

TORQUE TESTERS
TOOL SUPPORTS
SCREW FEEDERS



WARRANTY

NAVIGATION LEGEND



Screwdrivers



Controllers



Tool Supports



Torque Testers



Delta Regis products are warranted for one year from the date of purchase against defects in material and workmanship. In addition, DC premium brushless screwdrivers are warranted for two years and DC brushless motors are warranted for three years from the date of purchase against defects in material and workmanship. This warranty does not cover damage due to transportation, abuse, misuse, alteration, or improper service. Items subject to wear during normal use (such as tool cables, carbon brushes, driver bits, etc) are considered maintenance items and are not normally covered by this warranty, unless deemed to be defective upon our further evaluation.

Our sole remedy is to repair or replace (at our discretion) any unit found to be defective due to defects in material or workmanship. It is the responsibility of the user to return any product thought to be defective, freight prepaid, to our warehouse for inspection and evaluation.

There is no warranty of merchantability or fitness of purpose. In no event will Delta Regis Tools, Inc. be liable for business interruptions, loss of profits, harm, injury, damage, personal injury, cost of delay, or any other special, indirect, incidental, or consequential losses, costs, or damages.

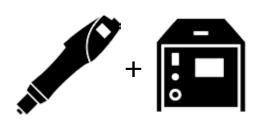
Efforts have been made to ensure the accuracy of the information and specifications in this catalog. Delta Regis Tools reserves the right to correct or change any specifications found herein without further notification.

Please contact us if you have any questions, concerns, or would like to discuss the details of an application. We are available to assist in any way that we can.



www.deltaregis.com

SCREWDRIVERS & CONTROLLERS



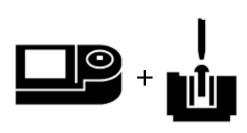
		Page							
12V MINI:	0.0134 NM 0.07-3.08 IN.	LB 7							
32V INLINE/PISTOL:	0.02-2.94 NM	LB 8							
32V ANGLE:	0.11-1.30 NM 0 .9-11.6 IN.	LB 9							
32V CONTROLLERS, I/O	32V CONTROLLERS, I/O MODULES & ACCESS.								
40V INLINE/PISTOL:	0.98-25 NM 8.9-221 IN.	LB 12-13							
40V ANGLE:	0.98-20 NM 8.9-177 IN.	B 14							
40V CONTROLLERS, I/O	15-18								

TORQUE ARMS & TOOL SUPPORTS



	Page
TELESCOPIC REACTION ARM, 12 / 30 NM	22
ECONOMY TORQUE ARM, SPRING ADJUST	22
E-MIDI PRECISION PARALLEL ARM	23
TOOL STAND AND TOOL BALANCERS	24
ERGO-SYS STAND, BALANCER AND ARM	25

SCREW FEEDERS, TORQUE TESTERS, ACCESS.



	Page
SCREW FEEDERS, 1.0-5.2MM THREAD DIA.	11
MANUAL TORQUE DRIVERS, PRESET & ADJ.	19
DRTQ TORQUE TESTERS, 1 IN.LB - 100 FT.LB	20-21
VACUUM PICKUP ATTACHMENT	26-27
SCREWDRIVER BITS AND BIT HOLDERS	27

INFORMATION



	Page
WARRANTY INFORMATION	2
DRIVER SELECTION GUIDE & FEATURES	4-6
TORQUE CONVERSION TABLE	27



SCREWDRIVER SELECTION GUIDE

Know your assembly requirements

With the endless range of applications for installing threaded fasteners, proper selection of a screwdriver begins with knowing the details of the job that needs to be performed by the driver.

Torque - What is the required torque to properly install the fastener? This torque value is determined through the engineering and testing of the product being assembled and not something that we can provide for you. How critical is the final torque value?

Prevailing Torque - Is the fastener running down freely into a threaded hole, or is it self-tapping? Does the fastener have thread-locking compound or a locknut? Any prevailing torque must be lower than final torque.

Joint Type - Once the fastener initially seats, is there extended rotation of the screwdriver due to soft gaskets, spring washers, or other compression in the assembled joint?

Speed and Direction- Is the fastener installation speed restricted by materials (eg. plastics) or other design criteria? Will the screwdriver run primarily in the forward (CW) direction, or does the application require frequent switching between forward and reverse?

Duty Cycle - What is the estimated time to run-down a fastener? How many fasteners are installed per minute? How many hours will the tool be running per day? Is there prevailing torque during run-down?

Select the appropriate model

Based on the application's torque (and speed) requirements, the quick reference chart on the following page indicates possible choices in the Delta Regis product line. In many cases, you will find that several models of screwdrivers offer the required torque output. Try to select models where the required torque falls into the middle portion of the screwdriver's range. The chart is sub-divided by series of screwdrivers. If you require assistance in selecting the most appropriate model for your application, please feel free to contact us by phone or e-mail.

DC Premium Brushless (12V/32V/40V) - The DC brushless models offer the best performance for production applications. Clean running, maintenance-free brushless DC motors allow for higher duty cycles than brush motor tools. Premium low voltage DC drivers are available with ESD-safe housings and various control options. Standard controllers have Hi/Lo speed selection, optional controllers available for slow start, I/O and counting with rundown verification. All brushless tools come with a precise shut-off clutch for excellent repeatability.



BRUSHLESS SCREWDRIVERS MODEL OVERVIEW

Model No.	RPM	Page					Torq	jue Ra	nge -	Nm (i	n-lb)					
(DC models use controller)	(Hi / Low)		o	1	2		3	2	1	5		7.	5	1	0	
12VDC Shut-off Premium Bru	ıshless	7		(8.8)	(16.7) ((26.5)	(35	5.4)	(44	.2)	(66	.4)	(88)	.5)	(1
ESL210	1000 / 700															
ESL210S	280 / 200															
ESL211	1000 / 700															
ESL211S	280 / 200															
32VDC Shut-off Premium Bru	ıshless	8														
CESL810	1000 / 700															
CESL810S	500 / 350															
CESL811	1000 / 700															
CESL812	1000 / 700															
CESL823/823P	100/700															
CESL823F/823PF	2000															
CESL824/824P	1000/700															
CESL824F/824PF	2000															
CESL827/827P	1200/900															
32VDC Right Angle Drivers		9														
CESL823/RA	1000 /700															
CESL823F/RA	2000															
CESL824/RA	1000															
CESL824F/RA	2000															
40VDC Shut-off Handheld D		12														
CESL828/828P	1000															
CESL828F/828PF	2000															
CESL829/829P	1000															
40VDC Handheld/ Fixture Mo		12-13														
CESL835M/835PM/CESP835	1000 / 750															
CESL845M/845PM/CESP845	800/600															
CESL855M/855PM/CESP855	550/400															
CESL855FM/855PFM	880/660															
CESL865M/865PM/CESP865	350/250															
CESL865FM/865PFM	600/450															
CESL875M/875PM	350/250															
40VDC Handheld/ Fixture Mo		12														
CESL935/935P	1000 /750															
CESL935F/935PF	2200/1650															
CESL945/945P	1000/750															
CESL945/945P CESL955/955P	880/660															
40VDC Right Angle Drivers	000/000	14														
CESL828/RA / 828F/RA	1000 (2000)	17														
CESL829/RA	1000 (2000)															
CESL835M/RAB	1000															
CESL845M/RAB	800															
CESL855M/RAB	550															
CL3L033IVI/RAD	330															



SCREWDRIVER FEATURES



Our drivers are designed with operator ergonomics in mind. Most models feature a cushioned grip for operator comfort. Our 12V, 32V and 40VDC Screwdrivers are available with ESD-Safe housings for assembling sensitive components. Other features include:

Torque Repeatability - Delta Regis Electric Drivers utilize precise clutches for repeatable performance. The factory target values are: 32VDC Shut-off Clutch: +/- 3% 12VDC / 40VDC: +/- 5%



Suspension bail allows for hanging tool from tool balancer for improved ergonomics and tool life.

