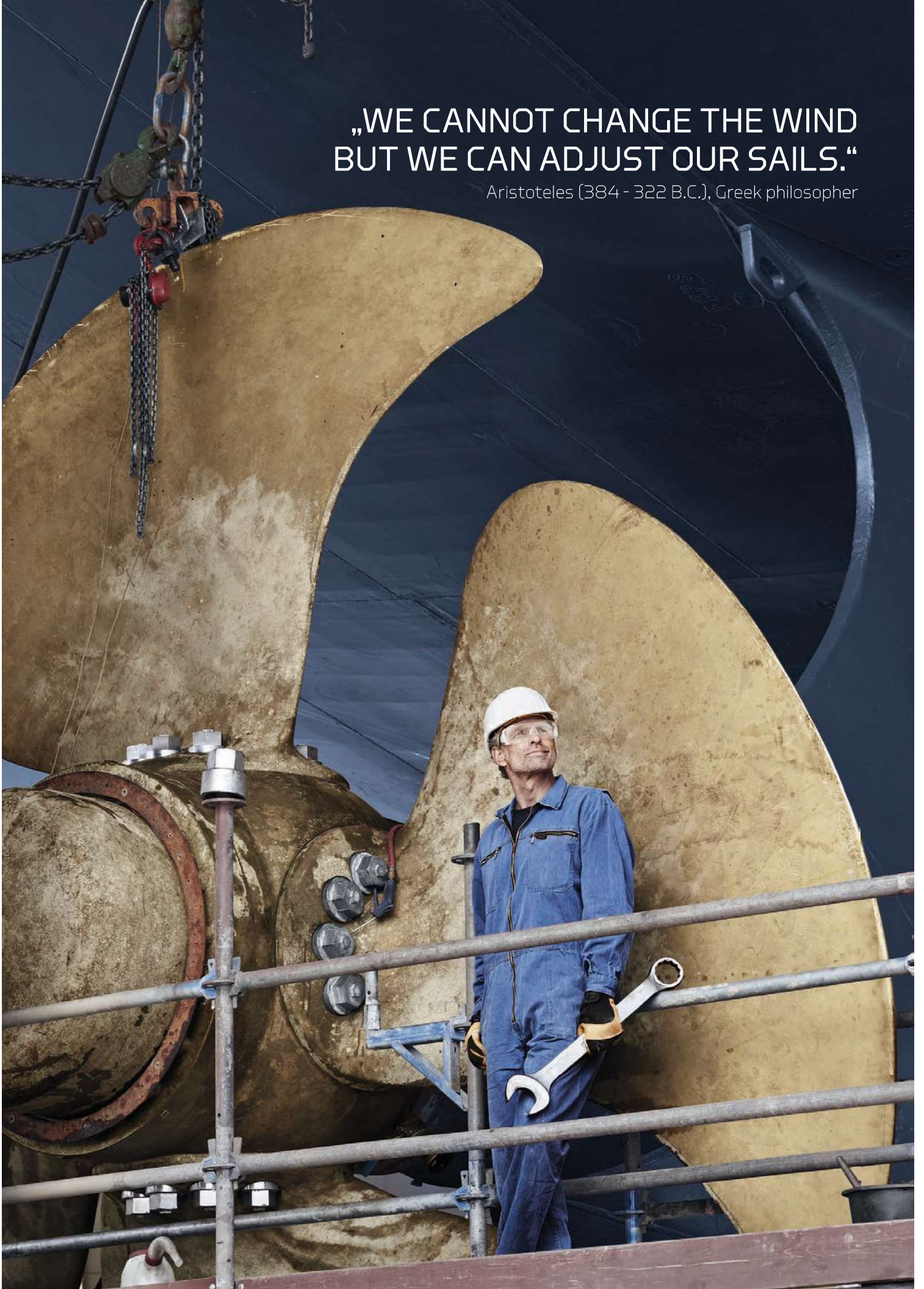


GEDORE TORQUE SOLUTIONS



„WE CANNOT CHANGE THE WIND
BUT WE CAN ADJUST OUR SAILS.“

Aristoteles (384 - 322 B.C.), Greek philosopher





SPECIAL SOLUTIONS

FOR DIFFERENT CUSTOMERS REQUIREMENTS

GATE VALVE WRENCHES LDA-S

- › MACHINE INCL.
REACTION ARM,
STRAIGHT(LM)
- › 2 BATTERIES
- › BATTERY CHARGER
- › TOOL CASE
- › OPERATING MANUAL

GATE VALVE WRENCHES LDE-S

- › MACHINE INCL.
REACTION ARM,
STRAIGHT(LM)
- › TOOL CASE
- › OPERATING MANUAL

GATE VALVE WRENCHES LEW-S

- › MACHINE INCL.
REACTION ARM,
STRAIGHT(LM)
- › TOOL CASE
- › OPERATING MANUAL

SIDE POWER WRENCHES LES

- › MACHINE INCL.
HEXAGON ADAPTER
AND HOLDER
- › TOOL CASE
- › OPERATING MANUAL

SIDE POWER WRENCHES LPS

- › MACHINE INCL.
REACTION ARM,
STRAIGHT(LM)
- › TOOL CASE
- › OPERATING MANUAL

RAILWAY TORQUE WRENCH LDB

- › MACHINE INCL.
REACTION ARM, STRAIGHT
(LM) WITH HOLDFUNCTION
- › 2 BATTERIES
- › BATTERY CHARGER
- › OPERATING MANUAL
- › FACTORY CALIBRATION
CERTIFICATE

HEAVY DUTY TORQUE WRENCH LHD

- › MACHINE INCL.
REACTION ARM, CRANKED
(ST) WITH HOLDFUNCTION
- › POWERBOX
- › TOOL CASE
- › OPERATING MANUAL
- › FACTORY CALIBRATION
CERTIFICATE



THE GATE VALVE WRENCHES

SERIES LDA-S, LDE-S, LEW-S

LDA-S series

Infinitely adjustable breakaway torque for individual settings on your gate valves



Flexible drive systems:
electric and battery-operated



2-speed gearbox for 3x higher speed



Rugged planet gear
unit for high breakaway
torques



Robust planetary gear for
high breakaway torques



Optional counter



LEW-S (electric)



LDE-S (electric)
Display with integrated counter





Open every gate valve with these tools

Our gate valve wrenches are derived from the development of precision torque wrenches. Once again, unnecessary weight has been saved in this new generation. At the same time, the mountings of the moving parts in the rugged planet gear unit were improved, leading to an enormous increase in service life of the entire machine.

Impact-free and accident-free work, even with difficult gate valves

Our gate valve wrenches work rapidly and reliably without wear-inducing slip-coupling. The electronically infinite torque settings and the soft start-up behaviour of the motor make a sudden tearing away of the gate valve spindle impossible.



