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## PR=EIGION TORGDE INNOVFTION

Enhance accessibility in tight areas with $\mathrm{PROTO}^{\ominus}$ Precision 90 Torque Wrenches. Each is individually crafted from a single piece of solid, high-grade steel. With proper maintenance and regular calibration, our rigorous safety standards ensure you never have to question their accuracy. Plus, we offer precision torque products in a wide range, including micrometer and electronic, as well as torque testing and accessories.


## TORGUE BENCH GENEGRE

) Helps ensure manual and electronic torque wrenches comply with ASME B107.300-2010, which requires calibration every 12 months or 5,000 clicks. Customer specification may exceed this.
) For use with J657 series sensors.
, 735 Ft. Lbs capacity.
) Adjustable handle pin to align with calibration marks.

D Secure frame to maintain dimensional stability.
) $1200: 1$ gearbox for accuracy during loading.


## TORGUE SCREWMRNERG

, Accuracy +/- 6\% CW to meet ASME spec.
D Drive hex releases at target torque to help prevent over torque.
D Female hex output for use with standard $1 / 4^{\prime \prime}$ bits.
, $1 / 4^{\prime \prime}$ male square drive adapter supplied (J107A and J6108A) for use with sockets.
, Made in Italy.

(Pg. 506)

## ELECTRONIC TORQUE WRENCHES

, Measuring units: $\mathrm{ft}-\mathrm{lb}$, in- $\mathrm{lb}, \mathrm{kg}-\mathrm{cm}$ and Nm .
) 9 presets available.
》 Stores up to 50 torque values.
》 Accurate to +/- 2\% CW and +/- 3\% CCW of torque reading at $20 \%-100 \%$.


36- tooth ratcheting head and 48-tooth ratcheting head

JGO12EA
(Pg. 498)

Operation modes include Peak or Follow mode.

LCD screen with visual alert lights and audible tone.

## ELECTRONIC TORQUE TESTARS

, Accurate to $+/-1 \% \mathrm{CW}$ and $+/-3 \%$ CCW digit accuracy.
, Measuring Units: ft-lbs, in-lbs, and Nm.
, Operation modes include Peak, Hold and Dial modes.
, Dimensions: L 5-5/8" x W 6-3/8" x H 3-1/2".
, Includes blow mold case with AC/DC adapter and calibration certificate.


Digital torque tester with LCD screen and audible beeps.


Female square drive.

## RCCESSIBILITY + RCCURRCY = PRECISION TORQUE

From torque tools to testers, $\mathrm{PROTO}^{\circledR}$ offers a complete range of solutions to help deliver accuracy and safety in industrial environments.

## BRERDTH DF LINE



## TORQUE WRENCH CERTIFICRTION DPTIONS

All Proto micrometer torque wrenches are certified and calibrated mechanically in the horizontal position with CXCERT versions including documents traceable to N.I.S.T.

| Proto $^{\circledR}$ Calibration |  |  |  |
| :---: | :---: | :---: | :---: |
| Designation | C | CKCERT |  |
| Standard | ASME B107.14-2004 | T.0.33K6-4-2193-1 |  |
| Accuracy | CW $+/-4 \%$ | CCW $+/-6 \%$ | CW $+/-4 \%$ |
| CCW $+/-6 \%$ |  |  |  |
| Calibration Technique | Mechanical Load Horizontal Position | Mechanical Load Horizontal Position |  |

## PRECIGION TORGUE

## PRECISION 90 MICROMETER TORQUE WRENCHES

）Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel－chrome coating for greater corrosion－resistance．
）Calibrated to＋／－4\％clockwise direction and＋／－6\％and counter clockwise direction at 20\％to 100\％of full scale．
）Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing at $20 \%, 60 \%$ ，and $100 \%$ of maximum instrument capacity．
）Manufactured to meet standard industrial torque applications，general industry，heavy equipment，and maintenance．
， 90 tooth count head allows for 4 degree arc swing，to help improve accessibility and efficiency．


| Product \＃ | Drive <br> Size（in） | Torque Range （in－lbs） | Head Width（in） | Head Depth（in） | Overall Length（in） | Weight（lbs） | Storage Case |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6062HTC | 1／4 | 40－200 | 1／2 | 1－1／8 | 11－3／8 | 2.60 | J6006PBF |
| J6064HTC | 3／8 | 40－200 | 1／2 | 1－1／8 | 11－3／8 | 2.70 | J6006PBF |

Low profile reversing lever design for quick，one hand operation．

## FIKED HERD MICROMETER TORQUE WRENCHES－IN－LBS

）Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel－chrome coating for greater corrosion－resistance．
）Calibrated to＋／－4\％clockwise direction and＋／－6\％and counter clockwise direction at $20 \%$ to $100 \%$ of full scale．
，Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing at 20\％，60\％，and 100\％of maximum instrument capacity．

| C Series | CKCERT Series | Drive <br> Size（in） | Torque Range <br> （in－lbs） | Increments <br> （in－llbs） | Head <br> Width（in） | Head <br> Depth（in） | Overall <br> Length（in） | Weight（lbs） | Storage Case |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## FIXED HERD MICRDMETER TORqUE WRENCHES－FT－LBS

）Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel－chrome coating for greater corrosion－resistance．
，Calibrated to＋／－ $4 \%$ in clockwise direction and＋／－ $6 \%$ counter clockwise direction at $20 \%$ to $100 \%$ of full scale．
，Manufactured to meet standard industrial torque applications，general industry，heavy equipment，and maintenance．
）Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing at $20 \%, 60 \%$ ，and $100 \%$ of maximum instrument capacity．

| Product \＃ | Drive <br> Size（in） | Torque Range <br> （ft－llss） | Increments <br> （ft－llss） | Head <br> Width（in） | Head <br> Depth（in） | Overall <br> Length（in） | Weight（llhs） | Storage Case |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6005C | $3 / 8$ | $16-80$ | 0.50 | $55 / 64$ | $7 / 8$ | $15-13 / 54$ | 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 |

