
Į	Torque Adju	stment		Stepless															
1É	Torque		0.25-0.75		1.20-3.00	0.35-0.70				2.00-4.50	0.25-0.75	0.50-1.70	1.20-3.00	2.00-4.50			0.50-1.70	1.20-3.00	
crewdriver	Free Speed	(min-1)	900	900	600	3,000	1,800	1,800	1,100	700	900	900	600	400	2,800	1,800	1,800	1,100	700
	Power Cons		Approx. 35 Approx. 45						Approx. 35				Appro						
S S		Machine Screw	2.6-3.0	2.6-4.0	3.5-5.0	2.6-3.0	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	2.6-3.0	2.6-4.0	3.5-5.0	4.5-6.0
Ξ	(mm)	Tapping Screw	2.3-3.0	2.3-3.5	3.0-4.0	2.3-3.0	2.3-3.0	2.3-3.5	3.0-4.0	4.0-5.0	2.3-3.0	2.3-3.5	3.0-4.0	4.0-5.0	2.3-3.0	2.3-3.0	2.3-3.5	3.0-4.0	4.0-5.0
Electric	Bit Type	For EJN / JJE							90	24		5							
	(mm)	For EKN / JKE									9	6.3	5_						
	Mass	(g)		700			70	00		890		690		890		6	90		890

\*1 : This model is made to order.

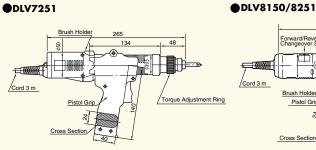
\*2 : Bit Shank; "- 
J ] "=Hex.5 mm, "- 
K ] "=Hex.6.35 mm

#### **Standard Accessories**

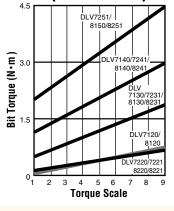
	No.	EJN/JJE	JKE except DLV8150-JKE	EKN/ DLV8150-JKE			
	No.1 x 6 x 70	1	_	_			
ä	No.1 x 7 x 75	_	1	_			
<b> </b>	No.2 x 6 x 70	1	_	_			
	No.2 x 7 x 75	-	1	1			
	No.3 x 7 x 50	_	-	1			
Sp	are Carbon Brush	2					
Su	spension Bail	1					

#### **External Dimensions**

#### OLV7251



#### **Torque Diagram** (for reference)

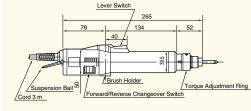


verse

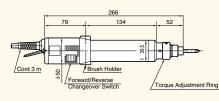
Brush Holde

Cross Section

#### DLV7120/7130/7140/7220/7221/7231/7241



#### DLV8120/8130/8140/8220/8221/8231/8241



### **DLV7000/8000** series

For Miniature Screws (1.0 - 3.5 mm)

#### **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<sup>-1</sup> for improving work efficiency. (100 V AC only)



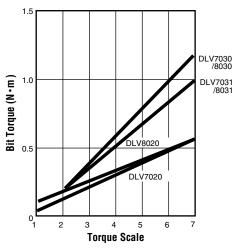
Sp	ecifica	tions		Stan	dard		High	Speed	
	Model	100 V AC Input	DLV7020-EMN	DLV7030-EMN	DLV8020-EMN	DLV8030-EMN	DLV7031-EMN	DLV8031-EMN	
	MOUCI	115 V AC Input	DLV7020-FME*1	DLV7030-FME*1	DLV8020-FME*1	DLV8030-FME*1			
	Starting Me	ethod	Lever	Start	Push t	o Start	Lever Start	Push to Start	
/er	Torque Adj	ustment	Stepless						
driv	Torque	(N·m)	0.05 - 0.55	0.3 - 1.1	0.1 - 0.55	0.3 - 1.1	0.3	- 1.0	
Screwdriver	Free Speed	(min⁻¹)	900	650	900	650	1,200		
Sc	Power Cons	sumption (W)		Appro	x. 25		Approx. 30		
		Machine Screw	1.0 - 3.0	2.0 - 3.5	1.0 - 3.0	2.0 - 3.5	2.0	- 3.0	
Electric	(mm)	Tapping Screw	1.2 - 2.6	2.0 - 3.0	1.2 - 2.6	2.0 - 3.0	2.0	- 3.0	
Ŭ	Bit Type	(mm)							
	Mass	(g)	40	0	4	10	400	410	

\*1: These models are made to order.

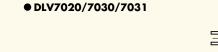
#### **Standard Accessories**

	No.	DLV7020/8020	DLV7030/8030/7031/8031									
	No.0 x 2.5 x 44	1	_									
Β	No.1 x 3 x 44	—	1									
	No.1 x 4 x 44	1	-									
	No.2 x 4 x 44	—	1									
S	uspension Bail	1										

#### **Torque Diagram (for reference)**



#### **External Dimensions**



Forw

Torque Adjustment Ring

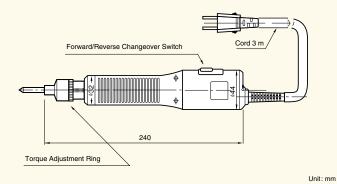
ard/Reverse Changeover Switch

236

Lever Switch

0~~ Cord 3 m

DLV8020/8030/8031



### DLV3100/3300 series For Miniature Screws & Machine Screws(1.0 - 6.0 mm)

**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

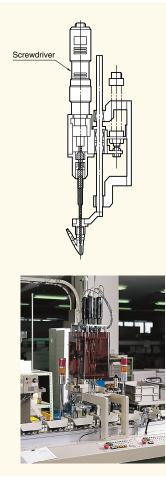
NOTE: The bit mounting is made in a specific way.

#### - -

S	pecifications	For Miniat	ure Screws	For Machine Screws						
	Model	DLV3321-CMN	DLV3331-CMN	DLV3121-EJN *1	DLV3131-EJN *1	DLV3141-EJN *1	DLV3151-EJN *1			
	Input Voltage	36 V DC(supplied	d from controller)	100 V AC, 50/60 Hz						
1.	Torque Adjustment			Step	Stepless					
Screwdriver	Torque (N·m)	0.05 - 0.5	0.3 - 1.2	0.25 - 0.7	0.5 - 1.5	1.2 - 3.0	2.0 - 4.5			
-i-b	Free Speed (min <sup>-1</sup> )	900	600	90	00	600	450			
Š	Power Consumption (W)	Appr	ox. 35		Approx. 35		Approx. 45			
15	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			
ျပ	(mm) Tenning Corour	1.2 - 2.6	2.0 - 3.0	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0			
Electric	Bit Type (mm)	Special bit			5 mm hex	standard bit				
	Mass (g)	4(	00		90	00				
-	Model	DLC3	310							
₩	Input Voltage	24 V AC, 5	50/60 Hz	-						
ĮĘ	Output Voltag	36 V	DC	]						
Controller	Control Function	Autos	stop							
10	Mass (g)	36	0							

**DLV3100** series

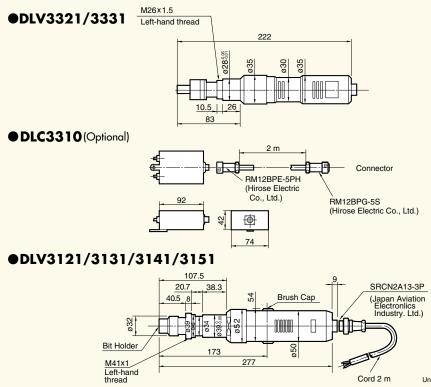
#### **Installation Example**



#### **Standard Accessories**

Model	DLV3121/3131/3141/3151	* The 2 m cord exclusively for DLV3321/3331
Cable	1	comes with DLC3310 as a standard accessory.
Spare Carbon Brush	2	comee with becover o us a standard decessory.

