

CESL8 32VDC PREMIUM BRUSHLESS, SHUT-OFF CLUTCH

.02-2.94 Nm
0.2-26 in.lb

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 BECT832-SSO 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⁾	-	Lever	0.2 - 3.1	0.02 - 0.35	1000	700	1/4" hex	185 / 7.3	32 / 1.3	385 / 0.8
CESL810S-ESD ⁽²⁾	-		0.2 - 3.1	0.02 - 0.35	500	350				
CESL811-ESD ⁽²⁾	CESL811 ⁽²⁾		0.4 - 6.2	0.05 - 0.69	1000	700				
CESL812-ESD ⁽²⁾	CESL812 ⁽²⁾		0.9 - 8.7	0.10 - 0.98	1000	700				
CESL823-ESD	CESL823	Lever	1.3 - 10.5	0.15 - 1.18	1000	700	1/4" hex	245 / 9.6	36 / 1.4	520 / 1.1
CESL823F-ESD ⁽¹⁾	CESL823F ⁽¹⁾		1.3 - 10.5	0.15 - 1.18	2000	-				
CESL824-ESD	CESL824		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	Push	1.3 - 10.5	0.15 - 1.18	1000	700				
CESL823PF-ESD ⁽¹⁾	CESL823PF ⁽¹⁾		1.3 - 10.5	0.15 - 1.18	2000	-				
CESL824P-ESD	CESL824P		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	1/4" hex	278 / 10.9	39.5 / 1.6	800 / 1.8
CESL827P-ESD ⁽¹⁾⁽³⁾	CESL827P ⁽¹⁾⁽³⁾	Push	8.7 - 26.0	0.98 - 2.94	1200	900				

⁽¹⁾ Use controller model BECT820 with these screwdrivers.

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

⁽³⁾ CESL827 is for hard joint, non-prevailing torque applications below 20% duty cycle. Use 40V model CESL828 for more demanding requirements.

32VDC RIGHT ANGLE DRIVERS




0.1-1.3 Nm
0.9-12 in.lb

Delta Regis 32VDC Right Angle Drivers allow screwdrivers access to fasteners located in areas that cannot be reached by a standard in-line tool.




CESL824_ESD/RA Right Angle Driver


Tool Includes



6 PIN, 2m TOOL CABLE

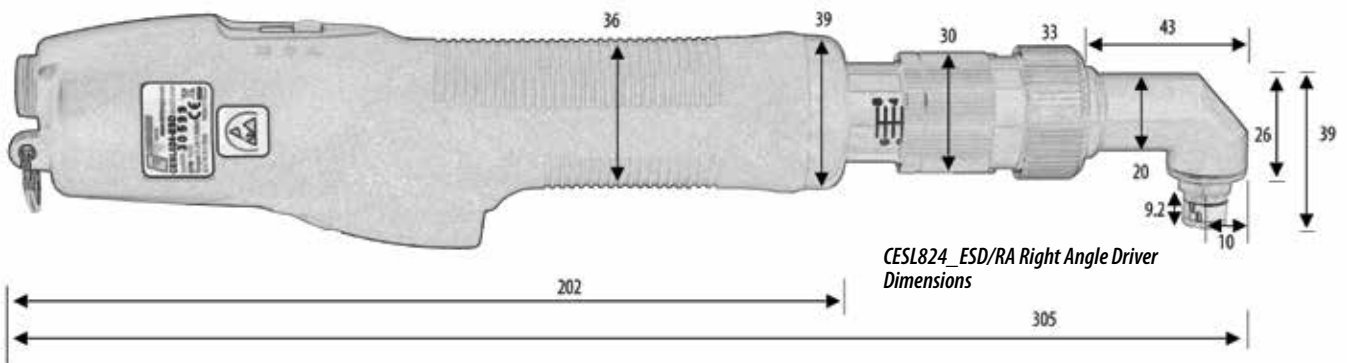


ADJUSTMENT LOCKING KEY, 1.5mm HEX



1/4" HEX BITS:
PH#1, #2 POWER BIT
PH#2 INSERT BIT

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



**BECT820
CONTROLLER**

Controllers for 32VDC Brushless Drivers							
Model Number ⁽¹⁾	Outlets	Speeds	Tool Connector	Input	Output	Dimensions L x W x H (mm)	Weight kg / lbs
BECT620C	1	Hi / Lo	6 pin	100-240V AC	32/24V DC, 60W	145 x 60 x 35	0.25 / 0.6
BECT820					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'.

