

WITH HIGH-STRENGTH
ALLOYS, ALUMINUM,
ENGINEERED COMPOSITES
AND OTHER WEIGHTREDUCING MATERIALS
UTILIZED IN TODAY'S
VEHICLES, ACCURATE
TORQUE IS MORE CRITICAL
THAN EVER. SNAP-ON® HAS
EXPANDED OUR RANGE OF
TORQUE MEASUREMENT
TO HANDLE AN EVEN
BROADER RANGE OF
TORQUE AND ANGLE
APPLICATIONS.

# PRECISELY THE QUALITY AND RELIABILITY YOU NEED, TOO.

Strict manufacturing makes our torque tools more dependable and durable. And features like progressive LEDs, large backlit LCD panels and multiple measurement and alert modes make our TechAngle® electronic torque wrenches more productive. For simpler applications, our compact mechanical torque wrenches provide accuracy and reliability no matter what the drive size, length, head articulation or measurement scale. Plus our TQ Series split-beam wrenches deliver unbeatable comfort, durability and easy-to-set torque adjustment.

## **TECHANGLE® TORQUE WRENCHES**



#### TechAngle® Models (2% Accuracy)

- DUAL PROGRESSIVE LEDs allow user to see active torque at various work positions; enables the user to anticipate torque target for more accurate torque application
- LARGE LCD SCREEN with bright backlight; numbers become larger and bolder during active torque for optimal viewing
- FOUR ALERT MODES (LCD, LED, Audible, Vibratory) provide excellent feedback in all working conditions
- SIX MEASUREMENT MODES (ft-lb, in-lb, Nm, dNm, kg-cm, and angle) at the touch of a button
- 10 PRESETS allow programming of common torque applications which saves time
- ADVANCED FEATURES include cycle counter, customizable sleep timer, language selection, auto torque calculation for torque adaptors, calibration alerts, battery level indication, and numerous alert mode customizations, allowing the user to customize the torque wrench to your work preferences
- TORQUE-THEN-ANGLE MODE allows the user to torque fasteners and then switch to angle mode without removing the torque wrench from a fastener

- MULTI-AXIS GYRO COMPENSATION patent pending mechanism compensates for tilt angle while tightening in a flexed position providing greater accuracy
- MULTI-LINGUAL DISPLAY programmable to display commands and signals in English, Spanish, French or German
- LOW-PROFILE BUTTONS protect against accidental activation
- HIGHLY ACCURATE torque measurement; 2% CW and 3% CCW
- POWER INTERRUPTION TECHNOLOGY prevents loss of continuity if dropped; prevents loss of work during head bolt pattern applications
- COMFORTABLE HANDLE WITH FLARED END provides a secure, non-slip grip during high-leverage applications
- PROTECTED BATTERY CAP design with solid brass contacts prevents accidental loosening and ensures continuity
- TWO YEAR WARRANTY standard on ATECH and CTECH models
- STORAGE CASE included
- LOW END ACCURACY (ATECH125 MODELS) ±2% CW/ ±3 CCW, 20–100% F.S.; ±4% CW/±6% CCW, 5–19% F.S.

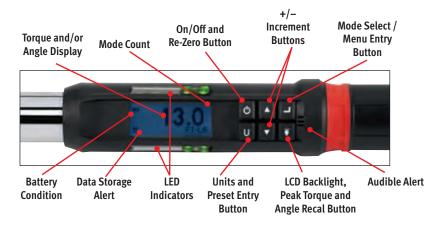
Specification Name	ATECH1FR240B*	ATECH2FR100B	ATECH2FR125B	ATECH1FS100	ATECH1FS240	ATECH2CS100
Square Drive, inches	1/4	3/8	3/8	1/4	1/4	3/8
Color	Black Housing/ Chrome Body	Black Housing/ Chrome Body	Black Housing/ Chrome Body	Chrome	Chrome	Chrome
Head Type	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head
Gear Teeth	72	80	80	72	72	72
Gear Action	5°	4.50	4.50	5°	5°	5°
Range, in-lb	12–240	60–1,200	60–1,500	4–100	12-240	4–100
Range, ft-lb	1–20	5–100	5–125	.33-8.3	1–20	.33–8.33
Range, N•m	1.36–27.12	6.78-135.0	6.78–169.48	.45-11.25	1.36–27.12	.48–12
Head Depth, inches	7/16	9/16	9/16	7/16	7/16	29/32
Head Width, inches	7/8	1-1/4	1-1/4	7/8	7/8	7/8
Weight (without batteries), lb (kg)	1.9 (8.6)	2.3 (1.04)	2.2 (0.9)	.93 (0.42)	.93 (0.42)	.90 (.41)
Battery, Type (qty)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)	Lithium Metal (1)	Lithium Metal (1)	Lithium Metal (1)
Length, inches	16.4	17.9	17.9	11.6	11.6	11.5
Ratchet Service Kit	RKRT72A	RKRF80	RKRFLLF80	RKRT72A	RKRT72A	RKRFC72
Flex Joint Repair Kit	RKRT841JT	RKRQD2JT	RKRFLLF80JT	TECH1FRATA	TECH1FRATA	TECH2FCRAT
Storage Case	PBATECH100B	PBATECH100B	PBATECH100B	PBATECH240M	PBATECH240M	PBQD1
Red	ATECH1F240RB	_	ATECH2F125RB	_	_	_
Green	ATECH1F240GB	_	ATECH2F125GB	_	_	_
Orange	ATECH1F2400B	_	ATECH2F1250B	_	_	_

(US #9156148, #9395257, #9242356, #D702519)

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated). All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20–100% of full scale, using NIST® traceable equipment. Angle accuracy ±1% of reading, ±1 degree at angular velocity > 10 deg/sec < 180 deg/sec, +/- 1 deg of test fixture; angle range 0–360°. Operating/storage temperature 0–130°F. Humidity: up to 90% non-condensing. CE approved.

## **TECHANGLE® TORQUE WRENCHES**







**Protected Battery Cap** Designed with solid brass contacts prevents accidental loosening and ensures continuity.

ATECH2FS100	ATECH2FM100	ATECH3FS250	ATECH2CS240	ATECH3FR250B	ATECH3FR300B	ATECH4RS600*	
3/8	3/8	1/2	3/8	1/2	1/2	3/4	
Chrome	Chrome	Chrome	Chrome	Black Housing/ Chrome Body	Black Housing/ Chrome Body	Chrome	
Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Fixed Head	
80	80	80	72	80	80	32	
4.5°	5°	4.5°	5°	4.5°	4.5°	11°	
60–1,200	60–1,200	150-3,000	12–240	150-3,000	1,480–3,600	360-7,200	
5–100	5–100	12.5–250	1–20	12.5–250	15–300	30–600	
6.8-135.0	7–135	16.9–339	1.5–30	16.9–339	20.3-406.7	40.7–813.5	
9/16	1-1/16	3/4	29/32	3/4	3/4	1-1/4	
1-1/4	1-3/16	1-5/8	7/8	1-5/8	1-5/8	2-1/2	
2.85 (1.29)	1.6 (.73)	4.35 (1.97)	.93 (.42)	3.75 (1.68)	3.95 (1.79)	10.95 (4.96)	
Lithium Metal (1)	Lithium Metal (1)	AA Alkaline (3)	Lithium Metal (1)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)	
19.1	15.4	26.7	11.5	26.6	30	48.7	
RKRF80	RKRFBO	RKRS80A	RKRFC72	RKRS80A	RKRS80A	RKRQC4	
RKRQD2JT	TECH2FRATA	RKRSX936JT	TECH2FCRAT	RKRSX936JT	TECH3FRATB	_	
PBATECH100B	PBQD2	PBATECH250B	PBQD1	PBATECH250B	РВАТЕСН300В	PBATECH4	
_			_	_	ATECH3F300RB	_	
_	_	_	_	_	ATECH3F300GB	_	
_			_	_	ATECH3F3000B	_	

Includes protective boot

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated). All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20–100% of full scale, using NIST® traceable equipment. Angle accuracy ±1% of reading, ±1 degree at angular velocity > 10 deg/sec < 180 deg/sec, +/- 1 deg of test fixture; angle range 0–360°. Operating/storage temperature 0–130°F. Humidity: up to 90% non-condensing. CE approved.







Do not exceed rated torque Do not use to break fasteners loose

Periodic recalibration is necessary to maintain accuracy
 Read safety precautions on pages W1 to W4



#### Standard Models/2% Accuracy/Ratcheting Head FEATURES:

- Torque and Angle combo modes provide the most accurate and fastest way to achieve torque plus angle in a single motion (patent pending)
- Built-in calibration factor for different head lengths (patent pending)
- Dual side LED indicator lights with configurable settings
- Large LCD screen with backlight
- Four indicator modes: LCD, LED, audible, vibratory
- Presets with lockout ability
- Sequence programming and iob mode
- USB downloadable data
- · Industry-leading two year warranty
- Includes storage case

- Complies with ISO®-6789-2003 and ASME® B107.300 (B107.28) Standards for Electronic Torque Instruments
- CTECH wrenches are manufactured with an all-steel body for strength • CTECHL wrenches are manufactured for rugged black anodized 6061-T aerospace aluminum from durability and reduced weight SPECIFICATIONS:
- Torque Accuracy: ±2%CW, ±3CCW
  Angle Accuracy: ±1% of reading, ±1° @ Angular Velocity >10°/Sec < 180°/Sec
- Angle Range: 0–360°
- Storage Capacity: 1,500 readings
- Number of Presets: 50
- Operating Temperature: 0-130 °F (-18-54 °C)
- Storage Temperature: 0-130 °F (-18-54 °C)

#### Standard Models/2% Accuracy/Interchangeable Head

- Snap-on® ControlTech® Industrial **Electronic Torque Wrenches are** fully programmable for reliable and consistent torque application
- Torque plus Angle combo modes allow the user to simultaneously complete precise "torque plus turn" specifications in a single motion
- In addition to the LED indicator lights, an audible beep and handle vibration alert the user when target torque is achieved
- The rugged all-steel construction is designed to stand-up to even the toughest work conditions

Stock No.	Head Type	Square Drive, inches	Gear Teeth	Gear Action	Torque Range, in-lb	Torque Range, ft-lb	Torque Range, N•m	Shank Diameter, inches	Weight, lb (kg)	Length, inches (mm)
CTECH1FR240A*	Sealed Flex Head	1/4	72	5°	12-240	1.0-20.0	1.4-27.2	_	2.0 (.9)	14.1 (358)
CTECH1R240A*	Fixed Head	1/4	72	5°	12-240	1.0-20.0	1.4-27.2	_	2.0 (.9)	14.1 (358)
CTECH2FR100A**	Sealed Flex Head	3/8	80	4.5°	60-1,200	5.0-100.0	6.8-135.6	_	2.7 (1.2)	17.2 (437)
CTECH3FR250A***	Sealed Flex Head	1/2	80	4.5°	150-3,000	12.5–250	16.9–339	_	4.5 (2.10)	26.7 (678)
CTECH4R600A†	Sealed Fixed Head	3/4	32	11°	360-7,200	30-600	40.7-813.5	_	10.5 (4.8)	48.6 (1,234)
CTECH1J240A	Interchangeable	_	_	_	12-240	1.0-20.0	1.4-27.2	J (0.425 )	1.8 (0.8)	12.5 (318)
CTECH2Y100A	Interchangeable	_	_	_	60-1,200	5–100	6.8-135.6	Y (0.560 )	2.7 (1.2)	17.2 (437)
CTECH3X250A	Interchangeable	_	_	_	150-3,000	12.5–250	16.9–339	X (0.735)	3.6 (1.6)	24.1 (612)
CTECH4Z600A	Interchangeable	_	_	_	30-600	360-7,200	40.7-813.5	Z (0.990 )	7.6 (3.5)	44.8 (1,138)
CTECHL1J240A	Interchangeable	_	_	_	1.0-20.0	12-240	1.4–27.2	J (0.425 )	1.0 (0.45)	12.5 (316)
CTECH1JM240	Interchangeable	_	_		12–240	1–20	1.36–27.12	J (0.425 )	0.80 (0.36) w/battery, excluding case	10.15 (258)
CTECHL1R240A	Sealed Fixed Head	1/4	72	5°	12-240	1.0-20.0	1.4–27.2	_	1.2 (0.54)	14.1 (358)
CTECHL1240A	Fixed Head	1/4	_	_	1.0-20.0	12-240	1.4–27.2	_	1.1 (0.49)	12.4 (315)
CTECHAN135A	IZO/ISO (Interchangeable)	_	_	1	60–1,195	5.0–99.6	6.8–135.0	9 x 12 mm	2.85 (1.2) w/o head, w/ batteries	17.8 (452) w/o head
CTECHAN30A	IZO/ISO (Interchangeable)	_	_	_	1.11–22.13	13.3–365.5	1.50-30.00	9 x 12 mm	2.0 (.9) w/o head, w/ batteries	13.3 (338) w/o head
CTECHBN340A	IZO/ISO (Interchangeable)	_	_	_	12.5–250.8	150-3,009	17.0–340.0	14 x 18 mm	3.75 (1.7) w/o head, w/ batteries	23.9 (607) w/o head
CTECHANM30	IZO/ISO Interchangeable Head	_	_	ı	13.3–265.5	1.11–22.13	1.5–30	9 x 12 mm	_	_
CTECH1MR240	Fixed Head	1/4	72	5°	12-240	1–20	1.36–27.12	_	0.93 (0.42)	11.6 (295)
CTECH2MR240	Fixed Head	3/8	80	4.5°	12-240	1–20	1.36-27.12	_	0.93 (0.42)	11.6 (295)
CTECH2MR1200	Fixed Head	3/8	80	4.5°	60–1,200	5–100	6.8–135.6	_	1.6 (.73)	15.4 (391)
CTECH1MR100	Fixed Head	1/4	72	5°	5–100	0.42-8.33	0.57-11.30		0.9 (0.41)	10.9 (267)
CTECH2MR100	Fixed Head	3/8	72	5°	5-100	0.42 - 8.33	0.57 - 11.30	_	0.9 (0.41)	10.9 (267.05)
CTECHYM1200	Interchangeable		_	_	60-1,200	5–100	6.8-135.6	Y (0.560)	1.4 (.63)	13.75 (349)

\*Uses Ratchet Service Kit RKRT72A Includes three AAA Lithium batteries. \*\*\*Uses Ratchet Service Kit RKRS80A. Includes three AA Lithium batteries. CTAL Torque Wrenches include three AAA Lithium batteries

\*\*Uses Ratchet Service Kit RKRF80. Includes three AA Lithium batteries. †Uses Ratchet Service Kit RKRQC4. Includes three AA Lithium batteries.