#### **External Dimensions**



14

### DLV7500/8500 series

For Machine Screws (2.6 - 6.0 mm)

Firm torque control

The torque reach light goes on

when the set torque is reached.

#### **Features**

#### **Ergonomic and Compact**

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

#### **High Torque Accuracy**

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

#### High Durability

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

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

#### Easy Forward / Reverse Operation • Horizontal rocker switch is easy to

**Pull for Bit Release** 

preventing inadvertent release.

Holds the bit securely,

operate with the thumb.

#### Non-slipping Grip, •••••• Easy to Grasp

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

#### **Product Safety**

The new "delvo" fully complies with European CE safety standards. An antistatic option is available.



**Power Cord Connector** The power cord is easily detached and replaced allowing easy repair or workstation redesign.



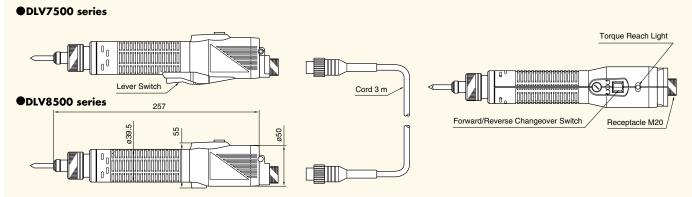
#### Easy Maintenance Design Modular design assures easy

Modular design assures easy maintenance.

#### Antistatic(ESD)

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

#### **External Dimensions**





Sp	ecifica	tions 🛛	Stan	dard	High Torque	Stan	lard	High Torque			
	Model	Standard	DLV7530-MKE	DLV7540-MKE	DLV7550-MKE	DLV8530-MKE	DLV8540-MKE	DLV8550-MKE			
	MUUEI	ESD	DLV7530-BKE	DLV7540-BKE	DLV7550-BKE	DLV8530-BKE	DLV8540-BKE	DLV8550-BKE			
	Starting Met	hod		Lever Start			Push to Start				
P.	Input Voltag	e			59 <b>\</b>	/ DC					
Ę	Torque Adju	stment		Stepless							
pw	Torque	(N·m)	0.5 - 1.7	1.2 - 2.7	2.0 - 4.5	0.5 - 1.7 1.2 - 2.7		2.0 - 4.5			
cre	Free Speed (min <sup>-1</sup> )		1,100	700	500	1,100	700	500			
S	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			
ctric	(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			
Elec	Bit Type	(mm)									
	Mass	(g)	650	650	750	650	650	750			

Measurer	nent point	Conventional product	DLV7500-BKE	
llandla	Static Electricity	(V)	350	5
Handle	Surface Resistance (Ω)		more than 10 <sup>13</sup>	10 <sup>4</sup>
Lever Cruiteb	Static Electricity	(V)	350	2
Lever Switch	Surface Resistance (Ω)		more than 10 <sup>13</sup>	10 <sup>4</sup>
Forward / Reverse Switch	Static Electricity	(V)	25	2
Power Cable	Static Electricity (V)		110	5
	Surface Resistance	(Ω)	more than 10 <sup>13</sup>	10 <sup>10</sup>

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

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

oller	Model	Features	Input Voltage	Mass (kg)	External Dimensions (mm)
-t	DLC4511-GGB*1	With Speed Control and Soft Start Function	230 V AC, 50/60 Hz	3.5	W139 x D140 x H81.5
č	DLR1510-JE*2	Screw Counter	230 V AG, 50/00 Hz	5.1	W143 x D177 x H126

\*1 Shape of plug for power supply is "Europe" type.
 \*2 Please see page 17 for details of DLC4511-GGB and DLR1510-JE.

#### **Standard Accessories**

	No.	DLV7530/7540/ 8530/8540	DLV7550/8550				
Ξ	No.1 x 7 x 75	1	_				
	No.2 x 7 x 75	1	1				
	No.3 x 7 x 50	- 1					
Sp	are Carbon Brush	2					
Po	ower Cord						
Su	spension Bail	1					





# Controller with Speed Adjustment and Screw Counter

DLC4511-GGB/DLR1510-JE



DLC4511-GGB

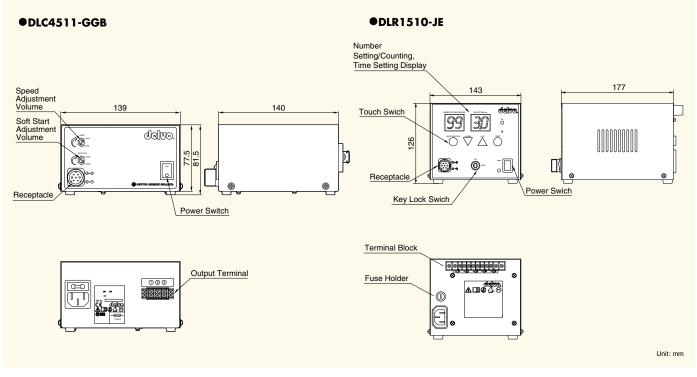


DLR1510-JE

#### **Specifications**

Model	Control Function	Input Voltage	Mass (kg)	External Dimensions (mm)
DLC4511-GGB	Stepless speed adjustment - 80 - 100 % Soft start - adjustable time setting of slow speed (max. 3 sec.) External output signals - Start and Torque up Electro-Static Discharge(ESD) Control		3.5	W139 x D140 x H81.5
DLR1510-JE	Screw counting - OK lamp and buzzer for notification Variable non-operation time Setting protection by key lock switch Setting by touch switch for easy operation External output signals - Start, Torque up, Count up & Cycle OK	230 V AC, 50/60 Hz	5.1	W143 x D177 x H126

#### **External Dimensions**



### **Multiple Controllers**

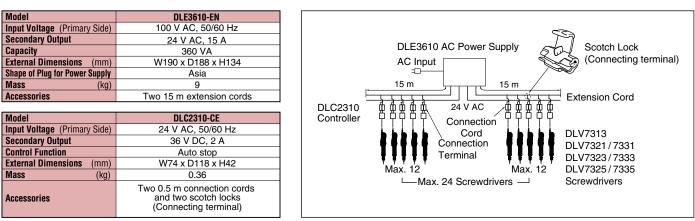
For DLV7300 series

#### AC Power Supply DLE3610/Controller DLC2310

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

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





#### Multiple Controller DLC1215

DLC1215 can control two screwdrivers by one controller.

