

# MOUNTZ TORQUE MEASUREMENT



# TABLE CONTENTS

<b>Products</b>	<b>Page</b>
EZ-TorQ III Torque Analyzer	3
TorqueLabe® LTT-Series Torque Analyzer	4
TorqueMate® PTT Torque Analyzer	6
BMX Torque Sensor	8
MTX Torque Sensor	9
BLRTSX Brushless Rotary Torque Sensor	10
BLRTSX-A Brushless Rotary Torque & Angle Sensor	11
RTSX Rotary Torque Sensor	12
RTSX-A Rotary Torque & Angle Sensor	13
RDA - Run Down Adapters	14
AURA (Auto Reversing Run Down Adapters)	15
Mini RDA - Run Down Adapters	16
Spring RDA - Run Down Adapters	17
Calibration Hex Adapters	18
Calibration Wheel	19
Calibration Segment Arm	20
Loading Bench	21
Webinars on Torque Measurement	22

# EZ-TORQ III TORQUE ANALYZERS

- An ISO 17025 certified torque analyzer used for calibrating and testing small hand screwdrivers, most wrenches, and power tools
- Quick and easy-to-use torque analyzer to verify a tool's performance on the assembly line
- Ensure proper torque is being applied and tools maintain conformity with quality standards
- Instant verification that a tool is still in or out of calibration. Daily or weekly verification in the assembly area
- Portable torque tester that features a built-in Li-ion rechargeable battery
- Vivid full color, smartphone-like touchscreen interface. Virtually unlimited data point storage with swappable SD card memory
- Mountz EZ-TorQ III Data Streamer. Sophisticated onboard software with SPC analysis. Ability to analyze and create statistical data
- Documentation solution as it features the ability to capture and store data. Creates a historical record of your torque readings
- Run Down Adapter is included with EZ-TorQ III. Use the RDA when testing and calibrating power tools
- Accuracy  $\pm 0.5\%$  of reading from 20% to 100% of full scale  
Accuracy  $\pm 1\%$  of reading from 10% to 20% of full scale



## Torque Ranges

Models	Item #	American	S.I.	Drive Size
EZ-TorQ III 10i	070810	1 - 10 lbf.in	11.3 - 113 cN.m	17mm F/Hex
EZ-TorQ III 50i	070811	5 - 50 lbf.in	56.5 - 565 cN.m	17mm F/Hex
EZ-TorQ III 100i	070812	10 - 100 lbf.in	113 - 1130 cN.m	17mm F/Hex
EZ-TorQ III 150i	070813	15 - 150 lbf.in	169.5 - 1695 cN.m	17mm F/Hex
EZ-TorQ III 300i	070814	30 - 300 lbf.in	339 - 3390 cN.m	17mm F/Hex

## Replacement Parts

Description	Item #
Universal Charger	310217
USB Cable	773072
Battery Pack	773175
1/4 Female Sq. Dr. x 17mm Male Hex Adapter	600727

**Warning:** Always use a run down adapter when testing power tools. EZ-TorQ III is not for use in testing Impact or Pulse type tools.

# TORQUELAB® LTT-SERIES TORQUE ANALYZERS

- Torque Analyzer for testing and calibrating hand screwdrivers, wrenches and power tools
- Provides EZ-Plug & Play with Mountz torque sensors. Features ARCII technology, an instant auto-recognition system of the sensor connected to the LTT
- Features a built-in transducer and can connect to an external torque sensor
- Selection of six operation modes: (Track, Peak, First Peak, Audit, Spindle Audit and Torque + Angle)
- Seven units of torque measurements: (ozf.in, lbf.in, lbf.ft, cN.m, N.m, kgf.m, kgf.cm). Two units of force measurements: (lbf and kN)
- Real-time clock for time stamping of readings. Stores a total of 5000 data points USB interface to download readings to PC
- Features built-in tool tests operation. Real-time graph of torque vs. time using associated PC Windows software
- Features Go / No Go LEDs that illuminate when the high or low setting is achieved
- Run Down Adapter is included with LTT. Use the RDA when testing and calibrating power tools
- High capacity Li-Ion batteries for long life (30 hrs with standard torque sensors and 16 hrs with brushless rotary sensors)
- Torque and Angle data is displayed simultaneously when used with Torque and Angle sensors, up to 8000 RPM for angle measurement
- Supplied with a Free ISO 17025 Certification of Calibration
- Three PC Windows based software programs:  
**Mountz Torque Meter Interface Program** for sensor calibrations, meter calibration and tool tests.  
**Torque Meter Bootloader** for updating the LTT operating systems.  
**Excel Add-In** for Real-Time data collection into an Excel spreadsheet. It provides statistics calculation
- Accuracy  $\pm 0.5\%$  of reading from 20% to 100% of full scale  
Accuracy  $\pm 1\%$  of reading from 10% to 20% of full scale



## Torque Ranges

Models	Item #	American	S.I.	Drive Size
LTT10i	068400	1 - 10 lbf.in	11.3 - 113 cN.m	1/4" F/Sq
LTT25i	068401	2.5 - 25 lbf.in	28.25 - 282.5 cN.m	1/4" F/Sq
LTT50i	068402	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" F/Sq
LTT100i	068403	10 - 100 lbf.in	113 - 1130 cN.m	1/4" F/Sq
LTT250i	068404	25 - 250 lbf.in	282.5 - 2825 cN.m	1/4" F/Sq
LTT50F	068405	5 - 50 lbf.ft	6.8 - 67.8 N.m	3/8" F/Sq
LTT100F	068406	10 - 100 lbf.ft	13.56 - 135.6 N.m	1/2" F/Sq
LTT250F	068407	25 - 250 lbf.ft	33.9 - 339 N.m	1/2" F/Sq

