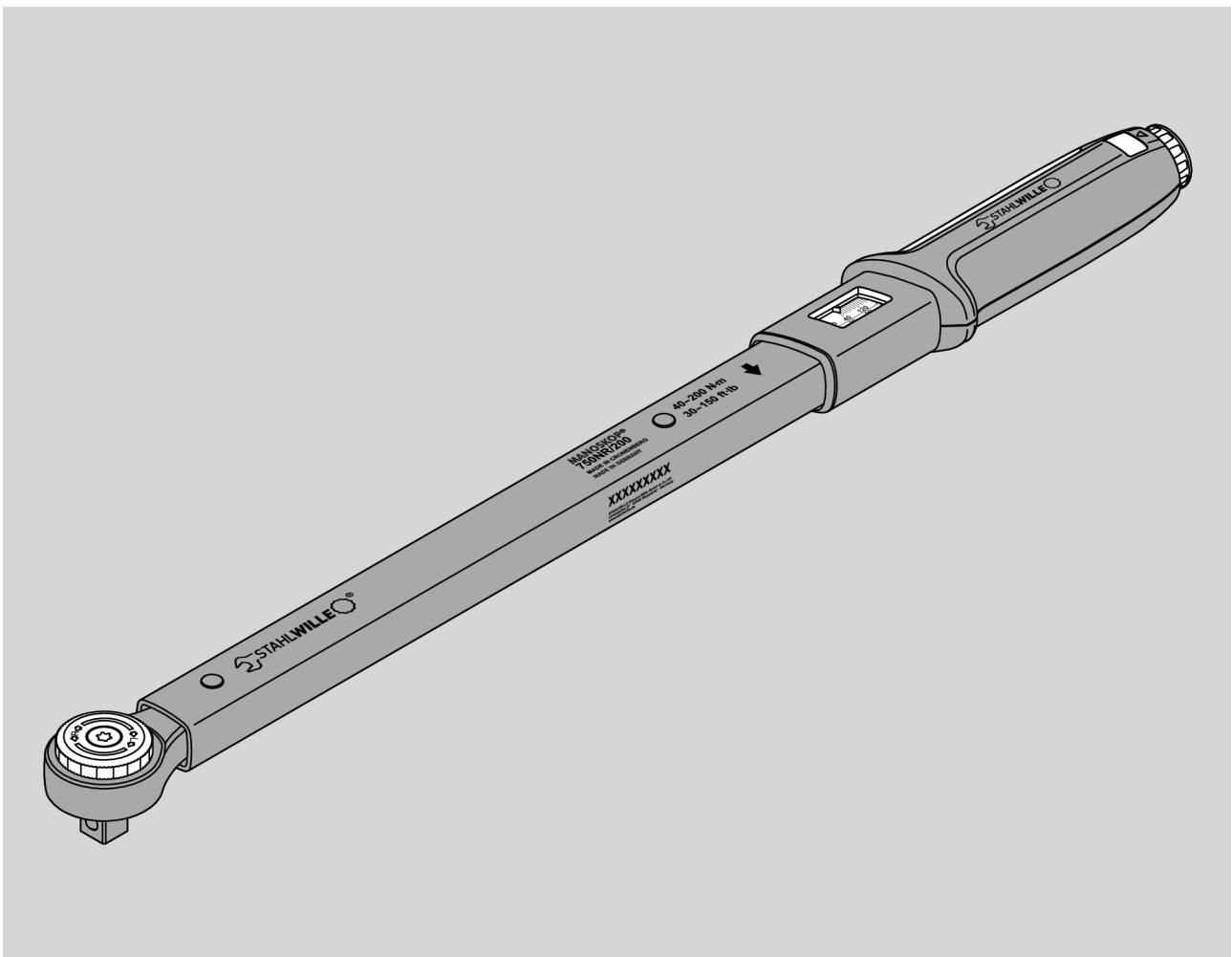


English version of the original German operating instructions

EN

MANOSKOP® 750NR



Last updated: 01/2025

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Technical description

MANOSKOP® 750NR is an adjustable, trigger torque wrench with audible and tactile trigger signal.