## FIKED HERD MICRDMETER TORQUE WRENCH 2ロロ－1ロロロ 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 $\pm 2 \%$ one direction are available upon request．

| Product \＃ | Drive Size（in） | Torque Range <br> （ft－llas） | Increments（ft－llas） | Head Width（in） | Head Depth（in） | Overall Length（in） | Weight（lhs） |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6023 | 1 | $200-1000$ | 5 | $1-7 / 8$ | $2-1 / 4$ | 69 | 24.50 |

## FIKED HERD MICROMETER TORQUE WRENCH 4ロロ－2ODO FT－LES

）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 at $20 \%$ to $100 \%$ of full scale．


| Product \＃ | Drive Size（in） | Torque Range <br> （ft－lls） | Increments（ft－lbs） | Head Width（in） | Head Depth（in） | Dverall Length（in） | Weight（lbs） |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6025 | 1 | $400-2000$ | 10 | $3-1 / 16$ | $4-1 / 8$ | $107-1 / 2$ | 53.10 |

## PRECISION TORQUE

## RATCHETING HERD MICROMETER TORQUE WRENCHES - IN-LBS

) Calibrated to $+/-4 \%$ clockwise direction and $+/-6 \%$ and counter clockwise direction at $20 \%$ to $100 \%$ of full scale.
, Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing at $20 \%, 60 \%$, and $100 \%$ of maximum instrument capacity.
) Manufactured to meet precision/highly accurate applications such as military and aerospace.
) Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only).

| C Series | CXCERT Series | Drive Size (in) | Torque Range (in-Ibs) | Increments (in-Ibs) | 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 | J6062CxCERT | 1/4 | 40-200 | 1 | 1-1/32 | 3/4 | 11-7/8 | 2.60 | J6006PBF | J6062RK |
| J6064C | Jgogackeert | 3/8 | 40-200 | 1 | 1-1/32 | 7/8 | 11-7/8 | 2.60 | J6006PBF | J6064RK |
| J6066C | Jgocickcert | 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 | J6072CKCERT | 1/2 | 600-3000 | 10 | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |

ASME B107.14M

## RRTCHETING HERD MICRDMETER TORQUE WRENCHES - FT-LBS

1. Calibrated to $+/-4 \%$ clockwise direction and $+/-6 \%$ and counter clockwise direction at $20 \%$ to $100 \%$ of full scale.
, Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing at $20 \%, 60 \%$, and $100 \%$ of maximum instrument capacity.
, Manufactured to meet precision/highly accurate applications such as military and aerospace.
) Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only).


| C Series | CXCERT Series | Drive Size (in) | Torque Range (ft-lhs) | Increments (ft-lbs) | Head Width (in) | $\begin{gathered} \text { Head } \\ \text { Depth (in) } \\ \hline \end{gathered}$ | Overall Length (in) | Weight (lbs) | Storage Case | Repair Kit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6006C | JG006CKCERT | 3/8 | 16-80 | 0.50 | 1-7/16 | 1-1/64 | 15-1/2 | 3.00 | J6006PBF | J6006RK |
| J6012C | - | 3/8 | 20-100 | 0.50 | 1-7/16 | 1-1/64 | 17 | 3.30 | J6006PBF | J6006RK |
| J6008C | JG008CKCERT | 1/2 | 16-80 | 0.50 | 1-7/16 | 1-7/32 | 15-1/2 | 3.00 | J6006PBF | J6008RK |
| J6016C | JG016CKCERT | 1/2 | 30-150 | 1 | 1-7/8 | 1-13/32 | 21-1/2 | 5.00 | J6014PBF | J6014RK |
| J6014C | Jg014ckcert | 1/2 | 50-250 | 1 | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |
| J6018AB | JG018CKCERT | 3/4 | 60-300 | 2 | 2-5/8 | 2-1/16 | 32-23/32 | 14.00 | J6007PB | J6018RK |
| J6020AB | Jgorockcert | 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

## RRTCHETINL HERD MICRDMETER TORQUE WRENCHES - NM

) Calibrated to $+/-4 \%$ clockwise direction and $+/-6 \%$ counter clockwise Manufactured to meet standard industrial torque applications, general direction at $20 \%$ to $100 \%$ of full scale. industry, heavy equipment, and maintenance.
, Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing at $20 \%, 60 \%$, and $100 \%$ of maximum instrument capacity.

| Product \# | Drive Size (in) | Torque Range (Nm) | Increments ( Nm ) | Torque Range (ft-lhs) | Increments (ft-Ibs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (llbs) | Storage Case | Repair Kit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6006MC | 3/8 | 16-80 | 0.5 | - | - | 1-7/16 | 1-1/64 | 15-1/2 | 3.00 | J6006PBF | J6006RK |
| J6006NMC* | 3/8 | 16-80 | 0.5 | 11.1-62.7 | 0.5 | 1-7/16 | 1-1/64 | 15-1/2 | 3.00 | J6006PBF | J6006RK |
| J6016MC | 1/2 | 40-200 | 1 | - | - | 1-7/8 | 1-13/32 | 21-1/2 | 5.00 | J6014PBF | J6014RK |
| J6016NMC* | 1/2 | 40-200 | 1 | 33.2-151.2 | 1 | 1-7/8 | 1-13/32 | 21-1/2 | 5.00 | J6014PBF | J6014RK |
| J6014MC | 1/2 | 70-350 | 1 | - | - | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |
| J6014NMC* | 1/2 | 70-350 | 1 | 55.3-261.8 | 1 | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |
| J6020NM | 3/4 | 160-800 | 4 | - | - | 2-5/8 | 2-1/16 | 41-9/16 | 15.50 | J6007PB | J6018RK |

