



ATECH1FS240



ATECH1FQS240



ATECH2FM100



ATECH2CS240

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.

TechAngle® Models (2% Accuracy)

Specifications	ATECH1FS240	ATECH1FQS240	ATECH2FM100	ATECH2CS240
Square Drive, inches	1/4	1/4	3/8	3/8
Head Type	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head
Gear Teeth	72	72	80	72
Gear Action	5°	5°	5°	5°
Range, in-lb	12–240	12–240	60–1,200	12–240
Range, ft-lb	1–20	1–20	5–100	1–20
Range, N•m	1.36–27.12	1.36–27.12	7–135	1.5–30
Head Depth, inches	7/16	7/16	1-1/16	29/32
Head Width, inches	7/8	7/8	1-3/16	7/8
Weight (without batteries), lb (kg)	.93 (.42)	.93 (.42)	1.6 (.73)	.93 (.42)
Battery, Type (qty)	Lithium Metal (1)	Lithium Metal (1)	Lithium Metal (1)	Lithium Metal (1)
Length, inches	11.6	11.6	15.4	11.5
Storage Case	PBATECH240M	PBATECH240M	PBQD2	PBQD1

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

Colors Available



ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS.

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 needed to maintain accuracy.
- Read Safety Precautions on pages W1–W4

TECHANGLE® TORQUE WRENCHES



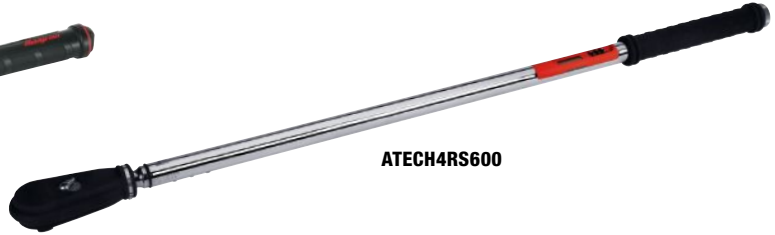
ATECH2FQ125B



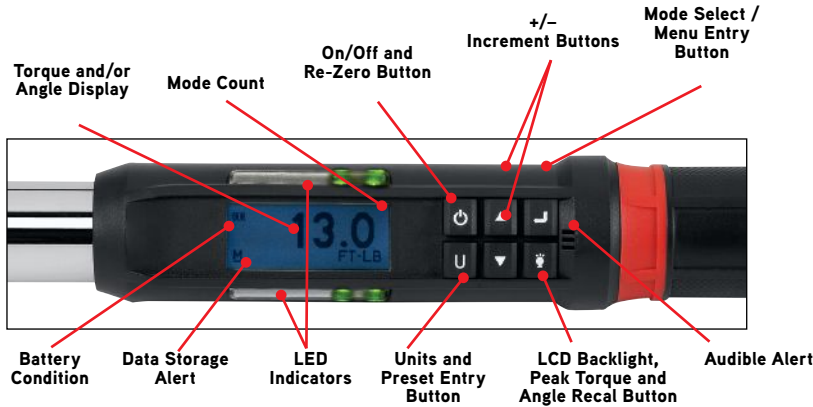
ATECH3FS250



ATECH3FR250B



ATECH4RS600



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

Specifications	ATECH2FQ125B	ATECH3FS250	ATECH3FR250B	ATECH4RS600*
Square Drive, inches	3/8	1/2	1/2	3/4
Head Type	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Fixed Head
Gear Teeth	80	80	80	32
Gear Action	4.5°	4.5°	4.5°	11°
Range, in-lb	60–1,500	150–3,000	150–3,000	360–7,200
Range, ft-lb	5–125	12.5–250	12.5–250	30–600
Range, N•m	6.78–169.48	16.9–339	16.9–339	40.7–813.5
Head Depth, inches	9/16	3/4	3/4	1-1/4
Head Width, inches	1-1/4	1-5/8	1-5/8	2-1/2
Weight (without batteries), lb (kg)	2.2 (0.9)	4.35 (1.97)	3.75 (1.68)	10.95 (4.96)
Battery, Type (qty)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)
Length, inches	17-25/32	26.7	26.6	48.7
Storage Case	PBATECH100B	PBATECH250B	PBATECH250B	PBATECH4

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

Colors Available



ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS.

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.

CONTROLTECH® INDUSTRIAL TORQUE WRENCHES

TORQUE



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)
- 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
- 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 job 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 for durability and reduced weight
- Torque Accuracy: ±2%CW, ±3CCW
- Angle Accuracy: ±1% of reading, ±1° @ Angular Velocity >10°/Sec. < 180°/Sec. +/- of fixture
- 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

- Built-in calibration factor for different head lengths (patent pending)

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)
CTECH1MR100	Sealed Fixed Ratchet	1/4	72	5°	5–100	0.42–8.33	0.57–11.30	—	0.9 (0.41)	10.9 (277)
CTECHL1R240A	Sealed Fixed Ratchet	1/4	72	5°	12–240	1.0–20.0	1.4–27.2	—	1.2 (0.54)	14.1 (358)
CTECH4R600A†	Sealed Fixed Ratchet	3/4	32	11°	360–7,200	30–600	40.7–813.5	—	10.5 (4.8)	48.6 (1,234)
CTECH1FR240A*	Sealed Flex Ratchet	1/4	72	5°	12–240	1.0–20.0	1.4–27.2	—	2.0 (0.91)	14.1 (358)
CTECH2FR100A	Sealed Flex Ratchet	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 Ratchet	1/2	80	4.5°	150–3,000	12.5–250	16.9–339	—	4.5 (2.10)	26.7 (678)
CTECH1R240A*	Fixed Ratchet	1/4	72	5°	12–240	1.0–20.0	1.4–27.2	—	2.0 (0.91)	14.1 (358)
CTECH1MR240	Fixed Ratchet	1/4	72	5°	12–240	1–20	1.36–27.12	—	0.93 (0.42)	11.6 (295)
CTECH2MR100	Fixed Ratchet	3/8	72	5°	5–100	0.42–8.33	0.57–11.30	—	0.9 (0.41)	10.9 (277)
CTECH2MR1200	Fixed Ratchet	3/8	80	4.5°	60–1,200	5–100	6.8–135.6	—	1.6 (7.3)	15.4 (391)
CTECH2MR240	Fixed Ratchet	3/8	80	4.5°	12–240	1–20	1.36–27.12	—	0.93 (0.42)	11.6 (295)
CTECH3R250A	Fixed Ratchet	1/2	80	4.5°	150–3,000	12.5–250	16.8–339	—	—	—
CTECHL1240A	Fixed Head	1/4	—	—	12–240	1.0–20.0	1.4–27.2	—	1.1 (0.49)	12.4 (315)
CTECHYM1200	Interchangeable	—	—	—	60–1,200	5–100	6.8–135.6	Y (0.560")	1.4 (0.63)	13.75 (349)
CTECHL1J240A	Interchangeable	—	—	—	12–240	1.0–20.0	1.4–27.2	J (0.425")	1.0 (0.45)	12.5 (318)
CTECH1JM240	Interchangeable	—	—	—	12–240	1–20	1.36–27.12	J (0.425")	0.80 (0.36) w/battery, excluding case	10.15 (258)
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	—	2.7 (1.2)	17.2 (437)
CTECH3X250A	Interchangeable	—	—	—	150–3,000	12.5–250	16.9–339	X (0.735")	—	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)
CTECHAN135A	IZO/ISO (Interchangeable)	—	—	—	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 (0.9) w/o head, w/batteries	13.3 (338) w/o head
CTECHBN340A	IZO/ISO (Interchangeable)	—	—	—	150–3,009	12.5–250.8	17.0–340.0	14 x 18 mm	3.75 (1.7) w/o head, w/batteries	23.9 (607) w/o head

*Uses Ratchet Service Kit RKRT72A. Includes three AAA Lithium batteries.
†Uses Ratchet Service Kit RKRCQ4. Includes three AA Lithium batteries.

***Uses Ratchet Service Kit RKR80A. Includes three AA Lithium batteries.
Torque parameters comply with ISO® 6789:2003 and ASME® B107:300-2010 (B107.29)



- Always pull wrench in direction of fixed jaw.
- Do not exceed rated torque
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Read Safety Precautions on pages W1–W4

TECHWRENCH® TORQUE WRENCHES



TECH2R100



TECH4R600

Standard Models/2% Accuracy/Fixed Head

- Manual preset, automatic track and peak hold modes
- Torque units conversion: N•m, 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	72	80	80	32
Gear Action	5°	4.5°	4.5°	11°
Range, in-lb	24–240	60–1,200	300–3,000	720–7,200
Range, ft-lb	1–20	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)	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)
Battery, Type (qty)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)	AA Alkaline (3)

CE

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
- Torque accuracy interchangeable head models: 4% CW, 6% CCW from 20–100% F.S. (TECH Y only)
- Sealed flex head ratchets move ±15°



TECH3FR250

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	72	80	80
Gear Action	5°	4.5°	4.5°
Range, in-lb	24–240	60–1,200	300–3,000
Range, ft-lb	1–20	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)
Storage Case	PBTECH2	PBTECH2	PBTECH3



TECH2Y100



TECH4Z600

Standard Models/4% Accuracy/Interchangeable Head

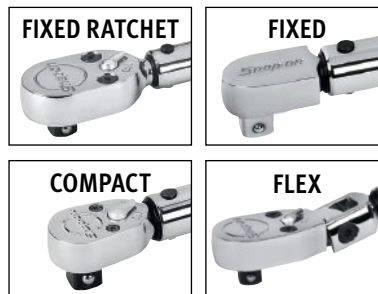
Specifications	TECH1J240	TECH2Y100	TECH3X250	TECH4Z600
Head Type	Interchangeable	Interchangeable	Interchangeable	Interchangeable
Range, in-lb	24–240	60–1,200	300–3,000	720–7,200
Range, ft-lb	1–20	5–100	25–250	60–600
Range, N•m	27.1–27.12	6.8–135	34–339	81–813
Shank (dia.)	J (0.425")	Y (0.560")	X (0.735")	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.