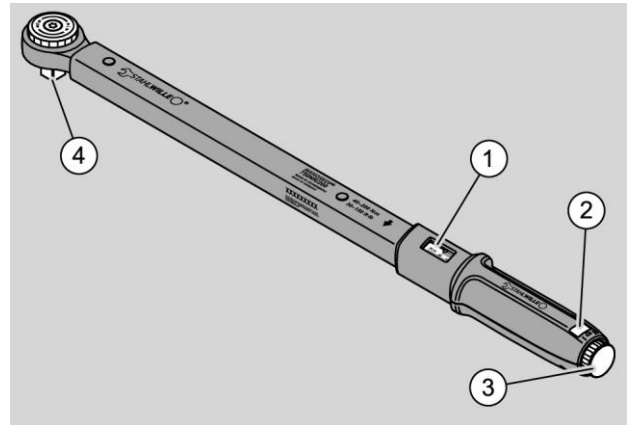
- The torque wrench has a safety release mechanism.
- It takes little effort to set the trigger values quickly and precisely using an adjustment knob and a main and a fine scale.
- The set value is securely fixed by the anti-rotation lock on the adjustment knob.
- The measuring element is a pre-tensioned spring. After use, it must be reset to the minimum value.
- When the torque wrench is released, it is immediately ready for use again.
- The ergonomically shaped two-component handle ensures comfortable and safe handling. The correct hand position is indicated by visual and haptic signals.

The permissible deviation of the respective set value from the cut-out value is $\pm 4\%$. MANOSKOP® 750NR complies with DIN EN ISO 6789, Type II, Class A.

Every MANOSKOP® has a serial number and is supplied with a calibration certificate.

MANOSKOP® 750NR ...

... is equipped with a permanently installed fine-tooth reversible ratchet with switchover disc. The switchover disc can be used to switch quickly and easily between right-hand and left-hand tightening. Various sockets and accessories can be used with the square drive. The cut-out function works only in the clockwise direction.



No.	Designation
1	Main scale
2	Fine scale
3	Adjustment knob
4	Ratchet head

Technical Data

	750NR100	750NR200	750NR400
Measuring range			
[N·m]	20–100	40–200	80–400
[ft·lb]	15–75	30–150	60–300
[in·lb]	180–900	360–1,800	720–3,600
Scale division of main scale			
[N·m]	5	10	20
[ft·lb]	10	20	40
Scale division of fine scale	0.25	0.5	1
Square drive size ["]	3/8	1/2	3/4
Length [mm]	443.0	562.5	680.0
LF [mm]	348.0	464.0	574.3
Weight [g]	1150	1490	2550
Ambient conditions			
Operating temperature [°C]	0–40		
Storage temperature [°C]	-10–+60		
Reference temperature [°C]	+23		
Relative humidity [%, non-condensing]	20–75		

Safety instructions

Intended Purpose

MANOSKOP® 750NR is intended for the controlled tightening of screw connections in workshops. A MANOSKOP® can also be subjected to loads in the opposite direction to its working direction to loosen already tightened joints. MANOSKOP® 750 may only be used for these purposes.

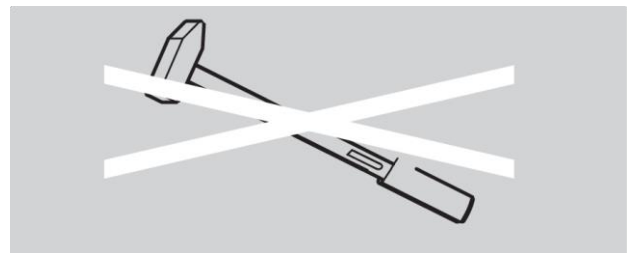
Intended use includes full compliance with the information in these operating instructions, in particular the safety instructions and the technical limit values.

The buyer is required to ensure that all users comply with these instructions.

Any use beyond the use described here is in breach of the intended purpose.

The buyer and user are responsible for any damage or injury resulting from non-adherence to these instructions.