## RRTCHET HERD REPRIR KITS－TORQUE WRENCH

， $1 / 4^{\text {＂to }} 1$＂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 |
| :---: | :---: | :---: | :---: |
| J6062RK | $1 / 4$ | J6062C，J6062CXCERT | Weight（lbs） |
| J6064RK | $3 / 8$ | J6064C，J6064CXCERT | 0.06 |
| J6006RK | $3 / 8$ | J6006C，J6006CXCERT，J6006MC，J6006NMC，J6012C，J6066C，J6066CXCERT | 0.07 |
| J6014RK | $1 / 2$ | J6014C，J6014CXCERT，J6014MC，J6014NMC，J6016C，J6016CXCERT， | 0.18 |
| J6008RK | $1 / 2$ | J6016MC，J6016NMC，J6068C，J6072C，J6072CXCERT | 0.37 |
| J6018RK | $3 / 4$ | J6008C，J6008CXCERT | 0.19 |
| J6022RK | 1 | J6018AB，J6018CXCERT，J6020AB， | 1.36 |

## DIRL TORQUE WRENCHES－IN－LBS／CM－Kロ

，6－30 in－lbs thru $120-600$ in－lbs／ $7-35 \mathrm{~cm}$ kg thru $140-700 \mathrm{~cm} \mathrm{~kg}$ ．
，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 \＃ | Certified Series | Drive <br> Size（in） | Torque Range <br> （metric） | Torque Range <br> （in－lhs） | Increments <br> （in－lbs） | Overall <br> Length（in） | Weight <br> （llhs） |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6168F | - | $1 / 4$ | $7-35 \mathrm{~cm} \mathrm{~kg}$ | $6-30$ | 0.5 | 10 | 1.00 |
| J6169F | J6169FCERT | $1 / 4$ | $18-90 \mathrm{~cm} \mathrm{~kg}$ | $15-75$ | 1 | 10 | 1.40 |
| J6177F | - | $3 / 8$ | $56-280 \mathrm{~cm} \mathrm{~kg}$ | $50-250$ | 5 | 10 | 1.30 |
| J6181F | - | $3 / 8$ | $140-700 \mathrm{~cm} \mathrm{~kg}$ | $120-600$ | 10 | 10 | 2.20 |

## DIRL TロRQUE WRENCHES－FT－LBS／MK匚

》 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．
1 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 （ft－lbs） | Increments （ft－lhs） | Overall Length （in） | Weigh （llbs） |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6113F | 3／8 | $1.4-7 \mathrm{mkg}$ | 10－50 | 1 | 10－1／4 | 2.20 |
| J6121F | 1／2 | $5-24 \mathrm{mkg}$ | 35－175 | 5 | 21－1／2 | 4.00 |
| J6125F | 1／2 | $7-35 \mathrm{mkg}$ | 50－250 | 5 | 21－1／2 | 3.80 |
| J6134F | 3／4 | － | 70－350 | 10 | 27－7／8 | 7.10 |
| J6133F ${ }^{\text {＋}}$ | 3／4 | $16-80 \mathrm{mkg}$ | 120－600 | 10 | 46－1／2 | 9.90 |
| J6141F ${ }^{\text {t }}$ | 1 | 28－140 mkg | 200－1000 | 20 | 74－1／4 | 27.00 |
| J6149Ft | 1 | $56-280 \mathrm{mkg}$ | 400－2000 | 40 | 110－3／4 | 48.00 |
| es one re | ion handle |  |  | JIS B4650 ISO 6789 ASME B107．14M |  |  |

, 2-10 Nm thru $50-250 \mathrm{Nm} / 18-90$ in-lbs thru $35-175 \mathrm{ft}$-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.

| Product \# | Certified Series | Drive Size (in) | Torque Range <br> (ft-llss) | Torque Range <br> (in-lhs) | Torque Range <br> (Nm) | Increments <br> (Nm) | Overall Length <br> (in) | Weight (lbs) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6169NMF | - | $1 / 4$ | - | $18-90$ | $2-10$ | 0.2 | 10 | 1.30 |
| J6177NMF | J6177NMFCERT | $3 / 8$ | - | $50-250$ | $6-30$ | 0.5 | 10 | 1.50 |
| J6113NMF | - | $3 / 8$ | $10-50$ | - | $14-70$ | 2 | $14-7 / 8$ | 2.10 |
| J6121NMF | - | $1 / 2$ | $35-175$ | - | $50-250$ | 5 | $21-1 / 2$ | 4.00 |

DIRL ELECTRONIC TORQUE WRENCHES - IN-LBS, FT-LBS
) Extended operation range in $\mathrm{Ft}-\mathrm{lb}$, $\mathrm{In}-\mathrm{lb}$ 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.
) Meets or exceeds ASME B107.28

| Product \# | Drive Size (in) | Torque Range (ft-llis) | Increments (ft-lbs) | Torque Range (in-lbs) | Increments (in-lbs) | Torque Range ( nm ) | $\begin{gathered} \text { Increments } \\ (\mathrm{nm}) \end{gathered}$ | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6339 | 1/4 | 0.63-6.25 | 0.01 | 7.5-75 | 0.01 | 0.84-8.47 | 0.01 | 3 | 2-1/2 | 11 | 1.40 |
| J6342 | 1/4 | 0.83-8.33 | 0.01 | 10-100 | 0.10 | 1.11-11.13 | 0.01 | 3 | 2-1/2 | 11 | 1.40 |
| J6345 | 3/8 | 2.1-21 | 0.01 | 25-250 | 0.10 | 2.8-28.2 | 0.01 | 3 | 2-1/2 | 11 | 1.40 |
| J6345A | 3/8 | 5-50 | 0.01 | 60-600 | 0.10 | 6.78-67.8 | 0.1 | 3 | 2-1/2 | 11 | 1.40 |
| J6345B | 1/2 | 10-100 | 0.01 | 120-1200 | 1.00 | 13.3-133.5 | 0.1 | 3 | 4 | 22 | 2.80 |
| J6346 | 1/2 | 25-250 | 0.10 | 300-3000 | 1.00 | 33.8-338 | 0.1 | 3 | 4 | 22 | 2.80 |
| J6347 | 3/4 | 60-600 | 0.10 | 720-7200 | 1.00 | 81-813 | 0.1 | 3 | 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 |