## Related Products for LTT-Series



### Cable Chart

For connecting the LTT to Mountz torque sensors

Torque Sensor	Item #
RTSX-A	072000
All BLRTSX models	072001
BMX	072002
MTX	072003
SDX	072004
RTSX	072005

### Replacement Parts

Description	Item #
Universal Charger (100-240VAC)	770303
USB Cable	770319
Battery Pack	072506



### Multiplexer Item # 072998

Connects 1-4 sensors to the Torque Analyzer and switches between the sensors manually or automatically. It eliminates the need to plug and unplug sensors.

When the LTT is connected to the Multiplexer, it reviews the Multiplexer (Mux) to determine what sensors are connected. It downloads the identity and calibration data for each of the attached sensors.



### Bar Code Reader Item # 072997

Designed to scan Bar Codes on tools and start Tool Tests automatically.

Reduces operational time for users with a large number of Tool Tests stored in the analyzer. The LTT is designed to work with this bar code reader.



### Mounting Brackets Item # 072606 For all LTT models



### Item # 072608 For all LTT10i - 50F models



### Calibration Hex Adapters

The hex adapter makes it easy and convenient to test a standard range of open-ended wrenches.

# TORQUEMATE® PTT-SERIES TORQUE ANALYZER

- Torque Analyzer for testing and calibrating hand screwdrivers, wrenches and power tools
- Provides EZ-Plug & Play with Mountz torque sensors. Features ARCI technology, an instant auto-recognition system of the sensor connected to the LTT
- Features a built-in transducer and can connect to an external torque sensor
- Selection of six operation modes: (Track, Peak, First Peak, Audit, Spindle Audit and Torque + Angle)
- Seven units of torque measurements: (ozf.in, lbf.in, lbf.ft, cN.m, N.m, kgf.m, kgf.cm). Two units of force measurements: (lbf and kN)
- Features built-in tool tests operation. Stores a total of 5000 data points
- Real-time clock for time stamping of readings. USB interface to download readings to PC
- Real-time graph of torque vs. time using associated PC Windows software
- Features Go / No Go LEDs that illuminate when the high or low setting is achieved
- Run Down Adapter is included with LTT. Use the RDA when testing and calibrating power tools
- High capacity Li-Ion batteries for long life (30 hrs with standard torque sensors and 16 hrs with brushless rotary sensors)
- Torque and Angle data is displayed simultaneously when used with Torque and Angle sensors, up to 8000 RPM for angle measurement
- Three PC Windows based software programs:  
**Mountz Torque Meter Interface Program** for sensor calibrations, meter calibration and tool tests.  
**Torque Meter Bootloader** for updating the LTT operating systems.  
**Excel Add-In** for Real-Time data collection into an Excel spreadsheet. It provides statistics calculation
- System Accuracy  $\pm 0.5\%$  of reading from 20% to 100% of full scale  
System Accuracy  $\pm 1\%$  of reading from 10% to 20% of full scale



**PTT-2000**

**Item # 072999**

## Related Products for PTT-Series



### Cable Chart

For connecting the PTT to Mountz torque sensors

Torque Sensor	Item #
RTSX-A	072000
All BLRTSX models	072001
BMX	072002
MTX	072003
SDX	072004
RTSX	072005

### Replacement Parts

Description	Item #
Universal Charger (100-240VAC)	770301
USB Cable	770319
Battery Pack	072506



### Multiplexer Item # 072998

Connects 1-4 sensors to the Torque Analyzer and switches between the sensors manually or automatically. It eliminates the need to plug and unplug sensors.

When the PTT is connected to the Multiplexer, it reviews the Multiplexer (Mux) to determine what sensors are connected. It downloads the identity and calibration data for each of the attached sensors.



### Bar Code Reader Item # 072997

Designed to scan Bar Codes on tools and start Tool Tests automatically.

Reduces operational time for users with a large number of Tool Tests stored in the analyzer. The PTT is designed to work with this bar code reader.

# BMX TORQUE REACTION SENSORS

- Torque Sensor for testing and calibrating hand screwdrivers, wrenches and power tools
- Features ARC II technology, an instant auto-recognition system of the BMX connected to the PTT or LTT torque testers
- Supplied with a Free ISO 17025 Certification of Calibration
- Mountable and bi-directional
- Accuracy  $\pm 0.25\%$  of reading