Please note that actual repeatability is joint dependent. It will vary based on factors such as joint type and consistency, lubrication, speed, operator input, and test equipment.



All models have a forward/reverse switch conveniently positioned for thumb operation.



Stepless external torque adjustment includes scale (0-8) for reference purposes (scale does not indicate actual torque value).



A torque lock sleeve can be installed in place of the standard front housing nut to cover the torque adjustment and prevent accidental changes. 12VDC and 32VDC brushless models include a torque lock sleeve.



Quick change bit holder accepts industrial screwdriver bits: ESL210-211: 4mm round bits All other models: 1/4" hex power bits





ESL2 SERIES MINI BRUSHLESS, SHUT-OFF CLUTCH



The Delta Regis ESL2 Series Miniature Shut-Off Screwdriver provides excellent low torque repeatability in a small package for precise installation of small screws. The screwdriver's brushless 12VDC motor ensures durability and low maintenance. Each tool includes a 2m cable for connecting to the required BECT200 Controller.



Features

- Compact size designed for installing miniature fasteners. Ideal for assembly of cell phones and other small electronics
- Precise shut-off clutch provides excellent repeatability
- Torque range of 0.07 3.08 in-lbs (0.01 0.34 Nm)
- · Low RPM models available for slow-speed applications
- ESD safe tool housing is standard (non-ESD available)
- Lever start, top-mounted reverse button
- 12VDC brushless motor requires no maintenance
- Bit holder accepts 4mm round winged bits (2 included)
- Tool and controller are CE/RoHS compliant; Controller is ETL approved

12VDC Brushless Screwd	rivers & Con		
Model No. with Controller (1,2)	Range In.Lbs	Range Nm	Speed (RPM) Hi / Lo
ESL210-ESD / BECT200	0.07 - 1.32	0.01 - 0.147	1000 / 700
ESL210S-ESD / BECT200	0.07 - 1.32	0.01 - 0.147	280 / 200
ESL211-ESD / BECT200	0.44 - 3.08	0.05 - 0.343	1000 / 700
ESL211S-ESD / BECT200	0.44 - 3.08	0.05 - 0.343	280 / 200
Dimensions (mm): 165 (L) x 23	3 (dia) / (in): 6.5	Weight: 170g / 0.4lbs	

⁽¹⁾ScrewdriverandControllerarepackagedandsoldasaset. Above dimensions are for the screwdriveronly.
(2) Controller includes standard North American power cord. Add suffix 'E' for EU cord, suffix 'UK' for UK cord.

cord.
BECT200 Controller Specifications
Input 100-240VAC, 50/60hz, 1A; Output 12/9VDC, 30W





CESL8 32VDC PREMIUM BRUSHLESS, SHUT-OFF CLUTCH

The Delta Regis CESL8 Series Premium Brushless Screwdrivers provide the ultimate combination of ergonomics, precision, performance and environmental cleanliness to the installation of fasteners. The quiet, brushless DC motor does not create the carbon dust generated by the brushes in a conventional DC motor. The motor's low power consumption results in a tool that runs cooler, even under demanding applications.



The CESL8 Series 32VDC
Brushless Screwdriver can be
used with either the standard
BECT620C/820 Hi/Lo Speed
Controller or with our BECT832SSO FASTEN/COUNT/VERIFY
Controller for applications
requiring batch counting and
input/output interface with
external equipment.



Features

- Precise Torque Control, Low Torque Reaction
- Quiet, Brushless DC motor means no carbon dust 3 year motor warranty.
- Compact body design results in exceptional manouverability and operator comfort
- · Less heat build-up and higher duty cycle capabilities than conventional brush motors
- 32V DC models available with ESD or Non-ESD housing
- CE, RoHS Compliant

32VDC Brushless Screwdriver Models

Model No. w/ESD Housing	Model No. without ESD	Start Type	Range (In.Lbs)	Range (Nm)	Speed (RPM) Hi	Speed (RPM) Lo	Driver Bit Type	Length mm / in	Diameter mm / in	Weight g / lbs
CESL810-ESD (2)	-		0.2 - 3.1	0.02 - 0.35	1000	700				
CESL810S-ESD (2)	-	Lover	0.2 - 3.1	0.02 - 0.35	500	350	1/4" hov	105 / 7 2	20/12	205 / 0.0
CESL811-ESD (2)	CESL811 (2)	Lever	0.4 - 6.2	0.05 - 0.69	1000	700	1/4" hex	185 / 7.3	32 / 1.3	385 / 0.8
CESL812-ESD (2)	CESL812 (2)		0.9 - 8.7	0.10 - 0.98	1000	700				
CESL823-ESD	CESL823		1.3 - 10.5	0.15 - 1.18	1000	700		245 / 9.6	36 / 1.4	
CESL823F-ESD (1)	CESL823F (1)	1	1.3 - 10.5	0.15 - 1.18	2000	-				
CESL824-ESD	CESL824	Lever	2.6 - 16.5	0.29 - 1.86	1000	700				
CESL824F-ESD (1)	CESL824F (1)		2.6 - 14.7	0.29 - 1.67	2000	-				
CESL823P-ESD	CESL823P		1.3 - 10.5	0.15 - 1.18	1000	700	1/4" hex			520 / 1.1
CESL823PF-ESD (1)	CESL823PF (1)	Push	1.3 - 10.5	0.15 - 1.18	2000	-				
CESL824P-ESD	CESL824P	Pusii	2.6 - 16.5	0.29 - 1.86	1000	700				
CESL824PF-ESD (1)	CESL824PF (1)		2.6 - 14.7	0.29 - 1.67	2000	-				
CESL827-ESD (1)(3)	CESL827 (1)(3)	Lever	8.7 - 26.0	0.98 - 2.94	1200	900				
CESL827P-ESD (1)(3)	CESL827P (1)(3)	Push	8.7 - 26.0	0.98 - 2.94	1200	900	1/4" hex	278 / 10.9	39.5 / 1.6	800 / 1.8

⁽¹⁾ Use controller model BECT820 with these screwdrivers.

⁽⁹⁾ CESL827 is for hard joint, non-prevailing torque applications below 20% duty cycle. Use 40V model CESL828 for more demanding requirements.



⁽²⁾ Driver available with optional 4mm round (winged bit) bit holder. Add suffix '-4mm' to model number.

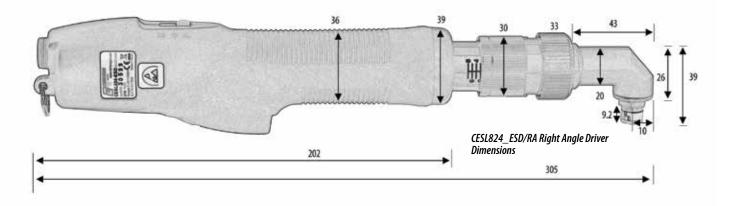
32VDC RIGHT ANGLE DRIVERS



0.1-1.3 Nm 0.9-12 in.lb



-RA Right Angle Drive	ers				
Model No. (Standard Housing)	Model No. (w/ ESD Housing)	Range (In.Lbs)	Range (Nm)	Speed (RPM)	Weight g / Ibs
CESL823/RA	CESL823-ESD/RA	0.9 - 7.3	0.11 - 0.83	1000/700	
CESL823F/RA	CESL823F-ESD/RA	0.9 - 7.3	0.11 - 0.83	2000	770 / 1.7
CESL824/RA	CESL824-ESD/RA	1.8 - 11.6	0.20 - 1.30	1000/700	77071
CESL824F/RA	CESL824F-ESD/RA	1.8 - 10.4	0.20 - 1.17	2000	







32 VDC CONTROLLERS & ACCESSORIES

The BECT620C/820 Controllers are specifically for use with CESL810-827 Brushless Tools. One controller (ordered separately) is required per screwdriver. CE/RoHS/ETL Approved.



