

### IF YOU FIND YOURSELF SECOND-GUESSING YOUR TORQUE WRENCH, FIND A NEW TORQUE WRENCH.

You simply can't hope that a bolt holding a rotor blade on an Apache helicopter is properly tightened.

Or that a nut keeping a conveyor running smoothly is secured. You have to know they are. At Proto®,

our wrench parts are manufactured from high-grade steel. Key working components are heat-treated

to resist wear. Springs are manufactured to keep their shape for thousands of cycles. And assembly

is done on a work bench, by hand. We even offer three product series to fit any tolerance ranges from

automotive to commercial air. All this ensures durable, dependable accuracy. Anything less is intolerable.

## PRECISION TORQUE

Engo

**Micrometer Torque Wrenches** 





### **INTERCHANGEABLE HERD TORQUE SYSTEM**

- > Manufactured from a solid piece of steel.
- > No welds or cuts to compromise the integrity of the attachment.

In the Proto<sup>®</sup> IHTW System, the handles and the attachments are engineered by the same team, and manufactured to a precise spec so that the centerline distances of each tang size remain the same, from one attachment to another, from one piece to the next. Proto<sup>®</sup> can deliver a high degree of consistency and repeatability from tool to tool and job to job.



### TANG SIZES

Tang sizes are similar to Drive Sizes for Ratchets: H4 Tang = 1/4" Drive H5 Tang = 3/8" Drive H7 Tang = 1/2" Drive







**H4 TANG** 

HS TANG

H7 TANG

### SYSTEM CENTERLINE DISTANCES ARE KEY

Each attachment for a given tang size is specifically engineered to maintain the System Centerline Distance - a fresh design, engineered to work smoothly as part of the whole system. No tool has a weld to throw off the centerline distance. Only when the piece is manufactured from a single piece of steel can the System Centerline Distance be reliably and accurately maintained.



### INTERCHANGEABLE HEAD TORQUE WRENCH HANDLE

- > Electronic Torque Wrenches offer the highest level of precision.
- > We offer a range of pre-set torque wrenches from 50 ft-lbs. to 200 ft-lbs. for dedicated applications.



### ELECTRONIC INTERCHANGEABLE HEAD TOROUE WRENCH ASSEMBLIES

- > Full interface with Proto® Interchangeable Head Attachments.
- > Accuracy of +/- 2% of indicated value in both clockwise and counter clockwise directions.
- Broad accuracy range extends from 10% to 100% of Full Scale to help reduce the number of torque wrenches required.
- > Ninety-nine "on-board" memory storage locations help improve efficiency when taking multiple torque readings.
- > Three units of measure are available (Ft-lb, In-lb, and Nm). Three operating modes: Track Mode.
- Peak Hold and Auto Clear.
- > Fast sampling rate helps maintain high accuracy during torque applications.

- Torque wrench head rotates to allow for ) easy viewing of LCD display.
- > Easy to read LCD Display with large digits.
- > 3-way Red/Green/Yellow lights.
- > Yellow light appears at the low end of the zone.
- Green light appears and buzzer sounds when the target is reached.
- Red light appears with intermittent buzzer when it is over torqued.
- > Audible buzzer helps identify when desired torque target zones are approaching and met.
- > Target torque zone is adjustable from 1% to 10% of targeted torque value.

Product #	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-Ibs)	Torque Range (Nm)	Increments (ft-lbs)	Increments (in-lbs)	Increments (Nm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH4-250	1/4	2.1-20.8	25-250	2.8-28.2	0.01	0.1	0.01	1-3/4	2	17-1/4	2.20
JH5-100F	3/8	10-100	120-1200	13.6-135.6	0.1	1	0.1	1-3/4	2	17-1/4	2.40
JH7-250F	1/2	25-250	300-3000	33.9-338.9	0.1	1	0.1	1-3/4	2	23	3.00

ASME B107 300

### MICROMETER INTERCHANGEABLE HEAD TORQUE WRENCH ASSEMBLIES

- > Full interface with Proto® Interchangeable Head Attachments.
- Accuracy of +/-4% CW and +/-6% CCW.
- > Two sizes available.

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Product #	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Width (in)	Height (in)	Overall Length (in	) Weight (lbs)
JH5-6006C	3/8	16-80	0.5	1-1/4	1-1/4	15	2.50
JH7-6014C	1/2	50-250	1	1-1/2	1-1/2	26	4.70
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### PRE-SET INTERCHANGEABLE HEAD TORQUE WRENCH ASSEMBLIES

- > Full interface with Proto® Interchangeable Head Attachments.
- Accuracy of +/-4% CW and +/-6% CCW.
- Pre-set for fixed and repeatable torque applications.
- Click-type operation for audible click.

Soft, comfortable grip.									
Product #	Torque Range (ft-lbs)	Torque Range (in-Ibs)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)			
JH4-150PS	-	50-150	1-1/2	1-1/2	6	0.70			
JH4-50FPS	10-50	-	1-1/2	1-1/2	11	1.30			
JH5-150FPS	45-150	-	1-1/2	1-1/2	19-1/4	2.25			
JH5-200FPS	45-200	_	1-1/2	1-1/2	23-1/4	2 30			

ASME B107.14M

### 1/4" DRIVE RATCHET TORQUE WRENCH HEAD - H4 TANG

- > Fixed ratcheting head with a robust 24-tooth design with 15° arc swing.
- > Alloy steel drive gear for strength and durability.
- Low profile for easy access.
- Powersing lover design for quick, one hand exercise

Product #	Drive Size (in)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)				
JH4-14R	1/4	1-1/16	23/32	3-1/4	0.20				
		Use With: JH4-250, JH4-	150PS, JH4-50FPS						



# INTERCHANGEABLE HEAD WRENCHES

### **OPEN END TORQUE WRENCH HEADS - H4 TANG**

> Open end is angled to 15° to help keep shank clear of obstructions helping to improve access.



Product #	Size (in)	Size (mm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH4-12	3/8	-	27/32	7/16	3-1/16	0.08
JH4-14	7/16	-	15/16	7/16	3-1/32	0.09
JH4-16	1/2	-	1-1/16	7/16	3-3/32	0.11
JH4-18	9/16	_	1-7/32	7/16	3-5/32	0.13
JH4-10M	-	10	27/32	7/16	3-1/16	0.08
JH4-11M	-	11	15/16	7/16	3-1/32	0.09
JH4-12M	-	12	1-1/32	7/16	3-1/16	0.10
JH4-13M	-	13	1-1/16	7/16	3-3/32	0.11
JH4-14M	-	14	1-7/32	7/16	3-5/32	0.13
					Use With: JH4-250, JH4-	150PS, JH4-50FPS

### **BOX END TORQUE WRENCH HEADS - H4 TANG**

- > The Proto<sup>®</sup> TorquePlus<sup>™</sup> Design, a high performance drive configuration which allows for guick and easy wrench engagement with the fastener flats, not the corners.
- 12 point box end allows for fine indexing, helping to improve speed and access.
- > Fits 4, 6 and 12 point fasteners.

TORQUEPLUS

- Indexed to 7.5° to help keep shank clear of obstructions by allowing the user to flip the wrench over to continue turning the fastener.
- > Countersunk on both sides to allow for easy application to the fastener.