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/QE Series Torque Wrenches are accurate to ±4% clockwise and ±6% counterclockwise from 20–100% of full scale
- **LONG LIFE RATCHET HEAD:** QD/QE 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 FRICTION "HOOR 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
3/8	GQT2R1000NP	Fixed Ratchet	32	11°	200 in-lb	1,000 in-lb	5 in-lb	14	1.26	1.07	WPB50A
3/8	GQT2R200NP	Fixed Ratchet	32	11°	40 in-lb	200 in-lb	1 in-lb	8.97	.88	.88	WPB7
1/4	QD1R200A	Fixed Ratchet	36	10°	40 in-lb	200 in-lb	1 in-lb	11-1/16	7/8	7/16	PBQD1
1/4	QD1200A	Fixed	—	—	40 in-lb	200 in-lb	1 in-lb	10-15/16	5/8	13/16	PBQD1
1/4	QD1R50A	Fixed Ratchet	36	10°	10 in-lb	50 in-lb	.5 in-lb	9-7/8	7/8	7/16	PBQD1
1/4	QD150A	Fixed	—	—	10 in-lb	50 in-lb	.5 in-lb	9-3/4	5/8	13/16	PBQD1
3/8	QD21000A	Fixed	—	—	200 in-lb	1,000 in-lb	5 in-lb	14-9/16	1	1-3/16	PBQD2
3/8	QD2R200A	Compact Ratchet	36	10°	40 in-lb	200 in-lb	1 in-lb	11-1/16	7/8	7/16	PBQD1
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
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
1/2	QD32500A	Fixed	—	—	500 in-lb	2,500 in-lb	10 in-lb	18-1/8	1	1-1/4	PBQD3
1/4	QE1R200	Fixed Ratchet	80	10°	40 in-lb	200 in-lb	1 in-lb	11-1/16	7/8	7/16	PBQD1
3/8	QE2R100	Fixed Ratchet	80	4.5°	20 ft-lb	100 ft-lb	.5 ft-lb	15-9/16	1-5/32	9/16	PBQD2
3/8	QE2FR75	Flex Ratchet	80	10°	5 ft-lb	75 ft-lb	.5 ft-lb	15-3/4	1-5/32	9/16	PBQD2
1/2	QE3R250	Fixed Ratchet	80	10°	50 ft-lb	250 ft-lb	1 ft-lb	24-3/16	1-5/8	3/4	PBQD3



- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is needed to maintain accuracy
- Read Safety Precautions on pages W1–W4

ADJUSTABLE CLICK-TYPE



QD3R250A



GQT3R250NP



QD3FR250A

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

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Head Depth, inches	Head Width, inches	Range, minimum	Range, maximum	Increments	Length, inches	Storage Case
1/2	GQT3R250NP	Fixed Ratchet	32	11°	1.42	1.74	50 ft-lb	250 ft-lb	1	23.75	WPB5
3/8	QD2R100A	Fixed Ratchet	80	4.5°	9/16	1-5/32	20 ft-lb	100 ft-lb	.5 ft-lb	15-9/16	PBQD2
3/8	QD2100A	Fixed	—	—	1-3/16	1	20 ft-lb	100 ft-lb	.5 ft-lb	14-9/16	PBQD2
3/8	QD2R75A	Fixed	80	4.5°	9/16	1-5/32	10 ft-lb	75 ft-lb	.5 ft-lb	15-3/4	PBQD2
3/8	QD2FR75B	Flex Head	80	4.5°	9/16	1-5/32	5 ft-lb	75 ft-lb	.5 ft-lb	15-3/4	PBQD2
3/8	QD275A	Fixed	—	—	1-3/16	1	15 ft-lb	75 ft-lb	.5 ft-lb	14-9/16	PBQD2
1/2	QD3150A	Fixed	—	—	1-1/4	1	30 ft-lb	150 ft-lb	1 ft-lb	18	PBQD3
1/2	QD3R250A	Fixed Ratchet	80	4.5°	3/4	1-5/8	50 ft-lb	250 ft-lb	1 ft-lb	24-3/16	PBQD3
1/2	QD3FR250A*	Flex Head	80	4.5°	3/4	1-5/8	50 ft-lb	250 ft-lb	1 ft-lb	25-3/4	PBATECH300B
1/2	QD3250A	Fixed	—	—	1-1/4	1	50 ft-lb	250 ft-lb	1 ft-lb	23-3/32	PBQD3
3/4	QD4R400A	Fixed Ratchet	32	11°	1-1/4	2-1/2	75 ft-lb	400 ft-lb	2.5 ft-lb	35-3/4	PBQC4
3/4	QD4400A	Fixed	—	—	1-1/2	1-1/2	75 ft-lb	400 ft-lb	2.5 ft-lb	33-3/4	PBQC4
3/4	QD4R600A	Fixed Ratchet	32	11°	1-1/4	2-1/2	100 ft-lb	600 ft-lb	5 ft-lb	42-3/4	PBQC4
3/4	QD4600A	Fixed	—	—	1-1/2	1-1/2	120 ft-lb	600 ft-lb	5 ft-lb	40-3/4	PBQC4
1	QD5R1000A	Fixed Ratchet	30	12°	1-1/2	3-1/8	200 ft-lb	1,000 ft-lb	5 ft-lb	71	PBQC5

*Clockwise-only calibration



QD3RM30A

Metric Torque Instruments (kg m, kg cm)

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
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
1/2	QD3RM30A	Fixed Ratchet	80	4.5°	6 kg•m	30 kg•m	.2 kg•m	19	1-5/8	3/4	PBQD3

"A" suffix models feature roll-marked tubes and 80 tooth gears



QD1RN25B



QD3RN200A



QD4RN800A

Newton Meter Torque Wrenches/±4% Accuracy

Square Drive, inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Head Depth, inches	Head Width, inches	Range, minimum	Range, maximum	Increments	Length, inches	Storage Case
1/4	QD1RN25B	Fixed Ratchet	36	10°	7/16	7/8	5 N•m	25 N•m	.1 N•m	11-3/4	PBQD1
1/4	QD1RN6B	Fixed Ratchet	36	10°	7/16	7/8	1 N•m	6 N•m	.05 N•m	9-7/8	PBQD1
3/8	QD2RN100A	Fixed Ratchet	80	4.5°	9/16	1-5/32	20 N•m	100 N•m	.5 N•m	15-9/16	PBQD2
3/8	QD2RN25B	Compact Ratchet	36	10°	7/16	7/8	5 N•m	25 N•m	.1 N•m	11-3/4	PBQD2
3/8	QD2RN50A	Fixed Ratchet	80	4.5°	9/16	1-5/32	10 N•m	50 N•m	.5 N•m	15-9/16	PBQD2
1/2	QD3RN200A	Fixed Ratchet	80	4.5°	3/4	1-5/8	40 N•m	200 N•m	2 N•m	19	PBQD3
1/2	QD3RN350A	Fixed Ratchet	80	4.5°	3/4	1-5/8	70 N•m	350 N•m	2 N•m	24-3/16	PBQD3
3/4	QD4RN800A	Fixed Ratchet	32	11°	1-1/4	2-1/2	150 N•m	800 N•m	5 N•m	42-3/4	PBQC4
1	QD5RN1500A	Fixed Ratchet	30	12°	1-1/2	3-1/8	300 N•m	1,500 N•m	10 N•m	68.4	S10-117-6

"A" suffix models feature roll-marked tubes



TQFR100C



TQR250E



TQFR250E



TQR600E

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

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
- 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
- Wrenches are non-reversible
- CE: EU—GB, FR, ES, DE

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

†Available in red only

Colors Available



ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS.



- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Read Safety Precautions on pages W1–W4

TORQOMETER® TORQUE WRENCHES



TE50FUAC



TE175LC

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

48" Tubular Extension Handle

- Tubular extension handle is packed with the following torque wrenches: TE803, TE803FU, TE803L, TE1003, TE1003FU, TE1003L, TESI1360, TESI1360FU, TESI1360L, TER1003, TER1003FU, TER1003L, TEC803, TEC803FU, TEC803L, TEC1003FU and TEC1003L

Square Drive, inches	Basic Models Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Range	Increments	Length, inches	Width, inches (mm)	Head Depth, inches	Storage Case
1/4	GTE6A	—	—	75 in-lb	1 in-lb	9-29/32	2-11/16 (68)	—	PB9
1/4	TE1AC	TE1FUAC	—	15 in-lb	1/4 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
1/4	TE3AC	TE3FUAC	—	30 in-lb	1/2 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
1/4	TE6AC	TE6FUAC	—	75 in-lb	1 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE12AC	TE12FUAC	TE12LAC	150 in-lb	2-1/2 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	—	TE12FFUAC	—	12 ft-lb	1/2 ft-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE25FAC	TE25FUAC	TE25LAC	25 ft-lb	1/2 ft-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE25AC	TE25FFUAC	—	300 in-lb	5 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE50FAC	TE50FUAC	TE50LAC	50 ft-lb	1 ft-lb	12-1/2	2-11/16 (68)	1-1/4	PB9
3/8	TE50AC	TE50FFUAC	TE50FLAC	600 in-lb	10 in-lb	12-1/2	2-11/16 (68)	1-1/4	PB9
1/2	TE51C	—	TE51LC	50 ft-lb	1 ft-lb	15	2-11/16 (68)	1-5/16	—
1/2	TE100C	TE100FUC	—	100 ft-lb	1 ft-lb	16	2-3/4 (70)	1-3/8	PBR5
1/2	TE175C	TE175FUC	TE175LC	175 ft-lb	2-1/2 ft-lb	18-3/4	2-3/4 (70)	1-3/8	PBR5
1/2	TE250C	TE250FUC	TE250LC	250 ft-lb	—	23-3/4	2-3/4 (70)	1-3/8	PB8A
1/2	—	TE51FUC	—	600 in-lb	10 in-lb	15	2-11/16 (68)	1-5/16	—
1/2	—	TE51FFUC	—	50 ft-lb	1 ft-lb	15	2-11/16 (68)	1-5/16	—
3/4	TE352AC	TE352FUAC	TE352LAC	350 ft-lb	5 ft-lb	29-7/8	3-1/4 (83)	—	—
3/4	TE602AC	TE602FUAC	TE602LAC	600 ft-lb	10 ft-lb	40-7/8	3-1/4 (83)	—	PB39
1	TE1503C	TE1503FUC	TE1503LC	—	25 ft-lb	80	4-13/32 (112)	—	—
1	TE1003C	TE1003FUC	TE1003LC	—	10 ft-lb	66-13/16	3-9/16 (91)	—	—
1	TE2003C	TE2003FUC	—	—	25 ft-lb	80	4-13/32 (112)	—	—
1	TE803C	—	TE803LC	800 ft-lb	10 ft-lb	66-13/16	3-9/16 (91)	—	—
1-1/2	—	TE2005FUC	—	—	25 ft-lb	80	3-9/16 (91)	—	—
1-1/2	TE3005C	—	—	—	50 ft-lb	—	5-1/2 (140)	—	—

*Does not include square drive dimension.