## ELECTRONIC SMRRT TロRQUE WRENCHES - FT-LBS

, Connected Bluetooth Torque Wrench allows for fast, easy and accurate torque setting.
D App control for advanced features to set torque target, help reduce errors and record measurements for audit.
, Torque history data transfer through mobile application.
, Digital Torque Wrench with 2\% accuracy CW/CCW and Angle measurement +/- 1 degree.
, Calibration status reporting to ASME or user defined schedule.
1 Includes protective Blow Mold Case, fast 2A charger, micro USB cable, charging dock, manual and calibration certificate.


| Product \# | Drive <br> Size (in) | Torque Range <br> (ft-lbs) | Increments <br> (ft-Ibs) | Torque Range <br> (in-lbs) | Increments <br> (in-lbs) | Torque Range <br> (NMM) | Overall <br> Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6110BT | $1 / 4$ | $1-22$ | 0.10 | $12-264$ | 0.10 | $1.5-30$ | $17-1 / 8$ |  |
| J6112BT | $3 / 8$ | $5-100$ | 0.10 | $60-1200$ | 0.10 | $6.70-135$ | $17-1 / 5$ |  |
| J6114BT | $1 / 2$ | $25-250$ | 0.10 | $300-3000$ | 0.10 | $17-340$ | $32-7 / 25$ | 2.75 |

## SMART TORQUE WRENCHES

Haptic feedback, positive mechanical click and LED lights for precise control of applied torque.

Included software allows for:
) Fast setting of torque or angle.
) Single or multi-pass sequences creation.
) Unit conversion.
) View of real-time results via app software.
) Data transfer for auditing.


For more information, please contact your local sales represenative.

## ELECTRONIC TORQUE WRENCHES - FT-LES

) LCD screen with visual alert lights and audible tone.
) Measuring units: Nm, ft-lb, in-lb, and kg-cm.
) Accurate to $+/-2 \%$ CW and $+/-3 \%$ CCW of torque reading at $20 \%$ to 100\%.
, Operation modes include Peak or Follow mode.
) 9 presets available.
, 36-tooth ratcheting head.
) Data memory size of 50 .
, Includes blow mold case, 2x AA batteries and calibration certificate.


| Product \# | Drive Size (in) | Torque Range (ft-lbs) | Increments (ft-Ibs) | Torque Range (in-lbs) | Increments (in-Ibs) | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) | Battery Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6012E | 3/8 | 5-99 | 0.10 | 60-1188 | 1 | 1-41/34 | 1-41/64 | 16-19/64 | 4.30 | AA |
| J6014E | 1/2 | 12.5-250 | 0.10 | 150-3000 | 1 | 1-41/34 | 1-41/64 | 25-19/32 | 6.40 | AA |

## ELECTRONIC FLEX HERD TORQUE WRENCHES - FT-LBS

) LCD screen with visual alert lights and audible tone.
) Measuring units: Nm, ft-lb, in-lb, and kg-cm.

1) Accurate to $+/-2 \%$ CW and $+/-3 \%$ CCW of torque reading at 20\% to 100\%.
) Operation modes include Peak or Follow mode.
, 9 presets available.
) 36 -tooth ratcheting flex head.
, Data memory size of 50 .
) Includes blow mold case, $2 x$ AA batteries and calibration certificate.


| Product \# | Drive <br> Size (in) | Torque Range <br> (ft-lhs) | Increments <br> (ft-lbs) | Torque Range <br> (in-llbs) | Increments <br> (in-lbs) | Overall <br> Length (in) | Weight (lbs) | Battery Type |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6061EFK | $1 / 4$ | $1.1-22$ | 0.01 | $12-264$ | 0.10 | $15-19 / 32$ | 4.00 | AA |
| J6012EFK | $3 / 8$ | $5-99$ | 0.10 | $60-1188$ | 1 | $16-45 / 64$ | 4.10 | AA |
| J6014EFK | $1 / 2$ | $12.5-250$ | 0.10 | $150-3000$ | 1 | $25-51 / 64$ | 6.40 | AA |

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## ELECTRONIC RNCLE TORQUE WRENCHES - FT-LBS

) $L C D$ screen with visual alert lights and audible tone.
) Measuring units: Nm , $\mathrm{ft}-\mathrm{lb}$, in- lb , and $\mathrm{kg}-\mathrm{cm}$.

1) Accurate to $+/-2 \%$ CW and $+/-3 \%$ CCW of torque reading at 20\% to 100\%.
2) Angle Accuracy: + /- $2^{\circ}$ (rotating $90^{\circ}$ at speed of $30^{\circ}$ per second).
) Operation modes include Peak or Follow mode.
) 9 presets available.

| Product \# | Drive <br> Size (in) | Torque Range <br> (ft-llas) | Increments <br> (ft-lbs) | Torque Range <br> (in-llas) | Increments <br> (in-lhs) | Overall <br> Length (in) | Weight (llss) | Battery Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JG012EA | $3 / 8$ | $5-99$ | 0.1 | $60-1188$ | 1 | $48-1 / 32$ | 4.10 | AA |
| JG020EA | $3 / 4$ | $30-600$ | 0.1 | $360-7200$ | 1 | $16-47 / 64$ | 12.10 | AA |

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## ELECTRONIC FIKED RRTCHETING HERD TORQUE WRENCHES

1) 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.
2) Fixed ratcheting head features a robust 24 tooth design with $15^{\circ}$ arc swing, alloy steel drive gear for strength and durability, low profile for easy access and a reversing lever design for quick, one handed operation.
) Ergonomically designed, comfortable cushion grip.
) Meets or exceeds ASME B107.28
) N.I.S.T. traceable certificate included.