Product #	Size (in)	Size (mm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH4-12B	3/8	-	19/32	7/16	3-1/32	0.08
JH4-14B	7/16	-	21/32	7/16	3-1/16	0.08
JH4-16B	1/2	-	25/32	7/16	3-1/8	0.11
JH4-18B	9/16	-	27/32	7/16	3-5/32	0.12
JH4-10MB	-	10	19/32	7/16	3-1/32	0.07
JH4-11MB	-	11	21/32	7/16	3-1/16	0.08
JH4-12MB	-	12	23/32	7/16	3-3/32	0.09
JH4-13MB	-	13	25/32	7/16	3-1/8	0.10
JH4-14MB	-	14	27/32	7/16	3-5/32	0.12
					Use With: JH4-250 JH4-	150PS JH4-50FPS

Use With: JH4-250, JH4-150PS, JH4-50FPS

### 3/8" DRIVE RATCHET TORQUE WRENCH HEAD - H5 TANG

- > Fixed ratcheting head with a robust 24-tooth design with 15° arc swing.
- Alloy steel drive gear for strength and durability.
- Low profile for easy access.
- Reversing lever design for quick one-hand operation

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Product #	Drive Size (in)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH5-38R	3/8	1-7/16	1	4-3/32	0.47
			Use Wit	h: JH5-100F, JH5-6006C, JH5	-150FPS, JH5-200FPS

Made in USA accurate at time of printing, consult www.protoindustrial.com for updated information. Made in USA Made in USA with global components



### **OPEN END TORQUE WRENCH HEADS - H5 TANG**

> Open end is angled to 15° to help keep shank clear of obstructions helping to improve access.



Product #	Size (in)	Size (mm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH5-14	7/16	-	15/16	5/8	3-21/32	0.14
JH5-16	1/2	-	1-1/16	5/8	3-3/4	0.16
JH5-18	9/16	-	1-7/32	5/8	3-13/16	0.18
JH5-20	5/8	-	1-5/16	5/8	3-27/32	0.21
JH5-22	11/16	-	1-7/16	5/8	3-7/8	0.23
JH5-24	3/4	-	1-19/32	5/8	3-15/16	0.27
JH5-26	13/16	-	1-23/32	5/8	3-31/32	0.31
JH5-28	7/8	-	1-27/32	5/8	4	0.34
JH5-11M	-	11	15/16	5/8	3-21/32	0.14
JH5-12M	-	12	1-1/32	5/8	3-23/32	0.15
JH5-13M	-	13	1-1/16	5/8	3-3/4	0.16
JH5-14M	-	14	1-7/32	5/8	3-13/16	0.18
JH5-15M	-	15	1-1/4	5/8	3-13/16	0.19
JH5-16M	-	16	1-5/16	5/8	3-27/32	0.21
JH5-17M	-	17	1-7/16	5/8	3-7/8	0.23
JH5-18M	-	18	1-1/2	5/8	3-29/32	0.25
JH5-19M	-	19	1-19/32	5/8	3-15/16	0.27
JH5-20M	-	20	1-5/8	5/8	3-15/16	0.28
JH5-21M	-	21	1-23/32	5/8	3-31/32	0.31
JH5-22M	-	22	1-27/32	5/8	4	0.34
JH5-23M	-	23	1-29/32	5/8	4-1/16	0.38
				Use With: JH5-1	00F, JH5-6006C, JH5-15	OFPS, JH5-200FPS

### **BOX END TORQUE WRENCH HEADS - H5 TANG**

- > The Proto<sup>®</sup> TorquePlus<sup>™</sup> Design, a high performance drive configuration which allows for quick and easy wrench engagement with the fastener flats, not the corners.
- > 12 point box end allows for fine indexing, helping to improve speed and access.
- > Fits 4, 6 and 12 point fasteners.
- Indexed to 7.5° to help keep shank clear of obstructions by allowing the user to flip the wrench over to continue turning the fastener.
- > Countersunk on both sides to allow for easy application to the fastener.



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	FASTENING SYSTEM

Product #	Size (in)	Size (mm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH5-14B	7/16	-	21/32	5/8	3-23/32	0.13
JH5-16B	1/2	-	25/32	5/8	3-3/4	0.16
JH5-18B	9/16	-	27/32	5/8	3-25/32	0.17
JH5-20B	5/8	-	15/16	5/8	3-27/32	0.20
JH5-22B	11/16	-	1	5/8	3-7/8	0.22
JH5-24B	3/4	-	1-1/8	5/8	3-15/16	0.25
JH5-26B	13/16	-	1-3/16	5/8	3-31/32	0.28
JH5-28B	7/8	-	1-9/32	5/8	4	0.31
JH5-11MB	-	11	21/32	5/8	3-23/32	0.13
JH5-12MB	-	12	23/32	5/8	3-23/32	0.14
JH5-13MB	-	13	25/32	5/8	3-3/4	0.16
JH5-14MB	-	14	27/32	5/8	3-25/32	0.17
JH5-15MB	-	15	7/8	5/8	3-13/16	0.18
JH5-16MB	-	16	15/16	5/8	3-27/32	0.20
JH5-17MB	-	17	1	5/8	3-7/8	0.22
JH5-18MB	-	18	1-1/16	5/8	3-29/32	0.23
JH5-19MB	-	19	1-1/8	5/8	3-15/16	0.25
JH5-20MB	-	20	1-5/32	5/8	3-31/32	0.27
JH5-21MB	-	21	1-3/16	5/8	3-31/32	0.28
JH5-22MB	-	22	1-9/32	5/8	4	0.31
JH5-23MB	-	23	1-11/32	5/8	4-1/16	0.36
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Use With: JH5-100F, JH5-6006C, JH5-150FPS, JH5-200FPS



INTERCHANGEABLE HEAD WRENCHES

### 1/2" DRIVE RATCHET TORQUE WRENCH HEAD - H7 TANG

- Fixed ratcheting head with a robust
- 24-tooth design with 15° arc swing.Alloy steel drive gear for strength and durability.
- Low profile for easy access.
- > Reversing lever design for quick, one-hand operation.



Product #	Drive Size (in)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH7-12R	1/2	1-27/32	1-13/32	5-7/8	1.08
				use W	ith: JH7-250F, JH7-6014C

### **OPEN END TORQUE WRENCH HEADS - H7 TANG**

• Open end is angled to 15° to help keep shank clear of obstructions helping to improve access.



Product #	Size (in)	Size (mm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH7-18	9/16	-	1-7/32	13/16	5-3/8	0.32
JH7-20	5/8	-	1-5/16	13/16	5-13/32	0.35
JH7-22	11/16	-	1-7/16	13/16	5-7/16	0.38
JH7-24	3/4	-	1-19/32	13/16	5-1/2	0.42
JH7-26	13/16	-	1-23/32	13/16	5-17/32	0.48
JH7-28	7/8	-	1-27/32	13/16	5-9/16	0.51
JH7-30	15/16	-	1-31/32	13/16	5-5/8	0.57
JH7-32	1	-	2-3/32	13/16	5-21/32	0.64
JH7-34	1-1/16	-	2-7/32	13/16	5-23/32	0.71
JH7-36	1-1/8	-	2-11/32	13/16	5-25/32	0.79
JH7-38	1-3/16	-	2-7/16	13/16	5-27/32	0.84
JH7-40	1-1/4	-	2-9/16	13/16	5-27/32	0.93
JH7-42	1-5/16	-	2-21/32	13/16	5-29/32	0.97
JH7-44	1-3/8	-	2-13/16	13/16	5-15/16	1.08
JH7-15M	-	15	1-1/4	13/16	5-3/8	0.33
JH7-16M	-	16	1-5/16	13/16	5-13/32	0.35
JH7-17M	-	17	1-7/16	13/16	5-7/16	0.38
JH7-18M	-	18	1-1/2	13/16	5-15/32	0.40
JH7-19M	-	19	1-19/32	13/16	5-1/2	0.42
JH7-20M	-	20	1-5/8	13/16	5-1/2	0.45
JH7-21M	-	21	1-23/32	13/16	5-17/32	0.48
JH7-22M	-	22	1-27/32	13/16	5-9/16	0.51
JH7-23M	-	23	1-29/32	13/16	5-5/8	0.56
JH7-24M	-	24	1-31/32	13/16	5-5/8	0.57
JH7-25M	-	25	2-3/32	13/16	5-21/32	0.64
JH7-26M	-	26	2-5/32	13/16	5-21/32	0.65
JH7-27M	-	27	2-7/32	13/16	5-23/32	0.71
JH7-28M	-	28	2-7/32	13/16	5-25/32	0.70
JH7-29M	-	29	2-11/32	13/16	5-25/32	0.79
JH7-30M	_	30	2-7/16	13/16	5-27/32	0.84
JH7-32M	_	32	2-9/16	13/16	5-27/32	0.93

### **BOX END TORQUE WRENCH HEADS - H7 TANG**

- The Proto<sup>®</sup> TorquePlus<sup>™</sup> Design, a high performance drive configuration which allows for quick and easy wrench engagement with the fastener flats, not the corners.
- 12 point box end allows for fine indexing, helping to improve speed and access.
- > Fits 4, 6 and 12 point fasteners.
- Indexed to 7.5° to help keep shank clear of obstructions by allowing the user to flip the wrench over to continue turning the fastener.
- > Countersunk on both sides to allow for easy application to the fastener.





