Electronic Torque Wrenches
IZO-D/DM
IZO-DF/DFM

SEE
+ HEAR + FEEL = Controlled Torquing Operations
Versatile

You will find the BAHCO IZO-D/DF and IZO-DM/DFM electronic torque wrenches spread throughout industry e.g. Automotive and support industry, Aviation and support industry and Assembly lines for any product. These products will be found everywhere, where quality has no compromise.

Award Winning Design

Product design: winner 2003

The award “red dot” for high design quality, expressing innovation in form and function in an exemplary manner, is presented to:

Electronic Torque Wrench IZO-D-135

The red dot design award is one of the most prestigious international design competitions. Since 1955, expert juries have made awards annually in the competition for outstanding design achievements which set new standards in the relevant product categories. The red dot has thus become one of the most highly prized and globally recognised seals of quality.

Simple

No need for more controls

The new IZO-DM/DFM wrench has only six control keys and is fast, simple and comfortable to operate. Accidental programming of the wrench cannot occur.

Tolerance

Torquing and measuring.

Like any indicating or dial wrenches the BAHCO IZO-D/DF,-DM/DFM has a “Track, Peak hold” digital display mode of the actual applied torque.

Programmable set values and torquing.

For repeating torque values, the required torque value together with a ± tolerance can easily be programmed, and is secure against accidental change. This allows the user to torque and to control his work within his own set of specifications.

Once a fastener is torqued to within the OK band, the BAHCO IZO-D/DF,-DM/DFM generates identifiable signals.


Everyone reacts in his own way to different external signals.

Robust

Quality at it’s best.

Long life, no moving or wearing parts, robust design, reliable and durable. The tool body is made from quality stainless steel.

Two component handle, made from glass filled nylon incorporating a santoprene soft grip. The hole is designed for convenient tool storage.

Precision

± 2 %

Perfect accuracy is guaranteed.

The IZO-D/DF,-DM/DFM wrench fulfills all modern requirements such as safety and security of operation, economy, reliability and high durability. The IZO-D/DF,-DM/DFM wrench is easy to set and very comfortable to operate.

The BAHCO IZO-D/DF,-DM/DFM wrenches take accuracy seriously:

± 2 %, ± 1 digit

Battery

Quick Change

The IZO-D/DF and IZO-DM/DFM wrenches allow up to 100 hours of continuous operation, depending on the chosen battery’s capacity. The alkaline batteries themselves can be easily changed within a few seconds. No data will be lost during battery change.

±2%

Perfect accuracy is guaranteed.

The IZO-D/DF,-DM/DFM wrench fulfills all modern requirements such as safety and security of operation, economy, reliability and high durability. The IZO-D/DF,-DM/DFM wrench is easy to set and very comfortable to operate.

The BAHCO IZO-D/DF,-DM/DFM wrenches take accuracy seriously:

± 2 %, ± 1 digit

visual reaction

visual – audible – feelable

Visual – Audible – Feelable

Everyone reacts in his own way to different external signals.
Deciding Advantages

No need to be afraid of electronics.
The new IZO-D/DF and IZO-DM/DFM Torque Wrenches from BAHCO combine the simplicity of use and speed of conventional mechanical tools with the accuracy of modern electronic hand tools. Save time and be in complete control of your work.

Sealed

If your torque operations are carried out in moist or dusty conditions it is good to know that the BAHCO IZO-D/DF, -DM/DFM wrench is both dust and splashproof. This provides for safe and reliable torquing in difficult conditions.

At Optimum

This is the way for a torque tool to fit into your hand. Perfectly designed handle, safe, convenient and comfortable.

In Any Position

The FEELBACK feature of the IZO-D/DF and IZO-DM/DFM wrenches ensures that you will always feel your correct torque, regardless whether you work under noisy conditions, in poor light or in difficult to access areas.

Feedback by feeling – FEELBACK

The correct torque value is sensed by your hand – you can rely on what you feel.

Reversible ratchet

- Product code 6852-1 - 1/4"
- Product code 7452-1 - 3/8"
- Product code 7852-1 - 1/2"
- Product code 8952-1 - 3/4"

Open ended insert

- Product code 7452-7-
  - 7 mm 10 mm 13 mm 16 mm 19 mm
  - 8 mm 11 mm 14 mm 17 mm
  - 9 mm 12 mm 15 mm 18 mm

- Product code 7852-7-
  - 13 mm 17 mm 22 mm 30 mm
  - 14 mm 18 mm 24 mm 32 mm
  - 15 mm 19 mm 27 mm

Ring insert

- Product code 7452-8-
  - 7 mm 10 mm 12 mm 14 mm 17 mm
  - 8 mm 11 mm 13 mm 15 mm 19 mm

- Product code 7852-8-
  - 19 mm 15 mm 19 mm 24 mm 30 mm
  - 14 mm 17 mm 22 mm 27 mm 32 mm

Flare insert

- Product code 7452-9-
  - 10 mm 12 mm 14 mm 18 mm
  - 11 mm 13 mm 17 mm 19 mm

Tool insert change is easy and versatile. Choose your inserts from the 9 x 12 or 14 x 18 system.