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.



TE50FUA



TE175L

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 (68)	1-1/4	PB9
1/4	TE3A	TE3FUA	—	30 in-lb	1/2 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
1/4	TE6A	TE6FUA	—	75 in-lb	1 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE12A	TE12FUA	TE12LA	150 in-lb	2-1/2 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE25A	TE25FUA	TE25LA	300 in-lb	5 in-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE50A	TE50FUA	TE50LA	600 in-lb	10 in-lb	12-1/2	2-11/16 (68)	1-1/4	PB9
3/8	TE12FA	TE12FFUA	TE12FLA	12 ft-lb	1/2 ft-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE25FA	TE25FFUA	TE25FLA	25 ft-lb	1/2 ft-lb	9-29/32	2-11/16 (68)	1-1/4	PB9
3/8	TE50FA	TE50FFUA	TE50FLA	50 ft-lb	1 ft-lb	12-1/2	2-11/16 (68)	1-1/4	PB9
1/2	TE51	TE51FU	TE51L	600 in-lb	10 in-lb	15	2-11/16 (68)	1-5/16	—
1/2	TE51F	TE51FFU	TE51FL	50 ft-lb	1 ft-lb	15	2-11/16 (68)	1-5/16	—
1/2	TE100	TE100FU	TE100L	100 ft-lb	1 ft-lb	16	2-3/4 (70)	1-3/8	PBR5
1/2	TE175	TE175FU	TE175L	175 ft-lb	2-1/2 ft-lb	18-3/4	2-3/4 (70)	1-3/8	PBR5
1/2	TE250	TE250FU	TE250L	250 ft-lb	5 ft-lb	23-3/4	2-3/4 (70)	1-3/8	PB8A
3/4	TE352A	TE352FUA	TE352LA	350 ft-lb	5 ft-lb	29-7/8	3-1/4 (83)	1-25/32	—
3/4	TE602A	TE602FUA	TE602LA	600 ft-lb	10 ft-lb	40-7/8	3-1/4 (83)	1-25/32	PB39
1	TE803**	TE803FU**	TE803L**	800 ft-lb	10 ft-lb	66-13/16	3-9/16 (91)	2-1/32	—
1	TE1003†	TE1003FU**	TE1003L**	1,000 ft-lb	10 ft-lb	66-13/16	3-9/16 (91)	2-1/32	—
1	TE1503†	TE1503FU†	TE1503L†	1,500 ft-lb	25 ft-lb	80	4-13/32 (112)	2-1/8	—
1	TE2003†	TE2003FU†	TE2003L†	2,000 ft-lb	25 ft-lb	80	4-13/32 (112)	2-1/8	—
1-1/2	TE2005†	TE2005FU†	TE2005L†	2,000 ft-lb	25 ft-lb	80	3-9/16 (91)	2-3/8	—
1-1/2	TE3005	TE3005FU**	TE3005L**	3,000 ft-lb	50 ft-lb	—	5-1/2 (140)	2-13/16	—

*Does not include square drive dimension.

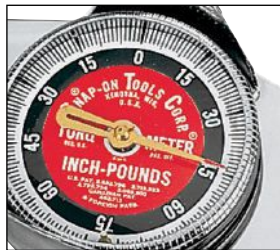
†Includes separately packed 93TQPA 5' tubular extension handle

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 GTE models feature a black oxide finish.

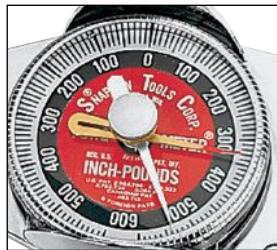
**Includes separately packed 92TQPA 4' tubular extension handle.

TE3005 includes 94TQPA 10' extension handle



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



WARNING



- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Do not use "cheater bars" on handles.
- Pull, do not push on handle.
- Read Safety Precautions on pages W1–W4

TORQOMETER® TORQUE WRENCHES



TESI75C



TESI75L

Newton Meter Reading/Standard 2% Accuracy

Square Drive, inches	Stock No.	Follow-Up Models Stock No.	Light Signal Models Stock No.	Range, N•m	Increments, N•m	Length, inches	Width, inches (mm)	Head Depth*, inches
1/4	—	TESI5FU	TESI5L	5	.2	9-29/32	2-11/16 (68)	1-1/4
1/4	TESI10	TESI10FU	TESI10L	10	.5	9-29/32	2-11/16 (68)	1-1/4
1/2	TESI125	TESI125FU	TESI125L	125	5	16	2-11/16 (68)	1-3/8
3/8	TESI20	TESI20FU	TESI20L	20	.5	9-29/32	2-11/16 (68)	1-1/4
3/8	TESI30	TESI30FU	TESI30L	30	1	9-29/32	2-11/16 (68)	1-1/4
3/8	TESI60C	TESI60FU	TESI60L	60	2	12-1/2	2-11/16 (68)	1-1/4
3/8	TESI70	TESI70FU	TESI70L	70	2	12-1/2	2-11/16 (68)	1-1/4
3/8	TESI75	TESI75FU	TESI75L	75	1	12-1/2	2-11/16 (68)	1-1/4
1/2	TESI200	TESI200FU	TESI200L	200	5	18-3/4	2-3/4 (70)	1-3/8
1/2	TESI250	TESI250FU	TESI250L	250	5	18-3/4	2-3/4 (70)	1-3/8
3/4	TESI500A	TESI500FUA	TESI500LA	500	10	29-7/8	3-1/4 (83)	1-25/32
3/4	TESI800A	TESI800FUA	TESI800LA	800	20	40-7/8	3-1/4 (83)	1-25/32
1	TESI1360**	TESI1360FU**	TESI1360L**	1,360	20	66-13/16	3-9/16 (91)	2-1/32
1	TESI2803	TESI2803FU†	TESI2803L†	2,800	50	80	4-13/32 (112)	2-1/8
1-1/2	TESI2805†	TESI2805FU†	—	2,800	50	80	4-25/32 (121)	2-3/8
1-1/2	—	TESI4000FU	TESI4000L	4,000	100	14 (356)	5-1/2 (140)	2-13/16

*Does not include square drive dimension.

†Includes separately packed 93TQPA 5" tubular extension handle.

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

**Includes separately packed 92TQPA 4" tubular extension handle.

Wrenches in chart do not include certificate of calibration.



TER175



TER175L

Combination US/Newton Meter Reading/Precise 1% Accuracy

Square Drive, inches	Stock No.	Follow-Up Models Stock No.	Light Signal Models Stock No.	Range, N•m	Increments, N•m	US Range	US Increments	Length, inches	Width, inches (mm)	Head Depth*, inches
1/4	TER1A	TER1FUA	TER1LA	1.7	.05	15 in-lb	.5 in-lb	9-29/32	2-11/16 (68)	1-1/4
1/4	TER3A	TER3FUA	TER3LA	3.5	0.1	30 in-lb	1 in-lb	9-29/32	2-11/16 (68)	1-1/4
1/4	TER6A	TER6FUA	—	8.4	0.2	75 in-lb	1 in-lb	9-29/32	2-11/16 (68)	1-1/4
3/8	TER12A	TER12FUA	TER12LA	17	.5	150 in-lb	5 in-lb	9-29/32	2-11/16 (68)	1-1/4
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 (68)	1-1/4
3/8	TER50A	TER50FUA	TER50LA	60	1	600 in-lb	20 in-lb	12-1/2	2-11/16 (68)	1-1/4
1/2	TER51	TER51FU	TER51L	60	1	600 in-lb	20 in-lb	15	2-11/16 (68)	1-5/16
1/2	TER100	TER100FU	TER100L	140	5	100 ft-lb	2 ft-lb	16	2-3/4 (70)	1-3/8
1/2	TER175	TER175FU	TER175L	230	10	175 ft-lb	5 ft-lb	18-3/4	2-3/4 (70)	1-3/8
3/4	TER352A	TER352FUA	TER352LA	480	10	350 ft-lb	5 ft-lb	29-7/8	3-1/4 (83)	1-3/8
3/4	TER602A	TER602FUA	TER602LA	800	20	600 ft-lb	20 ft-lb	40-7/8	3-1/4 (83)	1-25/32
1	TER1003**	—	TER1003L**	1,360	20	1,000 ft-lb	20 ft-lb	66-13/16	3-9/16 (91)	2-1/32

*Does not include square drive dimension.

Wrenches in chart do not include certificate of calibration.

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.

**Includes separately packed 92TQPA 4" tubular extension handle. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.

TORQOMETER® TORQUE WRENCHES

TORQUE



TEX602TLA



85TQP



TEX2003TFU

US Reading/Standard 2% Accuracy

Optional "T" Bars/
Extension Handles

Input Drive Female Square, inches	Output Drive Male Square, inches	Follow-Up Models Stock No.	Light Signal Models Stock No.	US Range, ft-lb	US Increments, ft-lb	Length, inches	Width, inches	Head Depth*, inches	Increments, ft-lb	"T" Bar	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	TEX3005TL	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.