| Product \# | Size (in) | Drive Size (in) | Torque Range (ft-lbs) | Torque Range (in-lis) | Increments (ft-Ibs) | Increments (in-Ibs) | Width (in) | Height (in) | Overall Length (in) | Weight (llbs) | Battery Type | Repair Kit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JH4-250RB | 27/64 | 1/4 | 2.1-20.8 | 25-250 | 0.01 | 0.10 | 1-3/4 | 2 | 20-1/2 | 2.50 | 4 AA included | JH4-250RBRK |
| JH5-100FRB | 9/16 | 3/8 | 10-100 | 120-1200 | 0.10 | 1.00 | 1-3/4 | 2 | 20-1/2 | 2.70 | 4 AA included | JH5-100FRBRK |
| JH7-250FRB | 47/64 | 1/2 | 25-250 | 300-3000 | 0.10 | 1.00 | 1-3/4 | 2 | 27-3/4 | 3.30 | 4 AA included | JH7-250FRBRK |

## ELECTRONIC TORQUE WRENCH SOFTWRRE e USB CONNECTION INTERFRCE

) Proto ${ }^{\oplus}$ Software allows for full two-way communication between the torque wrench or tester 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 on-board memory or one reading at a time.
) Control all settings on the torque wrench from the wrench or computer.
Overall
Product \# Width (in) Height (in) Length (in) Use With
, Software includes $C D$ and connection cable which interfaces with computer's USB connection.
) Compatible with Windows XP.


## ELECTRONIC INTERCHRNCERBLE HERD TORQUE WRENCH RS5EMBLIES

) Full interface with Proto ${ }^{\circledR}$ 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, $\mathrm{In}-\mathrm{lb}$, 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.
) Meets or exceeds ASME B107.28


| Product \# | Tang Size | Torque Range <br> (ft-lhs) | Torque Range <br> (in-lls) | Increments <br> (ft-llhs) | Increments <br> (in-llws) | Width (in) | Height (in) | Overall Length <br> (in) | Weight (lhs) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JH4-250 | H4 | $2.1-20.8$ | $25-250$ | 0.01 | 0.10 | $1-3 / 4$ | 2 | $17-1 / 4$ | 2.20 |
| JH5-100F | H5 | $10-100$ | $120-1200$ | 0.10 | 1.00 | $1-3 / 4$ | 2 | $17-1 / 4$ | 2.40 |
| JH7-250F | H7 | $25-250$ | $300-3000$ | 0.10 | 1.00 | $1-3 / 4$ | 2 | 23 | 3.00 |

## MICROMETER INTERCHRNGERbLE HERD TORqUE WRENCH RSSEMBLIES

) Full interface with Proto ${ }^{\otimes}$ Interchangeable Head Attachments.
) Accuracy of $+/-4 \%$ CW and $+/-6 \%$ CCW.
) Two sizes available.
) Meets or exceeds ASME B107.14M specification

| Product \# | Tang Size | Torque Range <br> fft-lhs) | Increments (ft-llbs) | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JH5-6006C | H5 | $16-80$ | 0.50 | $1-1 / 4$ | $1-1 / 4$ | 15 | 2.50 |
| JH7-6014C | H7 | $50-250$ | 1.00 | $1-1 / 2$ | $1-1 / 2$ | 26 | 4.70 |

## PRE-SET INTERCHRNGERBLE HERD TORQUE WRENCH RSSEMBLIES

, Full interface with Proto ${ }^{\circledR}$ Interchangeable Head Attachments.
2. 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 \# |  | Tang Size | Torque Range <br> (ft-lhs) | Torque Range <br> (in-lbs) | Width (in) | Height (in) | Overall Length (in) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Weight (lls) |  |  |  |  |  |  |  |
| JH4-150PS | H4 | - | $50-150$ | $1-1 / 2$ | $1-1 / 2$ | 6 | 0.70 |
| JH4-50FPS | H4 | $10-50$ | - | $1-1 / 2$ | $1-1 / 2$ | 11 | 1.30 |
| JH5-150FPS | H5 | $45-150$ | - | $1-1 / 2$ | $1-1 / 2$ | $19-1 / 4$ | 2.25 |
| JH5-200FPS | H5 | $45-200$ | - | $1-1 / 2$ | $1-1 / 2$ | $23-1 / 4$ | 2.30 |

# PRECIGION TORQUE 

## 1/4" DRIVE RRTCHET TORQUE WRENCH HERD - H4 TRNG

) Fixed ratcheting head with a robust 24 tooth design with $15^{\circ}$ arc swing.
D Alloy steel drive gear for strength and durability.
, Low profile for easy access.
) Reversing lever design for quick, one handed operation.


| 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 |

## OPEN END TORqUE WRENCH HERDS - H4 TRNG

, Open end is angled to $15^{\circ}$ to help keep shank clear of obstructions helping to improve access.


| Product \# |  | INCH | MM | Width (in) | Height (in) | Overall Length (in) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | Weight (llbs) | JH4-12 |
| :---: |
| JH4-14 |

## BロK END TORqUE WRENCH HERDS - H4 TRNธ

) The Proto ${ }^{\oplus}$ TorquePlus ${ }^{\text {Tw }}$ 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 $7.5^{\circ}$ 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 \# |  | INCH | MM | Width (in) | Height (in) | Overall Length (in) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JH4-12B | $3 / 8$ | - | $19 / 32$ | $7 / 16$ | $3-1 / 32$ | Weight (llas) |
| 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 | - | 14 | $25 / 32$ | $7 / 16$ | $3-1 / 8$ | 0.10 |
| JH4-14MB | - |  |  |  | $3 / 16$ | $3-5 / 32$ |

## 3／8＂DRIVE RRTCHET TORqUE WRENCH HERD－H5 TRNG

1 Fixed ratcheting head with a robust 24 tooth design with $15^{\circ}$ arc swing．
）Alloy steel drive gear for strength and durability．
）Low profile for easy access．
）Reversing lever design for quick，one handed operation．


| 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 |

## ロPEN ENロ TחRロUE WRENCH HERロS－HS TRNC

）Open end is angled to $15^{\circ}$ to help keep shank clear of obstructions helping to improve access．


| Product \＃ | TNCH | MM | Width（in） | Height（in） | Overall Length（in） | Weight（llbs） |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