Model	DLC1215-EN	DLC1215-GE			
Input Voltage	100 V AC	220 V AC			
Output Voltage	36 V I	DC x 2			
Control Function	Auto stop				
Shape of Plug for Power Supply	Asia				
External Dimensions (mm)	W143 x D145 x H102				
Mass (kg)	2	.4			

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



DLC1215

### DLV7100/7200/8100/8200 (115) Series 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 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**

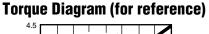
<u> </u>	opcontroations			Standard		ŀ	ligh Speed	1	High Torque		Standard		High Torque	ŀ	ligh Spee	d	High Torque
		Bit Shank: Hex. 5 mm	DLV7120- Ljt	DLV7130- LJT	DLV7140- LJT	DLV7221- LJT	DLV7231- LJT	DLV7241- LJT		DLV8120- LJT	DLV8130- LJT	DLV8140- LJT	DLV8150- LJT	DLV8221- LJT	DLV8231- LJT	DLV8241- Ljt	
	Model	Bit Shank: Hex. 6.35 mm	DLV7120- LKT	DLV7130- LKT	DLV7140- LKT	DLV7221- LKT	DLV7231- LKT	DLV7241- LKT	DLV7251- LKT	DLV8120- LKT	DLV8130- LKT	DLV8140- LKT	DLV8150- LKT	DLV8221- LKT	DLV8231- LKT	DLV8241- LKT	DLV8251- LKT
	Starting Method					Lever Star	ver Start Push to Start										
Ι.	Input Voltage						115 V AC, 50/60 Hz										
9	Torque Adju Torque Free Speed									Stepless							
Ē	Torque		0.25-0.75		1.2-3.0	0.35-0.7	0.5-1.7	1.2-3.0		0.25-0.75		1.2-3.0	2.0-4.5	0.35-0.7	0.5-1.7	1.2-3.0	2.0-4.5
		(min <sup>-1</sup> )	900	900	600	1,800	1,800	1,100	700	900	900	600	400	1,800	1,800	1,100	700
	Power Consumption (W)		Approx. 35 Approx.				Approx. 35			Approx. 45							
ုပ္ပ		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
ĽĔ	(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	4.0-5.0	2.3-3.0	2.3-3.5	3.0-4.0	4.0-5.0	2.3-3.0	2.3-3.5	3.0-4.0	4.0-5.0
Electric	Bit Type	For LJT						90		24	5						
	(mm)	For LKT									6.35	<u>i</u>					
	Mass	(g)		700			700		890		690		890		690		890

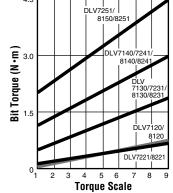
\*1 : All models of LJT/LKT series are made to order.

\*2 : Only Chinese instuction manual is available for LJT/LKT series.

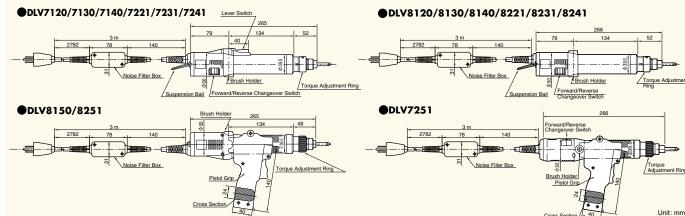
#### **Standard Accessories**

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





#### **External Dimensions**



# Electric screwdrivers bearing CCC mark (China Compulsory Certification mark) are available exclusively for China market.

#### **Specifications**

<u> </u>								
	Model	Lever Start	DLV30SL-MKC	DLV30HL-MKC	DLV30SL-MJC	DLV30HL-MJC		
	Model	Push to Start	DLV30SP-MKC	DLV30HP-MKC	DLV30SP-MJC	DLV30HP-MJC		
	Input Voltage			230 V AC,	50/60 HZ			
	Torque Adjustment	Low Torque Spring (Standard Accessory)	0.4 - 1.6					
Screwdriver	(N⋅m)	High Torque Spring (Built-in)		1.2	- 3.0			
Ę	Free Speed	(min-1)	1,200	2,000	1,200	2,000		
≷	Power Consump	tion (W)	Approx. 45					
5	Screw Size Machine Screw		2.6 - 5.0					
	(mm)	Tapping Screw	2.5 - 4.0					
Electric	Bit Type	(mm)						
	Mass	(g)	700					
	Standard Access	sories	Bit No.2 x 7 x 75 : 1 pc.     Suspension Bail : 1 pc.     Dow Torque Spring : 1 pc.					



						High Torque	High S	peed	
		Lever Start	DLV7120-JJC	DLV7130-JJC	DLV7140-JJC	· · · · · · · · · · · · · · · · · · ·			
	Model (220 V)	Push to Start	DLV8120-JJC	DLV8130-JJC	DLV8140-JJC	DLV8150-JJC	DLV8231-JJC	DLV8241-JJC	
		Lever Start	DLV7120-JKC	DLV7130-JKC				<u> </u>	
		Push to Start	DLV8120-JKC	DLV8130-JKC	DLV8140-JKC	DLV8150-JKC	DLV8231-JKC	DLV8241-JKC	
	Torque Adjustment				Step	less			
٦.	Torque	(N•m)	0.25 - 0.75	0.5 - 1.7	1.2 - 3.0	2.0 - 4.5	0.5 - 1.7	1.2 - 3.0	
ž	Free Speed	(min <sup>-1</sup> )	90	00	600	400	1,800	1,100	
Screwdriver	Power Consumption	(W)	Approx. 35				Approx. 45		
C e	Screw Size (mm)	Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 4.0	3.5 - 5.0	
S		Tapping Screw	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0	2.5 - 3.5	3.0 - 4.0	
Electric	Bit	(mm)	●JJC type			●JKC type			
	Mass	(g)	700(7100 series), 690(8100 series)			890	700(7200 series),	, 690(8200 series)	
	Standard Accessories		Each 1 pc.of bit No.1 x 6 x 70 / No.2 x 6 x 70(In the cace of DLV7251 / 8150 / 8251 each 1 pc.of No.2 x 7 x 75 / No.3 x 7 x 50) 1 pc. Suspension Bai, 2 pcs. Carbon Brush						

