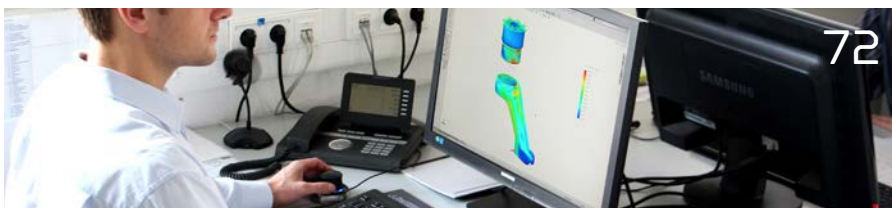


# HIGH-LEVEL CORDLESS TORQUE WRENCH WITH COLOUR DISPLAY





# OUR NEW INNOVATIONS



## New generation of the LDA/LAW series ergonomic, powerful and lightweight

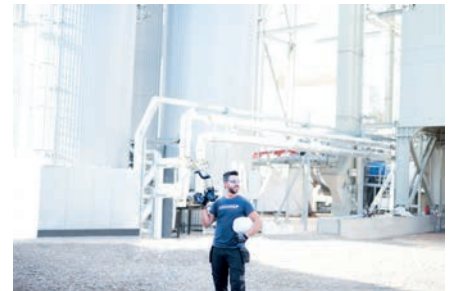
With low-maintenance brushless technology and new ergonomic design we present the LDA high-level cordless torque wrench up to 6 000 Nm in a new generation. Intelligent, flexible and smaller than its predecessor whilst lighter and more powerful. The desired torque range can be adjusted in steps. Powerful drive is provided by the efficient and fast brushless motor with 2-speed gearbox and powerful 270 Wh system power.

- › Torque range from 90-6 000 Nm
- › Brushless Technology – low maintenance
- › Stepped torque adjustment
- › Ergonomic handle for safe & non-fatiguing use
- › System power of 270 Wh with three powerful lithium-ion batteries (90 Wh/18 V/5 Ah)
- › Repeatability tolerance less than +/- 3 %
- › Also available in angled versions



See for yourself  
– take a look at our new  
LDA-Video!

Further information on pages 10–13.  
For a detailed, individual presentation of our torque wrench LDA  
please contact us.







## The heavy duty torque wrench with magnetic colour display and adjustable handles

Our LHD with detachable magnetic display and adjustable handles combines power and speed: for a faster insertion bolt by bolt. More than twice as fast than other suppliers when docking - for a faster reset from bolt to bolt.

The Brushless Technology ensures a longer service life of the torque wrench. Due to strong voltage fluctuations it is often impossible in the wind power sector to use electrically driven bolting equipment with the required accuracy. This is avoided with the LHD bolting device by a voltage conversion using our Powerbox - this way the bolting device is always provided with the necessary voltage for correct performance.

With detachable, magnetic display and adjustable handles, the LHD scores in terms of flexibility and accuracy.

- › Torque range: 800–7 500 Nm
- › Process-safe working in wind and weather
- › Documentation of more than 10 000 bolt-connections (module TRACK) – optional
- › Documentation and pre-defining of different bolting operations (module QS) – optional
- › Torque
- › Torque angle – optional
- › Inductive interface for data transmission
- › Torque adjustment in 10 Nm steps
- › Removable, magnetic display with cable length of 2m
- › Adjustable handles for easier work and optimal power distribution in every situation
- › Optical and an acoustic zero-error strategy
- › Repeatability tolerance less than +/- 2 %

Further information on pages 72–73.

For a detailed, individual presentation of our Heavy Duty torque wrench LHD please contact us.

## Exemption from the prescribed check for railway torque wrench LDB-10 (valid for Deutsche Bahn)

Basically, new bolted connections on rail tracks should be documented and randomly tested. As one of the first maintenance tools, the LDB-10 Universal railway torque wrench has now been relieved of the 1 % and 5 % prescribed check. Thus saving considerable amounts of resource and costs to the end user.

