

## PROTO BUILT QURLITY

Proto ${ }^{\circledR}$ torque wrenches are built with durable, easily serviced fixed or ratcheting heads and industrial strength handles for long life. The heavy industrial knurl helps control the grip and maintain safety while being used.



Hardened pivot pin for long life.


Permanently imprinted scale.


Positive slide collar for easy and reliable setting.


Machined grooves show correct hand position for best accuracy.

## TORQUE WRENCH CERTIFICRTION OPTIONS

## Proto ${ }^{\circledR}$ Calibration

| Designation | C | CKCERT |
| :---: | :---: | :---: |
| Standard | B107.14 | T.O.33K6 |
|  | 2004 | $-4-2193-1$ |
| Accuracy | CW $+/-4 \%$ | CW $+/-4 \%$ |
| Calibration | CCW $+/-6 \%$ | CCW $+/-6 \%$ |
| Technique | Mechanical Load | Mechanical Load |

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.

## Practeran tarque

## FIXED HERD MICRDMETER 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 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.
) Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only).

| C Series | CKCERT Series | Drive Size (in) | Torque Range (in-lhs) | Increments (in-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) | Storage Case |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6061C | J6061CKCERT | 1/4 | 40-200 | 1 | 25/32 | 3/4 | 11-45/64 | 2.60 | J6006PBF |
| J6063C | JG063CKCERT | 3/8 | 40-200 | 1 | 25/32 | 7/8 | 11-45/64 | 2.60 | J6006PBF |
| J6065C | JG065CKCERT | 3/8 | 200-1000 | 5 | 55/64 | 7/8 | 15-13/64 | 3.00 | J6006PBF |

## FIKED HERD MICRDMETER TORQUE WRENCHES - FT-LBS

) Calibrated to +/-4\% in clockwise direction and +/- $6 \%$ 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 a three click test at $20 \%, 60 \%$, and $100 \%$ of maximum instrument capacity.
, Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.

| Product \# | Drive Size (in) | Torque Range <br> (ft-lbs) | Increments <br> (ft-llbs) | Head Width (in) | Head Depth (in) | Overall Length <br> (in) | Weight (lbs) | 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 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 $\pm 2 \%$ one direction are available upon request.

| Product \# | Drive Size (in) | Torque Range (ft-Ibs) | Increments (ft-lbs) | 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 |

## FIXED HERD 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 at $20 \%$ to $100 \%$ of full scale.


| Product \# | Drive Size (in) | Torque Range (ft-lbs) | Increments (ft-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6025 | 1 | 400-2000 | 10 | 3-1/16 | 4-1/8 | 107-1/2 | 53.10 |
|  |  |  |  | JIS B4650 IS | 6789 тОЗЗК6-4 | 2193-1 AS28431 | ASME B107.14M |

## RRTCHETING 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 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.
) 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 | JG062CXCERT | 1/4 | 40-200 | 1 | 1-1/32 | 3/4 | 11-7/8 | 2.60 | J6006PBF | J6062RK |
| J6064C | JG064CKCERT | 3/8 | 40-200 | 1 | 1-1/32 | 7/8 | 11-7/8 | 2.60 | J6006PBF | J6064RK |
| J6066C | JG066CKCERT | 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 | J6072CXCERT | 1/2 | 600-3000 | 10 | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |

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## RRTCHETING HERD MICROMETER TORQUE WRENCHES - FT-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 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.
) Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only).
$\left.\begin{array}{c|c|cccccccc}\text { C Series } & \text { CKCERT Series } & \begin{array}{c}\text { Drive } \\ \text { Size (in) }\end{array} & \begin{array}{c}\text { Torque Range } \\ \text { (ft-lbs) }\end{array} & \begin{array}{c}\text { Increments } \\ \text { (ft-Ibs) }\end{array} & \begin{array}{c}\text { Head } \\ \text { Width (in) }\end{array} & \begin{array}{c}\text { Head } \\ \text { Depth (in) }\end{array} & \begin{array}{c}\text { Overall } \\ \text { Length (in) }\end{array} & \begin{array}{c}\text { Weight } \\ \text { (lbs) }\end{array} & \begin{array}{c}\text { Storage } \\ \text { Case }\end{array} \\ \hline \text { J6006C } & \text { J6006CKCERT } & 3 / 8 & 16-80 & 0.50 & 1-7 / 16 & 1-1 / 64 & 15-1 / 2 & 3.00 & \text { J6006PBF } \\ \text { J6012C } & - & 3 / 8 & 20-100 & 0.50 & 1-7 / 16 & 1-1 / 64 & \text { J6006RK } \\ \text { Kit }\end{array}\right]$
" ASME B107.14M

## RRTCHETING HERD MICROMETER TORQUE WRENCHES - NM

) Calibrated to +/- 4\% clockwise direction and +/- 6\% 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 a three click test at $20 \%, 60 \%$, and $100 \%$ of maximum instrument capacity.

) Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.

| Product \# | Drive Size (in) | Torque Range ( Nm ) | Increments (Nm) | Torque Range (ft-Ibs) | 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 |

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## RRTCHET HERD REPRIR KITS - TORGUE 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 |
| :--- | :---: | :---: | :---: |
| 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-KG

, $6-30$ in-lbs thru $120-600 \mathrm{in}$-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 Size (in) | Torque Range (metric) | Torque Range (in-Ibs) | Increments (in-Ibs) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6168F | - | 1/4 | $7-35 \mathrm{~cm} \mathrm{~kg}$ | 6-30 | 0.5 | 10 | 1.00 |
| J6169F | JG169FCERT | 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 TORQUE WRENCHES - FT-LBS/MKC

) 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 (ft-lhs) | Increments (ft-Ibs) | Overall Length (in) | Weight (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 mkg | 50-250 | 5 | 21-1/2 | 3.80 |
| J6134F | 3/4 | - | 70-350 | 10 | 27-7/8 | 7.10 |
| J6133F ${ }^{\dagger}$ | 3/4 | $16-80 \mathrm{mkg}$ | 120-600 | 10 | 46-1/2 | 9.90 |
| J6141F ${ }^{+}$ | 1 | 28-140 mkg | 200-1000 | 20 | 74-1/4 | 27.00 |
| J6149F\# | 1 | $56-280 \mathrm{mkg}$ | 400-2000 | 40 | 110-3/4 | 48.00 |
| des one rem des five rem | sion handle nsion handle | ctric LED and buzz | " |  | JIS B4650 ISO 6789 | SME B107 |

## DIRL TORQUE WRENCHES - NM/IN-LBS, FT-LES

) 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 (ft-Ibs) | Torque Range (in-lbs) | Torque Range ( Nm ) | Increments ( Nm ) | Overall Length (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.
1 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-lhs) | Increments (ft-lbs) | Torque Range (in-\|lbs) | Increments (in-Ibs) | Torque Range (nm) | $\begin{gathered} \text { Increments } \\ (\mathrm{nm}) \\ \hline \end{gathered}$ | Width (in) | Height (in) | Overall Length (in) | Weight (llbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

## ELECTRDNIC FIXED RRTCHETING HERD TDRQUE 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 $15^{\circ}$ 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 <br> Size (in) | Torque <br> Range <br> (ft-lhs) | Torque <br> Range <br> (in-lhs) | Increments <br> (ft-lbs) | Increments <br> (in-lhs) | Width <br> (in) | Height <br> (in) | Overall <br> Length (in) | Weight <br> (lbs) | Battery Type |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Repair |
| :---: |
| Kit |

## 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.
, Software includes CD and connection cable which interfaces with computer's USB connection.
, Compatible with Windows XP.