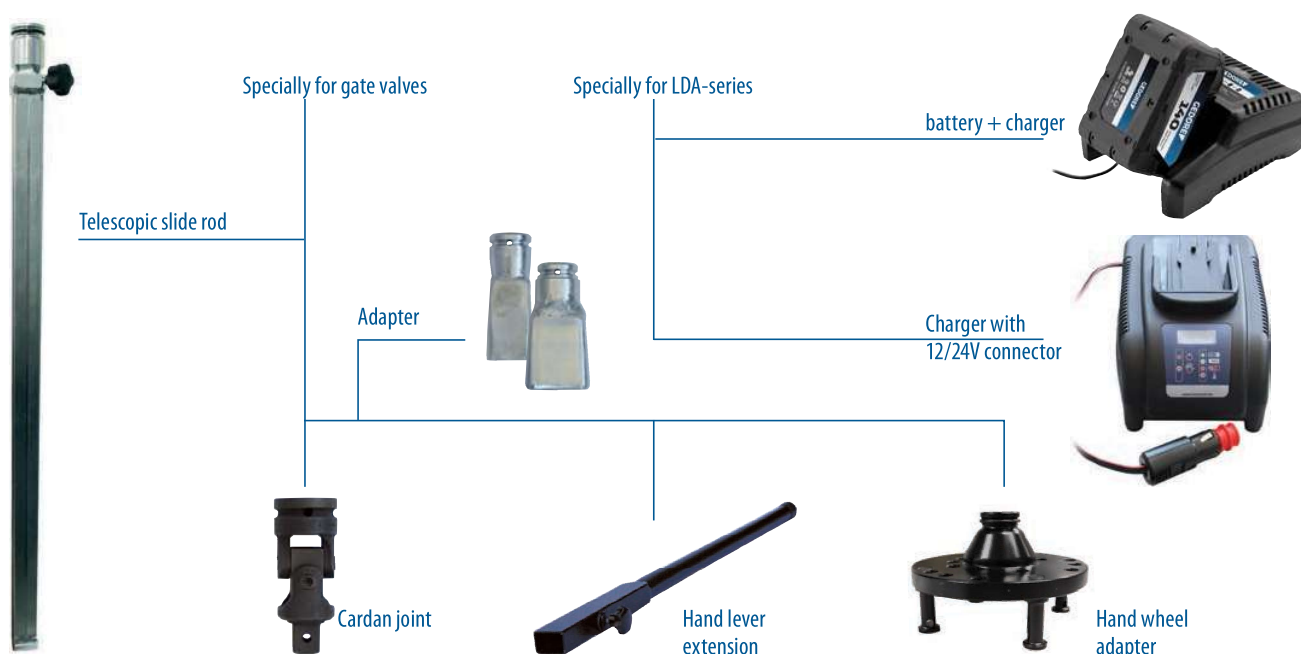
Optimal working weight of just 4.7 kg with a breakaway torque of over 900 Nm

Our gate valve wrenches are consistently weight-optimised without losing any operating comfort or the necessary safety. The complete motor unit can be rotated through 360° in all models and adapts comfortably to your application case due to the ergonomic design. The reaction forces are securely accommodated by the device. The operator can easily open even jammed gate valves up to size DN 1.000.

Various drive systems for flexible applications

The gate valve wrenches are available with electric or cordless power systems. Determine your own gains with regards to working safety, flexibility and time when opening/closing your gate valves in your pipe network.

Accessories



LDA-S SERIES

Robust battery technology for gate valve wrenches

The cordless gate valve wrench battery equipment is a real highlight under the gate valve wrenches.

Battery-operated but just as strong as a mains-based AC wrench, it provides a powerful breakaway torque of max. 900 Nm. Even with this design, the torque can be reduced during operation without reducing the speed until the best possible security is achieved for the gate valve and operator.

Flexible maintenance work and pipe network maintenance

From now on, you can work with your gate valve wrench whenever you want, wherever you want and as long as you want to. Our gate valve wrenches work with lithium ion technology (Li-Ion) instead of conventional nickel-cadmium batteries (Ni-Cd). These are characterised by 100% more operating time per charge compared to Ni-Cd batteries. This provides you with peak performance during the entire usage time without speed or torque loss.



i

Reserve capacity of battery and charger



The flashing LED signals that the battery has a reserve capacity of 10%

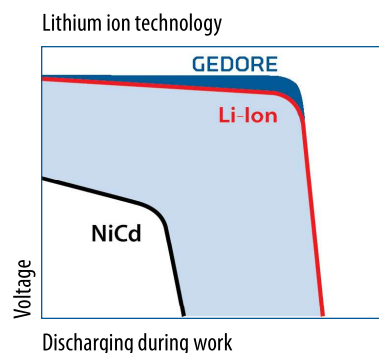


Pressure switch for displaying the charge status

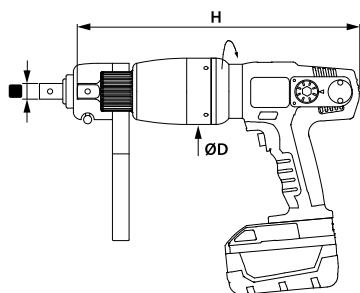
The charging time on the charger is approx. 30-50 min when the battery is empty. Once the battery is fully charged, the charger LED changes from red to green