## PRECIGION TORQUE

BOK END TORQUE WRENCH HERDS - H5 TRNG
) The Proto ${ }^{\circledR}$ TorquePlus ${ }^{\text {TM }}$ 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 $7.5^{\circ}$ 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 \# | INCH | MM | Width (in) | Height (in) | Overall Length (in) | Weight (llss) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

## 1/2" DRIVE RRTCHET TORqUE WRENCH HERD - H7 TRNG

) Fixed ratcheting head with a robust 24 tooth design with $15^{\circ}$ arc swing.
) Alloy steel drive gear for strength and durability.
, Low profile for easy access.
) Reversing lever design for quick, one handed 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 |

OPEN END TQRqUE WRENCH HERDS - H7 TRNG
Open end is angled to $15^{\circ}$ to help keep shank clear of obstructions helping to improve access.

BOK END TORQUE WRENCH HERDS - H7 TRNG
, The Proto ${ }^{\oplus}$ TorquePlus ${ }^{\text {™ }}$ 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 $7.5^{\circ}$ 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 \# | INCH | 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 |

## TRNG SIZES

Match the tang size of the head with the tang size of the wrench.

Tang sizes are not interchangeable.

## TORQUE SCREWDRIVERS

, Calibrated to $\pm 6 \%$ of torque reading, clockwise at $20 \%$ to $100 \%$ of full scale.
) Slipping clutch release to prevent overtorque.
) $1 / 4^{\prime \prime}$ Square to $1 / 4^{\prime \prime}$ Hex Adapter included for use with insert bits (applies to J6107A and J6108A only).
) Hex key adjustment with supplied tool (J6102A, J6107A, J6108A only).
) Lock ring (J6104A, J6104ACERT, J6106A, J6106ACERT only).
Laser marked easy-to-read scale.
) N.I.S.T. (National Institute of Standards and Technology) traceable certification supplied with J6104ACERT and J6106ACERT.


| Product \# | Certified Series | Drive Size (in) | Torque Range (in-Ibs) | $\begin{aligned} & \text { Increments } \\ & \text { (in-lbs) } \end{aligned}$ | Torque Range (in-oz) | $\begin{gathered} \text { Increments } \\ \text { (in-oz) } \end{gathered}$ | Width (in) | Height (in) | Overall Length (in) | Weight (Ibs) | Country of Origin |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6104A | J6104ACERT | 1/4 | - | - | 20-100 | 2 | 1-1/4 | 1-1/4 | 6-1/2 | 1.00 | " |
| J6106A | J6106ACERT | 1/4 | 7-36 | 1 | - | - | 1-1/4 | 1-1/4 | 6-1/2 | 1.00 | $\underline{\underline{\underline{\square g}}}$ |
| J6102A |  | 1/4 |  |  | 20-100 | 0.50 | 15/16 | 15/16 | 5-3/8 | 4.30 | Italy |
| J6107A |  | 1/4 | 4-22 | 1 |  |  | 1-9/16 | 1-9/16 | 5-7/8 | 10.20 | Italy |
| J6108A |  | 1/4 | 16-88 | 4 |  |  | 1-3/8 | 1-3/8 | 6-5/8 | 14.40 | Italy |

ASME B107.14M

## 미ITRL RNGLE RDRPTER

, Digital angle value readout.
) Ultra simple use: autotest and reset upon powering on.
) Adapter magnetized so it attaches to all types of ratchets.
) $+/-2^{\circ}$ accuracy (rotating $90^{\circ}$ at speed of $30^{\circ} / \mathrm{sec}$ ).
, +/-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.
) Both AAA and rechargeable batteries are compatible.

| Product \# | Overall <br> Length (in) | Weight <br> (libs) | Battery <br> Type | Storage <br> Case |
| :---: | :---: | :---: | :---: | :---: |
| J6300TWNA | $2-9 / 32$ | 0.50 | 2 AAA included | J6300PB |
|  |  |  |  | ASME B107.28 |

## PRECIGION TORGUE

DIGITRL TORQUE E RNGLE RDRPTERS
, Torque and angle tightening with one tool: productivity improvement, digital display minimizes reading errors, and delivers high precision.
) $+/-2^{\circ}$ (rotating $90^{\circ}$ at speed of $30^{\circ} / \mathrm{sec}$ ) 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.


| Product \# | Drive Size (in) | Torque Range <br> (ft-lbs) | Torque Range <br> (in-lbs) | Torque Range <br> $\mathbf{( n m )}$ | Overall Length (in) | Weight <br> (lbs) | Battery Type | Storage Case |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6280TA100 | $3 / 8$ | $5-99.5$ | $60-1195$ | $6.8-135$ | $3-23 / 64$ | 0.70 | 2 AAA included | J6310PB |
| J6280TA150 | $1 / 2$ | $7.4-147.5$ | $88-1770$ | $10-200$ | $3-23 / 64$ | 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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## ELECTRONIC TORQUE TESTERS

) Digital torque tester with LCD screen and audible beeps.
) Main power with adapter.
) Accurate to +/- 1\% CW / +/- 3\% CCW.
) Measuring Units: ft-lbs, in-lbs, and Nm.
) Operation modes include Peak, Hold and Dial modes.
, Include blow mold case with AC/DC adapter, manual and calibration certificate.
) Width (in): 5-19/32
) Height (in): $3-1 / 2$
) Overall Length (in): 6-13/32
Male 6 point drive (use with 27 mm socket).


| Product \# |  | Drive Size (in) | Drive Size (mm) | Torque Range (ft-lbs) | Torque Range (in-llss) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| J6470E | $1 / 4$ | - | $.40-4.0$ | $5-50$ | Weight (lbs) |
| J6472E | $3 / 8$ | - | $2-20.8$ | $25-250$ | 10.50 |
| J6474E | $3 / 8$ | - | $5-50$ | - | 11.00 |
| J6476E | $1 / 2$ | - | $25-250$ | - | 11.00 |
| J6478E | - | $60-600$ | - | 11.00 |  |

