

FG ESD PRESET TOROUE SCREWDRIVER





### **Mountz FG ESD Precision Preset Torque Screwdriver**

### SAFEGUARDING AGAINST **FASTENING FAILURES**

- Poka-yoke torque screwdriver prevents over-torque
- ESD safe tool prevents electrostatic discharge maintains a surface resistance within the range of 105 to 108 Ohms, ensuring compliance with ESD standards (Methods: IEC 61340-5-1, ANSI/ESD STM11.13)
- · Equipped with anti-static properties, the ESD screwdrivers effectively minimize static electricity generation and particle attraction
- · Special seals prevent grease leakage and contamination from reaching sensitive areas or components
- Accuracy and precision delivered for all fastening applications with unmatched quality you can count on
- Calibration life 4x ISO standards (for the FG-8i ESD, FG-20i ESD, FG-40i ESD, and FG-125i ESD models)
- Calibration life meets the ISO standards (for the FG-25z ESD, & FG-50z ESD models)
- Two year unlimited warrant, lifetime warranty against manufacturer defects





#### Quality cam-over technology in the palm of your hand for ESD safe environment

THE STATE-OF-THE-ART PRECISION TOROUE DRIVER

Engineered and assembled in Silicon Valley, the Mountz FG line of precision preset ESD safe torque screwdrivers are the most advanced hand tools for high-level process and quality control. The screwdriver's repeatability, traceability, and precision safeguards against fastening failures.

Designed for ESD safe environment with sensitive electronic components and assemblies, the Mountz ESD screwdriver adhere strictly to IEC standards, safeguarding against electrostatic energy and ensuring the utmost protection for delicate electronics. The tool features a dynamic wear-resistant internal seals as an added protective measure to prevent grease leakage and contamination from infiltrating sensitive areas or components.

When under or over-torquing puts your products at risk, Mountz cam-over torque screwdrivers deliver the accuracy you need. Mountz cam-over drivers use an internal cam-over mechanism to reduce the risk of operator error by disengaging once torque is reached. Our cam-over technology increases the consistency of torque delivered and joint reliability.

#### Precision and accuracy delivered every time

BREAKTHROUGH ACCURACY AND REPEATABILITY INCREASES OPERATOR CONFIDENCE AND OVERALL QUALITY OF ASSEMBLY

The Mountz FG ESD screwdriver calibration life exceeds the stringent industry standard (ISO 6789). The FG is an error-proofing tool that allows engineers to reduce quality risks for critical fastening applications with a torque range suitable for micro, low, and medium torque applications.

The cam-over technology applies the correct torque and prevents over-torque events. You can give Mountz FG tools to any operator and have the confidence that they will deliver the correct torque, time after time.

Our unique bearing system eliminates axial (end) and side loads by the operator, increasing the consistency of torque delivered and joint reliability.



#### **ESD Torque Screwdrivers**

Preventing electrostatic discharge is vital to sensitive electronic components and assemblies. Opting for ESD tools upfront presents a proactive strategy to avoid significant financial consequences of ESD accidents over time. These incidents, such as component damage, product defects, and downtime, can incur high costs.

The FG ESD screwdrivers incorporate anti-static properties to effectively reduce static electricity generation and minimize particle attraction. Constructed with impact-resistant, dissipative materials, these rugged and reliable tools adhere strictly to IEC standards, safeguarding against electrostatic energy and ensuring the utmost protection for delicate electronics. These drivers maintain a surface resistance within the range of 10<sup>5</sup> to 10<sup>8</sup> Ohms, ensuring compliance with ESD standards.



## Preset cam-over torque screwdriver improves productivity

Modern, effective preset torque screwdrivers improve productivity by guaranteeing that the correct torque value is consistently applied to each fastener. Preset torque screwdrivers are ideal for fastening applications where operators repeatedly assemble parts at the same torque setting. A preset screwdriver is similar to setting an alarm clock to signal the achievement of a selected time. The screwdriver is pre-set to the application's required torque value. The tool signals once torque is achieved.

A preset screwdriver doesn't have an external torque adjustment scale. These tools have an internal torque adjustment mechanism for setting the torque value using a hex key and a torque analyzer. The locking mechanism prevents accidental torque setting changes. Once the tool is set, the screwdriver's end cap is sealed with a calibration sticker and is ready to be used. However, if the preset torque value needs to be changed for a new fastening application, the flexible tool can easily be adjusted to a new preset torque value.