- The MANOSKOP® may not be used for uncontrolled loosening of nuts & bolts — for example rusty joints. This may cause damage to the torque wrench.



- The MANOSKOP® may not be used as a hammer. This will lead to injury and damage.

Personal protective equipment

When using the MANOSKOP®, there is a risk of crushing, bruises and broken bones.

- Wear safety shoes with steel toecaps.
- Wear cut-proof gloves.
- Wear hearing protection.

The required personal protective equipment is to be provided by the operator.

Structural features of the information on dangers



CAUTION

Notices containing the word CAUTION warn of a hazardous situation which may lead to slight or moderate injuries.

Structural features of notices regarding material and environmental damage

ATTENTION!

These notices warn of a situation which leads to material or environmental damage.

Correct torque settings ...

... can be lifesaving in some applications. For this reason, please note the following points:



CAUTION

There is a risk of injury and potential material damage due to impermissible deviation of indication.

- Make sure that the cut-out accuracy is checked at the specified intervals.

If not specified by the operator's in-house regulations (e.g. test equipment monitoring in accordance with ISO 9000 et seq), an inspection must be carried out after approx. 5000 operations or after 12 months, whichever comes first. The time

interval (12 months) starts from the date the tool is first used.

If the inspection reveals an unacceptable deviation, you must have the torque wrench readjusted (see page 10).

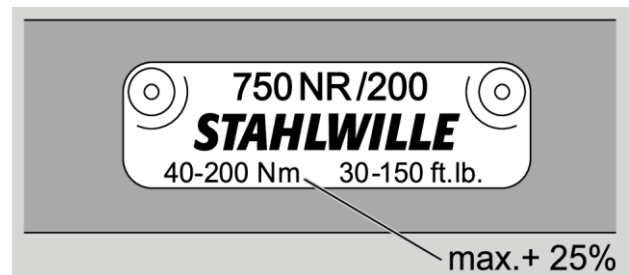
Operation

MANOSKOP® 750 is a measuring device and must be treated with appropriate care. Avoid mechanical, chemical or thermal effects that exceed the stresses involved in proper use.



Please note that extremes of climate (cold, heat, humidity) may affect measuring accuracy.

Avoid overloading the tool by more than 25 % of the maximum permissible load in the direction of tightening or in the opposite direction. The MANOSKOP® may be damaged. After such an overload, the readings may be inaccurate in such a way that the user does not notice.





CAUTION

Incorrect use can cause injury.

- Make sure that only personnel with the following knowledge and experience use the torque wrench:

- Handling torque tools
- Safe use of the torque wrench
- All information of these instructions

In addition, personnel undertaking repair of the torque wrench must be trained and authorised by the manufacturer.



CAUTION

Risk of injury when used without personal protective equipment.

- Wear safety shoes with steel toe caps.
- Wear hearing protection.

Selecting insert tools



CAUTION

There is a risk of injury due to faulty or incorrect wrench inserts.

- Only use the inserts from STAHLWILLE.
- Make sure that the permissible load capacity of the wrench inserts is greater than the capacity of the torque wrench.

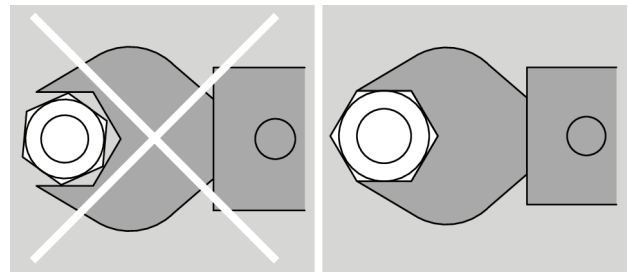


CAUTION

There is a risk of injury due to unsecured wrench inserts.

- Make sure that inserts are fully and securely seated on the square drive.

The tool must also have the correct shape and size for the workpiece.

