

ETS Torque Monitoring Electric Screwdriver



KEMP ideal solution for Industry 4.0 production line. We provide immediate feedback on each tightening process. ETS screwdrivers work in combination with control units together. Their built-in transducer continuously reads torque and position of the screw and sends the gathered data to the controller for analysis.

The tightening torque of current tools is calculated by simulation results rather than real torque. That's the reason why basically these products has been eliminated by the market.

KEMP ETS Ser. provide immediate feedback on each tightening process, be able to check at a glance whether the part is correctly tightened or not.

ETS Series - Torque Monitoring Electric Screwdriver

Making the Screwdriver Smart

Hall Effect Switch

Non-contact type switch that reduces the effects of wear and tear, which greatly enhances the durability and reliability.

Coreless Brushless Motor

With low inertia characteristic, the motor performs with stability and precision at both high and low speed range.

Patented Transducer Technology

High precision torque sensing mechanism with high sensitivity and durability.

High Strength Clutch Mechanism

A proven design tested over 2 million fastening cycles at maximum torque.

LED Lights & Buzzer

Built-in signal lights with three colors to inform the user about the status of each fastening cycle.



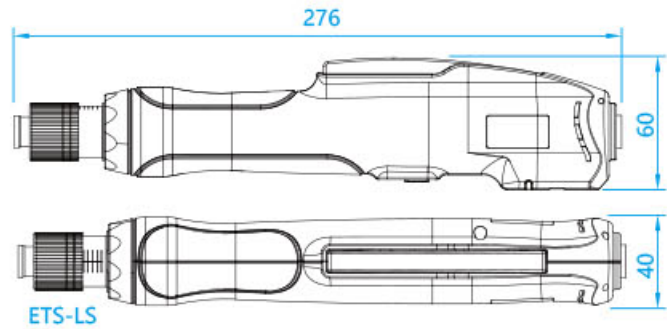
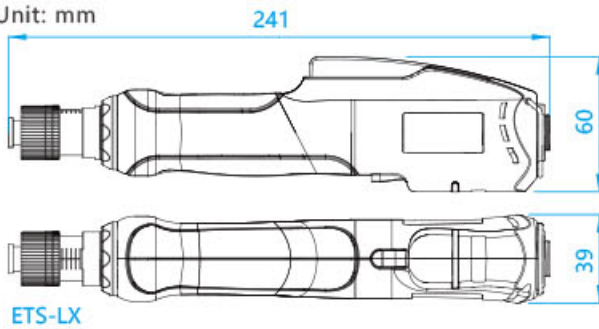
High Strength Spring

Tested over 1 million fastening cycle to ensure the spring tension is retained to reach the maximum torque.



Dimensions

Unit: mm



Model	Drive Size (Hex.)	Torque Range		Free Speed	Screw Seating RPM	Dimensions	Weight	Item No.
	mm / inch	kgf.cm	Nm	rpm	rpm	mm	kg	
ETS-LX02	Ø4	0.5~2	0.05~0.2	200~1000	200	241 x 60 x 39	380g ±10 %	305 20 001
ETS-LX06	Ø4	1~6	0.1~0.6	200~1000	200	241 x 60 x 39	380g ±10 %	305 20 002
ETS-LX10	Ø4	2~10	0.2~1.0	200~1000	200	241 x 60 x 39	380g ±10 %	305 20 003
ETS-LS06	1/4	1-6	0.1-0.6	200~1000	200	276 x 60 x 40	570g ±10 %	305 20 101
ETS-LS16	1/4	1-16	0.1-1.6	200~1000	200	276 x 60 x 40	570g ±10 %	305 20 102
ETS-LS20	1/4	2-20	0.2-2.0	200~1000	200	276 x 60 x 40	570g ±10 %	305 20 103
ETS-LS24	1/4	4-24	0.4-2.4	200~1000	200	276 x 60 x 40	570g ±10 %	305 20 104

Included accessories: 1 x Torque Locker Cover , 1 x Cable 8pin 2.0m (93520101)

Spec. for Cable

Type	Length	pin	Item No.
	M		
Cable 6pin 2.0m	2	6	935 20 111
Cable 8pin 2.0m	2	8	935 20 101

* According to KEMP product improvement policy, it will not be notified immediately when changes to the design and specifications. Please check KEMP's website for the latest information.

ETS Controllers unit

Function:

- Real-time monitoring
Displaying real-time status: OK, All OK, NOK, unfinished rundown, cross threading, omission, incomplete cycle, torque curve, time and number of turns.
- Parameter Setting
Fastening setting includes target torque, fastening duration(time), number of turns, speed(RPM), screw count and system lock.
- Flexibility in Connection
Can be connected with mobile devices, laptop, PC or other system for controls
- Data Storage
Built-in 16G memory capable of storing over 1 million set of fastening data, or data can be transferred to external device for storage through WIFI or ModBus
- Access Authorization
Three levels of authorization for the most secure management on the assembly line.
- Scan management
The USB port can be connected to a wired or wireless barcode machine. Execute work order scanning code record and technical function scanning code unlocking.

Smart Monitoring

Intuitive Control Interface

- ETS-LC1A Controller can be programmed with the 5" touch screen, mobile device, PC and laptop through WIFI connection.