#### **TECHWRENCH® TORQUE WRENCHES**





#### Standard Models/2% Accuracy/Fixed Head

- · Manual preset, automatic track and peak hold modes
- Torque units conversion: Nom, ft-lb, in-lb
- Audible (tone) and tactile (vibrating handle) preset alerts
- Stand on handle bottom keeps tool from rolling off flat surface
- Dual 80® Technology on all 72- and 80-tooth ratchet heads
- Low battery indicator and auto shutoff (after two minutes idle)
- ISO® 6789-2003 and ASME® B107.300-2010 standards compliant
- Certificate of NIST® traceability for 20-100% of full scale

Specifications	TECH1R240	TECH2R100	TECH3R250	TECH4R600
Square Drive, inches	1/4	3/8	1/2	3/4
Head Type	Sealed Fixed Ratchet	Sealed Fixed Ratchet	Sealed Fixed Ratchet	Sealed Fixed Ratchet
Gear Teeth	5°	4.5°	4.5°	11°
Gear Action	72	80	80	32
Range, in-lb	24–240	60–1,200	300–3,000	720–7,200
Range, ft-lb	2–20	5–100	25–250	60–600
Range, N•m	2.71–27.12	6.8–135	34–339	81–813
Head Depth, inches	7/16	5/8	3/4	1-1/4
Head Width, inches	7/8	1-5/32	1-5/8	2-1/2
Length, inches	15-1/4	17-1/4	26-1/4	48
Operating Temperature	40-110 °F (5-42 °C)			
Storage Temperature	0-122 °F (-20-50 °C)			
Battery, Type (qty)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)
Ratchet Service Kit	RKRT72A	RKRF80	RKRS80A	RKRQC4
Storage Case	PBTECH2	PBTECH2	РВТЕСН3	PBATECH4

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## **Standard Models/2%**

Accuracy/Flex Head

- Techwrench® (standard models)
- Torque accuracy ratchet head models: 2% CW, 3% CCW from 20–100% F.S.; 4% CW, 6% CCW from 10–19% F.S. 8% CW; 10% CCW from 5-9% of full scale (TECH Z only)
- Torque accuracy interchangeable head models: 4% CW, 6% CCW from 20-100% F.S. (TECH Y only)
- Sealed flex head ratchets move ±15°

Specifications	TECH1FR240	TECH2FR100	TECH3FR250
Square Drive, inches	1/4	3/8	1/2
Head Type	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head
Gear Teeth	5°	4.5°	4.5°
Gear Action	72	80	80
Range, in-lb	24-240	60-1,200	300-3,000
Range, ft-lb	2–20	5–100	25–250
Range, N•m	2.7-27.1	6.8-135	34–339
Head Depth, inches	7/16	5/8	3/4
Head Width, inches	7/8	1-5/32	1-5/8
Length, inches	15-1/4	17-1/4	26-1/4
Operating Temperature	40-110 °F (5-42 °C)	40–110 °F (5–42 °C)	40–110 °F (5–42 °C)
Storage Temperature	0-122 °F (-20-50 °C)	0-122 °F (-20-50 °C)	0-122 °F (-20-50 °C)
Ratchet Service Kit	RKRT72A	RKRF80	RKRS80A
Storage Case	PBTECH2	PBTECH2	PBTECH3



## Standard Models/4% Accuracy/ Interchangeable Head

Specifications	TECH1J240	TECH2Y100	TECH3X250	TECH4Z600
Head Type	Interchangeable	Interchangeable	Interchangeable	Interchangeable
Range, in-lb	24–240	60-1,200	300-3,000	720–7,200
Range, ft-lb	2–20	5-100	25-250	60–600
Range, N•m	27.1–27.12	6.8–135	34–339	81–813
Shank Dia.	J (0.425 )	Y (0.560)	X (0.735)	Z (0.990 )
Length, inches	13-3/4	15-1/2	23-3/4	42
Operating Temperature	40-110 °F (5-42 °C)	40–110 °F (5–42 °C)	40–110 °F (5–42 °C)	40–110 °F (5–42 °C)
Storage Temperature	0–122 °F (-20–50 °C)	0–122 °F (-20–50 °C)	0-122 °F (-20-50 °C)	0-122 °F (-20-50 °C)
Storage Case	PBTECH2	PBTECH2	PBTECH3	PBATECH4

Wrench length specification does not include the length of interchangeable heads. The certification of accuracy provided per ASME® and ISO® standards is 20%-100% of full scale.

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Do not exceed rated torque
 Do not use to break fasteners loose

Periodic recalibration is necessary to maintain accuracy
 Read safety precautions on pages W1 to W4

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#### **ADJUSTABLE CLICK-TYPE**









The QD Series of Click-Type Torque Instruments feature an innovative design that provides consistently accurate readings and rugged, trouble-free performance.

#### **FEATURES:**

- CERTIFICATE OF CALIBRATION: A Certificate of Calibration is packed with every QD Series Torque Instrument. Actual certification readings and individual instrument serial number are included. Each torque instrument, as calibrated at the factory, is certified to meet the accuracy specified in ANSI® B107.300-2010 (B107.14) and was calibrated on a torque standard traceable to the National Institute of Standards Technology (NIST®).
- ACCURACY: All QD Series Torque Wrenches are accurate to ±4% clockwise and ±6% counterclockwise from 20% of full scale to full scale
- LONG LIFE RATCHET HEAD: QD Series Torque wrenches feature the Snap-on® High-Strength Sealed Ratchet Head. Sealed ratchet heads keep out dirt and moisture while being virtually maintenance free. US Patent #4,934,220 applies to all QD Series Ratchet Head models. US Patent #6,125,722 applies to 1/4,3/8 and 1/2 drive Ratchet Head models only.
- MINIMAL FRICTIÓN "HOUR GLASS" CAM: Retains and releases lubricant where needed to reduce friction
- POSITIVE STOP: Instrument can not be accidentally disassembled if wound down past scale
- KNURLED HANDLE for a secure non-slip grip
- ONE YEAR WARRANTY
- STORAGE CASE included with each instrument
- All QD models with "A" suffix have roll-marked scales for better permanence and visibility

#### US Torque Instruments (in-lb)/±4% Accuracy

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, minimum	Range, maximum	Increments	Length, inches	Head Width, inches	Head Depth, inches	Storage Case	Ratchet Service Kit
1/4	QD150	Fixed	_	_	10 in-lb	50 in-lb	.5 in-lb	9-3/4	5/8	13/16	PBQD1	_
1/4	QD1R50	Fixed Ratchet	36	10°	10 in-lb	50 in-lb	.5 in-lb	9-7/8	7/8	7/16	PBQD1	RKRT936
1/4	QD1200	Fixed	_	_	40 in-lb	200 in-lb	1 in-lb	10-15/16	5/8	13/16	PBQD1	_
1/4	QD1R200	Fixed Ratchet	36	10°	40 in-lb	200 in-lb	1 in-lb	11-1/16	7/8	7/16	PBQD1	RKRT936
3/8	QD2R200	Compact Ratchet	36	10°	40 in-lb	200 in-lb	1 in-lb	11-1/16	7/8	7/16	PBQD1	RKRFC936
3/8	QD21000A	Fixed	_	_	200 in-lb	1,000 in-lb	5 in-lb	14-9/16	1	1-3/16	PBQD2	_
3/8	QD2R1000A	Fixed Ratchet	80	4.5°	200 in-lb	1,000 in-lb	5 in-lb	14-9/16	1	1-3/16	PBQD2	RKRF80
1/2	QD3R1600A	Fixed Ratchet	80	4.5°	300 in-lb	1,600 in-lb	10 in-lb	19	1-5/8	3/4	PBQD3	RKRS80A
1/2	QD32500A	Fixed	_	_	500 in-lb	2,500 in-lb	10 in-lb	18-1/8	1	1-1/4	PBQD3	_
1/2	QD3R2500A	Fixed Ratchet	80	4.5°	500 in-lb	2,500 in-lb	10 in-lb	19-1/8	1-5/8	3/4	PBQD3	RKRS80A

## US Torque Instruments: Dual-Scale (ft-lb/N•m)

	•				, ,	•						
Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, minimum	Range, maximum	Increments	Length, inches	Head Width, inches	Head Depth, inches	Storage Case	Ratchet Service Kit
3/8	QD2100A	Fixed	-	_	20 ft-lb	100 ft-lb	.5 ft-lb	14-9/16	1	1-3/16	PBQD2	_
3/8	QD275A	Fixed	-	_	15 ft-lb	75 ft-lb	.5 ft-lb	14-9/16	1	1-3/16	PBQD2	_
3/8	QD2R75B	Flex Head	80	4.5°	5	75	.5 ft-lb	15-3/4	1-5/32	9/16	PBQD2	RKRFR80
3/8	QD2R75A	Fixed	80	4.5°	10	75	.5 ft-lb	15-3/4	9/16	1-5/32	PBQD2	RKRFR80
3/8	QD2R100A	Fixed Ratchet	80	4.5°	20 ft-lb	100 ft-lb	.5 ft-lb	15-9/16	1-5/32	9/16	PBQD2	RKRF80
1/2	QD3150A	Fixed	_	_	30 ft-lb	150 ft-lb	1 ft-lb	18	1	1-1/4	PBQD3	_
1/2	QD3250A	Fixed	_	_	50 ft-lb	250 ft-lb	1 ft-lb	23-3/32	1	1-1/4	PBQD3	_
1/2	QD3FR250A*	Flex Head	80	4.5°	50 ft-lb	250 ft-lb	1 ft-lb	25-3/4	1-5/8	3/4	PBATECH300B	_
1/2	QD3R250A	Fixed Ratchet	80	4.5°	50 ft-lb	250 ft-lb	1 ft-lb	24-3/16	1-5/8	3/4	PBQD3	RKRS80A
3/4	QD4400A	Fixed	_	_	75 ft-lb	400 ft-lb	2.5 ft-lb	33-3/4	1-1/2	1-1/2	PBQC4	_
3/4	QD4600A	Fixed	_	_	120 ft-lb	600 ft-lb	5 ft-lb	40-3/4	1-1/2	1-1/2	PBQC4	_
3/4	QD4R400A	Fixed Ratchet	32	11°	75 ft-lb	400 ft-lb	2.5 ft-lb	35-3/4	2-1/2	1-1/4	PBQC4	RKRQC4
3/4	QD4R600A	Fixed Ratchet	32	11°	100 ft-lb	600 ft-lb	5 ft-lb	42-3/4	2-1/2	1-1/4	PBQC4	RKRQC4
1	QD5R1000A	Fixed Ratchet	30	12°	200 ft-lb	1,000 ft-lb	5 ft-lb	71	3-1/8	1-1/2	PBQC5	RKRQC5

<sup>\*</sup>Clockwise-only calibration



#### **Torque Wrenches**

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, minimum	Range, maximum	Increments	Length, inches	Head Width, inches	Head Depth, inches	Storage Case	Ratchet Service Kit
1/2	BRUTUS3R300	Fixed Ratchet	36	10°	60 ft-lb	300 ft-lb	2 ft-lb	32-1/2	1-3/4	3/4	PBTQ4	RKRS80A
3/8	QD2RN100A	Fixed Ratchet	80	4.50	20 N•m	100 N•m	.5 N•m	15-9/16	1-5/32	9/16	PBQD2	RKRF80

- **BRUTUS3R300 1/2 Drive Adjustable Click-Type Torque Wrench (60–300 ft-lb)** Expanded range allows extended coverage with the 1/2 drive tool servicing a majority of vehicles and large pickup trucks
- Gives the user additional range in applying torque and angle on high-torque applications
- Stamped scale (ft-lb) offers better permanency and visibility
- Features heavy-duty components; thicker diameter main tube, cam and internal components for strength and durability
- Accuracy is ±6% CW and CCW



## Metric Torque Instruments (kg m, kg cm)

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, min	Range, max	Increments	Length, inches	Head Width, inches		Storage Case	Repair Kit
3/8	QD2RM1000A	Flex Head	80	4.5°	200 kg•cm	1,000 kg•cm	5 kg•cm	15-9/16	1-5/32	9/16	PBQD2	RKRF80
1/2	QD3RM30A	Fixed Ratchet	80	4.5°	6 kg∙m	30 kg•m	.2 kg∙m	19	1-5/8	3/4	PBQD3	RKRS80A

<sup>3\$ &#</sup>x27;VXI; [ PRGHOV IHDWKUH UROD PDUNHG WKEHV DQG



## **Newton Meter Torque Wrenches/±4% Accuracy**

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, minimum	Range, maximum	Increments	Length, inches	Head Width, inches		Storage Case	Ratchet Service Kit
1/4	QD1RN6A	Fixed Ratchet	36	10°	1 N•m	6 N∙m	.05 N•m	9-7/8	7/8	7/16	PBQD1	RKRT936
1/4	QD1RN25A	Fixed Ratchet	36	10°	5 N•m	25 N•m	.1 N•m	11-3/4	7/8	7/16	PBQD1	RKRT936
3/8	QD2RN25A	Compact Ratchet	36	10°	5 N•m	25 N•m	.1 N•m	11-3/4	7/8	7/16	PBQD2	RKRFC936
3/8	QD2RN50A	Fixed Ratchet	80	4.5°	10 N•m	50 N•m	.5 N•m	15-9/16	1-5/32	9/16	PBQD2	RKRF80
3/8	QD2RN100A	Fixed Ratchet	80	4.5°	20 N•m	100 N•m	.5 N•m	15-9/16	1-5/32	9/16	PBQD2	RKRF80
1/2	QD3RN200A	Fixed Ratchet	80	4.5°	40 N•m	200 N•m	2 N•m	19	1-5/8	3/4	PBQD3	RKRS80A
1/2	QD3RN350A	Fixed Ratchet	80	4.5°	70 N•m	350 N•m	2 N•m	24-3/16	1-5/8	3/4	PBQD3	RKRS80A
3/4	QD4RN800A	Fixed Ratchet	32	11º	150 N∙m	800 N•m	5 N•m	42-3/4	2-1/2	1-1/4	PBQC4	RKRQC4
1	QD5RN1500A	Fixed Ratchet	30	12°	300 N•m	1,500 N•m	10 N•m	68.4	3-1/8	1-1/2	S10-117-6	RKRQC5

<sup>3\$ &#</sup>x27;VXI¿[ PRGHOV IHDWKUH UROO PDUNHG WKEHV







#### Adjustable Click Type Torque Wrench

- Snap-on® sealed ratchet head is virtually maintenance free; more time working with the tool, less time on tool maintenance
- Thumb screw-type adjustment is faster than cycling through a micrometer-style torque wrench; guard prevents setting from being changed accidentally; setting is displayed in window; conversion table to N•m is displayed on handle
- Sealed neck keeps dust and grit away from the torque mechanism for longer tool life
- "Split beam" measuring element provides accurate, reliable readings and eliminates the heavy coil spring used in conventional click-type wrenches; yields fewer moving parts, reducing friction and wear
- Cushion grip handle provides comfort plus control and resists most automotive fluids
- Designed for measuring torque in a clockwise direction only; wrench is not reversible
- CE: EU-GB, FR, ES, DE

#### US Reading Torque Wrenches with Conversion Scale/±4% Accuracy

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, minimum	Range, maximum	Increments	Length, inches	Head Width, inches	Depth*,	Ratchet Service Kit	Storage Case
3/8	TQFR50C†	Flex Head	36	10°	120 in-lb	600 in-lb	10 in-lb	18-5/8	1-5/8	9/16	RKRF936	PBTQ1
3/8	TQFR100C**	Flex Head	36	10°	20 ft-lb	100 ft-lb	2 ft-lb	18-5/8	1-5/8	9/16	RKRF936	PBTQ1
3/8	TQFR250E†	Flex Head	36	10°	40 ft-lb	250 ft-lb	5 ft-lb	22-3/8	1-5/8	9/16	RKRS936	PBTQ3
1/2	TQR250E	Fixed Ratchet	36	10°	40 ft-lb	250 ft-lb	5 ft-lb	22-3/8	1-5/8	3/4	RKRS936	PBTQ3
3/4	TQR400E†»	Detach Ratchet	32	11°	130 ft-lb	400 ft-lb	10 ft-lb	38-1/8	2-1/2	1-1/4	RKRTQ4	PBTQ4
3/4	TQR600E†»	Detach Ratchet	32	11°	200 ft-lb	600 ft-lb	10 ft-lb	48-5/8	2-1/2	1-1/4	RKRTQ4	PBTQ4

All wrenches are non-reversible

\*Does not include square drive dimension

»Three-piece construction disassembles for storage/transport †TQFR50C, TQR250E, TQR400E and TQR600E available in Red only

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated). All wrenches and drivers are calibrated per ASME\* standards for accuracy, from 20–100% of full scale, using NIST\* traceable equipment. Colors Available



ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS



TQFRM34D

## **Newton Meter Torque Wrenches with Conversion Scale**

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, minimum	Range, maximum	Increments	Length, inches	Head Depth*, inches	Storage Case	Repair Kit
3/8	TQFRN130B	Flex Head	30	12°	25 N∙m	130 N•m	5 N•m	17-5/8	9/16	PB50A	RKQJA2D
1/2	TQFRN350E	Flex Head	32	11°	70 N•m	350 N•m	5 N•m	22-1/8	3/4	PBTQ1	RKTQ3
3/8	TQFRN68B	Flex Head	30	12°	14 N•m	68 N∙m	2 N•m	17-5/8	9/16	PB50A	RKQJA2D

\*Does not include square drive dimension

All wrenches are non-reversible. The 3/8" drive models in this chart have metal handles.

## **Metric Torque Wrenches with Conversion Scale**

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, minimum	Range, maximum	Increments	Length, inches	Head Width, inches	Head Depth*, inches	Storage Case	Repair Kit
1/2	TQFRM34D	Flex Head	32	11°	5.0 kg•m	34 kg•m	1.0 kg•m	22-1/8	1-5/8	3/4	PBTQ3	RKTQ3
3/4	TQRM80C	Detach Ratchet	32	11°	26.0 kg•m	80 kg•m	2.0 kg•m	48	2-3/8	1-1/4	PB39	RKRQC4

\*Does not include square drive dimension All wrenches are non-reversible.