## Torque Ranges

Models	Item #	American	S.I.	Drive Size
BMX20z	077000	2 - 20 ozf.in	1.5 - 14 cN.m	1/4" F/Sq
BMX40z	077001	4 - 40 ozf.in	2.9 - 28.2 cN.m	1/4" F/Sq
BMX80z	077002	8 - 80 ozf.in	5.7 - 56.5 cN.m	1/4" F/Sq
BMX10i	077003	1 - 10 lbf.in	11.3 - 113 cN.m	1/4" F/Sq
BMX25i	077004	2.5 - 25 lbf.in	28.25 - 282.5 cN.m	1/4" F/Sq
BMX50i	077005	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" F/Sq
BMX100i	077006	10 - 100 lbf.in	113 - 1130 cN.m	1/4" F/Sq
BMX250i	077007	25 - 250 lbf.in	282.5 - 2825 cN.m	1/4" F/Sq
BMX500i	077008	50 - 500 lbf.in	565 - 5650 cN.m	3/8" F/Sq
BMX750i	077009	75 - 750 lbf.in	847 - 8473 cN.m	3/8" F/Sq
BMX50F	077010	5 - 50 lbf.ft	6.8 - 67.8 N.m	3/8" F/Sq
BMX100F	077011	10 - 100 lbf.ft	13.56 - 135.6 N.m	1/2" F/Sq
BMX250F	077012	25 - 250 lbf.ft	33.9 - 339 N.m	1/2" F/Sq
BMX500F	077013	50 - 500 lbf.ft	67.8 - 678 N.m	3/4" F/Sq
BMX1000F	077014	100 - 1000 lbf.ft	135.6 - 1355 N.m	1" F/Sq
BMX2500F	077015	250 - 2500 lbf.ft	339 - 3389 N.m	1 1/2" F/Sq
BMX5000F	077016	500 - 5000 lbf.ft	678 - 6779 N.m	1 1/2" F/Sq

## Related Products



### BMX Cable

For connecting the BMX to LTT or PTT  
Item # **072002**



### BMX Mounting Bracket

#### MB-1 (Item # 062109)

For BMX20z - BMX500F models

#### MB-3 (Item # 062128)

For BMX100F - BMX5000F models

### Cable Connection Diagram

A = Excitation (+)

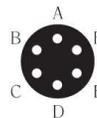
B = Excitation (-)

C = Signal (-)

D = Signal (+)

E = N/A

F = N/A



**Note!** \*This is the stand alone accuracy for the torque sensor. When the sensor is coupled with a Mountz torque analyzer, there is a system accuracy. Review the system accuracy listed with each torque analyzer.

**Warning:** Always use a run down adapter when testing power tools.

# MTX LOW TORQUE REACTION SENSORS

- Torque Sensor for testing and calibrating low torque hand screwdrivers, wrenches and power tools
- The low profile design makes it ideal for calibrating robotic drivers on the assembly line
- Features ARC II technology, an instant auto-recognition system of the MTX connected to the PTT or LTT torque testers
- Supplied with a Free ISO 17025 Certification of Calibration
- Mountable and bi-directional
- Accuracy  $\pm 0.25\%$  of reading



## Torque Ranges

Models	Item #	American	S.I.	Drive Size
MTX10z	079007	1 - 10 ozf.in	0.7 - 7.1 cN.m	1/4" F/Sq
MTX20z	079008	2 - 20 ozf.in	1.5 - 14 cN.m	1/4" F/Sq
MTX40z	079009	4 - 40 ozf.in	2.9 - 28.2 cN.m	1/4" F/Sq
MTX80z	079010	8 - 80 ozf.in	5.7 - 56.5 cN.m	1/4" F/Sq
MTX160z	079011	16 - 160 ozf.in	11.3 - 113 cN.m	1/4" F/Sq

## Related Products

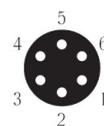


**MTX Cable**  
For connecting the MTX to LTT or PTT  
**Item # 072003**



**Mounting Bracket**  
**MB-1 (Item # 062109)**

### Cable Connection Diagram



1 = Signal (+)  
2 = Signal (-)  
3 = Excitation (-)  
4 = Excitation (+)  
5 = Ground  
6 = Data

**Note!** \*This is the stand alone accuracy for the torque sensor. When the sensor is coupled with a Mountz torque analyzer, there is a system accuracy. Review the system accuracy listed with each torque analyzer.

**Warning:** Always use a run down adapter when testing power tools.

# BLRTSX BRUSHLESS ROTARY TORQUE SENSORS

- The sensor is ideal for torque verification and torque-auditing applications. Monitors and measures the torque being applied from the driver to the fastener. It connects between the power tool and the fastening joint
- Lower maintenance requirements and expenses. Longer lifespan (no brush, non-contact signal transfer)
- Use torque sensor with most power tools, high RPM tools, pulse tools or rotational measurement applications.
- Features ARC II technology, an instant auto-recognition system of the BLRTSX connected to the PTT or LTT
- Supplied with a Free ISO 17025 Certification of Calibration
- Bi-directional. Accuracy  $\pm 0.25\%$  of reading



## Torque Ranges

Models	Item #	American	S.I.	Input Drive	Output Drive
BLRTSX70z-H	170226	10 - 70 ozf.in	7 - 49 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX140z-H	170227	25 - 140 ozf.in	18 - 98.8 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX18i-H	170228	2 - 18 lbf.in	22.5 - 203 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX50i-H	170229	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX50i	170230	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" F/Sq	1/4" M/Sq
BLRTSX100i-H	170231	10 - 100 lbf.in	113 - 1130 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX100i	170232	10 - 100 lbf.in	113 - 1130 cN.m	1/4" F/Sq	1/4" M/Sq
BLRTSX160i-H	170233	16 - 160 lbf.in	180 - 1807 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX160i	170234	16 - 160 lbf.in	180 - 1807 cN.m	1/4" F/Sq	1/4" M/Sq
BLRTSX18F	170235	2 - 18 lbf.ft	2.5 - 25 N.m	3/8" F/Sq	3/8" M/Sq
BLRTSX36F	170236	4 - 36 lbf.ft	5 - 50 N.m	3/8" F/Sq	3/8" M/Sq
BLRTSX73F	170237	8 - 73 lbf.ft	10 - 100 N.m	1/2" F/Sq	1/2" M/Sq
BLRTSX118F	170238	12 - 118 lbf.ft	16 - 160 N.m	1/2" F/Sq	1/2" M/Sq
BLRTSX184F	170239	19 - 184 lbf.ft	25 - 250 N.m	3/4" F/Sq	3/4" M/Sq
BLRTSX368F	170240	37 - 368 lbf.ft	50 - 500 N.m	3/4" F/Sq	3/4" M/Sq
BLRTSX738F	170241	74 - 738 lbf.ft	100 - 1000 N.m	1" F/Sq	1" M/Sq

