

# 3/4" BREAKBACK CALIBRATED TORQUE WRENCH

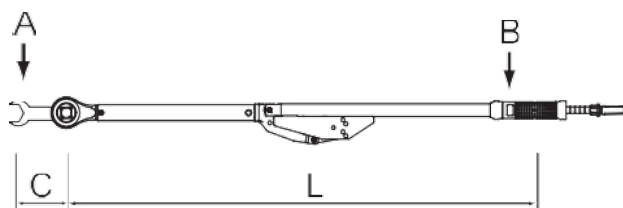
300-1000Nm

## EXTENSIONS & ADAPTORS

When using an extension or adaptor (increasing the effective length of the torque wrench) the output torque value will change. To calculate the new torque output of the wrench use the following formula.

$$A = \frac{L+C}{L} \times B$$

- A = Torque exerted at end of adaptor.
- L = Distance between square drive and hand position
- B = Wrench scale reading
- C = Length of adaptor or extension



A number of variables include the length of the adaptor or extension, length of the wrench and variations in hand position on the wrench will affect the accuracy of the above calculation.

## STANDARDS

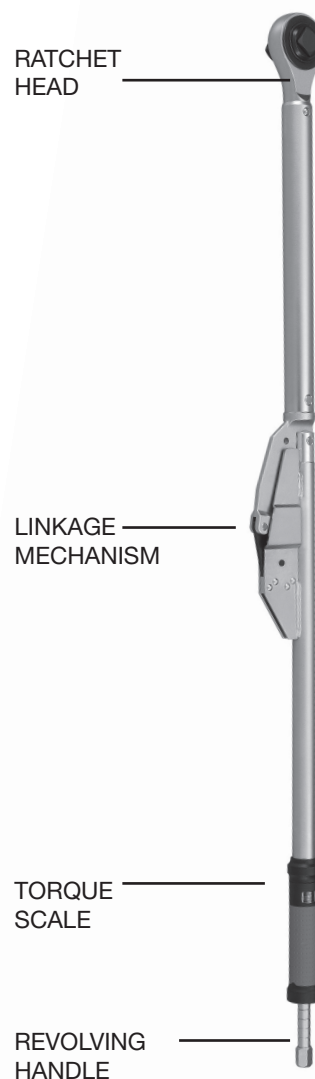
We calibrate each torque wrench at the factory using torque wrench standards according to BS EN ISO 6789-2:2017, and certifies it meets the accuracy of specification BS EN ISO 6789-2:2017




**WARNING**  
**RISK OF FLYING PARTICLES**  
■ THE TORQUE WRENCH MAY ONLY BE USED FOR THE CONTROLLED TIGHTENING OF SCREWS AND NUTS.

## SAFETY INSTRUCTIONS

### WARNING - RISK OF FLYING PARTICLES

- The Torque Wrench may only be used for the controlled tightening of screws and nuts.
- The Torque Wrench is a measuring / testing instrument and they must not be used to loosen screw connections.
- Function direction: The Torque wrench can only be operated clockwise to check the torque (According to the marking on the Torque Wrench).
- Never use Torque Wrench to break loose fasteners.
- Never use Torque Wrench as a level bar.
- Use of damaged hand tools, sockets, extensions and accessories may result in injury.
- Do Not use Torque wrench as a hammer.
- Torque Wrenches not calibrated may cause damage to parts or tools.
- Do Not use extensions on handles as damage to Torque Wrench will result.
- Over tightening of fasteners may result in breakage.



-  ALWAYS USE EYE PROTECTION WHILE USING HAND TOOLS
-  WARNING
-  INJURY MAY RESULT FROM ELECTRICAL SHOCK
- HANDLE IS NOT INSULATED, DO NOT USE ON LIVE ELECTRICAL OR HIGH VOLTAGE CIRCUITS.