Control	lers for	32VDC B	Brushless D				
Model Number ⁽¹⁾	Outlets	Speeds	Tool Connector	Input	Output	Dimensions L x W x H (mm)	Weight kg / lbs
BECT620C					32/24V DC, 60W	145 x 60 x 35	0.25 / 0.6
BECT820	1	Hi / Lo	6 pin	100-240V AC	32/24V DC, 120W	195 x 76 x 56	0.45 / 1

⁽¹⁾ Part number with North American cordset. For EU cord, add suffix 'E', UK cord add suffix 'UK'.



DD00 20422C
Torque Lock Sleeve - covers
an appropriate accessory.
down the chart; X signifies
on the right, follow column down the chart; X signifies an appropriate accessory.

DR96-66002

DR96-832X10MSH

Accessories

Select driver model no.

CESL827P-ESD CESL827P CESL827

101	Torque Lock Sieeve - covers torque adjusting nut to deter tampening (1 included), metal lock sieeves also available													
DR	30-20133C			X										
DR	30-20133E (ESD safe)	X	X											
DR	30-10134C						X	X						
DR	30-10134E (ESD safe)				X	X								
DR	30-20142C										X	X		
DR	80-20142E (ESD safe)								X	X				

Pistol Grip Attachment - reconfig	gures an ir	n-line scr	ewdriver i	for horizo	ntal faste	ner install	ation
DD80-DC623/4						V	

DR80-PG623/4						X					
DR80-PG623/4ESD				X							
DR80-PG623/4P							X				
DR80-PG623/4PESD					X						
DR80-PG628/9										X	
DR80-PG628/9ESD								X			
DR80-PG628/9P											X
DR80-PG628/9PESD					X				X		
Tool Holster - fasten to the edge	of a work	bench and	d park the	screwdri	iver when	not in us	е				

4	DR80-10136

DR80-PG628/9

DR80-10136 (w/ lock sleeve)				X	X	X	X	X	X	X	X
DR80-20136 (no lock sleeve)				X	X	X	X				
DR80-20141	X	X	X								

2m (6.5 ft), 6 pin, Standard Cable (included with each screwdriver)

Cable Assemblies	- for use with all 32VDC CESL8 Sci	rowdrivers rupping on	etd hi/low enood controllers
Cable Assemblies	- 101 USE WILLI All 32 VDG GESLO SCI	rewarivers rurilling on:	Sta fil/low speed controllers

10m (32ft), 6 pin, Shielded Cable

DR96-66003	R96-66003 3m (9.8 ft), 6 pin, Optional Long Cable						
DR96-66003/C	3m (9.8 ft), 6 pin, Coiled Cable with 0.4m whip ends						
DR96-66006	6m (19.6 ft), 6 pin, Optional Long Cable						
Shielded Tool Cables - Use with (Count/Verify Controllers and ECT8-SSOA Advanced I/O Module						
DR96-832X3MSH	3m (9.8 ft), 6 pin, Optional Long Cable (included with BECT832-SSO, ECT8-SSOA)						
DR96-832X5MSH 5m (16ft), 6 pin, Shielded Cable							





DRFF PRECISION SCREW FEEDER



The Fast Feed 520 utilizes a precision feed system suitable for almost any type of screw. The Fast Feed 520 also features three adjustments giving the user superb control over feed speed and time. Thanks to the flexible design of the rail, it can be quickly adjusted to feed screw sizes from 1.0 to 5.2 mm thread diameter.

Features

- One rail to accommodate many screw sizes
- Multiple adjustments = Optimized feed rate
- Fewer moving parts increases the durability
- Low maintenance / Easy to service
- Quiet operation



Specifications							
Model Number	DRFF-520						
Screw Thread Diameter	1.0-5.2mm (#0-#10)						
Max. Screw Length	19mm (0.75 in)						
Dimensions L x W x H	183 x 125 x 142 mm						
Weight kg / lbs	2.5 / 5.5						
Accessories (included)							
AC Adapter, Rail Adjustmen	t Kit. Operation Manual						

The DRFF-520 is compact, lightweight and costs only a fraction of the price of a conventional bowl feeder.

The feeder features three potentiometer adjustments to dial in the optimal feed rate for your specific application and screw type.

Vibration Intensity controls the vibration frequency of the rail that moves the screws from the hopper to the pickup

The Drum Rotation Timer and Vibration Timer control the amount of extra run-time for each of these functions after a screw has arrived into position at the pickup point.



Rail Adjustment Kit (included)

The rotating drum inside the hopper is capable of quickly supplying screws to the vibrating rail. The rail feeds the screws smoothly, resulting in a screw replenishment rate that is fast enough to keep up with the quickest operators.







www.deltaregis.com



1-12 Nm 9-106 in.lb

CESL8/9 40VDC BRUSHLESS SCREWDRIVERS

Delta Regis 40VDC Premium Brushless Screwdrivers pack the performance to satisfy demanding assembly applications. With torque capabilities to 25 Nm and brushless motor technology that withstands higher duty cycles, these drivers are ready to perform on production lines typically dependent on pneumatic tools. As with all Delta Regis Shut-off Clutch Screwdrivers, excellent torque repeatability is the fundamental building block that defines these models. A host of screwdriver configurations, accessories and control options are available to make the 40VDC Series an ideal choice for production assembly across a wide range of industries.



CESL828/829 drivers have powerful brushless motors to handle demanding applications. Fast versions are available to speed-up production lines that require installation of long fasteners.

CESL					
Model Number	Start Type	Range (In.Lbs)	Range (Nm)	Speed (RPM)	Drive Type
Inline Body Sty	le, Handhel	d ⁽¹⁾			
CESL828		8.9 - 26.0	0.98 - 2.94	1000	
CESL828F	Lever	8.9 - 26.0	0.98 - 2.94	2000	1/4" hex
CESL829		17.4 - 43.4	1.96 - 4.90	1000	
CESL828P		8.9 - 26.0	0.98 - 2.94	1000	
CESL828PF	Push	8.9 - 26.0	0.98 - 2.94	2000	1/4" hex
CESL829P		17.4 - 43.4	1.96 - 4.90	1000	
Dimension	s (mm): 278	(L) x 39.5(dia)	Weigh	t: 0.8 kg / 1.	76lbs



⁽¹⁾ ESD Safe housing available - add suffix '-ESD'







Delta Regis CESL9 Series Screwdrivers are engineered to perform in tough applications. The slim design and threaded metal front end make it an ideal choice for fixture mount and auto-screwfeed applications. A powerful motor and integrated fan keep the driver running cooler, particularily on soft joint and higher cycle applications.

40VDC Series drivers are capable of developing high torques - side handles are included where suitable. We recommend mounting in a torque reaction arm for ultimate ergonomics and operator safety.

CESL9 I					
Model Number	Start Type	Range (In. Lbs)	Range (Nm)	Speed (RPM)	Bit Type
CESL935		18-53	2-6	1000/750	
CESL935F	Lever	18-53	2-6	2200/1650	1/4" hex
CESL945		27-79	3-9	1000/750	
CESL955		53-106	6-12	880/660	
CESL935P		18-53	2-6	1000/750	
CESL935PF	Push	18-53	2-6	2200/1650	1/4" hex
CESL945P		27-79	3-9	1000/750	
CESL955P		53-106	6-12	880/660	

Dimensions (mm): 306(L) x 41.4(dia) / (in): 12(L) x 1.6(dia) **Weight:** 1.03kg / 2.3lbs



HIGH TORQUE PREMIUM BRUSHLESS, SHUT-OFF CLUTCH



2-25 Nm 18-221 in.lb



CESL8_M Series Screwdrivers incorporate an aluminum front collar to facilitate fixture mounting and include an accessory side handle for handheld applications.







