

**Brushless
electrical solutions:
maximum
accuracy,
minimum
maintenance.**



**Brushless electric screwdrivers
CESL - ESL - ESP**

- Torque range: from 0,02 up to 15 Nm
- Automatic current shut-off

Fiam®
PEOPLE AND SOLUTIONS

Brushless electric screwdrivers

Maximum accuracy, minimum maintenance.

Versatile and extremely comfortable, they are particularly suitable for specific assembly work even with **small screws and nuts**; they are used in different market fields and everywhere **high accuracy** is required also at low torque values.

Equipped with **brushless motors**, thanks to the absence of carbon dust in the working area, they guarantee **long lifetime, no pollution** in the working environment and **higher tool productivity**.

Be demanding

Reliability

Long lifetime of the components thanks to careful design and productive process quality which results in less maintenance and repair costs

Long lifetime, equal to **four times** that of a standard motor with brushes

The control system with **automatic power shut off, interacting with the controller**, cuts off power supply to the tool upon reaching preset torque value

CESL models are ESD compliant (Electro Static Discharge): they protect against any electrostatic discharge electronic components assembled

The **batch counting unit** (for CESL models) allows saving time to check assembled products (e.g. to check the number of tightened screws) thus ensuring the good quality of the assembled product
(poka-yoke system)



Don't be satisfied
with the maximum

Perfection
is in your hands

Naturally
Innovative

Productivity Ergonomics Ecology

Considerable increase of the efficiency of the tightening cycle thanks to innovative systems

Easy torque adjustment to increase or decrease the tightening torque through milled ring nut

The **driver unit** supplies the right voltage to the screwdriver and guarantees excellent operation and fully exploits the capacities of the tool

The **ECT unit** permits 3 additional outputs and **is** able to adjust **the "slow start"**

The reduced maintenance operations guarantees high **productive continuity**

Optimization of the tool performances in regard to ergonomics and operator safety

Maximum safety of use due to **low voltage operation** (32 and 40 Volt) and **perfect thermal insulation**

Very low noise level, minimum vibrations

Designed to allow the use of **suspension device** to diminish operator effort

Some models are equipped **with auxiliary grips for transforming the straight grip into a pistol grip tool** (for tightening operations on vertical surfaces)

Straight screwdrivers feature versions with **collar bracket** to be used on **arm stands**

Auxiliary grip in order to contrast any possible torque reaction on wrist

Innovative systems designed paying even more attention to the environment and its safeguard

Absence of carbon and copper dust for more healthier and breathable working environments