### Calculation example:

1 km rail = 6.666 bolts

+Verify: 66 or 336 bolts (with 1 % or 5 % prescribed check)

### Effort and costs of the prescribed check

2 persons each 1 minute per bolt x 60 €/h = 2 €/bolt

+ 1 km rail = 132,00 € verification costs (with 1 % prescribed check)

+ 1 km rail = 672,00 € verification costs (with 5 % prescribed check)

The LDB-10 amortizes itself after 19 km of rail (with 5 % prescribed check) or 96 km (with 1 % prescribed check)

Further information on pages 70–71.

For a detailed, individual presentation of our railway torque wrench LDB please contact us.



See for yourself  
– take a look at our  
LDB-Video!



1. Gang		2. Gang	
1	1056 Nm	1	440 Nm
2	1363 Nm	2	508 Nm
3	1584 Nm	3	611 Nm
4	2242 Nm	4	808 Nm
5	2704 Nm	5	929 Nm
6	3770 Nm	6	1052 Nm
7	3108 Nm	7	1145 Nm

# LDA, LAW, LDA/LAW SOLUTION

## CORDLESS TORQUE WRENCH



### LDA



### SCOPE OF DELIVERY

- › DEVICE
- › REACTION ARM CRANKED
- › 3 BATTERIES
- › CHARGER
- › TOOL BOX
- › OPERATING MANUAL
- › FACTORY CALIBRATION CERTIFICATE



### LAW



### SCOPE OF DELIVERY

- › DEVICE
- › REACTION ARM CRANKED
- › 3 BATTERIES
- › CHARGER
- › TOOL BOX
- › OPERATING MANUAL
- › FACTORY CALIBRATION CERTIFICATE



# CORDLESS TORQUE WRENCH IN NEW GENERATION

## LDA/LAW SERIES, 90-6000 Nm

Microprocessor-controlled electronics with shut-off function

Brushless Technology low-maintenance

Torque values readable on the label

System performance: 270 Wh powerful 90 Wh (18 V/5 Ah) lithium-ion battery

Ergonomic grip for safe & non-fatiguing use

Stepless torque adjustment

Repeatability +/- 3 %

With LED status signal

Automatic device switch-off when torque achieved. Wrench slackens (back off) after torque is applied

Individual GEDORE factory calibration certificate

LAW series

See for yourself – take a look at our new LDA-Video!

MESSWERTE 1. Gang	1	2	3	4	5	6
1	440	508	611	809	929	1082
2	440	508	611	809	929	1082
3	440	508	611	809	929	1082
4	440	508	611	809	929	1082
5	440	508	611	809	929	1082
6	440	508	611	809	929	1082



## The new cordless torque wrench up to 6000 Nm

Even more powerful, intelligent and flexible - and at the same time much smaller and lighter than its predecessor: The new generation of LDA cordless torque wrench with ergonomic grip and low-maintenance brushless technology. With our further developed and proven high level cordless torque wrench, bolting operations can be carried out independently and safely.

It generates torques of up to 6000 Nm with specially manufactured planetary gearboxes. The powerful lithium-ion battery mean that applications at high altitude or in confined spaces are easy overcome. Once the battery is fully discharged, you can switch to electrical operation thanks to the optionally available hybrid cube.



### Our secret: Intelligent microprocessor electronics

The heart of the cordless torque wrench is the switch-off electronics with microprocessor control. This allows the tightening torque for each bolting operation to be precisely maintained and ensures stable torque accuracy over the entire discharging cycle of the battery.

### Integrated gear protection and processor-controlled safety

The microprocessor prevents gear damage when loosening hard bolted connections. The low-backlash gear with a housing made of high-performance aluminium was specially developed further for this series. An active release function ensures that the wrench automatically releases after work is complete and can thus be easily removed from the bolt.

### An unbeatable combination

Battery technology and microprocessor electronics complement each other perfectly. Our microprocessor electronics increases and regulates the battery voltage. Thus, the battery life is extended and the torque kept constant during the operating cycle.

The scope of delivery of the cordless torque wrench includes a system performance of 270 Wh, consisting of three lithium-ion batteries (90 Wh/18 V/5 Ah).

With the latest Brushless Technology, the LDA becomes even more efficient. The brushless motor replaces the brushed universal motor and thus requires less maintenance.