CESL8_N	/I Handhe	eld / Fixture I	Mount		
Model Number	Start Type	Range (In.Lbs)	Range (Nm)	Speed (RPM)	Drive Type
Inline Body Sty	le, Handhel	d or Fixture Mou	nt		
CESL835M		18 - 53	2 - 6	1000/750	
CESL845M		27 - 79	3 - 9	800/600	
CESL855M		36 - 106	4 - 12	550/400	
CESL855FM	Lever	36 - 106	4 - 12	880/660	1/4" hex (2)
CESL865M		53 - 159	6 - 18	350/250	
CESL865FM		53 - 159	6 - 18	600/450	
CESL875M		71 - 221	8 - 25	350/250	
CESL835PM		18 - 53	2 - 6	1000/750	
CESL845PM		27 - 29	3 - 9	800/600	
CESL855PM		36 - 106	4 - 12	550/400	
CESL855PFM	Push	36 - 106	4 - 12	880/660	1/4" hex (2)
CESL865PM		53 - 159	6 - 18	350/250	
CESL865PFM		53 - 159	6 - 18	600/450	
CESL875PM		71 - 221	8 - 25	350/250	

Weight: 1.25 kg / 2.75lbs (CESL875,1.45kg / 3.2lbs)

^{(2) 3/8&}quot; Sqaure Drive Available - add suffix '-SQ'

CESP8 Bru							
Model Number	Start Type	Range (In.Lbs)	Range (Nm)	Speed (RPM)	Drive Type		
Pistol Grip Bod	y Style	•					
CESP835		18 - 53	2 - 6	1000/750	1/4" hex		
CESP835-SQ		18 - 53	2 - 6	1000/750	3/8" square		
CESP845		27 - 79	3 - 9	800/600	1/4" hex		
CESP845-SQ	Trigger	27 - 79	3 - 9	800/600	3/8" square		
CESP855		36 - 106	4 - 12	550/400	1/4" hex		
CESP855-SQ		36 - 106	4 - 12	550/400	3/8" square		
CESP865		53 - 159	6 - 18	350/250	1/4" hex		
CESP865-SQ		53 - 159	6 - 18	350/250	3/8" square		
Dimensions	Dimensions (mm): 270(L) x 169(H) x 48(dia) Weight : 1.2 kg / 2.64lbs						

⁽¹⁾ Pistol Grip tool has cable connection in bottom of handle as standard. For top rear connection, add suffix 'U' to model number.

CESP8 Pistol Grip tools come standard with the cable connection at the bottom of the handle - top rear cable connection is optional.



⁽¹⁾ ESD Safe housing available - add suffix '-ESD'

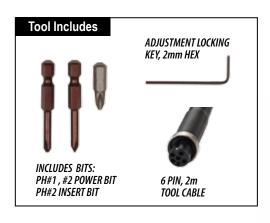
⁽¹⁾ ESD Safe housing available - add suffix '-ESD'

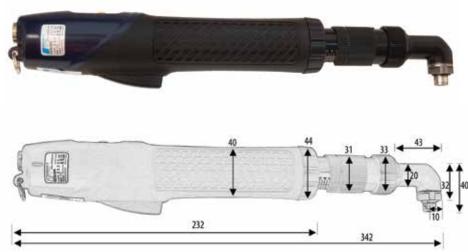


CESL8 40VDC RIGHT ANGLE DRIVERS

The Delta Regis 40VDC 90° Right Angle Drivers are a combination of a standard 40V high torque inline screwdriver with an added angle head attachment for access to tight areas.

1/4" Hex Drive Models CESL828-829/RA, 0.98-3.61 Nm (8.9-32 In.Lbs)



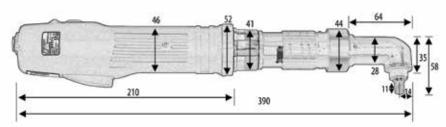


CESL828-829/RA:Right Angle Driver Dimensions(mm)

Tool Includes

ADJUSTMENT LOCKING 6 PIN, 2m TOOL CABLE KEY, 2mm HEX

3/8" Sq. Drive Models CESL835M-875M/RAB, 2-20 Nm (18-177 In.Lbs)



CESL8_M/RAB Right Angle Driver Dimensions(mm)

CESL8_N	///RAB / RA Right Ar					
Model No. (Standard Housing)	Model No. (w/ ESD Housing)	Range (In.Lbs)	Range (Nm)	Speed (RPM)	Drive Type (1)	Weight kg / lbs
Right Angle Head I	Driver, 3/8" square driv	e, optional s	wivel bail			
CESL828/RA	CESL828-ESD/RA	8.9 - 19	0.98 - 2.15	1000		
CESL828F/RA	CESL828F-ESD/RA	8.9 - 19	0.98 - 2.15	2000	1/4" hex	0.77 / 1.7
CESL829/RA	CESL829-ESD/RA	17.4 - 32	1.96 - 3.61	1000		
CESL835M/RAB	CESL835M-ESD/RAB	18 - 45	2 - 5	1000		
CESL845M/RAB	CESL845M-ESD/RAB	27 - 67	3 - 7.5	800		
CESL855M/RAB	CESL855M-ESD/RAB	36 - 90	4 - 10	550	3/8" square	1.77 / 3.9
CESL865M/RAB	CESL865M-ESD/RAB	53 - 145	6 - 15	350		
CESL875M/RAB	CESL875M-ESD/RAB	71 - 177	8 - 20	350		

^{(1) 1/4&}quot; hex available. Please contact our sales department for further inquires.



40VDC BRUSHLESS CONTROLLERS & ACCESSORIES

There are two standard Hi/Lo Speed Controllers available for the 40VDC Brushless Drivers. The BECT640HL is used primarily for screwdriver models CESL828-829 (F/P/PF). The high power output model BECT940HL is used for the higher torque 40VDC tools. CE/ROHS/ETL Approved.





Power Supplies / Controllers								
Model			Tool			Dimensions	Weight	Use only with
Number	Outlets	Speeds	Connector	Output	Input	LxWxH(mm)	kg / lbs	Screwdriver Models
BECT640HL	1	Hi/Lo	6 pin	40/30VDC, 220W	100-240VAC, 6.3A	220 x 134 x 85	1.8 / 4	CESL828-829(P/F)
BECT940HL	1	Hi/Lo	6 pin	40/30VDC, 360W	100-240VAC, 6.3A	220 x 134 x 85	1.8 / 4	CESL835-875M(PM) CESP835-865, CESL9

Power supply shipped with standard North American cordset. For EU cord, add suffix 'E'; for UK cord, add suffix 'UK'.









