QUATROS®

Tool strength. Human power.

USER MANUAL

Torque wrench
QS55 Series



25/05

PRODUCT DESCRIPTION

Torque wrench with 72 teeth ratchet mechanism allowing you to tighten only to the right side with an accuracy of ±3%. Each key is accompanied by a calibration certificate made in accordance with PN ISO 6789:2017 on a certified measuring instrument. Each torque wrench is packed in a plastic cassette.

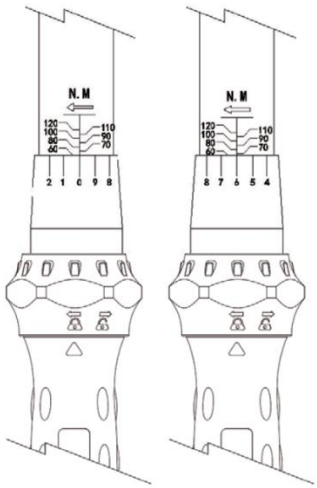
Specification:	QS55025	QS55060	QS55200	QS55330
Scope:	5-25Nm	10-60Nm	20-200Nm	60-330Nm
Drive:	1/4"	3/8"	1/2"	1/2"
Accuracy:	±3%	±3%	±3%	±3%
Length:	250mm	300mm	500mm	560mm
Weight:	0.3kg	0.432kg	1.12kg	1.252kg

USER MANUAL

Setting the torque value:

- Turn the lock switch to the right.
- Turn the handle clockwise until the centre line on the primary scale coincides with the line marking "0" on the auxiliary scale. The key is set to the lowest value visible on the main scale, e.g. 60Nm (Example 1). To increase the set torque by the value from the auxiliary scale, continue to turn the handle to cover the center line on the main scale with the line indicating the selected value on the auxiliary scale. The key is set for the sum of values from the primary and secondary scales, e.g. 66Nm (Example 2).
- Turn the lock switch to the left. Check that the handle is locked correctly. NOTE: IMPROPER LOCKING OF THE HANDLE MAY RESULT IN DAMAGE TO THE WRENCH.

Using a torque wrench:



Example 1:
60Nm

Example 1:
66Nm

- Once you have set the key parameters, you can get started. Hold the handle of the key (Fig. 1) and gradually (without making sudden movements or jerks) increase the force of pressure on the key until you hear a "click" sound. NOTE: AFTER HEARING THE "CLICK" SOUND, YOU CANNOT CONTINUE – DAMAGE TO THE KEY OR THE WORKPIECE TO BE TIGHTENED IS POSSIBLE!
- The force with which the wrench is pressed should be adjusted to the value of the set torque – the higher the torque set, the greater the force applied.
- When you are finished using the key, you must set the minimum torque value.

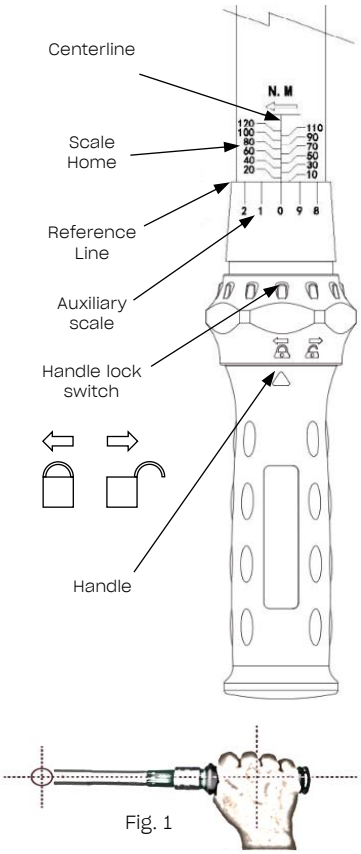


Fig. 1

Example 1: Value set 60NM – The reference line coincides with the value "60" from the master scale. "0" of secondary scale is positioned centrally relative to the center line of the primary scale.

Example 2: Value set 66Nm – The reference line is between the value of "60" and "70" from the main scale. "6" from the auxiliary scale is centrally placed in relation to the center line of the main scale.

TECHSAM®

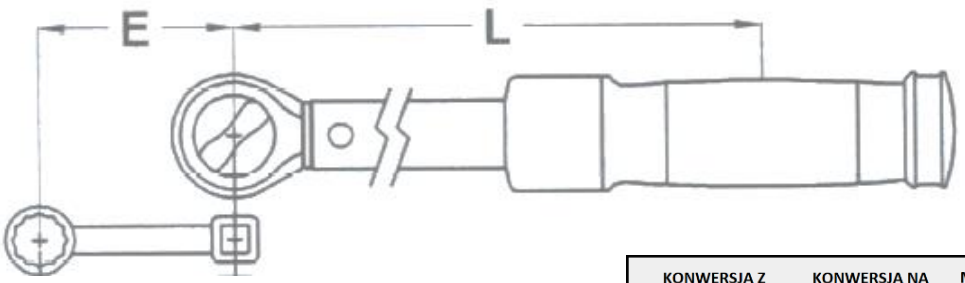
al. Warszawska 131
20-824 Lublin

tel. +48 81 444 63 73
techsam@quatros.pl

quatros.pl

NOTE: When using extensions , use the formula below to calculate what input torque value should be set on the torque wrench to obtain the required output torques to tighten a given component:

$$T1 = T2 \frac{L}{L+E}$$



where:
T1 – the value of the input torque (set on the key)
T2 – value of the output torque (required for tightening)
L – effective length of the wrench (measured according to the guidelines in the figure above)
E – effective length of the extension (measured according to the guidelines in the figure above)

For example:
The torque required to tighten the component is 100Nm. The length of the wrench measured according to the guidelines in the figure above is equal to 45 cm. The length of the extension measured according to the guidelines in the figure above is 5 cm.

$$T1 = 100Nm \frac{45cm}{45cm+5cm} = 100Nm * 0.9 = 90Nm$$

For the above situation, in order to obtain the required torque of 100Nm for tightening the component, the value of 90Nm should be set on the wrench scale.

KONWERSJA Z	KONWERSJA NA	MNOŻNIK
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

Notes:
- QS55 series wrenches are used for right-hand tightening only.
- Do not make sudden movements or jerks when tightening.
- The wrench must not be used to unscrew screws or as a ratchet.
- When using the key for the first time or after a long period of not using the wrench, you should pre-use the wrench several times to start the mechanism.
- When the wrench is not in use, set a minimum torque value to loosen the spring.
- The key must be protected from falling and mechanical damage.
- The key must not be cleaned with gasoline or solvent.
- Each key in the QS55 series is calibrated according to PN ISO 6789:2017 and has an accuracy of ±3%.
- It is recommended to check the wrench at least once a year or every 5000 cycles.

WARRANTY CONDITIONS

1. TECHSAM warrants the proper operation of the product for a period of 12 months from the date of purchase.
2. The warranty includes free removal of defects and factory defects revealed during the warranty period.
3. The warranty does not cover mechanical damage or damage caused by improper use of the product.
4. The warranty expires if repairs or alterations are found by unauthorized persons.
5. The condition for considering the warranty is the presentation of the warranty card together with the complained product at the service point or at the point of sale.
6. The warranty is valid only with the seller's stamp and the date of sale.
7. Warranty and post-warranty service is provided by the importer.

P.W. TECHSAM WOCH Sp. J.
al. Warszawska 131
20-824 Lublin
tel. +48 81 444 63 73
E-mail: techsam@quatros.pl

Date of sale .....

Seller's signature and seal .....