## CRLIBRRTION BENCH

) Helps ensure manual and electronic torque wrenches comply with ASME B107.300-2010, which requires calibration every 12 months or 5,000 clicks. Customer specification may exceed this.
) For use with J657 series sensors
) 735 Ft. Lbs capacity.

| Product \# | Torque <br> Range (ft-lbs) | Width (in) | Height (in) | Overall <br> Length (in) | Weight (llbs) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| J657B | $1-735$ | $13-1 / 2$ | $25-13 / 32$ | $65-3 / 4$ | 247 |

## CRLIBRRTION SENSORS

) ASME compliant torque sensors for accurate check and calibration (ASME B107.300-2010).
) Calibrated accuracy $<0.5 \%$ from $10-100 \%$ of the capacity.

| Product \# | Drive <br> Size (in) | Torque Range <br> (ft-lls) | Accuracy | Width (in) | Height (in) | Overall <br> Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J657-22 | $1 / 4$ | $1-22$ | $0.5 \%$ from 10-100\% | $3-1 / 8$ | $3-1 / 8$ | $5-3 / 4$ | 2.66 |
| J657-36 | $3 / 8$ | $4-36$ | $0.5 \%$ from 10-100\% | $3-1 / 8$ | $3-1 / 8$ | $5-3 / 4$ | 2.86 |
| J657-295 | $1 / 2$ | $15-295$ | $0.5 \%$ from 10-100\% | $3-1 / 8$ | $3-1 / 8$ | $5-3 / 4$ | 2.86 |
| J657-735 | $3 / 4$ | $7.5-735$ | $0.5 \%$ from 10-100\% | $4-3 / 4$ | $4-1 / 4$ | $6-3 / 4$ | 10.58 |



## TORQUE MULTIPLIER DISPLRY WRENCHES

, When placed between the torque multiplier and the fastener, the Proto ${ }^{\oplus}$ 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) | Increments (ft-Ibs) | Torque Range (nm) | $\begin{aligned} & \text { Increments } \\ & (\mathrm{nm}) \end{aligned}$ | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6349A | 1 | 100-1000 | 1 | 133-1335 | 1 | 4 | 5 | 14-1/2 | 15.00 |
| J6352 | 1 | 200-2000 | 1 | 267-2670 | 1 | 4 | 5 | 24 | 15.00 |

## RERCTION RRM TORQUE MULTIPLIERS

) Proto ${ }^{\circledR}$ Torque Multipliers provide overload protection with replaceable output square drives that are designed to twist off at $3 \%-10 \%$ over maximum output capacity.
, Standard torque accuracy is $+/-5 \%$ of reading.
) Reaction system: tubular reaction bar.
, Gear system: single stage planetary.
, Anti-backlash device: self-contained, 3 position.
) Includes extra male plug.

|  | Certified <br> Product | Input <br> Series | Output <br> Drive (in) | Max Rated <br> Input | Max Rated <br> Output | Torque <br> Ratio | Head <br> Depth (in) | Head <br> Length (in) | Handle <br> Length (in) | Overall <br> Length (in) | Weight <br> (llbs) | Repair Kit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## RERCTION PLRTE TORQUE MULTIPLIERS

, Proto ${ }^{\oplus}$ Torque Multipliers provide overload protection with replaceable output square drives that are designed to twist off at $3 \%-10 \%$ over maximum output capacity.
, 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.
) Includes extra male plug.


| Product \# | Input Drive (in) | Output Drive (in) | Max Rated Input | Max Rated Output | Torque Ratio | Head Depth (in) | Head Length (in) | Overall Length (in) | Weight (lbs) | Repair Kit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6234 | 1/2 | 1 | 162 ft -lbs (220 Nm) | $\begin{aligned} & \hline 2200 \mathrm{ft}-\mathrm{lbs} \\ & (2983 \mathrm{Nm}) \end{aligned}$ | 1:13.6 | 5-1/2 | 4-7/8 | 14 | 17.20 | J6222RD |
| J6242 | 1/2 | 1-1/2 | 189 ft -lbs ( 256 Nm ) | 5000 ft -lbs ( 6778 Nm ) | 1:26.5 | 8-3/4 | 5-5/8 | 14-29/32 | 34.00 | J6242RD |
| J6252 | 1/2 | 1-1/2 | $\begin{aligned} & 154 \mathrm{ft}-\mathrm{bs} \\ & (209 \mathrm{Nm}) \end{aligned}$ | 8000 ft -lbs (10846 Nm) | 1:52 | 10-3/4 | 5-13/16 | 15-3/16 | 50.30 | J6252RD |

## TORqUE MULTIPLIER SqUARE DRIVE REPLRCEMENT KITS

) Proto ${ }^{\circledR}$ 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 <br> (in) |  | Use With |
| :---: | :---: | :---: | :---: | Weight (llbs)

## RCCESSORY RIR DRIVE 200 FT-LBS

) Powered input to a torque multiplier can reduce operator fatigue, increase productivity
) Designed to drive Proto ${ }^{\oplus}$ 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 \# |  | Drive Size (in) | Output Drive (in) | Diameter Maximum (in) | Overall Length (in) |
| :---: | :---: | :---: | :---: | :---: | :---: | Weight (llbs)

## fir DRIVE CONVERTER 200 FT-LBS

Powered input to a torque multiplier can reduce operator fatigue, increase productivity
) Designed to drive Proto ${ }^{\circledR}$ 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 Ratio | Diameter (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J 6203 | $1 / 2$ | $1 / 2$ | $1 / 2$ Sq. Male | $1: 5.2$ | $3-1 / 8$ | 4 | 5.50 |

## 3/8" DRIVE 9 PIECE TORQUE RDRPTER SET - 12 PDINT

## Product \#: J5100

| Contents | Description |  |
| :---: | :---: | :---: |
| J5112 | Torque Adapter 3/8" |  |
| J5114 | Torque Adapter 7/16" |  |
| J5116 | Torque Adapter 1/2" |  |
| J5118 | Torque Adapter 9/16" |  |
| J5120 | Torque Adapter 5/8" |  |
| J5122 | Torque Adapter 11/16" |  |
| J5124 | Torque Adapter 3/4" |  |
| J5126 | Torque Adapter 13/16" |  |
| J5128 | Torque Adapter 7/8" |  |
| Weight (lbs): 1.32 |  | " |

, 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.