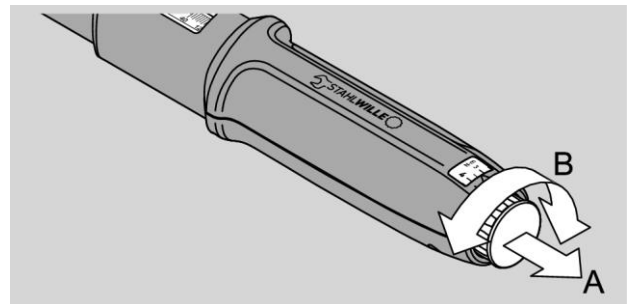


Setting the torque

You can read the measuring ranges and units of measurement on the tube and the scales. Torque values are set on the main and fine scales. The display value of the fine scale always refers to the scaling on the main scale only.

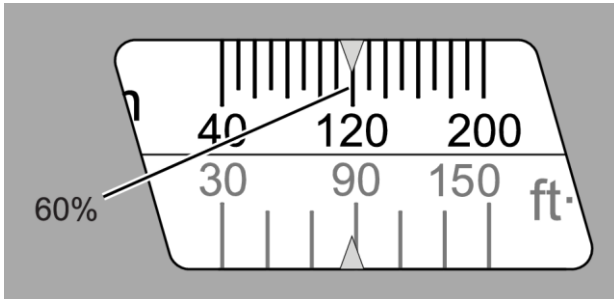
The cut-out level is set by turning the adjustment knob. Always start with a lower torque value than the desired target value.

- Pull the adjustment knob out of the locking position as far as it will go (A).
- Turn the adjustment knob (B) and observe the divisions on the main scale.



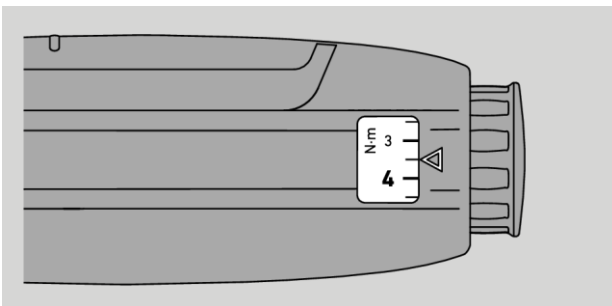
- Set a value that is lower than the required setting value.

An example using the MANOSKOP®750NR/200 model: For a required setting value of 123.5 N·m, first set it to approx. 120 N·m.

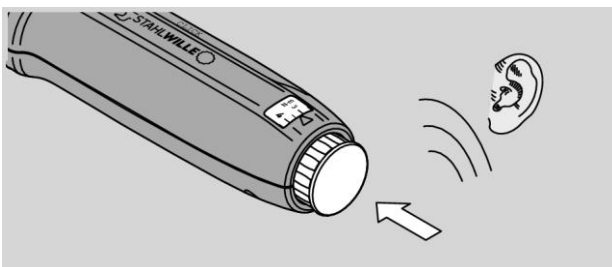


- Turn the adjustment knob and observe the exact setting on the fine scale.

An example using the MANOSKOP® 750NR/200 model: For a required setting value of 123.5 N·m, set it to 3.5 N·m.



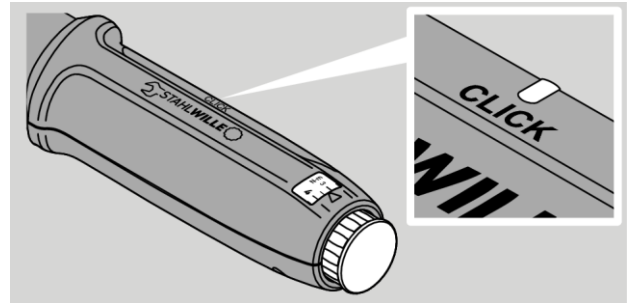
- Check the correct setting again.
- When you have set the desired value, press the adjustment knob back into the locking position. The knob engages in the notch and you hear a click. The setting is locked in.



The torque wrench is now ready to use.

Controlled counter clockwise tightening

For reasons of accuracy, the torque wrenches only have one operating direction. This is indicated by an arrow on the tube and the word "CLICK".



You **cannot** carry out controlled left-handed movements with the MANOSKOP® 750NR.