Accessories	CESL810-ESD	CESL810S-ESD	CESL811-ESD	CESL812-ESD	CESL811	CESL812	CESL823(F)-ESD	CESL824(F)-ESD	CESL823P(F)-ESD	CESL824P(F)-ESD	CESL823(F)	CESL824(F)	CESL823P(F)	CESL824P(F)	CESL827-ESD	CESL827P-ESD	CESL827	CESL827P
	Select driver model no. on the right, follow column down the chart; X signifies an appropriate accessory.																	
Torque Lock Sleeve - covers torque adjusting nut to deter tampering (1 included), metal lock sleeves also available																		
DR80-20133C					X													
DR80-20133E (ESD safe)	X		X															
DR80-10134C											X	X						
DR80-10134E (ESD safe)							X	X										
DR80-20142C																	X	X
DR80-20142E (ESD safe)															X	X		
Pistol Grip Attachment - reconfigures an in-line screwdriver for horizontal fastener installation																		
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 workbench and park the screwdriver when not in use																		
DR80-10136 (w/ lock sleeve)							X	X	X	X	X	X	X	X	X	X	X	X
DR80-10136 (no lock sleeve)							X	X	X	X	X	X	X	X	X	X	X	X
DR80-20141	X	X	X															
Cable Assemblies - for use with all 32VDC CESL8 Screwdrivers running on std hi/low speed controllers																		
DR96-66002	2m (6.5 ft), 6 pin, Standard Cable (included with each screwdriver)																	
DR96-66003	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																	
DR96-832X10MSH	10m (32ft), 6 pin, Shielded Cable																	





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	1	Hi/Lo	CE/RoHS/ETL	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				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:		BECT832-SSO for 32V screwdrivers only: CESL810-812, CESL823-824(P/F/PF), CESL827(P) BECT840-SSO: CESL828-829(P/F/PF) + all 32V CESL8 drivers (DR96-40TO32V-WHIP cable req'd when using 32V drivers)) BECT940-SSO: CESL835M-875M(PM), CESP835-865, CESL935-955(P/F/PF)					

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

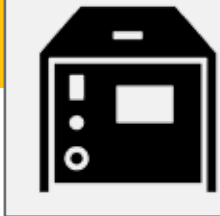
Features	
Slow Start Time Adjustment	0 - 9.9 sec
Slow Start Speed Adjustment	30 - 100%
Count (per batch)	1 - 99
Time Window Setting Range (min/max)	0 - 9.9 sec
Audible Alert (selectable)	Good/NG/Batch OK
Timed Auto-Reverse after Clutch-out	0 - 9.9 sec

Inputs (Dry 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.

BECT840-SSO CONTROLLER OVERVIEW



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.



Keypad for programming and selection

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.



Brushless Screwdriver Cable Connection



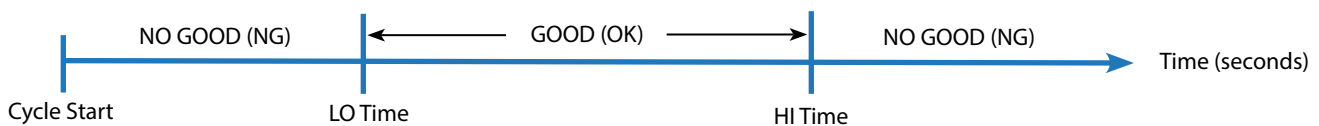
DIP Switch for optional functionality

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

BECT840/940-SSO include an output voltage selector switch for use with 32V screwdrivers



Plug-in I/O connector has screw terminals for connecting wiring



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.



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		Inputs (dry contact switch req'd)	Relay Outputs (max. 40VDC, 250mA)	Dimensions L x W x H
Slow Start Time Adjustment	0 - 9.9 sec	1. Remote Start	1. Tool Started/Running	103 x 100 x 32 mm 4.1 x 3.9 x 1.3 in Weight: 180 g / 0.4 lbs
Slow Start Speed Adjustment	~ 30 - 100%	2. Remote Reverse	2. Clutch Activated	
Max. Run Time Setting	0 - 9.9 sec	3. Remote Enable/Disable	3. Tool in Reverse	

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, Tool in Reverse
ECT8-SSOD (40V Tools)	CESL828-829(P/F/PF), CESP835-865, CESL835M-875M(PM), CESL9 ; BECT640/940HL	