	Model		DLV7321-CMC	DLV7331-C	MC	DLV	7321-CKC	DL	.V7331-CKC
	Starting Method				Lever Sta	art			
	Input Voltage				36 V DC	)			
L.	Torque Adjustment				Stepless	s			
l ≤	Torque	(N•m)	0.05 - 0.5 0.3 -		2	0.0	05 - 0.5		0.3 - 1.2
þ	Free Speed	(min <sup>-1</sup> )	700 - 1,000	0	700	) - 1,000	Ę	500 - 700	
Screwdriver	Power Consumption	(W)		35					
မလိ	Screw Size	Machine Screw	1.0 - 3.0	2.0 - 3.5	5	1.	0 - 3.0		2.0 - 3.5
1.2	(mm)	Tapping Screw	1.2 - 2.6	2.0 - 3.0	)	1.	2 - 2.6		2.0 - 3.0
Electric	Bit	(mm)						6.35	
	Mass	(g)			350				
2	Model		DLC	1213-GC					
∛	Input Voltage		220 V A	.C, 50/60 Hz					
Controller	Control Function		Auto Stop, Soft						
ပြီ	Mass	(g)	2						
				/					
	Madal		DI V67000	,	DI VEZ 400	c I	DIVEZADUC		
Γ	Model		DLV5720C	DLV5720HC	DLV5740	-	DLV5740HC		DLV5750C
	Starting Method		DLV5720C	,	Lever Sta	art	DLV5740HC		DLV5750C
	Starting Method Torque Adjustment			DLV5720HC		art s			
_ _	Starting Method Torque Adjustment Torque	(N·m)	0.02 - 0.	<b>DLV5720HC</b>	Lever Sta Stepless	art s 0.15 ·	- 0.4		0.1 - 0.55
iver	Starting Method Torque Adjustment Torque Free Speed	(min <sup>-1</sup> )		2 700 - 1,000	Lever Sta	art s 0.15 ·	- 0.4 1,200 - 1,800		0.1 - 0.55 670 - 1,000
vdriver	Starting Method Torque Adjustment Torque	(min <sup>-1</sup> ) (W)	0.02 - 0. 500 - 750	2 700 - 1,000 Approx. 10	Lever Sta Stepless	art s 0.15 ·	- 0.4 1,200 - 1,800	Approx. 3	0.1 - 0.55 670 - 1,000 35
rewdriver	Starting Method Torque Adjustment Torque Free Speed	(min <sup>-1</sup> ) (W) Machine Screw	0.02 - 0. 500 - 750	2 700 - 1,000 Approx. 10 3	Lever Sta Stepless	art s 0.15 · 0 1.6 -	- 0.4 1,200 - 1,800 2.6		0.1 - 0.55 670 - 1,000 35 1.0 - 3.0
Screwdriver	Starting Method Torque Adjustment Torque Free Speed Power Consumption	(min <sup>-1</sup> ) (W)	0.02 - 0. 500 - 750	2 700 - 1,000 Approx. 10 3	Lever Sta Stepless 450 - 600	art s 0.15 - 0 1.6 - 1.4 -	- 0.4 1,200 - 1,800 2.6		0.1 - 0.55 670 - 1,000 35
Electric Screwdriver	Starting Method Torque Adjustment Torque Free Speed Power Consumption	(min <sup>-1</sup> ) (W) Machine Screw	0.02 - 0. 500 - 750	2 700 - 1,000 Approx. 10 3	Lever Sta Stepless 450 - 600	art s 0.15 · 0 1.6 -	- 0.4 1,200 - 1,800 2.6		0.1 - 0.55 670 - 1,000 35 1.0 - 3.0
Electric Screwdriver	Starting Method Torque Adjustment Torque Free Speed Power Consumption Screw Size (mm)	(min <sup>-1</sup> ) (W) Machine Screw Tapping Screw	0.02 - 0. 500 - 750	2 700 - 1,000 Approx. 10 3	Lever Sta Stepless 450 - 600	0.15 0.15 0 1.6 - 1.4 -	- 0.4 1,200 - 1,800 2.6		0.1 - 0.55 670 - 1,000 35 1.0 - 3.0
Electric Screwdriver	Starting Method Torque Adjustment Torque Free Speed Power Consumption Screw Size (mm) Bit Mass Standard Accessories	(min <sup>-1</sup> ) (W) Machine Screw Tapping Screw (mm)	0.02 - 0. 500 - 750	DLV5720HC           2           700 - 1,000           Approx. 10           3           0           230           c44) Each 1 piece           81 : 1 piece	Lever Sta Stepless 450 - 600	art s 0.15 · 0 1.6 · 1.4 · 3.5 11 44 · No.1 × : e (1.5 m) DL	- 0.4 1,200 - 1,800 2.6 2.3 ↓ 4 × 44) Each 1 piece ₩9081 : 1 piece	Approx. 3	0.1 - 0.55 670 - 1,000 35 1.0 - 3.0 1.0 - 2.6
	Starting Method Torque Adjustment Torque Free Speed Power Consumption Screw Size (mm) Bit Mass Standard Accessories Model	(min <sup>-1</sup> ) (W) Machine Screw Tapping Screw (mm)	0.02 - 0. 500 - 750 1.0 - 2. 1.0 - 2. 1.0 - 2. Bit(No.0 × 1.8 × 44 • No.0 × 2.5 × Connection Cable (1.5 m) DLW30 Suspension Ball : 1 picce	DLV5720HC           2           700 - 1,000           Approx. 10           3           0           230           <44) Each 1 piece	Lever Sta Stepless 450 - 600	art s 0.15 · 0 1.6 · 1.4 · 3.5 11 44 · No.1 × × (1.5 m) DL 1 piece	- 0.4 1,200 - 1,800 2.6 2.3 ↓ 4 × 44) Each 1 piece ₩9081 : 1 piece	Approx. 3	0.1 - 0.55 670 - 1,000 35 1.0 - 3.0 1.0 - 2.6
Controller Electric Screwdriver	Starting Method Torque Adjustment Torque Free Speed Power Consumption Screw Size (mm) Bit Mass Standard Accessories	(min <sup>-1</sup> ) (W) Machine Screw Tapping Screw (mm)	0.02 - 0. 500 - 750 1.0 - 2. 1.0 - 2. 1.0 - 2. Bit(No.0 × 1.8 × 44 • No.0 × 2.5 × Connection Cable (1.5 m) DLW30 Suspension Ball : 1 picce	DLV5720HC           2           700 - 1,000           Approx. 10           3           0           230           c44) Each 1 piece           81 : 1 piece	Lever Sta Stepless 450 - 600	art s 0.15 · 0 1.6 · 1.4 · 3.5 11 44 · No.1 × × (1.5 m) DL 1 piece	- 0.4 1,200 - 1,800 2.6 2.3 ↓ 4 × 44) Each 1 piece ₩9081 : 1 piece	Approx. 3	0.1 - 0.55 670 - 1,000 35 1.0 - 3.0 1.0 - 2.6

\* The Controller incorporates the safe resistance that is installed between the bit and the power source cord.