Accessories		Œ	- ESD SD	F) - ESD ESD	M5/2		2	88
Select driver model no. on the right, follow column down the chart; X signifies an appropriate accessory.	CESL828 (F) CESL829	CESL828P (PF) CESL829P	CESL828 (F) - E CESL829 - ESD	CESL828P (F) - CESL829P - ESI	CESL835M - 875M	CESL835PM - 875PM	CESP835 - 865	CESL835M/RA CESL865M/RA
Torque Lock Sleeve - covers t	he torque	adjusting	nut to de	eter tampe	ering (*1 ir	cluded w	ith 828/82	29 drivers)
DR80-20142C (Clear) *	X	X						
DR80-20142E (ESD safe) *			X	X				
DR80-20142M (Metal)	X	X	X	X				
Pistol Grip Attachment - recor	nfigures a	n in-line s	crewdrive	er for hori	zontal fast	ener inst	allation	
DR80-PG628/9	X							
DR80-PG628/9ESD			X					
DR80-PG628/9P		X						
DR80-PG628/9PESD				X				
Tool Holster - fasten to the edg	ge of a wo	rkbench	and park	the screw	driver whe	en not in u	use	
DR80-10136	X	X	X	X				
DR80-TH8-9	X	X	X	X				
Cable Assemblies - for use wit	th all 40VI	DC CESL	8/CESP8	Screwdr	ivers runni	ng on sto	l hi/lo spe	ed controllers
DR96-10016M	2m (6.5	ft), 6 pin,	Standard	l Cable (i	ncluded w	th each s	crewdrive	er)
DR96-10018M	3m (9.8	ft), 6 pin,	Optional	Long Cal	ble			
DR96-10018M/C	3m (9.8 ft), 6 pin, Coiled Cable with 0.4m whip ends							
DR96-10020M	DR96-10020M 6m (19.6 ft), 6 pin, Optional Long Cable							
Shielded Tool Cables - use wi	Shielded Tool Cables - use with Count/Verify Controllers and ECT8-SSOB Advanced I/O Module							
DR96-840X3MSH	SH 3m (9.8 ft), 6 pin, Shielded Cable (included with BECT840/940-SSO, ECT8-SSOB)							
DR96-840X5MSH	5m (16 ft), 6 pin, Shielded Cable							
DR96-840X10MSH	10m (32	? ft), 6 pin	, Shielded	d Cable				



www.deltaregis.com



COUNTING CONTROLLER: 40 V/32V BRUSHLESS DRIVERS

Add error-proofing to your Delta Regis brushless driver with the BECT832/840/940-SSO Counting Controller. Available functions include Slow Start, Batch Counting, and OK/NG Rundown Indication based on the screwdriving cycle occurring within a predefined time window. An I/O terminal strip provides the interface to outputs for rundown OK, rundown NG, and batch complete. External switches can be wired to the input terminals for remote screwdriver enable/disable, remote start/reverse, and clear (reset batch count).

Features

- Selectable Slow Start Speed and Time
- Large LED Display of Screw Count Values
- Externally Accessible I/O Connections
- **Programmable Batch Counting** with Audible Buzzer indicating batch complete
- Programmable Time Window for comparison with actual fastening cycle time - LED's indicate OK/NG rundown cycle
- Optional Timed Auto-Reverse for applications requiring back-out after fastening
- Locks to limit access to program modifications
- BECT832-SSO operates 32V CESL8 Screwdrivers, BECT840/940-SSO run 40V CESL8 Series Drivers
- ETL / CE / RoHS Compliant



Counting Controller Model & Specifications

Model Number	Outlets	Speeds	Approvals	Output	Input	Dimensions L x W x H (mm) / (in)	Weight kg / lbs
BECT832-SSO				32/24V DC, 60W	100-240V AC, 1.2A	200 x 130 x 100 7.9 x 5.1 x 3.9	1.6 / 3.5
BECT840-SSO	1	Hi/Lo	CE/RoHS/ETL	40/32/24V DC, 220W		248 x 130 x 100	
BECT940-SSO				40/32/24V DC, 360W	100-240V AC, 6.3A	9.8 x 5.1 x 3.9	2.5 / 5.5
Use with driver models:		BECT840-S	SO: CESL828-829	drivers only: CESL810-812 9(P/F/PF) + all 32V CESL8 i75M(PM), CESP835-865, (drivers (DR96-40TO32V-W	ESL827(P) /HIP cable req'd when using	32V drivers))

Power supply shipped with standard North American cordset. For EU cord, add suffix 'E'; for UK cord, add suffix 'UK'.

Features				
Slow Start Time Adjustment	0 - 9.9 sec			
Slow Start Speed Adjustment	30 - 100%			
Count (per batch)	1 - 99			
Time Window Setting Range (min/max)	0 - 9.9 sec			
Audible Alert (selectable)	Good/NG/Batch OK			
Timed Auto-Reverse after Clutch-out	0 - 9.9 sec			

(C	Inputs Ory switch contact req'd)
1.	Remote Start
2.	Remote Reverse
3.	Disable Screwdriver
4.	External Confirm
5.	Enable at Batch Start
6.	Remote Clear

Outputs (MOS relay) (max. 40VDC, 250mA)
1. Rundown OK
2. Rundown NG
3. Batch Complete

Inputs require an external switch (dry contact) only. A 24 VDC voltage supply is available to power the output circuit, if required.



www.deltaregis.com

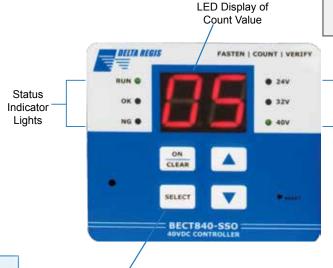
BECT840-SSO CONTROLLER OVERVIEW

Output

Voltage

Indicator

Parameters are set-up on the BECT832/840/940-SSO using the four button keypad and LED display panel. A simple program loop provides access to settings for slow start speed and time, batch count quantity, and min/max allowable rundown times. During normal operation, the large two-digit display shows the current screw count value and also provides visual LED indication of whether the rundown was Good or No Good based on the time window parameters that have been programmed into the controller.



REMOTE SEQUENCING OPTION (-3SL)

In some applications, there may be a requirement to remotely select from one of the available sequences that have been programmed into the controller.

The '-3SL' model number suffix replaces the standard remote start/reverse inputs with a remote sequence selection input option. With this option, one of 3 sequences may be selected by providing a remote input from a PLC or external switches.

To order a BECT840-SSO controller with this option, use model number BECT840-SSO-3SL.

Please contact us for further details.

NO GOOD (NG)

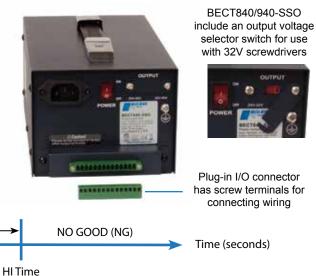


Brushless Screwdriver Cable Connection

DIP Switch
for optional
functionality

PWR SUPPLY AVAILABLE:
24VDC, 1A / COM (0 VDC)
INPUTS:
ENABLE/DISABLE
REMOTE START/REVERSE
CLEAR, CONFIRM
OUTPUTS:
OK / NG / OK ALL

LO Time



If the fastening cycle completes (clutch trips) within the programmed time window, the rundown cycle will be accepted as GOOD (OK) and the batch count will increment. A rundown outside the time parameters will result in a NG output.

GOOD (OK)



Cycle Start

www.deltaregis.com



ECT8-SSO SLOW START & I/O MODULE

Delta Regis ECT8-SSO Series Control Modules are ideal for processes that require more functionality than is provided by the standard hi/lo speed controller. The module installs in-line between the controller and the driver. It has a whip cable which plugs into the controller, and a 6 pin connector to accept the screwdriver cable. An LED display and programming buttons are provided for set-up of slow start parameters. Depending on the model, either basic output signals or advanced I/O connections are available for interfacing to external equipment.

ECT8-SSOA / ECT8-SSOB Advanced Multi-Function Input/Output Modules



Push buttons and LED display for setting slow start parameters. Indicator lights show status of input / output signals.



Bypass switch to disable control functionality.



ECT8-SSO Module plugs in-line between a CESL8/9 Series Driver and a standard 32V or 40VDC Hi/Lo Speed Controller.

(1) 3M long shielded tool cable is included with each ECT8-SSOA/B module to use in place of the standard unshielded tool cable that is included with the driver.