- US Reading/Standard 2% Accuracy
  Dial torque wrenches allow the user to easily apply and monitor torque
- Long-lasting performance given minimal component contact
- Steel welded bodies with bright nickel-chrome finish
- Heat-treated dial guards protect the dial crystal from damage
- Patented torsion bar machined from aircraft quality alloy steel for long life and precise performance across the entire scale
- Operating temperature range of 0–100 °F
- Wide selection of models—from 1/4-1-1/2 drives to ranges, scales, and dial configurations there is a dial wrench to cover nearly every need
  • Certificate of calibration models, add "C" suffix to stock number

Square Drive, inches	Basic Models Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Range	Increments	Length, inches	Width, inches	Head Depth,* inches	Storage Case	
1/4	TE1A	TE1FUA	_	15 in-lb	1/4 in-lb	9-29/32	2-11/16	1-1/4	PB9	
1/4	TE3A	TE3FUA	_	30 in-lb	1/2 in-lb	9-29/32	2-11/16	1-1/4	PB9	
1/4	TE6A	TE6FUA	_	75 in-lb	1 in-lb	9-29/32	2-11/16	1-1/4	PB9	
3/8	TE12A	TE12FUA	TE12LA	150 in-lb	2-1/2 in-lb	9-29/32	2-11/16	1-1/4	PB9	
3/8	TE25A	TE25FUA	TE25LA	300 in-lb	5 in-lb	9-29/32	2-11/16	1-1/4	PB9	
3/8	TE50A	TE50FUA	TE50LA	600 in-lb	10 in-lb	12-1/2	2-11/16	1-1/4	PB9	
3/8	TE12FA	TE12FFUA	TE12FLA	12 ft-lb	1/2 ft-lb	9-29/32	2-11/16	1-1/4	PB9	
3/8	TE25FA	TE25FFUA	TE25FLA	25 ft-lb	1/2 ft-lb	9-29/32	2-11/16	1-1/4	PB9	
3/8	TE50FA	TE50FFUA	TE50FLA	50 ft-lb	1 ft-lb	12-1/2	2-11/16	1-1/4	PB9	
1/2	TE51	TE51FU	TE51L	600 in-lb	10 in-lb	15	2-11/16	1-5/16	_	
1/2	TE51F	TE51FFU	TE51FL	50 ft-lb	1 ft-lb	15	2-11/16	1-5/16	_	
1/2	TE100	TE100FU	TE100L	100 ft-lb	1 ft-lb	16	2-3/4	1-3/8	PBR5	
1/2	TE175	TE175FU	TE175L	175 ft-lb	2-1/2 ft-lb	18-3/4	2-3/4	1-3/8	PBR5	
1/2	TE250	TE250FU	TE250L	250 ft-lb	5 ft-lb	23-3/4	2-3/4	1-3/8	PB8A	
3/4	TE352A	TE352FUA	TE352LA	350 ft-lb	5 ft-lb	29-7/8	3-1/4	1-25/32	_	
3/4	TE602A	TE602FUA	TE602LA	600 ft-lb	10 ft-lb	40-7/8	3-1/4	1-25/32	PB39	
1	TE803**	TE803FU**	TE803L**	800 ft-lb	10 ft-lb	66-13/16	3-9/16	2-1/32	_	
1	TE1003†	TE1003FU**	TE1003L**	1,000 ft-lb	10 ft-lb	66-13/16	3-9/16	2-1/32	_	
1	TE1503†	TE1503FU†	TE1503L†	1,500 ft-lb	25 ft-lb	80	4-13/32	2-1/8	_	
1	TE2003†	TE2003FU†	TE2003L†	2,000 ft-lb	25 ft-lb	80	4-13/32	2-1/8	_	
1-1/2	TE2005†	TE2005FU†	TE2005L†	2,000 ft-lb	25 ft-lb	80	3-9/16	2-3/8	_	
1-1/2	TE3005	TE3005FU**	TE3005L**	3,000 ft-lb	50 ft-lb	140	5-1/2	2-13/16	_	
Does not include square drive dimension  **Includes separately packed 92TQPA 4' tubular extension handle includes separately packed 93TQPA 5' tubular extension handle  TE3005 includes 94TQPA 10' extension handle										

\*Does not include square drive dimension †Includes separately packed 93TQPA 5' tubular extension handle Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available. Basic model = 1 needle Follow-up = 2 needles Signal = signal light GTE models feature a black oxide finish.



#### **BASIC MODEL**

 Needle shows torque achieved



#### FOLLOW UP MODEL

 Two separate needles show targeted torque and torque achieved



#### SIGNAL MODEL

• Features a built-in light that flashes when targeted torque is achieved







Do not exceed rated torque
 Do not use to break fasteners loose

Periodic recalibration is necessary to maintain accuracy
 Read safety precautions on pages W1 to W4

#### TORQOMETER® TORQUE WRENCHES





Newton Meter Reading/Standard 2% Accuracy
• Certificate of calibration models are designated by the "C" suffix added to stock number

Square Drive, inches	Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Range, N•m	Increments, N•m	Length, inches	Width, inches	Head Depth*, inches	Storage Case
1/4	TESI5	TESI5FU	TESI5L	5	.2	9-29/32	2-11/16	1-1/4	PB9
1/4	TESI10	TESI10FU	TESI10L	10	.5	9-29/32	2-11/16	1-1/4	PB9
3/8	TESI20	TESI20FU	TESI20L	20	.5	9-29/32	2-11/16	1-1/4	PB9
3/8	TESI30	TESI30FU	TESI30L	30	1	9-29/32	2-11/16	1-1/4	PB9
3/8	TESI60	TESI60FU	TESI60L	60	2	12-1/2	2-11/16	1-1/4	PB9
3/8	TESI70	TESI70FU	TESI70L	70	2	12-1/2	2-11/16	1-1/4	PB9
3/8	TESI75	TESI75FU	TESI75L	75	1	12-1/2	2-11/16	1-1/4	PB9
1/2	TESI125	TESI125FU	TESI125L	125	5	16	2-11/16	1-3/8	PBR5
1/2	TESI200	TESI200FU	TESI200L	200	5	18-3/4	2-3/4	1-3/8	PBR5
1/2	TESI250	TESI250FU	TESI250L	250	5	18-3/4	2-3/4	1-3/8	PBR5
3/4	TESI500A	TESI500FUA	TESI500LA	500	10	29-7/8	3-1/4	1-25/32	PB39
3/4	TESI800A	TESI800FUA	TESI800LA	800	20	40-7/8	3-1/4	1-25/32	PB39
1	TESI1360**	TESI1360FU**	TESI1360L**	1,360	20	66-13/16	3-9/16	2-1/32	_
1	TESI2803**	TESI2803FU***	TESI2803L***	2,800	50	80	4-13/32	2-1/8	_
1-1/2	TESI2805***	TESI2805FU***	_	2,800	50	80	4-25/32	2-3/8	_
1-1/2	_	TESI4000FU	TESI4000L	4,000	100	140	5-1/2	2-13/16	

\*\*Includes separately packed 92TQPA 4' tubular extension handle TE3005 includes 94TQPA 10' extension handle

\*Does not include square drive dimension

\*\*Includes separately packed 92TOPA 4
Includes separately packed 93TQPA 5' tubular extension handle

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number. Basic model = 1 needle Follow-Up = 2 needles Signal = signal light



## Combination US/Newton Meter Reading/Precise 1% Accuracy

• Certificate of calibration models are designated by the "C" suffix added to stock number

Square Drive, inches	Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Range, N•m	Increments, N•m	US Range	US Increments	Length, inches	Width, inches	Head Depth*, inches	Storage Case
1/4	TER1A	TER1FUA	TER1LA	1.7	.05	15 in-lb	.5 in-lb	9-29/32	2-11/16	1-1/4	PB9
1/4	TER3A	TER3FUA	TER3LA	3.5	0.1	30 in-lb	1 in-lb	9-29/32	2-11/16	1-1/4	PB9
1/4	TER6A	TER6FUA	_	8.4	0.2	75 in-lb	1 in-lb	9-29/32	2-11/16	1-1/4	PB9
3/8	TER12A	TER12FUA	TER12LA	17	.5	150 in-lb	5 in-lb	9-29/32	2-11/16	1-1/4	PB9
3/8	TER25A	TER25FUA	TER25LA	0-3,200 N•cm	50 N•cm	0-300 in-lb	5 in-lb	9-29/32	2-11/16	1-1/4	PB9
3/8	TER50A	TER50FUA	TER50LA	60	1	600 in-lb	20 in-lb	12-1/2	2-11/16	1-1/4	PB9
1/2	TER51	TER51FU	TER51L	60	1	600 in-lb	20 in-lb	15	2-11/16	1-5/16	_
1/2	TER100	TER100FU	TER100L	140	5	100 ft-lb	2 ft-lb	16	2-3/4	1-3/8	PBR5
1/2	TER175	TER175FU	TER175L	230	10	175 ft-lb	5 ft-lb	18-3/4	2-3/4	1-3/8	PBR5
3/4	TER352A	TER352FUA	TER352LA	480	10	350 ft-lb	5 ft-lb	29-7/8	3-1/4	1-3/8	PB39
3/4	TER602A	TER602FUA	TER602LA	800	20	600 ft-lb	20 ft-lb	40-7/8	3-1/4	1-25/32	PB39
1	TER1003**	_	TER1003L**	1,360	20	1,000 ft-lb	20 ft-lb	66-13/16	3-9/16	2-1/32	_

\*Does not include square drive dimension

\*\*Includes separately packed 92TQPA 4' tubular extension handle

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number. Basic model= 1 needle Follow-Up = 2 needles Signal = signal light

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated).

All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20%—100% of full scale, using NIST® traceable equipment.





## **Combination US/Metric Reading/Standard 2% Accuracy**

Square Drive, inches	Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Metric Range	Metric Increments	US Range	US Increments	Length, inches	Width, inches	Head Depth*, inches	Storage Case
1/4	TEC1A	TEC1FUA	_	16 kg∙cm	1 kg•cm	15 in-lb	.5 in-lb	9-29/32	2-11/16	1-1/4	PB9
1/4	TEC3A	TEC3FUA	_	35 kg•cm	1 kg•cm	30 in-lb	1 in-lb	9-29/32	2-11/16	1-1/4	PB9
1/4	TEC6A	TEC6FUA	_	90 kg•cm	2.5 kg•cm	75 in-lb	1 in-lb	9-29/32	2-11/16	1-1/4	PB9
3/8	TEC12A	TEC12FUA	TEC12LA	175 kg•cm	5 kg•cm	150 in-lb	5 in-lb	9-29/32	2-11/16	1-1/4	PB9
3/8	TEC25FA	TEC25FFUA	TEC25FLA	350 kg•cm	10 kg•cm	25 ft-lb	1 ft-lb	9-29/32	2-11/16	1-1/4	PB9
3/8	TEC50A	TEC50FUA	TEC50LA	700 kg•cm	20 kg•cm	600 in-lb	20 in-lb	12-1/2	2-11/16	1-1/4	PB9
1/2	TEC51	TEC51FU	TEC51L	700 kg•cm	20 kg•cm	600 in-lb	20 in-lb	15	2-11/16	1-5/16	_
1/2	TEC100	TEC100FU	TEC100L	14 kg•m	.5 kg∙m	100 ft-lb	2 ft-lb	16	2-3/4	1-3/8	PBR5
1/2	TEC175	TEC175FU	TEC175L	25 kg•m	1 kg•m	175 ft-lb	5 ft-lb	18-3/4	2-3/4	1-3/8	PBR5
1/2	TEC250	TEC250FU	TEC250L	35 kg•m	1 kg•m	250 ft-lb	10 ft-lb	23-3/4	2-3/4	1-3/8	PB8A
3/4	TEC352A	TEC352FUA	TEC352LA	50 kg•m	1 kg•m	350 ft-lb	10 ft-lb	29-7/8	3-1/4	1-25/32	PB39
3/4	TEC602A	TEC602FUA	TEC602LA	80 kg•m	2 kg∙m	600 ft-lb	20 ft-lb	40-7/8	3-1/4	1-25/32	PB39
1	TEC803**	TEC803FU**	TEC803L**	110 kg•m	2 kg∙m	800 ft-lb	25 ft-lb	66-13/16	3-9/16	2-1/32	_
1	_	_	TEC1003L**	136 kg•m	2 kg∙m	1,000 ft-lb	20 ft-lb	66-13/16	3-9/16	2-1/32	_
1	_	TEC1503FU†	TEC1503L†	200 kg•m	5 kg•m	1,500 ft-lb	25 ft-lb	80	4-13/32	2-1/8	_
1	_	TEC2003FU†	TEC2003L†	280 kg•m	5 kg•m	2,000 ft-lb	50 ft-lb	80	4-13/32	2-1/8	_
1-1/2	TEC2005†	TEC2005FU†	TEC2005L†	280 kg•m	5 kg•m	2,000 ft-lb	50 ft-lb	80	4-13/32	2-3/8	_
1-1/2	TEC3005	TEC3005FU	TEC3005L	400 kg•m	5 kg•m	3,000 ft-lb	50 ft-lb	140	5-1/2	2-13/16	_

\*Does not include square drive dimension.
†Includes separately packed 93TQPA 5' tubular extension handle.
Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available.
Basic model= 1 needle Follow-Up = 2 needles Signal = signal light

\*\*Includes separately packed 92TQPA 4' tubular extension handle.







Optional "T" Bars/

## US Reading/Standard 2% Accuracy

											Extension Handles		
Input Drive Female Square, inches	Drive Male	Stock No	Light Signal Models Stock No.	US Range, ft-lb	US Increments, ft-lb	Length, inches		Head Depth, inches	Increments, ft. lb.	"T" Bars	Length, inches	Ext. Handle	Ext. Handle Length, inches
3/4	3/4	TEX602TFUA*	TEX602TLA*	600	10	9	3-1/4	3-3/4	_	81TQP	66	_	_
3/4	1	TEX1003TFUA	TEX1003TLA	1,000	10	9-7/8	3-5/8	4-1/8	_	81TQP	66	_	_
1	1	TEX1503TFU	TEX1503TL	1,500	25	10-7/8	4-3/8	4-7/16		82TQP	18	85TQP	31
1	1	TEX2003TFU	TEX2003TL	2,000	_	10-7/8	4-3/8	4-7/16	25	82TQP	_	85TQP	31
1	1-1/2	TEX2005TFU	TEX2005TL	2,000	25	10-7/8	4-3/8	4-7/16	_	82TQP	18	85TQP	31
1-1/2	1-1/2	TEX3005TFU	_	3,000	50	12	5-1/8	6-1/2	_	83TQP	18	87TQP	66
1-1/2	1-1/2	TEX4005TFU	TEX4005TL	4,000	50	12	5-1/8	6-1/2	_	84TQP	20	89TQP	72

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.