Product #	Size (in)	Size (mm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH7-18B	9/16	-	27/32	13/16	5-11/32	0.31
JH7-20B	5/8	-	15/16	13/16	5-13/32	0.34
JH7-22B	11/16	-	1	13/16	5-7/16	0.36
JH7-24B	3/4	-	1-1/8	13/16	5-1/2	0.40
JH7-26B	13/16	-	1-3/16	13/16	5-17/32	0.45
JH7-28B	7/8	-	1-9/32	13/16	5-9/16	0.48
JH7-30B	15/16	-	1-3/8	13/16	5-5/8	0.55
JH7-32B	1	-	1-15/32	13/16	5-11/16	0.60
JH7-34B	1-1/16	-	1-17/32	13/16	5-23/32	0.66
JH7-36B	1-1/8	-	1-5/8	13/16	5-3/4	0.71
JH7-38B	1-3/16	-	1-3/4	13/16	5-13/16	0.80
JH7-40B	1-1/4	-	1-13/16	13/16	5-27/32	0.82
JH7-42B	1-5/16	-	1-29/32	13/16	5-29/32	0.91
JH7-44B	1-3/8	-	1-31/32	13/16	5-15/16	0.98
JH7-15MB	-	15	7/8	13/16	5-3/8	0.32
JH7-16MB	-	16	15/16	13/16	5-13/32	0.34
JH7-17MB	-	17	1	13/16	5-7/16	0.37
JH7-18MB	-	18	1-1/16	13/16	5-15/32	0.39
JH7-19MB	-	19	1-1/8	13/16	5-1/2	0.40
JH7-20MB	-	20	1-5/32	13/16	5-17/32	0.43
JH7-21MB	-	21	1-3/16	13/16	5-17/32	0.44
JH7-22MB	-	22	1-9/32	13/16	5-9/16	0.48
JH7-23MB	-	23	1-11/32	13/16	5-5/8	0.54
JH7-24MB	-	24	1-3/8	13/16	5-5/8	0.55
JH7-25MB	-	25	1-15/32	13/16	5-11/16	0.61
JH7-26MB	-	26	1-1/2	13/16	5-11/16	0.60
JH7-27MB	-	27	1-17/32	13/16	5-23/32	0.66
JH7-28MB	_	28	1-19/32	13/16	5-23/32	0.66
JH7-29MB	-	29	1-5/8	13/16	5-3/4	0.71
JH7-30MB	-	30	1-3/4	13/16	5-13/16	0.81
JH7-32MB	-	32	1-13/16	13/16	5-27/32	0.82

Use With: JH7-250F, JH7-6014C

### FIXED HEAD MICROMETER TORQUE WRENCHES - IN-LBS

### MEETS ASME STANDARD

- Calibrated to +/- 3% clockwise direction and +/- 6% and counter clockwise direction at 20% to 100% of full scale.
- > Calibration is accomplished by manual loading the torgue wrenches.
- > Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.

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Product #	Drive Size (in)	Torque Range (in-Ibs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs)	Storage Case
J6061C	1/4	40-200	1	25/32	3/4	11-45/64	2.60	J6006PBF
J6063C	3/8	40-200	1	25/32	7/8	11-45/64	2.60	J6006PBF
J6065C	3/8	200-1000	5	55/64	7/8	15-13/64	3.00	J6006PBF

ASME B107.14M

### **FIXED HEAD MICROMETER TORQUE WRENCHES - FT-LBS**

MEETS ASME STANDARD

- Calibrated to +/- 3% in clockwise direction and +/- 6% counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by manual loading the torque wrenches.
- > Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs	) Storage Case
J6005C	3/8	16-80	0.5	55/64	7/8	15-13/54	3.00	J6006PBF
J6013C	1/2	50-250	1	1-1/8	1-7/32	26-23/32	5.90	J6014PBF
J6015C	1/2	30-150	1	1-1/8	1-7/32	21-1/8	5.00	J6014PBF
J6017B	3/4	120-600	2	1-7/8	1-7/8	41-11/64	15.50	J6007PB
								SME B107.14M

FIXED HEAD MICROMETER TORQUE WRENCHES - IN-LBS

**MEETS TO33K6 STANDARD** 

- > Calibrated to +/- 3% clockwise direction and +/- 6% counter clockwise direction.
- > Calibration is accomplished by mechanical loading of each wrench in a horizontal position, and performing a three click test at 20%, 60% and 100% of maximum instrument capacity.
- Manufactured to meet precision/highly accurate applications such as military and aerospace.



Product #	Drive Size (in)	Torque Range (in-lbs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)		os) Storage Case
J6061CX	1/4	40-200	1	25/32	3/4	11-45/64	2.60	J6006PBF
J6063CX	3/8	40-200	1	25/32	7/8	11-45/64	2.60	J6006PBF
J6065CX	3/8	200-1000	5	55/64	7/8	15-13/64	3.00	J6006PBF
						F033K6-4-2193	3-1 /	ASME B107.300

Made in USA accurate at time of printing, consult www.protoindustrial.com for updated information. Made in USA Made in USA with global components



### **FIXED HEAD MICROMETER TORQUE WRENCHES - IN-LBS**

MEETS T033K6 STANDARD WITH CERTIFICATION AND N.I.S.T. TRACEABILITY

- Calibrated to +/- 3% in clockwise direction and +/- 6% in counter clockwise direction.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position, and performing a three click test at 20%, 60% and 100% of maximum instrument capacity.
- Certification documents traceable to N.I.S.T. (National Institute of Standards and Technology).
- Manufactured to meet precision/highly accurate applications such as military and aerospace.



Product #	Drive Size (in)	Torque Range (in-lbs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (	lbs) Storage Case
J6061CXCERT	1/4	40-200	1	25/32	3/4	11-45/64	2.60	J6006PBF
J6063CXCERT	3/8	40-200	1	25/32	7/8	11-45/64	2.60	J6006PBF
J6065CXCERT	3/8	200-1000	5	55/64	7/8	15-13/64	3.00	J6006PBF
						T033K6-4-2193	3-1	ASME B107.300

### FIXED HEAD MICROMETER TORQUE WRENCH 200-1000 FT-LBS

- Includes an extension handle.
- > Torque wrench is 40" long. Weight and over all length are for torque wrench with the extension handle.
- Packaged in a metal box for easy storage.
- > Calibrated  $\pm$  4% of torque reading clockwise and  $\pm 6\%$  counter clockwise at 20% to 100% of full scale.
- Certified wrenches to ±2% one direction are available upon request.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs	s) Head Width	(in) Head Depth (in)	Overall Length	(in) Weight (lbs)
J6023	1	200-1000	5	1-7/8	2-1/4	69	24.50
			JIS B4650	ISO 6789 T	O33K6-4-2193-1	AS28431 A	SME B107.14M

### FIXED HEAD MICROMETER TORQUE WRENCH 400-2000 FT-LBS

- Includes two extension handles, each 43" long.
- Torque wrench is 34-1/4" long. Weight and overall length are for torque wrench assembled with both extension handles.
- > Calibrated  $\pm 4\%$  of torque reading clockwise and  $\pm 6\%$  counter clockwise at 20% to 100% of full scale.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Widtl (in)	h Head Depth (in)	Overall Lengt	Weight h (in) (lbs)
J6025	1	400-2000	10	3-1/16	4-1/8	107-1/2	. 53.10
		BIL 💻	6 B4650 I	6789	TO33K6-4-2193-1	AS28431	ASME B107.14M





# RATCHETING HEAD MICROMETER WRENCHES

### RATCHETING HEAD MICROMETER TOROUE WRENCHES - IN-LBS

**MEETS ASME STANDARD** 

Calibrated to +/- 3% clockwise direction (for J6060A, calibrated to +/- 4% clockwise direction) and +/- 6% counter clockwise direction at 20% to 100% of full scale.