DIP switch settings control specific I/O functions



INPUTS (dry switch contact required)

- Remote Start and Remote Reverse
- Remote Enable/Disable

OUTPUTS (MOS relay, max. 40VDC, 250mA)

- Tool Started/Running
- Clutch Tripped
- Tool in Reverse

Model Number	Use with Screwdriver Models	Compatible with Controller Models
ECT8-SSOA (32V Tools)	CESL810-812, 823-827(P/F/PF)	BECT620C/IC, BECT820
ECT8-SSOB (40V Tools)	CESL828-829(P/F/PF), CESP835-865, CESL835M-875M(PM), CESL935-955(P/F/PF)	BECT640HL, BECT940HL

Features	
Slow Start Time Adjustment	0 - 9.9 sec
Slow Start Speed Adjustment	~ 30 - 100%
Max. Run Time Setting	0 - 9.9 sec

Inputs (dry contact switch req'd)
1. Remote Start
2. Remote Reverse
3. Remote Enable/Disable

Relay Outputs (max. 40VDC, 250mA)				
1. Tool Started/Running				
2. Clutch Activated				
3. Tool in Reverse				

Dimensions L x W x H
103 x 100 x 32 mm 4.1 x 3.9 x 1.3 in
Weight: 180 g / 0.4 lbs

ECT8-SSOC / ECT8-SSOD Basic Modules with Slow Start & Output Signals

Basic modules are available for applications requiring only slow start and/or output signals that can be interfaced with external equipment. The slow start function offers the same adjustments as the advanced module shown above. The output signals (tool running/clutch activated/tool in reverse) are via dry relay contacts (40VDC, 250mA max).

Model Number	Use with Screwdriver and Controller Models	Relay Outputs (max. 40VDC, 250mA)
ECT8-SSOC (32V Tools)	CESL810-812, 823-827(P/F/PF); BECT620C/IC, BECT820	Tool Running, Clutch Activated,
ECT8-SSOD (40V Tools)	CESL828-829(P/F/PF), CESP835-865, CESL835M-875M(PM), CESL9; BECT640/940HL	Tool in Reverse



Ph: 772.465.4302 888.500.2755

www.deltaregis.com

PRESET & ADJUSTABLE MANUAL TORQUE DRIVERS



0.15-6 Nm 1.25-50 in.lb

Series 7400 Torque Screwdrivers

Features

More and more screw connections in service and industry have to be tightened to a prescribed torque. Only the exact torque guarantees a secure fastening.

Our adjustable models can be adjusted in fine increments allowing for controlled tightening. Preset models come preset to their lowest setting and can be changed within their available torque range.

- Ergonomic handle provides better turning power with less effort resulting in more power and speed with less operator fatigue.
- Quick change bit holder accommodates insert and power bits.
- Accuracy is +/- 6% (complies with EN ISO 6789).
- Calibration certificate provided with each tool.
- 1/4" Hex Drive.

Model Number	Туре	Style	Range	Graduations
DR95-A7440M		Straight	0.3-1.2 Nm	0.05 Nm
DR95-A7441M		Straight	1.2-3.0 Nm	0.10 Nm
DR95-A7442PM		Pistol	3.0-6.0 Nm	0.25 Nm
DR95-A7445	Adjustable	Straight	2.5-11.5 in.lbs	0.5 in.lbs
DR95-A7446		Straight	11-29 in.lbs	1.0 in.lbs
DR95-A7447P		Pistol	25-50 in.lbs	2.5 in.lbs
DR95-P7465		Straight	2.5-11.5 in.lbs	-
DR95-P7466	Preset	Straight	11-29 in.lbs	-
DR95-P7467P		Pistol	25-50 in.lbs	-



Series 1000 Torque Screwdrivers

Features

Whether the need is for preset torque screwdrivers for the assembly line or adjustable ones for field maintenance, the compact precision and versatility of our screwdrivers provides the ability to assure quality on an ongoing basis.

- Clutch releases automatically when preset torque is attained no over torquing. Anti-backlash design for repeatability
- · Can be used in both right and left hand directions
- Accuracy of +/- 6% indicated value meets or exceeds ANSI B107.14M and ISO 6789
- · Comes with free NIST traceable certification
- 1/4" Hex Drive

Model Number	Туре	Style	Range	Graduations
DR95-10002			15 - 74 cNm	1 cNm
DR95-10003	Adjustable	Straight	20 - 100 in.oz	1 in.oz
DR95-10006	rajuotabio		2 - 36 in.lbs (0.2 - 4.0 Nm)	2 in.lbs (0.2 Nm)
DR95-10004		Straight	20 - 100 in.oz (15 - 74 cNm)	-
DR95-10005	Preset		3 - 15 in.lbs (0.34 - 1.7 Nm)	-
DR95-10007			7 - 36 in.lbs (0.8 - 4.0 Nm)	-





DRTQ TOUCH-SCREEN TORQUE TESTER





Specifications					
Models (max torque)	10 in.lb, 25 in.lb, 100 in.lb, 250 in.lb, 100 ft.lb				
Accuracy	± 0.5% of reading (20-100% full scale) ±1% or ±1 digit (10% to <20% full scale)				
Maximum Overload	d 150% of full scale ('Overload' displays at 110% +)				
Battery	3.7V Li-ion, 4400mAH 4 hrs continuous run, 12 hrs standby				
AC Adapter / Charger	Input: 100-240 VAC, 50/60 Hz Output: 5 VDC, center positive				
Dimensions (L x W x H)	229 x 102 x 80 mm 9 x 4 x 3.13 in				
Weight	2.7 kg / 6 lbs				
Included with each tester	AC Adapter, Carrying Case, Calibration Cert, Manual, Rundown Joint (1)				

Features

- Full color LCD touch screen
- Processes statistical calculations: CP, CPK, Sigma
- On screen statistics: Torque calculator and graphing for performance analysis
- Export data directly to an SD card
- Automatic screen rotation (level sensor flips screen between vertical and horizontal mode)
- 'Quick Run' mode provides the ability to quickly audit and verify a tool
- 'Measure mode' allows users to to establish acceptable tolerances - eight configurable torque test profiles available
- Eight available measurement units: in.oz, in.lb, ft.lb, Nm, cNm, kgF.cm, gF.cm, kgF.m
- Li-ion technology provides extended battery life
- Battery saving features: Sleep Mode, Back Light Timer, Automatic Shutdown
- Up to 4 hours of continuous use 12 hours standby
- Peak mode: For use with manual, electric, pneumatic, and cordless torque controlled tools (not for use with impact tools)
- Track Mode: For use with dial or electronic torque wrenches
- Advanced user programmable options: Auto Clear, Date/Time, Peak Time, Screen Brightness
- 2 year warranty
- Made in North America



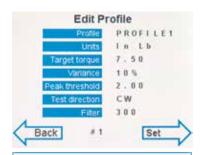
Each DRTQ Torque Tester includes: protective carrying case, user manual, calibration certificate, AC adapter, and rundown joint**

(**joint not included with DRTQ-100-f)



DRTQ TOUCH-SCREEN TORQUE TESTER

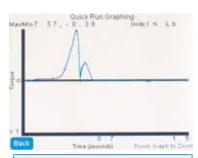




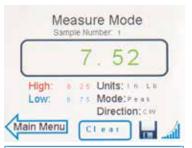
Configure up to 8 unique profiles to accomodate different test strategies.



Use Quick Run mode to perform a single run torque test and view a graph of the results.



Resulting graph displays torque vs. time. Tap an area of the graph to zoom up to 4 times the size.



Use Measure Mode to evaluate a series of torque readings based on the profile parameter settings.



Statistics are calculated based on profile settings and evaluation of the sample group readings.



Sample group torque readings & statistics can be saved with a file name to an SD card for export.

Each DRTQ Torque Tester is dead-weight calibrated with certified mass standards and arms to verify conformance to the stated accuracy of ±0.5% of indicated value (from 20-100%

A calibration certificate is included with each tester.

of full scale).