## CARE & MAINTENANCE

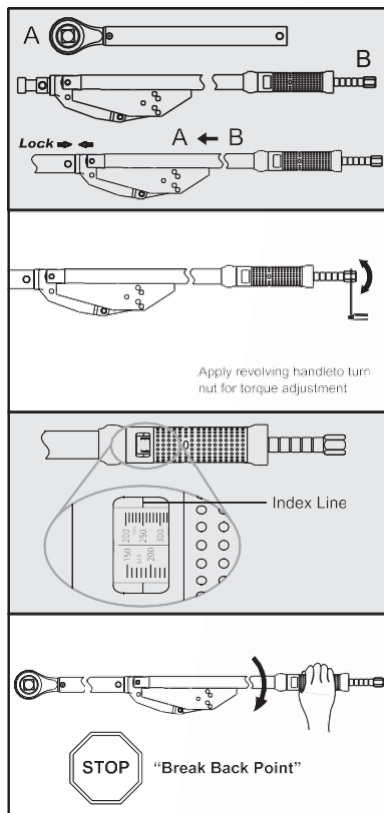
- The Torque Wrench is a precision instrument and should be stored with care.
- Do not throw it around, use hammer with it, or use it as a level bar.
- The Torque Wrench is lubricated for life and should not be oiled. The only exception is the ratchet head which may be lubricated as needed for smooth operation.
- The Torque Wrench is a precision measuring instrument. Calibration must be done regularly to ensure accuracy and it is the owners

responsibility. Suggested calibration period is at least every 12 months or even shorter depending on the situation.

- Always store the Torque Wrench in the box after use to stay away from dirt and humidity.
- Never disassemble the Torque wrench by yourself. For any need to disassemble the Torque Wrench may result in damage to this instrument.
- Setting the torque value to the lowest scale value after use.
- The calibration of the Torque Wrench may only be carried out by an authorised laboratory or workshop.

CONVERT FROM	TO	MULTIPLY BY
ozf-in	lbf-in	0.0625
lbf-in	ozf-in	16
lbf-in	kgf-cm	1.1519
lbf-in	lbf-ft	0.083333
lbf-in	kgf-m	0.011519
lbf-in	N-m	0.1130
lbf-in	dN-m	1.130
lbf-ft	N-m	1.356
lbf-ft	kgf-m	0.1382
lbf-ft	lbf-in	12
N-m	dN-m	10
N-m	kgf-cm	10.20
N-m	kgf-m	0.10197
N-m	lbf-in	8.8507
N-m	lbf-ft	0.73756
dN-m	lbf-in	0.885
dN-m	N-m	0.100
kgf-cm	lbf-in	0.8681
kgf-cm	N-m	0.09807
kgf-m	lbf-ft	7.233
kgf-m	N-m	9.807

## OPERATIONS.



## Certificate of Calibration

**Jefferson®**  
PROFESSIONAL TOOLS & EQUIPMENT

Model: JEFTRQWRH3-4A  
Serial No: 2303680001  
Wrench Capacity: 300-1000  
Units: N.m

Ambient Temperature: 18-28°C  
Humidity: RH ≤ 90  
Direction: CW / CCW  
Date of Calibration: 2023/3/21

Set point	Min (±4%)	Max	(CW) Readings				
300.0	288.0	312.0	300.4	300.2	300.4	300.1	300.2
600.0	576.0	624.0	603.8	603.9	603.6	603.7	603.4
1000.0	960.0	1040.0	1022.5	1022.6	1022.3	1022.4	1022.3
Set point	Min (±4%)	Max	(CCW) Readings				
300.0	288.0	312.0	300.5	300.6	300.5	300.3	300.5
600.0	576.0	624.0	603.7	603.8	603.6	603.4	603.2
1000.0	960.0	1040.0	1021.2	1021.5	1021.4	1021.2	1021.3

Testing Standard No: DIN ISO 6789-1:2017

Testing is in compliance with International standards with test equipment and reference standards calibrated by a laboratory traceable to International standards ISO / IEC 17025.

The Test Results shown above, fall within the maximum permitted deviation (Y/N): Y

Tester Model: LU-001

Serial No.: D013

The maximum measurement error of this equipment is : +1%

Inspector:

*David*

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