## Related Products



### BLRTSX Cables

For connecting the BLRTSX to LTT or PTT  
Item # 072001

**Note!** \*This is the stand alone accuracy for the torque sensor. When the sensor is coupled with a Mountz torque analyzer, there is a system accuracy. Review the system accuracy listed with each torque analyzer.

## Cable Connection Diagram



A = Ground  
(Shunt Calibration)  
C = Torque Output  
D = Ground (Torque Output)  
E = Ground (Supply)  
F = Supply, 11-26 VDC, 1 W  
K = Shunt Calibration  
M = Shield  
B/G/H/I/L = N/A

## BLRTSX-A BRUSHLESS ROTARY TORQUE & ANGLE SENSORS

- Ability to measure the rotation angle of a fastener. Joint rate & breakaway torque can be measured too. Angle output: 2-channel quadrature, 360 pulses per rotation
- The sensor is ideal for torque verification and torque-auditing applications. Monitors and measures the torque being applied from the driver to the fastener. It connects between the power tool and the fastening joint
- Lower maintenance requirements and expenses. Longer lifespan (no brush, non-contact signal transfer)
- Use torque sensor with most power tools, high RPM tools, pulse tools or rotational measurement applications
- Supplied with a Free ISO 17025 Certification of Calibration
- Bi-directional. Features ARC II technology, an instant auto-recognition system of the BLRTSX-A connected to the PTT or LTT. Accuracy  $\pm 0.25\%$  of reading



### Torque Ranges

Models	Item #	American	S.I.	Input Drive	Output Drive
BLRTSX70z-HA	170246	10 - 70 ozf.in	7 - 49 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX140z-HA	170247	25 - 140 ozf.in	18 - 98.8 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX18i-HA	170248	2 - 18 lbf.in	22.5 - 203 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX50i-HA	170249	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX100i-HA	170250	10 - 100 lbf.in	113 - 1130 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX100i-A	170251	10 - 100 lbf.in	113 - 1130 cN.m	1/4" F/Sq	1/4" M/Sq
BLRTSX160i-HA	170252	16 - 160 lbf.in	180 - 1807 cN.m	1/4" M/Hex	1/4" F/Hex
BLRTSX160i-A	170253	16 - 160 lbf.in	180 - 1807 cN.m	1/4" F/Sq	1/4" M/Sq
BLRTSX36F-A	170254	4 - 36 lbf.ft	5 - 50 N.m	3/8" F/Sq	3/8" M/Sq
BLRTSX73F-A	170255	8 - 73 lbf.ft	10 - 100 N.m	1/2" F/Sq	1/2" M/Sq
BLRTSX118F-A	170256	12 - 118 lbf.ft	16 - 160 N.m	1/2" F/Sq	1/2" M/Sq
BLRTSX184F-A	170257	19 - 184 lbf.ft	25 - 250 N.m	3/4" F/Sq	3/4" M/Sq
BLRTSX368F-A	170258	37 - 368 lbf.ft	50 - 500 N.m	3/4" F/Sq	3/4" M/Sq
BLRTSX738F-A	170259	74 - 738 lbf.ft	100 - 1000 N.m	1" F/Sq	1" M/Sq

### Related Products

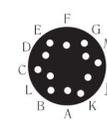


#### BLRTSX-A Cables

For connecting the BLRTSX-A to LTT or PTT  
Item # 072001

**Note!** \*This is the stand alone accuracy for the torque sensor. When the sensor is coupled with a Mountz torque analyzer, there is a system accuracy. Review the system accuracy listed with each torque analyzer.

### Cable Connection Diagram



A = Ground (Shunt Calibration)    G = Angle 2  
 B = Angle 1 Speed                    H = +5V (Angle Voltage)  
 C = Torque Output                    I = 90° running after /  
 D = Ground (Torque Output)        J = Shunt Calibration  
 E = Ground (Supply)                K = Shunt Calibration  
 F = Supply, 11-26 VDC, 1 W        L = Shield  
 M = Shield                              J & L = N/A

# RTSX ROTARY TORQUE SENSORS

- The sensor is ideal for torque verification and torque-auditing applications. Monitors and measures the torque being applied from the driver to the fastener. It connects between the power tool and the fastening joint
- Use torque sensor with most hand tools, power tools, or rotational measurement applications
- Features ARC II technology, an instant auto-recognition system of the RTSX connected to the PTT or LTT
- Supplied with a Free ISO 17025 Certification of Calibration
- Bi-directional
- Accuracy  $\pm 0.25\%$  of reading