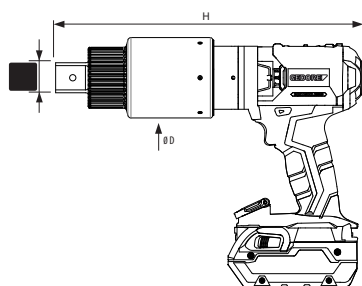
### Lies comfortably in the hand

The ergonomic grip is non-slip and fatigue-free in the hand and ensures safe working. The braked 360°-rotating drive unit prevents any injuries to the operator when used in confined spaces.

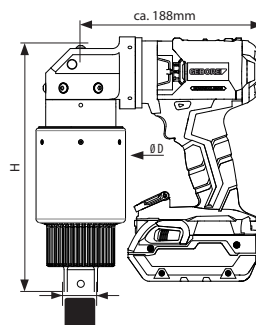




## Technical data



LDA series – straight version



LAW series – angled version

Type	N·m min <sup>*1</sup> /max <sup>*2</sup>	lbf·ft min <sup>*1</sup> /max <sup>*2</sup>	~ U/min	■	Ø D mm	H mm	kg <sup>*3</sup>
LDA-05	90 - 500	60 - 370	46	3/4"	80	255	3.3
LDA-07	120 - 700	80 - 520	29	3/4"	80	287	3.9
LDA-12	200 - 1200	150 - 890	20	3/4"	80	287	3.9
LDA-15	250 - 1500	180 - 1110	15	1"	88	303	5.0
LDA-22	300 - 2200	220 - 1630	10	1"	90	321	5.6
LDA-32	400 - 3200	290 - 2360	7	1"	88	344	6.1
LDA-40	500 - 4000	370 - 2950	5,5	1"	88	344	6.1
LDA- 60	700 - 6000	510 - 4430	3,5	1 1/2"	102	359	7.8
LAW-12	200 - 1200	150 - 890	20	3/4"	80	223	5.2
LAW-22	300 - 2200	220 - 1630	10	1"	90	255	6.9
LAW-32	400 - 3200	290 - 2360	7	1"	88	279	7.3
LAW-40	500 - 4000	370 - 2950	5,5	1"	88	279	7.3
LAW-60	700 - 6000	510 - 4425	3,5	1 1/2"	102	295	9.1

<sup>\*1</sup>Lowest torque in 2nd gear

<sup>\*2</sup> Maximum torque in 1st gear

<sup>\*3</sup> Without reaction arm with battery

Battery: 740g

Vibration is less than 2.5 m/s<sup>2</sup>

The continuous sound pressure as per DIN 455635 is < 80 dB(A)

Further torque ranges on request. All rights reserved. Subject to modifications without prior notice.



### Scope of delivery

- › Device
- › Hand grip (from LAW-60 see page 21)
- › Reaction arm cranked with lock on function made of chrome vanadium steel
- › 3x Lithium-ion battery (90 Wh/18 V/5 Ah)
- › Charger 220-240 V; 50/60 Hz or 110-120 V; 50/60 Hz for USA
- › Tool box
- › Operating instructions
- › Factory calibration certificate

### Optional accessories

- › Reaction arm made of light alloy, straight with adjustable locking knob with movable square-end and retaining ring
- › Reaction ring for bespoke reaction arm design
- › Hybrid Cube
- › Car charger for 12 V connection



\*USA: Illustration similar



\*Illustration similar

\*Illustration similar

# OUR TORQUE WRENCH IN DIFFERENT BOLTING SITUATIONS

i



Source: MERK Timber GmbH



## Metropol Parasol, Sevilla

The new landmark in Seville, Spain, was mounted with the high-torque cordless torque wrench (LDA). A total of 21900 bolted connections were tightened on the wooden construction.

## Rhenish lignite mining area

In the Rhenish lignite mining area, complex piping systems run through the openpit mining, which serve for drainage and pollution control. In some areas, steel flanged pipes are being dismantled, which have been used for over 10 years of drainage and installed in the ground. Due to the years of weathering and the resulting corrosion of the bolt connections, disassembly work is often a challenge for these tubes. To solve these bolted connections and to install new lines our LDA is used.



Source: RWE POWER, TAGEBAU HAMBACH



## Football stadium TSG Hoffenheim

The roof structure of the football stadium belonging to TSG 1899 Hoffenheim was mounted with our cordless torque wrench.