Uncontrolled loosening of nuts & bolts

...

The working direction can be changed to the opposite direction using the ratchet switchover disc. The release mechanism is not under load in this case.

ATTENTION!

Exceeding the limit torque leads to the risk of the torque wrench becoming damaged.

- Make sure that a limit torque of approx. 125 % of the maximum scale value is not exceeded.
- Do not loosen any tightly rusted bolts using the torque wrench.

Using the torque wrench



CAUTION

An incorrect trigger value leads to a risk of injury.

- Make sure that the correct trigger value is set.

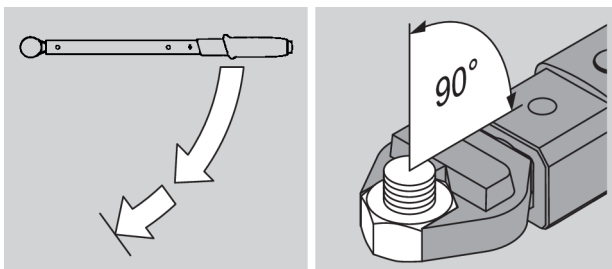


CAUTION

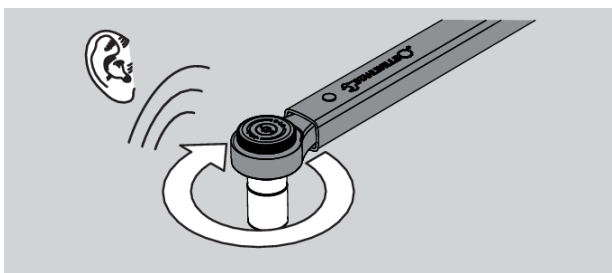
Slipping tools lead to a risk of injury.

- Make sure that the tool cannot slip off the workpiece.

Actuate the MANOSKOP® via the handle only. Grip the handle centrally. Tighten at a tangent to the slewing radius and at an angle to the tightening axis.



Pull steadily and without any interruption, particularly during the final phase, until you feel a jerk and hear a click. The torque level set on the scale has now been reached.



ATTENTION!

Incorrect use of the torque wrench leads to the risk of material damage.

- Make sure that the tightening process is immediately ceased after the torque wrench has cut-out.

As soon as the torque wrench has cut out, it is ready for the next job.

Storage

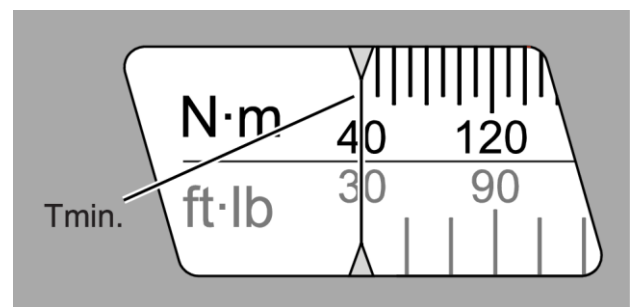
After use, the torque wrench must be reset to the minimum value.

CAUTION!

The spring mechanism of the torque wrench can be damaged if stored without being reset.

- Set the lowest possible torque value after use.

- After use, make sure that the lowest possible torque value is set.



Store the torque wrench at a temperature of -10 °C to +60 °C. The relative humidity may be 20–75 %, non-condensing.

Maintenance

The internal mechanisms of the torque wrench are subject to normal wear and tear under operating conditions. For this reason, the accuracy of the cut-out should be checked at regular intervals.

Unless otherwise indicated in the user's internal regulations test equipment inspection to (e. g. test equipment inspection to ISO 9000 et seq.), an inspection must take place after approx. 5000 operations or every 12 months, whichever comes first. The time interval (12 months) starts from the date the tool is first used.

If inspection shows that there is a deviation, the torque wrench must be adjusted.

The inspection and adjustment must be carried out in accordance with DIN EN ISO 6789.

Checking the accuracy of the cut-out value

A torque tester of sufficient capacity and accuracy is required for the inspection.