### DLR5040A-WE

Example of use together

with a sensor available in

the market

#### **Features**

#### For prevention of human fastening errors and enhanced fastening management accuracy

- · Ideally suited for the assembly lines of vehicles and electrical equipment requiring reliable screw fastening.
- The controller receives signals from electric screwdrivers to provide highly reliable screw fastening control.
- Count Return Function: When a screw is loosened, a reverse signal output from the electric screwdriver reverses the count by one.
- The Count Correction Function does not count elevated screws or double fastening as fastening errors.
- Input voltage range from 100 to 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 DLR5640 screw tightening counters in series without using any external controller such as a programmable controller.
- Driver Lock Function prevents unexpected start of screwdrivers.
- Compact and Lightweight (Compared with our conventional models decreased by 30 % in volume and by 38 % in mass.)
- SPC type screwdrivers for DLR5040A-WE are designed on the basis of established transformerless screwdrivers.
- **Specifications** Predicted fastening time LED OK/NG judge LED indicator Model DLR5040A-WE Power switc Fastening count/ setting display Fuse(3 A) Connecting port for Count 1 - 99Work set LED indicato electric screwd AC inlet **Counting Method** Count-up / Count-down **Count Correction Function** Count normal fastening only Jalvo. Self Adjustable Timer Setting 0.01 to 0.99 second 6 NIND 0 Work Detection Function Yes (1 terminal) / No **External Count Input** 2 terminals (PARTS A / PARTS B) Work Installation Timer Setting 0 to 9.5 seconds ÅÅBBBBE 2000000000 C/M  $\square$ F **B** • **B OK Output Timer Setting** 0 to 9.5 seconds NG Alarm ON(1) / ON(2) / OFF External connection **OK Buzzer** ON(1) / ON(2) / ON(3) / OFF Up key memory key terminal block **Count Return Function** Function key ON / OFF Count Down key Jumpers for external power supply NG Judge Timing WORK SET / DRIVER ON Setup DIP switch Automatic / Manual OK Judge AUTO / MANUAL Screwdriver Lock Function ON / OFF Scr LINK Function **Multiple Link** Up to 10 counters can be connected. When counters are connected via multiple link connection, all External Inputs on Terminal Block SENSOR / RESET / LINK-IN / PARTS A / PARTS B **External Outputs on Terminal Block** OK / NG / LINK-OUT screwdrivers are placed in the standby state and will not start except the one **Parameter Memory** Parameters stored in internal nonvolatile memory to be initially operated. In the **Power Supply** 100 - 240 V AC, 50/60 Hz See the bottom asterisk. connection shown on the right, all External Dimensions W100 × D120 × H60 screws will be fastened by the time the (mm) third screwdriver finishes screws. (Up Mass (kq)0.47 to 10 counters can be connected.) LINK-OU LINK-IN LINK-OUT Accessory : 2 m cord with UL three-prong plug. This product is for use outside Japan. Dedicated Screwdrivers for DLR5040A-WE TD04061 SPC cord for commercial power source (optional) DLV7000-SPC DLV7100/7200-SPC DLV8000-SPC series DI V30SP/HP-SPC Dedicated screwdrivers can be DLV7251-SPC DLV8150/8251-SPC directly plugged in commercial DLV8100/8200-SPC power source.

**Front and Rear Panels** 

series

Dedicated	Screwdrivers									Machine \$	Screw(2.6	6 - 6.0 mm	)		DLV30	) Туре
Model	Lever Start	DLV7020-SPC	DLV7030-SPC	DLV7031-SPC				DLV7120-SPC	DLV7130-SPC	DLV7140-SPC		DLV7231-SPC	DLV7241-SPC	DLV7251-SPC		
MOUCI	Push to Start				DLV8020-SPC	DLV8030-SPC	DLV8031-SPC	DLV8120-SPC	DLV8130-SPC	DLV8140-SPC	DLV8150-SPC	DLV8231-SPC	DLV8241-SPC	DLV8251-SPC	DLV30SP-SPC	DLV30HP-SPC
Input Volt	age		100 V AC, 50/60 Hz													
Torque Ad	ljustment							Step	less			_			_	
Torque	(N·m)	0.05 - 0.55	0.30 - 1.10	0.30 - 1.00	0.10 - 0.55	0.30 - 1.10	0.30 - 1.00	0.25 - 0.75	0.50 - 1.70	1.20 - 3.00	2.00 - 4.50	0.50 - 1.70	1.20 - 3.00	2.00 - 4.50	0.40	- 3.00
Free Spee	ed (min <sup>-1</sup> )	900	650	1,200	900	650	1,200	1,0	000	700	450	2,000	1,200	700	1,200	2,000
Power Cor	sumption (W)	Approx. 25 Approx. 30 Appr		Appro	x. 25	Approx. 30		Approx. 35			Approx. 45					
Screw Siz	e 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	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6	- 5.0
(mm)	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	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0	2.5	- 4.0
Bit Type	(mm)				$\begin{array}{c} \begin{array}{c} 06 \\ \hline \\ 24 \\ 24 \\ \end{array} \begin{array}{c} 14 \\ 5 \\ \hline \\ 5 \\ \end{array} \end{array} \begin{array}{c} 6.35 \text{ mm} \\ (1/4') \\ \text{hex shank} \end{array} \begin{array}{c} 06 \\ \hline \\ 06 \\ \hline \\ 14 \\ \hline \\ 24 \\ \hline \\ 5 \\ \end{array} \begin{array}{c} 6.35 \text{ mm} \\ (1/4') \\ \text{hex shank} \end{array} \begin{array}{c} 06 \\ \hline \\ 14 \\ 14$											
Mass	(g)		380			390		710(7100se	eries) / 670(8	100series)	810	710(7200series)	670(8200series)	810	70	00
Cord Length (m)					3 (with connector)											
Output Sig	gnals		Start, Torque up, Reverse													
Grounding	g Bit Feature							Equipped a	as standard							

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

### **DLR5340-WE**

#### **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.

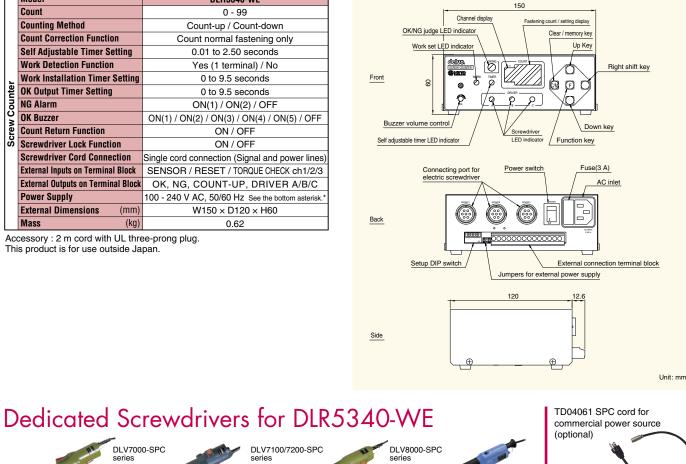


#### **Specifications**

	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 seconds				
	Work Detection Function	Yes (1 terminal) / No				
L .	Work Installation Timer Setting	0 to 9.5 seconds				
Screw Counter	OK Output Timer Setting	0 to 9.5 seconds				
8	NG Alarm	ON(1) / ON(2) / OFF				
No.	OK Buzzer	ON(1) / ON(2) / ON(3) / ON(4) / ON(5) / OFF				
١.	Count Return Function	ON / OFF				
တြ	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				
	<b>External Outputs on Terminal Block</b>	OK, NG, COUNT-UP, DRIVER A/B/C				
	Power Supply	100 - 240 V AC, 50/60 Hz See the bottom asterisk.*				
	External Dimensions (mm)	W150 × D120 × H60				
	Mass (kg)	0.62				

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

#### **Front and Rear Panels**



DLV7000-SPC DLV7100/7200-SPC series series DLV30SP/HP-SPC Dedicated screwdrivers can be DLV7251-SPC DLV8150/8251-SPC directly plugged in commercial DLV8100/8200-SPC power source. series

. . . .