TEC175



TEC175L

Combination US/Metric Reading/Standard 2% Accuracy

Square Drive, inches	Stock No.	Follow-Up Models Stock No.	Light Signal Models Stock No.	Metric Range, kg•m	Metric Increments, kg•m	US Range	US Increments	Length, inches	Width, inches (mm)	Head Depth*, inches
1/4	TEC1A	TEC1FUA	—	16	1	15 in-lb	.5 in-lb	1-1/4	2-11/16 (68)	1-1/4
1/4	TEC3A	TEC3FUA	—	35	1	30 in-lb	1 in-lb	9-29/32	2-11/16 (68)	1-1/4
1/4	TEC6A	TEC6FUA	—	90	2.5	75 in-lb	1 in-lb	9-29/32	2-11/16 (68)	1-1/4
3/8	TEC12A	TEC12FUA	TEC12LA	175	5	150 in-lb	5 in-lb	9-29/32	2-11/16 (68)	1-1/4
3/8	TEC25FA	TEC25FFUA	TEC25FLA	350	10	25 ft-lb	1 ft-lb	9-29/32	2-11/16 (68)	1-1/4
3/8	TEC50A	TEC50FUA	TEC50LA	700	20	600 in-lb	20 in-lb	12-1/2	2-11/16 (68)	1-1/4
1/2	TEC51	TEC51FU	TEC51L	700	20	600 in-lb	20 in-lb	15	2-11/16 (68)	1-5/16
1/2	TEC100	TEC100FU	TEC100L	14	.5	100 ft-lb	2 ft-lb	16	2-3/4 (70)	1-3/8
1/2	TEC175	TEC175FU	TEC175L	25	1	175 ft-lb	5 ft-lb	18-3/4	2-3/4 (70)	1-3/8
1/2	TEC250	TEC250FU	TEC250L	35	1	250 ft-lb	10 ft-lb	23-3/4	2-3/4 (70)	1-3/8
3/4	TEC352A	TEC352FUA	TEC352LA	50	1	350 ft-lb	10 ft-lb	29-7/8	3-1/4 (83)	1-25/32
3/4	TEC602A	TEC602FUA	TEC602LA	80	2	600 ft-lb	20 ft-lb	40-7/8	3-1/4 (83)	1-25/32
3/4	TEC803**	TEC803FU**	TEC803L**	110	2	800 ft-lb	25 ft-lb	66-13/16	3-9/16 (91)	2-1/32
1	—	—	TEC1003L	136	2	1,000 ft-lb	20 ft-lb	66-13/16	3-9/16 (91)	2-1/32
1	—	TEC1503FU†	TEC1503L†	200	5	1,500 ft-lb	25 ft-lb	80	4-13/32 (112)	2-1/8
1	—	TEC2003FU†	TEC2003L†	280	5	2,000 ft-lb	50 ft-lb	80	4-13/32 (112)	2-1/8
1-1/2	TEC2005	TEC2005FU†	TEC2005L†	280	5	2,000 ft-lb	50 ft-lb	80	4-13/32 (112)	2-13/16
1-1/2	TEC3005	TEC3005FU	TEC3005L	400	5	3,000 ft-lb	50 ft-lb	14 (356)	5-1/2 (140)	2-13/16

*Does not include square drive dimension.

Wrenches in chart do not include certificate of calibration.

Basic model = 1 needle Follow-Up = 2 needles Signal = signal light

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

Wrenches with a certificate of calibration are available.

†Includes separately packed 93TQPA 5' tubular extension handle.

- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Do not use "cheater bars" on handles.
- Pull, do not push on handle.
- Do not force head against flex stops.
- Frequently inspect, clean, and lubricate ratchet mechanism with light oil.
- Do not replace worn parts individually; use entire contents of the service kit.
- Recalibrate every 6 months or more depending on use. ANSI B107.14M specifies that accuracy is maintained through 5000 cycles for click-type torque wrenches.
- Read Safety Precautions on pages W1-W4



TORQOMETER® TORQUE DRIVERS - 1/4" DRIVE



TQSC4FUA

Combination US/Metric Reading/Standard 2% Accuracy

Standard Follow-Up Models Stock No.	Increments	Length, inches	Range
TQSSC1FUA	.5 kg•cm/5 in-lb	5-1/4	17 kg•cm/15 in-lb
TQSSC2.5FUA	1.000 kg•cm/1.0 in-lb	5-1/4	35 kg•cm/30 in-lb
TQSSC4FUA	2 kg•cm/2 in-lb	5-1/4	56 kg•cm/50 in-lb
TQSSC6FUA	3 kg•cm/5 in-lb	5-1/4	90 kg•cm/75 in-lb
TQSC1FUA	.5 kg•cm/5 in-lb	7-3/4	17 kg•cm/15 in-lb
TQSC2.5FUA	1.000 kg•cm/1.0 in-lb	7-3/4	35 kg•cm/30 in-lb
TQSC4FUA*	2 kg•cm/2 in-lb	8-11/16	56 kg•cm/50 in-lb
TQSC6FUA*	—	—	90 kg/70 in-lb

Wrenches in chart do not include certificate of calibration. Wrenches with a certification of calibration are available by adding "C" to the end of the stock number. All wrenches include PB47 Storage Case.
 Basic model = 1 needle Follow-Up = 2 needles *Includes 1/4" internal square drive in handle.

T-HANDLE TORQOMETER® TORQUE WRENCHES



TEXC602TFUA



TEXC4005TL

Combination US/Metric Reading/Standard 2% Accuracy

Optional "T" Bars/
Extension Handles

Input Drive Female Square, inches	Output Drive Male Square, inches	Follow-Up Models Stock No.	Light Signal Models Stock No.	US Range, ft-lb	US Increments, ft-lb	Metric Range, kg•m	kg•m	Length, inches	Width, inches (mm)	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	82TQP	18	85TQP	31
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

Wrenches in chart do not include certificate of calibration. Wrenches with a certification 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

TORQOMETER® TORQUE WRENCHES – 1/4" DRIVE



TQS012A

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.	Increments	Range
TQS1A	TQS1FUA	5-1/4	—	TQSS1FUA	4 in-oz/1/4 in-lb	192 in-oz/12 in-lb
TQS012A	TQS012FUA	5-1/4	TQSS012A	TQSS012FUA	1/2 in-oz/1/32 in-lb	24 in-oz/1.5 in-lb
TQS2A	TQS2FUA	5-1/4	TQSS2A	TQSS2FUA	8 in-oz/1/2 in-lb	384 in-oz/24 in-lb
TQS025A	TQS025FUA	5-1/4	TQSS025A	TQSS025FUA	1 in-oz/1/16 in-lb	48 in-oz/3 in-lb
TQS4A*	TQS4FUA*	5-1/4	TQSS4A	TQSS4FUA	1 in-lb	50 in-lb
TQS050A	TQS050FUA	5-1/4	TQSS050A	TQSS050FUA	2 in-oz/1/8 in-lb	96 in-oz/6 in-lb
—	TQSS25FUA	5-1/4	—	—	1 in-lb	75 in-lb
TQS6A*	TQS6FUA*	5-1/4	TQSS6A	TQSS6FUA	1 in-lb	75 in-lb
TQS008A	TQS008FUA	7-3/4	—	TQSS008FUA	1/2 in-oz	16 in-oz
TQS2.5A	TQS2.5FUA	7-3/4	TQSS2.5A	—	12 in-oz/1 in-lb	480 in-oz/30 in-lb
TQS004A	TQS004FUA	8-5/8	—	—	1/4 in-oz	8 in-oz

Wrenches in chart do not include certificate of calibration. Wrenches with a certification of calibration are available by adding "C" to the end of the stock number.
 All wrenches include PB47 Storage Case.
 Basic model = 1 needle Follow-up = 2 needles *Includes 1/4" internal square drive in handle.

TORQOMETER® TORQUE WRENCHES – 1/4" DRIVE

TORQUE

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

Standard Basic Models Stock No.	Length, inches	Standard Follow-up Models Stock No.	Stubby Basic Models Stock No.	Stubby Follow-up Models Stock No.	Range	Increments
—	5-1/4	—	TQSSI.055A	TQSSI.11FUA	.055 N•m	.001 N•m
TQSSI.11A	5-1/4	—	TQSSI.11A	—	.110 N•m	.005 N•m
TQSSI.34FUA	5-1/4	—	TQSI.34FUA	TQSSI.34FUA	.34 N•m	.01 N•m
—	5-1/4	—	—	TQSSI.70FUA	.70 N•m	.02 N•m
—	5-1/4	—	—	TQSSI.135FUA	1.35 N•m	.05 N•m
TQSI055A	5-1/4	TQSI055FUA	—	TQSSI055FUA	.055 N•m	.001 N•m
—	7-3/4	TQSR1FUA	—	—	1.6 N•m/15 in-lb	5 N•cm/.25 in-lb
—	7-3/4	TQSR2.5FUA	—	—	3.4 N•m/30 in-lb	.1 N•m/1 in-lb
—	7-3/4	TQSI135FUA	—	—	1.35 N•m	.05 N•m
—	8-11/16	TQSR4FUA*	—	—	5.5 N•m/50 in-lb	.1 N•m/1 in-lb
—	8-11/16	TQSR6FUA*	—	—	8.4 N•m/75 in-lb	.2 N•m/5 in-lb

*Includes 1/4" internal square drive in handle. **Precise 1% models are available on special order.
All wrenches include PB47 Storage Case.
ANSI® Spec. B107.300 applies to all these models.

