

TOTAL ASSORTMENT

# GDA, LDA/LAW SOLUTION, LDA/LAW CORDLESS TORQUE WRENCH



# **GDA**



# SCOPE OF DELIVERY

- **>** DEVICE
- > REACTION ARM CRANKED
- >2 BATTERIES
- **)**CHARGER
- >TOOL BOX
- >OPERATING MANUAL
- > FACTORY CALIBRATION CERTIFICATE



# LDA/LAW SOLUTION SCOPE OF DELIVERY



- **>** DEVICE
- > REACTION ARM CRANKED
- ) 3 BATTERIES
- **)** CHARGER
- > TOOL BOX
- OPERATING MANUAL
- > FACTORY CALIBRATION CERTIFICATE



# LDA/LAW

# SCOPE OF DELIVERY



- **>** DEVICE
- > REACTION ARM CRANKED
- ) 3 BATTERIES
- **)** CHARGER
- >TOOL BOX
- OPERATING MANUAL
- > FACTORY CALIBRATION CERTIFICATE



HOCHMOMENT AKKUSCHRAUBER

# THE COMPACT CORDLESS TORQUE WRENCH SERIE GDA, 60-200 Nm



# The compact cordless torque wrench up to 200 Nm

# The compact solution in low torque range.

With the new GDA we present our smallest cordless torque wrench for use in assembly, production and manufacturing.



# 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. With a repeatability of $\pm$ 4. 3%, the torque is steplessly adjustable and the

The heart of the cordless torque wrench is the switch-off electronics with

status of the bolted connection is visualised via the LED status signal.





#### Flexible use in various industries

The new GDA is the solution for small bolting cases in a wide range of applications. Thanks to its low weight, ergonomic design and size, it is perfect for all assembly work in the low torque range. Small, compact and battery operated, it can be used wherever torque accurate bolting is required. Also for applications in linear guidance.

#### An unbeatable combination

Battery technology and microprocessor electronics complement each other perfectly. Our microprocessor electronics increase and regulate the battery voltage. Thus, the battery life is extended and the torque is maintained during the entire Working cycle kept constant.

#### Technical Data

Тур	N·m min*¹/ max*²	lbf-ft min*1/ max*2	~ U/min	•	Ø D mm	H mm	<b>√</b> kg <b>√</b> *3	
GDA	60-200	44-148	54	1/2"	63	221	2.9	%
*1 Lowest torque in 2nd gear *2 Maximum torque in 1st gear *3 Without reaction arm with battery Vibration is less than 2.5 m/s² Continuous sound pressure level corresponding to <78,7 dB (A) Further torque ranges on request. All rights reserved. Subject to modifications without prior notice.								

# Scope of Delivery

- Reaction arm, cranked, made of folded and highstrength sheet steel
- 2x Lithium-ion battery (90 Wh/18 V/5 Ah)
- > Charger 220-240 V; 50/60 Hz or 110-120 V; 50/60 Hz
- > Tool box
- > Operating manual
- > Factory calibration certificate







### Optional Accessories

- > Various attachments
- > Special calibration up to 300 Nm







SW8, SW10, SW12, SW14



TORX impact socket T50, T55, T60

# CORDLESS TORQUE WRENCH WITH COLOUR DISPLAY LDA/LAW SOLUTION, 90 - 6000 Nm









# The new cordless torque wrench with documentation module

The new cordless torque wrench LDA/LAW Solution, is equipped with a documentation module for quality assurance and a sunlight-readable, intuitively operated colour display. Pre-defining of different bolting operations with module DOCU is possible. With its powerful 90 Wh lithium-ion battery, microprocessor electronics and brushless technology, the LDA/LAW Solution has a torque range up to 6000 Nm. With the torque rotation angle controlled torque tightening process, perfectly defined bolted connections according to the highest quality standards are guaranteed.

## Conforms to the highest standards

The data transfer of all bolt tightening operations via USB interface at the end of the working day is flawless and complete with the LDA Solution. An integrated counting mode for life and maintenance cycle reminds you of service and recalibration.

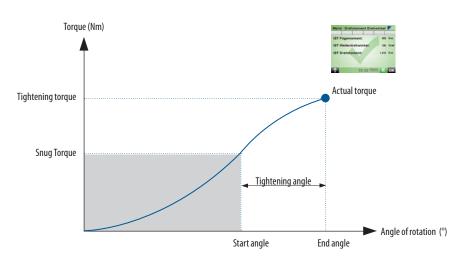
# Optional bolting software and documentation module DOCU

With the documentation module DOCU the documentation of over 10,000 bolt connections possible. It also serves for quality assurance archiving of your completed bolting work.

# Defined bolt connection with torque-angle controlled torque tightening

For a more precise tightening of the bolts, the LDA Solution offers the torque-angle torque tightening method. After the snug torque has been reached, the bolt is retightened by the previously determined further angle of rotation and thus guarantees a perfectly defined bolt connection according to the highest quality standards.









# Proven system sequence by means of digital color display

For maximum precision, the LDA Solution offers a visual and acoustic zerodefects strategy: a sunlight-readable, digital colour display visualises the entire work workflow; in addition, an acoustics signal sound as soon as the set value is reached. The menu language can be set optionally (German or English).