Reversable ratchet

Product code

6852-1 - 1/4"
7452-1 - 3/8"
7852-1 - 1/2"
8952-1 - 3/4"

Open ended insert

Product code 7452-7-
7 mm 10 mm 13 mm 16 mm 19 mm
8 mm 11 mm 14 mm 17 mm
9 mm 12 mm 15 mm 18 mm

Product code 7852-7-
13 mm 17 mm 22 mm 30 mm
14 mm 18 mm 24 mm 32 mm
15 mm 19 mm 27 mm

Ring insert

Product code 7452-8-
7 mm 10 mm 12 mm 14 mm 17 mm
8 mm 11 mm 13 mm 15 mm 19 mm

Product code 7852-8-
19 mm 15 mm 19 mm 24 mm 30 mm
14 mm 17 mm 22 mm 27 mm 32 mm

Flare insert

Product code 7452-9-
10 mm 12 mm 14 mm 18 mm
11 mm 13 mm 17 mm 19 mm

This modern torque tool generates automatically three different signal levels for fast and reliable action when the OK band is reached.


The large display is almost always “in view”. The actual applied torque is displayed.

An audible signal indicates that you have reached the OK band.

Memory ISO 9000

The BAHCO IZO-DM/DFM allows the user to document and analyse his torque data inline with ISO-9000 requirements. In many areas of industrial assembly processes, the control of torque is increasingly considered to be one of the most critical parts of such an operation. It has direct impacts on quality, safety and competitiveness of processes and products.

The IZO-DM/DFM series has extended functions and features to meet the highest standards and requirements within any application. These allow the user to further simplify his operation and to provide applied torque data documentation for full analysis and process control at any time.

Storing Data

Pushing one key is enough to store the actual applied torque. Up to 1000 values together with unit of measurement, fastener No. (in sequence) can be stored in the on-board memory.

Printouts

The IZO-DM/DFM can be connected directly to a printer for real time download, listing in sequence the applied torque values along with the unit of measurement.

Download

To achieve date and time of Torque, the wrench must be connected via a cable at all times. The IZO-DM/DFM wrench contains a cable and a software package which can convert the data into a Microsoft Excel template.

Memory Recall

This feature allows recalling the current batch from the on-board memory for quick and fast checking or verification of work in progress. The display gives prompts to make programming easier.
Calculation of the compensating torque when using an extension

A torque wrench is typically adjusted and calibrated by applying a known force at the center of the handle at a distance \( L_1 \) from the center of the driving square. In some applications it is necessary to add an extension to the wrench, especially when some work has to be carried out in confined areas.

In such cases it is necessary to compensate for this extension by reducing the programmed set torque on the wrench according to the following formula:

\[
C = \frac{L_1 \times T}{L_1 + B}
\]

where:
- \( L_1 \) = Distance from above table
- \( B \) = Length of extension
- \( T \) = Required torque
- \( C \) = Compensated torque

\[
C = \left( \frac{0.335 \times 20}{0.335 + 0.040} \right) = \frac{6.7}{0.375} = 17.86 \text{ Nm} (18 \text{ Nm})
\]

Dimensions mm | \( L \) | \( L_1 \) | \( L_2 \)
--- | --- | --- | ---
IZO-D-30 | 405 | 300 | 370
IZO-DM-30 | 405 | 300 | 370
IZO-DF-30 | 390 | 285 | 360
IZO-DFM-30 | 390 | 295 | 360
IZO-D-135 | 450 | 345 | 410
IZO-DM-135 | 450 | 345 | 410
IZO-DF-135 | 445 | 345 | 395
IZO-DFM-135 | 445 | 345 | 395
IZO-D-200 | 535 | 430 | 495
IZO-DM-200 | 535 | 430 | 495
IZO-DF-200 | 560 | 450 | 495
IZO-DFM-200 | 560 | 450 | 495
IZO-D-340 | 650 | 540 | 605
IZO-DM-340 | 650 | 540 | 605
IZO-DF-340 | 670 | 565 | 605
IZO-DFM-340 | 670 | 565 | 605
IZO-DR-810 | 1230 | 1130 | 1126
IZO-DRM-810 | 1230 | 1130 | 1126

The new IZO-D/DF and IZO-DM/DFM Torque Wrenches from Bahco comply with all relevant standards such as DIN/ISO 6789, EN 26789 and US B107.1-84M. They also comply with the EMC guideline 89/336/EU and are approved to carry the CE mark.
## Product Range

**IZO-D/DM**
With interchangeable ratchet head

<table>
<thead>
<tr>
<th>Product code</th>
<th>EAN code</th>
<th>Drive square</th>
<th>Nm</th>
<th>Torque lbf.ft</th>
<th>lbf.in</th>
<th>Length mm</th>
<th>Ratchet Insert</th>
<th>Insert mm</th>
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**IZO-DR-810**
With fixed flex head ratchet

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**IZO-DF/DFM**
With fixed flex head ratchet

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**IZO-DF/DFM**
With fixed ratchet head

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With fixed flex head ratchet

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