## Torque Ranges

Models	Item #	American	S.I.	Input Drive	Output Drive
RTSX10i-H	170200	1 - 10 lbf.in	11.3 - 113 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX10i	170201	1 - 10 lbf.in	11.3 - 113 cN.m	1/4" F/Sq	1/4" M/Sq
RTSX50i-H	170202	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX50i	170203	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" F/Sq	1/4" M/Sq
RTSX100i-H	170204	10 - 100 lbf.in	113 - 1130 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX100i	170205	10 - 100 lbf.in	113 - 1130 cN.m	1/4" F/Sq	1/4" M/Sq
RTSX200i-H	170206	20 - 200 lbf.in	226 - 2260 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX200i	170207	20 - 200 lbf.in	226 - 2260 cN.m	3/8" F/Sq	3/8" M/Sq
RTSX50F	170208	5 - 50 lbf.ft	6.8 - 67.8 N.m	3/8" F/Sq	3/8" M/Sq
RTSX100F	170209	10 - 100 lbf.ft	13.6 - 135.6 N.m	1/2" F/Sq	1/2" M/Sq
RTSX400F	170210	40 - 400 lbf.ft	54.2 - 542.4 N.m	3/4" F/Sq	3/4" M/Sq
RTSX738F	170211	74 - 738 lbf.ft	100 - 1000 N.m	1" F/Sq	1" M/Sq
RTSX1500F	170212	150 - 1500 lbf.ft	203.3 - 2033 N.m	1 1/2" F/Sq	1 1/2" M/Sq

## Related Products



### RTSX Cables

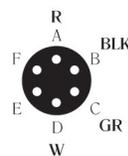
For connecting the RTSX to LTT or PTT  
**Item # 072005**

**Note!** \*This is the stand alone accuracy for the torque sensor. When the sensor is coupled with a Mountz torque analyzer, there is a system accuracy. Review the system accuracy listed with each torque analyzer.

**Warning:** Not recommended for impact wrenches.

### Cable Connection Diagram

- A = Excitation (+)
- B = Excitation (-)
- C = Output (-)
- D = Output (+)
- E = Shield
- F = 100% control (full scale)



# RTSX-A ROTARY TORQUE & ANGLE SENSORS

- Ability to measure the rotation angle of a fastener. Joint rate & breakaway torque can be measured too. Angle output: 2-channel quadrature, 360 pulses per rotation.
- The sensor is ideal for torque verification and torque-auditing applications. Monitors and measures the torque being applied from the driver to the fastener. It connects between the power tool and the fastening joint
- Use torque sensor with most hand tools, power tools, or rotational measurement applications
- Features ARC II technology, an instant auto-recognition system of the RTSX-A connected to the PTT or LTT
- Supplied with a Free ISO 17025 Certification of Calibration
- Bi-directional
- Accuracy  $\pm 0.25\%$  of reading



## Torque Ranges

Models	Item #	American	S.I.	Input Drive	Output Drive
RTSX10i-HA	170213	1 - 10 lbf.in	11.3 - 113 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX10i-A	170214	1 - 10 lbf.in	11.3 - 113 cN.m	1/4" F/Sq	1/4" M/Sq
RTSX50i-HA	170215	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX50i-A	170216	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" F/Sq	1/4" M/Sq
RTSX100i-HA	170217	10 - 100 lbf.in	113 - 1130 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX100i-A	170218	10 - 100 lbf.in	113 - 1130 cN.m	1/4" F/Sq	1/4" M/Sq
RTSX200i-HA	170219	20 - 200 lbf.in	226 - 2260 cN.m	1/4" M/Hex	1/4" F/Hex
RTSX200i-A	170220	20 - 200 lbf.in	226 - 2260 cN.m	1/4" F/Sq	1/4" M/Sq
RTSX50F-A	170221	5 - 50 lbf.ft	6.8 - 67.8 N.m	3/8" F/Sq	3/8" M/Sq
RTSX100F-A	170222	10 - 100 lbf.ft	13.6 - 135.6 N.m	1/2" F/Sq	1/2" M/Sq
RTSX400F-A	170223	40 - 400 lbf.ft	54.2 - 542.4 N.m	3/4" F/Sq	3/4" M/Sq
RTSX800F-A	170224	80 - 800 lbf.ft	108.4 - 1084 N.m	1" F/Sq	1" M/Sq
RTSX1500F-A	170282	150 - 1500 lbf.ft	203.3 - 2033 N.m	1 1/2" F/Sq	1 1/2" M/Sq

## Related Products



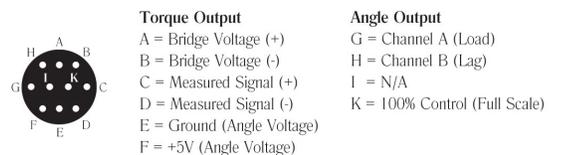
### RTSX-A Cables

For connecting the RTSX-A to LTT or PTT  
Item # 072000

**Note!** \*This is the stand alone accuracy for the torque sensor. When the sensor is coupled with a Mountz torque analyzer, there is a system accuracy. Review the system accuracy listed with each torque analyzer.