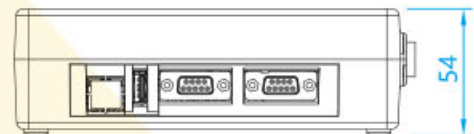
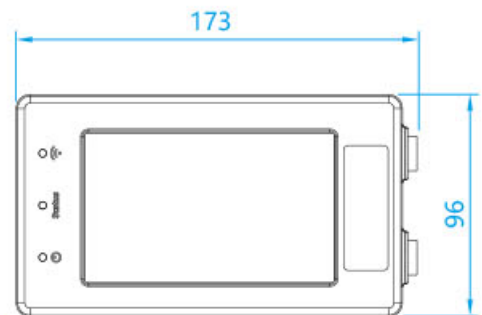
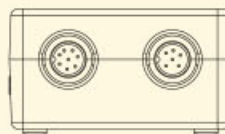
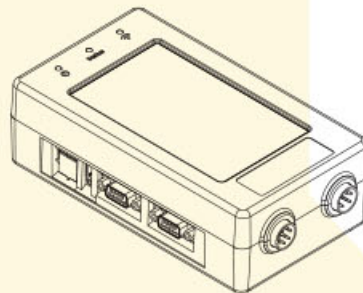
Controller with 5" Touch Screen

ETS-LC1A Controller is equipped with 5" touch screen for easy access to the control and settings.
The controller is conveniently-sized for easy placement on the assembly line.



Dimensions

Unit: mm



Model	Screen	DC output	IO	Internal storage	Dimensions	Weight	Item No.
					mm	kg	
ETS-LC1A (Advanced)	5" TFT LCD	20-30V ±10 %	8 Point (Output 4 - Input 4)	16G / up to 1 million records	173 x 96 x 54	415±10 %	335 20 102

Communication port : RS232/RS485/USB A-Type/Wi-Fi

Included accessories: 1 x Power Supply (30820100) , 1 x Cable 6pin 2.0m (93520111)

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KEMP Parameter Device

Turns

Target Turns **0.0** Turns

Max Turns **0.0** Turns

Min Turns **0.0** Turns

KEMP Parameter Device

Torque

Target Torque **0.60** Nm

Max Torque **0.70** Nm

Min Torque **0.50** Nm

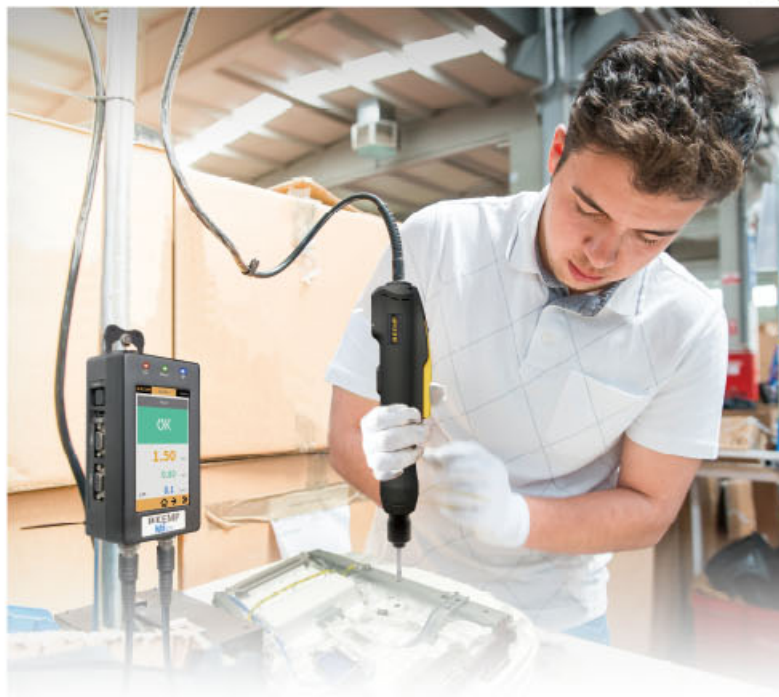
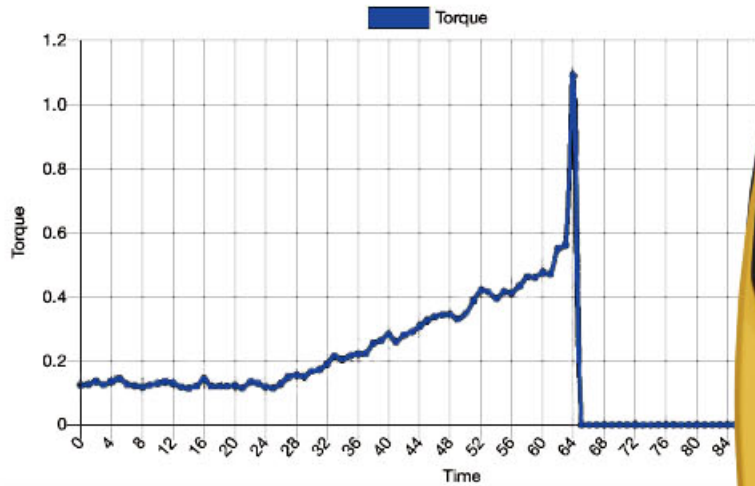
KEMP Parameter Device

Time

Target Time **0.40** Sec

Max Time **0.50** Sec

Min Time **0.30** Sec



	Specification	Description
Number of screw setting for each workpieces	1-99	All OK determination
Fastening time setting	0.01-9.99 sec.	Error-proofing capabilities
Fastening torque standard	0.1~0.6/0.1~1.6/0.2-2.0/0.4~2.4 Nm	
Torque calibration point	1-10 point	
Access Authorization	Master · Managersx 2 · User	
Communication Protocol	ModBus RTU	RS232/RS485
Data storage	up to 1 million records	Overwrite records after 100 days
Barcode scan	25 character	USB port/Lock
IO output	DO1: All OK DO2: OK DO3: NG DI1: Enable DI2: CW DI3: CCW DI4: Lock	

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