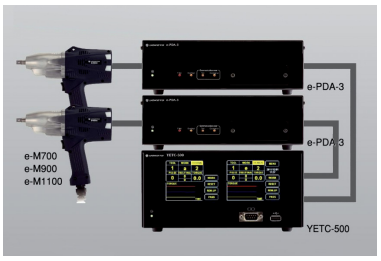
Electric System Impulse Wrench – e-M series with Angle Sensor

Img.: e-M900



Yokota's electrically driven EC system wrench with integrated **strain gauge torque transducer** and **angle of rotation sensor** enables a considerable reduction in energy consumption with the highest repeatability and superior working efficiency.

During the tightening process, four different parameters are measured and monitored: torque – angle of rotation – time – number of pulses. The tightening result is evaluated from the curves of torque, angle of rotation and time. This enables the highly accurate detection of double or other incorrect tightening.

Torque and rotation angle are measured directly at the front of the shaft to ensure the highest accuracy of measurement. The rotation angle sensor is an extremely compact (PAT) rotation encoder that detects both angle and direction of rotation with an accuracy of 1° with contactless signal transfer.

Thanks to the newly developed „Outer Rotor Servo Motor" and the composite housing, the Yokota e-wrench has the lowest weight in its class.

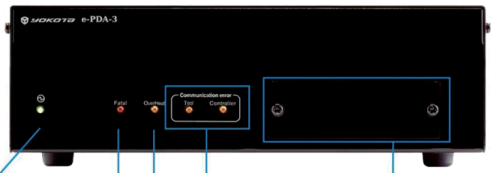
To suppress heat generation, the motor is equipped with a newly developed cooling fan. The size of the motor has been reduced and weight saved. In addition, the number of possible fastenings per minute has been increased to 20.

To avoid thread damage: Turning a fastener backwards to adjust to a preset angle of rotation at the beginning of the tightening process.

Sustainability

- Pulse cell supported on two sides by ball bearings (PAT.P).
- Integrated relief valve (PAT.P) to reduce oil pressure on the seals.
- No compressor system needed, no pipes, no hoses, no solenoid valves.
- No compressed air oil required, compatible with the environment and the user, especially in the vicinity of painting lines.
- Reduction of energy consumption – Lean and Green.

Front Panel



Power supply LED (green)
Fatal LED (red)
Overheat LED (orange)
Communication error LED (orange)
Speed setting at connecting with YETC-210R,220R,300R,320R: (Low, Middle, High)

Back Panel

Dip switch for selecting the power supply voltage to be used
Controller cable connector
Tool cable connector

Series e-M

Type / Size			Model	Item No.	Bolt Capacity	RPM	Torque Range*	Spindle Offset	Length	Weight	Vibration	Noise Level
	SqD	Hex			Ø	min^{-1}	N·m	mm	mm	kg	m/s^2	dB(A)
Pistol	3/8	–	e-M500	430700	M5-M6	300 - 4800	3 - 10	32,5	236	2,10	<2,5	75
	3/8	–	e-M700	430710	M6-M8	300 - 4800	7,5 - 35	32,5	236	2,18	<2,5	75
	3/8	–	e-M900	430720	M8-M10	300 - 4800	30 - 60	32,5	236	2,25	<2,5	78
	1/2	–	e-M1100	430730	M10-M12	300 - 4800	50 - 90	32,5	248	2,52	<2,5	80

Further information available 24 / 7 on our website.

** Torque specification is for guidance only, based on manufacturer's tightening tests at 0.6 MPa. Due to different influencing factors, values may deviate in practice.*