Greater output of the motors guarantees **reduced energy consumption**



Protective cover for clutch adjustment ring nut supplied with

Straight models

Type of screwdriver	Code	Grip	Torque range				Idle speed (fast/slow or single)	Starting system	Reversibility	Weight		Dimensions (mm)	Power consumption	Accessories	Driver to be connected	Monitoring unit to be connected
			min. Nm	max. Nm	min. in lb	max. in lb				kg	lb					
Model	Code	Type	Nm	Nm	in lb	in lb	rpm	Type	Type	kg	lb	L x Ø	Volt	Drive	Model	Model
CESL610-ESD	111618804	↓	0,02÷0,35	0,18÷3.1	1000/700	↑	↻	0,385	0,85	185x32	32	H4 mm	BECT 620 E	ECT6-SSO A *		
CESL611-ESD	111618805	↓	0,05÷0,69	0,44÷6.11	1000/700	↑	↻	0,385	0,85	185x32	32	H4 mm	BECT 620 E	ECT6-SSO A *		
CESL612-ESD	111618806	↓	0,10÷0,98	0,89÷8.67	1000/700	↑	↻	0,385	0,85	185x32	32	H4 mm	BECT 620 E	ECT6-SSO A *		
CESL623-ESD	111618807	↓	0,15÷1,18	1,33÷10.44	1000/650	↑	↻	0,52	1,14	245x36	32	⬡ 1/4"	BECT 620 E	ECT6-SSO A *		
CESL623F-ESD	111618808	↓	0,15÷1,18	1,33÷10.44	2000	↑	↻	0,52	1,14	245x36	32	⬡ 1/4"	BECT 620 IE	ECT6-SSO A *		
CESL623P-ESD	111618810	↓	0,15÷1,18	1,33÷10.44	1000/650	↑↓	↻	0,52	1,14	245x36	32	⬡ 1/4"	BECT 620 E	ECT6-SSO A *		
CESL623PF-ESD	111618811	↓	0,15÷1,18	1,33÷10.44	2000	↑↓	↻	0,52	1,14	245x36	32	⬡ 1/4"	BECT 620 IE	ECT6-SSO A *		
CESL624-ESD	111618809	↓	0,29÷1,86	2,57÷16.46	1000/650	↑	↻	0,52	1,14	245x36	32	⬡ 1/4"	BECT 620 E	ECT6-SSO A *		
CESL624P-ESD	111618812	↓	0,29÷1,86	2,57÷16.46	1000/650	↑↓	↻	0,52	1,14	245x36	32	⬡ 1/4"	BECT 620 E	ECT6-SSO A *		
ESL628	111618790	↓	0,98÷2,94	8,67÷26.02	1000	↑	↻	0,8	1,76	278x39,5	40	⬡ 1/4"	BECT 640 E	ECT6-SSO B		
ESL628F	111618791	↓	0,98÷2,94	8,67÷26.02	2000	↑	↻	0,8	1,76	278x39,5	40	⬡ 1/4"	BECT 640 E	ECT6-SSO B		
ESL628P	111618797	↓	0,98÷2,94	8,67÷26.02	1000	↑↓	↻	0,8	1,76	278x39,5	40	⬡ 1/4"	BECT 640 E	ECT6-SSO B		
ESL628PF	111618798	↓	0,98÷2,94	8,67÷26.02	2000	↑↓	↻	0,8	1,76	278x39,5	40	⬡ 1/4"	BECT 640 E	ECT6-SSO B		
ESL629	111618792	↓	1,96÷4,90	17,35÷43.37	1000	↑	↻	0,8	1,76	278x39,5	40	⬡ 1/4"	BECT 640 E	ECT6-SSO B		
ESL629P	111618799	↓	1,96÷4,90	17,35÷43.37	1000	↑↓	↻	0,8	1,76	278x39,5	40	⬡ 1/4"	BECT 640 E	ECT6-SSO B		

Legend

CESL610/ESL628 = Straight brushless electric screwdriver • F = One speed version (fast 2000 rpm) • P = Push to start • ESD = ESD models (Electric Static Discharge)

Legend

↻ **Reversibility:** All models are suitable for tightening and untightening operation

↑ **Lever start**

↑↓ **Push to start**

- Accessory drive: female hexagonal drive 1/4", 6,35 mm (ISO 1173)
- The code number must be used when ordering

The torque values are purely indicative and may be influenced by the hardness of the type of joint, by the type and length of the screw. For all further details, please apply to the Fiam Technical Consultancy Service.

* All straight models can be connected to a single unit (BECT 626, see page 6) which works at the same time as controller and batch counter

Standard equipment (supplied with the tool)

CESL...610/611/612... models:

- Power cord at 6 PINs integrated into tool (2 mt.)
- 3 bits
- Protective cover for clutch adjustment
- Hanging ring
- Use and maintenance manual

Other models CESL...:

- Power cord at 6 PINs integrated into tool (2 mt.)
- 2 bits
- Protective cover for clutch adjustment
- Hanging ring
- Use and maintenance manual

ESL... models:

- Power cord at 6 PINs integrated into tool (2 mt.)
- 2 bits
- Protective cover for clutch adjustment
- Hanging ring
- Pistol auxiliary grip (lever models include starting button)
- Use and maintenance manual