# Lies comfortably in the hand

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



## The display and its functions:





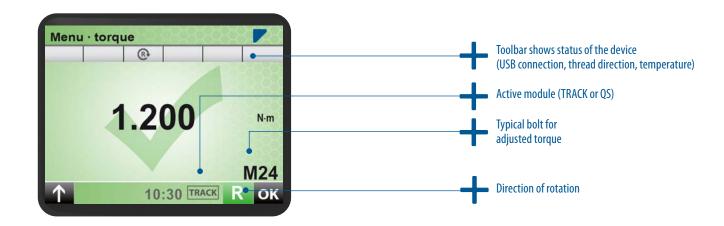




Standard Process OK

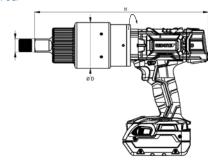
Process not OK

Messages and informations

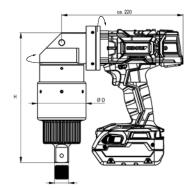




#### Technical Data



LDA Solution series – straight version



LAW Solution series – angled version

Тур	N∙m min*¹/ max*²	lbf·ft min*1/ max*2	~ U/min		Ø D mm	H mm	<b>∆</b> kg <b>∆</b> *3
LDA-05 Solution	90 - 500	66 - 369	46	3/4"	80	294	3.4
LDA-07 Solution	120 - 700	86-516	29	3/4"	80	326	4.0
LDA-12 Solution	200 - 1.200	148 - 885	20	3/4"	80	326	4.0
LDA-15 Solution	250 - 1.500	184 - 1107	15	1"	88	342	5.1
LDA-22 Solution	300 - 2.200	221 - 1623	10	1"	90	360	5.7
LDA-32 Solution	400 - 3.200	290 - 2360	7	1"	88	383	6.2
LDA-40 Solution	500 - 4.000	369 - 2950	5,5	1"	88	383	6.2
LDA-60 Solution	700 - 6.000	516 - 4425	3,5	1½"	102	398	7.9
LAW-12 Solution	200 - 1.200	148 - 885	20	3/4"	80	223	5.3
LAW-22 Solution	300 - 2.200	221 - 1623	10	1"	90	255	7.0
LAW-32 Solution	400 - 3.200	332 - 2360	7	1"	88	279	7.4
LAW-40 Solution	500 - 4.000	290 - 2360	5,5	1"	88	279	7.4
LAW-60 Solution	700 - 6.000	510 - 4425	3,5	1½"	102	295	9.2

\*1 Lowest torque in 2nd gear

\*2 Maximum torque in 1st gear

\*3 Without reaction arm with battery

Battery: 740g

Vibration is less than 2.5 m/s2 Continuous sound pressure level corresponding to < 78.7 dB (A) Further torque ranges on request. All rights reserved. Subject to modifications without prior notice.

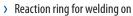
# Scope of delivery

- > Device
- > Handle (from LAW-60 Solution)
- > 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 110-120V; 50/60 Hz
- > Tool box
- > Operation manual
- > Factory calibration certificate



## Optional accessories

> Reaction arm made of light alloy, straight with adjustable locking knob with movable square-end and retaining ring



- > Car charger for 12 V connection
- > Function LA.M+a (fom construction size -12\*)
- > Module LA.DOCU
- > Silicone protection cover display unit



\*for LDA/LAW -12 Solution and -15 Solution function only possible in 1st gear











# CORDLESS TORQUE WRENCH IN NEW GENERATION LDA/LAW SERIES, 90-6000 Nm



# 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.









# 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.

#### 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.

# Integrated gear protection and processor-controlled safety

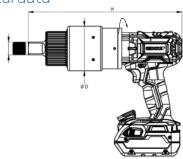
The microprocessor prevents gear damage when loosening hard bolted connections. The low-backlash gear with a housing made of high-performance aluminium was specially developed further for this series. An active release function ensures that the wrench automatically releases after work is complete and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

# Lies comfortably in the hand

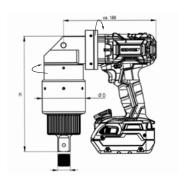
The ergonomic grip is non-slip and fatigue-proof in the hand and ensures safe working. The braked 360°-rotating drive unit prevents any injuries to the operator when used in confined spaces.



#### Technical data



LDA series - straight version



LAW series – angled version

Туре	N∙m min*¹/ max*²	lbf·ft min*1/ max*2	~ U/min		Ø D mm	H mm	<b>√</b> kg <b>√</b> *3
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 ½"	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 ½"	102	295	9.1

<sup>\*1</sup> Lowest torque in 2nd gear Vibration is less than 2.5 m/s<sup>2</sup>

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

Continuous sound pressure level corresponding to <78,7 dB (A)



### 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
- > 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 bespoken reaction arm design
- > Car charger for 12 V connection



\*Illustration similar

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

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

Battery: 740g

# **OUR TORQUE WRENCH IN DIFFERENT BOLTING SITUATIONS**









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.