### **PRODUCT OVERVIEW**

FEATURE	WHAT IS IT?	ADVANTAGE	END USER BENEFIT	
Cycles Before Calibration*	<ul> <li>ISO 6789-1:2017 calls for</li> <li>maximum of 5,000 torque applications</li> </ul>	<ul> <li>Exceeds standards</li> <li>Mountz 4x ISO standards: 20,000 cycles before re-calibration*</li> </ul>	<ul> <li>Longer time on the production line</li> <li>Reduces calibration budget and down time</li> </ul>	
ESD Safe	<ul> <li>Prevention of Electrostatic Discharge</li> <li>Ensuring compliance with ESD standards (Methods: IEC 61340-5-1, ANSI/ESD STM11.13)</li> </ul>	<ul> <li>Anti-static properties to effectively reduce static electricity generation and minimize particle attraction</li> <li>Maintain a surface resistance within the range of 10<sup>5</sup> to 10<sup>8</sup> Ohms</li> </ul>	<ul> <li>ESD protection</li> <li>Prevent defects</li> <li>Reduce scrap rates</li> <li>Ensure high-quality standard</li> <li>Improve productivity and quality</li> </ul>	
Cam-Over Technology	<ul> <li>Eliminate over torque</li> <li>Limits the amount of force applied</li> </ul>	<ul><li>Eliminates fastener breakage issues</li><li>Ensures correct torque is applied</li></ul>	<ul> <li>Precision and accuracy</li> <li>Error-prevention for the assembly process</li> <li>Safeguards against fastening failures</li> </ul>	
Handle Flutes	• Sleek 4-flute handle design	• Ergonomic	<ul><li> Sleek and comfortable</li><li> Easy to clean</li></ul>	
Needle Thrust Bearing	Rotary bearing to allow rotation between parts	<ul> <li>Reduces axial load torque dependency</li> <li>Reduces friction influence on tool output</li> <li>Longer life on internal components</li> </ul>	<ul><li>Higher accuracy</li><li>Durability</li></ul>	
Metal End Cap	Eliminates possibility of damage to end cap	Durable and doesn't strip out like plastic	<ul><li>Fewer parts need replaceme</li><li>Easier to service</li></ul>	
Bit Retention (Universal Bit Holder)	<ul> <li>¼ inch female hex bit holder that grips any type of bit</li> <li>Patented One Touch bit release</li> </ul>	<ul> <li>Safe and secure</li> <li>No band / spring and captive ball to fall out</li> </ul>	<ul> <li>Better quality and productivity on line</li> <li>Bits don't fall out or into assembly operation</li> </ul>	
Locking Mechanism	Double locking mechanism to prevent accidental torque setting change	Avoids torque setting drift	<ul><li>Longer period before re-calibration</li><li>Higher accuracy over time</li></ul>	
Preset Tool	<ul><li>Internal torque adjustment mechanism</li><li>Non-graduated setting torque tool</li></ul>	<ul> <li>Tool is set to a designated torque value</li> <li>Correct torque value is consistently applied</li> </ul>	<ul><li>Enhance process reliability</li><li>Improve production quality</li><li>Increase productivity</li><li>Reduce scrap rates</li></ul>	

<sup>\*</sup>Calibration life 4x ISO standards (for the FG-8i ESD, FG-20i ESD, FG-40i ESD & FG-125i ESD models) Calibration life meets the ISO standards (for the FG-25z ESD and FG-50z ESD models).