\*T-Bar not included Basic model= 1 needle

Follow-Up = 2 needles

Signal = signal light







Do not exceed rated torque
 Do not use to break fasteners loose

Periodic recalibration is necessary to maintain accuracy
 Read safety precautions on pages W1 to W4

### T-HANDLE TORQOMETER® TORQUE WRENCHES





#### TEXC4005TL

Optional "T" Bars/

#### Combination US/Metric Reading/Standard 2% Accuracy

							Extension	Extension mandles						
Input Drive Female Square, inches	Output Drive Male Square, inches	Follow-up Models Stock No.	Light Signal Models Stock No.	US Range, ft-lb		Metric Range, kg•m	kg∙m	Length, inches		Head Depth, inches	"T" Bar	T Bar Length, inches	Ext. Handle	Ext. Handle Length, inches
3/4	3/4	TEXC602TFUA	TEXC602TLA	600	20	80	2	9	3-1/4	3-3/4	81TQP	66	_	_
3/4	1	TEXC1003TFUA	TEXC1003TLA	1,000	20	136	2	9-7/8	3-5/8	4-1/8	81TQP	66	_	_
1	1	TEXC1503TFU	TEXC1503TL	1,500	25	200	5	10-7/8	4-3/8	4-7/16	85TQP	31	82TQP	18
1	1	TEXC2003TFU	TEXC2003TL	2,000	50	280	5	10-7/8	4-3/8	4-7/16	82TQP	18	85TQP	31
1	1-1/2	TEXC2005TFU	TEXC2005TL	2,000	50	280	5	10-7/8	4-3/8	4-7/16	82TQP	18	85TQP	31
1-1/2	1-1/2	TEXC3005TFU	TEXC3005TL	3,000	100	400	5	12	5-1/8	6-1/2	83TQP	18	87TQP	66
1-1/2	1-1/2	TEXC4005TFU	TEXC4005TL	4,000	100	550	10	12	5-1/8	6-1/2	84TQP	20	89TQP	72

UHOFKHV IQ FKDUWGR ORWIQFOXGH FHUNL;FDWH RI FDQEUDWRQ : UHOFKHV ZUK D FHUNL;FDWH RI FDQEUDWRQ DUH DYDLODEGH E\ DGGIQJ 3& IR WKH HOG RI WKH VWRFN OXPEHU

)RORZ 8S QHHGOHV 6LJQD0 VLJQD0QJKW

## **TORQOMETER® TORQUE DRIVERS - 1/4" DRIVE**



## **US Reading Standard/2% Accuracy**

Standard Basic Models Stock No.	Standard Follow-up Models Stock No.	Length, inches	Stubby Basic Models Stock No.	Stubby Follow-up Models Stock No.	Length, inches	Range	Increments
TQS004A	TQS004FUA	8-5/8	_	TQSS004FUA	5-3/4	8 in-oz	1/4 in-oz
TQS008A	TQS008FUA	7-3/4	_	TQSS008FUA	5-1/4	16 in-oz	1/2 in-oz
TQS012A	TQS012FUA	7-3/4	TQSS012A	TQSS012FUA	5-1/4	24 in-oz/1.5 in-lb	1/2 in-oz/1/32 in-lb
TQS025A	TQS025FUA	7-3/4	TQSS025A	TQSS025FUA	5-1/4	48 in-oz/3 in-lb	1 in-oz/1/16 in-lb
TQS050A	TQS050FUA	7-3/4	TQSS050A	TQSS050FUA	5-1/4	96 in-oz/6 in-lb	2 in-oz/1/8 in-lb
TQS1A	TQS1FUA	7-3/4	TQSS1A	TQSS1FUA	5-1/4	192 in-oz/12 in-lb	4 in-oz/1/4 in-lb
TQS2A	TQS2FUA	7-3/4	TQSS2A	TQSS2FUA	5-1/4	384 in-oz/24 in-lb	8 in-oz/1/2 in-lb
TQS2.5A	TQS2.5FUA	7-3/4	TQSS2.5A	TQSS2.5FUA	5-1/4	480 in-oz/30 in-lb	12 in-oz/1 in-lb
TQS4A*	TQS4FUA*	8-11/16	TQSS4A*	TQSS4FUA	5-1/4	50 in-lb	1 in-lb
TQS6A*	TQS6FUA*	8-11/16	TQSS6A*	TQSS6FUA	5-1/4	75 in-lb	1 in-lb

<sup>10</sup>WHUQDOVTXDUH GULYH LQ KDQG0H ,QF0XGHV

%DVLF PRGH0

) ROORZ XS QHHGOHV



## Combination US/Metric Reading/Standard 2% Accuracy

	Standard Follow-up Models Stock No.			Stubby Follow-up Models Stock No.	Length, inches	Range	Increments
_	TQSC1FUA	7-3/4	_	TQSSC1FUA	5-1/4	17 kg•cm/15 in-lb	.5 kg•cm/.5 in-lb
_	TQSC2.5FUA	7-3/4	_	TQSSC2.5FUA	5-1/4	35 kg•cm/30 in-lb	1.000 kg•cm/1.0 in-lb
_	TQSC4FUA*	8-11/16	_	TQSSC4FUA*	5-1/4	56 kg•cm/50 in-lb	2 kg•cm/2 in-lb
_	TQSC6FUA*	_	_	TQSSC6FUA*	5-1/4	90 kg•cm/75 in-lb	3 kg•cm/5 in-lb

<sup>:</sup> UHOFKHV LO FKDWIGR ORWIOFDXGH FHUNL; FUND HIJ DIEDDINCY : UHQFKHV ZWK D FHUNL; FUND RIF FOR DUDDINCY DHO DYDDD HE DGGIQJ 3& WR WKH RIF FOR DIEDDINCY SUPPLY DE STAND BY DIEDDING SUPPLY DE STAND BY

<sup>\*</sup>T-Bar not included

\*DVIF PRGH0 QHHG0H

<sup>,</sup> JUPICHEN LIZHWINDER ORMIDFRICH FUNDE DEUTEN : UHOFKHV ZUK D FHUNG FUND IN FOLDEURING DUH DYDLODECH E\ DGGLQJ 3& "UK H WH HQG RI WKH YWRFN QXPEHU \$0 ZUHOFKHV LOFROGH 3% GWRUDJH &DVH

#### TORQOMETER® TORQUE DRIVERS - 1/4" DRIVE

#### Combination US/Newton Meter Reading/Standard 2% Accuracy\*\*

Standard Basic Models Stock No.	Standard Follow up Models Stock No.	Length, inches	Stubby Basic Models Stock No.	Stubby Follow up Models Stock No.	Length, inches	Range	Increments
_	TQSI.34FUA	7-3/4	_	TQSSI.34FUA	5-1/4	.34 N•m	.01 N•m
TQSI055A	_	7-3/4	TQSSI.055A	_	5-1/4	.055 N•m	.001 N•m
_	TQSI055FUA	7-3/4	_	TQSSI055FUA	5-1/4	.055 N•m	.001 N•m
_	_	_	TQSSI.11A	TQSSI.11FUA	5-1/4	.110 N•m	.005 N•m
_	_	_	_	TQSSI.70FUA	5-1/4	.70 N•m	.02 N•m
_	TQSI135FUA	7-3/4	_	TQSSI1.35FUA	5-1/4	1.35 N•m	.05 N•m
_	TQSR1FUA	7-3/4	_	_	_	1.6 N•cm/15 in-lb	5 N•cm/.25 in-lb
_	TQSR2.5FUA	7-3/4	_	_	_	3.4 N•m/30 in-lb	.1 N•m/1 in-lb
_	TQSR4FUA*	8-11/16	_	_	_	5.5 N•m/50 in-lb	.1 N•m/1 in-lb
_	TQSR6FUA*	8-11/16	_	_	_	8.4 N•m/75 in-lb	.2 N•m/5 in-lb

<sup>\*</sup>Includes 1/4" internal square drive in handle.

All wrenches include PB47 Storage Case. ANSI® Spec. B107.300 applies to all these models. Basic model = 1 needle Follow-up = 2 needles

## **Torque Angle Gauges**

#### TA358 3/8 Square Drive Torque Angle Gauge

- Determines angle controlled torque tightening
- Allows user to follow manufacturer's specifications
- · Used on automotive, diesel and industrial equipment, plus head bolts and rod bolts on motorcycles

#### TA360 1/2 Square Drive Torque Angle Gauge

- Allows user to follow manufacturer's specifications
- Calibrated in degrees in large, easy-to-read increments



## **TORQUE SCREWDRIVER**

### TechAngle® Electronic Torque Screwdriver

- Four alert modes (LCD, LED, Audible, Vibratory)
- Advanced features: programmable sleep timer, cycle counter, overload indication, calibration alert, battery level, language selection and torque record memory including 10 presets and storage for up to 50 records
- Three modes of operation: Torque, Angle, Torque Then Angle
- Displays in seven units of measure: in-lb, in-oz, ft-lb, Nm, Kg-cm, cNm and angle
- Guaranteed accuracy +/- 2% CW and 3% CCW at 20-100% of full scale (+/-4% CW and 6% CCW at 5-19% of full scale)







Approaching Target

**Target** Achieved

Over Torque



ATECHMS80F

Stock No.	Description	Range	Increments	Length, inches
ATECHMS80F	1/4 Hex Electronic Screwdriver (Tool Only)	4-80 in-lb (0.45–9 N•m)	.01 in-lb	7-1/2
ATECHMS80FK	1/4 Hex Electronic Screwdriver Kit	4-80 in-lb (0.45–9 N•m)	.01 in-lb	7-1/2
ATECHMS100F*	1/4 Hex Electronic Screwdriver (Tool Only)	5–100 in-oz	.01 in-lb	7-1/2
ATECHMS80M	1/4 Square Electronic Driver (Tool Only)	4-80 in-lb (0.45–9 N•m)	.01 in-lb	7-1/2
ATECHMS80MK	1/4 Square Electronic Driver Kit	4-80 in-lb (0.45–9 N•m)	.01 in-lb	7-1/2
ATECHMS100M*‡	1/4 Square Electronic Driver (Tool Only)	5–100 in-oz	.01 in-lb	7-1/2
MSTECHHDL	Electronic Driver L-Handle	_	_	_

\*scales are +/-3% CW and CCW (+/- 5% CW and +/-6% CCW) at 5-19% of full scale.

 $C \in$ 

ASMF B107 300-2010







- Do not exceed rated torque
- · Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
  Periodic recalibration is necessary to maintain accuracy
  These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. See pages 906-907 for details.
  Read safety precautions on pages W1 to W4

<sup>\*\*</sup>Precise 1% models are available on special order

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.



#### ODRIVER3P

#### **Preset Torque Screwdrivers**

- Ideal for low-torque assemblies and precision application
- Drivers accept all standard 1/4 hex screwdriver bits
- Cam over torque limiting clutch-free wheels when set torque is achieved
- Accuracy is ±6% from 20-100% of full scale in clockwise direction only for all drivers in series
- Lightweight construction features aluminum body with steel shank
- Comfortable ergonomic tri-lobe grip and magnetic bit retention
- Textured body provides a nonslip grip
- Not supplied with Certificate of Calibration
- When ordering, user must designate desired torque rating to be set

Stock No.	Range, min Range, max		Length, inches	
QDRIVER1P	6 in-oz (4 N•cm)	32 in-oz (22 N•cm)	4-9/16	
QDRIVER2P	10 in-oz (7 N∙cm)	100 in-oz (70 N•cm)	5-5/8	
QDRIVER3P	1.5 in-lb (16 N•cm)	15 in-lb (169 N•cm)	5-5/8	
QDRIVER4P	4 in-lb (45 N∙cm)	40 in-lb (451 N•cm)	6	

ASME® B107.300-2010 Type III, Class A, Style 2, Design A



**QDRIVER3** 

#### **Adjustable Torque Screwdrivers**

- Ideal for low-torque assemblies, precision applications and dash/under dash work on most domestic and imported vehicles
- Drivers accept all standard 1/4 hex screwdriver bits
- Cam over torque limiting clutch-free wheels when set torque is achieved
- Accuracy is ±6% from 20-100% of full scale in clockwise direction only for all drivers in series
- Lightweight construction features body with steel shank
- Comfortable ergonomic tri-lobe grip and magnetic bit retention
- Textured body provides a nonslip grip

Stock No.	Range	Increments	Length, inches	
QDRIVER2	20-100 in-oz (14-70 N•cm)	1 in-oz	5-7/16	
QDRIVER3	3-15 in-lb (3-169 N•cm)	0.2 in-lb	6-1/4	
QDRIVER4	5-40 in-lb (56-451 N•cm)	0.5 in-lb	6-11/16	
QDRIVER4NM	50–450 N∙cm	5.0 N•cm	6-11/16	

ASME® B107.300-2010 Type III, Class A, Style 1, Design A

## **TPMS Torque Screwdriver**



Stock No.	Description	Range, Dedicated	Length	Accuracy
QDTPMS35	TPMS Adjustable Torque Screwdriver	4 in-lb, 12 in-lb, 35 in-lb	6-5/8	±6%

#### QDTPMS35 TPMS Adjustable Torque Screwdriver

- Highly accurate torque tool intended for maintaining or installing popular styles of tire pressure monitoring sensors
- Manufactured from aircraft-grade aluminum
- Dedicated torque measurements for popular TPMS ratings (4, 12, 35 in-lb)

## **Torque Limiting Drivers**

Stock No.	Range, minimum	Range, maximum	Increments	Length, inches
QTS135	5 in-lb	35 in-lb	0.5 in-lb	7
QTSP135	5 in-lb	35 in-lb	0.5 in-lb	7-1/2



#### QTS135 Adjustable Limiting Driver

- Micrometer-type adjustment
- Clutch allows 25° of free rotation upon reaching the set torque
- Guaranteed accuracy: within ±4% of setting from 20% of capacity to full capacity clockwise and counterclockwise

#### QTSP135 US Preset Limiting Driver

- Clutch mechanism to help prevent over-torquing by allowing free rotation upon reaching the set torque
- Ideal selection for assembly line work where the same requirement is constant
- Can be reset at different torque values or readjusted for accuracy whenever necessary with a torque tester
- Torque limit is pre-set at the factory so when ordering, user must designate desired torque rating to be set

#### Adjustable Torque Drivers (1/4 Square Drive)

Stock No.	Range	Increments	Length, inches
QDRIVER2A	20-100 in-oz (14-70 N•cm)	1 in-oz	5-7/16
QDRIVER3A	3-15 in-lb (34-169 N•cm)	0.2 in-lb	6-1/4
QDRIVER4A	5-40 in-lb (56-451 N•cm)	0.5 in-lb	6-11/16
QDRIVER4NMA	50–450 N•cm	5 N•m	6-11/16



OC11200

#### INTERCHANGEABLE HEADS

#### **Torque Wrench Bodies/Adjustable**

- Interchangeable heads permit ratcheting, fixed- or open-end torquing capability with either adjustable or preset torque wrench bodies
- A push of the locking pin provides quick-change action, with a wide range of head styles to choose from
- Adjustable models provide quick torque settings across the scale range while preset models are dedicated to a single torque measurement (good for repetitive assembly operations)
- Slim profile allows access to tight areas
- Micrometer-style adjustment for fast, accurate torque setting
- All QC series interchangeable torque wrenches are accurate to +/-4% clockwise and +/-6% counterclockwise from 20-100% of full scale
- Tube scales are roll-marked for better permanency and visibility

Stock No.	Model Type	Shank Diameter	Range	Increments	Length, inches	Storage Case
QC1I200	Adjustable	J (0.425 )	40-200 in-lb	1 in-lb	9-3/8	PBQD1
QC2I75	Adjustable	J (0.425 )	5-75 ft-lb	.5 ft-lb	13	PBQD2

: UHQFKHV IQ FKDUNGR ORNIOFOXGH FHUIL; FDWH RI FDAEUDWRQ : UHQFKHV ZUK D FHUIL; FDWH RI FDAEUDWRQ DUH DYDIODECH E\ DGGLOJ 3& WR WKH HQG RI WKH VWRFN OX PEHU



#### **Torque Wrench Bodies/Preset**

Stock No.	Model Type	Shank Diameter	Range	Length, inches
QC1P60	Preset	J (0.425 )	10-60 in-lb (1.1-6.8 N•m)	6
QC1P100	Preset	J (0.425 )	15-100 in-lb (1.7-11.3 N•m)	8
QC1P300	Preset	J (0.425 )	60-300 in-lb (6.8-33.9 N•m)	10
QC2P75	Preset	J (0.425 )	5–75 ft-lb (7–100 N•m)	11
QC3P150	Preset	Y (0.560 )	30–150 (41–203)	23
QC3P200	Preset	Y (0.560 )	40–200 ft-lb (55–270 N•m)	23
QC4P300	Preset	X (0.735 )	60-300 ft-lb (82-400 N•m)	27

1R FDQEUDWRQ FHUW; FDWHV RQ SUHVHWWRUTXH ERGLHV



## Torque Wrench Bodies/Adjustable/Dual Range

- Plug-and-play system of interchangeable heads are consistently sized from pin to the center of the fastener, so no adjustment calculations are needed
- Minimal friction "hour glass" cam retains and releases lubricant where needed to reduce friction
- Push buttons for quick-release of interchangeable head
- Positive stop ensures the instrument cannot be accidentally disassembled if wound down past scale
- Each instrument comes in a molded storage case for long-term protection
- Tube scales are roll-marked for better permanency and visibility
- Includes certificate of calibration

Stock No.	Range, N∙m	Range, ft-lb	Increments	Shank Type	Weight, lb (kg)	Length, inches (mm)
QD2IN50A	10–50	9.2-35.0	0.5 N•m/0.4 ft-lb	J	2.3 (1.12)	14-1/2 (368)
QD2IN100A	20–100	16.6–71.9	0.5 N•m/0.4 ft-lb	J	2.3 (1.12)	14-1/2 (368)
QD3IN200B	40–200	37–140	2 N•m/1.2 ft-lb	Y	3.36 (1.64)	23 (584)
QD3IN350A	70–350	59–251	2 N•m/1.2 ft-lb	Х	3.36 (1.64)	23 (584)
QD4IN800A	150-800	129–572	5 N•m/4.3 ft-lb	Z	11.14 (5.46)	41-1/2 (1,054)

) RU XVH ZLWK GXD0 SLQ KHDGV RQ0\

\$60(8%







Do not exceed rated torque Do not use to break fasteners loose

Periodic recalibration is necessary to maintain accuracy Read safety precautions on pages W1 to W4



QJD12A-80

## **Square Drive Heads/Ratcheting**

Allow use of torque wrench bodies on previous page with sockets, crowfoot wrenches or other similar attachment.