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

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



TA358

TORQUE SCREWDRIVER



ATECHMS80M



ATECHMS100M

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)

Stock No.		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
ATECHMS80NM	1/4" Square Electronic Driver Kit	4-80 in-lb (0.45–9 N•m)	.01 in-lb	7-1/2
ATECHMS80NF	1/4" Square Electronic Driver Kit	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
ATECHMS100MK	1/4" Square Electronic Driver Kit	5–100 in-oz	.01 in-lb	7-1/2

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

ASME B107.300-2010

MSTECHHDL Electronic Driver L-Handle

- T-handle for assisted turning above 40 in-lb



MSTECHHDL

- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed 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 P1–P2 for details.
- Read Safety Precautions on pages W1–W4



TORQUE DRIVERS



QDRIVER1P

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 $\pm 6\%$ 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, minimum	Range, maximum	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



QDRIVER2

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 $\pm 6\%$ 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 (34–169 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



QDTPMS35

TPMS Torque Screwdriver

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

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)



QDRIVER2A

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

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

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

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

INTERCHANGEABLE HEADS



QC11200

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	Shank (dia.)	Range	Increments	Length, inches
QC11200	Adjustable	J (0.425")	40–200 in-lb	1 in-lb	9-3/8
QC2175	Adjustable	J (0.425")	5–75 ft-lb	.5 ft-lb	13



QC3P200



QC4P300

Torque Wrench Bodies/Preset

Stock No.	Model	Shank (dia.)	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 ft-lb (41–203 N•m)	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

No calibration certificates on preset torque bodies



WARNING

- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Read Safety Precautions on pages W1–W4

INTERCHANGEABLE HEADS



QD2IN50A



QD3IN200B



QD2IN100A

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	X	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)

ASME® B107.300



QJD8SL-72

Square Drive Heads/Ratcheting

Square Drive, inches	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	Head O.D., inches	Depth, inches	Repair Kit
1/4	QJD8A-72	—	—	—	15/16	7/16	RKRT72A
1/4	QJD8SL-72	—	—	—	15/16	7/16	RKRT72A
3/8	QYD12A-80**	—	—	—	1-1/4	9/16	RKRF80
3/8	QYD12SL-80	—	—	—	1-1/4	9/16	RKRF80
3/8	—	QJD12A-80**	—	—	1-1/4	9/16	RKRF80
3/8	—	QJD12SL-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	—	—	—	QZD32BDP	2-1/2	1-1/2	RKRQC5

**U.S. Patents 4,934,220 and 6,125,722 apply to this ratchet head.

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

Center of Fastener to Retaining Pin

QYD Series – 3.00"

QXD Series – 4.50"

QZD Series – 5.75"

QJD-SL Series – 3.5"

QYD-SL Series – 4.43"

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



QJSD8A

Square Drive Heads/Fixed

Square Drive, inches	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	Head O.D., inches	Head 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	QJSD8A	1-3/4	2-1/4

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

Center of Fastener to Retaining Pin

QJD Series – 2.50"

QYD Series – 3.00"

QXD Series – 4.50"

QZD Series – 5.75"

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

INTERCHANGEABLE HEADS



QJBOERM10A



QJBOER12A

Ratcheting Box End Heads, 12-Point, mm

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

mm	J (0.425")	Y (0.560")	Head O.D., mm	Head Depth, mm
10	QJBOERM10A	—	21.5	8
13	QJBOERM13A	—	25	10
15	QJBOERM15A	—	28.5	11
16	QJBOERM16A	QYBOERM16A	30.5	11
17	QJBOERM17A	—	32	12
18	QJBOERM18A	QYBOERM18A	34.5	12
19	QJBOERM19A	—	41.7	12.9
22	QJBOERM22A	—	41.7	14.5
24	QJBOERM24A	QYBOERM24A	46.5	15.5

Ratcheting Box End Heads, 12-Point, inches

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

	J (0.425")	Y (0.560")	Head O.D, inches	Head Depth, inches
3/8	QJBOER12A	—	27/32	5/16
7/16	QJBOER14A	—	7/8	11/32
1/2	QJBOER16A	—	1-1/32	1/4
9/16	QJBOER18A	—	1-1/16	13/32
5/8	QJBOER20A	QYBOER20A	1-3/16	7/16
11/16	—	QYBOER22A	1-1/4	15/32
3/4	QJBOER24A	QYBOER24A	1-7/16	1/2

INTERCHANGEABLE HEAD, CLICK-TYPE TORQUE WRENCHES



QJXD14A



QYXB24A

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

Center of fastener to retaining pin:
 • QJXD Series: 2.50"
 • QYXD Series: 3.00"
 • QXXD Series: 4.50"

	Stock No.	Shank (dia.)	Maximum Recommended 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
5/8	QYXD20A	Y (0.560")	160
11/16	QJXD22A	J (0.425")	60
11/16	QYXD22A	Y (0.560")	160
3/4	QJXD24A	J (0.425")	60
3/4	QYXD24A	Y (0.560")	160
7/8	QJXD28A	J (0.425")	60
15/16	QJXD30A	J (0.425")	60
15/16	QYXD30A	Y (0.560")	160
1	QJXD32A	J (0.425")	60

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

Center of fastener to retaining pin:
 • QJXB Series: 2.50"
 • QYXB Series: 3.00"
 • QXXB Series: 4.50"

	Stock No.	Shank (dia.)	Maximum Recommended 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
5/8	QYXB20A	Y (0.560")	160
11/16	QJXB22A	J (0.425")	60
3/4	QJXB24A	J (0.425")	60
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
1-3/8	QXXB44A	X (0.735")	240
1-1/2	QXXB48A	X (0.735")	240




- Frequently inspect, clean, and lubricate all non-sealed ratchet mechanisms with light oil.
- Do not replace worn parts individually; use entire contents of the service kit.
- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Read Safety Precautions on pages W1-W4

INTERCHANGEABLE HEAD, CLICK-TYPE TORQUE WRENCHES

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

Center of fastener to retaining pin:

- QJXBM Series: 2.50"
- QYXBM Series: 3.00"

	Stock No.	Shank (dia.)	Maximum Recommended Working Torque, ft-lb
11	QJXBM11A	J (0.425")	60
12	QJXBM12A	J (0.425")	60
13	QJXBM13A	J (0.425")	60
14	QJXBM14A	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

Box End Heads, 40° Bend, 12-Point, mm



Size, mm	Stock No.	Shank (dia.)	Center of Fastener to Retaining Pin
18	QYSBXM18A	Y (0.560")	QYSBXM Series – 3.00"
24	QYSBXM24A	Y (0.560")	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 (Chart)
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 (Chart)
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 (Chart)
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
IZW19X12	Welding insert 9 x 12
IZW14X18	Welding insert 14 x 18

INTERCHANGEABLE HEAD

Thin Open End Heads, inches




QJO22ARTH60

Center of fastener to retaining pin:

- QJO Series: 2.50"
- QYO Series: 3.00"

	Stock No.	Shank (dia.)	Maximum Recommended Working Torque, ft-lb
11/16	QJO22ARTH60	J (0.425")	60
7/8	QJO28ARTH	J (0.425")	60
15/16	QJO30ARTH	J (0.425")	60
1	QJO32ARTH	J (0.425")	60
1-1/16	QJO34ARTH	J (0.425")	60
1-1/8	QJO36ARTH	J (0.425")	60
1-3/16	QJO38ARTH	J (0.425")	60
1-1/4	QJO40ARTH	J (0.425")	60
1-3/8	QJO44ARTH	J (0.425")	60
1-1/2	QJO48ARTH	J (0.425")	60
1-9/16	QJO50ARTH	J (0.425")	60
1-5/8	QJO52ARTH	J (0.425")	60
1-3/4	QJO56ARTH	J (0.425")	60

	Stock No.	Shank (dia.)	Maximum Recommended Working Torque, ft-lb
1-7/8	QJO60ARTH	J (0.425")	60
2	QJO64ARTH	J (0.425")	60
2-1/16	QJO66ARTH	J (0.425")	60
2-11/16	QJO86ARTH	J (0.425")	60
15/16	QYO30ARTH	Y (0.560")	160
1-1/16	QYO34ARTH	Y (0.560")	160
1-5/8	QYO52ARTH	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
2-1/4	QYO72ARTH	Y (0.560")	160

Open End Heads, mm

mm	J (0.425")	Y (0.560")	X (0.735")	Z (0.990") Dual Pins	O.D., mm	Head Depth, 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	QJOM29A (60)	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	—	—	—	—	86	18
50	—	—	—	QZOM50ADP (480)	102	20
55	—	—	QXOM55A (240)	QZOM55ADP (480)	113	23
60	—	—	—	QZOM60ADP (480)	125	27
65	—	—	—	QZOM65ADP (480)	130	26
70	—	—	—	QZOM70ADP (480)	169	31

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



QJOM27A

Center of fastener to retaining pin:

- QJOM Series: 2.50"
- QYOM Series: 3.00"
- QXOM Series: 4.50"
- QZOM Series: 5.75"



- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Read Safety Precautions on pages W1-W4