DRTO					
Model Number	Torque	Torque Range			
DRTQ-160-z	16.00 - 160.00 in.oz	(0.11 - 1.13 Nm)	1/4" square drive		
DRTQ-10-i	1.00 - 10.00 in.lb	(0.11 - 1.13 Nm)	1/4" square drive		
DRTQ-25-i	2.50 - 25.00 in.lb	(0.28 - 2.82 Nm)	1/4" square drive		
DRTQ-100-i	10.00 - 100.00 in.lb	(1.13 - 11.30 Nm)	1/4" square drive		
DRTQ-250-i	25.00 - 250.00 in.lb	(2.82 - 28.25 Nm)	3/8" square drive		
DRTQ-100-f (1)	10.00 - 100.00 ft.lb	(13.56 - 135.58 Nm)	1/2" square drive		

(1) Rundown joint is not included with DRTQ-100-f, sold separately

DRTQ Accessories					
Part Number	Description				
DRTQ-MOUNT	Reaction collar for bench mounting				
DRTQ-RDA-1/4	1/4" sq.dr. joint simulator (70 in.lb / 8 Nm max)				
DRTQ-RDA-3/8	3/8" sq.dr. joint simulator (250 in.lb / 28 Nm max)				
DRTQ-RDA-1/2	1/2" sq.dr. joint simulator (60 ft.lb / 80 Nm max)				
DRTQ-ELEC3045	AC Adapter, 100-240VAC input / 5VDC output				





www.deltaregis.com



ERGO-12 TELESCOPIC TORQUE REACTION ARM

The ERGO-12 Telescopic Reaction Arm is used to absorb and transfer the reaction force generated at the screwdriver during fastening, without having a significant effect on freedom of movement, thereby reducing operator fatigue. Through the use of carbon-fiber tubes, the arm is extremely tough while being light at the same time. With the universal mounting adapter, the ERGO-12 is capable of being mounted problem-free in most work areas.

Telescopic carbon-fiber tubes have been polished for a precision fit and are guided in low wear polymer bushings.



Solidly constructed rotation and swivel joints. The universal adapter allows for easy mounting in most work environments.



Sturdy tool holder accepts tool diameters of 26 to 55 mm. Optimize tool mounting by selecting the aluminum torque lock sleeve for your model of Delta Regis screwdriver. Contact us for further details.

Telescopic Arm Model Number	Max. Torque in-lb / Nm	Max. Work Radius mm / in	Min. Work Radius mm / in	Fits Tool Diameter mm / in	Weight kg / lbs
ERGO-12-L-HZ	106 / 12	962 / 37.8	515 / 20.3	26 - 55 /1.0 - 2.1	0.57 / 1.3
ERGO-30-L-HZ	265 / 30	962 / 37.8	515 / 20.3	26 - 55 / 1.0 - 2.1	0.68 / 1.5

DR90-20004ECONOMY TORQUEREACTION ARM

Reduce employee injury by absorbing torque transmission, eliminating repetitive strain on hands, wrists and arms. These arms are capable of supporting tools up to 5 lbs (2.27 kg) while withstanding torque reaction up to 20 ft-lbs (27 Nm).

Features

Two versions are available to suit either pneumatic tool or electric tool mounting. The DR90-20004P has a 1/4" npt threaded female port for mounting an in-line air tool vertically using a pipe nipple. The DR90-20004E includes an electric tool adaptor to provide for clamping around the body of an electric screwdriver.

- Adjustable height. Parallel arm design maintains tool perpendicular to work surface.
- Tool weight is supported by a spring loaded arm assembly. Spring tension is adjustable.

Part Number	Description			
DR90-20004E	Torque Arm for Electric Screwdriver			
DR90-20004P	Torque Arm for Pneumatic Driver			
DR90-20002	Optional Bench Clamp			





www.deltaregis.com

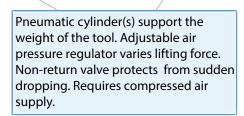
E-MIDI PRECISION PARALLEL TORQUE ARM

The E-MIDI Parallel Torque Arm is designed to maintain a power tool in a vertical attitude. A maximum of 4 pneumatic lift cylinders remove the weight of the tool from the operator's hand. Reaction torque is isolated from the operator and transferred through the base of the arm to the mounting surface. All pivot points combine tight machining tolerances with ball and needle bearings for precision and ease of motion.

Features

- Precision arm designed to hold screwdrivers and tappers
- Perfect for higher torque Brushless Series screwdrivers
- Consistency of arm improves driver torque repeatability
- No torque reaction from the tool to the operator (max torque 25 Nm)

Solid construction provides smooth arm movement. All moving axes equipped with ball and/or needle bearings.



Sturdy tool holder accepts tool diameters of 26 to 55 mm. Optimize tool mounting by selecting an aluminum torque lock sleeve that corresponds to your model of Delta Regis Electric Screwdriver. Visit our website or contact us for optional metal lock sleeve part numbers.

Specifying a model number:

Use the chart below to select a model number for the arm.

Vertical Travel	Torque Max.	Torque Arm
mm / in	(Nm)	Weight kg / lbs
368 / 14.5	25	

The standard configuration is:

EMIDI-1-1-0-1-1 (800mm work radius, 1 cylinder (max tool weight 2kg), no encoders, 560mm high mounting column)

		Work Radius		# of Cylinders		Angle Encoder	Column Height	Tool Holder
EMIDI	-	X	1	X	-	X	X	X
		1 = 800 mm		1 = 2 kg max		0 = none	0 = no column	1 = standard
		2 = 990 mm		2 = 4 kg max		1 = X/Y encoders	1 = 560 mm	(26-55mm)
				3 = 6 kg max		(no controller)	2 = 915 mm	
				4 = 8 kg max				



TOOL STAND AND BALANCERS



DR90-30001

TOOL STAND

DR90-30001 Tool Stand

Using a tool balancer in conjunction with a tool stand will keep your screwdriver at the ready, leaving your work area clear when not in use. The DR90-30001 tool stand fastens directly to your workbench (screws req'd). An optional extra arm kit can be used to suspend two tools from the same stand.



Part Number	Description			
DR90-30001	Tool Stand - 110 cm high, 60 cm reach, 2.3 kg (5 lbs) maximum load			
DR90-3ARMKIT	Extra Arm Kit - 60 cm reach, includes slider and hanging clip			
DR90-3CLAMP	Bench Clamp - Fastens stand to edge of workbench, no drilling req'd			

Tool Balancers

A tool balancer mounted directly above the assembly area is an ideal way to prolong the service life of a power tool while keeping it readily available for use. Our spring-rewind balancers have adjustable retract force and a maximum vertical travel of 6 feet.