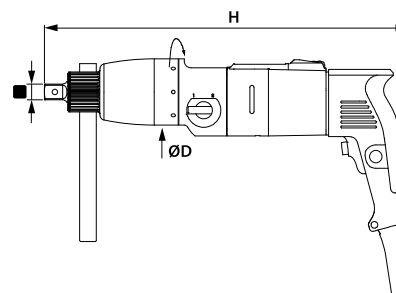
Four lit up LEDs signal that the battery is fully charged



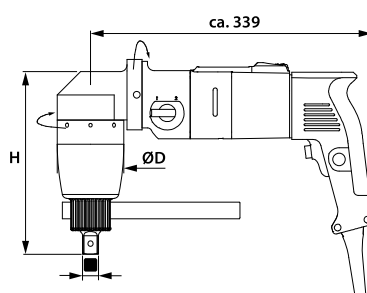
Technical Data



LDA-S – battery-operated



LDE-S – electric straight version



LEW-S – electric angled version

Type	~ N·m max ^{*1}	~ lbf·ft max ^{*1}	~ U/min	■	Ø D mm	H mm	kg ^{*2}
LDA - 05S	500	370	60	¾"	80	308	4.3
LDA - 07S	700	520	41	¾"	80	319	4.5
LDA - 09S	900	660	30	¾"	80	340	4.7
LDE - 075S	770	570	25	¾"	80	440	5.1
LDE - 09S	900	670	17	¾"	80	440	5.2
LEW - 09S	900	670	18	¾"	80	220	6.5

*1 Breakaway torque in 1st gear Other torques on request
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*2 Without reaction arm



THE SIDE POWER WRENCH

LES/LPS SERIES

LES series

Patented switch-off electronics protected against spray water and moisture



Infinitely adjustable torque settings with electronic overload protection



Display with integrated counter and countdown function



Patented tandem gear pulley for secure transmission of large torques up to 4,800 Nm (in LES-16,..)



Optimised design enables space-saving positioning parallel to the tie rod



torque values readable on the label

Braked 360° pivoting drive unit enables simple positioning on the tie rod



Various wrench widths with reduction inserts ensure universal application options

LPS series (pneumatic)



Accessories: Hexagon adapter

⬡	36 mm	41 mm	46 mm	50 mm	55 mm	60 mm	65 mm	70 mm	75 mm	80 mm
55	•	•	•							
60	•	•	•	•	•					
70	•	•	•	•	•					
80	•	•	•	•	•	•	•	•		
95						•	•	•	•	•



Specially developed for working on plate heat exchangers

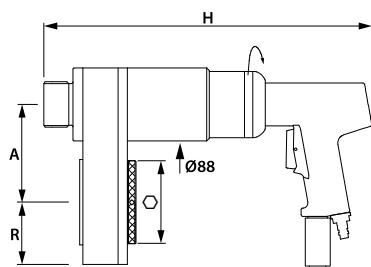
We have specially developed various series of side power wrenches in this sector for the safe assembly and disassembly of plate heat exchanger systems. They work rapidly and reliably, and are – like all of our devices – weight-optimised and designed to be user-friendly. Regardless of whether your exchanger systems are equipped with or without thrust bearings, we have the appropriate system for all types to make your work as easy and comfortable as possible. Our side power wrenches are available with electric or pneumatic drives.