INTERCHANGEABLE HEADS




QJO28A



QZO38ADP

Open End Heads, inches


	 J (0.425")	Y (0.560")	X (0.735")	Z (0.990") Dual Pins	Head Depth, inches	O.D., inches
1/4	QJO8A (5)	—	—	—	9/64	17/32
9/32	QJO9A (7)	—	—	—	5/32	21/32
5/16	QJO10A (9)	—	—	—	11/64	21/32
3/8	QJO12A (18)	—	—	—	11/64	25/32
7/16	QJO14A (26)	—	—	—	11/64	29/32
1/2	QJO16A (34)	QYO16A (58)	—	—	11/64	1-1/16
9/16	QJO18A (58)	QYO18A (58)	—	—	9/32	1-1/16
5/8	QJO20A (60)	QYO20A (70)	—	—	9/32	1-5/16
11/16	QJO22A (60)	QYO22A (99)	—	—	5/16	1-7/16
3/4	QJO24A (60)	QYO24A (125)	QXO24A (125)	—	11/32	1-19/32
13/16	QJO26A (60)	QYO26A (160)	QXO26A (164)	—	3/8	1-23/32
7/8	QJO28A (60)	QYO28A (160)	—	—	3/8	1-23/32
15/16	QJO30A (60)	QYO30A (160)	QXO30A (200)	—	13/32	1-29/32
1	QJO32A (60)	QYO32A (160)	QXO32A (240)	QZO32ADP (298)	7/16	2-1/32
1-1/16	QJO34A (60)	QYO34A (160)	QXO34A (240)	QZO34ADP (480)	15/32	2-3/16
1-1/8	QJO36A (60)	QYO36A (160)	QXO36A (240)	QZO36ADP (367)	15/32	2-5/16
1-3/16	QJO38A (60)	QYO38A (160)	QXO38A (240)	QZO38ADP (433)	15/32	2-5/16
1-1/4	QJO40A (60)	QYO40A (160)	QXO40A (240)	QZO40ADP (480)	17/32	2-9/16
1-5/16	—	QYO42A (160)	QXO42A (240)	QZO42ADP (480)	9/16	2-21/32
1-3/8	QJO44A (60)	QYO44A (160)	QXO44A (240)	QZO44ADP (480)	19/32	2-3/16
1-7/16	—	QYO46A (160)	QXO46A (240)	QZO46ADP (480)	19/32	3
1-1/2	QJO48A (60)	QYO48A (160)	QXO48A (240)	QZO48ADP (480)	5/8	3-1/16
1-9/16	—	QYO50A (160)	QXO50A (240)	QZO50ADP (480)	21/32	3-3/16
1-5/8	QJO52A (60)	QYO52A (160)	QXO52A (240)	QZO52ADP (480)	11/16	3-11/32
1-11/16	—	—	QXO54A (240)	QZO54ADP (480)	23/32	3-13/32
1-3/4	—	QYO56A (240)	QXO56A (240)	QZO56ADP (480)	23/32	3-9/16
1-13/16	—	—	QXO58A (240)	QZO58ADP (480)	13/32	3-21/32
1-7/8	—	QYO60A (240)	QXO60A (240)	QZO60ADP (480)	25/32	3-13/16
2	—	—	QXO64A (240)	QZO64ADP (480)	27/32	4-1/16
2-1/8	—	—	QXO68A (240)	QZO68ADP (480)	27/32	4-3/16
2-1/4	—	QYO72 (240)	—	QZO72ADP (480)	15/16	4-9/16
2-3/8	—	—	—	QZO76ADP (480)	—	—
2-1/2	—	—	—	QZO80ADP (480)	1	5-1/16
2-7/8	—	QYO92 (240)	—	—	5/8	5-31/32

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

Center of fastener to retaining pin:

- QJO Series: 2.50"
- QYO Series: 3.00"
- QXO Series: 4.50"
- QZO Series: 5.75"

Box End Heads, 15° offset, 12-Point, inches

	J (0.425")	X (0.735")	Y (0.560")	Z (0.990")	O.D., inches	Head Depth, inches
7/32	QJX7A (10)	—	—	—	13/32	3/16
1/4	QJX8A (18)	—	—	—	13/32	3/16
9/32	QJX9A (41)	—	—	—	13/32	3/16
5/16	QJX10A (41)	—	—	—	1/2	7/32
3/8	QJX12A (60)	—	—	—	9/32	1/4
7/16	QJX14A (60)	—	QYX14A (60)	—	21/32	5/16
1/2	QJX16A (60)	—	QYX16A (75)	—	3/4	11/32
9/16	QJX18A (60)	—	QYX18A (112)	—	27/32	3/8
5/8	QJX20A (60)	QXX20A (171)	QYX20A (160)	—	15/16	13/32
11/16	QJX22A (60)	QXX22A (200)	QYX22A (160)	—	1-1/32	7/16
3/4	QJX24A (60)	QXX24A (219)	QYX24A (160)	—	1-1/8	15/32
13/16	QJX26A (60)	QXX26A (240)	QYX26A (160)	QZX26A (275) QZX26ADP (275)	1-3/16	17/32
7/8	QJX28A (60)	QXX28A (240)	QYX28A (160)	—	1-9/32	9/16
15/16	QJX30A (60)	QXX30A (240)	QYX30A (160)	QZX30A (300) QZX30ADP (300)	1-3/8	19/32
1	QJX32A (60)	QXX32A (240)	QYX32A (160)	—	1-15/32	21/32
1-1/16	—	QXX34A (240)	—	—	1-9/16	11/16
1-1/16	QJX34A (60)	—	QYX34A (160)	QZX34ADP (300)	1-9/16	11/16
1-1/8	—	QXX36A (240)	QYX36A (160)	QZX36ADP (480)	1-5/8	11/16
1-3/16	—	QXX38A (240)	QYX38A (160)	QZX38ADP (480)	1-3/4	11/16
1-1/4	QJX40A (60)	QXX40A (240)	QYX40A (160)	QZX40ADP (480)	1-9/16	11/16
1-5/16	—	QXX42A (240)	QYX42A (160)	QZX42ADP (480)	1-29/32	3/4
1-3/8	—	QXX44A (240)	QYX44A (160)	QZX44ADP (480)	2	3/4
1-7/16	—	QXX46A (240)	—	QZX46ADP (480)	2-1/16	7/8
1-1/2	—	QXX48A (240)	QYX48A (160)	QZX48ADP (480)	2-5/32	7/8
1-9/16	—	QXX50A (240)	—	QZX50ADP (480)	2-1/4	7/8
1-5/8	—	QXX52A (240)	QYX52A (160)	QZX52ADP (480)	2-11/32	7/8
1-11/16	—	QXX54A (240)	—	—	2-7/16	7/8
1-11/16	—	—	—	QZX54ADP (480)	2-7/16	7/8
1-3/4	—	QXX56A (240)	—	QZX56ADP (480)	2-17/32	1-1/32
1-13/16	—	QXX58A (240)	—	QZX58ADP (480)	2-5/8	1-1/32
1-7/8	—	QXX60A (240)	—	QZX60ADP (480)	2-11/32	1-1/32
2	—	QXX64A (240)	—	QZX64ADP (480)	2-7/8	1-1/32
2-1/16	—	—	—	QZX66ADP (480)	2-21/32	1-3/16
2-1/8	—	—	—	QZX68ADP (480)	3-1/16	1-3/16
2-3/8	—	—	—	QZX70ADP (240)	3-1/8	1-1/8
2-1/4	—	—	—	QZX72ADP (480)	3-7/32	1-3/16
2-3/8	—	—	—	QZX76ADP (480)	3-13/32	1-9/32
2-1/2	—	—	—	QZX80A (480) QZX80ADP (480)	3-19/32	1-5/16
2-9/16	—	—	—	QZX82A (480)	—	—

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



QJX7A

Center of fastener to retaining pin:

- QJX Series – 2.50"
- QYX Series – 3.00"
- QXX Series – 4.50"
- QZX Series – 5.75"

Adaptor


QZD32A-1 Z Shank to 1" Drive Adapter

- Adaptor Z Shank to 1" Drive



QZD32A-1

Ratcheting Flare Nut Heads, 12-Point, mm

	Stock No.	Shank (dia.)
16	RTWHM16J	J (0.425")
16	RTWHM16JSL	J (0.425")



RTWHM16JSL



- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Read Safety Precautions on pages W1-W4

INTERCHANGEABLE HEADS




QJXM9A



QXXM18A

Box End Heads, 12-Point, mm

 mm	J (0.425")	X (0.735")	Y (0.560")	Z (0.990") Dual Pins	Head Depth, mm	O.D., mm
6	QJXM6A (15)	—	—	—	5	11
7	QJXM7A (20)	—	—	—	5	11
8	QJXM8A (22)	—	—	—	6	13
9	QJXM9A (30)	—	—	—	6	14
10	QJXM10A (53)	—	—	—	7	15
11	QJXM11A (59)	—	—	—	8	17
12	QJXM12A (60)	—	—	—	8	18
13	QJXM13A (60)	—	—	—	9	20
14	QJXM14A (60)	QXXM14A (117)	QYXM14A (117)	—	9	21
15	QJXM15A (60)	—	QYXM15A (148)	—	10	22
16	QJXM16A (60)	QXXM16A (183)	QYXM16A (160)	—	10	24
17	QJXM17A (60)	QXXM17A (197)	QYXM17A (160)	—	11	25
18	QJXM18A (60)	QXXM18A (224)	QYXM18A (160)	—	12	27
19	QJXM19A (60)	QXXM19A (238)	QYXM19A (160)	—	12	28
20	QJXM20A (60)	QXXM20A (240)	QYXM20A (160)	—	13	30
21	QJXM21A (60)	QXXM21A (240)	QYXM21A (160)	—	13	31
22	QJXM22A (60)	QXXM22A (240)	QYXM22A (160)	—	14	32
23	QJXM23A (60)	QXXM23A (240)	QYXM23A (160)	—	15	34
24	QJXM24A (60)	QXXM24A (240)	QYXM24A (160)	QZXM24ADP (375)	15	35
25	—	QXXM25A (240)	—	QZXM25ADP (413)	16	37
26	QJXM26A (60)	—	QYXM26A (160)	—	16	38
27	QJXM27A (60)	QXXM27A (240)	QYXM27A (160)	QZXM27ADP (480)	17	39
29	—	QXXM29A (240)	QYXM29A (160)	QZXM29ADP (480)	18	42
30	—	QXXM30A (240)	QYXM30A (160)	QZXM30ADP (480)	19	44
32	—	QXXM32A (240)	QYXM32A (160)	QZXM32ADP (480)	19	46
34	—	QXXM34A (240)	QYXM34A (160)	QZXM34ADP (480)	19	48
36	—	QXXM36A (240)	QYXM36A (160)	QZXM36ADP (480)	22	53
41	—	QXXM41A (240)	—	QZXM41ADP (480)	22.4	59.4
46	—	QXXM46A (240)	—	QZXM46ADP (480)	24.6	66.5
50	—	—	—	QZXM50ADP (480)	26.9	73.2
55	—	—	—	QZXM55ADP (480)	30.2	81.8
60	—	—	—	QZXM60ADP (480)	33.3	89.7

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


Center of fastener to retaining pin:

- QJXM Series – 2.50"
- QYXM Series – 3.00"
- QXXM Series – 4.50"
- QZXM Series – 5.75"

Ratcheting Flare Nut Heads, 12-Point, inches




RTWH104YSL

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

Center of fastener to retaining pin:

- RTWH "J" Series – 2.50"
- RTWH "Y" Series – 3.00"

Flare Nut Heads, 6-Point, inches

	J (0.425")	Y (0.560")	O.D., inches	Head Depth, inches
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)	—	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 Torque, ft-lb




QJRXS10A

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"

Flare Nut Heads, 6-Point, mm

	J (0.425")	Y (0.560")	O.D., mm	Head Depth, mm
8	QJRXSM8A (17)	—	17	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)	29	11
17	QJRXSM17A (60)	QYRXSM17A (83)	29	11
18	—	QYRXSM18A (94)	30	12
19	QJRXSM19A (60)	QYRXSM19A (104)	32	12
20	QJRXSM20A (60)	QYRXSM20A (113)	33	13

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




QJRXSM8A

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"

Flare Nut Heads, 12-Point, inches

	Y (0.560")	Head O.D., inches	Head Depth, inches
5/8	QYRX20A (79)	1-1/16	15/32
11/16	QYRX22A (92)	1-7/32	1/2
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)	1-1/2	5/8
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
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

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



QYRX20A

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"



- Do not exceed rated torque; use only moderate force on flare nut wrenches.
- Do not use to break fasteners loose.
- Read Safety Precautions on pages W1-W4

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 $\pm 4\%$
- A variety of alternative reaction fixtures are available

Specifications	MTMC730	MTMB740	MTMB950	MTMP14700	MTMC1475	MTMB1990
Reaction Type	Interchangeable	Bar and Cranked	Bar and Cranked	Plate	Interchangeable	Bar and Cranked
Torque Ratio	22:1	5:1	5:1	125:1	27:1	5:1
Certification	Yes	No	No	No	Yes	No
Anti-Wind-Up	Yes	No	No	Yes	Yes	125:1
Torque Output, Minimum ft-lb	74	74	96	1470	147	200
Torque Output, Maximum ft-lb	730	740	950	14,700	1,475	1,990
Torque Output, Minimum N•m	100	100	130	2,000	200	270
Torque Output, Maximum N•m	1,000	1,000	1,300	20,000	2,000	2,700
Input Drive Female Square, inches	3/8	1/2	1/2	1/2	1/2	3/4
Output Drive Male Square, inches	3/4	3/4	3/4	2-1/2	1	1

Specifications	MTMB2200	MTMP25000	MTMC2950	MTMB3300	MTMP4400	MTMC5100	MTMP7000
Reaction Type	Bar	Plate	Interchangeable	Bar	Plate	Interchangeable	Plate
Torque Ratio	15.5:1	87.5:1	25:1	26:1	25:1	25:1	135:1
Certification	No	No	Yes	No	No	Yes	No
Anti-Wind-Up	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Torque Output, Minimum ft-lb	220	2,500	295	330	450	516	700
Torque Output, Maximum ft-lb	2,200	25,000	2,950	3,300	4,400	5,100	7,000
Torque Output, Minimum N•m	300	3,400	400	450	610	700	950
Torque Output, Maximum N•m	3,000	34,000	4,000	4,500	6,000	7,000	9,500
Input Drive Female Square, inches	1/2	3/4	1/2	1/2	1/2	1/2	1/2
Output Drive Male Square, inches	1	2-1/2	1	1	1-1/2	1-1/2	1-1/2

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 μE , 3 mV/V F.S., 7.5 V excitation
- Unique neck design allows operator to see display when testing long torque wrenches
- Accuracy: $\pm 0.5\%$ 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
QC1ETT100	1/4	10–100 in-lb	11.3–113
QC1ETT400	1/4	40–400 in-oz	28–280
QC1ETT50	1/4	5–50 in-lb	5.6–56
QC2ETT1000	3/8	100–1,000 in-lb	113–1,130
QC2ETT250	3/8	25–250 in-lb	28–280
QC3ETT250	1/2	25–250	34–339
QC4ETT600	3/4	60–600	81–813

The certification of accuracy provided per ASME® and ISO® Standards is 10–100% of full scale.

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
- $\pm 0.5\%$ 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 ($\pm 0.5\% \pm 1$ 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, in-lb, 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
2344-0050-03	Table Mounting Bracket For DTT Testers
DTS95095	Power Cord, UK
DTS95096	Power Cord, Australia
DTS95097	Power Cord, EU

NOTE: Must order the adaptor and appropriate power cord.

Specifications	QC2DTT250	QC3DTT250
Square Drive, inches	3/8	1/2
Range English	25–250 in-lb	25–250 ft-lb
Range, N•m	2.9–28.2	33.9–338.9
Accuracy	$\pm 0.5\%$ of Indicated Test Value from 10–100% or Rated Capacity	$\pm 0.5\%$ of Indicated Test Value from 10–100% or Rated Capacity
Operating Modes	TRACK, PEAK, FIRST PEAK	TRACK, PEAK, FIRST PEAK
Operating Temperature	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)

NOTE: Must order the adaptor and appropriate power cord.



TBTT100A



TBT600A

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
- NIST® traceable

Stock No.	Description	Range	Resolution
TBTT100A	Transducer	5–100	.01 ft-lb, 1 in-lb, 2 in-oz, .01 N•m, .001 kg-m, 1 kg-cm
TBTT16A	Transducer	7.5–200 in-lb	.002 ft-lb, 02 in-lb, .002 N•m, .0002 kg-m, .02 kg-cm
TBTT600A	Transducer	30–600 ft-lb	.05 ft-lb, 5 in-lb, 10 in-oz, 1 N•m, .01 kg-m, 1 kg-cm
TBT600A	Horizontal Torque Tester	5–600	—



- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain accuracy.
- Read Safety Precautions on pages W1–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 more

- 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® 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
- Versatorq® 2 sensors available from 2 in-oz up to 1,500 ft-lb with readings in seven popular measurement scales



VERSATORQ2



Versatorq® 2 System Torque Acquisition Meters

Specifications	VERSATORQ2
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)
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

*Versatorq® display ignores torque input less than .5% of full scale in Track mode and 2.0% of full scale in Peak mode. Hazardous Location Designation: Class 1, Zone 2, Ex ic IIA. Temperature Class: T6

VERSATORQ2 Versatorq® 2 System

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

Versatorq® 2 Sensors



VERSA2S100A

Stock No.	Square Drive, inches	Range	Sensor Diameter, inches	Sensor Length, inches	Cable Length, inches (mm)
VERSA1S10A*	1/4	1–10 in-lb	.7	2.9	48 (1,219)
VERSA1S20A*	1/4	2–20 in-oz	.5	2.9	48 (1,219)
VERSA1S200A	1/4	20–200 in-lb	.9	2.1	48 (1,219)
VERSA1S50A	1/4	5–50 in-lb	.9	2.1	48 (1,219)
VERSA2S100A	3/8	10–100	1.2	2.4	48 (1,219)
VERSA3S250A	1/2	25–250 ft-lb	1.4	2.6	48 (1,219)
VERSA4S600A	3/4	60–600 ft-lb	2.0	3.9	96 (2,438)
VERSA5S1500A**	1	150–1,500 ft-lb	2.4	4.4	92 (2,336)

*Knurled handles allow for fingertip control. Heavy-duty coiled cord with four-pin MS-style connector. Original Versatorq® Sensors (without “A” suffix in the stock number) are compatible with the VERSATORQ2 meter, but the sensors require calibration.

Heavy-duty coiled cord with four-pin MS-style connector. Original Versatorq® Sensors (without “A” suffix in the stock number) are compatible with the VERSATORQ2 meter, but the sensors require calibration.

**Diameter does not include side-mounted connector. Heavy-duty coiled cord with four-pin MS-style connector. Original Versatorq® Sensors (without “A” suffix in the stock number) are compatible with the VERSATORQ2 meter, but the sensors require calibration.



VERSACABLE2

Versatorq® 1 System Accessories

Stock No.	Description
VERSACABLE	RS232 Serial Printer Cable
VERSACABLE2	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

TORQUE



VERSATEST



VERSATEST600

Versatest™

The Versatest™ 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 $\pm 0.25\%$ 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 maintains 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
Soft Key User Interface	Units, Calibration, Date/Time, Statistics, Hi/Low Limits Set, Data Store, Data Recall, Printer Setup, Zero, Auto/Manual Store/Send/Clear
Power Supply	Auto Switching 100–240 VAC, 50/60 Hz, 50 watts
Statistical Analysis	Max, Min, Range, Mean, Sigma N, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo
Accuracy	$\pm 0.25\%$ of reading at 25 °C (with TTC Transducer calibration)
Modes	Track, Peak Hold, First Peak, Power Tool
Storage Temperature Range	-20–50 °C (-2–122 °F)
Select Keys	Increment, Decrement, Shift Left, Shift Right, Enter
Temperature Drift Percentage	+0.03 °C (+0.017 °F)
Sample Rate	2,000 samples per second
Analog Output	+(CW)/-(CCW) 1.8 V at Transducer Full Range Linearity, $\pm 1\%$ of Reading
Printer/Computer Serial Output Port	RS232 (True), 300–19.2K Baud
Histogram	Lower Set Limit, Upper Set Limit, 10 Divisions

Versatest™

VERSATEST Electronic Torque Tester/Calibrator

- Large LCD display
- Accuracy: $\pm 0.25\%$ 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™ 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



- Do not exceed rated torque.
- Periodic recalibration is needed to maintain accuracy.
- Read Safety Precautions on pages W1–W4

ELECTRONIC TORQUE TESTER AND CALIBRATOR

Electronic Torque Tester and Calibrator

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 non-impact 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 Complete Master Torque Calibration System (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" 2,000 ft-lb Transducer, TTC5500-1 Extension Arm, 2000-SW WedgeLink Software, TTC503 Download Cable.