If you have access to such a tester, you may inspect the MANOSKOP® yourself. Suitable torque testers are available from STAHLWILLE. It is also possible for STAHLWILLE to test the MANOSKOP® for you.

We will show you how to check using the MANOSKOP® 750NR/200 model. To check it, proceed as follows:

- Set the torque wrench to the maximum scale value.
- Actuate the torque wrench five times ensuring it cuts-out each time.

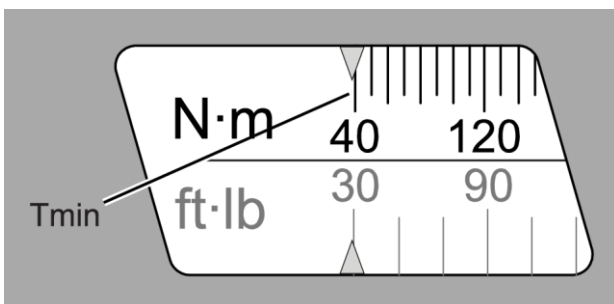
This is important for the accuracy of the subsequent measurements:

ATTENTION!

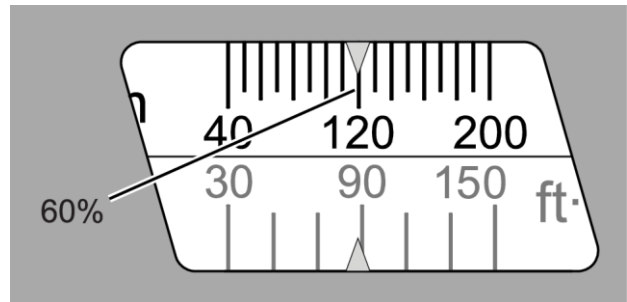
Incorrect use of the torque wrench leads to the risk of material damage.

- Make sure that the tightening process is immediately ceased after the torque wrench has triggered.

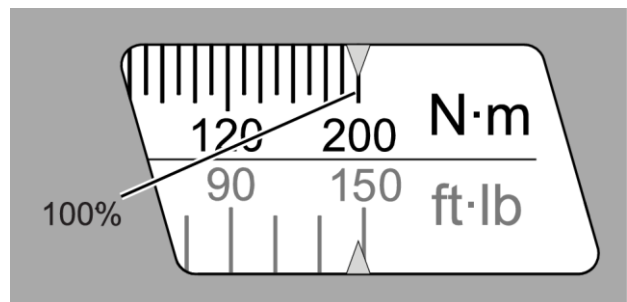
- Set the torque wrench to the minimum scale value (Tmin).



- Carry out five measurements with this setting on the torque tester.
- Check that the values displayed by the torque tester are not more than $\pm 4\%$ higher or lower than the value set on the torque wrench.
- Set the torque wrench to 60 % of the maximum scale reading.



- Carry out five measurements with this setting on the torque tester.
- Check that the values displayed by the torque tester are not more than $\pm 4\%$ higher or lower than the value set on the torque wrench.
- Set the torque wrench to the highest scale reading.



- Carry out five measurements with this setting on the torque tester.
- Check that the values displayed by the torque tester are not more than $\pm 4\%$ higher or lower than the value set on the torque wrench.

If the tests show that there are deviations greater than the permitted amounts, the wrench will require readjusting.

Adjusting for deviations in cut-out value

You can send in your torque wrench to STAHLWILLE for readjustment. You will then receive it back readjusted and with a new calibration certificate.

Cleaning

Clean the MANOSKOP® only with white Spirit. Other chemical substances may damage the plastic components.

Accessories

Attachment tools

- Sockets and accessories

For the inspection

PerfectControl® calibration and adjusting device

- 7794-1
- 7794-2

Manutork® calibration device

- 7791
- 7792

Services

- repairs
- testing and readjusting (incl. accuracy guarantee and new works calibration certificate)

Disposal

Observe the current local environmental regulations when disposing of the tool. The handle is made of glass fibre-reinforced polyamide (PA6-GF30) and polymethyl methacrylate (PMMA). The inner parts are made of glass fibre-reinforced polyamide (PA6-GK30) and polyoxymethylene (POM).

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