

Beta 601C



INSTRUCTIONS FOR USE



INSTRUCTIONS FOR USE

EN

OPERATION MANUAL AND INSTRUCTIONS FOR THE DIGITAL ANGLE INDICATOR MANUFACTURED BY:

**BETA UTENSILI
S.P.A.**

Original documentation drawn up in ITALIAN.



CAUTION



IMPORTANT! READ THIS MANUAL THOROUGHLY BEFORE USING THE DIGITAL ANGLE INDICATOR. FAILURE TO COMPLY WITH THE SAFETY STANDARDS AND OPERATING INSTRUCTIONS MAY RESULT IN SERIOUS INJURY.

Store the safety instructions with care and hand them over to the users.

PURPOSE OF USE

The digital angle indicator can be used for the following purpose:

- measuring the right-hand/left-hand torque angle on screws and nuts in combination with torque wrenches, ratchets or levers.

The digital angle indicator must not be used for the following operations:

- must not be used in humid or wet environments, and must not be exposed to rain or snow
- must not come into contact with chemical and corrosive substances
- must not be used for any applications other than recommended ones.

WORK AREA SAFETY



Do not operate the digital angle indicator in environments containing potentially explosive atmospheres, because sparks may be generated, which can ignite the dust or fumes.



Keep children and unauthorized personnel away from the digital angle indicator.



Do not use the digital angle indicator near flammable material.

DIGITAL ANGLE INDICATOR SAFETY

Before use, check that the digital angle indicator has not been damaged, and that no parts are worn.

Do not force the electronic circuit of the digital angle indicator.

PERSONNEL SAFETY

Stay alert; watch what you are doing. Do not use the digital angle indicator while tired or under the influence of drugs, alcohol, or medication.

INSTRUCTIONS FOR USE



BATTERY INSTALLATION/REPLACEMENT

Install or replace the batteries as follows:

- Loosen the four screws of the battery compartment on the back (picture 2-l).
- Remove the flat batteries, and install the new batteries, paying attention to the polarity (2 AAA batteries).
- Close the battery compartment, and tighten the four screws.
- Remove the batteries, if the digital angle indicator is not used for an extended period.
- If the battery is flat, the battery symbol will be shown on the display.

DIGITAL ANGLE INDICATOR SAFETY

- Do not drop or hit the digital angle indicator.
- Do not use the digital angle indicator in humid or wet environments.
- To clean the digital angle indicator, use a dry cloth. Do not use alcohol or diluents.
- Do not place the digital angle indicator near magnetic fields.
- Do not modify the digital angle indicator. Changes may affect operation.

TECHNICAL DATA

MEASUREMENT RANGE	0° – 999.0°
ACCURACY	± 2%
RESOLUTION	0.1°
SCALE	1° to 360° (increment 0.1°)
PROGRAMMABLE ANGLE VALUES	9
STORED ANGLE VALUES	50
POWER SUPPLY	2 AAA batteries
OPERATING TEMPERATURE	-10 °C ÷ 60 °C
STORAGE TEMPERATURE	-20 °C ÷ 70 °C
HUMIDITY	Max. 90%
AUTO POWER OFF	After approximately 2 minutes
WEIGHT	95 g

KEY TO SYMBOLS

a: LED indicators	m: memory button (M)	o: magnet
b: buzzer	+ button ▲	l: battery compartment
d: digital display	- button ▼	r: RESET button
c: start of measurement/menu button (C)	ON / CANC button (S/S)	

DIGITAL ANGLE INDICATOR OPERATION

This device has been designed for right-hand/left-hand angle torque of screws and nuts in combination with impact wrenches, ratchets or levers.

- Lay the angle indicator on a flat surface and press the ON button (C). The set torque direction will be shown on the display:
 - PoS (clockwise)
 - nEG (anticlockwise)

When the symbol 0000 is shown on the display, wait a few seconds. After the required value has been set, the display will show the previously set angle of torsion.

- Press button M, selecting one of the 9 preset angle values. A new angle value can be set by pressing buttons ▲ and ▼ . The new value will automatically be saved in memory M.

INSTRUCTIONS FOR USE



- Place the angle indicator on the tool and quickly press button (S/S) to start tightening. The angle indicator is fitted with a magnet, to provide perfect stability (picture 2-o).
- When 80% of the selected angle is reached, the first green LED will turn on and the buzzer will sound.
- When the set angle value is reached, the red LED will turn on.
- To store the value of the torque angle, press button M.