Overall

| Product \# | Width (in) | Height (in) | Length (in) | Use With | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JH6000SW | 5 | 1-3/4 | 5 | JH4-250, JH4-250R, JH5-100F, JH5-100FR, JH J6474-C, J6476-C | 0.60 |

## ELECTRONIC INTERCHRNCERBLE HERD TQRqUE WRENCH RSSEMBLIEs

1) 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, 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.

| Product \# | Tang Size | Torque Range <br> (ft-lis) | Torque Range <br> (in-lhs) | Increments <br> (ft-lbs) | Increments <br> (in-llbs) | Width (in) | Height (in) | Overall Length <br> (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 ${ }^{\circledR}$ 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> (ft-lbs) | Increments (ft-lls) | Width (in) | Height (in) | Overall Length (in) | Weight (llss) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

를 ASME B107.14M

## PRE-SET INTERCHRNCERBLE HERD TORQUE WRENCH RSSEMBLIES

) Full interface with Proto ${ }^{\otimes}$ Interchangeable Head Attachments.
) Accuracy of $+/-4 \% \mathrm{CW}$ and $+/-6 \% \mathrm{CCW}$.
) Pre-set for fixed and repeatable torque applications.
) Click-type operation for audible click.
) Soft, comfortable grip.

| Product \# | Tang Size | Torque Range (ft-llos) | Torque Range (in-lbs) | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

## 1/4" DRIVE RRTCHET TORQUE WRENCH HERD - H4 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) |
| :---: | :---: | :---: | :---: | :---: |
| JH4-14R | $1 / 4$ | $1-1 / 16$ | $23 / 32$ | $3-1 / 4$ |
|  |  | Neight (lbs) |  |  |
| $=$ |  |  |  |  |

## DPEN END TORqUE WRENCH HERDS - H4 TRNC

, 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 (lbs) | JH4-12 |
| :---: |
| JH4-14 |

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

## BロK END TロRQUE WRENCH HERDS - H4 TRNธ

) The Proto ${ }^{\oplus}$ 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 (liss) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

## 3/8" DRIVE RRTCHET TORqUE WRENCH HERD - H5 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) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JH5-38R | $3 / 8$ | $1-7 / 16$ | 1 | $4-3 / 32$ | 0.47 |

## DPEN END TORqUE WRENCH HERDS - H5 TRNC

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


| Product \# | TWCH | 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: JH5-100F, JH5-6006C, JH5-150FPS, JH5-200FPS

## PRECIEION TORQUE

bok end Tarque 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 \# | WCH | 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 |

"

## 1/Z" DRIVE RRTCHET TORqUE WRENCH HERD - H7 TRNC

) 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 (llbs) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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.


| Product \# | INCH | 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 |

르 Use With: JH7-250F, JH7-6014C

## INTERCHRNGERBLE HERDS



In the Proto ${ }^{\circledR}$ IHTW System, different heads can be used on the same assembly while maintaining calibration. This assembly can do the same job as three fixed head tools.


BaK END TQRqUE 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 |
| JH7-428 | 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 $\pm 4 \%$ of torque reading, clockwise at $20 \%$ to $100 \%$ of full scale.
) $1 / 4^{\prime \prime}$ Square to $1 / 4^{\prime \prime}$ 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 and J610EACERT.


| Product \# | Certified Series | Drive Size (in) | Torque Range (in-llos) | Increments (in-Ihs) | Torque Range (in-oz) | Increments (in-oz) | Width (in) | Height (in) | Overall Length (in) | Weight <br> (llbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6104A | J6104ACERT | 1/4 | - | - | 20-100 | 2 | 1-1/4 | 1-1/4 | 6-1/2 | 1.00 |
| J6106A | JG106ACERT | 1/4 | 7-36 | 1 | - | - | 1-1/4 | 1-1/4 | 6-1/2 | 1.00 |

## 미ITRL RNCLE 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> (lbs) | Battery <br> Type | Storage <br> Case |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| J6300TWA | $2-9 / 32$ | 0.50 | 2 AAA included | J6300PB |  |
|  |  |  |  |  |  |