Square Drive, inches	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	Head O.D., inches	Depth, inches	Ratchet Service Kit
1/4	QJD8A-72	_	_	_	15/16	7/16	RKRT72A
1/4	QJD8SL-72	_	_	_	15/16	7/16	RKRT72A
3/8	QJD12A-80	_	_	_	1-1/4	9/16	RKRF80
3/8	QJD12SL-80	_	_	_	1-1/4	9/16	RKRF80
3/8	_	QYD12A-80	_	_	1-1/4	9/16	RKRF80
3/8	_	QYD12SL-80	_	_	1-1/4	9/16	RKRF80
3/8	_	_	QXD12A-80	_	1-1/4	9/16	RKRF80
1/2	QJD16A	_	_	_	1-5/8	3/4	RKRS936
1/2	QJD16SL	_	_	_	1-5/8	3/4	RKRS80A
1/2	_	QYD16A	_	_	1-5/8	3/4	RKRS936
1/2	_	QYD16SL	_	_	1-5/8	3/4	RKRS80A
1/2	_	_	QXD16A	_	1-5/8	3/4	RKRS80A
3/4	_	_	QXD24A	_	2-1/2	1-1/4	RKRQC4
3/4	_	_	_	QZD24BDP	2-1/2	1-1/4	RKRQC4
1	_	_	QXD32A	QZD32BDP	2-1/2	1-1/2	RKRQC5

Center of Fastener to Retaining Pin QJD Series – 2.50 QZD Series – 5.75 QYD Series - 3.00 QJD-SL Series - 3.5 QXD Series - 4.50 QYD-SL Series - 4.43

\*US Patent #6,125,722 Value in parentheses in chart is the Maximum Recommended Working Torque, ft-lb



## **Square Drive Heads/Fixed**

Allow use of torque wrench bodies on previous page with sockets, crowfoot wrenches or other similar attachments.

Square Drive, inches	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	Head O.D., inches	Depth, inches
1/4	QJSD8A	_	_	_	5/8	3/4
3/8	QJSD12A	QYSD12A	_	_	1	1
1/2	QJSD16A	QYSD16A	QXSD16A	_	1	1-1/4
3/4	_	_	QXSD24A	QZSD24ADP	1-1/2	2
1	_	_	QXSD32A	QZSD32ADP	1-3/4	2-1/4

Center of Fastener to Retaining Pin QJD Series – 2.50 QYD Series – 3.00 QXD Series – 4.50 QZD Series – 5.75

Value in parentheses is the Maximum Recommended Working Torque, ft-lb





## Ratcheting Box End Heads, 12-Point, mm

	J (0.425")	Y (0.560")	O.D., mm	Head Depth, mm
10	QJB0ERM10A	_	21.5	8
12	QJB0ERM12A	_	23.5	8
13	QJB0ERM13A	_	25	10
15	QJB0ERM15A	_	28.5	11
16	QJB0ERM16A	QYBOERM16A	30.5	11
17	QJB0ERM17A	_	32	12
18	QJB0ERM18A	QYBOERM18A	34.5	12
19	QJB0ERM19A	_	41.7	12.9
22	QJB0ERM22A	_	41.7	14.5
24	QJB0ERM24A	QYBOERM24A	46.5	15.5

Center of Fastener to Retaining Pin QJBOER Series – 2.50 QYBOER Series – 3.0

## Ratcheting Box End Heads, 12-Point, inches

	J (0.425")	Y (0.560")	O.D., inches	Head Depth, inches
5/16	QJB0ER10A	_	11/16	1/4
3/8	QJB0ER12A	_	27/32	5/16
7/16	QJB0ER14A	_	7/8	11/32
1/2	QJB0ER16A	_	1-1/32	1/4
9/16	QJB0ER18A	_	1-1/16	13/32
5/8	QJB0ER20A	QYBOER20A	1-3/16	7/16
11/16	_	QYB0ER22A	1-1/4	15/32
3/4	QJB0ER24A	QYBOER24A	1-7/16	1/2
15/16	QYBOER30A	_	1-27/32	5/8

Center of Fastener to Retaining Pin QJBOER Series – 2.50 QYBOER Series – 3.0

#### INTERCHANGEABLE HEAD, CLICK-TYPE TORQUE WRENCHES

#### Box End Heads, 0° Offset, 12-Point, inches

<b>□</b> Ţ	Stock No.	Shank (dia.)	Maximum Working Torque, ft-lb
3/8	QJXD12A	J (0.425 )	60
7/16	QJXD14A	J (0.425 )	60
1/2	QJXD16A	J (0.425 )	60
9/16	QJXD18A	J (0.425 )	60
11/16	QJXD22A	J (0.425 )	60
3/4	QJXD24A	J (0.425 )	60
7/8	QJXD28A	J (0.425 )	60
15/16	QJXD30A	J (0.425 )	60
1	QJXD32A	J (0.425 )	60
7/8	QYXD28A	Y (0.560)	160
15/16	QXXD30A	X (0.735)	240
1-1/8	QXXD36A	X (0.735)	240
5/8	QYXD20A	Y (0.560)	160
11/16	QYXD22A	Y (0.560)	160
3/4	QYXD24A	Y (0.560)	160
15/16	QYXD30A	Y (0.560)	160

Center of fastener to retaining pin:

• QJXD Series: 2.50 • QYXD Series: 3.00

## Box End Heads, 10° Offset, 12-Point, mm

mm Ţ	Stock No.	Shank (dia.)	Maximum Working Torque, ft-lb	
11	QJXBM11A	J (0.425 )	59	
12	QJXBM12A	J (0.425 )	60	
13	QJXBM13A	J (0.425 )	60	
14	QJXBM14A	J (0.425 )	60	
15	QJXBM15A	J (0.425 )	60	
16	QJXBM16A	J (0.425 )	60	
18	QJXBM18A	J (0.425 )	60	
19	QJXBM19A	J (0.425 )	60	
18	QYXBM18A	Y (0.560)	160	
24	QYXBM24A	Y (0.560)	160	
28	QYXBM28A	Y (0.560)	160	

Center of fastener to retaining pin:

• QJXBM Series: 2.50 • QYXBM Series: 3.00

### Box End Heads, 10° Offset, 12-Point, inches

<b>□</b> Ţ	Stock No.	Shank (dia.)	Maximum Working Torque, ft-lb
1/2	QJXB16A	J (0.425 )	60
9/16	QJXB18A	J (0.425 )	60
5/8	QJXB20A	J (0.425 )	60
11/16	QJXB22A	J (0.425 )	60
3/4	QJXB24A	J (0.425 )	60
1-3/8	QXXB44A	X (0.735)	240
1-1/2	QXXB48A	X (0.735)	240
5/8	QYXB20A	Y (0.560)	79
3/4	QYXB24A	Y (0.560)	160
7/8	QYXB28A	Y (0.560)	160
15/16	QYXB30A	Y (0.560)	160
1	QYXB32A	Y (0.560)	160
1-1/8	QYXB36A	Y (0.560)	160

Center of fastener to retaining pin:

• QJXB Series: 2.50 • QYXB Series: 3.00



#### Box End Heads, 40° Bend, 12-Point, mm

mmŢ	Stock No.		Center of Fastener to Retaining Pin
18	QYSBXM18A	Y (0.560)	QYSBXM Series - 3.00
24	QYSBXM24A	Y (0.560)	QYSBXM Series - 3.00

Center of fastener to retaining pin:

• QYSBXM Series: 3.00

## ISO/IZO Ratchet Head Inserts

Stock No.	Square Drive, inches (mm)	Width, mm	Insert Size, mm	Max Recommended Working Torque, N•m
IZTRAT9X12	1/4 (6)	37	9 x 12	25
IZFRAT9X12	3/8 (10)	38	9 x 12	160
IZSRAT9X12	1/2 (13)	38	9 x 12	160
IZSRAT14X18	1/2 (13)	40	14 x 18	265
IZLRAT14X18	3/4 (19)	40	14 x 18	960
QIZ16Q14X18	1/2 (13)	40	14 x 18	265

## **IZO Torque Insert Heads**

Stock No.	Description
IZ70E9X12	7 mm OE insert 9 x 12
IZ80E9X12	8 mm OE insert 9 x 12
IZ90E9X12	9 mm OE insert 9 x 12
IZ100E9X12	10 mm OE insert 9 x 12
IZ110E9X12	11 mm OE insert 9 x 12
IZ130E9X12	13 mm OE insert 9 x 12
IZ140E9X12	14 mm OE insert 9 x 12
IZ150E9X12	15 mm OE insert 9 x 12
IZ160E9X12	16 mm OE insert 9 x 12
IZ170E9X12	17 mm OE insert 9 x 12
IZ180E9X12	18 mm OE insert 9 x 12
IZ190E9X12	19 mm OE insert 9 x 12
IZ130E14X18	13 mm OE insert 14 x 18
IZ140E14X18	14 mm OE insert 14 x 18
IZ150E14X18	15 mm OE insert 14 x 18

Stock No.	Description		
IZ170E14X18	17 mm OE insert 14 x 18		
IZ180E14X18	18 mm OE insert 14 x 18		
IZ190E14X18	19 mm OE insert 14 x 18		
IZ220E14X18	22 mm OE insert 14 x 18		
IZ240E14X18	24 mm OE insert 14 x 18		
IZ270E14X18	27 mm OE insert 14 x 18		
IZ300E14X18	30 mm OE insert 14 x 18		
IZ320E14X18	32 mm OE insert 14 x 18		
IZ360E14X18	36 mm OE insert 14 x 18		
IZ10IR9X12	10 mm Insert Ring 9 x 12		
IZ11IR9X12	11 mm Insert Ring 9 x 12		
IZ12IR9X12	12 mm Insert Ring 9 x 12		
IZ13IR9X12	13 mm Insert Ring 9 x 12		
IZ14IR9X12	14 mm Insert Ring 9 x 12		
IZ15IR9X12	15 mm Insert Ring 9 x 12		

Stock No.	Description		
IZ17IR9X12	17 mm Insert Ring 9 x 12		
IZ19IR9X12	19 mm Insert Ring 9 x 12		
IZ13IR14X18	13 mm Insert Ring 14 x 18		
IZ14IR14X18	14 mm Insert Ring 14 x 18		
IZ15IR14X18	15 mm Insert Ring 14 x 18		
IZ17IR14X18	17 mm Insert Ring 14 x 18		
IZ19IR14X18	19 mm Insert Ring 14 x 18		
IZ22IR14X18	22 mm Insert Ring 14 x 18		
IZ24IR14X18	24 mm Insert Ring 14 x 18		
IZ27IR14X18	27 mm Insert Ring 14 x 18		
IZ30IR14X18	30 mm Insert Ring 14 x 18		
IZ32IR14X18	32 mm Insert Ring 14 x 18		
IZ36IR14X18	36 mm Insert Ring 14 x 18		
IZWI9X12	Welding insert 9 x 12		
IZWI14X18	Welding insert 14 x 18		







Do not exceed rated capacity
 Do not use to break fasteners loose
 Periodic recalibration is necessary to maintain accuracy
 Read safety precautions on pages W1 to W4

## Thin Open End Heads, inches



QYOM32A

Center of fastener to retaining pin:

• QJO Series: 2.50 • QYO Series: 3.00

	Stock No.	Shank (dia.)	Maximum Working Torque, ft-lb
9/16	QJ018ARTH	J (0.425)	60
11/16	QJ022ARTH60	J (0.425)	60
1	QJ032ARTH	J (0.425)	60
1-1/16	QJ034ARTH	J (0.425)	60
1-1/8	QJ036ARTH	J (0.425)	60
1-3/16	QJ038ARTH	J (0.425)	60
1-1/4	QJ040ARTH	J (0.425)	60
1-3/8	QJ044ARTH	J (0.425)	60
1-1/2	QJ048ARTH	J (0.425)	60
1-9/16	QJ050ARTH	J (0.425)	60
1-5/8	QJ052ARTH	J (0.425)	60
1-11/16	QJ054ARTH	J (0.425)	60
1-3/4	QJ056ARTH	J (0.425)	60
1-7/8	QJ060ARTH	J (0.425)	60

#### Maximum Shank Stock No. Working Torque, ft-lb (dia.) 2 QJ064ARTH J (0.425) 60 2-1/16 QJ066ARTH J (0.425) 60 2-1/8 QJ068ARTH J (0.425) 60 2-11/16 QJ086ARTH J (0.425) 60 1-3/8 QYO44ARTH J (0.425) 60 QYO48ARTH 1-1/2 Y (0.560) 160 1-9/16 QYO50ARTH Y (0.560) 160 QY052ARTH 1-5/8 Y (0.560) 160 1-3/4 QYO56ARTH Y (0.560) 160 1-7/8 QYO60ARTH Y (0.560) 160 2 QYO64ARTH Y (0.560) 160 2-1/8 QYO68ARTH Y (0.560) 160 QY072ARTH 2-1/4 Y (0.560) 160

#### Thin Open End Heads, mm

	Stock No.	Shank (dia.)	Maximum Working Torque, ft-lb
17	QJOM17ARTH	J (0.425)	60
18	QJOM18ARTH	_	_

mm <u>Ţ</u>	Stock No.	Shank (dia.)	Maximum Working Torque, ft-lb	
46	QJOM46ARTH	1	_	

O.D., Head Depth,

## Open End Heads, mm

mm	J (0.425 )	Y (0.560 )	X (0.735 )	Z (0.990 )	mm	mm
6	QJOM6A (5)	_	_	_	13	4
7	QJOM7A (6)	_	_	_	15	4
8	QJOM8A (10)	_	_	_	17	4
9	QJOM9A (14)	_	_	_	19	5
10	QJOM10A (22)	_	_	_	21	5
11	QJOM11A (33)	_	_	_	23	6
12	QJOM12A (36)	_	_	_	25	6
13	QJOM13A (41)	_	_	_	27	6
14	QJOM14A (55)	QYOM14A (55)	_	_	29	7
15	QJOM15A (60)	QYOM15A (74)	_	_	31	7
16	QJOM16A (60)	QYOM16A (88)	_	_	33	7
17	QJOM17A (60)	QYOM17A (103)	QXOM17A (103)	_	35	8
18	QJOM18A (60)	QYOM18A (115)	QXOM18A (115)	_	37	8
19	QJOM19A (60)	QYOM19A (138)	QXOM19A (138)	_	39	9
20	QJOM20A (60)	QYOM20A (160)	QXOM20A (160)	_	41	9
21	QJOM21A (60)	QYOM21A (160)	QXOM21A (180)	_	43	9
22	QJOM22A (60)	QYOM22A (160)	QXOM22A (206)	_	46	10
23	QJOM23A (60)	QYOM23A (160)	QXOM23A (229)	_	47	10
24	QJOM24A (60)	QYOM24A (160)	QXOM24A (240)	QZOM24ADP (250)	49	11
25	QJOM25A (60)	QYOM25A (160)	QXOM25A (240)	QZOM25ADP (275)	52	11
26	QJOM26A (60)	QYOM26A (160)	QXOM26A (240)	QZOM26ADP (298)	53	11
27	QJOM27A (60)	QYOM27A (160)	QXOM27A (240)	QZOM27ADP (319)	55	12
29	_	QYOM29A (160)	QXOM29A (240)	QZOM29ADP (379)	58	12
30	QJOM30 (60)	QYOM30A (160)	QXOM30A (240)	QZOM30ADP (413)	61	13
32	QJOM32 (60)	QYOM32A (160)	QXOM32A (240)	QZOM32ADP (480)	65	14
34	_	QYOM34A (160)	QXOM34A (240)	QZOM34ADP (480)	68	14
36	QJOM36A (60)	QYOM36A (160)	QXOM36A (240)	QZOM36ADP (480)	74	15
41	_	QYOM41 (160)	QXOM41A (240)	QZOM41ADP (480)	83	18
46	_	_	QXOM46A (240)	QZOM46ADP (480)	93	19
49	_	QXOM49A (240)	_	_	86	18
50	_	QYOM50A (160)	_	QZOM50ADP (480)	102	20
55	_	_	QXOM55A (240)	QZOM55ADP (480)	113	23
60	_	QYOM60A (160) QXOM60A (240)	_	QZOM60ADP (480)	125	27
65	_	_	_	QZOM65ADP (480)	130	26
70	_	_	_	QZOM70ADP (480)	169	31

\*Use with QC1P100 and QC1I200 torque bodies only; other heads may be used with all listed torque bodies

Value in parentheses is the Maximum Recommended Working Torque, ft-lb.