Dedicated	Screwdrivers		Minia	ture Screv	w(1.0 - 3.5	5 mm)				Machine \$	Screw(2.6	- 6.0 mm	)		DLV30	) Туре
Model	Lever Start	DLV7020-SPC	DLV7030-SPC	DLV7031-SPC				DLV7120-SPC	DLV7130-SPC	DLV7140-SPC		DLV7231-SPC	DLV7241-SPC	DLV7251-SPC		
Mouer	Push to Start				DLV8020-SPC	DLV8030-SPC	DLV8031-SPC	DLV8120-SPC	DLV8130-SPC	DLV8140-SPC	DLV8150-SPC	DLV8231-SPC	DLV8241-SPC	DLV8251-SPC	DLV30SP-SPC	DLV30HP-SPC
Input Volt	age							100 V AC	50/60 Hz							
Torque Ad	ljustment							Step	less							
Torque	(N·m)	0.05 - 0.55	0.30 - 1.10	0.30 - 1.00	0.10 - 0.55	0.30 - 1.10	0.30 - 1.00	0.25 - 0.75	0.50 - 1.70	1.20 - 3.00	2.00 - 4.50	0.50 - 1.70	1.20 - 3.00	2.00 - 4.50	0.40	- 3.00
Free Spee	ed (min <sup>-1</sup> )	900	650	1,200	900	650	1,200	1,0	00	700	450	2,000	1,200	700	1,200	2,000
Power Cor	nsumption (W)	/) Approx. 25 Approx. 30 Approx. 25 Approx. 30			Approx. 35 Approx. 45											
Screw Siz	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	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6	- 5.0
(mm)	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	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0	2.5	- 4.0
Bit Type	(mm)	-	Ø4	3.5	-6			ø6 		5	6.35 mm (1/4") hex shank			6.35 mm (1/4") hex shank	1	
Mass	(g)		380			390		710(7100se	eries) / 670(8	3100series)	810	710(7200series)	670(8200series)	810	70	00
Cord Leng	ength (m) 3 (				3 (with connector)											
Output Signals							S	tart, Torque	up, Revers	se						
Grounding	g Bit Feature							Equipped a	as standard							

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

### **DLR5640-WN**

#### **Features**

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

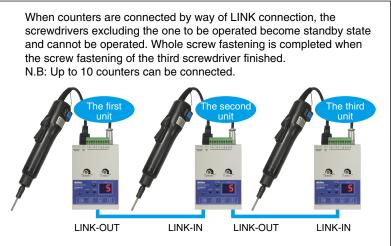
- Ideally suited for the assembly lines of vehicles and electrical equipment requiring reliable screw fastening.
- The controller receives signals from electric screwdrivers to provide highly reliable screw fastening control.
- Functions of the controller and counter are integrated into a single unit.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

#### **Specifications**

Screw Counter

Model	DLR5640-WN				
Count	1 - 99				
Counting Method	Count-up / Count-down				
Count Correction Function	Count normal fastening only				
Self Adjustable Timer Setting	0.01 to 0.99 second				
Work Detection Function	Yes (1 terminal) / No				
External Count Input	2 terminals (PARTS A / PARTS B)				
Work Installation Timer Setting	0 to 9.5 seconds				
OK Output Timer Setting	0 to 9.5 seconds				
NG Alarm	ON(1) / ON(2) / OFF				
OK Buzzer	ON(1) / ON(2) / ON(3) / OFF				
Count Return Function	ON / OFF WORK SET / DRIVER ON				
NG Judge Timing					
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				
Power Supply	100 - 240 V AC, 50/60 Hz				
Screwdriver Power Supply	33 V DC, 1.5 A				
External Dimensions (mm)	W101 × D140 × H57				
Mass (kg)	0.8				
Accessories	Power cord with U.S.A plug (2 m) Suspension bail (2 pcs.)				

#### LINK Function (Commom to DLR5040A & DLR5640)





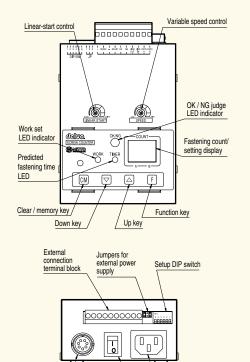




Example of use together with a sensor available in the market

The example of installation

#### **Front and Rear Panels**



Connecting port for

electric screwdriver

AC inlet

Power switch

# Screwdrivers designed for Screw Fastening Counter

DLR5640-WE



DLV7410A/7410HA/7420A-SPC

DLV7321/7331-SPC

#### **Specifications**

Model		DLV7410A-SPC	DLV7410HA-SPC	DLV7420A-SPC	DLV7321-SPC	DLV7331-SPC		
Starting Method		Lever start switch						
Torque Adjustme	ent			Stepless				
Torque	(N·m)	0.02	- 0.20	0.15 - 0.40	0.10 - 0.50	0.30 - 1.20		
Free Speed	(min <sup>-1</sup> )	500 - 750	700 - 1,000	450 - 600	300 - 1,000	200 - 700		
Power Consump	tion (W)		Approx. 10		Appro	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)							
Electrostatic Cou	intermeasure	Complied with EN100015-1						
Mass	(g)		230		350			
Cord Length	(m)	1.5 (with connector)						
Output Signals		Start, Torque up, Reverse						
Grounding Bit Fe	ature			Equipped as standard				

#### **Combinations with Electric Screwdrivers**

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

\*1: The Count Return Function is not available.

#### **Optional Cord**



DLW9072(TD02925)



Conversion cord from 5-prong to 6-prong(TD02826)

### **DSF1000** series A type

Screw Feeder NKBIDA

#### **Features**

#### The smallest ever and space saving.

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



#### **Specifications**

•								
Model		DSF1120A	DSF1140A	DSF1170A	DSF1200A			
100 V AC, 5	50/60 Hz	DSF1120A-EN	DSF1140A-EN	DSF1170A-EN	DSF1200A-EN			
Input Voltage 115 V AC, S	50/60 Hz	DSF1120A-FE	DSF1140A-FE	DSF1170A-FE	DSF1200A-FE			
230 V AC, 5	50/60 Hz	DSF1120A-GE	DSF1140A-GE	DSF1170A-GE	DSF1200A-GE			
<b>Nominal Screw Diamete</b>	<b>r</b> (mm)	ø1.2	ø1.4	ø1.7	ø2			
Tank Capacity *		1,000 pcs.	700 pcs.	400 pcs.	350 pcs.			
Screw Feed Speed		Less than one second per piece						
Dimensions	(mm)	W45 x D170 x H102						
Mass	(kg)		1	.5				
Power Consumption	(W)		Appr	ox. 5				
Shape of Plug for Power S	Supply	Asia						
Accessories		Hex. Wrench : 1 pc. Power cord : 1 pc. of 2 m						

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

#### **Optional Expansion Tank**

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

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





Example of use



Screw tray

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



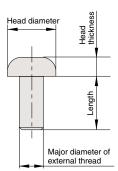
#### **Applicable Screw Size**

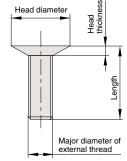
Applicab	le Screw	Size			(Unit: mm)
Nominal Diameter	Head Shape	Head Diameter	Head Thickness	Length	Major Diameter of External Thread
ø1.2		ø1.5 - ø2.0	0.15 - 0.50		Up to 1.2
ø1.4	Pan head	ø1.7 - ø2.7	0.15 - 0.70	2 - 5	Up to 1.4
ø1.7	1 annoad	ø1.9 - ø3.2	0.15 - 0.90		Up to 1.7
ø2		ø2.3 - ø3.5	0.15 - 1.00		Up to 2.0
ø1.2		ø1.5 - ø2.0	0.15 - 0.50		Up to 1.2
ø1.4	Countersunk	ø1.7 - ø2.7	0.15 - 0.70		Up to 1.4
ø1.7	head	ø1.9 - ø3.2	0.15 - 0.90	3 - 5	Up to 1.7
ø2		ø2.3 - ø4.2	0.15 - 1.30		Up to 2.0

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

Pan Head

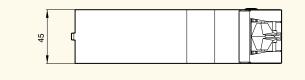
#### Countersunk Head





#### **External Dimensions**

#### •DSF1000A series





Unit: mm

### DLT1133/1173/1633/1673 series

#### **Features**

- Store the measured data up to 100 ones even after the power is turned off, preventing any data loss. In addition, the data can be fed into a personal computer through RS232C connector, realizing paperless control for measured torque data.
- Free program designed for uploading the torque data stored in "delvo" torque checkers into computers can be downloaded from NITTO KOHKI's website. http://www.nitto-kohki.co.jp/e/
- Can run 15 hours continuously with the battery fully charged (more than two weeks on the condition of one-hour operation per day). In addition, it is of energy saving type with AUTO POWER OFF function (to turn OFF power automatically when left unused for 10 minutes).