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



| Product \# Size (in) |  | Drive Size (in) | Head Width (in) (B) | Head Depth (in) (C) | Overall Length (in) (L) | Weight (lls) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{J 5 1 1 2}$ | $3 / 8$ | $3 / 8$ | $9 / 16$ | $17 / 64$ | $2-11 / 16$ | 0.08 |
| $\mathbf{J 5 1 1 4}$ | $7 / 16$ | $3 / 8$ | $21 / 32$ | $19 / 64$ | $2-47 / 64$ | 0.10 |
| $\mathbf{J 5 1 1 6}$ | $1 / 2$ | $3 / 8$ | $47 / 64$ | $21 / 64$ | $2-25 / 32$ | 0.10 |
| $\mathbf{J 5 1 1 8}$ | $9 / 16$ | $3 / 8$ | $13 / 16$ | $23 / 64$ | $2-13 / 16$ | 0.12 |
| $\mathbf{J 5 1 2 0}$ | $5 / 8$ | $3 / 8$ | $29 / 32$ | $25 / 64$ | $2-55 / 64$ | 0.12 |
| $\mathbf{J 5 1 2 2}$ | $11 / 16$ | $3 / 8$ | 1 | $27 / 64$ | $2-29 / 32$ | 0.12 |
| $\mathbf{J 5 1 2 4}$ | $3 / 4$ | $3 / 8$ | $1-5 / 64$ | $29 / 64$ | $2-61 / 64$ | 0.12 |
| $\mathbf{J 5 1 2 6}$ | $13 / 16$ | $3 / 8$ | $1-11 / 64$ | $31 / 64$ | $2-63 / 64$ | 0.14 |
| $\mathbf{J 5 1 2 8}$ | $7 / 8$ | $3 / 8$ | $1-17 / 64$ | $33 / 64$ | $3-1 / 32$ | 0.16 |

## TORQUE TESTER FLDOR STRND

1) Floor stand for Proto ${ }^{\oplus}$ Torque Testing systems makes installation quick and easy.
) All steel construction.
) Mounting holes predrilled to match Proto ${ }^{\circledR}$ test systems.
) Floor mount holes are predrilled for securing to the floor.
, Small footprint for space saving economy.
) Durable powder coated paint.

## ELECTRONIC TORQUE METER

) The Proto ${ }^{\otimes}$ Electronic Torque Meter is a true all-in-one torque meter.
, The Proto ${ }^{\oplus}$ 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) | Height (in) | Overall Length (in) | Weight (llbs) | Battery Type |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JG360B | $3-1 / 4$ | 2 | $7-1 / 4$ | 2.34 | 9 volt included |

## 0.5\% IN-LINE EKTENSION TRRNSDUCERS

) 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.
, N.I.S.T. traceable certificate included


| Product \# | Drive Size (in) | Torque Range (ft-Ibs) | Torque Range (in-Ibs) | Width (in) | Height (in) | Overall Length (in) | Use With | Weight (liss) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6361B | 3/8 | - | 25-250 | 1-1/4 | 3-1/4 | 1-1/4 | J6360 | 0.52 |
| J6362B | 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 |
| J6364B | 1/2 | 25-250 | - | 1-7/16 | 3-5/8 | 1-7/16 | J6360 | 0.89 |

### 0.25\% BENCH MOUNT TRRNSDUCERS

, "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.
) N.I.S.T. traceable certificate included.

| Product \# | Drive Size (in) | Torque Range (ft-lhs) | Torque Range (in-llos) | Width (in) | Height (in) | Overall Length (in) | Use With | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6365B | 1/4 | - | 10-100 | 2-3/4 | 2-1/4 | 2-3/4 | J6360B | 0.90 |
| J6366B | 3/8 | - | 25-250 | 2-3/4 | 2-3/4 | 2-3/4 | J6360B | 0.83 |
| J6367B | 3/8 | 5-50 | - | 2-3/4 | 2-3/4 | 2-3/4 | J6360B | 1.13 |
| J6368B | 1/2 | 25-250 | - | 4 | 3-3/4 | 4 | J6360B | 3.14 |
| J63698 | 3/4 | 50-500 | - | 4 | 4-5/8 | 4 | J6360B | 3.16 |
| J63718 | 1/4 | - | 5-50 | 2-3/4 | 2-1/4 | 2-3/4 | J6360B | 0.60 |
| J6372B | 1/2 | 15-150 | - | 4 | 3-3/4 | 4 | J6360B | 0.60 |
| J6373B | 3/4 | 60-600 | - | 4 | 4-5/8 | 4 | J6360B | 0.90 |
| J6374B | 1 | 100-1000 | - | 6 | 5 | 8-1/2 | J6360B | 0.90 |
| J6375B | 1 | 200-2000 | - | 6 | 5 | 8-1/2 | J6360B | 0.90 |

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BRRCKET FOR BENCH MロUNT TRRNSDUCERS
) Heavy-duty mounting bracket for bench mount transducers.
) Use up to 600 ft-lbs.


| Product \# | Width (in) | Height (in) | Overall <br> Length (in) | Use With | Weight (lls) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6370 | 5 | 5 | 5 | J6365B, J6366B, J6367B, J6368B, J6369B, <br> J6371B, J6372B, J6373B, J6374B, J6375B | 5.75 |