- Calibration is accomplished by manually loading the torque wrench. Manufactured to meet standard industrial torque applications
  - such as general industry, heavy equipment and maintenance.

Product #	Drive Size (in)	Torque Range (in-Ibs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs)	Storage Case	Repair Kit
J6060A	1/4	10-50	1	1-1/16	7/8	9-1/2	1.20	J6006PBF	J6062RK
J6062C	1/4	40-200	1	1-1/32	3/4	11-7/8	2.60	J6006PBF	J6062RK
J6064C	3/8	40-200	1	1-1/32	7/8	11-7/8	2.60	J6006PBF	J6064RK
J6066C	3/8	200-1000	5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6068C	1/2	360-1800	10	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6072C	1/2	600-3000	10	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
								ASM	E B107.14N

### **RATCHETING HEAD MICROMETER TORQUE WRENCHES - FT-LBS**

**MEETS ASME STANDARD** 

- Calibrated to +/- 3% clockwise direction and +/- 6% counter clockwise at 20% to 100% of full scale.
- Calibration is accomplished by manual loading the torque wrenches.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs)	Storage Case	Repair Kit
J6006C	3/8	16-80	0.5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6012C	3/8	20-100	0.5	1-7/16	1-1/64	17	3.30	J6006PBF	J6006RK
J6008C	1/2	16-80	0.5	1-7/16	1-7/32	15-1/2	3.00	J6006PBF	J6008RK
J6016C	1/2	30-150	1	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6014C	1/2	50-250	1	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
J6018AB	3/4	60-300	2	2-5/8	2-1/16	32-23/32	14.00	J6007PB	J6018RK
J6020AB	3/4	120-600	2	2-5/8	2-1/16	41-9/16	15.50	J6007PB	J6018RK
J6022B	1	140-700	2	2-5/8	2-5/16	46-27/32	20.50	J6007PB	J6022RK

ASME B107.14M 

### **RATCHETING HEAD MICROMETER TORQUE WRENCHES - NM MEETS ASME STANDARD**

- > Calibrated to +/- 3% clockwise direction and +/- 6% counter clockwise direction at 20% to 100% of full scale.
- > Calibration is accomplished by manual loading the torgue wrenches.
- ) Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



ASME B107.14M



### **RATCHETING HEAD MICROMETER TORQUE WRENCHES - IN-LBS**

**MEETS TO33K6 STANDARD** 

- Calibrated to +/- 3% in clockwise direction and +/- 6% in counter clockwise direction.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position, and performing a three click test at 20%, 60% and 100% of maximum instrument capacity.
- Manufactured to meet precision/highly accurate applications such as military and aerospace.



Product #	Drive Size (in)	Torque Range (in-lbs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs)	Storage Case	Repair Kit
J6062CX	1/4	40-200	1	1-1/32	3/4	11-7/8	2.60	J6006PBF	J6062RK
J6064CX	3/8	40-200	1	1-1/32	7/8	11-7/8	2.60	J6006PBF	J6064RK
J6066CX	3/8	200-1000	5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6072CX	1/2	600-3000	10	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
					!	TOP	33K6-4-2193-	1 ASM	IF B107 300

### RATCHETING HEAD MICROMETER TORQUE WRENCHES - FT-LBS

**MEETS TO33K6 STANDARD** 

- Calibrated to +/- 3% in clockwise direction and +/- 6% counter clockwise direction.
- Calibration is accomplished by mechanical loading each wrench in a horizontal position and performing a three click test at 20%, 60% and 100% of maximum instrument capacity.
- Manufactured to meet precision/highly accurate applications such as military and aerospace.

Product #	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs)	Storage Case	Repair Kit
J6006CX	3/8	16-80	0.5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6008CX	1/2	16-80	0.5	1-7/16	1-7/32	15-1/2	3.00	J6006PBF	J6008RK
J6014CX	1/2	50-250	1	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
J6016CX	1/2	30-150	1	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6018CX	3/4	60-300	2	2-5/8	2-1/16	32-23/32	14.00	J6007PB	J6018RK
J6020CX	3/4	120-600	2	2-5/8	2-1/16	41-9/16	15.50	J6007PB	J6018RK
						TO3	3K6-4-2193-	1 ASN	IE B107.300

### **RATCHETING HEAD MICROMETER TORQUE WRENCHES - IN-LBS**

MEETS T033K6 STANDARD WITH CERTIFICATION AND N.I.S.T. TRACEABILITY

- Calibrated to +/- 3% in clockwise direction and +/- 6% in counter clockwise direction.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position, and performing a three click test at 20%, 60% and 100% of maximum instrument capacity.
- Certification documents traceable to N.I.S.T. (National Institute of Standards and Technology).
- Manufactured to meet precision/highly accurate applications such as military and aerospace.

Product #	Drive Size (in)	Torque Range (in-lbs)	Increments (in-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs)	Storage Case	Repair Kit
J6062CXCERT	1/4	40-200	1	1-1/32	3/4	11-7/8	2.60	J6006PBF	J6062RK
J6064CXCERT	3/8	40-200	1	1-1/32	7/8	11-7/8	2.60	J6006PBF	J6064RK
J6066CXCERT	3/8	200-1000	5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6072CXCERT	1/2	600-3000	10	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
						TO3	3K6-4-2193-	1 ASM	IE B107.300





### **RATCHETING HEAD MICROMETER TORQUE WRENCHES - FT-LBS**

MEETS TO33K6 STANDARD WITH CERTIFICATION AND N.I.S.T. TRACEABILITY

- Calibrated to +/- 3% in clockwise direction and +/- 6% in counter clockwise direction.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position, and performing a three click test at 20%, 60% and 100% of maximum instrument capacity.
   Certification documents traceable to N.I.S.T.
- (National Institute of Standards and Technology).
- Manufactured to meet precision/highly accurate applications such as military and aerospace.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Increments (ft-lbs)	Head Width (in)	Head Depth (in)	Overall Length (in)	Weight (lbs)	Storage Case	Repair Kit
J6006CXCERT	3/8	16-80	0.5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6006RK
J6008CXCERT	1/2	16-80	0.5	1-7/16	1-1/64	15-1/2	3.00	J6006PBF	J6008RK
J6016CXCERT	1/2	30-150	1	1-7/8	1-13/32	21-1/2	5.00	J6014PBF	J6014RK
J6014CXCERT	1/2	50-250	1	1-7/8	1-13/32	27-1/8	5.90	J6014PBF	J6014RK
J6018CXCERT	3/4	60-300	2	2-5/8	2-1/16	32-23/32	14.00	J6007PB	J6018RK
J6020CXCERT	3/4	120-600	2	2-5/8	2-1/16	41-9/16	15.50	J6007PB	J6018RK
						TO3	3K6-4-2193-	1 ASM	1E B107.300

**RATCHET HEAD REPAIR KITS - TORQUE WRENCH** 

- 1/4" to 1" ratchet wheels made from alloy steel for uncompromising strength and durability.
- Field repair your torque wrench ratchet head easily with the corresponding repair kit.