**Warning:** Not recommended for impact wrenches.

## Cable Connection Diagram



# RUN DOWN ADAPTERS

- The It is designed to serve as a joint simulator for testing power-driven torque control tools. It provides consistent and reliable torque readings
- The adapter is mounted inline between the tool's drive and the transducer
- Hardened thread components increase accuracy and life
- Square drives conform to ASME B107 standards for proper fit
- Non-rotating body for improved safety
- Compact size and lightweight
- Operates in clockwise direction only. After each run down, the RDA should be completely backed-up



## Torque Ranges

Models	Item #	American	S.I.	Drive Size
RDA-10i	063970	1 - 10 lbf.in	11.3 - 113 cN.m	1/4" Sq. Dr.
RDA-25i	063971	2.5 - 25 lbf.in	28.25 - 282.5 cN.m	1/4" Sq. Dr.
RDA-50i	063972	5 - 50 lbf.in	56.5 - 565 cN.m	1/4" Sq. Dr.
RDA-100i	063973	10 - 100 lbf.in	113 - 1130 cN.m	1/4" Sq. Dr.
RDA-250i	063974	25 - 250 lbf.in	282.5 - 2825 cN.m	1/4" Sq. Dr.
RDA-750i	063977	75 - 750 lbf.in	847 - 8473 cN.m	3/8" Sq. Dr.
RDA-50F	063978	5 - 50 lbf.ft	6.8 - 67.8 N.m	3/8" Sq. Dr.
RDA-100F	063981	10 - 100 lbf.ft	13.56 - 135.6 N.m	1/2" Sq. Dr.
RDA-250F	063982	25 - 250 lbf.ft	33.9 - 339 N.m	1/2" Sq. Dr.
RDA-500F	063983	50 - 500 lbf.ft	67.8 - 678 N.m	3/4" Sq. Dr.
RDA-1000F	063991	100 - 1000 lbf.ft	135.6 - 1355 N.m	1" Sq. Dr.
RDA-2500F	063990	250 - 2500 lbf.ft	339 - 3389 N.m	1 1/2" Sq. Dr.
RDA-5000F	063992	500 - 5000 lbf.ft	678 - 6779 N.m	1 1/2" Sq. Dr.

## Related Products



### Electric Screwdrivers

Electric torque screwdrivers increase productivity and enhance product quality through precision torque control and user comfort. The electric screwdriver automatically shuts off once the preset torque is achieved.



### Torque Analyzers

Measure and calibrate tools with a torque analyzer.

# AURA (AUTO-REVERSING RUN DOWN ADAPTER)

- Operates in clockwise direction only. Once the tool shuts off, the AURA automatically unwinds for the next run down. It eliminates the need to back it out
- It is designed to serve as a joint simulator for testing power-driven torque control tools. It provides consistent and reliable torque readings
- The adapter is mounted inline between the tool's drive and the transducer
- Compact size and lightweight
- Includes two springs to cover the torque range of 1 - 50 lbf.in



## Torque Ranges

Models	Item #	American	S.I.	Input Drive	Output Drive
AURA 50i	063292	1 - 50 lbf.in	11.3 - 565 cN.m	1/4 F/Sq	17mm Hex
AURA 50i	063293	1 - 50 lbf.in	11.3 - 565 cN.m	1/4 F/Sq	1/4 M/Sq

## Related Products



### Electric Screwdrivers

Electric torque screwdrivers increase productivity and enhance product quality through precision torque control and user comfort. The electric screwdriver automatically shuts off once the preset torque is achieved.



### Torque Analyzers

Measure and calibrate tools with a torque analyzer.

## MINI RDA - RUN DOWN ADAPTERS

- The mini RDA unit with fastener is designed for low torque sensors: BMX20z - BMX10i and MTX models
- It is designed to serve as a joint simulator for testing power-driven torque control tools. It provides consistent and reliable torque readings
- The adapter is mounted inline between the tool's drive and the transducer
- Operates in clockwise direction only. After each run down, the RDA should be completely backed-up
- The kit includes 5 mini RDA units along with 10 fasteners



Models	Item #	Screws
Mini RDA2	061229-2	PH Phil 2-56 x 1/4 SS
Mini RDA4	061229-4	PH Phil 4-40 x 1/4 SS
Mini RDA6	061229-6	PH Phil 6-32 x 1/4 SS
Mini RDA10	061229-10	PH Phil 10-32 x 1/4 SS

### Related Products



#### Electric Screwdrivers

Electric torque screwdrivers increase productivity and enhance product quality through precision torque control and user comfort. The electric screwdriver automatically shuts off once the preset torque is achieved.



#### Torque Analyzers

Measure and calibrate tools with a torque analyzer.

# SPRING RUN DOWN ADAPTERS

- The spring RDA is designed to be used with EZ-TorQ torque analyzers
- It is intended to serve as a joint simulator for testing power-driven torque control tools. It provides consistent and reliable torque readings
- The adapter is mounted inline between the tool's drive and the transducer
- Operates in clockwise direction only. After each run down, the RDA should be completely backed-up



## Torque Ranges

Models	Item #	American	S.I.	Input Drive	Output Drive
Spring RDA-10i	070600	1 - 10 lbf.in	11.3 - 113 cN.m	5mm Hex	17mm Hex
Spring RDA-50i	070605	5 - 50 lbf.in	56.5 - 565 cN.m	6mm Hex	17mm Hex
Spring RDA-100i	070610	10 - 100 lbf.in	113 - 1130 cN.m	6mm Hex	17mm Hex
Spring RDA-150i	070615	15 - 150 lbf.in	169.5 - 1695 cN.m	6mm Hex	17mm Hex

## Related Products



### Electric Screwdrivers

Electric torque screwdrivers increase productivity and enhance product quality through precision torque control and user comfort. The electric screwdriver automatically shuts off once the preset torque is achieved.

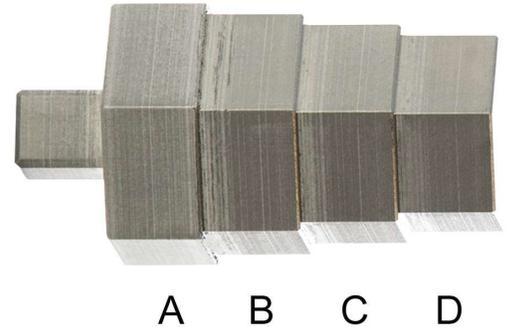


### Torque Analyzers

Measure and calibrate tools with a torque analyzer.