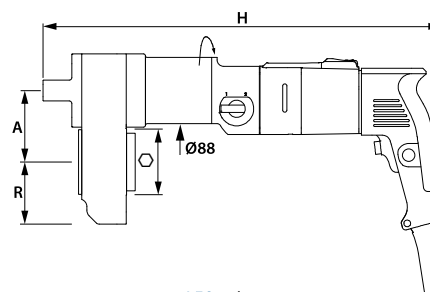
The alternative for smaller plate heat exchangers

The LES-09 model is our entry models with torques up to 1,600 Nm. These side power wrenches are impressive because of their practical and simple operation, particularly for smaller plate heat exchanger versions. High-performance aluminium ensures lower weight and the rotating hand grip adapts individually to the requirements of the user. But, above all, it is the enormous bolting speed that is characteristic of both our new products. The set includes a hexagon adapter for the next smallest wrench width, including the holder for attaching the adapter to the basic unit.

Technical data



LPS - pneumatic



LES - electric

Type	~ N·m max ^{*1}	~ lbf·ft max ^{*1}	~ U/min ^{*2}	⊙ mm	A/R mm	H mm	kg ^{*3}
LPS - 1/60	3000	2200	7	60	112/61	396	10.0
LPS - 1/80	3600	2650	5	80	118/75	396	12.0
LPS - 1/95	4800	3500	4	95	135/95	396	13.0
LES - 16/60	3000	2200	7	60	112/61	503	11.1
LES - 16/70	3600	2650	5	70	118/75	503	11.7
LES - 16/80	3600	2650	5	80	118/75	503	11.7
LES - 16/95	4800	3500	4	95	135/95	503	13.6
LES - 09/55	1600	1180	13	55	86/75	480	10.0
LES - 09/60	1600	1180	13	60	86/75	480	9.8

^{*1} Series LES: Breakaway torque in 1st gear

^{*1} Series LPS: Breakaway torque at 7 bar

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^{*2} Series LES: Maximum speed in 2nd gear

^{*2} Series LPS: Maximum speed at 7 bar

^{*3} Without reaction arm



THE RAILWAY TORQUE WRENCH LDB SERIES

Select the rail system directly on the large, illuminated colour display



Low-wear, brushless direct current drive with 16 kW maximum output

Maximum breakaway torque 1,100 Nm



Supplied with individual GEDORE factory calibration certificate

Change of direction right on the handle

Robust, lockable 48V Lithium Ion battery. For approx. 1,400 bolts on new W-rail system

Additional handles, variable attachment



Watch our LDB-video - see for yourself!

Awarded with the



COMPETENCE PRIZE
BADEN-WÜRTTEMBERG
FOR INNOVATION AND QUALITY
2015



A complex task

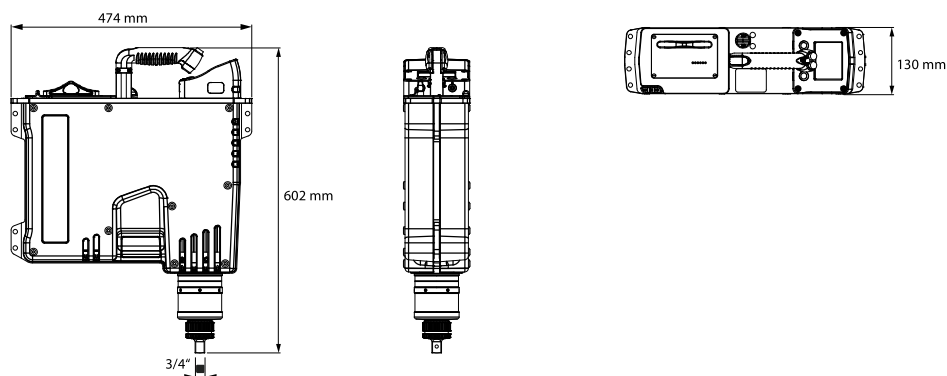
Bolts with two different thread pitches are normally used to fasten rails. When fixing the W-rail system, the sleeper bolt head bolts ten times faster to the sleeper in comparison to the K-rail system due to the larger thread pitch. Various types of fixing equipment are also used which also makes the process complicated. It mainly depends on the skills of the rail track fitter to fasten the bolts quickly yet carefully. A virtually impossible task due to the time restrictions often involved.