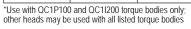
Center of fastener to retaining pin:
• QJOM Series: 2.50

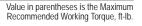
QYOM Series: 3.00QXOM Series: 4.50

• QZOM Series: 5.75

## Open End Heads, inches

	J (0.425 )	Y (0.560 )	X (0.735 )	Z (0.990 )	O.D., inches	Head Depth, inches
1/4	QJ08A (5)	_	_	_	17/32	9/64
9/32	QJ09A (7)	_	_	_	21/32	5/32
5/16	QJ010A (9)	_	_	_	21/32	11/64
3/8	QJ012A (18)	_	_	_	25/32	11/64
7/16	QJ014A (26)	_	_	_	29/32	11/64
1/2	QJ016A (34)	QYO16A (58)	_	_	1-1/16	11/64
9/16	QJ018A (58)	QYO18A (58)	_	_	1-1/16	9/32
5/8	QJ020A (60)	QY020A (70)	_	_	1-5/16	9/32
11/16	QJ022A (60)	QYO22A (99)	_	_	1-7/16	5/16
3/4	QJ024A (60)	QYO24A (125)	QX024A (125)	_	1-19/32	11/32
13/16	QJ026A (60)	QY026A (160)	QX026A (164)	_	1-23/32	3/8
7/8	QJ028A (60)	QYO28A (160)	_	_	1-23/32	3/8
15/16	QJ030A (60)	QYO30A (160)	QX030A (200)	_	1-29/32	13/32
1	QJ032A (60)	QYO32A (160)	QX032A (240)	QZ032ADP (298)	2-1/32	7/16
1-1/16	QJ034A (60)	QYO34A (160)	QX034A (240)	QZ034ADP (480)	2-3/16	15/32
1-1/8	QJ036A (60)	QYO36A (160)	QX036A (240)	QZ036ADP (367)	2-5/16	15/32
1-3/16	_	QYO38A (160)	QX038A (240)	QZ038ADP (433)	2-7/16	1/2
1-1/4	QJ040A (60)	QYO40A (160)	QX040A (240)	QZ040ADP (480)	2-9/16	17/32
1-5/16	_	QYO42A (160)	QX042A (240)	QZ042ADP (480)	2-21/32	9/16
1-3/8	QJ044A (60)	QYO44A (160)	QX044A (240)	QZ044ADP (480)	2-3/16	19/32
1-7/16	_	QYO46A (160)	QX046A (240)	QZ046ADP (480)	3	19/32
1-1/2	QJ048A (60)	QYO48A (160)	QX048A (240)	QZ048ADP (480)	3-1/16	5/8
1-9/16	_	QY050A (160)	QX050A (240)	QZ050ADP (480)	3-3/16	21/32
1-5/8	QJ052A (60)	QY052A (160)	QX052A (240)	QZ052ADP (480)	3-11/32	11/16
1-11/16	_	_	QX054A (240)	QZ054ADP (480)	3-13/32	23/32
1-3/4	_	QY056A (240)	QX056A (240)	QZ056ADP (480)	3-9/16	23/32
1-13/16	_	_	QX058A (240)	QZ058ADP (480)	3-21/32	13/32
1-7/8	_	QY060A (240)	QX060A (240)	QZ060ADP (480)	3-13/16	25/32
2	_	_	QX064A (240)	QZ064ADP (480)	4-1/16	27/32
2-1/16	_	_	QX066A (240)	QZ066ADP (480)	4-3/16	27/32
2-1/8	_	_	_	QZ068ADP (480)	4-5/16	5/8
2-1/4	_	QY072 (240)	_	QZ072ADP (480)	4-9/16	15/16
2-3/8	_	_	_	QZ076ADP (480)	_	_
2-1/2	_	_	_	QZ080ADP (480)	5-1/16	1
2-7/8	_	QYO92 (240)	_	_	5-31/32	5/8







Center of fastener to

- retaining pin:
   QJO Series: 2.50
   QYO Series: 3.00
   QXO Series: 4.50
   QZO Series: 5.75





# Adaptor QZD32A-1 Adaptor

• Adaptor Z Shank to 1 Drive



## **Ratcheting Pipe Wrench Head, inches**

Size, inches	Stock No.	Shank (dia.)
2	RPWH128Z	Z (0.990 )



## Ratcheting Flare Nut Heads, 12-Point, inches

_		
<b>□</b> Ţ	J (0.425 )	Y (0.560 )
7/16	RTWH28JSL	_
1/2	RTWH32JSL	_
9/16	RTWH36JSL	RTWH36YSL
5/8	RTWH40JSL	RTWH40YSL
11/16	RTWH44JSL	RTWH44YSL
3/4	RTWH48JSL	RTWH48YSL
13/16	RTWH52JSL	RTWH52YSL
7/8	RTWH56JSL	RTWH56YSL
3/8	_	RTWH24YSL
15/16	_	RTWH60YSL
1	_	RTWH64YSL
1-1/16	_	RTWH68YSL
1-1/8	_	RTWH72YSL
1-1/4	_	RTWH80YSL
1-3/8	_	RTWH88YSL
1-1/2	_	RTWH96YSL
1-5/8	_	RTWH104YSL



## Ratcheting Flare Nut Heads, 12-Point, mm

mm Ţ	Stock No.	Shank (dia.)
16	RTWHM16JSL	J (0.425")

Center of fastener to retaining pin:

- RTWHMJ: 3.51
- RTWHJ: 3.50
- RTWHY: 4.43

## Flare Nut Heads, 6-Point, mm

mmŢ	J (0.425 )	Y (0.560 )	0.D., mm	Head Depth, mm
8	QJRXSM8A (17)	_	17	7
9	QJRXSM9A (25)	_	18	7
10	QJRXSM10A (33)	_	20	8
11	QJRXSM11A (42)	_	21	9
12	QJRXSM12A (50)	_	22	9
13	QJRXSM13A (58)	QYRXSM13A (58)	24	9
14	QJRXSM14A (60)	_	25	10
15	QJRXSM15A (60)	QYRXSM15A (71)	26	10
16	QJRXSM16A (60)	QYRXSM16A (75)	27	11
17	QJRXSM17A (60)	QYRXSM17A (83)	29	11
18	QJRXSM18A (60)	QYRXSM18A (94)	30	12
19	QJRXSM19A (60)	QYRXSM19A (104)	32	12
20	QJRXSM20A	QYRXSM20A (113)	33	13
21	_	QYRXSM21A	34	13

Value in parentheses is the Maximum Recommended Torque, ft-lb.

#### Flare Nut Heads, 6-Point, inches

	J (0.425 )	Y (0.560 )	O.D., inches	Head Depth, inches
1/4	QJRXS8A (6)	_	19/32	1/4
5/16	QJRXS10A (17)	_	21/32	9/32
3/8	QJRXS12A (29)	_	3/4	5/16
7/16	QJRXS14A (42)	_	27/32	11/32
1/2	QJRXS16A (54)	_	29/32	3/8
9/16	QJRXS18A (60)	QYRXS18A (67)	1	13/32
5/8	QJRXS20A (60)	QYRXS20A (74)	1-3/32	7/16
11/16	QJRXS22A (60)	QYRXS22A (92)	1-5/32	15/32
3/4	QJRXS24A (60)	QYRXS24A (104)	1-1/4	1/2
13/16	QJRXS26A (60)	QYRXS26A (117)	1-5/16	7/32
7/8	QJRXS28A (60)	QYRXS28A (133)	1-13/32	9/16
15/16	QJRXS30A (60)	QYRXS30A (146)	1-1/2	19/32
1	QJRXS32A (60)	QYRXS32A (158)	1-9/16	5/8
1-1/8	_	QYRXS36A (160)	1-3/4	11/16

Value in parentheses is the Maximum Recommended Working Torque, ft-lb.

#### Flare Nut Heads, 12-Point, inches

	Shank Dia. Y (0.560 )	O.D., inches	Head Depth, inches
9/16	QYRX18A (67)	31/32	13/32
11/16	QYRX22A (92)	1-7/32	1/2
1-3/8	QYRX44A (160)	2	13/16
1-1/2	QYRX48A (160)	2-5/32	27/32
1-5/8	QYRX52A (160)	2-11/32	1
2-1/4	QYRX72A (160)	3-1/2	1-9/16
5/8	QYRX20A (79)	1-1/16	15/32
3/4	QYRX24A (104)	1-1/4	17/32
13/16	QYRX26A (117)	1-9/32	9/16
7/8	QYRX28A (133)	1-13/32	1-3/8
15/16	QYRX30A (146)	1-7/32	23/32
1	QYRX32A (158)	1-7/32	23/32
1-1/16	QYRX34A (160)	1-5/8	23/32
1-1/8	QYRX36A (160)	1-23/32	3/4
1-3/16	QYRX38A (160)	1-13/16	7/8
1-1/4	QYRX40A (160)	1-27/32	23/32



#### QYRX18A

Center of fastener to retaining pin:

• QJRXSM Series: 2.50 • QYRXSM Series: 3.00

• QJRXS Series: 2.50 • QYRXS Series: 3.00 • QYRX Series: 3.00

Value in parentheses is the Maximum Recommended Torque, ft-lb.

#### **GEARED HEAD MULTIPLIERS**







#### Manual Torque Multipliers

- Ideal for use in the oil and gas industry, mining, railroad, heavy fleet, power gen and aviation
  Compact dimensions allow excellent access and easy handling

- Maximum torque output range from 730–25,000 ft-lb (MTMP25000)
   Anti-Wind-Up Ratchet (AWUR) fitted as standard, except for MTMB740, MTMB950 and MTMB1990; keeps the multiplier loaded for easier operation
- MTMC units are calibrated to give exact multiplication ratio, and each MTMC unit is issued with unique Certificate of Calibration
- True torque multiplication, accuracy guaranteed better than ±4%
- A variety of alternative reaction fixtures is available

Specifications	MTMC730	MTMC1475	MTMC2950	MTMC5100	MTMB2200	MTMB3300
Reaction Type	Interchangeable	Interchangeable	Interchangeable	Interchangeable	Bar	Bar
Torque Ratio	22:1	27:1	25:1	25:1	15.5:1	26:1
Certification	Yes	Yes	Yes	Yes	No	No
Anti-Wind-Up	Yes	Yes	Yes	Yes	Yes	Yes
Torque Output, Minimum ft-lb	74	147	295	516	220	330
Torque Output, Maximum ft-lb	730	1,475	2,950	5,100	2,200	3,300
Torque Output, Minimum N•m	100	200	400	700	300	450
Torque Output, Maximum N•m	1,000	2,000	4,000	7,000	3,000	4,500
Input Drive Female Square, inches	3/8	1/2	1/2	1/2	1/2	1/2
Output Drive Male Square, inches	3/4	1	1	1-1/2	1	1

Specifications	MTMB740	МТМВ950	MTMB1990	MTMP4400	MTMP7000	MTMP14700	MTMP25000
Reaction Type	Bar and Cranked	Bar and Cranked	Bar and Cranked	Plate	Plate	Plate	Plate
Torque Ratio	5:1	5:1	5:1	25:1	125:1	125:1	87.5:1
Certification	No	No	No	No	No	No	No
Anti-Wind Up	_	_	_	Yes	Yes	Yes	Yes
Torque Output, Minimum ft-lb	74	96	200	450	700	1470	2,500
Torque Output, Maximum ft-lb	740	950	1,990	4,400	7,000	14,700	25,000
Torque Output, Minimum N∙m	100	130	270	610	950	2,000	3,400
Torque Output, Maximum N•m	1,000	1,300	2,700	6,000	9,500	20,000	34,000
Input Drive Female Square, inches	1/2	1/2	3/4	1/2	1/2	1/2	3/4
Output Drive Male Square, inches	3/4	3/4	1	1-1/2	1-1/2	2-1/2	2-1/2







- Do not exceed rated capacity
  Do not use to break fasteners loose
  Periodic recalibration is necessary to maintain accuracy
  Read safety precautions on pages W1 to W4



#### **Electronic Dial-Type Torque Wrenches**

The straightforward design provides easy setup and usage. There is no need to look directly at the digital display, as the wrench features a three-step LED light bar: a yellow LED warns when the target torque is approaching, a green light illuminates when the target is reached, and a red light indicates over-torque. In addition to the readout and LED's, a buzzer sounds when the desired torque value is reached.

#### Features:

- Four units of torque: in-lb, ft-lb, N•m, kg•cm
- Three models available, from 5-600 in-lb
- Accuracy: ±1% of indicated value CW and +/- 2% CCW, from 20–100% of full scale
- Accuracy: ±2% of indicated value CW and +/- 2% CCW, from 10-19% of full scale
- Three-step LED visual light system: YELLOW LIGHT = approaching target torque, GREEN LIGHT = target torque reached, RED LIGHT = over torque indicator
- Audible tone sounds when the desired torque is reached
- Display can be rotated 180° to allow for left-hand use
- Battery cover is designed to be aviation FOD proof
- Holds "peak" torque reading for 10 seconds
- Resistant to the majority of chemicals used in industrial environments
- Wrench can be hung on a tool board
- Uses one standard 9 V alkaline battery
- NIST® traceable Certificate of Calibration included
- Meets or exceeds ASME® B107.28-2010

Stock No.	Square Drive, inches	in-lb	ft-lb	N•m	kg-cm	Length, inches (mm)	Weight, lb (kg)	Storage Case
ED1050	1/4	5-50	.42-4.17	.56-5.65	5.7-57.61	11.5 (292)	1.25 (.57)	PBED1
ED2250	3/8	25–250	2.08-20.83	2.82-28.25	28-288.03	14.5 (368)	1.51 (.68)	PBED2
ED2600	3/8	60-600	5–50	6.79-67.79	69-691.27	14.5 (368)	1.51 (.68)	PBED2

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#### TORQUE TESTERS



#### **Electronic Torque Testers**

These electronic torque testers can be placed on the wall in the factory or on a bench to allow operators to test torque wrenches or power tools without having to leave their station.

- Includes Track and Peak modes
- Can be used with nonimpacting power tools (joint rate simulators required)
- Dual scale (English/N•m or English/dN•m)
- Reads bidirectional (clockwise and counterclockwise)
- Uses rechargeable Ni-Cad batteries (2 Ni-Cad 9 V)
- Charger included
- Integral transducer and sturdy housing allow mounting in virtually any position
- Integral Transducer: Full bridge strain gauge, 350 ohms, 1,500  $\mu E$ , 3 mV/V F.S., 7.5 V excitation
- Unique neck design allows operator to see display when testing long torque wrenches
- Accuracy: ±0.5% of reading ±1 count in the least significant digit (10–100% of full range) at 25 °C
- Display Accuracy: four digits, 9,999 counts
- Stability: +0.044% per °C

Stock No.	Square Drive, inches	Range English	Range, N•m
QC1ETT10	1/4	10-100 in-oz	7.0-70.6
QC1ETT400	QC1ETT400 1/4		28-280
QC1ETT50	1/4	5–50 in-lb	5.6–56
QC1ETT100	1/4	10–100 in-lb	11.3–113
QC2ETT250	3/8	25-250 in-lb	28-280
QC2ETT1000	3/8	100-1,000 in-lb	113–1,130
QC3ETT250	1/2	25-250	34-339
QC4ETT600	3/4	60–600	81–813

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#### Digital Torque Testers (DTT Series)

- Can be mounted on a wall or in a bench-top vise
- Features an easy-to-use touchscreen to capture peak torque values during a test in real time
- Download stored torque data to a PC
- Testing options: quick check or ASME®-style test
- Refresh rate of 1,000 data points per second
- Record and track torque wrench test results by serial number, plus add traceability by using wrench serial numbers and technician I.D.
- Choose wrench type
- ±0.5% of indicated test value from 10-100% or rated capacity
- Memory Capacity: 500 records (complete check mode only)
- Includes AC/DC power supply, (6) AA alkaline batteries, USB cable and carrying case
- Highly accurate scale (±0.5% ±1 count 10-100% CW and CCW of indicated test value @ 25 °C)
- Ability to customize between units of measure (N•m, kg-cm, ft-lb, inlb, in-oz), operation modes (Track, Peak, First Peak) and wrench type
- Operating temperature (10-32 °C/50-90 °F)
- Refresh rate of 1,000 data Points Per Second
- CSA/UL Requirements: Power supply listed under UL (C and US); 100-240V/50-60 Hz, 6 A input and 9 V/1.66 A output
- Includes a Certificate of Calibration



QC3DTT250

Stock No.	Description			
DTS8269	AC Adaptor			
DTS95095	Power Cord, UK			
DTS95096	Power Cord, Australia			
DTS95097	Power Cord, EU			
2344-0050-03	Table Mounting Bracket For DTT Testers			

TBT600A

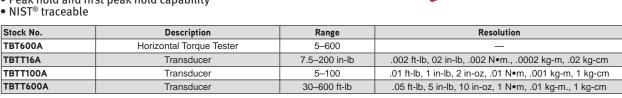
NOTE: Must order the adaptor and appropriate power cord.