Product #	Drive Size (in)	Use With	Weight (lbs)
J6062RK	1/4	J6062C, J6062CX, J6062CXCERT	0.06
J6064RK	3/8	J6064C, J6064CX, J6064CXCERT	0.07
J6006RK	3/8	J6006C, J6006CX, J6006CXCERT, J6006MC, J6006NMC, J6012C, J6066C, J6066CX, J6066CXCERT	0.18
J6014RK	1/2	J6014C, J6014CX, J6014CXCERT, J6014MC, J6014NMC, J6016C, J6016CX, J6016CXCERT, J6016MC, J6016NMC, J6068C, J6072C, J6072CX, J6072CXCERT	0.37
J6008RK	1/2	J6008C, J6008CX, J6008CXCERT	0.19
J6018RK	3/4	J6018AB, J6018CX, J6018CXCERT, J6020AB, J6020CX, J6020CXCERT, J6020NM	1.36
J6022RK	1	J6022B	1.51

### **TORQUE SCREWDRIVERS - IN-OZ**

- Calibrated to ± 4% of torque reading, clockwise at 20% to 100% of full scale.
- > 1/4" Square to 1/4" Hex Adapter included for use with insert bits.
- Industrial heavy-duty design.
- Aircraft grade aluminum.
- Aircraft quality spring.
- Positive self locking lock ring.
- > Floating three point reaction for repeatability.
- Laser marked easy-to-read scale.
- > N.I.S.T. (National Institute of Standards and Technology) traceable certification supplied with J6104ACERT.



Product #	Drive Size (in)	Torque Range (in-oz)	Increments (in-oz)	Width (in)	Height (in)	Overall Length (in	) Weight (lbs)
J6104A	1/4	20-100	2	1-1/4	1-1/4	6-1/2	1.00
J6104ACERT	1/4	20-100	2	1-1/4	1-1/4	6-1/2	1.00
						AS	ME B107.14M

### **TORQUE SCREWDRIVERS - IN-LBS**

- Calibrated to ± 4% of torque reading, clockwise at 20% to 100% of full scale.
- 1/4" Square to 1/4" Hex Adapter included for use with insert bits.
- Industrial heavy-duty design.
- Aircraft grade aluminum.
- Aircraft quality spring.
- Positive self locking lock ring.
- > Floating three point reaction for repeatability.
- Laser marked easy-to-read scale.
- N.I.S.T. (National Institute of Standards and Technology) traceable certification supplied with J6106ACERT.

Product #	Drive Size (in)	Torque Range (in-lbs)	Increments (in-lbs)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
J6106A	1/4	7-36	1	1-1/4	1-1/4	6-1/2	1.00
J6106ACERT	1/4	7-36	1	1-1/4	1-1/4	6-1/2	1.00
						ASN	<i>I</i> E B107.14M

### DIAL TORQUE WRENCHES - IN-LBS/CM-KG

- 6-30 in-lbs. thru 120-600 in-lbs. / 7-35 cm-kg thru 140-700 cm-kg.
- Accurate to  $\pm 4\%$  of torque reading in both directions at 20% to 100% of full scale.
- Industrial all steel or aluminum torque transfer components.
- > High alloy torsion drive design accuracy not effected by hand position.
- Dual scale (English/Metric) with clockwise and counterclockwise operation — fewer wrenches needed to complete job.
- Memory needles are standard on all wrenches except electric light models.
- Easy-to-read, high contrast scale.
- Laser marked serial number for traceability.
- N.I.S.T. (National Institute of Standards and Technology) traceable CW certification supplied with each wrench.

Product #	Drive Size (in)	Torque Range (metric)	Torque Range (in-lbs)	Increments (in-lbs)	Overall Length (in)	Weight (lbs)
J6168F	1/4	7-35 cm-kg	6-30	0.5	10	1.00
J6169F	1/4	18-90 cm-kg	15-75	1	10	1.40
J6177F	3/8	56-280 cm-kg	50-250	5	10	1.30
J6181F	3/8	140-700 cm-kg	120-600	10	10	2.20
				JIS B4650	SO 6789 ASN	/IE B107.14M



PRECISION TORQUE

### **DIAL TORQUE WRENCHES - FT-LBS/MKG**

- > Accurate to  $\pm 4\%$  of torque reading in both directions at 20% to 100% of full scale.
- Industrial all steel or aluminum torque transfer components.
- > High alloy torsion drive design accuracy not effected by hand position.
- > Dual scale (English/Metric) with clockwise and counterclockwise operation — fewer wrenches needed to complete job.
- > Memory needles are standard on all wrenches except electric light models.

- Easy-to-read, high contrast scale.
- Laser marked serial number for traceability.
  - > N.I.S.T. (National Institute of Standards and Technology) traceable CW certification supplied with each wrench.
  - > J6133F and J6141F include one removeable extension handle for easy force application.
  - J6149F includes five removeable extensions (requires two operators) and electric LED and buzzer.



.I6133F

Product #	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (metric)	Increments (ft-lbs)	Overall Length (	in) Weight (lbs)
J6113F	3/8	10-50	1.4-7 mkg	1	10-1/4	2.20
J6121F	1/2	35-175	5-24 mkg	5	21-1/2	4.00
J6125F	1/2	50-250	7-35 mkg	5	21-1/2	3.80
J6134F	3/4	70-350	-	10	27-7/8	7.10
J6133F	3/4	120-600	16-80 mkg	10	46-1/2	9.90
J6141F	1	200-1000	28-140 mkg	20	74-1/4	27.00
J6149F	1	400-2000	56-280 mkg	40	110-3/4	48.00
				JIS B4650 IS	60 6789 A	SME B107.14M

### **DIAL TORQUE WRENCHES - NM/IN-LBS, FT-LBS**

- > 2-10 Nm thru 50-250 Nm / 18-90 in-lbs. thru 35-175 ft-lbs
- > Accurate to  $\pm 4\%$  of torque reading in both directions at 20% to 100% of full scale.
- Industrial all steel or aluminum torque transfer components.
- High alloy torsion drive design accuracy not effected by hand position.
- Dual scale (Metric/English) with clockwise and counterclockwise operation — fewer wrenches needed to complete job.
- Memory needles are standard on all wrenches except electric light models.
- Easy-to-read, high contrast scale.
- Laser marked serial number for traceability.
- > N.I.S.T. (National Institute of Standards and Technology) traceable CW certification supplied with each wrench.

<b>J6169NMF</b> 1/4 – 18-90 2-10 0.2	Overall Length (in)	Weight (lbs)
	10	1.30
J6177NMF 3/8 – 50-250 6-30 0.5	10	1.50
<b>J6113NMF</b> 3/8 10-50 – 14-70 2	14-7/8	2.10
J6121NMF 1/2 35-175 – 50-250 5	21-1/2	4.00

ASME B107.14M 

J6149F



### **DIAL ELECTRONIC TORQUE WRENCHES - IN-LBS, FT-LBS**

- > Extended operation range in ft-lbs., in-lbs. and Nm units.
- Precision Accuracy: + / 1% in BOTH directions.
- Accuracy valid from 10% to 100% of full scale.
- > Large easy to read digits.
- Patented rotary bezel. LCD and key pad rotate both ways, up to 359 degrees for easy viewing.
- Torque target zone adjustable 1% to 10% indicates when the desired torque limit is approaching.
  - > Yellow light indicates the low end of the zone
  - Green light and buzzer sounds when the target is reached
  - Red Light with intermittent buzzer indicates over-torqued
- One button target torque setting.