Models available upon request

- ESL... models with ESD device
- CESL... models without ESD device

Straight models with collar bracket

Type of screwdriver		Grip		Torque range		Idle speed fast/slow or single		Starting system	Reversibility	Weight		Dimensions (mm)	Power consumption	Accessories	Driver to be connected	Monitoring unit to be connected
Model	Code	Type	Nm	Nm	in lb	in lb	rpm	Type	Type	kg	lb	L x Ø	Volt	Drive	Model	Model
ESL629M	111618793		2÷5		17.7÷44.25		1000			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB
ESL629PM	111618800		2÷5		17.7÷44.25		1000			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB
ESL630M	111618794		3÷7,5		26.55÷66.38		800			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB
ESL630PM	111618801		3÷7,5		26.55÷66.38		800			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB
ESL640M	111618795		4÷10		35.4÷88.5		550			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB
ESL640PM	111618802		4÷10		35.4÷88.5		550			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB
ESL650M	111618796		6÷15		53.1÷132.75		350			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB
ESL650PM	111618803		6÷15		53.1÷132.75		350			1,2	2.64	297x46,2	40	Hex 1/4"	BECT 640 E	ECT6-SSOB

Legend

ESL269 = Straight electric screwdriver • M = Models with collar bracket • P = Push to start

Legend

Reversibility: All models are suitable for tightening and untightening operation

Lever start
Push to start

- Accessory drive: female hexagonal drive 1/4"; 6,35 mm (ISO 1173)
- The code number must be used when ordering

The torque values are purely indicative and may be influenced by the hardness of the type of joint, by the type and length of the screw. For all further details, please apply to the Fiam Technical Consultancy Service.

Straight models with collar bracket

Standard equipment (supplied with the tool)

- Power cord at 6 PINs not integrated into tool (2 mt.)
- 2 bits
- Hanging ring
- Auxiliary grip
- Use and maintenance manual

Models available upon request

- ESL... models with ESD device
- Models with □ 3/8" drive

Pistol models

Type of screwdriver		Grip		Torque range		Idle speed fast/slow or single		Starting system	Reversibility	Weight		Dimensions (mm)	Power consumption	Accessories	Driver to be connected	Monitoring unit to be connected
Model	Code	Type	Nm	Nm	in lb	in lb	rpm	Type	Type	kg	lb	L x Ø x H	Volt	Drive	Model	Model
ESP620	111618821		2÷5		17.7÷44.25		1000			1,25	2.75	270x48x169	40	Hex 1/4"	BECT640E	ECT6-SSOB
ESP630	111618822		3÷7,5		26.55÷66.38		800			1,25	2.75	270x48x169	40	Hex 1/4"	BECT640E	ECT6-SSOB
ESP640	111618823		4÷10		35.4÷88.5		550			1,25	2.75	270x48x169	40	Hex 1/4"	BECT640E	ECT6-SSOB
ESP650	111618824		6÷15		53.1÷132.75		350			1,25	2.75	270x48x169	40	Hex 1/4"	BECT640E	ECT6-SSOB

Legend

ESP620 = Pistol electric screwdriver

Legend

Reversibility: All models are suitable for tightening and untightening operation

Push button

- Accessory drive: female hexagonal drive 1/4"; 6,35 mm (ISO 1173)
- The code number must be used when ordering

The torque values are purely indicative and may be influenced by the hardness of the type of joint, by the type and length of the screw. For all further details, please apply to the Fiam Technical Consultancy Service.

Standard equipment (supplied with the tool)

- Power cord at 6 PINs not integrated into tool (2 mt.)
- Protective cover for clutch adjustment
- 2 bits
- Hanging ring
- Auxiliary grip
- Use and maintenance manual

Models available upon request

- ESP.. models with ESD device
- Models with cable on top
- Models with □ 3/8" drive

Accessories

• BECT... driver

Required to **convert the local power feed** (230 Volt CA - 50 Hz) into direct current (20/32 Volt CC).

BECT620E model allows **choosing between two tool speeds of rotation**: the speed given by the screwdriver and a speed that is approx. 30% lower.



BECT620...



BECT640E

Model	Code	Outputs	Speed	Connector	OutPut	InPut	L x Width x H		Weight	
							mm	kg	lb	
BECT 620 E	676000094	1	Slow/Fast	6 pin	32/20 VDC	100-240VAC	145x60x35	0,25	0,55	
BECT 620 IE	676000095	1	High	6 pin	32 VDC	100-240VAC	195x76x56	0,45	0,99	
BECT 640 E	676000097	1	High	6 pin	40 VDC	100-240VAC	210x118x85	1,8	3,96	

E = Power cord with European pin

• ECT... monitoring unit

Monitoring unit of the tightening time to be connected to BECT... driver.