	QC2DTT250	QC3DTT250
Square Drive, inches	3/8	1/2
Range English	25–250 in-lb	25–250
Range, N•m	2.9–28.2	33.9–338.9
Accuracy	±0.5% of Indicated Test Value from 10–100% or Rated Capacity	±0.5% of Indicated Test Value from 10–100% or Rated Capacity
Operating Modes	TRACK, PEAK, FIRST PEAK	TRACK, PEAK, FIRST PEAK
<b>Operating Temperature</b>	32-122 °F (0-50 °C)	32-122 °F (0-50 °C)
Humidity	85% Relative Humidity @ 21 °C (70 °F)	85% Relative Humidity @ 21 °C (70 °F)
Power Supply	Included 9 V AC/DC Adaptor, (6) AA Batteries Included	Included 9 V AC/DC Adaptor, (6) AA Batteries Included
Data/Surge/Recall	Memory Capacity—500 Records (complete check mode only)	Memory Capacity—500 Records (complete check mode only)



## **Horizontal Torque Testers and Transducers**

- Includes (3) transducers
- Full digital display
- Covers ft-lb, in-lb, in-oz, N•m, kg-m, kg-cm scales
- · Peak hold and first peak hold capability









Do not exceed rated torque
 Do not use torque wrenches to break fasteners loose
 Torque multipliers produce very high reaction force, use caution
 Read safety precautions on pages W1 to W4

## VERSATORQ® 2 TORQUE METERING AND DATA ACQUISITION SYSTEM

**Versatorq® 2 System Torque Acquisition Meters**The Snap-on® Versatorq® 2 portable ATEX®/UL® certified electronic torque analyzer displays torque readings from sensors that attach between sockets and the driver. This highly versatile torque analyzer and data acquisition system can be used with various sockets, extensions, universal joints, and ratcheting drivers. Sensors, purchased separately, are available in eight ranges from 2-20 in-oz to 150-1,500 ft-lb and provide readings with an accuracy of 1% or 2% (dependent on the transducer).

Now "intrinsically safe" for use in hazardous environments (ATEX, UL®, ULC, CE compliant).

- Ideal for applying torque (CW and CCW) in confined spaces with tight access and jobs requiring repetitive torque applications
- Accuracy rating ±1% of reading (10–100% of sensor range). ±2% with VERSA1S10A and VERSA1S20A
- Track mode displays applied torque value and Peak mode displays highest torque value
- Non-volatile flash memory retains data for 10 years or
- Plug-and-play mini USB for easy data download; no client software needed
- Customer calibration supports ASME® and ISO®
   Includes carrying case (PB57A), mini USB cable (USBATOMINIB), belt clip (276-61) and batteries
- Versatorq<sup>®</sup> 2 sensors (sold separately) enable accurate torque application using a standard ratchet or breaker bar of any length, with data readout and storage on the cable-connected Versatorq® 2 meter
- Versatorg® 2 sensors available from 2 in-oz up to 1,500 ft-lb with readings in seven popular measurement scales



## **Torque Acquisition Meters**

- VERSATORQ2 Versatorq® 2 System
   Includes carrying case (PB57A), mini USB cable (USBATOMINIB), belt clip (276-61) and batteries
- Sensors sold separately

Specifications	VERSATORQ2	
Description	VERSATORQ® 2 System	
Display	4 Digit with Alpha and Numerical Function Flags	
Display Capacity*	4 Digits	
Accuracy	±1% of Reading (10–100% of Sensor Range) (±2% with VERSA1S10A and VERSA1S20A Sensors)	
Push-Button Keypad		
Units of Measure	in-oz, in-lb, ft-lb, n∙m, cN∙m, kg∙cm, kg∙m	
Operating Temperature	40–110 °F (23–42 °C)	
Storage Temperature	-2–122 °F (-20–22 °C)	
Humidity	Up to 90% Non-Condensing	
Dimensions	3 W x 2-1/2 D x 6 L	
Weight	_	
Charge Life (full charge to shutoff)	_	
Data Storage/Recall	_	
Battery	_	
9HIIVDWRIIT® GIVS(D\ 1 IORII	HV WRITTXH LOSXWIHVV WKDO RI IXIII VEDIH LO TIIDEN PRGH DOG	

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## Versatorg® 2 Sensors

Stock No.	Square Drive, inches	Range	Sensor Diameter, inches	Sensor Length, inches	Cable Length, inches
VERSA1S10A*	1/4	1–10 in-lb	.7	2.9	48
VERSA1S200A	1/4	20-200 in-lb	.9	2.1	48
VERSA1S20A*	1/4	2-20 in-oz	.5	2.9	48
VERSA1S50A	1/4	5–50 in-lb	.9	2.1	48
VERSA2S100A	3/8	10-100	1.2	2.4	48
VERSA3S250A	1/2	25-250 ft-lb	1.4	2.6	48
VERSA4S600A	3/4	60-600 ft-lb	2.0	3.9	96
VERSA5S1500A**	1	150–1,500	2.4	4.4	92

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## **VERSATORQ1®** System Accessories

Stock No.	Description
VERSACABLE	RS232 Serial Printer Cable
<b>VERSACABLE2</b>	PC Interface Cable

Please reference the VERSATORQ® 2 instruction manual for the sensor ranges and resolutions in different units of torque measurement.

#### **VERSATEST™ ELECTRONIC TORQUE TESTER & CALIBRATOR**

#### Versatest™

The Versatest<sup>™</sup> indicator is a laboratory-grade monitor designed for precise, in-house torque wrench testing and calibration. High-precision torque transducers provide system readings with an accuracy of +/- 0.25% of indicated value. Twelve transducers are available in ranges from 5 in-oz to 2,000 ft-lb. The 4-in-1 Transducer, with a range of 5 in-lb to 250 ft-lb is also available. All transducers feature a built-in memory chip that identifies the transducer and maintain's the calibration. Setup and calibration programming is entered via soft touch keys. The Versatest™ can store and recall up to 3,000 torque readings. Torque readings stored in memory can be downloaded to a computer with optional download cable and software.



Specifications	VERSATEST
Description	Electronic Torque Tester/Calibrator
Display  Large 5-1/2 x 1-1/2 Backlit LCD Graphics Display (240 x 64 dot matrix, 0.67 to character height)	
Capacity	5 Significant Digits +/- 32,000 Counts (16 bit A/D)
Display Rate	Five Updates per Second
Accuracy	±0.25% of reading at 25 °C (with TTC Transducer calibration)
ar Graph 100 Segment Analog of Applied Torque Scaled to Limits Set Value	
Modes Track, Peak Hold, First Peak, Power Tool	
Humidity 85% Relative Humidity @ 21 °C (70 °F)	
Dimensions	10 W x 10-1/2 D x 4 H (including carrying handle)
Power Supply	Auto Switching 100–240 VAC, 50/60 Hz, 50 watts
Data Storage/Recall	3,000 Measurements
Histogram	Lower Set Limit, Upper Set Limit, 10 Divisions
Computer Serial Com Port	RS232 (true), 300-19.2K Baud
Analog Output	+(CW)/-(CCW) 1.8 V at Transducer Full Range Linearity, ±1% of Reading
Loader Control Relays	Two, Normally Open, Form A, Rated 12 V DC @ 1/2 A Close Contact at 110% CW or CCW or Torque/Force Transducer Range

#### VERSATEST

#### VERSATEST Electronic Torque Tester/Calibrator

- Large LCD display
- Accuracy: +/- 0.25% of indicated value, CW and CCW, from 10-100% of full scale
- Two RS232C serial ports; for use with a printer and PC
- Data storage /recall (with date/time stamp) up to 3,000 readings
- Real-time clock
- Seven Torque Units: ft-lb, in-lb, in-oz, N•m, dN•m, kgm, kg-cm
- Will also load torque screwdrivers
  Smart Plug-and-Play transducers
- Analog output connect to oscilloscope or X-Y plotter
- External Printer can be mounted on top of the Versatest<sup>™</sup> unit
- Four Modes: Track, Peak Hold, First Peak, Power Tool
- Transducers available from 5 in-oz to 2,000 ft-lb
- · Statistic Process Control (SPC) built in
- · Automatic or manual downloading

- All transducers are individually serialized with Certificate of Calibration traceable to NIST®
- Five Languages: English, Spanish, French, Japanese, German
- CE Conformity

#### VERSATEST600 Versatest™ Complete Electronic **Torque Calibration System**

- Provides high-speed monitoring of static and dynamic torque inputs
- Includes the Versatest™ Digital Monitor, VERSA600LDR2 600 ft-lb Mechanical Loader, TTC400 4-in-1 Transducer. TTC5000-1 Bracket and TTC12 3/4 600 ft-lb Transducer

#### **VERSA600LDR2 Versatest™ Mechanical Torque Loader**

- Unit will load dial, micrometer, beam and electronic torque wrenches
- Maximum capacity of 600 ft-lb
- Use with any TTC series transducer from 15 in-oz to 600 ft-lb





#### **ELECTRONIC TORQUE TESTER AND CALIBRATOR**



TTC2000SYS

TTC2000 Master Torque Calibration System (Manual) The system tests and calibrates most click-type, digital, dial torque wrenches as well as torque screwdrivers. Twelve transducers are available in ranges from 5 in-oz to 2,000 ft-lb. Also available is the 4-in-1 Transducer, with a range of 4 in-lb to 250 ft-lb. All transducers feature a built-in memory chip that identifies the transducer and maintains the calibration. Set up and calibration programming is entered via soft touch keys. The TTC2000 can store and recall up to 3,000 torque readings. Torque readings stored in memory can be downloaded to a computer with optional download cable and software. Optional kits are available to calibrate cable tensionmeters, tension and compression gauges and nonimpact power tools.

#### TTC2800/TTC2822 Master Torque Calibration System (Motorized)

The TTC2800 has the same features as the TTC2000 series except for the following enhanced features:

- Electric motor powered crank for easy calibration
- Is offered in 110 V version (TTC2800/Complete TTC2800SYS or 220 V version (TTC2822/Complete system TTC2822SYS)

TTC2000SYS Electronic Manual Torque Tester/Calibrator (Manual) includes: TTC610 Digital Monitor, TTC600 2000 ft-lb Mechanical Loader, SM0773PU Tool Cabinet w/ Casters, TTC400 4-in-1 Transducer, TTC5000-1 Bracket, TTC12 3/4 600 ft-lb Transducer, TTC14 1 2000 ft-lb Transducer, TTC5500-1 Extension Arm, 2000-SW WedgeLink Software, 2000-50-3 Download Cable.



TTC2800SYS

TTC2800SYS Motorized Torque Tester/Calibrator Complete Master Torque Calibration System (Motorized) includes: TTC2800 Monitor, Loader and Tool Cabinet w/ Casters, TTC400 4-in-1 Transducer, TTC5000-1 Bracket, TTC12 3/4 600 ft-lb Transducer, TTC14 1 2,000 ftlb Transducers, TTC5500-1 Extension Arm, 2000-SW WedgeLink Software, 2000-50-3 Download Cable **Features** 

- Accuracy: ±0.25% of indicated value, CW and CCW, from 10–100% of full scale
- Units of Torque: ft-lb, in-lb, in-oz, N•m, dN•m, cN•m, Kgm, Kg-cm
- Units of Force: lbf, ozf, n, dN, kp, gf
  Four Modes: TRACK, PEAK HOLD, FIRST PEAK, POWER
- · Includes built-in low-profile serial printer
- Transducers available from 5 in-oz to 2,000 ft-lb
- Loader hand crank maximum input torque is 8 ft-lbs, maximum output is 2,000 ft-lb
- All transducers are individually serialized with certificates of calibration traceable to N.I.S.T.
- Programmable automatic or manual options for CLEAR, STORE or SEND
- RS232 serial port for downloading data to PC
- Operating Temperature: 10–32 °C (50–90 °F)
- Automatic lockup in the event of transducer overload
- Data storage/recall (with date/time stamp) up to 3,000 readings
- Dual Voltage: 110 V or 220 V Real Time Clock
- Smart "Plug and Play" transducers
   NIST® traceable

	TTC2000SYS	TTC2800SYS	
Description	Electronic Manual Torque Tester/Calibrator	Motorized Torque Tester/Calibrator	
Capacity	8 digits ±32,000 counts (16 bit A/D)	8 digits ±32,000 counts (16 bit A/D)	
Accuracy*	±0.25% of reading at 25 °C (with TTC Transducer calibration)	±0.25% of reading at 25 °C (with TTC Transducer calibration)	
Temperature Drift	+0.03 (+0.017)	+0.03 (+0.017)	
Maximum Range Display	2-line x 16 character 5 x 8 dot-matrix LCD used for MAX. Transducer range, Units, Calibration, Date/Time, Statistics, Torque/Force or Torque Limits Set, Data Store/Recall, Printer Set Up	2-line x 16 character 5 x 8 dot-matrix LCD used for MAX. Transducer range, Units, Calibration, Date/Time, Statistics, Torque/Force or Torque Limits Set, Data Store/Recall, Printer Set Up	
Modes	Track, Peak Hold, First Peak, Power Tool	Track, Peak Hold, First Peak, Power Tool	
Operating Temperature	10–32 (50–90)	10–32 (50–90)	
Storage Temperature	-20–50 (-2–122)		
Humidity	Up to 90% Non-Condensing	Up to 90% Non-Condensing	
Power Supply	UL Approved, 120 VAC/220 VAC, 50/60 Hz	120 VAC ±10%, 50/60 Hz @3.14 A (including motor current). (Includes stepdown transformer for 240 VAC operation.)	
Data Storage/ Recall	3,000 Measurements	3,000 Measurements	
Statistical Analysis	Max, Min, Range, Mean, SigmaN, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo	Max, Min, Range, Mean, SigmaN, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo	
Histogram	Lower Set Limit, Upper Set Limit, 10 Divisions	Lower Set Limit, Upper Set Limit, 10 Divisions	
Printer/Computer Serial Output Port			
Computer Serial Com Port	RS232 (True), 300-19.2K Baud (Optional)	RS232 (True), 300-19.2K Baud (Optional)	
Analog Output	+(CW/-(CW) 1.8 V at Transducer Full Range Linearity, ±1% of reading	+(CW/-(CW) 1.8 V at Transducer Full Range Linearity, ±1% of reading	
Loader Control Relays	Two, Normally Open, Form A, Rated 12 DVC @ 1/2 A close contact at 110% CW or CCW or torque/force transducer range contact at 110% CW or CCW or torque/force transducer range.		
Loader Hand Crank	Input torque 8 ft-lb Maximum, Output Torque 2,000 ft-lb Maximum	Input torque 8 ft-lb Maximum, Output Torque 2,000 ft-lb Maximum	
Motorized Loader Modes	<del>-</del>	Manual; Auto Dial; Auto Click	
Motorized Loader Power Supply	_	120 V AC ±10% Hz @ 3.14 A (including motor current); (optional step-down transformer for 240 V AC operation)	