# CALIBRATION HEX STEP ADAPTERS

- The hex adapter makes it easy and convenient to test a standard range of open-ended wrenches.
- An adapter that features four size options increases productivity.
- Improve wrench calibration process. Make it simple and efficient.
- Square drive meets the ASME B107.300-2010 and ISO 6789-1:2017 standards



## 1/4 Square Drive Models

Size Type	Item #	Dimension A	Dimension B	Dimension C	Dimension D	Max Torque Capacity
American	061500	3/4"	11/16"	5/8"	9/16"	30 N.m
American	061501	5/16"	3/8"	7/16"	1/2"	30 N.m
American	061527	1/2"	3/8"	1/4"	1/8"	30 N.m
American	061630	1/4"	7/32"	3/16"	5/32"	30 N.m
American	061502	1/4"	7/32"	3/16"	1/8"	30 N.m
Metric	061503	19 mm	17mm	16mm	14mm	30 N.m
Metric	061504	13mm	12mm	11mm	10mm	30 N.m
Metric	061505	9mm	8mm	7mm	6mm	30 N.m
Metric	061529	9mm	7mm	5mm	3mm	30 N.m
Metric	061528	8mm	6mm	4mm	2mm	30 N.m
Metric	061506	5.5mm	5mm	4.5mm	4mm	30 N.m

## 3/8 Square Drive Models

Size Type	Item #	Dimension A	Dimension B	Dimension C	Dimension D	Max Torque Capacity
American	061559	1 1/4"	1 1/8"	1 1/16"	1"	135 N.m
American	061537	1"	7/8"	3/4"	5/8"	135 N.m
American	061524	3/4"	11/16"	5/8"	9/16"	135 N.m
American	061531	9/16"	7/16"	5/16"	3/16"	135 N.m
American	061525	1/2"	7/16"	3/8"	5/16"	135 N.m
American	061530	1/4"	7/32"	3/16"	1/8"	135 N.m
Metric	061543	19 mm	17mm	16mm	14mm	135 N.m
Metric	061542	17mm	15mm	13mm	11mm	135 N.m
Metric	061541	16mm	14mm	13mm	10mm	135 N.m
Metric	061540	13mm	12mm	11mm	10mm	135 N.m
Metric	061539	9mm	8mm	7mm	6mm	135 N.m
Metric	061538	5.5mm	5mm	4.5mm	4mm	135 N.m

# CALIBRATION WHEEL

- The calibration wheel is engineered to calibrate torque analyzers and sensors and ensure instruments are traceable to National or International Standards, such as N.I.S.T and ISO.
- Traceable ANSI-Z540 Certificate is supplied with the Calibration Wheel.



Models	Item #	Max Wt.	Tolerance	Input Drive	Length
Calibration Wheel 1.0"	069980	50 oz.	+/- .001	1/4" M/Sq.	1"
Calibration Wheel 2.0"	060095	20 lbs.	+/- .001	1/4" M/Sq. & 3/8" M/Sq.	2"
Calibration Wheel 4.0"	060064	65 lbs.	+/- .002	1/4" M/Sq. & 3/8" M/Sq.	4"

**Note!** There are 1 or 2 other components that may be necessary for composing of a Dead Weight test system.

## Hangars

Models	Item #	Weight	Stem
Stainless Steel (Class F)	110044	2 lbs	9 1/4"
Stainless Steel (Class F)	110043	5 lbs	16"



## Weights

Models	Item #	Weight
Stainless Steel Hook (Class 3)	110050	0.25 oz.
Stainless Steel Hook (Class 3)	110051	0.50 oz.
Stainless Steel Hook (Class 3)	110052	1 oz.
Stainless Steel Hook (Class 3)	110053	2 oz.
Stainless Steel Hook (Class 3)	110054	4 oz.
Stainless Steel Hook (Class 3)	110055	8 oz.
Stainless Steel Hook (Class 3)	110056	16 oz.
Stainless Steel Hook (Class 3)	110057	32 oz.
Stainless Steel Hook (Class 3)	110058	40 oz.
Stainless Steel Slotted (Class F)	110047	0.5 lbs.
Stainless Steel Slotted (Class F)	110046	1 lb.
Stainless Steel Slotted (Class F)	110045	2 lbs.
Stainless Steel Slotted (Class F)	110041	5 lbs.
Stainless Steel Slotted (Class F)	110042	10 lbs.
Stainless Steel Slotted (Class F)	110070	20 lbs.
Stainless Steel Slotted (Class F)	110071	50 lbs.



# CALIBRATION SEGMENT ARM

- The calibration segment arm is engineered to calibrate torque analyzers and sensors and ensure instruments are traceable to National or International Standards, such as N.I.S.T and ISO.
- Traceable ANSI-Z540 Certificate is supplied with the Calibration Segment Arm.