#### **Specifications**

opoonnoationo									
Model	DLT1133	DLT1173	DLT1633	DLT1673					
Measurement Range (N·m)	0.015	- 1.5	0.15	- 6.5					
Calibration Precision	Within ± 0.5 °	% (Full Scale),	Within $\pm$ 0.5 % (Full Scale),						
Gampianon Frecision	For 0.2 N·m or	less, ± 1 digit	For 2 N·m or less, ± 1 digit						
Display	4-digit	digital display (Single-line) Data sampli	ing : 1,000 times/sec Display rate : 12 tir	mes/sec					
Measuring Unit         kgf · cm-N·m -lbf · in (selectable)									
Data Memory		100 pieces of data							
Measuring Direction		CW an	nd CCW						
Measuring Mode		3 modes :	: PD-TR-PP						
Auto Power Off		Powered off if left unt	touched for 10 minutes						
External Output	As per RS232C output (single-direction, no procedure, 100 data items) Mitsutoyo Digimatic (sequential output)								
Analog Output	Approx. 1	.5 V max	Approx. 1.0 V max						
Analog Output	No zero offset ; identical waveforms produced in PP, PD, and TR modes								
Rechargeable Battery		Nickel-cadr	mium battery						
Charger Type	DLE1833	DLE1873	DLE1833	DLE1873					
Input Voltage for Charger	100 V AC, 50/60 Hz	230 V AC, 50/60 Hz	100 V AC, 50/60 Hz	230 V AC, 50/60 Hz					
Charging Time		8 h	iours						
Continuous Operation Time		15 hours							
External Dimensions (mm)		W160 x D	D110 x H47						
Mass (kg)		1	1.0						

#### **Standard Accessories**

		DLT1133	DLT1173	DLT1633/DLT1673		
Joint/Bit		Bit Joint	Bit Joint	Bit Joint	Spring for Joint	
Model		DLW4340	DLW4430	DLW4360	DLW4660	
Measuring	(N•m)	0.015 - 1.5	0.15 - 1.5	0.15 - 6.5	0.15 - 1.5	

#### **Optional Accessories**

Model	Part No.	Model	Specifications	DLT1133	DLT1173	DLT1633/DLT1673
	TD03305	DLW4330	OD 4 mm type, Torque Range : 0.015 to 0.25 N·m	0	0	-
Bit Joint	TD03306 DLW4340		OD 4 mm type, Torque Range : 0.15 to 1.5 N·m	0	0	0
Dir Joint	TD03307	DLW4350	Hex 5 and Hex 6.35 types, Torque Range : 0.15 to 1.5 N·m	0	0	0
	TD03308	DLW4360	Hex 5 and Hex 6.35 types, Torque Range : 0.15 to 6.5 N·m	_	_	0
Screw Joint	Screw Joint TD03309 DLW443		#1 screw type, Torque Range : 0.15 to 1.5 N·m	0	0	0
oorew Juliit	TD03310	DLW4530*	#2 screw type, Torque Range : 0.15 to 5 N·m	_	_	Ó

 $\bigcirc$  : Standard accessories  $\bigcirc$  : Available as option - : Unsupported

\* DLW4530 must be used at 5 N·m or less.



#### **Selection of Torque Checker**

DLT1133 / DLT1173 (for miniature screw)	DLT1633 / DLT1673
DLV3300 series*1 / DLV5700 series / DLV5800 series / DLV7300 series	DLV7100 series / DLV8100 series / DLV7200 series / DLV8200 series
DLV7800 series / DLV7000 series / DLV8000 series / DLV7400A series	DLV7500 series / DLV8500 series / DLV3100 series <sup>*2</sup> / DLV30 series

\*1 A reversible screwdriver is required to loosen the measuring joint.

\*2 A reversible screwdriver is required to loosen the measuring joint. Screw type joint is required.

### Accessories

#### **Tool Balancer**



Easy to adjust tension by using handle.

Model		TW-1R	RW-3	RW-5	
Capacity	(kg)	0.5 - 1.5	1.0 - 3.0	2.5 - 5.0	
Stroke	(m)	1.5		2	
Mass	(kg)	0.3	0.7	0.9	

#### Vacuum Pump DLP2500 series



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

Model		DLP2530	DLP2570		
Voltage		100 V AC, 50/60 Hz 230 V AC, 50/60 I			
Power Consumption	(W)	, 26(60 Hz)			
Achievable Vacuum	(kPa)	-33.3			
Flow Rate (at Outlet)	( l/mm)	2	24		
Screw Size	(mm)	4 or less			
Mass	(kg)	3.8			

#### Pistol Grip DLW2300/2300ESD

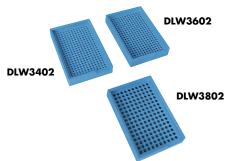
(for DLV7100, 7200, 8100, 8200, 7500, 7600, 8500, 8600, and 30 series Electric Screwdrivers)



#### Easy-to-attach grip suitable for horizontal operation.

#### Shaker Box Made of Anti-electrostatic Resin

(for 2,3 and 4 mm Screws)



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

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

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

#### **Torque Adjustment Ring Cover**



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

Part No.	Model	Applicable Screwdriver				
TD00331	DLW5200	7100, 7200, 8100 and 8200 series				
TV05143	DLW5201*	7100, 7200, 8100, 8200, and 30 (brushless) series				
TD00332	DLW5300	7301,7000,8000 series (for 4 mm bit)				
TD01883	DLW5400	7300 series (for 6.35 mm bit)				
TD00333	DLW5500	7303 series (for 4 mm & 6.35 mm bit)				
TD00334	DLW5600	7500, 8500 series				
TD02875	DLW5700	5700, 5800, 7400A, series				
*As this is a	As this is a clear plastic cover, torgue scale can be seen even after mounted					

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

#### Flanged Coupling DLW9011

(for DLV7100, 7200, 8100, and 8200 series Electric Screwdrivers)



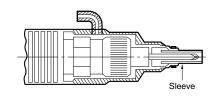
Provides a flange which enables the operator to apply axial pressure through the heel of the hand.