# MOUNTZ FG ESD PRESET PRECISION HAND SCREWDRIVER LINEUP

MODEL	ITEM NO.	TORQUE RANGES		LABEL	DRIVE		
		AMERICAN	S.I.	COLOR	SIZE	WEIGHT	LENGTH
FG-25z ESD	076750	3 – 25 ozf.in	2 – 17.7 cN.m	Blue	1/4" F/Hex	2.8 oz.	4.]"
FG-25z ESD	076751	3 – 25 ozf.in	2 – 17.7 cN.m	Red	1/4" F/Hex	2.8 oz.	4.1"
FG-25z ESD	076752	3 – 25 ozf.in	2 – 17.7 cN.m	Green	1/4" F/Hex	2.8 oz.	4.1"
FG-25z ESD	076753	3 – 25 ozf.in	2 – 17.7 cN.m	Gold	1/4" F/Hex	2.8 oz.	4.1"
FG-50z ESD	076625	20 – 50 ozf.in	14.1 – 35.3 cN.m	Blue	1/4" F/Hex	2.8 oz.	4.]"
FG-50z ESD	076635	20 – 50 ozf.in	14.1 – 35.3 cN.m	Red	1/4" F/Hex	2.8 oz.	4.1"
FG-50z ESD	076640	20 – 50 ozf.in	14.1 – 35.3 cN.m	Green	1/4" F/Hex	2.8 oz.	4.1"
FG-50z ESD	076645	20 – 50 ozf.in	14.1 – 35.3 cN.m	Gold	1/4" F/Hex	2.8 oz.	4.]"
FG-8i ESD	076631	1.6 – 8 lbf.in	18 – 90 cN.m	Blue	1/4" F/Hex	7.3 oz.	5.2"
FG-8i ESD	076636	1.6 – 8 lbf.in	18 – 90 cN.m	Red	1/4" F/Hex	7.3 oz.	5.2"
FG-8i ESD	076641	1.6 – 8 lbf.in	18 – 90 cN.m	Green	1/4" F/Hex	7.3 oz.	5.2"
FG-8i ESD	076646	1.6 – 8 lbf.in	18 – 90 cN.m	Gold	1/4" F/Hex	7.3 oz.	5.2"
FG-20i ESD	076632	2 – 20 lbf.in	22 – 226 cN.m	Blue	1/4" F/Hex	7.3 oz.	5.2"
FG-20i ESD	076637	2 – 20 lbf.in	22 – 226 cN.m	Red	1/4" F/Hex	7.3 oz.	5.2"
FG-20i ESD	076642	2 – 20 lbf.in	22 – 226 cN.m	Green	1/4" F/Hex	7.3 oz.	5.2"
FG-20i ESD	076647	2 – 20 lbf.in	22 – 226 cN.m	Gold	1/4" F/Hex	7.3 oz.	5.2"
FG-40i ESD*	076633	4 – 40 lbf.in	0.4 – 4.5 N.m	Blue	1/4" F/Hex	11.5 oz.	6.3"
FG-40i ESD*	076638	4 – 40 lbf.in	0.4 – 4.5 N.m	Red	1/4" F/Hex	11.5 oz.	6.3"
FG-40i ESD*	076643	4 – 40 lbf.in	0.4 – 4.5 N.m	Green	1/4" F/Hex	11.5 oz.	6.3"
FG-40i ESD*	076648	4 – 40 lbf.in	0.4 – 4.5 N.m	Gold	1/4" F/Hex	11.5 oz.	6.3"
FG-125i ESD*	076634	25 – 125 lbf.in	2.8 – 14.1 N.m	Blue	1/4" F/Hex	11.5 oz.	6.3"
FG-125i ESD*	076639	25 – 125 lbf.in	2.8 – 14.1 N.m	Red	1/4" F/Hex	11.5 oz.	6.3"
FG-125i ESD*	076644	25 – 125 lbf.in	2.8 – 14.1 N.m	Green	1/4" F/Hex	11.5 oz.	6.3"
FG-125i ESD*	076649	25 – 125 lbf.in	2.8 – 14.1 N.m	Gold	1/4" F/Hex	11.5 oz.	6.3"

## Designed for use in ESD sensitive environments

- Equipped with anti-static properties, FG ESD drivers effectively minimize static electricity generation and particle attraction (IEC 61340-5-1).
- High-grade dissipative coating maintains a surface resistance within the range of 10<sup>5</sup> to 10<sup>8</sup> Ohms, ensuring compliance with ESD standards (Methods: IEC 61340-5-1, ANSI/ESD STM11.13).
- The handle is constructed from impactresistant, dissipative material. It maintains a surface resistivity ranging typically from:
  - 10<sup>5</sup> to 10<sup>8</sup> Ohms when measuring the handle-to-tip resistance.
  - 10<sup>5</sup> to 10<sup>8</sup> Ohms for material resistance per ANSI/ESD STM11.13
- The electrostatic decay from the handle through the bit is typically less than 50 milliseconds, ensuring electrical conductivity from 1 kV to 1 V.
- Features dynamic wear-resistant internal seals as an added protective measure to prevent grease leakage and contamination from infiltrating sensitive areas or components.

#### High-grade, dissipative coating

Maintains a surface resistance within the range of  $10^5$  to  $10^8$  Ohms.



## High-performance wear-resistant internal seals

Designed to prevent any grease leakage, our dynamic wear-resistant internal seals form a dual protective barrier.



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#### **ESD Safe T-Bar with Press-Fit Design**

Eliminates traditional through holes to maintain a ESD safe environment and only compatible with FG-40i ESD and FG-125i ESD models



All the models are designed and manufactured to meet or exceed the accuracy and repeatability requirements of ISO 6789: 2017 (+/- 6% of setting).



A removable ESD T-Bar is supplied with FG-40i ESD and FG-125i ESD.



Tamper-proof internal adjustment. No external adjustment scale — must be preset using a torque analyzer.



#### EZ-TORQ III (TORQUE ANALYZER)

Measure, test, and calibrate small torque screwdrivers, wrenches, and power tools to ensure proper torque is applied and reduce manufacturing errors on your assembly line.

**Cleaning Regimen:** Please note that these tools are not designed to be submerged. Cleansing procedures involving water and isopropyl alcohol-based solvents are permitted.



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