## DIUITRL TORQUE RND 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 ( $\mathrm{N} . \mathrm{m}, \mathrm{Ft}-\mathrm{lb}, \mathrm{In}-\mathrm{lb}, \mathrm{kg}-\mathrm{cm}$, 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-lis) | Torque Range <br> (in-llis) | Torque Range <br> (nm) | 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 |

ASME B107.28

## TORQUE MULTIPLIER DISPLRY WRENCHES

) When placed between the torque multiplier and the fastener, the Proto ${ }^{\circledR}$ 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 <br> (ft-lis) | Increments <br> (ft-liss) | Torque Range <br> $(\mathbf{n m})$ | Increments <br> $(\mathbf{n m})$ | Width (in) | Height (in) | Overall Length <br> (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> Drive (in) | Output <br> Drive (in) | Max Rated <br> Input | Max Rated <br> Dutput | 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 ${ }^{\circledR}$ 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: 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 Dutput | Torque Ratio | $\begin{gathered} \text { Head Depth } \\ \text { (in) } \\ \hline \end{gathered}$ | Head Length (in) | Overall Length (in) | Weight (lbs) | Repair Kit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6234 | 1/2 | 1 | $\begin{aligned} & 162 \mathrm{ft}-\mathrm{bs} \\ & (220 \mathrm{Nm}) \end{aligned}$ | $2200 \mathrm{ft}-\mathrm{lbs}$ ( 2983 Nm ) | 1:13.6 | 5-1/2 | 4-7/8 | 14 | 17.20 | J6222RD |
| J6242 | 1/2 | 1-1/2 | $\begin{aligned} & 162 \mathrm{ft}-\mathrm{bs} \\ & (220 \mathrm{Nm}) \end{aligned}$ | $\begin{aligned} & 2200 \mathrm{ft}-\mathrm{lbs} \\ & (2983 \mathrm{Nm}) \end{aligned}$ | 1:26.5 | 8-3/4 | 5-5/8 | 14-29/32 | 34.00 | J6242RD |
| J6252 | 1/2 | 1-1/2 | $\begin{aligned} & 162 \mathrm{ft}-\mathrm{bs} \\ & (220 \mathrm{Nm}) \end{aligned}$ | $\begin{aligned} & 2200 \mathrm{ft}-\mathrm{bs} \\ & (2983 \mathrm{Nm}) \end{aligned}$ | 1:52 | 10-3/4 | 5-13/16 | 15-3/16 | 50.30 | J6252RD |

## TORQUE MULTIPLIER SQURRE 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 ${ }^{\circledR}$ Torque Multipliers (except J6202A).
) Maximum torque output: 200 ft -lbs ( 271 Nm )
) Maximum running air pressure: 60 PSI.

1) Output free speed: 70 RPM.
) Output rotation: clockwise and counterclockwise


| Product \# |  | Drive Size (in) | Output Drive (in) | Diameter Maximum (in) | Overall Length (in) |
| :---: | :---: | :---: | :---: | :---: | :---: | Weight (llss)

## AIR 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) | Dutput Drive (in) | Torque Ratio | Diameter (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6203 | $1 / 2$ | $1 / 2$ | $1 / 2$ 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 | " $=$ AS954E S3.8.1 |

, 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 RDRPTERS-12 POINT

| Product \# |  | Size (in) | Drive Size (in) | Head Width (in) (B) | Head Depth (in) (C) | Overall Length (in) (L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{J 5 1 0 8}$ | $1 / 4$ | $3 / 8$ | $13 / 32$ | $7 / 32$ | $2-37 / 64$ | Weight (llbs) |
| $\mathbf{J 5 1 1 0}$ | $5 / 16$ | $3 / 8$ | $31 / 64$ | $15 / 64$ | $2-5 / 8$ | 0.06 |
| $\mathbf{J 5 1 1 2}$ | $3 / 8$ | $3 / 8$ | $9 / 16$ | $17 / 64$ | $2-11 / 16$ | 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.