### **Sleeves and Vacuum Pickups**

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

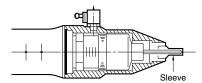
#### Vacuum Pickup

DLP6500 (for DLV7000 and 8000 Series Electric Screwdrivers)



DLP5100 (for DLV7800 Electric Screwdrivers) DLP5300 (for DLV7400A/5800 Electric Screwdrivers) DLP7100 (for DLV7313 Electric Screwdriver) DLP7200 (designed for OD 4 mm Shank Bit for

DLV7323/7333 Electric Screwdrivers) DLP7300 (designed for OD 6.35 mm Hex. Shank Bit for DLV7323/7333 Electric Screwdrivers)



#### **Standard Set**

Vacuum Pickup (Part No.)	DLP5100 (TD00342)	DLP5300 (TD04342)	DLP6500 (TD00343)	<b>DLP7100</b> (TD00345)	DLP7200 (TD00346)
	DLS2124 × 1 pc.	DLS2120 × 1 pc.	DLS2124 × 1 pc.	DLS2122 × 1 pc.	DLS2123 × 1 pc.
Accessories	DLS2127 × 1 pc.	DLS2124 × 1 pc.	DLS2127 × 1 pc.	DLS2124 × 1 pc.	DLS2124 × 1 pc.
			DI S2130 x 1 pc	DI S2127 x 1 pc	DI S2127 x 1 pc

#### Sleeve DLS2000 series (Plastic)

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

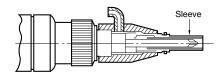


					Unit: mm
	Bit				
Part No.	Model	ød	øD		
TD00348	DLS2120	2			
TD00349	DLS2121	2.2		No.0 x 1.8 x 44	
TD00350	DLS2122	2.5	3.5	NU.U X 1.0 X 44	
TD00351	DLS2123	2.7			$\pm$
TD00352	DLS2124	3.1			L) ad
TD00353	DLS2125	3.3		No.0 x 2.5 x 44	× le
TD00354	DLS2126	3.5	4.5		
TD00355	DLS2127	3.7			ω ×
TD00356	DLS2128	4		No.1 x 3 x 44	Ω
TD00357	DLS2129	4.2		110.1 X 3 X 44	hilli No
TD00358	DLS2130	4.5	5.5	No.1 x 4 x 44	<u>ل</u> ک
TD00359	DLS2131	4.7		INO. I X 4 X 44	
TD00360	DLS2132	5.1			
TD00361	DLS2133	5.3	6.5	No.2 x 4 x 44	
TD00362	DLS2134	5.6		INU.2 X 4 X 44	
TD00363	DLS2135	6.1	7		

#### For DLV7100/7200/8100/8200- J series

#### **Vacuum Pickup**

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

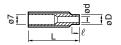


**Standard Set** 

Vacuum Pickup (Part No.)	<b>DLP7000</b> (TD00344)
Accessories	DLS3223 × 1 pc.
ACCESSOILES	DLS3225 × 1 pc.

								Unit: mm		
		Bit								
	Part No.	Model	ød	øD	l	L	ы			
	TD00364	DLS3222	5.6	7	5		No.1 x 5 x 70			
	TD05024	DLS3223	6.1	9						
Г	TD00365	DLS3224	6.4	9	] —	34	No.2 x 6 x 70			
Г	TD00366	DLS3225	7.1	9				ead x L)		
Г	TD00367	DLS3226	4.6	7			No.1 x 4 x 100	He		
Γ	TD00368	DLS3227	5.1	7	18		NO.1 X 4 X 100			
Г	TD00369	DLS3228	5.6	7		65	No.1 x 5 x 100	o.		
Γ	TD00370	DLS3229	6.1	9		60	No.2 x 5 x 100	Phillips (No. x		
	TD00371	DLS3230	6.4	9	—		No.2 x 6 x 100			
	TD00372	DLS3231	7.1	9			INU.2 X 6 X 100			

#### Sleeve DLS3000 series (Metal)

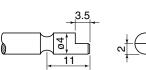


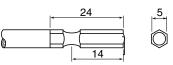
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### NK BIT

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

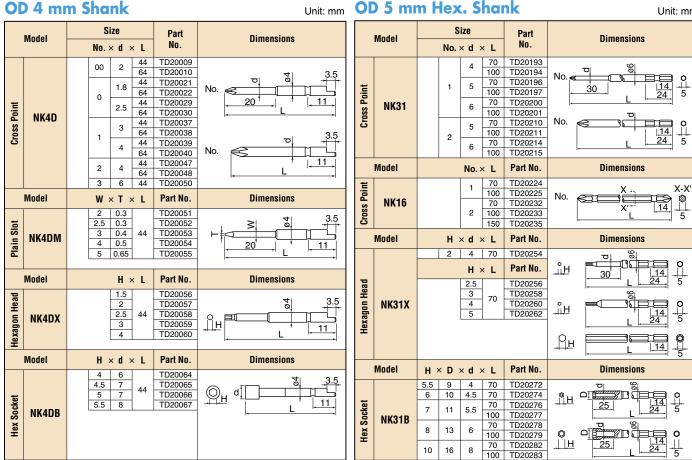
#### For DLV7100/7200/8100/8200/3100 series





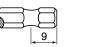
#### **OD 5 mm Hex. Shank**

Unit: mm



Unit: mm

#### For DLV7200/8100/8200 series

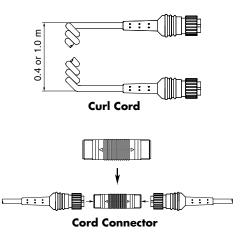


6.35

#### OD 6.35 mm Hex. Shank

	Model					Part	Dimensions		
Model		No.×d×L			× L	No.	Diffensions		
			1		50	TD20308			
Cross Point			<u>'</u>		75	TD20309			
۲ ۲	NK35		2	7	50	TD20319			
SS	INNUU			l '	75	TD20320			
5			3		50	TD20327	L <u>23</u> 6.35		
			<u> </u>		75	TD20328			
	Model			No.>	× L	Part No.	Dimensions		
					75	TD20363			
E.	NK15			2	100	TD20364	X -, X-X'		
2					150	TD20366	No. States 0		
SS					75	TD20371	Y'-i 10		
18						3	100 150	TD20372	6.35
						TD20374	+ <u> </u>		
	Model	Η×L		Part No.	Dimensions				
ad				5	50	TD20400	07		
풀	NK35X			6	50	TD20404			
Hexagon Head	NNJJA								
	Model	H >	< D	×d>	× L	Part No.	Dimensions		
et		10	10	8	75	TD20442			
S.	NK35BN	10	16	8 B	100	TD20443			
Hex Socket	INKOJDIN	10	10	10	75	TD20457			
<u>۽</u>		13	19	10	100	TD20458			

#### ptional Co rc



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

ribado inquire or the distributor for the price and minimum quantity on such optional cord.			
Part No.	Optional Cord	Applied Models	Length(m)
TD02826	5P to 6P Exchange Cord *1		0.1
TD02416	Extension Cord For 5P	DLV7300	2.0
TD02486	Extension Cord For 6P		2.0
TD01882	Curl Cord		0.4
TD02820	Curl Cord	DLV7500/8500	1.0
TD02438	Cord Connector DLW9100		

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

### **SAFETY GUIDE**

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

#### 🕂 WARNING:

🔨 CAUTION:

Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in death or serious injury.

Indicates a potentially hazardous situation which, if not avoided by following the instructions given,

could result in injury or material damage.

#### **Safety Precautions**

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

#### 🔥 WARNING

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

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

#### \land 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.



 $\star$  Specifications and designs are subject to change at any time without notice.



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