All rail systems used to be fastened with the same torque setting of approx. 200 Nm. However this setting is suboptimal for the majority of tracks. In practice one torque setting means that rails are incorrectly fastened and can lead to the sleepers breaking and bolts cracking.

Flexible use is the feature of a universal talent

- › The LDB-10 can be used for tightening and loosening horizontal bolts for insulated rail joints, fishplate joints, check rail bolts, track switch bolts etc. In comparison to the impact wrench, each bolt is opened.
- › It can be held perfectly balanced in the hand of the operator thanks to the ergonomic, height-adjustable handle. Two handles that can be mounted at variable heights allows the operator to adapt the device depending on the type of work.
- › The universal railway torque wrench weighs under 20 kg, a fraction of conventional machines and can easily be operated and moved by one operator.
- › Alongside bolting, the LDB-10 can also be used to drill sleepers using a suitable drilling adapter.
- › Environmentally-friendly battery operation ensures zero-emission working. Advantage: Can be used in tunnels. This tool can be operated during the night as its noise levels are considerably lower than with other drives.
- › The torque no longer has to be set on the LDB-10. The operator simply has to select the type of rail system from a pre-configured menu. The corresponding torques and bolting speeds have been pre-entered at the factory. The correct setting can be made quickly. And above all: Damages on the sleepers and bolts can be easily avoided.
- › The LDB-10 can also be equipped with a universal impact socket. With this, both clip bolts (hexagon 39 mm) and sleeper bolts (square 21/28) and even fishplate bolts (hexagon 41 mm) can be torqued. W-, KS-, K-rail and track switches can be torqued without having to change tools.
- › The quality of each single bolt connection must be verified in line with increasing demands on safety and quality. The LDB-10 has been designed with this in mind and stores the type of rail track system, the time of bolting, the torque and the correct tightening. The memory saves up to 50,000 bolting operations and can be conveniently read out on the PC (documentation optional).

Technical data



LDB - battery operated

Type	~ Nm max*1	~ lbf-ft max*1	~ U/min		L mm	B mm	H mm	kg *3
LDB-10	150-1100	110-810	160	3/4"	410	130	420	17.2
1 breakaway torque	2 Without reaction arm, without impact socket, with battery.		All rights reserved. Subject to modifications without prior notice.					



Type	C _N	U	L mm	B mm	H mm	kg
Li-Ion phosphate-based battery	10 Ah	48 V DC	178	130	337	4.6



Type	Input voltage	Output voltage	P	L mm	B mm	H mm	kg	Charging time
Charger with mains cable	100-260 V / 45-70 HzWh	48 V DC / 1.6 A	100 W	218	121	55	1.35	approx.. 4.6 h



IEC C14 connector, Protective insulation Protection class I (DIN EN 61140)

THE HEAVY DUTY TORQUE WRENCH

LHD SERIES



Technical data

- › more than twice as fast as other suppliers - for a faster insertion bolt by bolt
- › reliable operation regardless of the wind or weather conditions
- › Torque
- › Torque angle
- › torque adjustment in 10 Nm steps
- › repeatability $\pm 2\%$

Torque range	800 - 8.000 Nm
Speed	10,3 U/min
Weight	14,6 kg
Dimension (LxWxH)	180 x 250 x 540 mm
Gear unit diameter	102 mm
Square drive	1 ½"
Protection	IP54

The diagram illustrates the connection between a laptop and a torque wrench. The laptop screen shows a menu with three options: 'torque classic', 'adjustment', and 'Info'. A cable connects the laptop to a blue torque wrench. The wrench has a digital display and a button. Arrows indicate data flow between the laptop and the wrench.