| Product \# | Width (in) | Height (in) | Overall Length (in) | Use With | Weight (llbs) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| J 64705 | 7 | 32 | 4 | $\mathrm{~J} 6470, \mathrm{~J} 6472, \mathrm{~J} 6474, \mathrm{~J} 6476, \mathrm{~J} 6478$ | 20.00 |

## 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 $9 V$ battery, providing up to 50 hours run time. (non-"C" version)
) 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.
) Testers meet or exceed requirements set forth in ASME B107.29


| Product \# | USB <br> Version \# | Drive Size (in) | Torque Range (ft-lbs) | Torque Range (in-llos) | Increments (ft-Ihs) | $\begin{aligned} & \text { Increments } \\ & \text { (in-lbs) } \end{aligned}$ | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6470 | J6470-C | 1/4 | 0.42-4.17 | 5-50 | 0.01 | 0.01 | 6 | 4-1/2 | 6 | 6.00 |
| J6472 | J6472-C | 3/8 | 2.1-20.8 | 25-250 | 0.01 | 0.10 | 6 | 4-1/2 | 6 | 6.00 |
| J6474 | J6474-C | 3/8 | 5-50 | 60-600 | 0.01 | 0.10 | 6 | 4-1/2 | 6 | 6.00 |
| J6476 | J6476-C | 1/2 | 25-250 | 300-3000 | 0.10 | 1.00 | 6 | 4-1/2 | 6 | 6.00 |
| J6478 | J6478-C | 3/4 | 60-600 | 720-7200 | 0.10 | 1.00 | 6 | 4-1/2 | 6 | 6.00 |
| Volt battery included |  |  |  |  |  |  |  |  | " | E B107 |

## ELECTRONIC TORQUE METER

) The Proto ${ }^{\circledR}$ Electronic Torque Meter is a true all-in-one torque meter.
) The Proto ${ }^{\circledR}$ 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 (llss) | Battery Type |
| :---: | :---: | :---: | :---: | :---: | :---: |
| J6360B | $3-1 / 4$ | 2 | $7-1 / 4$ | 2.34 | 9 volt included |
|  |  |  |  | asME B107.29 |  |

## 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 <br> (ft-llhs) | Torque Range <br> (in-llhs) | Width (in) | Height (in) | Overall Length <br> (in) | Use With | Weight (lbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6361B | $3 / 8$ | - | $25-250$ | $1-1 / 4$ | $3-1 / 4$ | $1-1 / 4$ | J 6360 | 0.52 |
| J6362B | $3 / 8$ | $5-50$ | - | $1-1 / 4$ | $3-1 / 4$ | $1-1 / 4$ | J 6360 | 0.55 |
| J6363 | $1 / 2$ | $15-150$ | - | $1-7 / 16$ | $3-5 / 8$ | $1-7 / 16$ | J 6360 | 0.79 |
| J6364B | $1 / 2$ | $25-250$ | - | $1-7 / 16$ | $3-5 / 8$ | $1-7 / 16$ | J 6360 | 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 <br> (ft-lls) | Torque Range <br> (in-llhs) | Width (in) | Height (in) | Overall Length <br> (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 |
| J6369B | $3 / 4$ | $50-500$ | - | 4 | $4-5 / 8$ | 4 | J6360B | 3.16 |
| J6371B | $1 / 4$ | - | $5-50$ | $2-3 / 4$ | $2-1 / 4$ | $2-3 / 4$ | 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 | 0.9 |
| J6374B | 1 | $100-1000$ | - | 6 | 5 | $8-1 / 2$ | J6360B | 0.90 |
| J6375B | 1 | $200-2000$ | - | 6 | 5 | $8-1 / 2$ | J6360B | 0.90 |

## BRRCKET FOR BENCH MOUNT TRRNSDUCERS

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



[^0]:    *Dual increment indicators