CAUTION: If the tightening process is interrupted for a few seconds, the display will blink, confirming that the required angle has been reached. To resume tightening, press button (S/S). To zero the device, press button C.

- To start a new tightening operation, press button S/S.

If the display is not used for approximately 2 minutes, it will automatically turn off.

SETTING UP MENU

Keep button S/S pressed to enter the configuration menu. Press button S/S several times to enter the menus: CHANGING TORQUE DIRECTION, TORQUE MEMORIES AND RESETTING TORQUE MEMORIES.

CHANGING TORQUE DIRECTION MENU

- The display will show PoS for the clockwise direction of rotation, and nEG for the anticlockwise direction of rotation respectively.
- Press buttons ▲ and ▼ to change the direction of rotation.
- To quit the menu, press button (S/S) several times.

TORQUE MEMORIES MENU

- This menu provides the values of the measured and stored torque angles (up to 50 values stored).
- If no values have been stored, the display will show nonE.
- Whenever buttons ▲ and ▼ are pressed, the display will show the stored values of the torque angle.
- To delete one of the stored values, press button C twice.
- To quit the menu, press button (S/S) several times.

RESETTING TORQUE MEMORIES MENU

- This menu allows all the values stored in the TORQUE MEMORIES MENU to be deleted.
- The display will show ClrA
- To delete all the stored values, press button C.
- The display will show no?
- To delete all the stored values, press button C. To cancel the operation, press button S/S.
- To quit the menu, press button S/S twice.

ERROR MESSAGES

- Er4 indicates that the value has not been set correctly. Press button C to repeat the operation. Do not move the angle indicator while setting.
- Er5 indicates that the angle indicator is not working correctly. Press the RESET button.
- Er--- indicates that the angle indicator was rotated too quickly during a measurement. Press button C to repeat the operation.
- Full indicates that no data can be stored in the memory; the memory is full. Delete some of the 50 stored data.

RESET

- If the angle indicator is not working correctly, press the RESET button to zero the device (picture 2-r). The angle indicator can also be zeroed by removing the batteries.

INSTRUCTIONS FOR USE



MAINTENANCE

Maintenance and repair jobs must be carried out by trained personnel only. For such jobs, you can contact Beta Utensili S.P.A.'s repair centre.

DISPOSAL

The symbol of the barred bin printed on the device or packaging means that the product must be collected separately from the other urban rubbish when it is no longer operational.

To dispose of this product, the user can:

- deliver it to a rubbish collection centre for electronic and electrotechnical devices;
- return it to the seller at the moment they buy a new, equivalent device; or
- in the case of products for professional use only, contact the manufacturer, who will have to arrange for proper disposal.

Proper disposal of this product will allow the raw materials to be reused and will affect neither the environment nor human health. Unauthorized disposal of the product is an infringement of the regulations concerning the disposal of hazardous waste, and will result in sanctions.



WARRANTY

This digital angle indicator is manufactured and tested in accordance with current EU regulations. It is covered by a 12-month warranty for professional use or a 24-month warranty for nonprofessional use.

We will repair any breakdowns caused by material or manufacturing defects by fixing the defective pieces or replacing them at our discretion.

Should assistance be required once or several times during the warranty period, the expiry date of this warranty will remain unchanged.

This warranty will not cover defects due to wear, misuse or breakdowns caused by blows and/or falls.

In addition, this warranty will no longer be valid if any changes are made, or if the digital angle indicator is forced or sent to the customer service in pieces.

This warranty explicitly excludes any damage to people and/or things, whether direct or consequential.

DECLARATION OF CONFORMITY

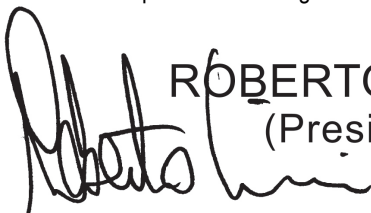
We hereby declare, assuming full responsibility, that the described product complies with all the relevant provisions of the following Directives and amendments thereto:

- Electromagnetic Compatibility Directive (EMC) 2004/108/EC;
- Directive concerning the restriction of the use of certain hazardous substances in electric and electronic equipment (RoHS) 2011/65/EC.

The Technical Brochure is available at:

BETA UTENSILI S.P.A.

Name and title of person in charge


ROBERTO CICERI
(President)