- > Ergonomically designed for user comfort.
- > Operates on standard 9 volt battery.
- > Torsion drive strain gauge technology improves accuracy.
- Users can pull on the handle anywhere and still maintain accuracy.
- Built on durable chrome body (not painted) with nylon-6 rotary bezel.
- > Rotary dial is shrouded with metal walls to protect display.
- > Peak, hold and track modes standard.
- Fast sampling rate helps maintain high accuracy during torque applications.
- > Easy to use by production line or quality control inspector.



J6345



J6345B

Product #	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-lbs)	Torque Range (Nm)	Increments (ft-lbs)	Increments (in-lbs)	Increments (Nm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
J6339	1/4	0.63-6.25	7.5-75	0.84-8.47	0.01	0.01	0.01	З	2-1/2	11	1.40
J6342	1/4	0.83-8.33	10-100	1.11-11.13	0.01	0.1	0.01	З	2-1/2	11	1.40
J6345	3/8	2.1-21	25-250	2.8-28.2	0.01	0.1	0.01	З	2-1/2	11	1.40
J6345A	3/8	5-50	60-600	6.78-67.8	0.01	0.1	0.1	З	2-1/2	11	1.40
J6345B	1/2	10-100	120-1200	13.3-133.5	0.01	1	1	З	4	22	2.80
J6346	1/2	25-250	300-3000	33.8-338	0.1	1	0.1	З	4	22	2.80
J6347	3/4	60-600	720-7200	81-813	0.1	1	0.1	З	4	22	2.80
J6349	1	100-1000	-	140-1400	-	-	-	4	5	77	20.00
J6351	1	200-2000	-	271-2700	-	_	-	4	5	125	46.00
											107 300

ASME B107.300



J6351



### ELECTRONIC FIXED RATCHETING HEAD TOROUE WRENCHES

- Accuracy of +/- 2% of indicated value in both clockwise and counter clockwise directions.
- Broad accuracy range extends from 10% of Full Scale to 100% of Full Scale to help reduce the number of torque wrenches required.
- Ninety-nine "on-board" memory storage locations help improve efficiency when taking multiple torque readings.
- Three units of measure are available (Ft-lb, In-lb, and Nm).
- Three operating modes: Track Mode. Peak Hold and Auto Clear.
- > Fast sampling rate helps maintain high accuracy during torque applications.
- > Torque wrench head rotates to allow for easy viewing of LCD display.
- Easy to read LCD Display with large digits.

- 3-way Red/Green/Yellow lights.
- > Yellow light appears at the low end of the zone.
- Green light appears and buzzer sounds when the target is reached.
- Red light appears with intermittent buzzer when it is over torqued.
- > An audible buzzer helps identify when desired torque target zones are approaching and met.
- Target torque zone is adjustable from 1% to 10% of targeted torque value.
- > Fixed ratcheting head features a robust 24-tooth design with 15° arc swing, alloy steel drive gear for strength and durability, low profile for easy access and a reversing lever design for quick, one-hand operation.
- Ergonomically designed, comfortable cushion grip.



Product #	Size (in)	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-lbs)	Torque Range (Nm)	Increments (ft-lbs)	Increments (in-lbs)	(Nm)	(in)	(in)	(in)	(lbs)	Туре
JH4-250R	17/40	1/4	2.1-20.8	25-250	2.8-28.2	0.01	0.1	0.01	1-3/4	2	20-1/2	2.50	4 AA included
JH5-100FR	14/25	3/8	10-100	20-1200	13.6-135.6	0.1	1	0.1	1-3/4	2	20-1/2	2.70	4 AA included
JH7-250FR	61/83	1/2	25-250	300-3000	33.9-338.9	0.1	1	0.1	1-3/4		27-3/4		1 1 1
										-==	٨٥		

ASME B107.300

### ELECTRONIC TORQUE WRENCH SOFTWARE AND USB INTERFACE

- > Proto<sup>®</sup> Software allows for full two-way communication between the torque wrench and a laptop or desktop computer.
- Add-on the software and plug in the cable for full computer interface.
- All data captured by the torque wrench can be downloaded directly into a spreadsheet: either all at once from onboard memory or one reading at a time.
- > Control all settings on the torque wrench from the wrench or computer.
- ) Software includes CD and connection cable which interfaces with computer's RS-232 connection.



Product #	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
JH6000SW	5	1-3/4	5	0.60
				11 F 4005 11 F 40050 11 7 0505

Use With: JH4-250, JH4-250R, JH5-100F, JH5-100FR, JH7-250F, JH7-250FR, J6470-C, J6472-C, J6474-C, J6476-C, J6478-C

### DIGITAL ANGLE ADAPTER

- Digital angle value readout.
- > Ultra simple use: autotest and reset upon powering on.
- Adapter magnetized so it attaches to all types of ratchets.
- +/-2° accuracy (rotating 90° at speed of 30° / sec).
- +/-2% clockwise and counter clockwise for torque accuracy.
- LEDs for easy viewing of results and audible beep when desired level is reached.
- Buzzer and LED indicator for the 9 pre-settable target torques.
- > 50 data memory for recall and joint torque auditing.
- > Auto Sleep after about 2 minutes idle.

Made in USA

> Both AAA and rechargeable batteries are compatible.



<b>J6300TWA</b> 2-9/32 0.50 2 AAA included J6300PB	Product #	Overall Length (in)	Weight (lbs)	Battery Type	Storage Case
	J6300TWA	2-9/32	0.50	2 AAA included	J6300PB

ASME B107.300

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### **DIGITAL TORQUE AND ANGLE ADAPTERS**

- Torque and angle tightening with one tool: productivity improvement, digital display minimizes reading errors, and delivers high precision.
- > +/-2° (rotating 90° at speed of 30° / sec) for angle accuracy.
- +/-3% clockwise or +/-4% counter clockwise for torque accuracy.
  LEDs for easy viewing of results and audible
- beep when desired level is reached.Buzzer and LED indicator for the 9 pre-
- settable target torques or angles.
  Five Units Selectable (N.m, ft-lb, in.lb, kg.cm, degree).
- 50 data memory for recall and joint torque-angle auditing.
- > Auto Sleep after about 2 minutes idle.
- Both AAA and rechargeable batteries are compatible.



J6280TA100 3/8 5-99.5				Weight (lbs)	Battery Type	Storage Case
JUCUTATUU 0/0 0-00.0	60-1195	6.8-135	3-23/64	0.70	2 AAA included	J6310PB
<b>J6280TA150</b> 1/2 7.4-147.5	88-1770	10-200	3-23/64	0.70	2 AAA included	J6415PB
J6280TA250 1/2 12.5-250.7	150-3009	17-340	3-23/64	0.70	2 AAA included	J6425PB

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### 3/8" DRIVE 9 PIECE TORQUE ADAPTER SET - 12 POINT

- Designed for easy torque calibrations.
- > Adapters measure 2" from the center of the square drive to the center of the adapter opening.
- > Special heat-treated alloy steel helps to increase strength and durability.
- > Box end wall thickness is specially engineered to provide strength while
- still allowing ample room for access to reach difficult fasteners.
  12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.

Product #	Drive Size (in)	Weight (lbs)
J5100	3/8	1.32
		AS954E S3.8.1



### 3/8" DRIVE TORQUE ADAPTERS - 12 POINT

- Designed for easy torque calibrations.
- Adapters measure 2" from the center of the square drive to the center of the adapter opening.
- Special heat-treated alloy steel helps to increase strength and durability.
- Box end wall thickness is specially engineered to provide strength while still allowing ample room for access to reach difficult fasteners.
- 12 point box end allows for fine indexing, helping to improve speed and access.
   Fits 4, 6 and 12 point fasteners.