Models	Item #	Max Wt.	Tolerance	Input Drive	Length
S-10	061106	25 lbs.	+/- .005	1/4" M/Sq.	10
S-10	060094	75 lbs.	+/- .005	3/8" M/Sq.	10"
S-10	060056	100 lbs.	+/- .005	1/2" M/Sq.	10
S-12	060052	75 lbs.	+/- .006	3/8" M/Sq.	10
S-12	060093	100 lbs.	+/- .006	1/2" M/Sq.	10
S-24	060091	125 lbs.	+/- .012	1/2" M/Sq.	10
S-24	060053	250 lbs.	+/- .012	3/4" M/Sq.	10
S-48	060090	125 lbs.	+/- .024	3/4" M/Sq.	10
S-48	060054	250 lbs.	+/- .024	1" M/Sq.	10

**Note!** There are 1 or 2 other components that may be necessary for composing of a Dead Weight test system.

## Hangars

Models	Item #	Weight	Stem
Stainless Steel (Class F)	110044	2 lbs	9 1/4"
Stainless Steel (Class F)	110043	5 lbs	16"



Hangar



Hook Weight



Slotted Weight

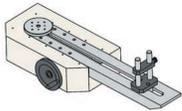
## Weights

Models	Item #	Weight
Stainless Steel Hook (Class 3)	110050	0.25 oz.
Stainless Steel Hook (Class 3)	110051	0.50 oz.
Stainless Steel Hook (Class 3)	110052	1 oz.
Stainless Steel Hook (Class 3)	110053	2 oz.
Stainless Steel Hook (Class 3)	110054	4 oz.
Stainless Steel Hook (Class 3)	110055	8 oz.
Stainless Steel Hook (Class 3)	110056	16 oz.
Stainless Steel Hook (Class 3)	110057	32 oz.
Stainless Steel Hook (Class 3)	110058	40 oz.

Models	Item #	Weight
Stainless Steel Slotted (Class F)	110047	0.5 lbs.
Stainless Steel Slotted (Class F)	110046	1 lb.
Stainless Steel Slotted (Class F)	110045	2 lbs.
Stainless Steel Slotted (Class F)	110041	5 lbs.
Stainless Steel Slotted (Class F)	110042	10 lbs.
Stainless Steel Slotted (Class F)	110070	20 lbs.
Stainless Steel Slotted (Class F)	110071	50 lbs.

# LOADING BENCH

- Effortlessly perform a torque wrench calibration with a mechanical torque wrench loader
- The calibration instrument enables quick and easy torque wrench calibration and presetting, independent of human influence or transducer side and end load factors
- The loading bench is a laboratory-grade instrument designed to allow accurate torque wrench calibration with less physical effort
- A large wheel for smooth manual loading.
- The ability to mount on a bench or cabinet
- Adjustability to the size of the wrench being tested. Operational in both clockwise and counter-clockwise directions
- Easy to use with the BMX torque sensor and an LTT or PTT torque analyzer.



## LB250F

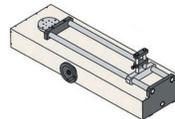
### Item #063302

Torque Range: Max. 250 lbf.ft

Horizontal Reaction Position:  
4" to 28" from the center of the turn-table.

Vertical Reaction Position:  
1" to 4" from the turn-table base.

Weight: 53 lbs.  
Size: 37.5" W x 12" H x 10.75" D



## LB750F

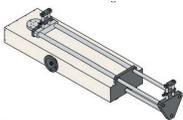
### Item #063301

Torque Range: Max. 750 lbf.ft

Horizontal Reaction Position:  
4.87" to 41.25" from the center of the turn-table

Vertical Reaction Position:  
1.87" to 5.4" from the turn-table base.

Weight: 130 lbs.  
Size: 50" W x 15" H x 15.5" D



## LB2000F

### Item #063300

Torque Range: Max. 2,000 lbf.ft

Horizontal Reaction Position:  
4.87" to 75.5" from the center of the turn-table

Vertical Reaction Position:  
1.87" to 5.4" from the turn-table base

Weight: 160 lbs.  
Size: 84.75" W x 15" H x 15.5" D

**Note!** It is recommended that the Loading Bench be fastened to a bench top.

# WEBINARS ON TORQUE MEASUREMENT

Mountz, The Torque Tool Specialists®, has been a leader in the torque tool industry for more than 57 years. We have experienced a breadth of manufacturing environments and gathered various perspectives. View our on-demand torque educational webinars to learn more about torque calibration and torque measurement processes.



## How to Improve Quality with a Torque Verification Process



How do you know when a tool starts to drift out of calibration? Keeping tools in calibration requires frequent torque verification. Watch our torque webinar and learn how to implement a routine torque verification process.

## How to Create an Effective Torque Measurement & Calibration Program



Measuring torque should occur in all three facets of the assembly process - prior, during, and after. Watch our torque webinar and learn how to implement successful torque testing and calibration program.

## Learn How to Calibrate a Torque Analyzer and Torque Sensor



To maintain reliability and accuracy, these torque measuring equipment must be properly calibrated regularly. Watch our torque webinar and learn how a torque analyzer or torque sensor is calibrated.

## Measuring Dynamic Torque for Screw Fastening Systems



Knowing how to measure dynamic torque can yield extremely valuable insight when troubleshooting joint application issues and evaluating power tool performance. Watch our torque webinar and learn how to implement a live torque feedback process or conduct a study of torque applied for an assembly process.

## How to Calibrate a Preset Torque Screwdriver or Wrench



Preset hand tools go out of calibration with use. Calibrating a torque tool ensures quality process control and mitigates risks. Watch our torque webinar and learn the calibration process and international standard requirements for a preset screwdriver or wrench by signing up for our educational webinar today.

## Torque 101 - A Guide to the Fundamentals of Torque Control



Watch our torque webinar and learn what torque is, the variables that impact it, and methods for applying and measuring torque.