Total Uncertainty: Add 7.5-100% of Range and 8-100% of Range Training programs are available by location (P/N STRN01 to STRN07)

#### **ELECTRONIC TORQUE TESTER AND CALIBRATOR**

### TTC2000/TTC2800 System Components

#### TTC600 Loader

#### **TTC610 Digital Indicator**

• For electronic torque tester and calibrator

#### **TTC800 Motorized Loader** TTC810 Digital Indicator

#### **Electronic Torque Tester and Calibrator** TTC2000 Electronic Torque Tester/Calibrator

- Automatic sensor recognition with TTC series "Smart" transducers
- Range: 5 in-oz-2,000 ft-lb (bidirectional)
  Total uncertainty (10-100% of range): ± 0.25% of indicated torque value
- Alpha-numeric eight-digit display
- Memory to 3,000 values
- Includes low-profile serial printer
- Date and time stamp for stored values
- Statistical analysis performed on stored data
- Programmable manual or automatic options for Clear, Store and Print functions
- Recall and review of stored torque values
- Modes: Track, Peak, First Peak and Power Tool
- Optional angle encoder
- RS232C port is standard
- Analog output is standard
- Full digital circuitry
- Eight torque measurement units: in-oz, in-lb, ft-lb, cNom, dNom, Nom, kg-cm and kg-m
- Automatic lock-up for transducer protection
- NIST® traceable

#### TTC2000SYS Electronic Manual Torque

#### Tester/Calibrator

- TTC2000SYS includes: TTC2000 Monitor, Mechanical Loader and Cabinet, TTC400 4-in-1 Transducer Kit (4 in-lb-250 ft-lb), TTC12 Transducer Kit (60-600 ft-lb), TTC14 Transducer Kit (200-2,000 ft-Lb), TTC5500-1 Extension Arm, TTC5000-1 4-in-1 Transducer Bracket, 2000-SW WedgeLink Software and 2000-50-3 Download Cable
- NIST® traceable

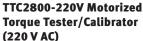






#### TTC2800SYS Motorized **Torque Tester/Calibrator**

- Front Panel Function Keys: SELECT Torque/Force; MODE, UNIT; ZERO TARE; CALIBRATION: DATE/TIME: SET LOW; STORE DATA; RECALL DATA; STÁTISTICS; SEND/ AUTO SEND; AUTO CLEAR; MANUAL CLEAR; ENTER; VALUE increment; VALUE decrement; DIGIT left; DIGIT right
- Model TTC2800SYS includes: TTC2800 TTC Monitor. Motorized Loader, and Cabinet, TTC400 4-in-1 Transducer Kit (4 in-lb-250 ft-lb), TTC5000-1 4-in-1 Transducer Bracket, TTC12 Transducer Kit (60-600 ft-lb), TTC14 Transducer Kit (200-2,000 ft-lb), TTC5500-1 Extension Arm, 2000-SW WedgeLink Software and 2000-50-3 Download Cable



- Front Panel Function Keys: SELECT Torque/Force: MODE, UNIT; ZERO TARE; CALIBRATION; DATE/ TIME; SET HIGH; SET LOW; STORE DATA; RECALL DATA; STATISTICS; SEND/ AUTO SEND; AUTÓ CLEAR; MANUAL CLÉAR; ENTER; VALUE increment; VALUE decrement; DIGIT left; DIGIT right
- NIST® traceable



**TTC400** 

#### **Transducers**

All TTC series transducers include the correct adaptor for the indicated torque range.

Stock No.	Description	Range	Bench Top Mounting Bracket
TTC4***	1/4 Drive Transducer	5–50 in-oz	TTC3421
TTC5	1/4 Drive Transducer	15–200 in-oz	TTC3421
TTC6	1/4 Drive Transducer	4–50 in-lb	TTC3421
TTC65	1/4 Drive Transducer	15–150 in-lb	TTC3421
TTC7	3/8 Drive Transducer	30–400 in-lb	TTC3421
TTC8	3/8 Drive Transducer	80–1,000 in-lb	TTC3421
TTC10	1/2 Drive Transducer	10-125 ft-lb	TTC3422
TTC11	1/2 Drive Transducer	20-250 ft-lb	TTC3422
TTC12	3/4 Drive Transducer	60-600 ft-lb	TTC3422
TTC13	1 Drive Transducer	100-1,000 ft-lb	TTC15002
TTC14	1 Drive Transducer	200–2,000 ft-lb	TTC15002
TTC400**	1/4, 3/8 and 1/2 Drive 4-in-1 Transducer	4 in-lb-250 ft-lb	N/A
TTC5000-1*	4-in-1 Adaptor Plate	_	_
TTC34325	4-in-1 Table Mounting Bracket	_	_

<sup>\*</sup>TTC400 requires the TTC5000-1 Adaptor Plate when used with the TTC600 Manual Loader, TTC800 Motorized Loader and VERSA600LDR2 \*\*Required for TTC400 4-in-1 Torque Transducer to be used on TTC600/TTC800 loaders

<sup>\*\*\*</sup>Accuracy is +/-0.5% of indicated test value from 10% to 100% of indicated torque value





Total Uncertainty: Add 7.5–100% of Range and 8–100% of Range (to some transducers)

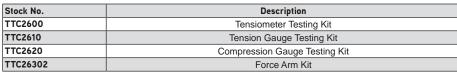
#### **ELECTRONIC TORQUE TESTER AND CALIBRATOR**







- Reaction arms, cables, mounting plates and fixtures are available for testing tensiometers, plus compression and tension gauges. The TTC600 and TTC800 loaders and TTC Series transducers can be configured to deliver compression and tension loads
- The TTC610/TTC810 indicator also provides measurement, display, storage and statistical analysis for force inputs



Force testing feature can only be used with single transducers and CANNOT be used with the TTC400 4-in-1 multi transducer.









#### **TTCCALKIT Calibration Kit**

- Includes TTC3200 Weight Set (#1), TTC500 2-1/2 Calibration Wheel, TTC1510 5 Calibration Wheel, TTC1520 10 Butterfly Calibration Wheel, 2000-226-3 Adaptor (1/2 x 3/8 ), TTC1540 40 Calibration Arm, 390-2-2 4 oz Calibration Weight Tray, TTC3018 oz Calibration Weight Tray, TTC3040 7.5 lb Calibration Weight Tray, TTC3020 15 lb Calibration Weight Tray, TTC3030 50 lb Calibration Weight Tray and TTC25002 Calibration Stand Kit
- · Kit can be used on all TTC Systems

#### Accessories TTC900121 Smart Cable Replacement

#### **Calibration Wheels/Arms**

Use to calibrate any TTC Series transducer. Arms are certified to manufacturer's standards.

Stock No.	Description
TTC500	2-1/2 Calibration Wheel (max 50 in-oz)
TTC1510	5 Calibration Wheel (max 150 in-lb)
TTC1520	10 Butterfly Wheel (max 250 ft-lb)
TTC1530	1/2 and 3/8 Drive 20 Calibration Arm
TTC1540	1-1/4 Drive 40 Calibration Arm
TTC75002	Torque Screwdriver Testing Kit (for 2800 and 2000 Series Systems)

#### Weight Sets

Used to calibrate any TTC Series transducer. All weights are NIST® (NBS) traceable.

Stock No.	Description
TTC3200	No. 1 Weight Set (for all transducers)
TTC3210	No. 2 Weight Set (200 in-oz-600 ft-lb)
TTC3220	No. 3 Weight Set (600–2,000 ft-lb)

#### Weight Hangers/Travs

Used to calibrate any TTC series transducer. Weight trays are certified as to weight.

Stock No.	Description
390-2-2	Weight Hanger (4 oz)
TTC301	Weight Hanger (1/2 lb)
TTC3040	Weight Tray (7.5 lb)
TTC3020	Weight Tray (15 lb)
TTC3030	Weight Tray (50 lb)



### Joint Rate Simulator Adaptors

- Use with torque tester when testing nonimpacting power tools
- Square drive adaptor is placed on top of square drive of the torque tester and tightened with a set screw
- Adaptor bit is inserted into the power tool and mated to the top of the joint adaptor
- By stacking the Belleville washers in set patterns, the joint rate adaptor can simulate soft, medium or hard joints

Stock No.	Square Drive, inches	Capacity, in-lb	Adaptor Bit	Load Screw
QC1JRS50	1/4	50	1/4 Hex x 3/16 Hex	1/4 x 28 x 1
QC2JRS400	3/8	400	3/8 Square Internal x 3/8 Hex	7/16 x 20 x 1.5
QC2JRS1000	3/8	1,000	3/8 Square Internal x 1/2 Hex	5/8 x 18 x 1.5

#### Accessories

Accessorie	<b>3</b>	
Stock No.	Description	
TTC3421	Tranducer Mount (5-50 in-oz to 80-1,000 in-lb)	
TTC3422	Transducer Mount (10-125 ft-lb to 60-600 ft-lb)	
2000-150-03	Transducer Mount (60-600 ft-lb to 200-2,000 ft-lb)	
TTC75006	Torque Screwdriver Testing Kit (for VERSATEST600 Loader System)	
260-27	1/4 Hex x 1/4 Square Socket Adaptor	
342-40	Female 1/4 Square x 1/4 Square Socket Adaptor	
342-41-1	Female 1/4 Square x 1/4 Square Socket Adaptor	
342-41-1S	Female 1/4 Square x 3/8 Square Socket Adaptor	
342-41-2	Female 3/8 Square x 3/8 Square Socket Adaptor	
65-26-2	Female 1/2 Square x 3/8 Square Socket Adaptor	
65-78-1	Female 1/2 Square x 3/4 Square Socket Adaptor	
65-78-2	Female 3/4 Square x 3/4 Square Socket Adaptor	
75-25-1	Female 1 Square x 3/4 Square Socket Adaptor	
75-20	Female 1 Square x 1 Square Socket Adaptor	
2000-152-3	1/2 Male x 3/8 Female Square Drive Reducer	
2000-226-3	3/4 Male x 1/2 Female Square Drive Reducer	
2000-226-2	1 Male x 3/4 Female Square Drive Reducer	
2000-0154-18	1-1/4 Male x 3/4 Female Square Drive Reducer	
TTC25002	Complete Calibration Stand Kit (Including Adaptors)	
TTC75002	Torque Screwdriver Testing Kit (for 2800 and 2000 Series Systems)	
TTC5500-1	Extension Arm (For 2000 and 2800 Series Loaders)	
QCDTC3250	Electronic Torque Digital Checker—1/2 and 3/8 (25–250 ft-lb)	
TCR175	Torque Comparator (175 ft-lb Max)	
TCR600	Torque Comparator (600 ft-lb Max)	
TTC503	USB Download Cable for SureTest and TTC systems	



#### **Torque Digital Checker**

#### QCDTC3250 Electronic Torque Digital Checker-1/2 and 3/8 (25-250 ft-lb)

- Easy method to check a 1/2 or 3/8 drive torque wrench
- Highly Accurate: +/- 1% CW and +/- 1% CCW of indicated value
- · Large, easy-to-read backlit LCD screen
- Three measurement modes: ft-lb, in-lb, N• m
- Three primary torque checking modes—Track, Peak Hold, First Peak
- Integrated exercise adaptor on mounting plate to "break in" mechanical torque wrenches before testing
- Includes GAF2A 3/8 adaptor with storage pocket for convenience when testing 3/8 drive torque wrenches
- Integrated exercise adaptor on mounting plate (allows user to break-in for accurate results per ASME® B107-300 standard)
- Battery powered by 3 AA alkaline batteries—optional AC adaptor available (DTS8269)
- Adjustable shut-off feature
- CE approved
- Includes Certificate of Calibration

#### TCR175 Torque Comparator (175 ft-lb Max)

- Determines if a torque wrench requires calibration to maintain proper application of torque
- 1/2 female square drive input and 175 ft-lb capacity with 5 ft-lb graduations and 230 N•m capacity with 10 N•m increments is a perfect fit for the most popular torque wrenches
- Integrated exercise adaptor makes break-in process in simple, providing the most accurate results (as per B107-300 standard)
- 2% accurate within ±2% of the reading from 20% of full scale to full scale clockwise and counterclockwise
- Able to check a 3/8 drive torque wrench by using an A2A or GAF2A adaptor
- Does not include Certificate of Calibration

#### TCR175C Torque Comparator (Certificate of Calibration)

#### TCR600 Torque Comparator (600 ft-lb Max)

- Similar to TCR175 except for:
- 3/4 female square drive input and 600 ft-lb capacity with 10 ft-lb graduations and 800 N•m capacity with 20 N•m increments
- Compact design with 1/4 steel mounting plate allows for convenient installation in any direction: horizontally on a bench, vertically on a wall, or on any other sturdy, flat surface
- Use on most 3/4 drive torque wrenches
- Does not include Certificate of Calibration

#### TCR600C Torque Comparator (Certificate of Calibration)







- Do not exceed rated torque
- Periodic recalibration checks are necessary to maintain and assure torque tester accuracy
   Read safety precautions on pages W1 to W4



**QCDTC3250** 



TCR175C



TCR600C





#### **Pneumatic Torque Wrenches**

#### PTM Features:

- Twin motor technology allows the PTM to be both lightweight and fast
- Compact and powerful, allowing excellent access to a variety of treaded fasteners
- The secondary trigger ensures hands are away from pinch points during operation
- Run-down speeds up to 224 RPM (for PTM370)
- A wide variety of reaction fixtures are available, making this an extremely versatile tool
- These are nonimpacting tools with low vibration levels
- Operate at noise levels below 85 dB (under load)
- Gearbox rotates independently from the handle so reaction forces are never transferred back to the operator
- All tools are supplied with a Certificate of Calibration and torque vs. pressure chart
- PTM Series offers a wide range of torque output, from 74-4,500 ft-lb
- Accuracy of ±5%
- Includes case, cranked reaction fixture, tool hanger, secondary handle and male quick connect

Stock No.	Description	Torque Range (ft-lb)	Torque Range (N•m)	Square Drive Size
PTM370	Pneumatic Torque Wrench	74–370	100–500	3/4
PTM590	Pneumatic Torque Wrench	118–590	160–800	3/4
PTM740	Pneumatic Torque Wrench	147–740	200-1,000	3/4
PTM1000	Pneumatic Torque Wrench	200–1,000	270–1,350	1
PTM1475	Pneumatic Torque Wrench	295–1,475	400–2,000	1
PTM1990	Pneumatic Torque Wrench	400–1,990	540–2700	1
PTM2950	Pneumatic Torque Wrench	590–2,950	800-4,000	1-1/2
PTM3300	Pneumatic Torque Wrench	660–3,320	900–4,500	1-1/2
PTM4400	Pneumatic Torque Wrench	885–4,425	1200-6,000	1-1/2
WTE4G72L9	9 Wheel Torque Extension (for PTM740)	_	1,000 (1,350)	1











PTQ1WTCPD562

PTQ1WTCUP482

PTQ1WTCUPD30

PTQ1WTCPBWD1

PTQ1WTCPBWD2

### **Pneumatic Torque Wrench Wheel Torque Accessories**

 Wheel extension and cup combine to create a reaction point when torquing lug nuts on trucks and heavy equipment

Stock No.	Description	Use with Snap-on Sockets
PTQ1WTCUP342	Standard Cup	IM322A, IM342A
PTQ1WTCUP362	Standard Cup	IM362
PTQ1WTCUP482	Standard Cup	IM482, IMM382
PTQ1WTCUP542	Standard Cup	IM502, IM522, IM542
PTQ1WTCUP562	Standard Cup	IM562, IMM412
PTQ1WTCPD362	Deep Well Cup	SIM322, SIM342, SIM362
PTQ1WTCPD562	Deep Well Cup	SIM462, SIM482, SIM522, SIM562
PTQ1WTCUPD30	Deep Well Cup	SIMM302
PTQ1WTCUPD35	Deep Well Cup	SIM382, SIM402, SIM422, SIM442, SIMM302, SIMM322 SIMM332, SIMM352
PTQ1WTCPBWD1	Deep Well Cup	BW626A, BWD482
PTQ1WTCPBWD2	Deep Well Cup	BWDM412



# Pneumatic Torque Filter/Regulators PTMFRL Filter/Regulator Unit

- Filter and lubricator in one unit
- Large pressure gauge allows the operator to easily select the appropriate pressure
- Adjustable lubricator provides the proper amount of lubrication for PTM Series of tools