Product #	Size (in)	Drive Size (in)	Head Width (in) (B)	Head Depth (in) (C)	Overall Length (in) (L)	Weight (lbs)
J5112	3/8	3/8	9/16	17/64	2-11/16	0.08
J5114	7/16	3/8	21/32	19/64	2-47/64	0.10
J5116	1/2	3/8 47/64		21/64	2-25/32	0.10
J5118	9/16 3/8 13/16		23/64	2-13/16	0.12	
J5120	<b>5120</b> 5/8 3/8 29/32		25/64	2-55/64	0.12	
J5122	11/16	3/8	1	27/64	2-29/32	0.12
J5124	3/4	3/8	1-5/64	29/64	2-61/64	0.12
J5126	13/16	3/8	1-11/64	31/64	2-63/64	0.14
J5128	7/8	3/8	1-17/64	33/64	3-1/32	0.16
						AS954E S3.8.1



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# @<sup>\*</sup>

### **ELECTRONIC TORQUE TESTERS**

- Use to test all types of torque wrenches in all types of settings where full scale calibration is needed or where a quick Pass/Fail check is required.
- Accuracy of +/- 1% of indicated value in both clockwise and counter clockwise directions.
- > Broad accuracy range extends from 10% to 100% of full scale.
- > Three units of measure are available ft-lb, in-lb, and Nm.
- Three operating modes: Track Mode, Peak Hold and First Peak (for use with Click-style Torque wrenches).
- Fast sampling rate helps maintain high accuracy during torque applications.
- Each tester is built with a male square drive and also comes supplied with a female-to-female square drive adapter.
- Powered by a standard 9V battery, providing up to 50 hours run time.
- > N.I.S.T. (National Institute of Standards and Technology) traceable certification supplied with each tester.
- Optional all-steel stand (J6470S) provides a strong support with minimal footprint.

### **ELECTRONIC USB TORQUE TESTERS**

- Powers the tester via USB cable.
- > Recharges Internal Nimh battery.
- > Allows communication with computer for downloading torque readings via communication port on computer. Use with JH6000SW.
- An extensive two-way communication command set (ASCII text commands) that can control the tester remotely, from a computer, using any third party communication program (including Hyperterminal).
  - > Set target torque remotely.
  - > Set units remotely.
  - > Set target tolerance remotely.
  - > Set mode (track, peak, first peak) remotely.
  - > Query torque value remotely.
  - > Clear the Display remotely.
- > Get (call) torque value remotely by sending a Carriage Return to tester.
- > 100 torque reading memory (torque value saved to memory when save key is pressed on keypad).

#		(in)	(ft-lbs)	Range (in-lbs)	Range (Nm)	Increments (ft-lbs)	Increments (in-lbs)	Increments (Nm)	Width (in)	Height (in)	Length (in)	Weight (lbs)	Battery Type
J6470 J64	470-C	1/4	0.42-4.17	5-50	0.56-5.65	0.01	0.01	0.01	6	4-1/2	6	6.00	9 volt included
J6472 J64	472-C	3/8	2.1-20.8	25-250	2.8-28.2	0.01	0.1	0.01	6	4-1/2	6	6.00	9 volt included
J6474 J64	474-C	3/8	5-50	60-600	6.78-67.8	0.01	0.1	0.1	6	4-1/2	6	6.00	9 volt included
J6476 J64	476-C	1/2	25-250	300-3000	33.8-338	0.1	1	0.1	6	4-1/2	6	6.00	9 volt included
J6478 J64	478-C	3/4	60-600	720-7200	81.3-813	0.1	1	0.1	6	4-1/2	6	6.00	9 volt included

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### TORQUE TESTER FLOOR STAND

- > Floor stand for Proto® Torque Testing systems makes installation quick and easy.
- > All steel construction.
- Mounting holes predrilled to match Proto<sup>®</sup> test systems.
- > Floor mount holes are pre-drilled for securing to the floor.
- Small footprint for space saving economy.
- > Durable powder coated paint.

	Product #	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
	<b>J6470S</b>	7	32	4	20.00
1	Use With	n: J6470	, J6472,	J6474, J64	76, J6478



### **ELECTRONIC TORQUE METER**

- > The Proto<sup>®</sup> Electronic Torque Meter is a true all-in-one torque meter.
- The Proto<sup>®</sup> Electronic Torque Meter provides the maximum flexibility in lab and production applications. This system meets a broad range of needs from demanding users.
- It can help eliminate the need for multiple electronic torque wrenches and testers. The system grows as the demands of the user grow.
- Ideal for use in production (application of torque), quality control (verification of torque) and for the calibration and or verification of torque wrench accuracy (calibration labs and kit rooms).
- > Easy to learn and use. Anyone can be up and running in seconds. Unit designed with the end user in mind.

	Product #	Width (in)		Overall Length (in)		Туре				
	J6360	3-1/4	2	7-1/4	2.34	9 volt included				
j					ASME B107.300					



### **1.0% IN-LINE EXTENSION TRANSDUCERS**

- In-line extension transducers, connect between a wrench and a socket to measure the torque that is applied to a fastener.
- > This versatile type of transducer converts a hand held torque meter (J6360) into a highly accurate digital torque wrench.
- In-line transducers can also be used as torque wrench testers when mounted to a fixture.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-Ibs)	Width (in)	Height (in)	Overall Length (in)	Use With	Weight (lbs)
J6361	3/8	_	25-250	1-1/4	3-1/4	1-1/4	J6360	0.52
J6362	3/8	5-50	-	1-1/4	3-1/4	1-1/4	J6360	0.55
J6363	1/2	15-150	-	1-7/16	3-5/8	1-7/16	J6360	0.79
J6364	1/2	25-250	_	1-7/16	3-5/8	1-7/16	J6360	0.89
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### 0.5% BENCH MOUNT TRANSDUCERS

- "Plug and play" torque transducers. Automatic set-up of transducers means user friendly operation and less down time.
- > Versatile all-in-one unit can be used as both an accurate torque wrench and as an accurate torque tool tester. No need to own separate torque testers and electronic torque wrenches.
- > First peak of torque mode allows hand calibration of click type torque wrenches.
- Memory for traceability.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (in-Ibs)	Width (in)	Height (in)	Overall Length (in)	Use With	Weight (lbs)	
J6365	1/4	-	10-100	2-3/4	2-1/4	2-3/4	J6360	0.90	
J6366	3/8	-	25-250	2-3/4	2-3/4	2-3/4	J6360	0.83	
J6367	3/8	5-50	-	2-3/4	2-3/4	2-3/4	J6360	1.13	
J6368	1/2	25-250	_	4	3-3/4	4	J6360	3.14	
J6369	3/4	50-500	-	4	4-5/8	4	J6360	3.16	
J6371	1/4	-	5-50	2-3/4	2-1/4	2-3/4	J6360	0.60	
J6372	1/2	15-150	-	4	3-3/4	4	J6360	0.60	
J6373	3/4	60-600	-	4	4-5/8	4	J6360	0.90	
J6374	1	100-1000	-	6	5	8-1/2	J6360	0.90	
J6375	1	200-2000	-	6	5	8-1/2	J6360	0.90	
							ASI	ME B107.300	

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### BRACKET FOR BENCH MOUNT TRANSDUCERS

- > Heavy-duty mounting bracket for bench mount transducers.
- Use up to 600 ft-lbs.

	Product #	Width (in)	Height (in)	Overall Lengt (in)	h Weight (lbs)
	J6370	5	5	5	5.75
	Jse With: J6365 3, J6371, J6372	, ,	,	, -	3107.300



### **TORQUE MULTIPLIER DISPLAY WRENCHES**

- > When placed between the torque multiplier and the fastener, the Proto<sup>®</sup> Torque Multiplier Display Wrench will display the actual torque applied to the fastener.
- > Precision Accuracy: + / 1% in BOTH directions.