It allows:

- Two speed modalities: slow and fast (HI/LO) – only for ECT6-SSOA model
- Management of the slow start (screw feeding speed) from 30% up to 100% of nominal speed
- I/O external connectors: 1 input and 3 outputs (in cycle, end cycle, reversibility)



Model	Code	For screwdrivers	Driver to be connected	Slow start time	Slow start speed	OutPut	Cable length		L x Width x H
							mt	mm	
ECT6-SSOA	676000098	CESL (32V)	BECT620E BECT620IE	0,1÷5 s.	30-100% speed max	3	0,3	58x95x35	
ECT6-SSOB	676000099	ESL / ESP (40V)	BECT640E	0,1÷5 s.	30-100% speed max	3	0,3	58x95x35	

• BECT626 batch counting unit

Only for CESL... models, it works at the same time as controller and batch counter and allows:

- Two speeds modalities: slow and fast (HI/LO)
- Management of the slow start (screw feeding speed) from 30% up to 100% of nominal speed
- I/O external connectors: 2 inputs (reset, start) and 3 outputs (ok, nok, end cycle)
- Acoustic signal to be programmed
- Min/max tightening time to be programmed
- Counting up to 99 screws
- Display with OK/NOK/IN CYCLE LEDs with visualization of the screws number (7 segments)



Model	Code	For screwdrivers	Speed	InPut (n. 2)	OutPut (n. 3)	Weight		L x Width x H
						kg	lb	
BECT626-SSOE	676000096	CESL (32V)	Slow/Fast	100-240V AC	32/20V DC, 60 VAC	0,9	1,98	150x130x48

Standard equipment

- Power cord with European pin (E)
- Connecting clamp
- Device for driver suspension

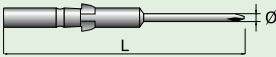

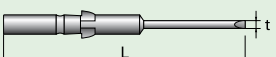

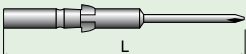

• **Pistol grip** to convert CESL...straight screwdrivers into pistol models

• **90° angle head** to be connected directly to straight models for tightenings in small spaces

• **Tool holster** to be fixed to the work bench in order to house pistol tools; avoids damage to the tools and guarantees longer lifetime

• **Cable at 6 pin**, 3 or 6 mt long

• **Bits, sockets, balancers:** see the Fiam "Accessories" catalogue

		Imprint	mm	Length L	Code
 	Cross-slotted	PH. 00	ø 1,5	60 mm	601056005
		PH. 0	ø 2,0	60 mm	601056010
		PH. 0	ø 2,5	60 mm	601056015
		PH. 1	ø 3,0	60 mm	601056020
 	Slotted		t = 1,3 s = 0,3	60 mm	601016005
			t = 1,5 s = 0,3	60 mm	601016010
			t = 1,8 s = 0,4	60 mm	601016015
			t = 2,0 s = 0,4	60 mm	601016020
 	Torx	T3		60 mm	601086005
		T4		60 mm	601086010
		T5		60 mm	601086015

Accessories

• BT telescopic torque reaction arms in carbon fibre

They reduce reaction on operator's wrist due to torque generated by the tool: they can stand 30% higher torque than commercially available arms.

Resistant to any mechanical stress, they are equipped with **3 telescopic elements** and **double terminal coupling** to guarantee high handiness and manoeuvrability. They can be easily **installed** on existing workplaces on ceiling or wall using a simple and compact plate. For further information see cat. 79.

Telescopic reaction arm		Max torque	Max work range	Min work range	Ø max tool
Model	Code	Nm	mm	mm	mm
BT12	692071120	12	1125	515	25 - 46
BT12 L	692071121	12	1700	650	25 - 46
BT25	692071250	25	1150	540	25 - 46

Wide Operating Area

Wide rotation of the tool around its axis

