

## YOKOTA ELECTRIC TOOLS

A GENERATION FORWARD FOR THE MANUFACTURING INDUSTRY WITH A NEED OF ACCURATE BOLT TIGHTENING AND HIGH SPEED PRODUCTION.

The Yokota electric system wrenches with integrated torque transducer and angle sensor offer a large reduction of energy consumption, a high degree of accuracy and fantastic work efficiency.

**NEW!**

# E-Wrench: Hybrid Technology

## Electric drive:

- Reduction of energy consumption → Lean and Green.
- No need for pneumatic installation with compressor, air piping, hose and solenoid valves.
- No need for lubrication of the tool. Good for the working environment, especially near paint shops.
- Due to the newly developed outer rotor servo motor and the composite body, the Yokota wrench has lightest weight in its class.

## Reliable and accurate tightening:

- Faulty tightening detection with the maximum accuracy due to the use of an integrated torque transducer and also an integrated angle sensor.
- During the tightening process, four different variables are measured and monitored: Torque - Angle - Time - No. of Impulses.
- Torque transducer and angle sensor located directly at the front of the main shaft, giving the best accuracy of measurement.
- Torque transducer measures directly and transmits the signals contactless.
- The angle sensor is an extremely compact (PAT) rotary encoder that detects both angle as well as direction by 1 degree, signal transmission contactless.
- Detects cross threads, double hits, contamination, etc.

## Durability:

- The impulse unit is supported on both ends by ball bearings (PAT.P).
- The impulse unit has a check valve mechanism (PAT.P) to reduce oil pressure on the main shaft.
- For heat suppression of the impulse unit it is equipped with a separate cooling fan.
- For heat suppression of the motor it is equipped with a cooling fan that reduced motor size (and weight at the same time).



*New developed outer rotor motor*



## Operator comfortability:

- The reaction forces are close to zero due to the use of the oil impulse mechanism, even at high torque bolt tightening.
- Compared with older models, the number of bolt tightening is improved to 20 bolts/minute.
- Special feature to prevent cross threaded tightening: Reversely rotating a bolt to a preset angle at the start of tightening.
- High speeds: Free speed (bolt run down) of 4800 RPM.
- High intensity LED light to project on the bolt.
- Combinations of buzzers and LED (Green / Red) for operator feedback on OK / NG tightenings.
- Motor speed freely adjustable in the controller. For three different speed stages: Start of trigger / Run down / Final tightening.

## Controller features:

- 20 different parameter settings possible, for a variety of different work pieces.
- Touch screen LCD color display, showing graphs, torque, angle, impulses and more.
- Group management function (counting).
- Result of tightening output through various interfaces: USB, RS-232C, I/O and Ethernet connector.
- Simultaneous use of two tools on one controller is possible.

### Controller YETC-500

For electric system wrenches with built-in angle sensor

Controller	Version
YETC-500-10SL	LAN Ethernet version
YETC-500-10SO	serial communication

Amplifier
e-PDA-4

Extension toolcable	
5 mtr.	7693-1591-00-01
10 mtr.	7693-1591-00-02

### Controller front panel



1. Touch panel type LCD
2. RS-232C serial connector
3. USB connector

### Controller back panel



1. Ethernet connector (option)
2. I/O terminal board
3. Tool connector 1
4. Tool connector 2

### Technical specifications

Type	Drive	Bolt capacity mm	RPM	Torque Nm	Weight kg	Length mm	Side to center mm	Vibration m/s <sup>2</sup>	Noise level dB(A)
e-M700	3/8" 4K	M6-M8	300-4.800	7,5 - 35	2,18	236	32,5	< 2,5	75
e-M900	3/8" 4K	M8-M10	300-4.800	30 - 60	2,25	236	32,5	< 2,5	78
e-M1100	1/2" 4K	M10-M12	300-4.800	50 - 90	2,52	248	32,5	< 2,5	80