TTC2800SYS 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 ft-lb Transducers, TTC5500-1 Extension Arm, 2000-SW WedgeLink Software, TTC503 Download Cable



TTC2000SYS



TTC2800SYS

Features

- Accuracy: $\pm 0.25\%$ 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, Kgm, Kg-cm
- Units of Force: lbf, ozf, n, dN, kp, gg
- Four Modes: TRACK, PEAK HOLD, FIRST PEAK, POWER TOOL
- 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

Specifications	TTC2000SYS	TTC2800SYS
Accuracy	$\pm 0.25\%$ of reading at 25 °C (with TTC Transducer calibration)	$\pm 0.25\%$ of reading at 25 °C (with TTC Transducer calibration)
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
Motorized Loader Modes	—	Manual; Auto Dial; Auto Click
Motorized Loader Power Supply	—	120 V AC $\pm 10\%$ Hz @ 3.14 A (including motor current); (optional step-down transformer for 240 V AC operation)
Power Supply	UL Approved, 120 VAC/220 VAC, 50/60 Hz	120 VAC $\pm 10\%$, 50/60 Hz @ 3.14 A (including motor current). (Includes stepdown transformer for 240 VAC operation.)
Operating Temperature Range	10–32 °C (50–90 °F)	10–32 °C (50–90 °F)
Printer/Computer Serial Output Port	RS232 (True), 300–19.2K Baud	RS232 (True), 300–19.2K Baud
Statistical Analysis	Max, Min, Range, Mean, SigmaN, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo	Max, Min, Range, Mean, SigmaN, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo
Temperature Drift Percentage	+0.03 °C (+0.017 °F)	+0.03 °C (+0.017 °F)
Torque/Force Display	Eight digit, alpha-numeric, super bright red LED, 0.55 inch character height	Eight digit, alpha-numeric, super bright red LED, 0.55 inch character height
Storage Temperature Range	-20–50 °C (-2–122 °F)	-20–50 °C (-2–122 °F)
Type	TTC2000 Manual Loader System	TTC2800SYS Motorized Control System
Analog Output	+(CW/-) 1.8 V at Transducer Full Range Linearity, $\pm 1\%$ of reading	+(CW/-) 1.8 V at Transducer Full Range Linearity, $\pm 1\%$ of reading
Units Of Measure	TORQUE: ft-lb, in-lb, in-oz, N•m, dN•m, kg•cm and kg•cm; FORCE: lbf, ozf, N, dN, kp and gf	TORQUE: ft-lb, in-lb, in-oz, N•m, dN•m, kg•cm and kg•cm; FORCE: lbf, ozf, N, dN, kp and gf
Capacity, digits [counts] (bit A/D)	8 [$\pm 32,000$] (16)	8 [$\pm 32,000$] (16)
Computer Serial Com Port	RS232 (True), 300–19.2K Baud (Optional)	RS232 (True), 300–19.2K Baud (Optional)
Data Storage/Recall	3,000 Measurements	3,000 Measurements
Histogram	Lower Set Limit, Upper Set Limit, 10 Divisions	Lower Set Limit, Upper Set Limit, 10 Divisions
Humidity	Up to 90% Non-Condensing	Up to 90% Non-Condensing
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	Two, Normally Open, Form A, Rated 12 DVC @ 1/2 A close 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

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



TTC2000

Electronic Torque Tester and Calibrator

TTC2000 Electronic Torque Tester/Calibrator

- Automatic sensor recognition with TTC series “Smart” transducers
- Range: 15 in-oz–2,000 ft-lb (bidirectional)
- Total uncertainty (10–100% of range): $\pm 0.25\%$ 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, cN•m, dN•m, N•m, kg-cm and kg-m
- Automatic lock-up for transducer protection
- NIST® traceable



TTC2800SYS

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; STATISTICS; 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
- 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

TTC2800-220V Motorized Torque Tester/Calibrator (220 V AC)

- 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; AUTO CLEAR; MANUAL CLEAR; ENTER; VALUE increment; VALUE decrement; DIGIT left; DIGIT right
- NIST® traceable

TTC280220V Motorized Torque Tester/Calibrator (220 V AC)

- 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; AUTO CLEAR; MANUAL CLEAR; ENTER; VALUE increment; VALUE decrement; DIGIT left; DIGIT right
- NIST® traceable



TTC610



TTC810

TTC610 Digital Indicator

- For electronic torque tester and calibrator

TTC810 Digital Indicator

TTC600 Loader

TTC800 Motorized Loader

TTC503 USB Download Cable for SureTest and TTC systems



- Do not exceed rated torque.
- Do not use to break fasteners loose.
- Periodic recalibration is needed to maintain and assure torque tester accuracy.
- Read Safety Precautions on pages W1–W4

ELECTRONIC TORQUE TESTER AND CALIBRATOR



TTC8



TTC400

Transducers

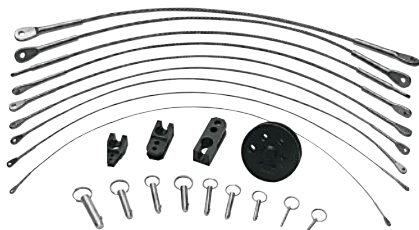
All TTC series transducers include the correct adaptor for the indicated torque range.

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
TTC34325	4-in-1 Table Mounting Bracket	—	—
TTC5000-1*	4-in-1 Adaptor Plate	—	—

*TTC400 requires the TTC5000-1 Adaptor Plate when used with the TTC600 Manual Loader, TTC800 Motorized Loader and VERSA600LDR2. Total Uncertainty: Add 7.5-100% of Range and 8-100% of Range (to some transducers).

**Required for TTC400 4-in-1 Torque Transducer to be used on TTC600/TTC800 loaders. Total Uncertainty: Add 7.5-100% of Range and 8-100% of Range (to some transducers).

***Accuracy is +/-0.5% of indicated test value from 10-100% of indicated torque value. Total Uncertainty: Add 7.5-100% of Range and 8-100% of Range (to some transducers).



TTC2600



TTC2620



TTC2610



TTC26302

Force Testing Equipment

- 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

Stock No.	Description
TTC2600	Tensiometer Testing Kit
TTC2610	Tension Gauge Testing Kit
TTC2620	Compression Gauge Testing Kit
TTC26302	Force Arm Kit

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

TTCALKIT 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, TTC301 8 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

ELECTRONIC TORQUE TESTER AND CALIBRATOR

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



QC1JRS50

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



390-2-2

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/Trays

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)
TTC3020	Weight Tray (15 lb)
TTC3030	Weight Tray (50 lb)
TTC3040	Weight Tray (7.5 lb)

TORQUE COMPARATORS

Accessories

Stock No.	Description
TTC75002	Torque Screwdriver Testing Kit (for 2800 and 2000 Series Systems)
TTC75006	Torque Screwdriver Testing Kit (for VERSATEST600 Loader System)
2000-150-03	Transducer Mount (60–600 ft-lb to 200–2,000 ft-lb)
TTC3421	Transducer Mount (5–50 in-oz to 80–1,000 in-lb)
TTC3422	Transducer Mount (10–125 ft-lb to 60–600 ft-lb)
TTC5500-1	Extension Arm (For 2000 and 2800 Series Loaders)
TTC25002	Complete Calibration Stand Kit (Including Adaptors)
TTC501	PC Cable
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 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
75-20	Female 1" Square x 1" Square Socket Adaptor
75-25-1	Female 1" Square x 3/4" Square Socket Adaptor
2000-0154-18	1-1/4" Male x 3/4" Female Square Drive Reducer
2000-152-3	1/2" Male x 3/8" Female Square Drive Reducer
2000-226-2	1" Male x 3/4" Female Square Drive Reducer
2000-226-3	3/4" Male x 1/2" Female Square Drive Reducer
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



TTC25002

2000-150-03



260-27



2000-0154-18



TTC1540



WARNING



- Do not exceed rated torque.
- Periodic recalibration is needed to maintain and assure torque tester accuracy.
- Read Safety Precautions on pages W1–W4

TORQUE COMPARATORS



Torque Digital Checker

QCOTC3250 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: $\pm 1\%$ CW and $\pm 1\%$ 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

TCR175C Torque Comparator (Certificate of Calibration)

- Determine 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 it easy to break in simple, providing the most accurate results (as per B107-300 standard)
- 2% accurate within $\pm 2\%$ of the reading from 20% of full scale to full scale clockwise and counterclockwise
- Can check a 3/8" drive torque wrench by using an A2A or GAF2A adaptor

TCR600C Torque Comparator (Certificate of Calibration)

- Similar to TCR175 except for these differences:
- 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



WTE4G72L9

PTM1000

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 $\pm 5\%$
- Includes case, cranked reaction fixture, tool hanger, secondary handle and male quick connect

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



PTQ1WTCPBWD1



PTQ1WTCUPD30



PTQ1WTCPD362



PTQ1WTCUP482



PTQ1WTCUP562



WTE4G72L9

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
PTQ1WTCPBWD1	Deep well cup to fit 13/16" Budd wheel studs	BW626A, BWD482
PTQ1WTCPBWD2	Deep Well Cup to fit 21 mm Budd wheel studs	BWDM412
PTQ1WTCUPD30	Deep Well Cup to fit 30 mm lugs	SIMM302
PTQ1WTCUP342	Standard Cup	IM322A, IM342A
PTQ1WTCUPD35	Deep Well Cup	SIM382, SIM402, SIM422, SIM442, SIMM302, SIMM322, SIMM332, SIMM352
PTQ1WTCUP362	Standard Cup	IM362
PTQ1WTCPD362	Deep Well Cup	SIM322, SIM342, SIM362
PTQ1WTCUP482	Standard Cup to fit 38 mm and 1-1/2" lugs	IM482, IMM382
PTQ1WTCUP542	Standard Cup	IM502, IM522, IM542
PTQ1WTCUP562	Standard Cup to fit 41 mm and 1-3/4" lugs	IM562, IMM412
PTQ1WTCPD562	Deep Well Cup to fit 1-7/16" and 1-3/4" lugs	SIM462, SIM482, SIM522, SIM562
WTE4G72L9	9" Wheel Torque Extension (for PTM740)	—

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



PTMFRL



- Do not exceed rated torque.
- Periodic recalibration is needed to maintain and assure torque tester accuracy.
- Read Safety Precautions on pages W1-W4