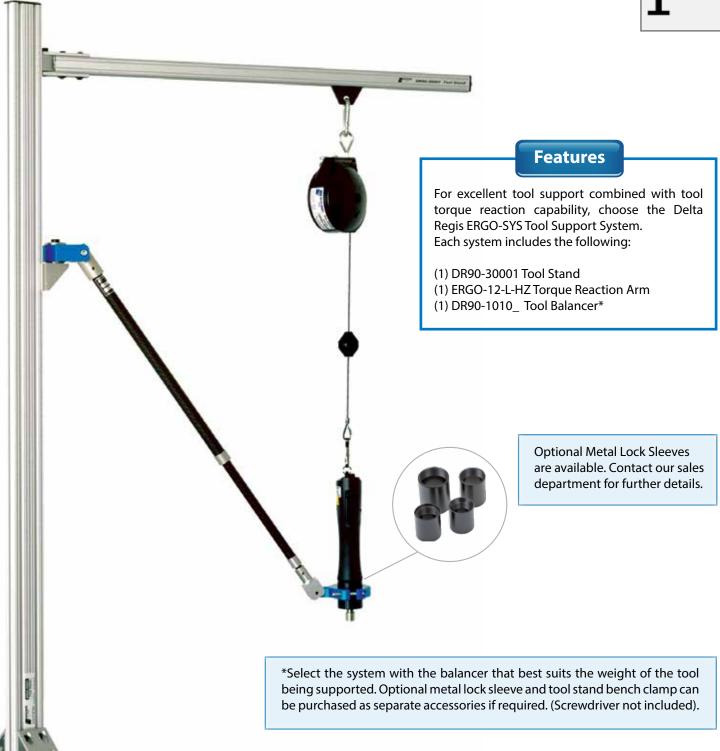
Part Number	Description
DR90-10101	Tool Balancer - 0.23 - 0.68 kg (0.5 - 1.5 lbs), 1.8m (6') travel
DR90-10103	Tool Balancer - 0.68 - 1.36 kg (1.5 - 3.0 lbs), 1.8m (6') travel
DR90-10105	Tool Balancer - 1.36 - 2.27 kg (3.0 - 5.0 lbs), 1.8m (6') travel
DR90-10104	Economy Balancer - 0.6 - 1.5 kg (1.3 - 3.3 lbs), 1.8m (6') travel



www.deltaregis.com

ERGO-SYS TOOL SUPPORT SYSTEM





System Part No	Includes Balancer	Supports Tool Weight
ERGO-SYS-1	DR90-10101	0.5 - 1.0 lbs
ERGO-SYS-3	DR90-10103	1.0 - 2.5 lbs
ERGO-SYS-5	DR90-10105	2.5 - 4.5 lbs





SCREWDRIVER VACUUM PICK-UP ATTACHMENT

Need to hold a non-ferrous fastener with the bit of your electric screwdriver? The Delta Regis Vacuum Pickup Attachment is a miniature, bit-mounted vacuum nozzle. The vacuum attachment is held on the screwdriver bit by a collet appropriately sized for the shank diameter of the bit. This allows for initial positioning of the pickup nozzle relative to the tip of the screwdriver bit. The nozzle tip is spring loaded and has a small amount of linear travel. The head of the screw seals up against the end of the nozzle and the nozzle rotates with the screw and driver bit. The outer collar of the attachment remains stationary and connects to a vacuum supply.



Vacuum Pickup Attachment With Driver Bit

The vacuum pickup attachment is ordered as an assembly complete with the required screwdriver bit. The nozzle which seals the vacuum against the fastener rotates with the screw head and driver bit. The table below outlines options to specify a model number for the assembly. Please note that the bit types and nozzle configurations shown below cover the most common applications. Please contact us for information on other bit types or special nozzle configurations.

Model # VACPU H70PH1 30 A M2

Material	Nozzle
Code	Material
Α	Aluminum
В	Brass
S	Stainless

Code	Bit Type (1/4" Hex)	Bit Length (mm)	Replacement Bit Part #	Bit Tip Dia (mm)	Bit shank Dia (mm)	Collet Dia Code
H70PHX	PH #00	70	DR91-1202XRD-A	2	3	30
H70PH0	PH #0	70	DR91-12020RD-A	2.5	3	30
H70PH1	PH #1	70	DR91-12021RD-A	2.5	3	30
H70PH2	PH #2	70	DR91-12022RD-A	3	4	40
H70TX5	TX5	70	DR91-135171	3	3	30
H70TX6	TX6	70	DR91-134740	3	3	30
H70TX8	TX8	70	DR91-060098	3	3	30
H70TX10	TX10	70	DR91-060100	4	4	40
H70TX15	TX15	70	DR91-060105	4	4	40
H89IP6	6IP	89	DR91-134667	3	3	30
H89IP8	8IP	89	DR91-134670	3	3	30
H89IP9	9IP	89	DR91-134669	3	3	30
H70IP10	10IP	70	DR91-134684	4	4	40
H70IP15	15IP	70	DR91-134686	4	4	40

Nozzle Code	Length (mm)	OD (mm)	ID (mm)			
'M' Nozzles require min. 70mm bit length						
MO	10	6.4	3.2			
M1	10	6.4	4			
M2	10	6.4	4.5			
M3	10	8	5			
M4	10	8	6.4			

Select a nozzle with an ID at least 1mm larger than the bit tip diameter. Nozzle ID must be smaller than the screw head OD.



www.deltaregis.com

SCREWDRIVER BITS AND BIT HOLDERS



Vacuum Pump (Pneumatic)

The DR80-VACPUMP acts as a vacuum source for the VACPU assembly. The vacuum generator operates on a compressed air supply and includes an ON/OFF slide valve and a pressure regulator to adjust the vacuum flow. 2.5m (8 ft) of 6mm OD tubing is included to connect the VACPUMP to the fitting on the vacuum pickup attachment.

Air Supply requirements: 1 SCFM, 45-90 psig, 1/4" npt inlet port



Driver Bits & Bit Holders

Delta Regis offers a comprehensive selection of Screwdriver Bits, Nutsetters, and Bit Holders. Due to the extensive range of product, we have chosen to maintain an updated PDF list of available accessory bits on our website at www.deltaregis.com/ Accessories/Driver_Bits.

We offer bits in standard 1/4" hex drive for screws with Phillips, Slot, Torx, Square and Socket heads. A limited selection of bits with 4mm and 5mm round shank (winged) drive are also available. Magnetic and non-magnetic Nutsetters and Bit Holders of various lengths and configurations are available to suit specific application requirements. Minimum purchase quantities may apply, depending on the item.

Please give us a call or send us an e-mail if you require an accessory item that you don't see listed on our website or in our catalog. We'll be glad to try and assist you in getting the proper accessory to use with your Delta Regis screwdriver.



TORQUE CONVERSION FACTORS

oz-in	lb-in	lb-ft	kgf-cm	Nm
oz-in x 0.0071 = Nm	lb-in x 0.1130 = Nm	lb-ft x 1.356 = Nm	kg-cm x 0.01 = kg-m	Nm x 0.1020 = kg-m
oz-in x 0.0007 = kg-m	lb-in x 0.0115 = kg-m	lb-ft x 0.1383 = kg-m	kg-cm x 13.89 = in-oz	Nm x 10.197 = kg-cm
oz-in x 0.0720 = kg-cm	lb-in x 1.152 = kg-cm	lb-ft x 13.826 = kg-cm	kg-cm x 0.868 = in-lb	Nm x 141.60 = oz-in
oz-in x 0.0625 = lb-in	lb-in x 16.0 = oz-in	lb-ft x 192 = oz-in	kg-cm x 0.0723 = lb-ft	Nm x 8.851 = lb-in
oz-in x 0.0052 = lb-ft	lb-in x 0.08333 = lb-ft	lb-ft x 12 = lb-in	kg-cm x 0.098 = Nm	Nm x 0.7376 = lb-ft



Contact us:

Delta Regis Canada Inc. 790 Redwood Sq. Unit 10-11 Oakville, ON L6L 6N3 Canada

Ph 1.888.500.2755 or 905-847-4440 Fx 1.866.500.7270 or 905-847-9907

Delta Regis Tools Inc. 6945 NW LTC PKWY Port St. Lucie, FL 34986 USA

Ph 1.888.500.2755 or 772.465.4302 Fx 1.866.500.7270 or 772.465.4368

email: sales@deltaregis.com website: www.deltaregis.com

In Europe, contact:

Delta Regis Tools, GmbH Wolfgangshof 4 82140 Olching Germany

Ph +49 (0)8142 66919-50 Fx +49 (0)8142 66919-99

email: info@deltaregis.eu website: www.deltaregis.eu





find us on **facebook**