Product #	Drive Size (in)	Torque Range (ft-lbs)	Torque Range (Nm)	Increments (ft-lbs)	Increments (Nm)	Width (in)	Height (in)	Overall Length (in)	Weight (lbs)
J6349A	1	100-1000	133-1335	1	1	4	5	44	15.00
J6352	1	200-2000	267-2670	1	1	4	5	24	15.00



### **TORQUE MULTIPLIERS 750 FT-LBS**

- Maximum rated input: 227 ft-lbs. (308 Nm).
- Maximum rated output: 750 ft-lbs. (1017 Nm).
- > Standard torque accuracy is +/- 5% of reading.
- Reaction system: tubular reaction bar.
- Gear system: single stage planetary.



Product #	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Handle Length (in) (L1)	Overall Length (in) (L)	Weight (lbs)
J6202A	1/2	3/4 Sq. Male	1:3.33	3-3/32	2-13/16	5-1/4	8-19/32	4.00
J6202ACERT	1/2	3/4 Sq. Male	1:3.33	3-3/32	2-13/16	5-1/4	8-19/32	4.00

### **TORQUE MULTIPLIERS 1200 FT-LBS**

- > Maximum rated input: 200 ft-lbs. (271 Nm).
- Maximum rated output: 1200 ft-lbs. (1626 Nm).
- > Standard torque accuracy is +/- 5% of reading.
- > Reaction system: tubular reaction bar.
- Gear system: single stage planetary.
- > Angle of turn protractor: 5° increments.



Product #	Input Drive (in)	Output Drive (in)	Torque Ratio		Head Length (in) (B)	Handle Length (in) (L1)	Overall Length (in) (L)	Weight (lbs)	Repair Kit
J6212	1/2	3/4 Sq. Male	1:6	4	3-15/16	14-1/8	19-19/32	9.10	J6212RD
J6212CERT	1/2	3/4 Sq. Male	1:6	4	3-15/16	14-1/8	19-19/32	9.10	J6212RD

### **TORQUE MULTIPLIERS 2200 FT-LBS**

- Maximum rated input: 162 ft-lbs. (220 Nm).
- Maximum rated output: 2200 ft-lbs. (2983 Nm).
- > Standard torque accuracy is +/- 5% of reading.
- > Reaction system: tubular reaction bar.
- Gear system: two stage planetary.
- Angle of turn protractor: 5° increments.
- > Anti-backlash device: self-contained, 3 position.



Product #	Input Drive (in)	Output Drive (in)	Torque Ratio		Head Length (in) (B)	Handle Length (in) (L1)	Overall Length (in) (L)	Weight (lbs)	Repair Kit
J6222	1/2	1 Sq. Male	1:13.6	5-3/4	4-1/16	14-1/8	19-19/32	15.20	J6222RD
J6222CERT	1/2	1 Sq. Male	1:13.6	5-3/4	4-1/16	14-1/8	19-19/32	15.20	J6222RD

550



### **TORQUE MULTIPLIERS 3200 FT-LBS**

- Maximum rated input: 173 ft-lbs. (235 Nm).
- Maximum rated output: 3200 ft-lbs. (4338 Nm).
- > Standard torque accuracy is +/- 5% of reading.
- Reaction system: tubular reaction bar.
- Gear system: two stage planetary.
- Angle of turn protractor: 5° increments.
- > Anti-backlash device: self-contained, 3 position.



Product #	Input Drive (in)	Output Drive (in)	Torque Ratio		Head Length (in) (B)	Handle Length (in) (L1)	Overall Length (in) (L)	Weight (lbs)	Repair Kit
J6232	1/2	1 Sq. Male	1:18.5	6-1/2	4-1/16	14-1/8	19-19/32	18.30	J6232RD
J6232CERT	1/2	1 Sq. Male	1:18.5	6-1/2	4-1/16	14-1/8	19-19/32	18.30	J6232RD

### **TORQUE MULTIPLIER - REACTION PLATE SYSTEM - 2200 FT-LBS**

- Maximum rated input: 162 ft-lbs. (220 Nm).
- Maximum rated output: 2200 ft-lbs. (2983 Nm).
- > Standard torque accuracy is +/- 5% of reading.
- > Reaction system: reaction plate with slave drive
- Gear system: two stage planetary.
- > Anti-backlash device: self-contained, 3 position.
- Can be used for Mack truck leaf springs.

Product #	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Overall Length (in) (L)		Repair Kit
J6234	1/2	1 Sq. Male	1:13.6	5-1/2	4-7/8	14	17.20	J6222RD





### **TORQUE MULTIPLIER - REACTION PLATE SYSTEM - 5000 FT-LBS**

- Maximum rated input: 189 ft-lbs. (256 Nm).
- Maximum rated output: 5000 ft-lbs. (6778 Nm).
- Standard torque accuracy is +/- 5% of reading.
- > Reaction system: reaction plate with slave drive.
- Gear system: three stage planetary.
- > Anti-backlash device: self-contained, 3 position.



P	roduct #	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Overall Length (in) (L)	Weight (lbs)	Repair Kit
	J6242	1/2	1-1/2 Sq. Male	1:26.5	8-3/4	5-5/8	14-29/32	34.00	J6242RD

### **TORQUE MULTIPLIER - REACTION PLATE SYSTEM - 8000 FT-LBS**

- Maximum rated input: 154 ft-lbs. (209 Nm).
- Maximum rated output: 8000 ft-lbs. (10846 Nm).
- > Standard torque accuracy is +/- 5% of reading.
- > Reaction system: reaction plate with slave drive.
- Gear system: three stage planetary.
- > Anti-backlash device: self-contained, 3 position.



Product #	Input Drive (in)	Output Drive (in)	Torque Ratio	Head Depth (in) (A)	Head Length (in) (B)	Overall Length (in) (L)	Weight (lbs)	Repair Kit
J6252	1/2	1-1/2 Sq. Male	1:52	10-3/4	5-13/16	15-3/16	50.30	J6252RD





### **TORQUE MULTIPLIER SQUARE DRIVE REPLACEMENT KITS**

Proto® Torque Multipliers provide overload protection with replaceable output square drives that are designed to twist off at 3%-10% over maximum output capacity.

Product #	Drive Size (in)	Use With	Weight (lbs)
J6212RD	3/4	J6212, J6212CERT	0.20
J6222RD	1	J6222, J6222CERT, J6234	0.53
J6232RD	1	J6232, J6232CERT	0.56
J6242RD	1-1/2	J6242	1.55
J6252RD	1-1/2	J6252	1.72



### ACCESSORY AIR DRIVE 200 FT-LBS

- Powered input to a torque multiplier can reduce operator fatigue, increase productivity.
- Designed to drive Proto<sup>®</sup> Torque Multipliers (except J6202A).
- Maximum torque output: 200 ft-lbs. (271 Nm).
- Maximum running air pressure: 60 PSI.
- Output free speed: 70 RPM.
- > Output rotation: clockwise and counterclockwise.

	Product #	(in)	Output Drive (in)	(in)	Length (in)	(lbs)
	J6201	1/4	1/2 Sq. Male	3-1/8	16-1/4	11.00
1						



### **AIR DRIVE CONVERTER 200 FT-LBS**

- Powered input to a torque multiplier can reduce operator fatigue, increase productivity.
- Designed to drive Proto<sup>®</sup> Torque Multipliers (except J6202A) when used with an air or electric drive tool.
- > Not designed for use with Impact Tools.
- Maximum torque output: 200 ft-lbs. (271 Nm).
- Maximum torque input: 38 ft-lbs. (52 Nm).



Product #Drive Size (in)Input Drive (in)Output Drive (in)Torque RatioDiameter (in)Overall Length (in) Weight (lbs)J62031/21/21/21/23-1/845.50